APPENDIX A

FIELD LOGS

Soil Boring Logs
HA01
SB01

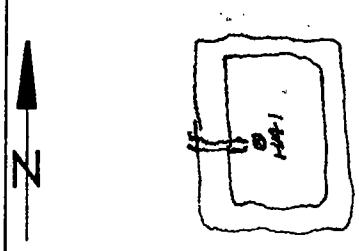
Well Boring Logs
MW01
MW02
MW03
TW01A
TW02A/SB02

Well Construction Logs
MW01
MW02
MW03
TW01
TW01A
TW02A

Well Development Logs
MW01
MW02
MW03
TW01
TW01A
TW02A

Purge and Sample Logs
MW01
MW02
MW03
TW01
TW01A
TW02A

LOCATION MAP



INSTALLATION ▶ DU			PAGE 1 OF 1
BORING OR WELL NUMBER ▶ HA-1		LOCATION ▶ SWMU# 41	
DATE ▶ 12/10/93		WEATHER ▶ Cold, Cloudy Snowing little wind	
LOGGED BY ▶ JFB		DRILLED BY ▶ U×B Steve Parker	
DRILLING METHOD ▶ Hand Auger		SAMPLING METHOD ▶ Bucket Auger	
GRAVEL PACK ▶ NA		SEAL ▶ Soil fill	

CASING ▶ TYPE NA DIAMETER NA LENGTH NA HOLE DIA. 3 1/4

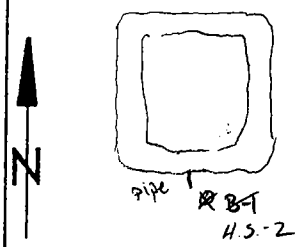
SCREEN ▶ TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH 7.0

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING	WELL COMPLETION
Dry						0				0.0 - 0.5 Gravel	
						1				0.5 - 0.6 blacktop	
Dry			sl plas			2			10YR 5/3	0.6 - 3.5 Silt, brown, little clay, trace very fine sand	
						3					
moist			plas			4				3.5 - 5.0 clay, light gray to pale yellow little silt, mottled, gypsum and caliche veins and nodules	
						5					
						6			5Y 6/2	5.0 - 6.0 clay, light, olive gray	
						7			5YR 6/2	6.0 - 7.0 clay, pinkish gray	
						8					
						9					
						10					
						11					
						12					
						13					
						14					
						15					
						16					
						17					
						18					
						19					
						20					

EXPLANATION GROUT SAND SCREEN BENTONITE CASING WATER LEVEL

DUGLOG.DWG/CAD10/9-23-93

LOCATION MAP



INSTALLATION ▶ DU			PAGE 1 OF 1
BORING OR WELL NUMBER ▶ ~~B-T~~ HS-2		LOCATION ▶ SWMU# 41	
DATE ▶ 12 / 7 / 93		WEATHER ▶ sunny, high clouds	
LOGGED BY ▶ Paul Hubickey		DRILLED BY ▶ Boyles Brothers Jay Hulse	
DRILLING METHOD ▶ H.S.A Mobile B-57 625		SAMPLING METHOD ▶ 2" split spoon	
GRAVEL PACK ▶ NA		SEAL ▶ backfilled w/ cuttings	

CASING ▶ TYPE NA DIAMETER — LENGTH — HOLE DIA. 10"

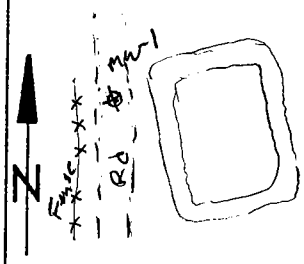
SCREEN ▶ TYPE NA SLOT — DIAMETER — LENGTH — TOTAL DEPTH 15.0

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING	WELL COMPLETION
						0					
						1					
dry						2		Pushed	10YR 7/2	0-.5 sandy silt (ML) light gray, dry, trace fine sand, trace clay	
						3	2.0			.5-2.0 SAB, mottled with white evaporite and hematite? staining, - evaporite along micro fractures	
						4					
						5					
damp						6			2.5YR 6/2	0-.4 silty clay (CL) light brownish gray, damp, trace to little silt	
						7	2.0	Pushed		.4-2.0 increase clay decrease silt, mottled white evaporite and little hematite staining	
						8					
						9					
						10					
						11					
						12					
						13			10YR 7/2 6/1	0-2.0 silt clay (CL) light gray, moist, evaporite and hematite staining, laminated silty clay light gray gray	
moist						14	2.0	Pushed			
						15				1.5 increase clay	
						16				TD = 15.0	
						17					
						18					
						19					
						20					

EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

DUGLOG.DWG/CAD10/9-23-93

LOCATION MAP



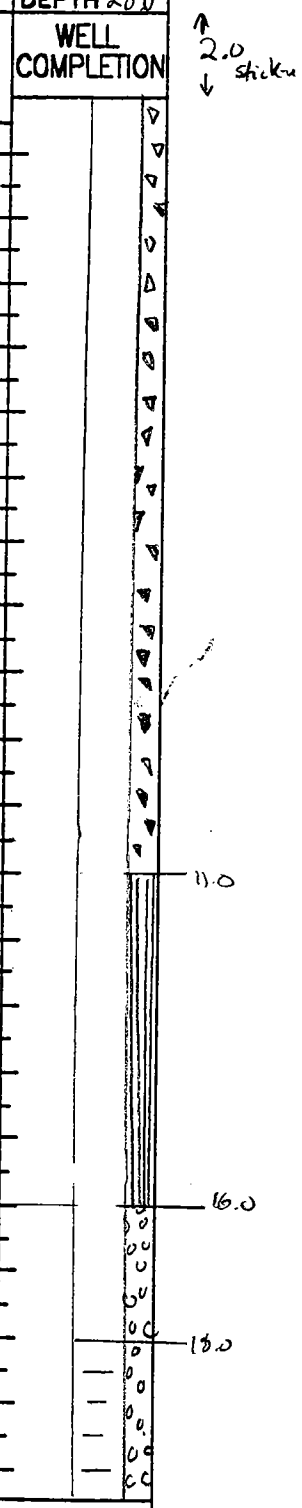
INSTALLATION ▶ DU			PAGE 1 OF 2
BORING OR WELL NUMBER ▶ MW-1		LOCATION ▶ SWMU# 41	
DATE ▶ 12 / 6 / 93		WEATHER ▶ blue sky, partly cloudy, sunny mid 30°F, wind calm	
LOGGED BY ▶ Paul Hubarkey		DRILLED BY ▶ Boyles Brothers Gary Hulse	
DRILLING METHOD ▶ HSA Mobile B-57 6.25		SAMPLING METHOD ▶ 2" Spl ℄ spoon	
GRAVEL PACK ▶ 20-40 silica sand 16.0 - 28.0		SEAL ▶ Grout 0-11 B.P. 11-16.0	

CASING ▶ TYPE Sch 40 PVC DIAMETER 4" LENGTH 20 HOLE DIA. 10"

SCREEN ▶ TYPE Sch 40 PVC SLOT 0.01 DIAMETER 4" LENGTH 10 TOTAL DEPTH 28.0

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING
						0				sandy silt (ML), light brown, fine sand (cuttings)
						1				
						2				
						3				
damp to moist (Lm)			Plas		0	4	2.0'	Pushed	10YR 5/4	0-.4 clayey silt (ML) yellowish brown, damp, trace to some clay, trace fine sand
						5			10YR 7/2	.4-2 silty clay (CL), light gray, damp, trace silt plastic, thin silt lenses, evaporite lenses, gypsum, alternating light gray lenses
						6				
						7				
moist (Lm)			Plas		0	8	2.0	Pushed	10YR 6/2	0-2 silty clay (CL), light brownish gray banded sequence trace silt, trace some clay, moist
						9				
						10				
						11				
moist (Lm)			Plas		0	12	2.0	Pushed	10YR 6/2	0-2 silty clay (CL), light brownish gray, trace silt trace to some clay, moist, iron staining, evaporite nodules and xtals
						13				
						14				
						15				
moist (Lm)			Plas			16	1.2	Pushed	10YR 6/2	0-.2 silty clay (CL) SAB trace
						17			10YR 7/3	.2-1.2 silty sand (SM) very pale brown, moist, trace silt, and fine sand, rounded to well rounded grains limonite staining
moist (Lm) damp					0	18	2.0	Pushed	10YR 4/6 10YR 6/2	0-.8 silty/clay sand sand/clay mixture, (SM), moist little to some silt clay, fine sand, iron staining in sand dark yellowish brown
						19				.8-1.9 silty/clay (CL), light brownish gray, trace to little silt
(wet) sat	well					20			10YR 7/3	1.9-2.0 silty sand (SM) very pale brown, wet/sat, trace to

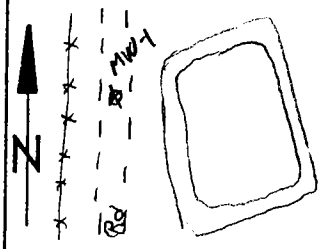
WELL COMPLETION



EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

DUGLOG.DWG/CAD10/9-23-93

LOCATION MAP



INSTALLATION	DU		PAGE 2 OF 2
BORING OR WELL NUMBER	MW-1	LOCATION	SWMU# 41
DATE	12 / 6 / 93	WEATHER	sunny
LOGGED BY	P. Hubbard	DRILLED BY	Boyles Brothers J. Hulse
DRILLING METHOD	HSA. Mobile B-57 6.25	SAMPLING METHOD	2" split spoon
GRAVEL PACK	20-40 silica sand 16.0 - 28.0	SEAL	Grout 0-11.0 B.P. 11.0 - 16.0

CASING	TYPE Schedule 40 PVC	DIAMETER 4"	LENGTH 20	HOLE DIA. 10"
SCREEN	TYPE Sch 40 PVC	SLOT 0.01	DIAMETER 4"	LENGTH 10	TOTAL DEPTH 28

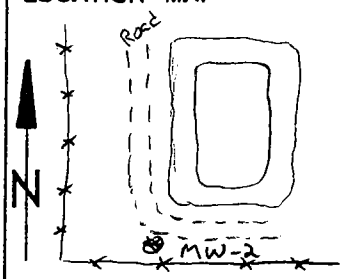
MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING
						20	1.5			little fines, fine sand, rounded to well rounded 20.0 10:20 ▼
						21				geotech
										21.5 silty clay (CL) (cuttings)
						22				
						23				
						24				
						25				
						26				
						27				
						28				TD = 28
						29				
						30				1 - 10' 4" sch 40 0.01
						11				3 - 10' 4" sch 40 Blank
										4 - bags 20-40 silica sand
						12				2 3/4 - 1/4" BP
										3 - bags Type I & II portland w bentonite added
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

WELL COMPLETION

EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

DUGLOG.DWG/CAD10/9-23-93

LOCATION MAP

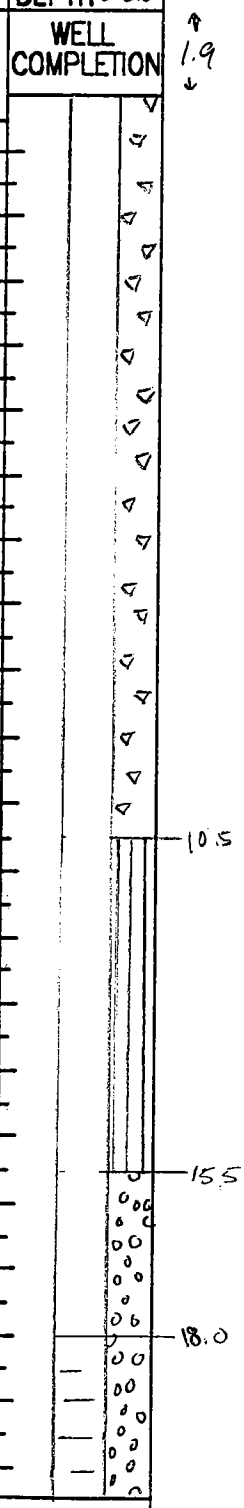


INSTALLATION	DU		PAGE 1 OF 2
BORING OR WELL NUMBER	MW-2	LOCATION	SWMU# 41
DATE	12 / 6 / 93	WEATHER	sunny warm mid 40°F slight N breeze
LOGGED BY	P. Hubbley	DRILLED BY	Boyles Brothers Jay Hulse
DRILLING METHOD	H.S.A. Mobile B-57 6.25	SAMPLING METHOD	2" split spoon
GRAVEL PACK	20-40 silica sand 15.5 - 28.0	SEAL	Grout 0-10.5 BP. 10.5 - 15.5

CASING	TYPE Sch 40 PVC	DIAMETER 4"	LENGTH 20'	HOLE DIA. 10"
SCREEN	TYPE Sch 40 PVC	SLOT 0.01	DIAMETER 4"	LENGTH 10'	TOTAL DEPTH 28.0

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING
						0				0-2 sandy silt (ML), light brown, dry, trace to little fine sand, trace med. sand, well rnd to rnd (cuttings)
						1				
						2				
						3				increase clay (cuttings)
moist (LM)			Plas		0	4	2.0	Pushed	10YR 8/1 10YR 6/2	0-2 silty clay (CL) clayey silt (ML) mixtures white / light brownish gray, moulded texture, evaporites, moist
						5				
						6				
						7				
moist (LM)			Plas		0	8	2.0	Pushed	10YR 7/1	0-2 silty clay (CL), light gray, moist, trace silt
						9				
						10				
						11				
12/7/93 moist (LM)			Plas		0	12	2.0	Pushed	10YR 7/1	0-2 silty clay (CL), light gray moist, trace silt silt clay layering
						13				
						14				1.5-2 increase clay less silt
						15				
moist (LM)			Plas		0	16	1.5	Pushed	10YR 7/1 10YR 7/3	0.5 clay (CL), light gray, moist .5-1.5 silty sand (SM) very pale brown, trace silt and fine sand, rnd to well rnd grains
moist/wet						17				
						18				
moist (M)	well		Plas			19	2.0	Pushed 1.5	10YR 6/2 10YR 7/3	0-1.4 clay (CL), light brownish gray, tight clay moist 1.4-20 silty sand (SM) very pale brown trace silt
						20				

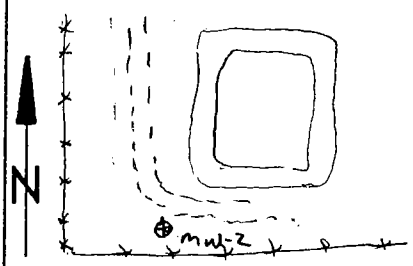
WELL COMPLETION



EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

DUCLOG.DWG/CAD10/9-23-93

LOCATION MAP



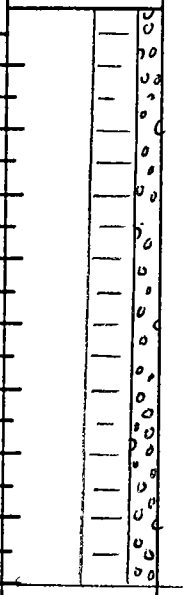
INSTALLATION	DU		PAGE 2 OF 2
BORING OR WELL NUMBER	MW-2	LOCATION	SWMU# 41
DATE	12 / 7 / 93	WEATHER	blue sky, calm wind mid 20-Lao 30°F
LOGGED BY	Paul Hubickey	DRILLED BY	Boyles Brothers Jay Hulse
DRILLING METHOD	H.S.A. Mobile B-57 6.25	SAMPLING METHOD	2" split spoon
GRAVEL PACK	20-40 silica sand 15.5 – 28.0	SEAL	Grout 0-10.5 B.P. 10.5 – 15.5

CASING ▶ TYPE Sch 40 PVC DIAMETER 4" LENGTH 20' HOLE DIA. 10"

SCREEN ▶ TYPE Sch 40 PVC SLOT 0.01 DIAMETER 4" LENGTH 10' TOTAL DEPTH 28.0

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING
						20		RJ 58		fine sand, rnd to well rnd grains, wet
wet										contact of (SM) (SM) ▼ 20.5 ▼
						21		55		
wet	well						20'	50	10YR 5/3	0-2 silty sand (sm), brown, trace to little fines fine sand well rnd to rounded grains - geotech sample collect
						22		58		
								62		
						23		67		
wet	well						20'	Pushed	10YR 5/3	0-2 silty sand (sm), brown, trace to little fines SAB
						24				0-1.5 silt sand (sm) SAB increase fines
					2.0	25			10YR 6/3	1.5-2.0 sandy silt (ML), pale brown, little fine fine sand, little clay, damp
damp										
						26				
						27				
						28				
						29				
						30				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

WELL COMPLETION



1 - 10' sch 40 PVC 0.01
2 - 10' sch 40 PVC Blank
1 - thread cap
4.5 - 20-40 silica sand
3.25 - buckets 1/4" BP
2 - bags Type I and II Portland bentonite powder

EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

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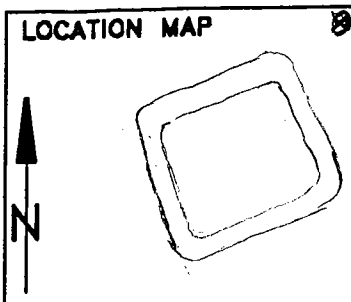
LOCATION MAP	INSTALLATION ▶ DU		PAGE 1 OF 2
	BORING OR WELL NUMBER ▶ MW-3	LOCATION ▶ SWMU# 41	
	DATE ▶ 12 / 2 / 93	WEATHER ▶ mid 30°F, high clouds	
	LOGGED BY ▶ P. Hubicky	DRILLED BY ▶ Boyles Brothers Jay Hulse	
	DRILLING METHOD ▶ Mobile B-57 6.25" HSA	SAMPLING METHOD ▶ 20" split spoon	
	GRAVEL PACK ▶ 20-40 Silica Sand 15.5' – 27.8'	SEAL ▶ Grout 0-10.5 B.P 10.5-15.5	



CASING ▶ TYPE shedule 40 PVC DIAMETER 4" LENGTH 20 HOLE DIA. 10"

SCREEN ▶ TYPE Sch 40 SLOT 0.01" DIAMETER 4" LENGTH 10 TOTAL DEPTH 27.8

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING
						0				0-1.5 bgs - silty sandy gravel (cuttings) fill material
						1				
						2				
						3				
moist						4		PUSHED	7YR 5/1 light gray	0-2 clayey silt (ML) trace fine sand lenses, moist, some clay. 1-2 increase in clay
						5	2.0			
						6				
						7				
moist						8		PUSHED	10YR 7/1 light gray	0-2 silty clay (CL) thinly laminated silt lenses, thin 1/16" vertical fine sand lense (root channel)
						9	2.0			
						10				
						11				
moist						12		PUSHED	10YR 7/1 light gray	0-2 clay (CL) thin laminated silt lenses, limonite stain
						13	2.0			
						14				
						15				
						16		PUSH	10YR 7/1 light gray	0-3" clay (CL) some fine sand, moist 3"-2' silty sand (SM), some limonite staining fine sand, trace/some fines, rounded to well rounded sand
						17	2.0	30 30		
						18				
moist						19		12 24B	10YR 7/1 light gray	0-10" clay (CL) some fine sand, moist, last 3" interbedded sand clay lenses limonite staining clay
						20	2.0'			

WELL COMPLETION

21.1 ft bgs

10.5

15.5

17.8

EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

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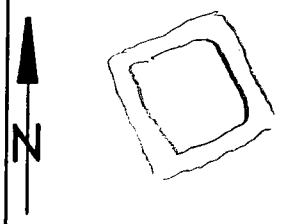
LOCATION MAP ⊕ MW-3



INSTALLATION ▶ DU			PAGE 2 OF 2
BORING OR WELL NUMBER ▶ MW-3		LOCATION ▶ SWMU# 41	
DATE ▶ 12 / 2 / 93		WEATHER ▶ afternoon sunny 5 mph wind N	
LOGGED BY ▶ PJH		DRILLED BY ▶ Boyles Bro. JH	
DRILLING METHOD ▶ Mobile B-57 6.25 HSA		SAMPLING METHOD ▶ 2.0" split spoon	
GRAVEL PACK ▶ 20-40 Silica Sand 15.5' – 27.8'		SEAL ▶ Grout 0 – 10.5 B.P. 10.5 – 15.5	

CASING ▶ TYPE Schedule 40 PVC DIAMETER 4" LENGTH 20 HOLE DIA. 10"

SCREEN ▶ TYPE Sch 40 PVC SLOT 0.01" DIAMETER 4" LENGTH 10 TOTAL DEPTH 27.8

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE I.D.	HEADSPACE READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	MUNSELL COLOR	LITHOLOGY / GRAIN SIZE / REMARKS / USCS CLASSIFICATION / IRDMIS CODING	WELL COMPLETION
wet	well					20		28	10YR 6/2 lt brn gray	10"-1.5' silty sand (SM) light brownish gray fine to medium grain sand, lines	20.75
						21		32		1.5-2.0' silty sand fine grain sand, lines	21
						22					
						23	x				
			sl Plas					3	10YR 6/2 lt brn gray	0-2 clayey silt (ML) trace to little clay, trace fine sand	
						24	20	4			
wet								5			
						25		9			
						26					
						27					
						28					28
						29					
						30					
						11					
						12					
						13					
						14					
						15					
						16					
						17					
						18					
						19					
						20					

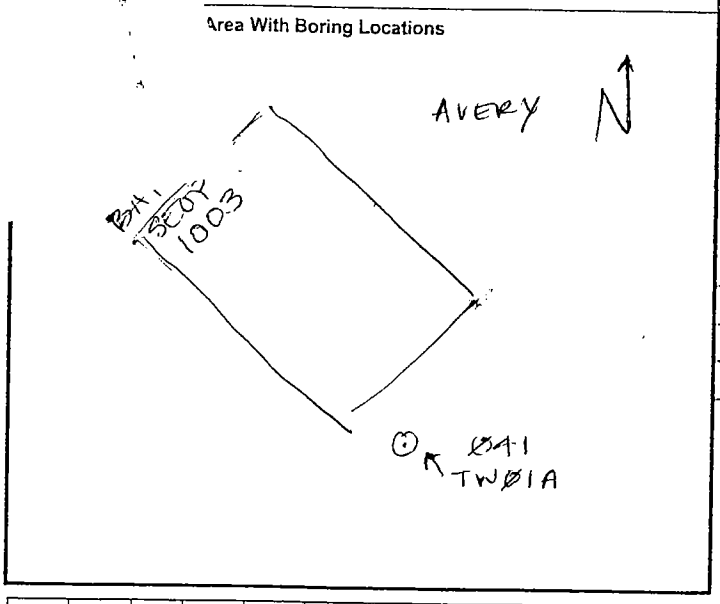
TD=27.8

EXPLANATION: GROUT, SAND, SCREEN, BENTONITE, CASING, WATER LEVEL

DUGLOG.DWG/CAD10/9-23-93

ONS ENGINEERING SCIENCE, INC.

Area With Boring Locations



Site ID: DT0041TW01A	Project No: 7441148-20030
Boring No: 041TW01A	Well No: 041TW01A
Logged by: J. Fitzmayer / L. McCrikstry	Edited By:
Drilling Contractor: EARTH PROBE	
Drill Rig Type/Method DIR. PUSH / DT6600 GEOPROBE	
Driller's Name M. TAGGART	
Borehole Diam/Drill Bit Type: 3.25", DIR. PUSH SHOE	Total Depth: 25'
Hammer Wt: NA	Drop: NA
Start Time: 1405	Date: 12.20.05
Completion Time: 1610	Date: 12.20.05
Backfilled Time: NA	Date

1st Water							
Boring Depth (ft)							
Casing Depth (ft)							
Water Depth (ft)							
Time:							
Date:							

PID	Sampler Type and Depth	Blow Count/6 in.	Driven (in)	Recovered	Sample Condition	Casing Type & Size	Annulus Filler	Depth: Sample Recovery	Depth: Feet	Depth: Graphics	Description
0.0 ppm		NA	NA	NA	NA	Sched. 40 PVC, 1.5" I.D.; 19.5'–0' bgs	Bentonite Crumbles (hydrated); 13'–0' bgs	75%	1–4		0–5' = Asphalt and backfill Grey/Green clay w/ chunks of white MARL. Dry to moist (@5') some sand.
									3		Black asphalt layer
									5		~5' bgs
0.0 ppm								80%	5–6	Very Saturated	CL: contact w/ overlying backfill is approx. clay is v. moist from 5'–6'. Color is v. pale to white until 6' where some laminations begin. Color: 10YR 8/1 to 10YR 7/2
									8.5–10'		8.5–10' - Varved clays
0.0 ppm							Bentonite Seal	100%	10–15		10' - Same CL as above. mm scale laminations. some veg. debris alternating clay & marl. low moisture content sample consistant to 15'

_____ = Sharp Contact ////////// = Gradiation Contact ..... = Inferred contact

PARSONS ENGINEERING SCIENCE, INC.

Boring No: 041TW01A Well No: TW1A Sheet No. 2 of 2 Sheets

Site ID: DTO041TW01A Project No: 744148-200030

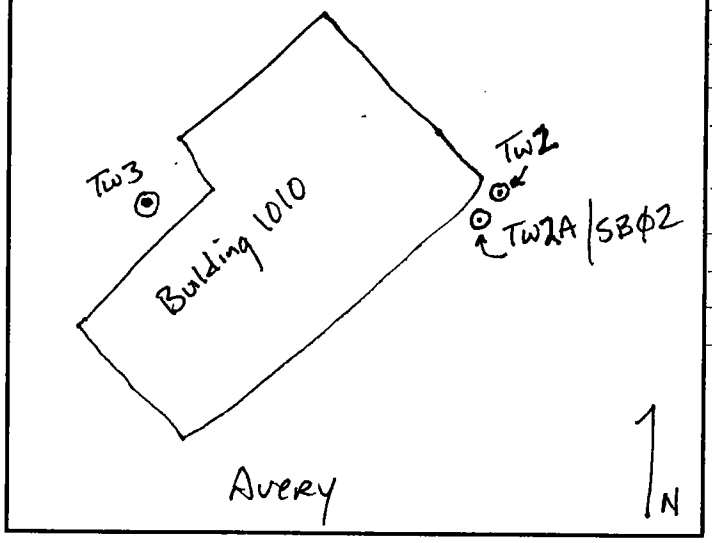
PID	Sampler Type and Depth	Blow Count/6 in.	Driven (in)	Recovered	Sample Condition	Casing Type & Size	Annulus Filter	Sample Recovery	Feet	Graphics	Description
0.0 ppm		NA	NA	NA	NA — 1.5" I.D.	Sched. 40 PVC 19.5' – 0 bgs	Bent. Pellets Seal 17.5-13'	100%	16, 17, 18, 19		15-17' - CL continued. Varves interspersed. veg debris present. V. low moisture content. CL/sand contact 17' bgs
0.0 ppm						Sched. 40 PVC Screen 24.5' - 19.5' BTOC	PRE-PACK SCREEN + ADDED FILTER 25' - 17.5' 10/20 sand	100%	20, 21, 22, 23, 24		SAND (SM) - Fine to v. fine grained. Poorly ~~sorted~~/graded. Moist. Color 10YR 6/6, brownish yellow contains orange Fe-ox stain. 19.5' CLAY (CL): CT: olive gray (5YY 1/2) Dry, v. hard. no laminations present. 21.5' SAND + CLAY: Super saturated (SM + CL) color 10YR 7/1 light grey. v. fine grained. Dryer more brown sand @ 22'.
						4" Bottom Cap →			25		T.D. = 25' bgs

_____ = Sharp Contact ////////// = Gradiation Contact ..... = Inferred contact

→ Completed as replacement well Ø41TWØ2A

PARSONS ENGINEERING SCIENCE, INC.

Sketch Map of Site Area With Boring Locations



Site ID: DTØØ41SBØØ2	Project No: 744148-20030
Boring No: Ø41SBØØ2	Well No: Ø41TWØ2A
Logged by: J. Fitzmayer	Edited By: Lea McKinstry
Drilling Contractor: Earth Probe	
Drill Rig Type/Method: Dir. Push / DT6600 Geoprobe	
Driller's Name: M. Taggart	
Borehole Diam/Drill Bit Type: 3.25", Dir. Push. Shoe	Total Depth: 24.6'
Hammer Wt: NA	Drop: NA
Start Time: 1035	Date: 12/20/05
Completion Time: 1320	Date: 12/20/05
Backfilled Time: N/A	Date

1st Water						
Boring Depth (ft)						
Casing Depth (ft)						
Water Depth (ft)						
Time:						
Date:						

PID	Sampler Type and Depth	Blow Count/6 in.	Driven (in)	Recovered	Sample Condition	Casing Type & Size	Annulus Filter	Sample Recovery	Graphics	Description
0.0 ppm		NA	NA	NA	NA	Sched. 40 PVC, 1.5" I.D.; 19.3'–0' bgs	Bentonite Crumbles (hydrated); 13'–0' bgs	70%	Soil Samples	0–5': Asphalt, gravel, + backfill of brown clay + chunks of white marl. Dry to moist (@ 5').
									SØ22	5' - collect Sample SØØ22.
										~6' bgs
0.0 ppm								80%		CL: Contact w/ overlying backfill is approximate only. CL is very pale brown (10YR 7/4); moist, non-laminated w/ disseminated nodules (pebbles) of gypsum, ~ .5" in diameter.
									SØ23	10' - Same CL as above. mm-scale laminations of white marl are present. Moisture ↑ w/ depth. Minor paleo veg debris/rootlets, little to no sand or silt content.
0.0 ppm							Bentonite Seal	100%	SØ24	15' - Same clay as above.

Depth: 1–15

_____ = Sharp Contact ////////// = Gradiation Contact ..... = Inferred contact

PARSONS ENGINEERING SCIENCE, INC.

Boring No: Ø4ISBØ2 Well No: TW2A Sheet No 2 of 2 Sheets

Site ID: DTØ4ISBØ2/TW2A Project No: 744148

PID	Sampler Type and Depth	Blow Count/6 in.	Driven (in)	Recovered	Sample Condition	Casing Type & Size	Annulus Filter	Sample Recovery	Depth (Feet)	Graphics	Description
0.0 PPM		N/A	N/A	N/A	N/A	1.5" I.D. Sched. 40 PVC → 19.3' - 0' BGS	Bent. Pellets SEAL 18-13' →	100 %	15' 16 17 18 19		15'-19': SAME CL AS ABOVE; Increased MOISTURE, decreased MARL LAMINATIONS.
											19' bgs
							Added 10/20 Sand		20		SAND (SM): Very Fine-grained, Poorly graded, moist. Color is Brown (10 YR 5/3). Contains orange Fe-ox stain (~1" thick) Right @ 19' bgs.
0.0 PPM						1.5" I.D. Sched. 40 PVC Screen (SM) 24.3' - 19.3' BTOC	PRE-PACK SCREEN & FILTER 24.6 - 18'	100 %	21 ▼ 12/20/05 22 23 24 25		20.2'
											CLAY (CL): LT. olive gray (5Y 6/2): Dry, massive non-laminated. Contains 1 6" thick Sand lens at ~22.3' bgs. Sand is Fine grained, Poorly graded + wet to saturated.
						4" Bottom cap →					23'-25': 23' Sand-clay mix (SM-CL): Very Pale Brown (10 YR 8/2): Saturated @ ~23.7-24.7. Unit is Sandy But Plastic.
											T.D. = 25' Bgs

_____ = Sharp Contact ////////// = Gradiation Contact ..... = Inferred contact

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MONITOR WELL CONSTRUCTION LOG	SITE ID: SWMU-41	WELL NO. MW-1
CLIENT/PROJECT: DUGWAY PROVING GROUNDS	PROJECT NO. UT074	LOGBOOK NO. 5
INSTALLATION: DU	CONTRACTOR:	PAGES:

START DATE: 12 / 6 / 93 END DATE: 12 / 6 / 93

SUPERVISING GEOLOGIST: Paul Hubicky

SINGLE CASED WELL (Y/N)

DRILLING CONTRACTOR: Boyles Brothers

BUILT BY: Jay Hulse

WELL COORD.

WELL PROTECTOR Yes

DEPTH BGS (ft):

TYPE:	DIA.(inches) .55 ft
WEEP HOLE (Y/N)	WATER TIGHT SEAL (Y/N)
GUARD POSTS (Y/N)	NO. 4 TYPE:

SURFACE PAD

SIZE:

COMPOSITION:

RISER PIPE	TOTAL LENGTH (TOC-TOS) ft.
RISER MATERIAL: PVC	VENTILATED CAP (Y/N)
INTERVAL 18 ft.	DIAMETER 4 inches

GROUT

INTERVAL (BGS) 11.0 ft.	TREMIED (Y/N)
COMPOSITION AND PROPORTION:	
CENTRALIZERS (Y/N)	DEPTHS NA ft.
BENTONITE SEAL	SETUP TIME: 1hr 20min
TYPE: 1/4	TREMIED (Y/N)
SOURCE:	INTERVAL 11.0 ft. 16.0
AMOUNT USED 3 buckets	WATER ADDED (Y/N) 5 GALS

FILTER PACK

TYPE: Colorado Silica Sand

SOURCE:	TREMIED (Y/N)
AMOUNT USED 4 bags	INTERVAL 11.0 ft. 28.0
GRAIN SIZE 20-40	WATER ADDED (Y/N)

SCREEN

TYPE: sch 40 PVC

INTERVAL 18-28 ft.	DIAMETER 4 inches

SLOT SIZE & TYPE 0.01 INCH

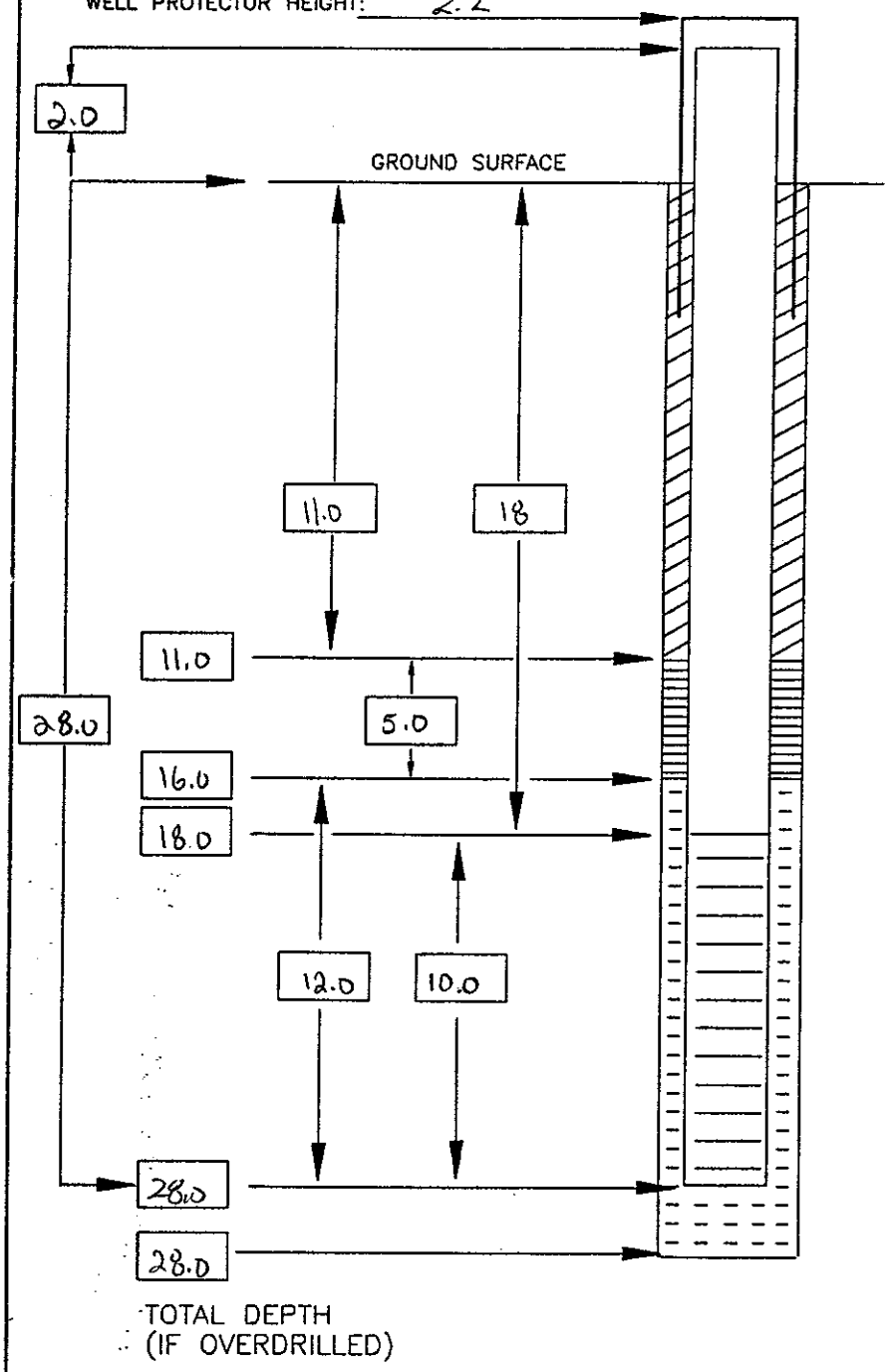
SUMP (Y/N)

INTERVAL (BGS) NA ft	BOTTOM CAP (Y/N)

BACKFILL PLUG (IF OVERDRILLED)

TYPE: NA	TREMIED (Y/N) NA
AMOUNT USED NA	WATER ADDED (Y/N) NA

SETUP/HYDRATION TIME: NA



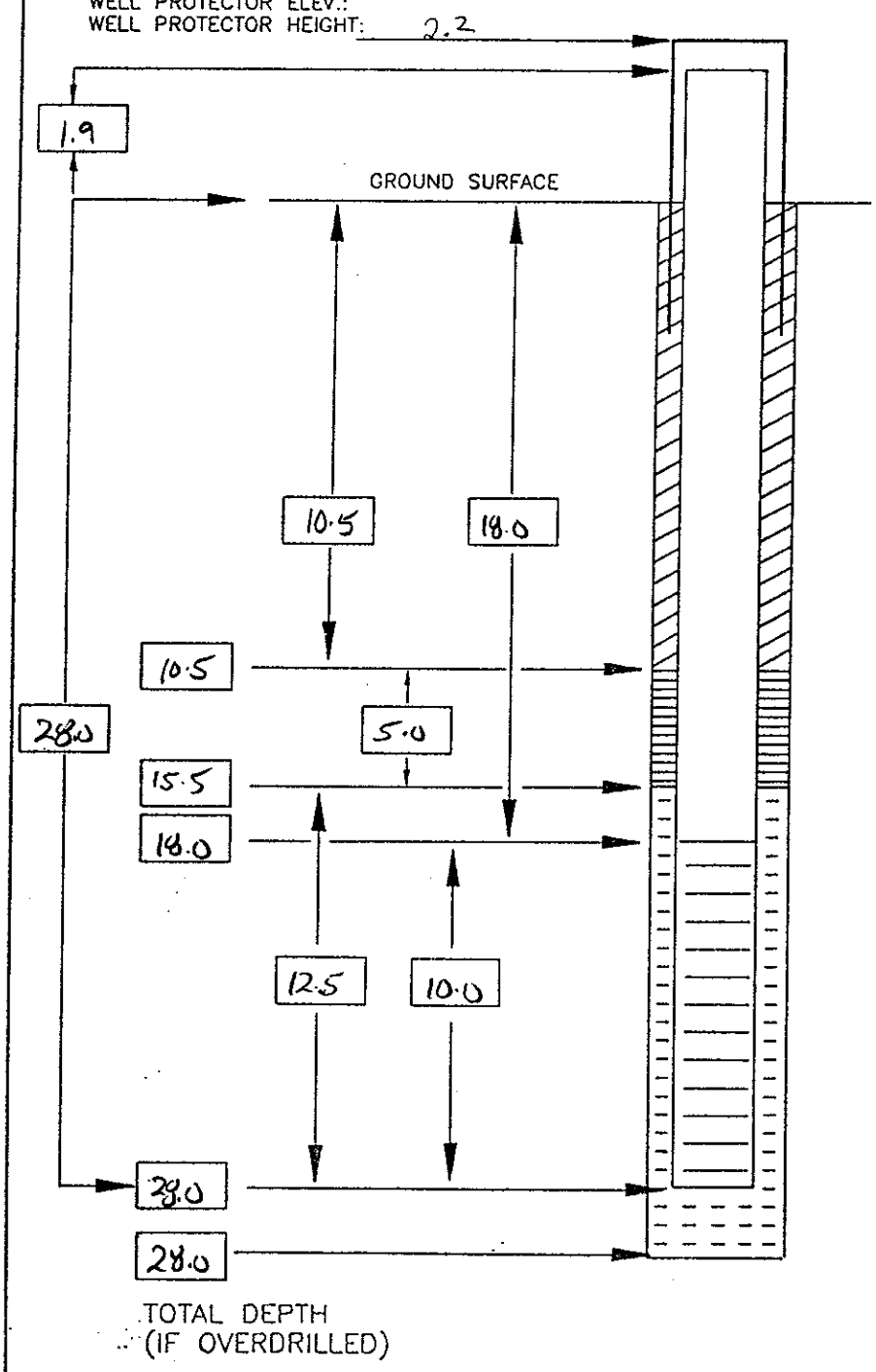
DUGGON.DWG/CAD10/9-30-93

MONITOR WELL CONSTRUCTION LOG	SITE ID: SWMU-41	WELL NO. MW-2
CLIENT/PROJECT: DUGWAY PROVING GROUNDS	PROJECT NO. UT074	LOGBOOK NO. 5
INSTALLATION: DU	CONTRACTOR:	PAGES:

START DATE: 12 / 6 / 93 END DATE: 12/7 / 93

SUPERVISING GEOLOGIST: Paul Hubiday

SINGLE CASED WELL (Y/N)



DRILLING CONTRACTOR: Bayles Brother's

BUILT BY: Jay Hulse

WELL COORD.

WELL PROTECTOR Yes

DEPTH BGS (ft):

TYPE:	DIA.(inches) .55 ft
WEEP HOLE (Y/N)	WATER TIGHT SEAL (Y/N)
GUARD POSTS (Y/N) NO. 4	TYPE:

SURFACE PAD

SIZE:

COMPOSITION:

RISER PIPE	TOTAL LENGTH (TOC-TOS) ft.
RISER MATERIAL: PVC	VENTILATED CAP (Y/N)
INTERVAL +1.9 18.0 ft.	DIAMETER 4" inches

GROUT

INTERVAL (BGS) 10.5 ft.	TREMIED (Y/N)
COMPOSITION AND PROPORTION:	
CENTRALIZERS (Y/N)	DEPTHS NA ft.
BENTONITE SEAL	SETUP TIME: 42 min
TYPE: 1/4"	TREMIED (Y/N)
SOURCE:	INTERVAL 10.5 ft. 15.5
AMOUNT USED 3.25 buckets	WATER ADDED (Y/N) 5 GALS

FILTER PACK

TYPE: Colorado silica Sand

SOURCE:	TREMIED (Y/N)
AMOUNT USED 4.5 bag	INTERVAL 15.5 ft. 28.0
GRAIN SIZE 20-40	WATER ADDED (Y/N)

SCREEN

TYPE: sch 40 PVC

INTERVAL 18.0-28 ft.	DIAMETER 4 inches

SLOT SIZE & TYPE 0.01 INCH

SUMP (Y/N)

INTERVAL (BGS) NA ft	BOTTOM CAP (Y/N)

BACKFILL PLUG (IF OVERDRILLED)

TYPE: NA	TREMIED (Y/N) NA
AMOUNT USED NA	WATER ADDED (Y/N) NA

SETUP/HYDRATION TIME: NA

DUGCON.DWG/CAD10/9-30-93

MONITOR WELL CONSTRUCTION LOG

MONITOR WELL CONSTRUCTION LOG	SITE ID: SWMU-41	WELL NO. MW-3
CLIENT/PROJECT: DUGWAY PROVING GROUNDS	PROJECT NO. UT074	LOGBOOK NO. 5
INSTALLATION: DU	CONTRACTOR:	PAGES:

START DATE: 12/2/93 END DATE: 12/3/93

SUPERVISING GEOLOGIST: Paul Hubicky

SINGLE CASED WELL (Y/N)

DRILLING CONTRACTOR: Boyles Brother's

BUILT BY: Jay Hulse

WELL COORD.

WELL PROTECTOR Yes

DEPTH BGS (ft):

TYPE:	DIA.(inches) .55 ft
WEEP HOLE (Y/N)	WATER TIGHT SEAL (Y/N)
GUARD POSTS (Y/N)	NO. 4 TYPE: Ø

SURFACE PAD

SIZE:

COMPOSITION:

RISER PIPE	TOTAL LENGTH (TOC-TOS) ft.
RISER MATERIAL: PVC	VENTILATED CAP (Y/N)
INTERVAL 17.8 ft.	DIAMETER 4" inches

GROUT

INTERVAL (BGS) ft.	TREMIED (Y/N)
COMPOSITION AND PROPORTION:	
CENTRALIZERS (Y/N)	DEPTHS NA ft.
BENTONITE SEAL	SETUP TIME: 51 min
TYPE: 1/4	TREMIED (Y/N)
SOURCE:	INTERVAL 10.5 ft. 15.5
AMOUNT USED 3 buckets	WATER ADDED (Y/N) 5 GALS

FILTER PACK

TYPE: Colorado Silica Sand

SOURCE:	TREMIED (Y/N)
AMOUNT USED	INTERVAL 15.5 ft. 27.8
GRAIN SIZE 20-40	WATER ADDED (Y/N)

SCREEN

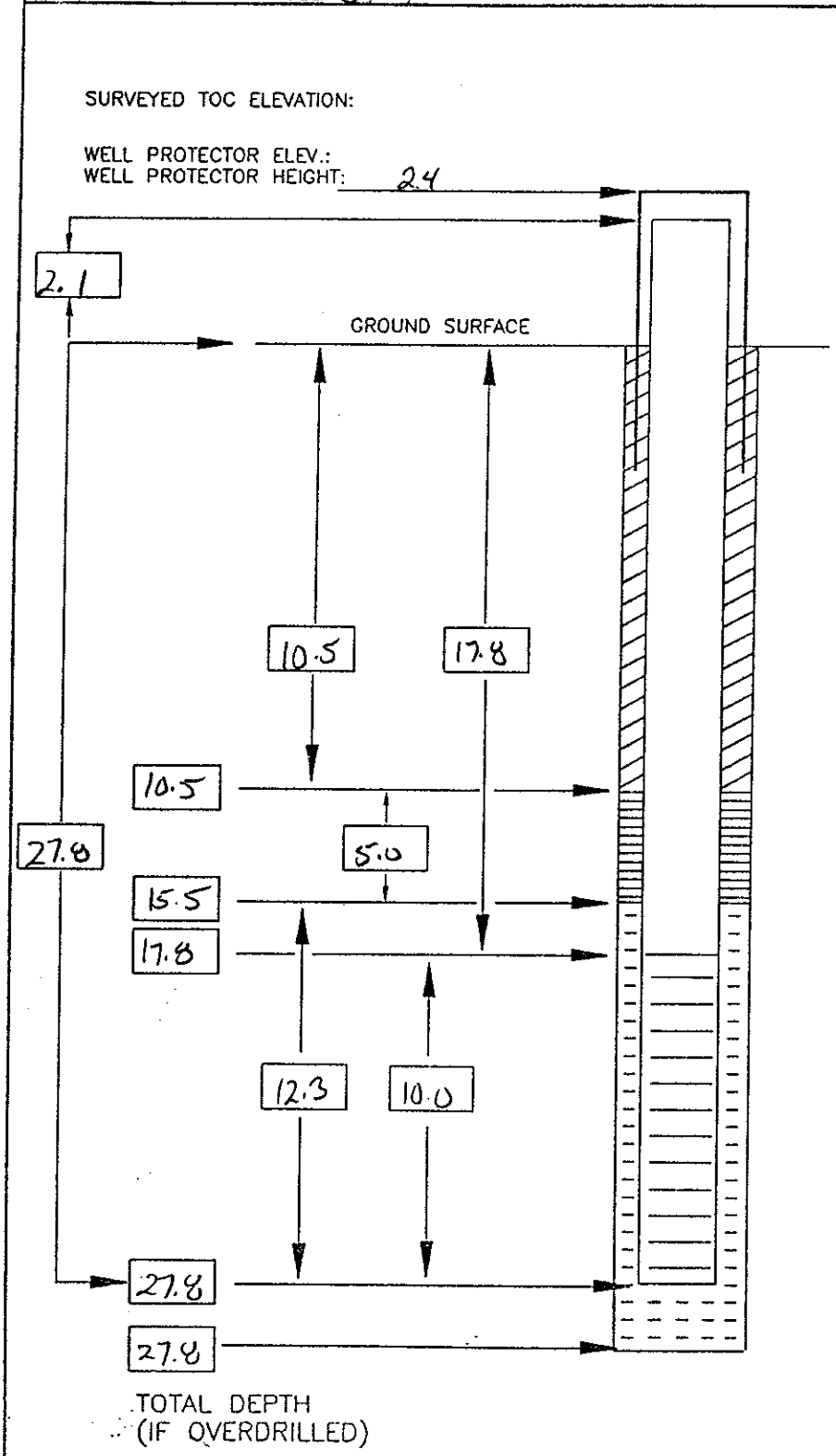
TYPE: Sch 40 PVC

INTERVAL 17.8-27.8 ft.	DIAMETER 4 inches
SLOT SIZE & TYPE	INCH 0.010
SUMP (Y/N)	
INTERVAL (BGS) NA ft	BOTTOM CAP (Y/N)

BACKFILL PLUG (IF OVERDRILLED)

TYPE: NA	TREMIED (Y/N) NA
AMOUNT USED NA	WATER ADDED (Y/N) NA

SETUP/HYDRATION TIME: NA



DUGCON.DWG/CAD10/9-30-93

WELL LOG RECONSTRUCTED FROM FIELD ACTIVITY REPORT DATA

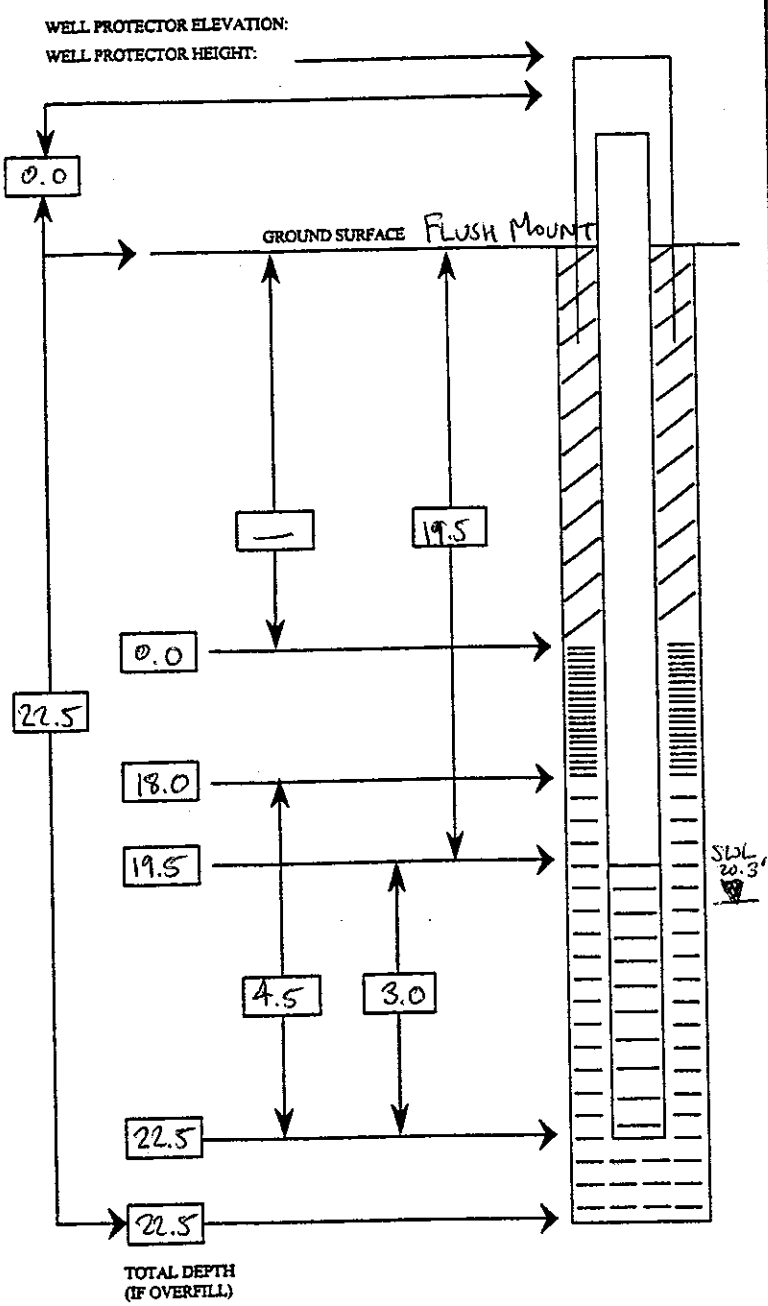
MONITORING WELL CONSTRUCTION LOG	SITE ID: DTO 041	WELL NO. DTØ41TWØØ1
CLIENT/PROJECT: CESPK/DPG	PROJECT NO.: 734267	LOGBOOK NO.: MICROWELL 1
INSTALLATION: DPG	CONTRACTOR: PARSONS ES	PAGES: 27-28

START DATE: 12-2-98 END DATE: 12-2-98

SUPERVISING GEOLOGIST: JOHN PAWLIK

SINGLE CASED WELL ☒ Yes ☐ No

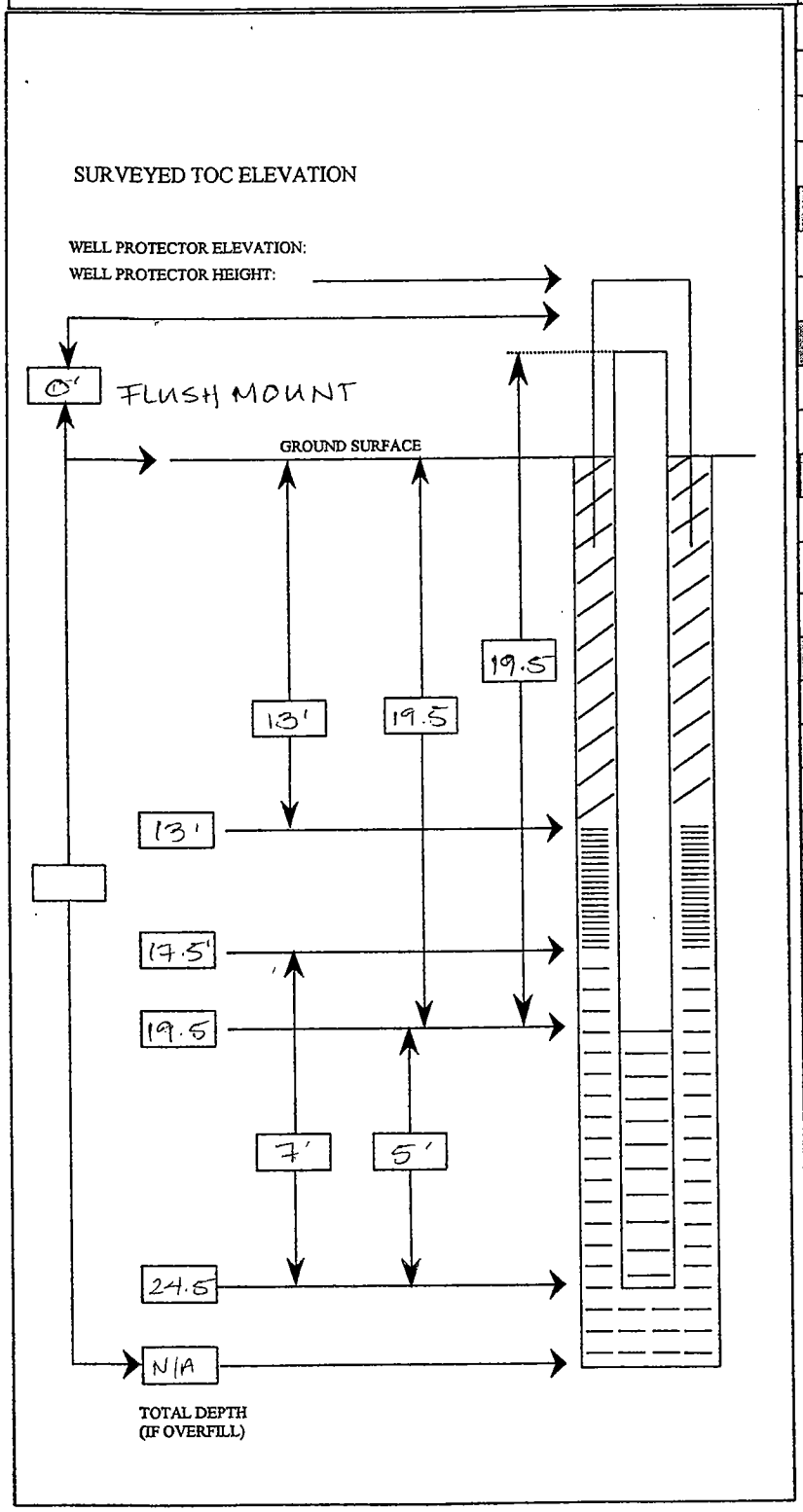
SURVEYED TOC ELEVATION



DRILLING CONTRACTOR: EARTHPROBE	
WELL COORD.:	
WELL PROTECTOR: FLUSH MOUNT	
DEPTH BGS (FT): 0.5' bgs cemented	
TYPE: Round metal w/ bolted lid	DIAMETER: 7" round inches
WEEP HOLE: ☐ Yes ☒ No	WATER TIGHT SEAL: ☒ Yes ☐ No
GUARD POSTS ☐ Yes ☒ No	NO.: TYPE:
SURFACE PAD: FLUSH MOUNT	
SIZE:	
COMPOSITION: CEMENT	
RISER PIPE:	TOTAL LENGTH (TOC-TOS): 19.5 ft
RISER MATERIAL: PVC	VENTILATED CAP: ☐ Yes ☒ No
INTERVAL: 0-19.5 ft	DIAMETER: 0.5" ID inches
GROUT: N/A	
INTERVAL (BGS): — ft	TREMIED: — ~~☐ Yes~~ ☐ No
COMPOSITION & PROPORTION: —	
CENTRALIZERS: N/A	DEPTH: — ft
BENTONITE SEAL:	SETUP TIME:
TYPE:	TREMIED: ☐ Yes ☐ No
SOURCE:	INTERVAL: 18.0 - 0.0 ft
AMOUNT USED:	WATER ADDED: ☐ Yes ☐ No GAL
FILTER PACK:	
TYPE: Silica Sand	
SOURCE: Colorado	TREMIED: ☐ Yes ☐ No
AMOUNT USED:	INTERVAL: 18.0-19.5 ft
GRAIN SIZE:	WATER ADDED: ☐ Yes ☐ No GAL
SCREEN:	
TYPE: 3' stainless steel prepack, PVC screen	
INTERVAL: 19.5-22.5 ft	DIAMETER: 0.5" ID inches
SLOT SIZE & TYPE: 0.010 PVC	inch
SUMP: ☐ Yes ☒ No	
INTERVAL (BGS): N/A ft	BOTTOM CAP: ☒ Yes ☐ No
BACKFILL PLUG (IF OVERDRILLED): N/A	
TYPE: —	TREMIED: ☐ Yes ☐ No — ft
AMOUNT USED: —	WATER ADDED: ~~☐ Yes~~ ☐ No GAL
SETUP/HYDRATION TIME: —	

MONITORING WELL CONSTRUCTION LOG	SITE ID: DTØ41TWØ1A	WELL NO. Ø41TWØ1A
CLIENT/PROJECT: CESPK / DPG	PROJECT NO.: 744148	LOGBOOK NO.: PDB Sample #1
INSTALLATION: DPG	CONTRACTOR: PARSONS	PAGES: 32-35 & 37

START DATE: 12/20/05 END DATE:	DRILLING CONTRACTOR: EARTH PROBE
SUPERVISING GEOLOGIST: J. Fitzmayer / LEA MCKINSTRY	WELL COORD.:
SINGLE CASED WELL ☑Yes ☐No	WELL PROTECTOR:

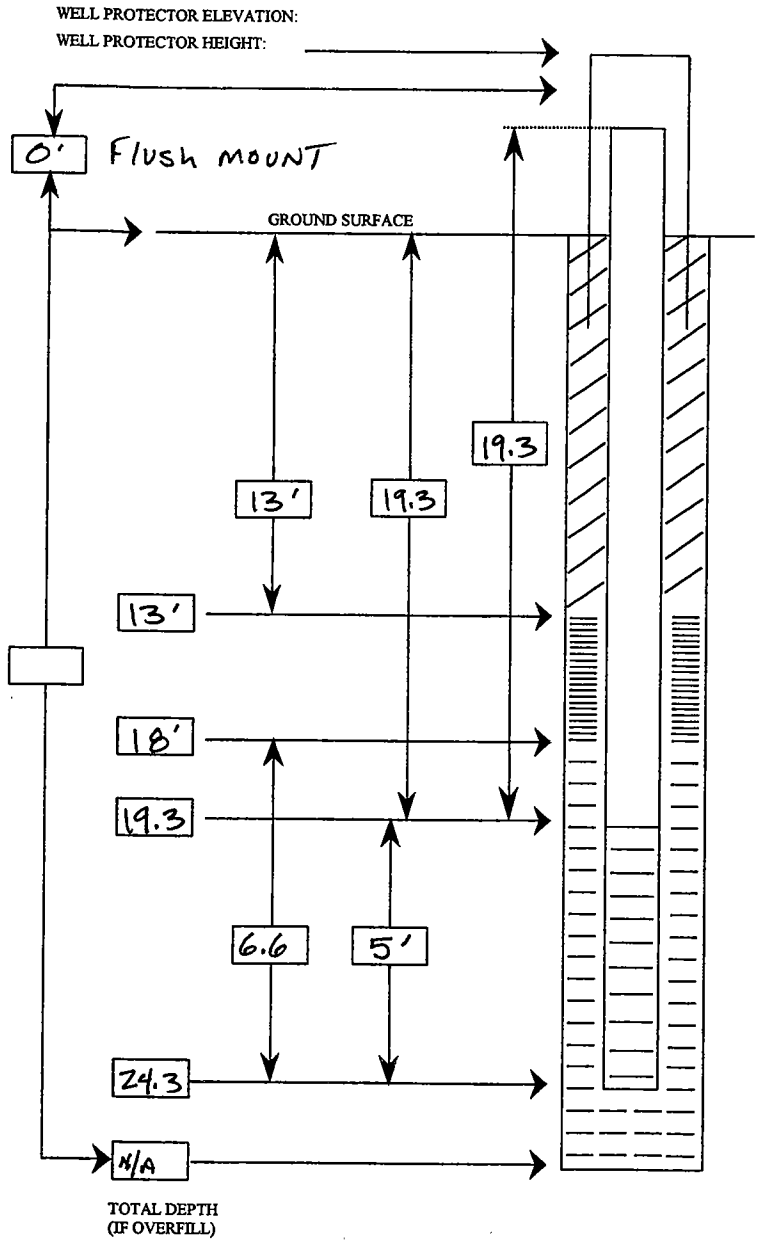


DEPTH BGS (FT): 0.3	
TYPE: METAL TRAFFIC	DIAMETER: 10 inches
WEEP HOLE: ☑Yes ☐No	WATER TIGHT SEAL: ☐Yes ☑No
GUARD POSTS ☐Yes ☑No	NO.: — TYPE: —
SURFACE PAD:	
SIZE: CIRCULAR; ~14" DIAMETER	
COMPOSITION: CEMENT	
RISER PIPE:	TOTAL LENGTH (TOC-TOS): 19.5 ft.
RISER MATERIAL: Sched. 40 PVC	VENTILATED CAP: ☐Yes ☐No
INTERVAL: 0-19.5' ft.	DIAMETER: 1.5 inches
GROUT:	
INTERVAL (BGS): 0-13 ft.	TREMIED: ☐Yes ☑No
COMPOSITION & PROPORTION: BENTONITE CRUMBLES	
CENTRALIZERS: NONE	DEPTH: — ft.
BENTONITE SEAL:	SETUP TIME: > 30 min
TYPE: BENT. CHIPS	TREMIED: ☐Yes ☑No
SOURCE: —	INTERVAL: 13'-17.5' ft.
AMOUNT USED: 20 scoop	WATER ADDED: ☑Yes ☐No 3 GAL.
FILTER PACK:	
TYPE: PRE-PACK SCREEN/ADDED SAND AROUND SCREEN	
SOURCE:	TREMIED: ☐Yes ☑No
AMOUNT USED: PRE-PACK + 12 scoops	INTERVAL: 24.8-17.5 ft.
GRAIN SIZE: Pre-pack 20/40 extra - 10/20	WATER ADDED: ☐Yes ☑No — GAL.
SCREEN:	
TYPE: Sched. 40 PVC Slotted Screen	
INTERVAL: 19.5-24.5 ft.	DIAMETER: 1.5 inches
SLOT SIZE & TYPE: .010"/continuous slot	inch
SUMP: ☑Yes ☐No Bottom Cap	
INTERVAL (BGS): 24.5-24.8 ft.	BOTTOM CAP: 4" ☑Yes ☐No
BACKFILL PLUG (IF OVERDRILLED): N/A	
TYPE: —	TREMIED: ☐Yes ☐No — ft.
AMOUNT USED: —	WATER ADDED: ☐Yes ☐No — GAL.
SETUP/HYDRATION TIME: —	

MONITORING WELL CONSTRUCTION LOG	SITE ID: DTOØ41TWØ2A	WELL NO. Ø41TWØ2A
CLIENT/PROJECT: CESPK / DPG	PROJECT NO.: 744148	LOGBOOK NO.: PDB Sample #1
INSTALLATION: DPG	CONTRACTOR: PARSONS	PAGES: 32-35
START DATE: 12/20/05	END DATE: 12/20/05	DRILLING CONTRACTOR: EARTH PROBE
SUPERVISING GEOLOGIST: J. Fitzmayer / LEA McKinstry		WELL COORD.:
SINGLE CASED WELL ☑ Yes ☐ No		WELL PROTECTOR:

Approx. 1 gallon H_2O added during drilling
Well is Flushmount

SURVEYED TOC ELEVATION



DEPTH BGS (FT): 0.8	
TYPE: metal. Traffic	DIAMETER: 10 inches
WEEP HOLE: ☑ Yes ☐ No	WATER TIGHT SEAL: ☐ Yes ☑ No
GUARD POSTS ☐ Yes ☑ No	NO.: — TYPE: —
SURFACE PAD:	
SIZE: Circular; ~14" Diameter	
COMPOSITION: Cement	
RISER PIPE:	TOTAL LENGTH (TOC-TOS): 19.3 ft.
RISER MATERIAL: Sched. 40 PVC	VENTILATED CAP: ☐ Yes ☑ No
INTERVAL: 0'-~~23.8~~ 19.3' ft.	DIAMETER: 1.5 inches
GROUT: JRF	
INTERVAL (BGS): 0-13' ft.	TREMIED: ☐ Yes ☑ No
COMPOSITION & PROPORTION: Bentonite Crumbles	
CENTRALIZERS: NONE	DEPTH: — ft.
BENTONITE SEAL:	SETUP TIME: >30 min.
TYPE: Bent. chips	TREMIED: ☐ Yes ☑ No
SOURCE: —	INTERVAL: 13'-18' ft.
AMOUNT USED: 18 scoops	WATER ADDED: ☑ Yes ☐ No 1 GAL.
FILTER PACK:	
TYPE: Pre-pack screen / added sand around screen	
SOURCE:	TREMIED: ☐ Yes ☑ No
AMOUNT USED: Pre-pack + 12 scoops	INTERVAL: 24.6-18 ft.
GRAIN SIZE: Pre-pack - 20/40 extra - 10/20	WATER ADDED: ☐ Yes ☑ No — GAL.
SCREEN:	
TYPE: Sched. 40 PVC slotted screen	
INTERVAL: 19.3-24.3 ft.	DIAMETER: 1.5 inches
SLOT SIZE & TYPE: .010"/ Continuous slot	inch
SUMP: ☑ Yes ☐ No Bottom cap	
INTERVAL (BGS): 24.3-24.6 ft.	BOTTOM CAP: 4" ☑ Yes ☐ No
BACKFILL PLUG (IF OVERDRILLED): N/A	
TYPE: —	TREMIED: ☐ Yes ☐ No — ft.
AMOUNT USED: —	WATER ADDED: ☐ Yes ☐ No — GAL.
SETUP/HYDRATION TIME: —	

WELL DEVELOPMENT LOG

WELL DEVELOPMENT LOG	Site ID: SWMU-41	Field ID No. (Well No.): MW-1	Page 1 of 1
Installation: DU		Location: Avery Evaporation Pond	
Project No.: UT074	Client/Project: Dugway Proving Ground/RFI		
Development Contractor: Boyles Brother's Drilling			
Starting Date: 12-15-93	Completion Date: 12-15-93	Casing Dia: 4"	Dev. Rig B-57
Developed by: Boyles Bro Jay Hulse	Logbook No.: 5	Pages: 27	Well Vol.: 13.91

Development Method: Bail to drill rig

Equipment: PVC bailer Length = 9.7 ID = .25 Vol = 3.56

Date Stabilized Groundwater Depth Measured: __/__/__
Pre-Dev. SWL (BGS) 21.63 ft. Maximum drawdown during pumping — ft. at — gpm
Range and average discharge rate: — gpm
Total quantity of material bailed: 72 gallons
Total quantity of water discharged by pumping: — gallons
Disposition of discharge water: Contained 55 gal drums A-41 A-42

Time	Volume Removed (gal.)	Water Level ft. BGS	Turbidity	Clarity/ Color	Temp. °C	pH (s.u.)	Conductivity (µmhos/cm)	Remarks
1249	3.5		—	brown	49.4	7.60	10,430	very silty
1257	18		—	brown	49.2	7.23	13,990	less silty
1303	27		—	opaque	48.4	7.04	14,440	
1309	36		—	opaque	48.8	7.09	14,410	less silty
1313	54		—	opaque	47.5	7.07	14,290	
1320	65		—	opaque	47.5	7.25	13,990	
1324	72		—	opaque	47.1	7.20	14,010	

Comments:
soft bottom prior to develop TD = 29.79
hard bottom after develop TD = 30.30

Development Complete: Y/N ( )
BGS - Below Ground Surface

Reviewed by: _____ Date: /

WELL DEVELOPMENT LOG

WELL DEVELOPMENT LOG	Site ID: SWMU-41	Field ID No. (Well No.): MW-2	Page 1 of 1
Installation: DU		Location: Avery Evaporation Pond	
Project No.: UT074	Client/Project: Dugway Proving Ground/RFI		
Development Contractor: Boyles Brothers			
Starting Date: 12-15-93	Completion Date: 12-15-93	Casing Dia: 4"	Dev. Rig B-57
Developed by: Boyles Brothers Jay Hulse	Logbook No.: 5	Pages: 26,27	Well Vol.: 14.67

Development Method: Bail in drilling

Equipment: PVC bailer Length = 9.6 ID = .17 Vol = 1.63 gals

Date Stabilized Groundwater Depth Measured: __/__/__
Pre-Dev. SWL (BGS) 21.79 ft. Maximum drawdown during pumping ___ ft. at ___ gpm
Range and average discharge rate: — gpm
Total quantity of material bailed: 74 gallons
Total quantity of water discharged by pumping: — gallons
Disposition of discharge water: Contained 55 gal drums A-39 A-40

Time	Volume Removed (gal.)	Water Level ft. BGS	Turbidity	Clarity/ Color	Temp. °C	pH (s.u.)	Conductivity (µmhos/cm)	Remarks
1020	1.63		—	brown	42.7	7.32	14,920	silty
1025	10		—	brown	44.9	7.13	15,070	silty
1033	17		—	brown	43.1	7.18	15,020	silty
1040	25		—	tan	42.5	7.15	16,210	cloudy
1054	35		—	tan	46.0	7.17	16,180	cloudy
1102	45		—	tan	45.9	7.08	16,630	cloudy
1106	54		—	tan	48.2	7.05	16,490	cloudy
1116	60		—	opaque	45.4	7.12	16,450	
1126	74		—	opaque	45.3	7.13	16,360	v. slightly silty

Comments:

Development Complete: Y/N ( )
BGS - Below Ground Surface

Reviewed by: _____ Date: /_____

WELL DEVELOPMENT LOG

WELL DEVELOPMENT LOG	Site ID: SWMU-41	Field ID No. (Well No.): MW-3	Page 1 of 1
Installation: DU		Location: Avery-Evaporation Pond	
Project No.: UT074	Client/Project: Dugway Proving Ground/RFI		
Development Contractor: Boyles Brothers Drilling			
Starting Date: 12-15-93	Completion Date: 12-15-93	Casing Dia: 4"	Dev. Rig B-57
Developed by: Boyles Brothers Jay Hulse	Logbook No.: 5	Pages: 26	Well Vol.: 13.16

Development Method: Bail w drill rig

Equipment: PVC bailer Length = 9.7' ID = .25 Vol = 3.56 gals

Date Stabilized Groundwater Depth Measured: 12/15/93
Pre-Dev. SWL (BGS) 22.53 ft. Maximum drawdown during pumping — ft. at — gpm
Range and average discharge rate: — gpm
Total quantity of material bailed: 67 gallons
Total quantity of water discharged by pumping: 67 gallons
Disposition of discharge water: Contained 55 gal drums A-37 A-38

Time	Volume Removed (gal.)	Water Level ft. BGS	Turbidity	Clarity/ Color	Temp. °C	pH (s.u.)	Conductivity (µmhos/cm)	Remarks
0916	3.56		—	brown	49.8	7.99	9,730	very silty
0922	17		—	brown	44.3	7.76	9,210	
0927	23		—	brown	44.3	7.52	9,670	
0931	36		—	brown	47.8	7.39	10,240	
0935	54		—	brown	47.5	7.35	10,110	
0940	66		—		45.5	7.45	9,960	
0942	67		—	light brown	47.1	7.27	10,280	

Comments:
MW 111

Development Complete: Y/N ( )
BGS - Below Ground Surface

Reviewed by: _____ Date: /

WELL DEVELOPMENT LOG

HB 4/14/99 HB 4/14/99

Site ID: ~~173~~ 41		Well No.: TW00~~1~~	Page 1 of 1
Installation: DPG		Location:	
Project No.: 734267/30900	Client/Project: DPG PHASE II		
Development Subcontractor: PARSONS		Drillers: —	3.8 ppm
Start Date: 4/14/99	Completion Date: 4/14/99	Casing Dia.: .5	Dev. Rig: —
Developed by: H BRADBURY	Log Book No.: MICRO WELLS	Pages: 32	Well Vol.: .077

Development method: PERISTALTIC PUMP

Equipment: MASTERFLEX SAMPLING PUMP & TUBING, MODEL 51453 — H2O LEVEL INDICATOR, PHOTOVAC PID

Date Stabilized Groundwater Depth Measured: 4 / 14 / 99.

Pre-Dev. SWL 19.91 ft. _____ Maximum drawdown during development — ft. at — gpm.

SWL (BTOC): 21.35 Total Well Depth (BTOC): 21.8 Sediment Thickness: 0

Range and average discharge rate: — gpm. Total quantity of material (silt) removed: ~~0~~ 1 gallons.

Total quantity of water removed: 1 gallons. Maximum drawdown during development — ft. at — gpm.

Disposition of discharged water: lt br silty then CLEAR Drum No. _____

Purge Data

Total depth 21.8 - Depth to water 19.91 = Column Height (Ht.)

Gal/ft * .041 x Ht. 1.89 = Well Volume .077 x No. of Volumes to be purged 10 =

Required purge Volume .77 Actual purge Volume 1

*2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66

PURGE CALCULATIONS: $\pi(R^2$=WELL RADIUS X R^2=BOREHOLE RADIUS)H=WATER COLUMN HEIGHT X 30% = FILTER PACK POROSITY

ORP	Time	Volume Removed (gal.)	Water Level (ft BGS)	Turbidity	Clarity/ Color	Temp. °C	pH (.)	CONDUCTIVITY (µmhos/cm)	Remarks:	TDS
163	0849	.2	—		lt. br.	23.0	7.62	500.4	lt br. silty	234.2
196	0859	.05	—		less silty	22.4	7.87	485.0	less silty	237.0
164	0923	.55 ~~.65~~	—		clear	24.5	7.54	489.5		233.4
166	0931	.20 ~~.20~~ .75	—		cloudy	24.8	7.79	489.4	lt br silty	232.4

Comments: 21.35 AFTER DEV. 21.8 TD of WELL AFTER DEV.
CWA 041GW01Ø

Development complete: ☒ Yes ☐ No

Reviewed by: _____ Date: ___/___/___

WELL DEVELOPMENT LOG

Site ID: SWMW-41	Well No.: 041TW1A		Page 1 of 1
Installation: DPG		Location: AVERY	
Project No.: 744148	Client/Project:		
Development Subcontractor: —		Drillers: EARTHPROBE	
Start Date: 2/15/2006	Completion Date:	Casing Dia.: 1.5"	Dev. Rig:
Developed by:	Log Book No.: POB Book #1	Pages: 41	Well Vol.:

Development method: CHECK VALVE PUMP

Equipment:

Date Stabilized Groundwater Depth Measured: 2 / 16 / 06

Pre-Dev. SWL 22.04 ft. _____ Maximum drawdown during development _____ ft. at _____ gpm.

SWL (BTOC): 22.04 Total Well Depth (BTOC): _____ Sediment Thickness: _____

Range and average discharge rate: _____ gpm. Total quantity of material (silt) removed: _____ gallons.

Total quantity of water removed: _____ gallons. Maximum drawdown during development _____ ft. at _____ gpm.

Disposition of discharged water: _____ Drum No. _____

Note: 3 gallons H_2O added ∴ 5 volume = 15 gallons

24.35 + 0.3 = 24.65'

Purge Data

Total depth 24.65' - Depth to water 22.04 = Column Height (Ht.) 2.61'

Gal/ft * 0.09 x Ht. 2.61 = Well Volume 0.235 x No. of Volumes to be purged 5 =

Required purge Volume 1.175 + 15 gallons Actual purge Volume

*2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66

PURGE CALCULATIONS: $\pi(R^2$=WELL RADIUS X R^2=BOREHOLE RADIUS)H=WATER COLUMN HEIGHT X 30% = FILTER PACK POROSITY

Time	Volume Removed (gal.)	Water Level (ft BGS)	Turbidity	Clarity/ Color	Temp. °C	pH (.)	CONDUCTIVITY (µmhos/cm)	Remarks:
1250	ϕ	22.04'	910	Cloudy grey	11.4	7.53	2146	TDS - 1721 ORP - 52 : Grey color
1305	1.5	22.60'	310	cloudy grey	—	—	—	—
1400	5	—	130	clearing	—	—	—	— clearing
1530	13	22.10'	13.50	clear	11.5	7.65	1994	TDS - 1594 ORP - 132 clear
1600	16	"	7.88	clear	11.4	7.65	2018	TDS - 1604 ORP - 170 clear

Comments:

Development complete: ☑ Yes ☐ No

Reviewed by: _____ Date: ___/___/___

WELL DEVELOPMENT LOG

Site ID: SWMW-41	Well No.: Ø41TW2A		Page 1 of 1
Installation: DPG		Location: Area	
Project No.: 744148	Client/Project:		
Development Subcontractor: —		Drillers: Earthprobe	
Start Date: 2/14/06	Completion Date:	Casing Dia.: 1.5"	Dev. Rig:
Developed by: Niall Renshaw	Log Book No.: PDB Simple	Pages:	Well Vol.:

Development method: 0.5' OD WATERA PUMP #1 w/ a check valve

Equipment:

Date Stabilized Groundwater Depth Measured: ___/___/___.

Pre-Dev. SWL 21.51 ft. ___ Maximum drawdown during development ___ ft. at ___ gpm.

SWL (BTOC): ___ Total Well Depth (BTOC): ___ Sediment Thickness: 0.25'

Range and average discharge rate: ___ gpm. Total quantity of material (silt) removed: ___ gallons.

Total quantity of water removed: ___ gallons. Maximum drawdown during development ___ ft. at ___ gpm.

Disposition of discharged water: ___ Drum No. ___

23.75+0.3=24.05 **Purge Data**

Total depth 24.05 - Depth to water 21.51' = Column Height (Ht.) 2.54'

Gal/ft * ___ x Ht. ___ = Well Volume ___ x No. of Volumes to be purged ___ =

Required purge Volume ___ Actual purge Volume

*2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66

PURGE CALCULATIONS: $\pi(R^2$=WELL RADIUS X R^2=BOREHOLE RADIUS)H=WATER COLUMN HEIGHT X 30% = FILTER PACK POROSITY

	Time	Volume Removed (gal.)	Water Level (ft BGS)	Turbidity	Clarity/ Color	Temp. °C	pH (.)	CONDUCTIVITY (µmhos/cm)	Remarks:
	1320	Ø		580	cloudy	11.1	7.09	6201	TDS — 5480 ppm ORP 242
	1400	~1 gal	21.55'	820	milky cloudy				
	1615	2½ gal	21.55'	550	cloudy	8.0	7.41	6133	Depth of bottom = 23.3+0.3 = 24.1' : tapping plastic TDS 5464 ORP 223
2/15/06	0845	2½ gal	21.55'	108	clearing up	6.8	7.21	6072	TDS - 5396 ppm, ORP - 219.
	1046	5.5 gallons	21.55'	136	clearing	—	—	—	Note: @ 0930 - 540 Turb. cloudy
Small amount of clay/silt	1115	7 gallons	"	230	cloudy	—	—	—	
	1210	8 gallons	"	477	cloudy	9.6	7.58	6163	TDS 5478 ORP 211
	1430-1330	10 gallons		132	slightly cloudy	—	—	—	—
2/16/06	1555	10 gallons	21.60'	35	clear	10.5	6.92	6825	TDS 5452 ORP 187
	1630	12 gallons	up to 23.0' bbc	17	clear	—	—	—	—
	1700	15 gallons	21.55' bbc	7.32	clear	8.2	7.26	6835	TDS 5490 ORP 177

Comments:

Development complete: ☑ Yes ☐ No

Reviewed by: ___ Date: ___/___/___

MONITORING WELL PURGE AND SAMPLE LOG

Project No.: 734267-30900	Site ID: Sarma 041 MW1
Installation: Dugway Proving Grounds	Log Book No. 2 Pages: 82
Contractor: PARSONS	Sampler(s) P. Foote, R. Mulvey
Purge Start Date: 5/8/01 Time: 1416	Purge End Date: 5/8/01 Time: 1540
Weather: Wind 0-3 mph Precipitation: None	Air Temperature: 72 °F
Well Labeled: Y/N [Y] Well Secure: Y/N [Y]	Comments:
PID SN:	Well Headspace (PID mu) 0.0 Odor: 0
Explosimeter SN: —	Reading: — %LEL —
Water Level Instrument: Solinst	Serial No.: 26423
SWL (BTOC): 21.99 Total Well Depth (BTOC): 30.16	Sediment Thickness: 0
Well Casing 2" (4") 6" Other:	Borehole diameter: 8"
Water Column: 8.17 ft. Gals/ft. 0.653	Total Purge Vol. 17 Gallons
Purge Method: Pump	Purge Equipment: Grundfos Red. flow 2 / Horiba U-22

PURGE DATA:

Total depth 30.46 - Depth to water 21.99 = Column Height (Ht.) 8.17
Gal/ft * 0.653 x Ht 8.17 = Well volume 5.33 x No. of Volumes to be purged 3 =
Required purge volume 16.0 Actual purge Volume 17.0
* 2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66
Purge Calculations: $\pi(r^2$ =well radius x r^2 =borehole radius)h =water column height x 30% =filter pack porosity

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	TDS ~~ppm~~	Conductivity (~~µmhos/cm~~)	Turbidity (NTU)	Comments
1423	7 min	1.0	22.30	29.46	15.94	7.10	9.0 g/L	13.9 mS/cm	2.35	
1450	34 min	7.0	22.38	29.46	15.87	7.13	9.0 g/L	13.7 "	0.27	
1514	58 min	13.0	22.37	29.46	15.99	7.13	8.0 g/L	13.7 "	0.11	
1528	1:12	15.5	22.39	29.46	15.94	7.12	8.0 g/L	13.7 "	0.10	
					~~15.93~~	~~7.13~~		~~13.8 "~~		

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	DO ~~mg/L~~ 2.13	ORP mV	Conductivity (~~µmhos/cm~~ mS/cm)	TDS ppm	Turbidity (NTU)	VOC Collection Flow Rate
1540	1:24	17	22.40	29.46	15.93	7.13	~~9.0 g/L~~	77	13.8	9.0 g/L	0.10	<100 ml/min

Sample Type: GW Sample No. 041GW018
Sample Equipment: Pump Sample Filtered: Yes [ ] No [X] Filter Type/Size: —
Equipment Rinsate Sample No.: — Sample Equipment Decon: Date: 5-8-01 by: PAF
Comments:
Prepared by: Date: / / Reviewed by: Date: / /

MONITORING WELL PURGE AND SAMPLE LOG

Project No.: 734267-30900	Site ID: SWMU 041 - MW041
Installation: Dugway Proving Grounds	Log Book No. 2 Pages: 83
Contractor: PARSONS	Sampler(s) P. Foote, R. Mulvey
Purge Start Date: 5/9/01 Time: 0825	Purge End Date: 5/9/01 Time: 0935
Weather: Wind 0 mph Precipitation: 0	Air Temperature: 60 °F
Well Labeled: Y/N [Y] Well Secure: Y/N [Y]	Comments:
PID SN:	Well Headspace (PID mu) 0.0 Odor: —
Explosimeter SN: —	Reading: %LEL
Water Level Instrument: Solinst	Serial No.: 26423
SWL (BTOC): 22.14 Total Well Depth (BTOC): 30.47	Sediment Thickness: 0
Well Casing 2" (4") 6" Other:	Borehole diameter: 8"
Water Column: 8.33 ft. Gals/ft. 0.653	Total Purge Vol. 17 Gallons
Purge Method: Pump	Purge Equipment: Grundfos Rediflow 2 / Horiba U-22

PURGE DATA:

Total depth 30.47 - Depth to water 22.14 = Column Height (Ht.) 8.33
Gal/ft * 0.653 x Ht 8.33 = Well volume 5.44 x No. of Volumes to be purged 3 =
Required purge volume 16.3 Actual purge Volume _____
* 2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66
Purge Calculations: $\pi(r^2$ =well radius x r^2 =borehole radius)h =water column height x 30% =filter pack porosity

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	TDS ~~ppm~~	Conductivity (~~µmhos~~ mS/cm)	Turbidity (NTU)	Comments
0832	0:07	1	22.48	29.47	14.59	6.62	12 g/L	18.7	4.20	
0900	0:35	9	22.83	29.47	14.96	7.17	12 g/L	18.8	0.82	
0915	0:50	13	22.87	29.47	14.93	7.20	12 g/L	18.7	0.40	

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	DO mg/L	ORP mV	Conductivity (µmhos/cm)	TDS ppm	Turbidity (NTU)	VOC Collection Flow Rate
0935	1:10	17	22.88	29.47	15.00	7.22	2.06	-26	18.7	12 g/L	0.52	<100 ml/min

Sample Type: GW | Sample No. 041GW019 — 041FD019
Sample Equipment Grundfos Rediflow 2 | Sample Filtered: Yes [ ] No [X] | Filter Type/Size: —
Equipment Rinsate Sample No.: — | Sample Equipment Decon: Date: 5-9-01 by: PAF
Comments:
Prepared by: P. Foote Date: 5/9/01 | Reviewed by: Date: / /

When pump was pulled up from well, what appeared to be wood excelsior (~12" long) was clinging to pump & leads. Saved in baggy

730244\wp0698\sops\sop24

MONITORING WELL PURGE AND SAMPLE LOG

Project No.: 734267-30900	Site ID: SWMU Φ41 - MW ΦΦ3
Installation: Dugway Proving Grounds	Log Book No. 2 Pages: 83
Contractor: Parsons	Sampler(s) P. Foote, R. Mulvey
Purge Start Date: 5/9/01 Time: 1035	Purge End Date: 5/9/01 Time: 1155
Weather: Wind 0-3 mph Precipitation: None	Air Temperature: 75° °F
Well Labeled: Y/N [Y] Well Secure: Y/N [Y]	Comments:
PID SN:	Well Headspace (PID mu) 0.0 Odor: —
Explosimeter SN: —	Reading: — %LEL
Water Level Instrument: Solinst	Serial No.: 26423
SWL (BTOC): 22.90 Total Well Depth (BTOC): 30.41	Sediment Thickness:
Well Casing 2" (4") 6" Other:	Borehole diameter: 8"
Water Column: 7.51 ft. Gals/ft. 0.653	Total Purge Vol. 16 Gallons
Purge Method: Pump	Purge Equipment: Grundfos Rediflow 2/Horiba U-22

PURGE DATA:

Total depth 30.41 - Depth to water 22.90 = Column Height (Ht.) 7.51

Gal/ft * 0.653 x Ht 7.51 = Well volume 4.9 x No. of Volumes to be purged 3 =

Required purge volume 14.7 Actual purge Volume 16

* 2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66

Purge Calculations: $\pi(r^2$ =well radius x r^2 =borehole radius)h =water column height x 30% =filter pack porosity

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	TDS ~~ppm~~ g/L	Conductivity ~~(µmhos/cm)~~ mS/cm	Turbidity (NTU)	Comments
10:39	0:04	1	23.08	29.41	16.39	7.34	7.0	11.1	30.2	
10:58	0:23	5	23.11	29.41	16.59	7.41	6.0	10.1	8.70	
11:23	0:48	10	23.11	29.41	16.82	7.44	6.0	10.1	1.05	
11:41	1:06	14	23.11	29.41	16.82	7.44	6.0	10.1	0.55	
						~~7.44~~		~~TEST~~	~~0.55~~	

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	DO	ORP mV	Conductivity ~~(µmhos/cm)~~ mS/cm	TDS ~~ppm~~ g/L	Turbidity (NTU)	VOC Collection Flow Rate
1155 ~~1150~~	1:17	16	23.11	29.41	16.82	7.44	1.56	12	10.1	6.0	0.65	<100ml/min

Sample Type: Sample No. Φ41GWΦ20

Sample Equipment Pump Sample Filtered: Yes [ ] No [X] Filter Type/Size: —

Equipment Rinsate Sample No.: Φ41EBΦ20 Sample Equipment Decon: Date: 5/9/01 by: PAF

Comments: See below

Prepared by: P. Foote Date: 5/9/01 Reviewed by: Date: / /

When pump was pulled out from well, what appeared to be wood excelsior (12" long) was clinging to pump & lines. Saved in baggy.

MONITORING WELL PURGE AND SAMPLE LOG

Project No.: 734267 / 30200	Site ID: SWMU041 TW001
Installation:	Log Book No. MICRO WELLS Pages: 52
Contractor: PARSONS	Sampler(s) H. BRADBURY
Purge Start Date: 5/26/99 Time: 1350	Purge End Date: 5/26/99 Time: 1516
Weather: Wind 3 mph Precipitation: NONE	Air Temperature: 75 °F
Well Labeled: Y/N [Y] Well Secure: Y/N [Y]	Comments:
PID SN:	Well Headspace (PID mu) 3.8 ppm Odor NONE
Explosimeter SN: NA	Reading: %LEL
Water Level Instrument:	Serial No.:
SWL (BTOC): 19.57 Total Well Depth (BTOC): 21.80	Sediment Thickness:
Well Casing 2" 4" 6" Other: 1.0"	Borehole diameter: 2"
Water Column: 2.23 ft. Gals/ft. .041	Total Purge Vol. .25 Gallons
Purge Method: Peristaltic Pump	Purge Equipment: Peristaltic Pump

PURGE DATA:

Total depth 21.80 - Depth to water 19.57 = Column Height (Ht.) 2.23

Gal/ft * .041 x Ht 2.23 = Well volume .091 x No. of Volumes to be purged 3 = .27

Required purge volume .27 Actual purge Volume .25

* 2-inch ID well = 0.163, 4-inch ID well = 0.653, 6-inch ID well = 1.472, 4-inch ID well with 10-inch bore = 1.66

Purge Calculations: $\pi(r^2$ =well radius x r^2 =borehole radius)h =water column height x 30% =filter pack porosity

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	Conductivity (µmhos/cm)	Turbidity (NTU)	Comments	ppm TDS
1411	—	.05	19.57	19'	31.2	7.55	678.4µS	5.03	ORP=120 CLEAR	325.7
1415	4 min	.10		19'	29.7	7.48	632.9µS	.93	ORP 150 CLEAR	303.2
1421	6 min	.05		19'	29.8	7.43	626.6µS	2.37	ORP 173 CLEAR	300.5
1425	4 min	.05		19	29.1	7.49	614.8µS	1.09	ORP 171 CLEAR	294.7

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	DO	ORP	Conductivity (µmhos/cm)	Turbidity (NTU)	VOC Collection Flow Rate	TDS
1440	15 min	.25		19'	30.2	7.52	2.0	218 mv	671.0µS	1.71	89 ml/min	322.9

Sample Type: WATER	Sample No. 041GW014	
Sample Equipment Peristaltic Pump	Sample Filtered: Yes [ ] No [X]	Filter Type/Size: —
Equipment Rinsate Sample No.: —	Sample Equipment Decon: Date: NA by:	
Comments:		
Prepared by: H. BRADBURY Date: 5/26/99	Reviewed by:	Date: / /

TOC - Top of Casing SWL - Static Water Level

LOW-FLOW GROUNDWATER PURGE AND SAMPLE LOG

Project No.: 744148	Site ID: DTO041TW1A
Installation: Dugway Proving Ground	Log Book No. PDB Sample #1 / Pages:
Contractor: PARSONS	Sampler(s) NIALL HENSHAW, LEA MCKINSTRY
Purge Start Date: 2/23/06 Time: 0935	Purge End Date: 2/23/06 Time: 1000
Weather: Wind mph Precipitation: ∅, clear	Air Temperature: 30's ?F
Well Labeled: Y/N [Y] Well Secure: Y/N [Y]	Comments:
PID SN:	Well Headspace (PID mu) Odor
Water Level Instrument: SOLINST	Serial No.: 26423
SWL beginning (BTOC): 22.07' / WL After pump install (BTOC):	Max Drawdown (inches):
Well Casing 2" 4" 6" Other: 1.5"	Borehole diameter: 3.25' / Sandpack length (L): 5 ft.
Screen Length: 5'	Parameters Measured With: YSI 650
Water Column height (h): 24.65 - 22.07' = 2.58 ft.	Total Purge Vol. 1.25 Gallons
Purge Method: PERISTALTIC PUMP / Max Purge Rate: L/min	Sampling Flow Rate: mL/min
Pump Type: / Pump Vol.:	Tubing Material: 35' + 4 + 4' = 43' / Vol./ft: 0.0025 gal/ft / Total ft.: 43' 3/8" OD 0.25 ID polyethylene tubing
Flow-Through Cell Vol.: *560ml = 0.148 gallon	Total Pump + Tubing + Cell Vol.: 0.11 + 0.148 = 0.258
Casing radius: 1.5" (in)/12 = 0.125 r (decimal ft)	Borehole radius: 3.25 (in)/12 = 0.27 r (decimal ft)
Well Casing Vol. = 3.14 x r(0.125)^2 x h(2.58') x 7.48 (conversion from ft^3 to gal.) = 0.2322 gallons	
Sandpack Vol. = 3.14 x r(0.27)^2 x L(2.58) x 7.48 – Well Casing Vol.(0.23 above) x 0.3 = 1.25 gallons	
Total Well Vol. = Well Casing Vol. (0.2322 above) + Sandpack Vol. (1.25 above) = 1.48 gallons	
Depth of pump inlet (BTOC) and rational: 23.3' btoc : centre of water column in screen	

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (°C)	pH	DO	ORP mV	Conductivity (?mhos/cm)	TDS ppm	Turbidity (NTU)	Comments
0938	∅	∅	22.42	23.3	12.70	7.7	3.11	99.1	1640		41.9	
0944	6 min	0.5	22.36	"	14.14	7.48	0.75	100.8	1691		0.1	
0950	6	0.75	22.31	"	14.32	7.49	0.54	108.0	1689		<0.5	
0953	3	1.0	22.31	"	14.5	7.49	0.47	108.0	1688		2.4	

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (?F)	pH	DO	ORP mV	Conductivity (?mhos/cm)	TDS ppm	Turbidity (NTU)	VOC Collection Flow Rate
1000	7	1.25	22.31	23.3	14.77	7.50	0.46	94.5	1693		0.00	< 100 ml/min

Sample Type: (LOW FLOW + PERISTALTIC PUMP) WATER	Sample No. ∅41GW∅34 GW∅33 MOH
Sample Equipment PERISTALTIC PUMP LOW FLOW. / Sample Filtered: Yes [ ] No [✓]	Filter Type/Size:
Equipment Rinsate Sample No.:	Sample Equipment Decon: Date: 2/23/06 by: MOH
Comments:	
Discharge Water Disposition: In Drum	Drum Number: ∅744
Prepared by: Date: / /	Reviewed by: Date: / /

Figure 51-1

Note: 1010 SWL returned to 22.07' btoc

LOW-FLOW GROUNDWATER PURGE AND SAMPLE LOG

Project No.: 744148	Site ID: DTO041TW02A
Installation: Dugway Proving Ground	Log Book No. PDB Sample #2 / Pages: 44
Contractor: PARSONS	Sampler(s)
Purge Start Date: 2/23/06 Time: 1114	Purge End Date: 2/23/06 Time: 1130
Weather: Wind 0-5 mph Precipitation: Sunny	Air Temperature: 30's ?F
Well Labeled: Y/N [y] Well Secure: Y/N [y]	Comments:
PID SN:	Well Headspace (PID mu) Odor
Water Level Instrument: Solinst	Serial No.: 26423
SWL beginning (BTOC): 21.57' / WL After pump install (BTOC):	Max Drawdown (inches): 6.6'
Well Casing 2" 4" 6" Other: 1.5"	Borehole diameter: 3.25" / Sandpack length (L): 5 ft.
Screen Length: 5'	Parameters Measured With: YSI 650
Water Column height (h): 24.05' − 21.57' = 2.48 ft.	Total Purge Vol. Gallons
Purge Method: / Max Purge Rate: L/min	Sampling Flow Rate: mL/min
Pump Type: Peristatic pumps / Pump Vol.:	Tubing Material: 30'+4'+4' = 38' / Vol./ft: 0.0025 gal/ft / Total ft.: 38'
Flow-Through Cell Vol.: *560ml = 0.148 gallons	Total Pump + Tubing + Cell Vol.: 0.095 + 0.148 = 0.243
Casing radius: 1.5" (in)/12 = 0.125 r (decimal ft)	Borehole radius: 3.25 (in)/12 = 0.27 r (decimal ft)
Well Casing Vol. = 3.14 x r(0.125)^2 x h(2.48) x 7.48 (conversion from ft^3 to gal.) = 0.223 gallons	
Sandpack Vol. = 3.14 x r(0.27)^2 x L(2.48) x 7.48 – Well Casing Vol.(0.223 above) x 0.3 = 1.21 gallons	
Total Well Vol. = Well Casing Vol. (0.223 above) + Sandpack Vol. (1.21 above) = 1.433 gallons	
Depth of pump inlet (BTOC) and rational: 22.8' btoc : center of water column in screen.	

3/8" OD 0.25" ID polyethylene tubing

PURGE CYCLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (?C)	pH	DO	ORP mV	Conductivity (?mhos/cm)	TDS ppm	Turbidity (NTU)	Comments
1114	Ø	Ø	21.9	22.8	15.4	7.33	4.36	109.0	5580		Ø	125 mL/min
1117	3	0.2	21.88	"	14.2	7.1	2.99	108.8	5635		0	
1120	3	0.5	21.83	"	15.9	7.05	2.48	108.7	5617		0	
1125	5	0.7	21.75	"	15.99	7.00	3.14	110.5	5632		1.9	

SAMPLE

Actual Time	Elapsed Time	Volume Purged (gals)	Depth to Water (ft)	Depth of Pump Intake (ft)	Temp (?F)	pH	DO	ORP mV	Conductivity (?mhos/cm)	TDS ppm	Turbidity (NTU)	VOC Collection Flow Rate
1130	5	0.8	21.81	"	14.01	7.00	3.25	110.4	5653		0	

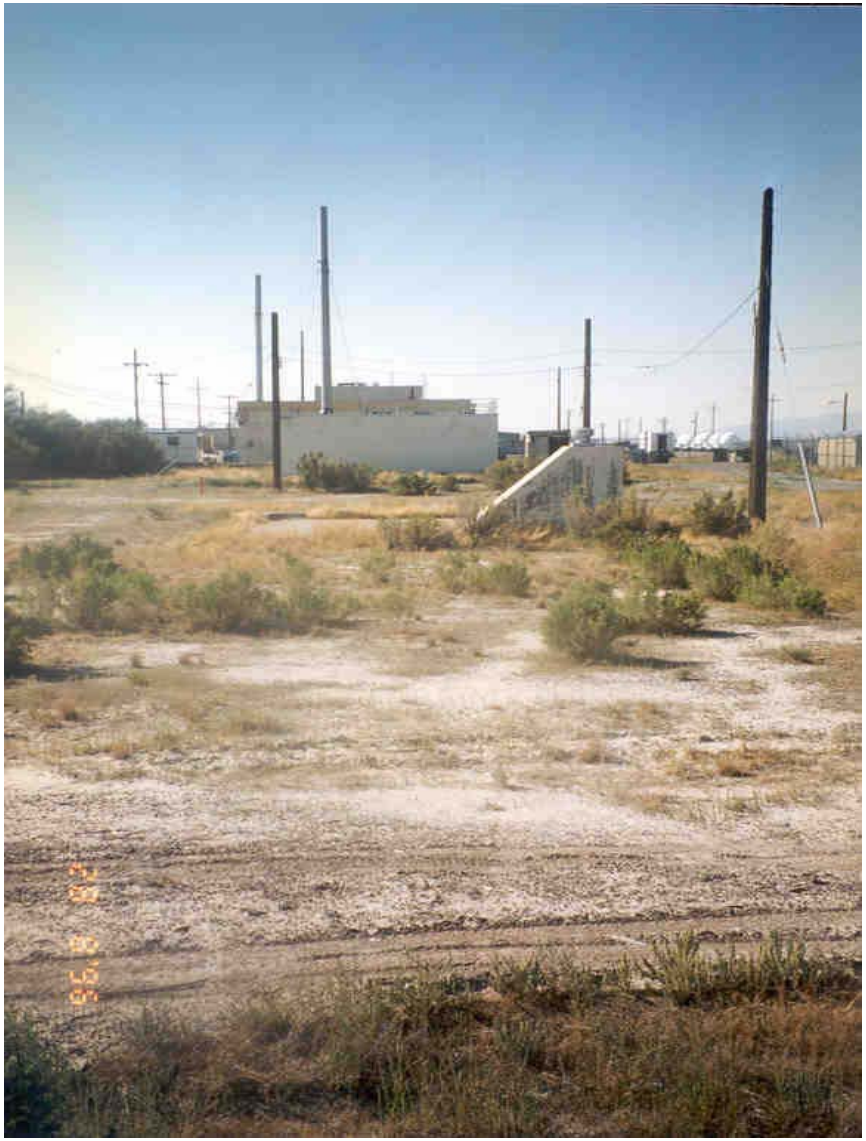
Sample Type: WATER	Sample No. Ø41GWØ34
Sample Equipment LOW FLOW AND PERISTALTIC / Sample Filtered: Yes [ ] No [✓]	Filter Type/Size:
Equipment Rinsate Sample No.:	Sample Equipment Decon: Date: 2/23/06 by: NOH
Comments:	
Discharge Water Disposition: IN DRUM	Drum Number: ESØ744
Prepared by: Date: / /	Reviewed by: Date: / /

Figure 51-1

APPENDIX B

PHOTOGRAPHS

Photograph 1
SWMU-41 – View of evaporation pond looking south.



Photograph 2
SWMU-41 – View of pump house entrance (Building 1002) and Building 1003 looking northwest.

Photograph 3

SWMU-41 – View of manhole covers to underground vaults and concrete roof of pump house (Building 1002).

Photograph 4
SWMU-41 – Looking down into one of the three vaults.

Photograph 5
SWMU-41 – Excavation of vault rooftop.

APPENDIX C

ANALYTICAL RESULTS

APPENDIX C
ANALYTICAL RESULTS

Appendix C contains analytical results in a Microsoft ® Excel 2000 workbook, "TABLEC1.xls". This workbook contains data that are minimally formatted to support use of the data in further processing or assessment. The workbook contains several worksheets (tabs). The tabs are named to identify the data in the worksheet.

Worksheets are provided for any of the following, as applicable:

- Soil Confirmation Data
- Surface Water Confirmation Data
- Groundwater Confirmation Data
- Groundwater Screening Data
- TNT Soil Screening Data
- Site Material/Wastewater Confirmation Data
- Soil Gas Screening Data

The worksheets include raw data for normal field samples and field duplicates. Percent solids is included as a result where available. Both Phase I and Phase II data are included where Phase I data are available. During Phase I (logdates from 1992 to 1996), samples analyzed for ABPs were also analyzed for CWA including sarin, soman, VX, sulfur-mustards, and lewisite. These data have never been encoded for electronic use, and therefore, are not represented in Table C.1.xls. No detections of CWAs occurred in Phase I.

The worksheet fields are described in Table C.2.

Note that several data reduction processes take place when using the data in reports. Details of data reduction for risk assessment are provided in the Risk Assumptions Document (Parsons, 2002a). Other report elements, such as maps, may contain data that are more minimally processed, such as removal of duplicative results. Some report elements contain only data that have survived site attribution analysis or

other analytical steps. Therefore, in general, it is not possible to compare directly from the raw data to a report element.

Some data are presented as codes. Table C.2 indicates this and provides descriptions for Tables C.3, C.4, C.5, and C.6, which explain the coding.

Sensitivity Assessment General Comments

Table C.7 is the data sensitivity assessment for soils. This table summarizes non-detects for which the analytical sensitivity is greater than the Residential Soil PRG (USEPA Region 9, 2004) and/or the background level (Table 6.1, non-parametric 95-percent UTL or maximum detection if no 95-percent UTL is available; Parsons, 2001[a]) for soils.

Two items of particular note pertain to this table. First, at SWMUs where there are Phase I data, it is included in the sensitivity assessment. Second, in some cases, samples were analyzed by multiple methods and with different sensitivity. The assessment shows results which have less sensitivity than the screening level without regard for whether a more sensitive result is otherwise available. Common situations where this occurs are:

- Phase I analysis for arsenic, lead, selenium, and antimony which were often analyzed by inductively coupled plasma and graphite furnace atomic absorption.
- Phase I analysis for pesticides and herbicides. These analytes were included in the SVOC suite as a general screen with high reporting limits, but were analyzed specifically by gas chromatography where site history indicated a need.
- Phase II analysis for dichlorobenzenes. These compounds occur on both the SVOC and VOC analyte lists. Where both suites are analyzed, two results will occur.
- Phase II analysis for dinitrotoluenes. These compounds occur on both the SVOC and the explosives lists. Where both suites are analyzed, two results will occur.

Site Specific Sensitivity Assessment

In this section the impact of decreased analytical sensitivity on site characterization is considered. Non-detects in soil samples for which the analytical

sensitivity is greater than the USEPA Region 9 (2004) Residential Soil PRG are summarized in Table C.7.

Nineteen soil samples collected during Phase I at MW01, MW02, MW03, SS001, SS002, SB01, and HA01 were associated with reported MDLs for various analytes in excess of the Residential Soil PRG. A total of 22 analytes (1,2-dichloroethane, 1,2-dichloropropane, 2,4-dinitrotoluene, 3,3'-dichlorobenzidine, aldrin, alpha-BHC, arsenic, benzo[a]pyrene, beta-BHC, bis[2-chloroethyl]ether, carbon tetrachloride, chloroform, delta-BHC, dibenz[a,h]anthracene, dieldrin, heptachlor, heptachlor epoxide, indeno[1,2,3-c,d]pyrene, N-nitrosodi-n-propylamine, thallium, toxaphene, and vinyl chloride) have MDLs that exceed the PRG. The impact to data usability for these analytes will be addressed in the following paragraphs.

Thirteen arsenic non-detect results from Phase I data exceeded background. Samples were analyzed by ICP. In each case an additional result with adequate sensitivity exists as a result of additional analysis by graphite furnace. Therefore no data gap exists for arsenic.

Nineteen Phase I thallium results were also identified as having inadequate sensitivity. Thallium is not expected at this site based on site history. Thallium is associated with rat poisons and insecticides. No evidence of disposal of these materials was noted in field investigations. Other uses include high refractive index glass, semi-conductors, and mercury switches (Budavari, S, 1996). Because there is no site history or visual evidence to support the presence of elevated thallium, there is no data gap.

The compound N-nitrosodi-n-propylamine was noted to exceed sensitivity goals in Phase II data. This compound has been discussed in Section 3.3.4.3 (Volume I of this report [Parsons, 2004b]). N-nitrosodi-n-propylamine has been rarely detected at DPG, and it is not anticipated based on site history. Therefore, the inadequate sensitivity associated with this SVOC does not represent a data gap.

Eight of the SVOCs were pesticides (aldrin, alpha-BHC, beta-BHC, delta-BHC, dieldrin, heptachlor, heptachlor epoxide, and toxaphene), which were included in the Phase I SVOC analytical suite. Pesticides were never site specific target compounds and were not carried forward into Phase II at this site; therefore, these compounds do not represent data gaps.

Chloroform and vinyl chloride were not detected at SWMU-41, and carbon tetrachloride had one low level detection at MW02. These are three of the VOCs associated with data exceeding sensitivity goals in Phase I results. Carbon tetrachloride has been detected in the Carr area of DPG in association with chemical warfare disposal sites. SWMU-41 does not have a history of CWA disposal. There is no site history of chlorinated solvent use or decontamination, and no other VOCs were detected at SWMU-41; therefore, decreased chloroform, vinyl chloride, and carbon tetrachloride analytical sensitivity does not represent a data gap.

Phase I 2,4-dinitrotoluene results were identified as having inadequate sensitivity. This chemical is associated with explosive compounds and material. There is no evidence of UXO or other explosive compounds at the site to support the presence of 2,4-dinitrotoluene; therefore, there is no data gap associated with this compound.

The other two VOCs (1,2-dichloroethane and 1,2-dichloropropane) and the other two SVOCs (3,3'-dichlorobenzidene and bis[2-chloroethyl] ether) are rarely detected at DPG, and are not associated with a specific site history which would support their presence at SWMU-41. Therefore the non-detect results with inadequate sensitivity for these compounds do not represent a data gap.

Three polyaromatic hydrocarbons PAHs (benzo[a]pyrene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene) have sensitivity concerns at this site. There were no PAHs detected at this site including those with adequate sensitivity. Although there are samples collected within areas containing of broken asphalt, which could be a source of PAHs, asphalt is not considered a source of waste contamination in the scope of this RFI. There is no site history that would include disposal of wastes containing PAHs at SWMU-41; therefore, there are no data gaps associated with this inadequate sensitivity.

Several minor sensitivity issues were noted at SWMU-41, which did not impact the usability of the data, and there were no data gaps are present as a result of this sensitivity assessment.

TABLE C.2
EXPLANATION OF DATA FIELDS

DUGWAY PROVING GROUND, UTAH

Field Name	Data Base Code	Definition	Comments
Location	LOCID	Identifier assigned to a location on DPG where an investigative activity occurred.	Although typically these points are unique, in the case of composite sampling multiple points may be associated with a single location. See SOP 16 for nomenclature conventions.
Sample_ID	FLDSAMPID	Unique identifier assigned to a sample in the field.	See SOP 16 for nomenclature conventions.
Logdate	LOGDATE	Date that an investigative activity (sampling) took place. In MM/DD/YYYY format.	
Depth	(SBD + SED)/2	The average sample depth in feet below ground surface, or for angle borings, linear feet bored.	For water samples this may be depth at which the pump was deployed. Well construction data will provide the screen interval.
Matrix	MATRIX	The ERPIMS[a/] matrix code.	ERPIMS Valid Value Lists are available at: http://www.afcee.brooks.af.mil/ms/irp_vvl.asp
Method	ANMCODE	The ERPIMS method code, where applicable. For Phase I Data this is the USATHAMA[b/] method code. Some codes are not found in ERPIMS or USATHAMA, e.g. DPG WDTC[c/] methods.	Table C.3 shows method codes and associated methods. ERPIMS Valid Value Lists are available at: http://www.afcee.brooks.af.mil/ms/irp_vvl.asp
Anadate	ANADATE	The date of analysis. In MM/DD/YYYY format.	
Prep_Method	EXMCODE	The ERPIMS preparation method code, where applicable. Not populated for Phase I data.	"None" and "Method" are used as required by ERPIMS to indicate that no preparation step waas used, or that a preparation step included in the analytical method was used. ERPIMS Valid Value Lists are available at: http://www.afcee.brooks.af.mil/ms/irp_vvl.asp
Extdate	EXTDATE	The date the preparation method was performed. In MM/DD/YYYY format.	

TABLE C.2 (CONTINUED)
EXPLANATION OF DATA FIELDS

DUGWAY PROVING GROUND, UTAH

Field Name	Data Base Code	Definition	Comments
Analyte	ANALYTE	The ERPIMS Analyte name where applicable. If an Analyte is not included in ERPIMS then the IRDMIS[d/] name is used. If an analyte is not defined in either program, then a name was assigned by Parsons.	
Qualifier	PARVQ	Indicates how to interpret the result.	Table C.4 lists and explains the qualifiers.
Result	PARVAL	The result is shown in the units specified. "0" means that the laboratory did not detect the analyte at a value greater than or equal to the Method Detection Limit (MDL).	
MDL	MDL	For Phase II data this is the sample specific MDL, and is equivalent to "SQL" as used in risk assessment (Parsons, 2002a. Phase II data is reported to the MDL. Phase I data was reported in the IRDMIS system. This system did not distinguish between MDL and Reporting Limit (RL) or Practical Quantitation Limit (PQL). This limit, regardless of how it was derived, is the value against which detection or non-detection was assessed. Therefore it was placed in the MDL field for ease of use in data processing. Note that for Phase I data, if there has been a detection, no limit was reported and therefore we have placed a "0" in the MDL field to represent this case.	For the chemical warfare agents GF, soman and tabun MDLs were not determined. The MDL column has been left null. The RL reported by the DPG WDTC is used to assess the data.
RL	RL	For Phase II data the Reporting Limit (RL) is equivalent to the Practical Quantitiation Limit (PQL) specified in the QAPP[e/].	
Units	UNITS	"MG/KG" means mg/Kg and "UG/L" means ug/L.	

TABLE C.2 (CONTINUED)
EXPLANATION OF DATA FIELDS

DUGWAY PROVING GROUND, UTAH

Field Name	Data Base Code	Definition	Comments
Flag	EPA_FLAGS	This is the data validation qualifying flag.	Flags are described in Table C.5.
Reason	DQREASON	This code describes the reason for the flag.	Reason codes are described in Table C.6.
R9RESSOPRG	R9RESSOPRG	The US EPA Region IX residential soil Preliminary Remediation Goal (PRG).	PRGs may be found at: http://www.epa.gov/region09/waste/sfund/prg/index.html
BKGRND	BKGRND	The 95% UTL (Parsons, 2001b)	

a/ ERPIMS is Environmental Resource Program Information Management System. ERPIMS is managed by the Air Force Center for Environmental Excellence (AFCEE) at Brooks AFB.

b/ USATHAMA refers to the fomer program of the U.S. Army Environmental Center.

c/ WDTC is West Desert Test Center.

d/ IRDMIS is Installation Restoration Data Management.

e/ QAPP is Quality Assurance Project Plan.

TABLE C.3
PHASE II RFI METHOD CODES
DUGWAY PROVING GROUND, UTAH

Anmcode	Description	Reference[a/]	Method[b/]	Comment
A3500D	Iron II	SM18	3500-FE D	
CL-002R	G-Agents, VX, Mustard	DPG	CL-002R[c/]	
CL-025R	Lewisite	DPG	CL-025R[d/]	
D2216	Percent Solids	ASTM	D2216	
E160.1	Total Dissolved Solids	MCAWW	160.1	
E310.1	Alkalinity	MCAWW	310.1	
E415.1	Total Organic Carbon	MCAWW	415.1	51 normal and field duplicate results from temporary wells sampled in spring 1999, prior to revision of the QAPP to specify analytical details for the TOC analysis.
IAAP	Nitrocellulose	Lab SOP	Hydrolysis Followed by Auto-Analyzer	
LT03	IMPA/MPA	USATHAMA	IMPA and MPA in Soil by Ion Chromatography	
UT03	IMPA/MPA	USATHAMA	IMPA and MPA in Water by Ion Chromatography	
LW18	Thiodiglycol	USATHAMA	Thiodiglycol in Soil by Liquid Chromatography	
UW22	Thiodiglycol	USATHAMA	Thiodiglycol in Water by Liquid Chromatography	

TABLE C.3 (CONTINUED)
PHASE II RFI METHOD CODES

DUGWAY PROVING GROUND, UTAH

Anmcode	Description	Reference[a/]	Method[b/]	Comment
M8015D	TPH – Diesel Range	SW846	8015	Note that there is in fact no modification to the method, despite the "M" in the ERPIMS code. ERPIMS did not update the code after the issuance of SW-846 Update III which normalized this procedure.
SW6010	Metals	SW846	6010B	
SW6020	Metals	SW846	6020	
SW7470	Mercury	SW846	7470A	
SW7471	Mercury	SW846	7471A	
SW8081	Pesticides	SW846	8081A	
SW8151	Herbicides	SW846	8151A	
SW8260	VOCs, TPH – Gas Range, BTEX	SW846	8260B	
SW8270	SVOCs	SW846	8270C	
SW8321	ABPs	SW846/LabSOP	8321 Modified for Chemical Warfare Agent Breakdown Products	
SW8330	Explosives	SW846	8330	Note that nitroglycerin may appear in either SW8330 or SW8330M.
SW8330M	Nitroglycerin	SW846/LabSOP	SW8330 Modified to include Nitroglycerin	
SW9030	Sulfide	SW846	9030	

TABLE C.3 (CONTINUED)
PHASE II RFI METHOD CODES

DUGWAY PROVING GROUND, UTAH

Anmcode	Description	Reference[a/]	Method[b/]	Comment
SW9040	pH	SW846	9040B	
SW9045	pH	SW846	9045C	
SW9056	Anions	SW846	9056	
SW9060	Total Organic Carbon	SW846	9060	
T8	DIMP	USATHAMA	DIMP in Water by Gas Chromatography	
TT9	DIMP	USATHAMA	DIMP in Soil by Gas Chromatography	

a/ Lab SOPs are the analysis performed by the analyzing laboratory's SOP. USATHAMA is defined in the acronym list. See reference list for other entries as follows:

a. SM18 = APHA, AWWA, and WEF, 1992.
b. CL-002R AND CL-025R = DPG, 1998a, 1998b, 2001a, and 2001b.
c. ASTM = ASTM D2216.
d. MCAWW = MCAWW, 1983/1979.
e. SW846 = USEPA, 1997d.

b/ Methods are listed as follows: For SM18, DPG, ASTM, MCAWW and SW846 the actual method number is supplied. For USATHAMA a description of the analysis, matrix and instrumentation is provided. Phase I methods were detailed RFI Report, Final Phase I, Volume III table 1.2.1. The methods are coded as presented in table 1.2.1.

c/ SOP CL-002R Revision 1 until April 20, 2001, then Revision 2.

d/ SOP CL-0025R Revision 1 until April 20, 2001, then Revision 2.

TABLE C.4
QUALIFIERS FOR PHASE II RFI ANALYTICAL DATA

DUGWAY PROVING GROUND, UTAH

Qualifier	Description	Comment
TR	A value which is greater than or equal to the MDL, and less than the RL.	
=	A value equal to or greater than the RL	
	A value equal to or greater than the RL	Qualifier is null.
>	The actual value exceeds the reported value	Used for flashpoint to indicate that the flashpoint exceeds the upper limit of the test (e.g., the sample did not flash).
ND	The observed value was below the MDL	

TABLE C.5

EPA FLAGS FOR PHASE II RFI ANALYTICAL DATA

DUGWAY PROVING GROUND, UTAH

Flag	Description[a/]
U	The analyte was not detected above the level of the associated value[b/].
J	The analyte was detected. The associated value is considered approximate, but usable for decision-making purposes.
UJ	The analyte was not detected above the level of the associated value, however, the associated value is considered approximate.
R	The data is unusable for all purposes.
	The associated value is normal in terms of analytical uncertainty.

a/ Adapted from the QAPP (Parsons, 2001b).

b/ Associated value means the PARVAL if the PARVAL is non-zero. If the PARVAL is zero, the MDL is associated value, unless it too is zero. If both the PARVAL and MDL are zero, then the associated value is the RL.

TABLE C.6
DATA FLAGGING REASONS FOR PHASE II RFI ANALYTICAL DATA

DUGWAY PROVING GROUND, UTAH

DQ REASON Code	Description
H	Holding Time
B	Blank Contamination or Negative Blank Recovery
S	Surrogate Recovery
M	Matrix Spike Recovery
D	Duplicate Precision for Matrix Spikes, Field Samples, Laboratory Control Samples, or Laboratory Duplicates
L	Laboratory Control Sample Recovery
K	Field Blank Contamination
A	ICP Serial Dilution
G	Initial Calibration Curve
O	Interference Check Sample
W	GC/ECD Performance Check Sample
C	Continuing Calibration Verification
TR	Detected Below RL
I	Internal Standards
Y	No 2nd Column Confirmation

TABLE C.7

DATA SENSITIVITY ASSESSMENT - SOIL

SWMU-41

DUGWAY PROVING GROUND, UTAH

Analyte	Method[a/]	Result [b/]	Units	PRG[c/]	BKGRND[d/]	Number of Samples
1,2-Dichloroethane	LM23	< 0.32	mg/Kg	0.28		18
1,2-Dichloropropane	LM23	< 0.53	mg/Kg	0.34		18
2,4-Dinitrotoluene	LM25	< 1.4	mg/Kg	0.72		19
3,3'-Dichlorobenzidine	LM25	< 1.6	mg/Kg	1.1		19
Aldrin	LM25	< 1.3	mg/Kg	0.029		19
alpha-BHC (alpha-Hexachlorocyclohexane)	LM25	< 1.3	mg/Kg	0.090		19
Arsenic	JS12	< 16.4	mg/Kg	0.39	13	19
Benzo(a)pyrene	LM25	< 1.2	mg/Kg	0.062		19
beta-BHC (beta-Hexachlorocyclohexane)	LM25	< 1.3	mg/Kg	0.32		19
bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	LM25	< 0.36	mg/Kg	0.22		19
Carbon Tetrachloride	LM23	< 0.31	mg/Kg	0.25		18
Chloroform	LM23	< 0.24	mg/Kg	0.22		18
delta-BHC (delta-Hexachlorocyclohexane)	LM25	< 0.21	mg/Kg	0.090		19
Dibenz(a,h)anthracene	LM25	< 0.31	mg/Kg	0.062		19
Dieldrin	LM25	< 0.079	mg/Kg	0.030		19
Heptachlor	LM25	< 0.24	mg/Kg	0.11		19
Heptachlor Epoxide	LM25	< 0.48	mg/Kg	0.053		19
Indeno(1,2,3-c,d)pyrene	LM25	< 2.4	mg/Kg	0.62		19
N-Nitrosodi-n-Propylamine	LM25	< 1.1	mg/Kg	0.069		19
Thallium	JS12	< 34.3	mg/Kg	5.2		19
Toxaphene	LM25	< 12	mg/Kg	0.44		19
Vinyl Chloride	LM23	< 1.8	mg/Kg	0.079		18

TABLE C.7 (CONTINUED)

DATA SENSITIVITY ASSESSMENT - SOIL

SWMU-41

DUGWAY PROVING GROUND, UTAH

Analyte	Method[a/]	Result [b/]	Units	PRG[c/]	BKGRND[d/]	Number of Samples

a/ Method = The database code for analytical methods. Codes are explained in the Introduction to Appendix C.
b/ Result = The Method Detection Limit (MDL), or a value which was detected but flagged "U" or "UJ" during data validation. Range values arise from sample specific MDLs.
c/ PRG= U.S. EPA Region IX Residential Soil Preliminary Remediation Goal in mg/Kg (USEPA Region 9, 2004).
d/ BKGRND = Background values for metals Table 6.1 of Characterization and Recommended Use of Facility-Wide Background Soil Metals Data (Parsons, 2001a).
The non-parametric 95% UTL is used, if there is no 95% UTL, then the maximum detected value is used.

TABLE C.8

PHASE II RFI FIELD DUPLICATES - SOIL

SWMU-41

DUGWAY PROVING GROUND, UTAH

SAMPLE ID	ANALYTE	LOCATION	LOGDATE	RESULT 1[a/]	RESULT 2	MDL[b/]	UNITS	RPD[c/]
041SO024	Aluminum	DTO041SB002	12/20/2005	18900	20200	1.1	mg/Kg	6.6
041SO024	Arsenic	DTO041SB002	12/20/2005	15	12.5	0.35	mg/Kg	18.2
041SO024	Barium	DTO041SB002	12/20/2005	240	199	0.28	mg/Kg	18.7
041SO024	Beryllium	DTO041SB002	12/20/2005	0.87	1.1	0.071	mg/Kg	23.4
041SO024	Cadmium	DTO041SB002	12/20/2005	0.19	0.19	0.071	mg/Kg	-9999.0
041SO024	Calcium	DTO041SB002	12/20/2005	122000	123000	29.8	mg/Kg	0.8
041SO024	Chromium, Total	DTO041SB002	12/20/2005	17	19.1	0.33	mg/Kg	11.6
041SO024	Cobalt	DTO041SB002	12/20/2005	6.7	7	0.071	mg/Kg	4.4
041SO024	Copper	DTO041SB002	12/20/2005	13.3	13.8	0.078	mg/Kg	3.7
041SO024	Iron	DTO041SB002	12/20/2005	17200	18900	7.8	mg/Kg	9.4
041SO024	Lead	DTO041SB002	12/20/2005	9.9	10.6	0.071	mg/Kg	6.8
041SO024	Magnesium	DTO041SB002	12/20/2005	19500	21700	0.78	mg/Kg	10.7
041SO024	Manganese	DTO041SB002	12/20/2005	412	422	0.071	mg/Kg	2.4
041SO024	Molybdenum	DTO041SB002	12/20/2005	1.2	1.1	0.071	mg/Kg	8.7
041SO024	Nickel	DTO041SB002	12/20/2005	13.2	13.8	0.071	mg/Kg	4.4
041SO024	Potassium	DTO041SB002	12/20/2005	5600	6070	3.5	mg/Kg	8.1
041SO024	Selenium	DTO041SB002	12/20/2005	0.97	1	0.18	mg/Kg	-9999.0
041SO024	Silver	DTO041SB002	12/20/2005	0.16	0.18	0.071	mg/Kg	-9999.0
041SO024	Sodium	DTO041SB002	12/20/2005	3180	3390	4.8	mg/Kg	6.4

TABLE C.8 (CONTINUED)

PHASE II RFI FIELD DUPLICATES - SOIL

SWMU-41

DUGWAY PROVING GROUND, UTAH

SAMPLE ID	ANALYTE	LOCATION	LOGDATE	RESULT 1[a/]	RESULT 2	MDL[b/]	UNITS	RPD[c/]
041SO024	Vanadium	DTO041SB002	12/20/2005	36.2	37.9	3.1	mg/Kg	4.6
041SO024	Zinc	DTO041SB002	12/20/2005	52.9	54.8	0.71	mg/Kg	3.5
041SO024	Acetone	DTO041SB002	12/20/2005	0.029	0.012	0.007	mg/Kg	-9999.0
041SO024	Benzene	DTO041SB002	12/20/2005	0.0022	0	0.001	mg/Kg	-9999.0
041SO024	pH	DTO041SB002	12/20/2005	8.2	8.1	0.1	PH UNITS	1.2
041SO034	Bismuth-214	DTO041SS003	5/8/2005	0.94	0.86	0.24	PCI/G	-9999.0
041SO034	Cesium-137	DTO041SS003	5/8/2005	0.32	0.27	0.08	PCI/G	-9999.0
041SO034	Lead-212	DTO041SS003	5/8/2005	0.83	0.96	0.16	PCI/G	-9999.0
041SO034	Lead-214	DTO041SS003	5/8/2005	0.91	1	0.17	PCI/G	-9999.0
041SO034	Potassium-40	DTO041SS003	5/8/2005	13.9	11.9	0.7	PCI/G	15.5
041SO034	Thallium-208	DTO041SS003	5/8/2005	0.33	0.22	0.1	PCI/G	-9999.0
041SO034	alpha, Gross	DTO041SS003	5/8/2005	26.4	22.5	7	PCI/G	-9999.0
041SO034	beta, Gross	DTO041SS003	5/8/2005	23.2	29.6	4.3	PCI/G	-9999.0
041SO054	Bismuth-214	DTO041SS023	5/9/2005	0.54	0.72	0.13	PCI/G	-9999.0
041SO054	Cesium-137	DTO041SS023	5/9/2005	0.217	0.27	0.069	PCI/G	-9999.0
041SO054	Lead-212	DTO041SS023	5/9/2005	0.435	0.54	0.098	PCI/G	-9999.0
041SO054	Lead-214	DTO041SS023	5/9/2005	0.58	0.75	0.13	PCI/G	-9999.0
041SO054	Potassium-40	DTO041SS023	5/9/2005	5.2	8.6	1	PCI/G	-9999.0
041SO054	Thallium-208	DTO041SS023	5/9/2005	0.164	0.141	0.077	PCI/G	-9999.0

TABLE C.8 (CONTINUED)

PHASE II RFI FIELD DUPLICATES - SOIL

SWMU-41

DUGWAY PROVING GROUND, UTAH

SAMPLE ID	ANALYTE	LOCATION	LOGDATE	RESULT 1[a/]	RESULT 2	MDL[b/]	UNITS	RPD[c/]
041SO054	alpha, Gross	DTO041SS023	5/9/2005	27.8	15	6.1	PCI/G	-9999.0
041SO054	beta, Gross	DTO041SS023	5/9/2005	21.8	25.5	3.7	PCI/G	-9999.0

a/ Entries are shown when RESULT 1 is a detection.
b/ MDL is method detection limit.
c/ RPD is relative percent difference. RPD is calculated when RESULT 1 >= 10 times the MDL. Otherwise, RPD is not applicable and "-9999" is displayed.

TABLE C.9

PHASE II RFI FIELD DUPLICATES - WATER

SWMU-41

DUGWAY PROVING GROUND, UTAH

SAMPLE ID	ANALYTE	LOCATION	LOGDATE	RESULT 1[a/]	RESULT 2	MDL[b/]	UNITS	RPD[c/]
041GW019	Arsenic	DTO041MW002	5/9/2001	155	152	4.2	µg/L	2.0
041GW019	Barium	DTO041MW002	5/9/2001	18	17.3	0.43	µg/L	4.0
041GW019	Calcium	DTO041MW002	5/9/2001	611000	581000	27	µg/L	5.0
041GW019	Copper	DTO041MW002	5/9/2001	4.5	3.9	2.1	µg/L	-9999.0
041GW019	Magnesium	DTO041MW002	5/9/2001	299000	293000	25	µg/L	2.0
041GW019	Manganese	DTO041MW002	5/9/2001	45.5	37	0.69	µg/L	20.6
041GW019	Molybdenum	DTO041MW002	5/9/2001	82.8	79.4	1.5	µg/L	4.2
041GW019	Potassium	DTO041MW002	5/9/2001	252000	243000	600	µg/L	3.6
041GW019	Sodium	DTO041MW002	5/9/2001	3470000	3410000	36	µg/L	1.7
041GW019	Vanadium	DTO041MW002	5/9/2001	104	103	3.2	µg/L	1.0
041GW019	Chloride (as Cl)	DTO041MW002	5/9/2001	3920000	3840000	220000	µg/L	2.1
041GW019	Fluoride	DTO041MW002	5/9/2001	4500	4400	1000	µg/L	-9999.0
041GW019	Nitrogen, Nitrate (as N)	DTO041MW002	5/9/2001	3000	3000	1000	µg/L	-9999.0
041GW019	Sulfate (as SO4)	DTO041MW002	5/9/2001	3660000	3640000	180000	µg/L	0.5

a/ Entries are shown when RESULT 1 is a detection.
b/ MDL is method detection limit.
c/ RPD is relative percent difference. RPD is calculated when RESULT 1 >= 10 times the MDL. Otherwise, RPD is not applicable and "-9999" is displayed.

TABLE C.10

EQUIPMENT BLANK DETECTED RESULTS

SWMU-41

DUGWAY PROVING GROUND, UTAH

SAMPLE ID	ANALYTE	QUALIFIER	RESULT	MDL[a/]	RL[b/]	UNITS	FLAG
041EB020	Bromodichloromethane	TR	3.1	0.4	5	µg/L	J
041EB020	Chloride (as Cl)	=	515	90	450	µg/L	
041EB020	Chloroform	=	20.4	0.3	5	µg/L	
041EB020	Magnesium	TR	43.3	25	500	µg/L	J
041EB020	Nitrogen, Nitrate (as N)	TR	30	10	50	µg/L	J
041EB020	Sodium	TR	740	36	5000	µg/L	J
041EB020	Sulfate (as SO4)	TR	110	70	350	µg/L	J
041EB020	Zinc	TR	6.7	2.1	30	µg/L	J
041EB026	Aluminum	TR	2.8	2.1	50	µg/L	J
041EB026	Antimony	TR	0.073	0.036	2	µg/L	J
041EB026	Calcium	TR	45.4	15	50	µg/L	J
041EB026	Cobalt	TR	0.08	0.057	1	µg/L	J
041EB026	Magnesium	TR	3.9	0.79	50	µg/L	J
041EB026	Methyl Ethyl Ketone (2-Butanone)	=	2.4	1	2	µg/L	
041EB026	pH	=	6.3	0.1		PH UNITS	
041EB026	Sodium	=	86.7	11	50	µg/L	
041EB026	Toluene	TR	0.44	0.25	1	µg/L	J

[a/] MDL is method detection limit.
[b/] RL is reporting limit.

TABLE C.11

RESULTS QUALIFIED DUE TO FIELD BLANK CONTAMINATION

SWMU-41

DUGWAY PROVING GROUND, UTAH

ANALYTE	SAMPLE ID	LOCATION	METHOD	QUALIFIER	RESULT	UNITS	FLAG
Methyl Ethyl Ketone (2-Butanone)	041SO022	DTO041SB002	SW8260B	=	0.013	mg/Kg	U
Methyl Ethyl Ketone (2-Butanone)	041SO023	DTO041SB002	SW8260B	TR	0.0088	mg/Kg	U
Methyl Ethyl Ketone (2-Butanone)	041SO024	DTO041SB002	SW8260B	TR	0.0094	mg/Kg	UJ
Toluene	041SO022	DTO041SB002	SW8260B	TR	0.0013	mg/Kg	U
Toluene	041SO023	DTO041SB002	SW8260B	TR	0.0016	mg/Kg	U
Toluene	041SO024	DTO041SB002	SW8260B	TR	0.0021	mg/Kg	UJ

APPENDIX D

SITE-ATTRIBUTION ANALYSIS FOR RISK ASSESSMENT AND SUPPORTING SOIL-TO-GROUNDWATER SSL CALCULATIONS

APPENDIX D

SITE-ATTRIBUTION ANALYSIS FOR RISK ASSESSMENT AND SUPPORTING SOIL-TO-GROUNDWATER SSL CALCULATIONS

Methods for conducting the site-attribution analysis for risk assessment have been described in the Risk Assumptions Document (Parsons, 2002a) and Background Metals Report (Parsons, 2001a) and are not repeated here. The usability of the background and site-specific data was reviewed as described in the Risk Assumptions Document (Parsons, 2002a), and the results are presented in the Background Soil Metals Data report (Parsons, 2001a) and Attachment 1 for background and site data, respectively. Summary statistics (e.g., frequency of detection and range of detected concentrations), box-and-whisker plots, and/or histograms for analytes detected at least once in soils at SWMU-41 and DPG-specific background samples are provided in Attachment 2. All detected organics are assumed to be the potential result of site activities (Parsons, 2002a) and were retained as preliminary COPCs. Both Phase I and II data were utilized in this site-attribution analysis for risk assessment. An abbreviated site-attribution analysis of the radiological survey data is also provided (Section D.4).

Per USEPA (1989a) risk assessment guidance, “If inorganic chemicals are present at the site at naturally occurring levels, they may be eliminated from the quantitative risk assessment.” The methodology for conducting a site-attribution analysis for risk assessment is described in the Background Metals Report (Parsons, 2001a) and is summarized on Figure D.1. A site-attribution analysis was conducted on results from surface (0-0.5 ft bgs) and mixed (0-10 ft bgs) soil samples because these are the potential exposure intervals that are evaluated in the human and ecological risk assessments (Parsons, 2002a). A subsurface (>0.5 ft bgs) site-attribution analysis was also conducted for evaluating soil-to-groundwater impacts.

There are two separate exposure areas at SWMU-41 that will be evaluated during this site-attribution analysis and the risk assessment. Area 1 is located at the evaporation pond and includes the soils within, underlying, and immediately adjacent to the pond. Building 1002 and the associated tanks and vaults are also included in Area 1. Area 2

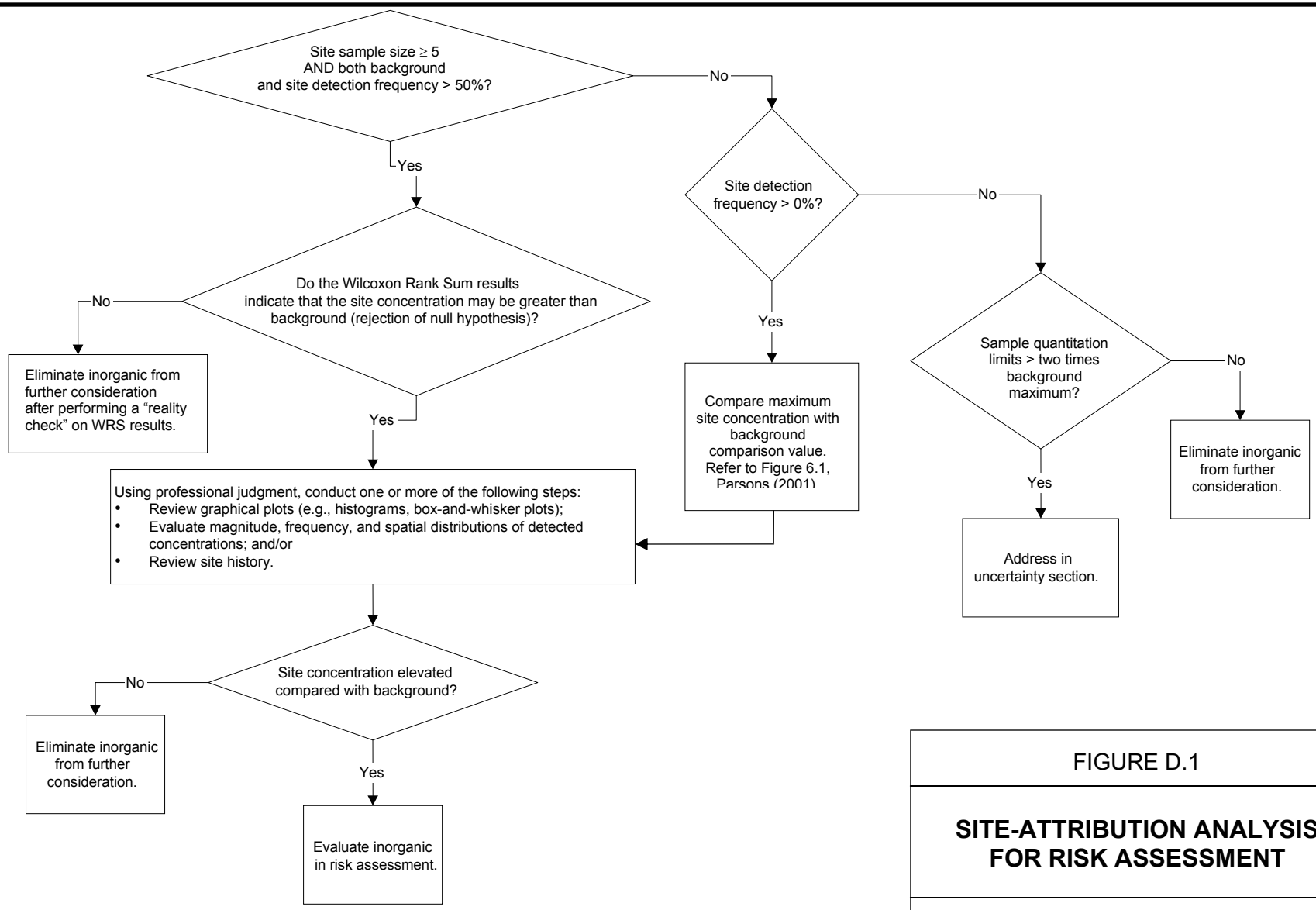


FIGURE D.1

SITE-ATTRIBUTION ANALYSIS FOR RISK ASSESSMENT

DUGWAY PROVING GROUND RFI

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includes all other buildings and the tunnel associated with this site, as well as soils adjacent to the southeast side of Building 1010.

D.1 SURFACE SOIL EXPOSURE INTERVAL

The locations, number, types, and results for surface soil (0-0.5 ft bgs) samples collected at SWMU-41 are discussed in Section 2 of the report. Soil sampling locations, depths, and dates for the data used in the site-attribution analysis for risk assessment for the Area 1 surface soil exposure interval are summarized in Table D.1. The analytical results and the results of the data-quality review (e.g., number of rejected ["R"-qualified] records removed) for the Area 1 surface soil samples listed in Table D.1 are provided in Appendix C and as Attachment 1 to this appendix. No surface soil samples were collected in Area 2.

TABLE D.1

SAMPLES USED IN THE SURFACE SOIL SITE-ATTRIBUTION ANALYSIS FOR RISK ASSESSMENT SWMU-41 AREA 1

DUGWAY PROVING GROUND, UTAH

Sample Number	Average Sample Depth (ft bgs)[a/]	Sampling Date
SS001	0.25	2/15/1994
SS002	0.25	2/15/1994

[a/] ft bgs = Feet below ground surface.

Summary statistics (e.g., frequencies of detection and ranges of detected concentrations) were calculated for analytes detected at least once in surface soil at SWMU-41 Area 1 and are provided in Attachment 2. Five inorganics (antimony, boron, molybdenum, tellurium, and thallium) were analyzed for, but were not detected in any of the surface soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations (Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a).

As shown on Figure D.1, the Wilcoxon Rank Sum (WRS) test is conducted only when: 1) a specific inorganic is detected in greater than 50-percent of soil samples in both the background and site data sets (Figure 6.2 of the Background Metals Report; Parsons, 2001a); and 2) a minimum of five samples have been collected from within the SWMU exposure area (Parsons, 2002a).

Since only two surface soil samples were collected at Area 1, the two required conditions for conducting the WRS test (Figure D.1) on surface soil interval results were not met for any of the detected analytes (Attachment 2). Therefore, maximum site concentrations of these inorganics were compared with background comparison values (i.e., the lesser of the background soil 95-percent upper tolerance limit [UTL] concentration and maximum detected background concentration) (Figure D.1; Attachment 2). Of the 22 detected inorganics, 13 (aluminum, arsenic, cadmium, chromium [total], cobalt, copper, iron, lead, manganese, mercury, nickel, vanadium and zinc) had maximum site concentrations greater than their respective background comparison values (Attachment 2). There is no DPG-specific background level for silver and tin which were detected in Area 1 surface soils; therefore, it is assumed that the detected concentrations of silver and tin may be potentially attributable to site activities and these inorganics were retained as Area 1 surface soil preliminary COPCs.

One of the next steps in the site-attribution analysis for risk assessment involves a review of the graphical plots for those inorganics with maximum detected concentrations greater than background comparison values (refer to Figure D.1). Box-and-whisker plots were not generated for surface soil results at SWMU-41 Area 1 because of the small sample size. However, histograms were generated for site and background concentrations (Attachment 2). As shown in the surface histograms, arsenic, chromium (total), cobalt, copper, iron, lead, nickel, vanadium, and zinc site concentrations exceed the range of background concentrations; therefore, arsenic, chromium (total), cobalt, copper, iron, lead, nickel, vanadium, and zinc were retained as surface soil preliminary COPCs. As shown in the surface histograms for aluminum and manganese, site concentrations fall within the overall distribution of background concentrations. Therefore, aluminum and manganese were eliminated as preliminary surface soil COPCs at Area 1.

Histograms were not generated for cadmium and mercury which were detected in Area 1 surface soil because of the low detection frequency in background and the small number of surface soil samples. However, select surface soil samples had site concentrations of cadmium and mercury that appeared to be elevated relative to background levels at DPG (i.e., may be attributable to site activities) based on the fact that the maximum detected site concentrations were greater than the range of DPG background concentrations. Therefore, cadmium and mercury were retained as Area 1 surface soil preliminary COPCs.

The five SVOCs (benzo[a]anthracene, benzo(g,h,i)perylene, chrysene, fluoranthene, and pyrene) and one VOC (phenanthrene) detected in surface soil (Attachment 2) at SWMU-41 Area 1 are assumed potentially to be related to site activities, and therefore, were retained as surface soil preliminary COPCs. The total petroleum hydrocarbons (total) detected in surface soils (Attachment 2) at Area 1 are assumed to potentially be related to site activities. However, total petroleum hydrocarbons were eliminated as preliminary COPCs for the reasons described in Section 2.2.3.1.

D.2 MIXED SOIL EXPOSURE INTERVAL

The locations, number, types, and results for mixed soil (0-10 ft bgs) samples collected at SWMU-41 are discussed in Section 2 of the report. Soil sampling locations, depths, and dates for the data used in the site-attribution analysis for risk assessment for the mixed soil exposure interval are summarized in Table D.2. The analytical results and the results of the data-quality review for the mixed soil samples listed in Table D.2 are provided in Appendix C and as Attachment 1 to this appendix.

D.2.1 Area 1 Mixed Soil Exposure Interval

Summary statistics were calculated for analytes detected at least once in the mixed soil exposure interval (0-10 ft bgs) (Attachment 2). Four inorganics (molybdenum, antimony, tellurium, and thallium) were analyzed for, but were not detected in any of the mixed soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations

(Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a).

TABLE D.2

SAMPLES USED IN THE MIXED SOIL SITE-ATTRIBUTION ANALYSIS FOR RISK ASSESSMENT SWMU-41

DUGWAY PROVING GROUND, UTAH

Sample Number	Average Sample Depth (ft bgs)[a/]	Sampling Date
	Area 1	
HA001	1.8	12/16/1993
HA001	5.3	12/16/1993
SB001	3	12/7/1993
SB001	7	12/7/1993
SS001	0.25	2/15/1994
SS002	0.25	2/15/1994
	Area 2	
SB002	4.8	12/20/2005
SB002	9.8	12/20/2005

[a/] ft bgs = Feet below ground surface.

The two required conditions for conducting the WRS test (Figure D.1) on Area 1 mixed soil interval results were not met for boron, cadmium, mercury, selenium, silver, or tin (Table D.3). Therefore, maximum site concentrations of these inorganics were compared with background comparison values. Of these six inorganics, cadmium and mercury had maximum site concentrations greater than their respective background comparison values (Attachment 2). Box-and-whisker plots and histograms were not generated for cadmium and mercury because of their low detection frequency in background. However, select mixed soil samples had site concentrations of cadmium and mercury that appeared to be elevated relative to background levels at DPG (i.e., may be attributable to site activities) based on the fact that the maximum detected site concentrations were greater than the range of DPG background concentrations. Therefore, cadmium and mercury were retained as mixed soil preliminary COPCs. There were no DPG-specific background levels for boron, silver, or tin, which were detected in Area 1 mixed soils; therefore, it is assumed that the detected concentrations of these

inorganics may be potentially attributable to site activities, and boron, silver, and tin were retained as mixed soil preliminary COPCs. The maximum detected concentration of selenium in mixed soils was below its respective background comparison value (Attachment 2); therefore, selenium was eliminated as a mixed soil preliminary COPC.

TABLE D.3

INORGANICS IN MIXED SOILS THAT MET THE MINIMUM REQUIREMENTS FOR THE WILCOXON RANK SUM TEST SWMU-41 AREA 1

DUGWAY PROVING GROUND, UTAH

Minimum Requirements for WRS Test Met?	
No	**Yes**
Boron	Aluminum
Cadmium	Arsenic
Mercury	Barium
Selenium	Beryllium
Silver	Calcium
Tin	Chromium, Total
	Cobalt
	Copper
	Iron
	Lead
	Magnesium
	Manganese
	Nickel
	Potassium
	Sodium
	Vanadium
	Zinc

The WRS test was performed on the remaining inorganics, and the results are presented in Table D.4. For the 17 inorganics that underwent the WRS test, the null hypothesis, which states that the site and background concentrations are the same (Parsons, 2001a), was accepted for three inorganics (beryllium, cobalt, and sodium). The next step in the site-attribution analysis for risk assessment (Figure D.1) was to review box-and-whisker plots and histograms for the inorganics for which the null hypothesis was rejected (aluminum, arsenic, barium, calcium, chromium [total], copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc) (see Attachment 2). A review of these graphical plots indicates that mixed soil site concentrations of aluminum,

TABLE D.4

RESULTS OF WILCOXON RANK SUM SITE-ATTRIBUTION ANALYSIS FOR MIXED SOILS AT SWMU-41 AREA 1

DUGWAY PROVING GROUND, UTAH

Chemical	Number of Samples		Rank Sum		"Z" Value	Two-Sided P-level	Accept Null Hypothesis? [a/]
	SWMU-41	Background	SWMU-41	Background			
Aluminum	6	141	746	10133	3.0	3.2E-03	**No**
Arsenic	6	140	699	10033	2.5	1.1E-02	**No**
Barium	6	141	689	10189	2.4	1.6E-02	**No**
Beryllium	6	141	600	10279	1.5	1.3E-01	Yes
Calcium	6	141	648	10230	2.0	4.6E-02	**No**
Chromium, Total	6	141	781	10098	3.3	9.8E-04	**No**
Cobalt	6	141	599	10279	1.5	1.3E-01	Yes
Copper	6	141	742	10137	2.9	3.6E-03	**No**
Iron	6	141	811	10068	3.6	3.3E-04	**No**
Lead	6	141	740	10139	2.9	3.8E-03	**No**
Magnesium	6	141	683	10195	2.3	1.9E-02	**No**
Manganese	6	141	743	10136	2.9	3.5E-03	**No**
Nickel	6	141	800	10079	3.5	5.0E-04	**No**
Potassium	6	141	708	10170	2.6	9.7E-03	**No**
Sodium	6	141	423	10455	-0.2	8.4E-01	Yes
Vanadium	6	141	728	10151	2.8	5.5E-03	**No**
Zinc	6	141	746	10133	3.0	3.2E-03	**No**

[a/] The null hypothesis states that there is no difference between the site and the background concentrations of a given chemical.
The null hypothesis was accepted if the two-sided p-level was ≥ 0.05, based on the Type I (alpha) error rate of 0.05 (Parsons, 2002).

arsenic, chromium (total), copper, iron, lead, nickel, vanadium, and zinc were greater than the range of background concentrations at DPG (i.e., may be attributable to site activities), and therefore, aluminum, arsenic, chromium (total), copper, iron, lead, nickel, vanadium, and zinc were retained as mixed soil preliminary COPCs. A review of the mixed soil WRS results (Table D.4), box-and-whisker plots, and histograms (Attachment 2) for barium, calcium, magnesium, manganese, and potassium indicates that the distribution of site concentrations for these inorganics may be slightly shifted relative to the background distribution, but are still within background ranges, indicating site concentrations are similar to or less than background levels. Therefore, barium, calcium, magnesium, manganese, and potassium were eliminated from further consideration as mixed soil preliminary COPCs.

Per USEPA (2000a) guidance, the conclusions from statistical tests such as the WRS test should be confirmed (i.e., reality checked) by reviewing graphical plots (e.g., box-and-whisker plots and histograms). A review of the WRS test results and graphical plots for cobalt indicated that although the WRS test results suggested that site and background concentrations were similar, the maximum detected site concentration was greater than the corresponding range of background concentrations (shown in the box-and-whisker plots and histograms in Attachment 2). This suggests that concentrations may be greater than background levels, and therefore, cobalt was conservatively retained as a preliminary COPC for the mixed soil exposure interval. The graphical review also supports the conclusion that the other two inorganics (beryllium and sodium) were similar to background concentrations and were eliminated from further consideration as mixed soil preliminary COPCs.

The five SVOCs (benzo[a]anthracene, benzo(g,h,i)perylene, chrysene, fluoranthene, and pyrene) and one VOC (phenanthrene) detected in mixed soil (Attachment 2) at SWMU-41 Area 1 are assumed potentially to be related to site activities, and therefore, were retained as mixed soil preliminary COPCs. The total petroleum hydrocarbons (total) detected in mixed soils (Attachment 2) at Area 1 are assumed to potentially be related to site activities. However, total petroleum hydrocarbons were eliminated as preliminary COPCs for the reasons described in Section 2.2.3.1 and 2.2.3.2.

D.2.2 Area 2 Mixed Soil Exposure Interval

Summary statistics were calculated for analytes detected at least once in the mixed soil exposure interval (0-10 ft bgs) (Attachment 2). One inorganic (thallium) was analyzed for, but was not detected in any of the mixed soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations (Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a).

Since only two Area 2 mixed soil samples were collected, the two required conditions for conducting the WRS test (Figure D.1) on mixed soil interval results were not met for any of the detected analytes (Attachment 2). Therefore, maximum site concentrations of these inorganics were compared with background comparison values. Of the 23 detected inorganics, only chromium (total) and vanadium had maximum site concentrations greater than their respective background comparison values (Attachment 2). There were no DPG-specific background levels for molybdenum or silver, which were detected in mixed soils; therefore, it is assumed that the detected concentrations of these inorganics may be potentially attributable to site activities, and molybdenum and silver were retained as mixed soil preliminary COPCs.

One of the next steps in the site-attribution analysis for risk assessment involves a review of the graphical plots for those inorganics with maximum detected concentrations greater than background comparison values (refer to Figure D.1). Box-and-whisker plots were not generated for mixed soil results at SWMU-41 Area 2 because of the small sample size. However, histograms were generated for site and background concentrations (Attachment 2). As shown in the mixed histograms for vanadium, site concentrations exceed the range of background concentrations, therefore, vanadium was retained as a mixed soil preliminary COPC at Area 2. As shown in the mixed histograms for chromium (total), site concentrations fall within the overall distribution of background concentrations. Therefore, chromium (total) was eliminated as a preliminary mixed soil COPC.

The two VOCs (acetone and benzene) detected in mixed soil (Attachment 2) at SWMU-41 Area 2 are assumed potentially to be related to site activities, and therefore were retained as mixed soil preliminary COPCs.

D.3 SUBSURFACE SOIL EXPOSURE INTERVAL FOR SOIL-TO-GROUNDWATER ANALYSIS

The locations, number, types, and results for subsurface soil (>0.5 ft bgs) samples collected at SWMU-41 are discussed in Section 2 of the report. Soil sampling locations, depths, and dates for the data used in the site-attribution analysis for soil-to-groundwater impacts for the subsurface soil exposure interval are summarized in Table D.5. The analytical results and the results of the data-quality review for the subsurface soil samples listed in Table D.5 are provided in Appendix C and as Attachment 1 to this appendix.

TABLE D.5

SAMPLES USED IN THE SUBSURFACE SOIL SITE-ATTRIBUTION ANALYSIS FOR EVALUATING SOIL-TO-GROUNDWATER IMPACTS SWMU-41

DUGWAY PROVING GROUND, UTAH

Sample Number	Average Sample Depth (ft bgs)[a/]	Sampling Date
	Area 1	
HA001	1.8	12/16/1993
HA001	5.3	12/16/1993
SB001	3	12/7/1993
SB001	7	12/7/1993
SB001	14	12/7/1993
	Area 2	
SB002	4.8	12/20/2005
SB002	9.8	12/20/2005
SB002	20	12/20/2005

[a/] ft bgs = Feet below ground surface.

D.3.1 Area 1 Subsurface Soil Exposure Interval

Summary statistics were calculated for analytes detected at least once in the subsurface soil exposure interval (>0.5 ft bgs) (Attachment 2). Eight inorganics (antimony, cadmium, molybdenum, selenium, silver, tellurium, thallium, and tin) were analyzed for, but were not detected in any of the subsurface soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations (Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a).

The two required conditions for conducting the WRS test (Figure D.1) on Area 1 subsurface soil interval results were not met for boron, cobalt, or mercury (Table D.6). Therefore, maximum site concentrations of these inorganics were compared with background comparison values (Figure D.1; Attachment 2). Of these three inorganics, cobalt and mercury had maximum site concentrations greater than their respective background comparison values (Attachment 2). Box-and-whisker plots and histograms were not generated mercury because of the low detection frequency in background. However, histograms were generated for site and background concentrations of cobalt (Attachment 2). As shown in the Area 1 subsurface soil histogram for cobalt, site concentrations fall within the overall distribution of background concentrations. Therefore, cobalt was eliminated as an Area 1 subsurface soil preliminary COPC. Although histograms were not generated for mercury, select Area 1 subsurface soil samples had site concentrations of mercury that appeared to be elevated relative to background levels at DPG (i.e., may be attributable to site activities) based on the fact that the maximum detected site concentration was greater than the range of DPG background concentrations. Therefore, mercury was retained as an Area 1 subsurface soil preliminary COPC. There were no DPG-specific background levels for boron, which was detected in Area 1 subsurface soils; therefore, it is assumed that the detected concentrations of boron may be potentially attributable to site activities and this inorganic was retained as an Area 1 subsurface soil preliminary COPC.

The WRS test was performed on the remaining inorganics, and the results are presented in Table D.7. For the 16 inorganics that underwent the WRS test, the null hypothesis, which states that the site and background concentrations are the same (Parsons, 2001a), was accepted for seven inorganics (beryllium, chromium [total], copper, magnesium, sodium, vanadium, and zinc). The next step in the site-attribution analysis for risk assessment (Figure D.1) was to review box-and-whisker plots and histograms for the inorganics for which the null hypothesis was rejected (aluminum, arsenic, barium, calcium, iron, lead, manganese, nickel, and potassium) (see Attachment 2). A review of these graphical plots indicates that Area 1 subsurface soil site concentrations of aluminum were greater than the range of background concentrations at DPG (i.e., may be attributable to site activities), and therefore, aluminum was retained as

an Area 1 subsurface soil preliminary COPC. A review of the Area 1 subsurface soil WRS results (Table D.7), box-and-whisker plots, and histograms (Attachment 2) for arsenic, barium, calcium, iron, lead, manganese, nickel, and potassium indicates that the distribution of site concentrations for these inorganics may be slightly shifted relative to the background distribution, but are still within background ranges, indicating site concentrations are similar to or less than background levels. Therefore, arsenic, barium, calcium, iron, lead, manganese, nickel, and potassium were eliminated from further consideration as subsurface soil preliminary COPCs.

TABLE D.6

INORGANICS IN SUBSURFACE SOILS THAT MET THE MINIMUM REQUIREMENTS FOR THE WILCOXON RANK SUM TEST SWMU-41 AREA 1

DUGWAY PROVING GROUND, UTAH

Minimum Requirements for WRS Test Met?	
No	**Yes**
Boron	Aluminum
Cobalt	Arsenic
Mercury	Barium
	Beryllium
	Calcium
	Chromium, Total
	Copper
	Iron
	Lead
	Magnesium
	Manganese
	Nickel
	Potassium
	Sodium
	Vanadium
	Zinc

Per USEPA (2000a) guidance, the conclusions from statistical tests such as the WRS test should be confirmed (i.e., reality checked) by reviewing graphical plots (e.g., box-and-whisker plots and histograms). A review of the WRS test results and graphical plots for chromium (total) and vanadium indicated that although the WRS test results suggested that site and background concentrations were similar, the maximum

TABLE D.7

RESULTS OF WILCOXON RANK SUM SITE-ATTRIBUTION ANALYSIS FOR SUBSURFACE SOILS AT SWMU-41 AREA 1

DUGWAY PROVING GROUND, UTAH

Chemical	Number of Samples		Rank Sum		"Z" Value	Two-Sided P-level	Accept Null Hypothesis? [a/]
	SWMU-41	Background	SWMU-41	Background			
Aluminum	5	141	595	10137	2.4	1.5E-02	**No**
Arsenic	5	140	589	9996	2.4	1.5E-02	**No**
Barium	5	141	580	10152	2.3	2.3E-02	**No**
Beryllium	5	141	398	10334	0.3	7.4E-01	Yes
Calcium	5	141	603	10128	2.5	1.1E-02	**No**
Chromium, Total	5	141	544	10187	1.9	5.7E-02	Yes
Copper	5	141	535	10197	1.8	7.2E-02	Yes
Iron	5	141	638	10093	2.9	3.6E-03	**No**
Lead	5	141	580	10151	2.3	2.2E-02	**No**
Magnesium	5	141	531	10200	1.8	7.8E-02	Yes
Manganese	5	141	602	10129	2.5	1.2E-02	**No**
Nickel	5	141	588	10143	2.4	1.8E-02	**No**
Potassium	5	141	562	10169	2.1	3.6E-02	**No**
Sodium	5	141	501	10231	1.4	1.5E-01	Yes
Vanadium	5	141	484	10248	1.2	2.1E-01	Yes
Zinc	5	141	504	10228	1.5	1.4E-01	Yes

[a/] The null hypothesis states that there is no difference between the site and the background concentrations of a given chemical.
The null hypothesis was accepted if the two-sided p-level was ≥ 0.05, based on the Type I (alpha) error rate of 0.05 (Parsons, 2002).

detected site concentrations for these inorganics were greater than the corresponding range of background concentrations (shown in the box-and-whisker plots and histograms in Attachment 2). This suggests that concentrations of these inorganics may be greater than background levels, and therefore, chromium (total) and vanadium were conservatively retained as preliminary COPCs for the Area 1 subsurface soil interval. The graphical review also supports the conclusion that the other five inorganics (beryllium, copper, magnesium, sodium, and zinc) were similar to background concentrations and were eliminated from further consideration as Area 1 subsurface soil preliminary COPCs.

The total petroleum hydrocarbons (total) detected in subsurface soils (Attachment 2) at Area 1 are assumed to potentially be related to site activities. However, total petroleum hydrocarbons were eliminated as preliminary COPCs for the reasons described in Section 2.2.3.2.

Monitoring Well Subsurface Soil Samples Evaluation

Although the soil samples collected from the monitoring well borings (MW01, MW02, and MW03) drilled in Area 1 during Phase I were not required for characterization of SWMU-41 (per Section 2.1.2.1), they will be evaluated for potential site-attributable contamination to verify that soils in these areas were unimpacted by past activities. These areas were also evaluated during the HWMU-40 investigation and conclusions of that evaluation can be found in the applicable site closure report.

Summary statistics were calculated for analytes detected at least once in the 12 monitoring well subsurface soil samples from MW01, MW02, and MW03 (Attachment 2). Nine inorganics (antimony, cadmium, mercury, molybdenum, selenium, silver, tellurium, thallium, and tin) were analyzed for, but were not detected in any of the monitoring well subsurface soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations (Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a). One-half the SQL was used as the surrogate value for analytes that were not detected in a given soil sample when calculating the mean and standard deviation.

The two required conditions for conducting the WRS test (Figure D.1) on monitoring well subsurface soil results were not met for boron (Table D.8). DPG-specific

background levels are not available for boron, which was detected in monitoring well subsurface soils; therefore, DPG-specific background comparison values could not be used in the site attribution analysis for boron. However, boron concentrations were compared with state and regional background ranges. Boron concentrations at the well soils range from 13-43 mg/Kg and Utah soils range from 24-100 with an arithmetic mean of 74 mg/Kg (Dragun, 1991), and western US soils range from <20-300 mg/Kg with a geometric mean of 23 mg/Kg (Shacklette and Boerngen, 1984). Boron concentrations are assumed to be similar to background levels because the maximum detected site concentration was within the ranges of background concentrations reported for Utah and western US soils. Also, all other inorganics in the monitoring well samples had concentrations similar to background ranges. No other anthropogenic chemicals were detected in the monitoring well boring samples. Only one organic chemical (diethyl phthalate) was detected in MW02, which is a common laboratory contaminant and is highly unlikely to be due to site-related activities. Finally, there is no site history that would indicate that boron was used or disposed of at these locations. Therefore, based on these lines of evidence, boron was eliminated as a monitoring well subsurface soil preliminary COPC.

The WRS test was performed on the remaining inorganics, and the results are presented in Table D.9. For the 17 inorganics that underwent the WRS test, the null hypothesis, which states that the site and background concentrations are the same (Parsons, 2001a), was accepted for six inorganics (barium, copper, lead, magnesium, nickel, and zinc), which were eliminated from further consideration as subsurface soil preliminary COPCs. The next step in the site-attribution analysis for risk assessment (Figure D.1) was to review box-and-whisker plots and histograms for the inorganics for which the null hypothesis was rejected (aluminum, arsenic, beryllium, calcium, chromium [total], cobalt, iron, manganese, potassium, sodium, and vanadium) (see Attachment 2). A review of these graphical plots indicates that monitoring well subsurface soil site concentrations of sodium were slightly greater than the range of background concentrations at DPG (i.e., may be attributable to site activities). Sodium is an essential nutrient and is considered nontoxic. Although the essential nutrient analysis is typically presented in the risk assessment, these samples will not be assessed in

Section 3, and therefore, sodium is eliminated as a preliminary COPC based on this analysis. A review of the monitoring well subsurface soil WRS results (Table D.9), box-and-whisker plots, and histograms (Attachment 2) for aluminum, arsenic, beryllium, calcium, chromium (total), cobalt, iron, manganese, potassium, and vanadium indicates that the distribution of site concentrations for these inorganics may be slightly shifted relative to the background distribution, but are still within background ranges, indicating site concentrations are similar to or less than background levels. Therefore, aluminum, arsenic, beryllium, calcium, chromium (total), cobalt, iron, manganese, potassium, and vanadium were eliminated from further consideration as monitoring well subsurface soil preliminary COPCs.

TABLE D.8

INORGANICS IN SUBSURFACE SOILS THAT MET THE MINIMUM REQUIREMENTS FOR THE WILCOXON RANK SUM TEST SWMU-41 MONITORING WELL SOILS

DUGWAY PROVING GROUND, UTAH

Minimum Requirements for WRS Test Met?	
No	**Yes**
Boron	Aluminum
	Arsenic
	Barium
	Beryllium
	Calcium
	Chromium, Total
	Cobalt
	Copper
	Iron
	Lead
	Magnesium
	Manganese
	Nickel
	Potassium
	Sodium
	Vanadium
	Zinc

The one SVOC (diethyl phthalate) detected in MW02, which is a common laboratory contaminant and is highly unlikely to be related to site activities. Because there is no site history to account for the presence of this SVOC and because of the lack

TABLE D.9

RESULTS OF WILCOXON RANK SUM SITE-ATTRIBUTION ANALYSIS FOR SUBSURFACE SOILS AT SWMU-41 MONITORING WELL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Number of Samples		Rank Sum		"Z" Value	Two-Sided P-level	Accept Null Hypothesis? [a/]
	SWMU-41	Background	SWMU-41	Background			
Aluminum	12	141	1390	10392	3.2	1.6E-03	**No**
Arsenic	12	140	1506	10123	4.0	6.0E-05	**No**
Barium	12	141	1189	10593	1.8	7.3E-02	Yes
Beryllium	12	141	1267	10515	2.3	1.9E-02	**No**
Calcium	12	141	1351	10431	2.9	3.8E-03	**No**
Chromium, Total	12	141	1246	10536	2.2	2.9E-02	**No**
Cobalt	12	141	1306	10475	2.6	9.5E-03	**No**
Copper	12	141	1046	10735	0.8	4.1E-01	Yes
Iron	12	141	1440	10341	3.5	4.6E-04	**No**
Lead	12	141	1064	10718	0.9	3.4E-01	Yes
Magnesium	12	141	1128	10654	1.4	1.7E-01	Yes
Manganese	12	141	1251	10531	2.2	2.7E-02	**No**
Nickel	12	141	1135	10646	1.4	1.5E-01	Yes
Potassium	12	141	1222	10559	2.0	4.3E-02	**No**
Sodium	12	141	1233	10548	2.1	3.6E-02	**No**
Vanadium	12	141	1283	10499	2.4	1.5E-02	**No**
Zinc	12	141	981	10800	0.4	7.0E-01	Yes

[a/] The null hypothesis states that there is no difference between the site and the background concentrations of a given chemical.
The null hypothesis was accepted if the two-sided p-level was ≥ 0.05, based on the Type I (alpha) error rate of 0.05 (Parsons, 2002).

of any other organic constituents, diethyl phthalate is assumed to be a laboratory contaminant and therefore not site related, and diethyl phthalate was eliminated as a monitoring well subsurface soil preliminary COPC. Furthermore, it was detected at a concentration four orders of magnitude below the USEPA Region 9 (2004) Residential Soil PRG.

D.3.2 Area 2 Subsurface Soil Exposure Interval

Summary statistics were calculated for analytes detected at least once in the subsurface soil exposure interval (>0.5 ft bgs) (Attachment 2). One inorganic (thallium) was analyzed for, but was not detected in any of the Area 2 subsurface soil samples (Appendix C). None of the SQLs for the other analytes detected at least once were greater than two times the maximum detected concentrations (Attachment 1); therefore, all non-detect results were included in the summary statistic calculations (Parsons, 2002a).

Since only three Area 2 subsurface soil samples were collected, the two required conditions for conducting the WRS test (Figure D.1) on subsurface soil interval results were not met for any of the detected analytes (Attachment 2). Therefore, maximum site concentrations of these inorganics were compared with background comparison values. Of the 23 detected inorganics, only aluminum, arsenic, chromium (total), and vanadium had maximum site concentrations greater than their respective background comparison values (Attachment 2). There were no DPG-specific background levels for molybdenum or silver, which were detected in Area 2 subsurface soils; therefore, it is assumed that the detected concentrations of these inorganics may be potentially attributable to site activities, and molybdenum and silver were retained as Area 2 subsurface soil preliminary COPCs.

One of the next steps in the site-attribution analysis for risk assessment involves a review of the graphical plots for those inorganics with maximum detected concentrations greater than background comparison values (refer to Figure D.1). Box-and-whisker plots were not generated for Area 2 subsurface soil results at SWMU-41 because of the small sample size. However, histograms were generated for site and background concentrations (Attachment 2). As shown in the Area 2 subsurface histograms for vanadium, site concentrations exceed the range of background concentrations; therefore, vanadium was retained as an Area 2 subsurface soil preliminary COPC. As shown in the Area 2

subsurface histograms for aluminum, arsenic, and chromium (total), site concentrations fall within the overall distribution of background concentrations. Therefore, aluminum, arsenic and chromium (total) were eliminated as preliminary Area 2 subsurface soil COPCs.

The two VOCs (acetone and benzene) detected in Area 2 subsurface soil (Attachment 2) at SWMU-41 are assumed potentially to be related to site activities, and therefore, were retained as Area 2 subsurface soil preliminary COPCs.

D.4 RADIOLOGICAL SURVEY DATA

A site-attribution analysis was also performed for the data collected during the radiological survey at SWMU-41 (Appendix F). As indicated in the guidance for closure of radioactive sites (e.g., MARSSIM [NRC, 2000] and NUREG-1757 [NRC, 2003]), site data can be compared directly with background using the WRS test to determine if the data are indistinguishable from background. Per MARSSIM, the applicable null hypothesis for this test is known as Scenario B, and the underlying assumption of the Scenario is that the survey data are indistinguishable from background unless proven otherwise. Based on the results of the WRS test, this null hypothesis is either accepted (i.e., survey data are similar to background and the dataset passes) or rejected (i.e., survey data are not similar to background and the dataset fails). Following the WRS test, the same “reality check” discussed in Sections D.1 through D.3 can be performed on the data to determine if the result is a true indication of the presence or absence of contamination, or if it is an artifact from some other factor.

As discussed in Appendix F, two types of data were collected at SWMU-41 – field measurements using hand-held instruments and soil sampling data. Summary statistics of the field measurements and soil analytical data are presented in Tables D.10 and D.11, respectively. For the soils data, the gross alpha, gross beta, and bismuth-214 (Bi-214) and cesium-137 (Cs-137) results from the gamma spectroscopy analysis were selected as representative results for the purposes of a site-attribution analysis for risk assessment. The primary radionuclide of concern (ROC) at SWMU-41, cobalt-60 (Co-60), was not detected in background, and was detected in trace amounts (but below screening levels) in only two of the 21 surface soil samples (Appendix F). Therefore, it

was concluded that Co-60 was not present at levels that warranted inclusion in a risk assessment. Bi-214 is a naturally-occurring radionuclide in the uranium decay series, and was detected in 100-percent of both SWMU-41 pond and SWMU-41 pond background samples, with the average background concentration slightly higher. Cs-137 is not a ROC at SWMU-41, but is a man-made radionuclide associated with fallout from atmospheric nuclear weapons testing that is ubiquitous in the environment. The average Cs-137 concentration in the SWMU-41 pond was slightly higher than the average background concentration.

The WRS tests comparing the datasets listed in Tables D.10 and D.11 with background followed the guidelines indicated in MARSSIM. Results from the tests performed for the field measurements and soil analytical data are presented in Tables D.12 and D.13, respectively. It should be noted that while the underlying principles of the WRS tests are the same, the WRS tests conducted for the radiological data described in this section use the Microsoft Excel spreadsheet formulae listed in MARSSIM Appendix I for the Scenario B null hypothesis, and not the Statistica software typically used with DPG chemical data. The null hypothesis stating that site data were indistinguishable from background data was accepted for the following datasets:

- Building 1002 GM pancake and 3”x3” NaI
- Building 1004 GM pancake and 3”x3” NaI
- Building 1005 GM pancake and 3”x3” NaI
- SWMU-41 tunnel 3”x3” NaI
- SWMU-41 pond GM pancake and 3”x3” NaI
- SWMU-41 soil sample results: gross alpha – surface, gross beta –surface, gross alpha – subsurface, gross beta – subsurface, Bi-214 – surface, and Cs-137 – surface.

The only dataset not found to be indistinguishable from background was the GM pancake data collected in the SWMU-41 tunnel. A review of the box-and-whisker plots and histograms of SWMU-41 tunnel GM pancake data indicates that the distribution of SWMU-41 tunnel measurements may be slightly shifted relative to the background distribution, but are still primarily within background levels. During the collection of measurements within the SWMU-41 tunnel it was noted that measurements with the GM pancake trended higher towards the closed north end of the tunnel. It is likely that the

TABLE D.10
SUMMARY STATISTICS FOR SWMU-41 SURFACE FIELD MEASUREMENTS[a/]
DUGWAY PROVING GROUND, UTAH

Dataset	Number of Measurements	Minimum (cpm) [b/]	Mean (cpm)	Standard Deviation (cpm)	Maximum (cpm)	Median (cpm)
Interior Survey Units						
Building 1002 GM Pancake	89	39	65	11	96	63
Building 1002 3"x3" NaI	89	17049	20576	1080	22343	20816
Building 1004 GM Pancake	20	34	52	10	72	52
Building 1004 3"x3" NaI	20	9773	12698	1333	14238	12792
Building 1005 GM Pancake	20	37	60	19	92	58
Building 1005 3"x3" NaI	20	13415	18080	3078	23947	17623
SWMU-41 Tunnel GM Pancake	21	44	68	16	100	69
SWMU-41 Tunnel 3"x3" NaI	21	16981	19881	1617	22304	20239
Interior Background						
Building 5326 GM Pancake	25	36	59	13	85	62
Building 5326 3"x3" NaI	25	16414	22156	1668	25280	22079
Building 5326-mod 3"x3" NaI [c/]	25	10160	13715	1033	15648	13667
Exterior Survey Units						
SWMU-41 Pond GM Pancake	99	49	71	11	111	69
SWMU-41 Pond 3"x3" NaI	99	18100	20889	2110	29739	20339
Exterior Background						
Pond Background GM Pancake	25	47	79	15	102	82
Pond Background 3"x3" NaI	25	17864	23385	2294	25321	24205

[a/] Surface field measurements collected using GM Pancake probe and 3"x3" NaI probe, as discussed in Appendix F.

[b/] cpm = counts per minute.

[c/] GM and 3x3 measurements at 1004 were taken with a 25 ft cable, which reduced the background of the 3x3 detector by approximately 38.1-percent, based on background measurements (i.e., without the radioactive source) taken during instrument function checks. The existing Building 5326 background summary statistics were similarly reduced by 38.1-percent to account for the longer cable length.

TABLE D.11

SUMMARY STATISTICS FOR SELECTED SWMU-41 SOIL RADIOLOGICAL ANALYTICAL RESULTS[a/]

DUGWAY PROVING GROUND, UTAH

Analysis	Detection Frequency			Range of Values (pCi/g) [b/] Detected Concentrations		Mean (pCi/g)
	Detects	Total	Percent	Minimum	Maximum	
SWMU-41 Pond						
Gross Alpha - Surface	21	21	100	12	27.8	18
Gross Beta - Surface	21	21	100	19.0	44.5	25
Gross Alpha - Subsurface	6	6	100	22.6	37.1	28
Gross Beta - Subsurface	6	6	100	18.9	27.2	22.0
Bismuth-214	21	21	100	0.43	1.15	0.65
Cesium-137	15	21	71	0.15	8.1	1.12
Pond Background						
Gross Alpha	5	5	100	14	30	22
Gross Beta	5	5	100	23.2	29	25.2
Bismuth-214	5	5	100	0.8	1.0	0.9
Cesium-137	5	5	100	0.28	0.52	0.39

[a/] Additional information regarding the radiological analytical results is presented in Appendix F.

[b/] pCi/g = picocuries per gram.

TABLE D.12
RESULTS OF WILCOXON RANK SUM SITE-ATTRIBUTION ANALYSIS FOR SURFACE FIELD MEASUREMENTS AT SWMU-41

DUGWAY PROVING GROUND, UTAH

Survey Unit	Measurement [a/]	Valid N Survey [b/]	Valid N Background [b/]	Critical Value [c/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [d/]	Conclusion [e/]
Building 1002	GM Pancake	89	25	5403.7	5389	Accept	Data at background levels
Building 1002	3"x3" NaI	89	25	5403.7	4327	Accept	Data at background levels
Building 1004	GM Pancake	20	25	545.8	379	Accept	Data at background levels
Building 1004	3"x3" NaI	20	25	545.8	336	Accept	Data at background levels
Building 1005	GM Pancake	20	25	545.8	464	Accept	Data at background levels
Building 1005	3"x3" NaI	20	25	545.8	280	Accept	Data at background levels
SWMU-41 Tunnel	GM Pancake	21	25	582.4	582.5	Reject	Data at background levels [e/]
SWMU-41 Tunnel	3"x3" NaI	21	25	582.4	301	Accept	Data at background levels
SWMU-41 Pond	GM Pancake	99	25	6502.2	5711.5	Accept	Data at background levels
SWMU-41 Pond	3"x3" NaI	99	25	6502.2	5529	Accept	Data at background levels

[a/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[b/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[c/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM (NRC, 2000) Appendix I.

[d/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the survey unit is indistinguishable from background is accepted, and the survey unit passes the test (i.e., the survey unit meets the release criterion).

[e/] Refer to Appendix D text.

TABLE D.13
RESULTS OF WILCOXON RANK SUM SITE-ATTRIBUTION ANALYSIS
FOR SELECTED SOIL RADIOLOGICAL ANALYTICAL RESULTS AT SWMU-41

DUGWAY PROVING GROUND, UTAH

Survey Unit	Measurement [a/]	Valid N Survey [b/]	Valid N Background [b/]	Critical Value [c/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [d/]	Conclusion
Gross Alpha - Surface	GM Pancake	21	5	313.6	265	Accept	Data at background levels
Gross Beta - Surface	3"x3" NaI	21	5	313.6	274	Accept	Data at background levels
Gross Alpha - Subsurface	GM Pancake	6	5	46.7	42	Accept	Data at background levels
Gross Beta - Subsurface	3"x3" NaI	6	5	46.7	26	Accept	Data at background levels
Bismuth-214	GM Pancake	21	5	313.6	237.5	Accept	Data at background levels
Cesium-137	3"x3" NaI	15	5	180.0	156	Accept	Data at background levels

[a/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[b/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[c/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM (NRC, 2000) Appendix I.

[d/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the survey unit is indistinguishable from background is accepted, and the survey unit passes the test (i.e., the survey unit meets the release criterion).

elevated beta levels detected by the GM pancake were the result of the presence of naturally-occurring beta-emitting radon progeny on the measurement location surfaces, as discussed in Appendix F. The lines of evidence to support the presence of radon progeny within this portion of the tunnel are as follows: 1) the tunnel is below ground and has no ventilation that would disperse any radon gas that entered the tunnel from the subsurface soil; 2) radon progeny tend to plate out on smooth surfaces, such as piping; and 3) radon progeny are short-lived (i.e., on the order of minutes) and smear samples (Appendix F) collected at that location but analyzed several days later did not have detectable radioactivity, indicating that what was there originally decayed to negligible levels.

As a result of the analyses discussed above, the radiological data collected at SWMU-41 are considered to be at background levels, and the further consideration of any risks related to residual radioactivity at SWMU-41 is not warranted. Further discussion of compliance of the radiological data with the unrestricted use release criterion of 25 millirem per year (mrem/yr) is presented in Appendix F.

D.5 FINAL LIST OF PRELIMINARY CHEMICALS OF POTENTIAL CONCERN FOR RISK ASSESSMENT AND SOIL-TO-GROUNDWATER ANALYSIS

Preliminary surface-, mixed-, and subsurface-soil interval COPCs at SWMU-41 are listed in Table D.14 and were based on the results of the site-attribution analysis for risk assessment.

D.6 SUPPORTING SOIL-TO-GROUNDWATER SSL CALCULATIONS

As discussed in Section 3.1.6 the potential for future impacts to groundwater underlying SWMU-41 was evaluated by comparing soil (surface and subsurface) concentrations of potentially site-related analytes with generic and source area-specific soil-to-groundwater soil screening levels (SSLs) calculated using USEPA (1996b) methodology. Generic soil-to-groundwater SSLs were calculated based on USEPA (1996a) recommended parameters, including a default dilution attenuation factor (DAF) of 20. With the exception of a facility-specific fraction of organic carbon (f_{oc}) of 0.02 (i.e., 2-percent) (Shaw, 2003), soil-to-groundwater SSLs were calculated using USEPA

(1996a and 2002b) recommended input assumptions, methodology, and USEPA Region 9 (2004) PRGs. Potential soil-to-groundwater impacts were evaluated further for chemicals with soil concentrations that exceeded generic soil-to-groundwater SSLs by using site-specific source area DAFs. These were based on site- and chemical-specific source area(s) and 95th percentile DAFs shown in Appendix E, Figure 5 of the USEPA (1996b) Technical Support Document. Supporting generic soil-to-groundwater SSL calculations for Area 1 and Area 2 are provided in Tables D.15 and D.16, respectively. Source area-specific soil-to-groundwater SSL calculations are provided in Table D.17 for Area 1, and were not required for Area 2.

TABLE D.14

PRELIMINARY CHEMICALS OF POTENTIAL CONCERN IN SURFACE AND MIXED SOILS FOR RISK ASSESSMENT AND SUBSURFACE SOIL-TO-GROUNDWATER IMPACTS SWMU-41

DUGWAY PROVING GROUND, UTAH

Surface (0-0.5 ft bgs)[a/] Soil Interval	Mixed (0-10 ft bgs) Soil Interval	Subsurface (>0.5 ft bgs) Soil Interval
	Area 1	
Phenanthrene	Phenanthrene	Aluminum
Benzo(a)anthracene	Benzo(a)anthracene	Boron
Benzo(g,h,i)perylene	Benzo(g,h,i)perylene	Chromium, Total
Chrysene	Chrysene	Mercury
Fluoranthene	Fluoranthene	Vanadium
Pyrene	Pyrene	
Arsenic	Aluminum	
Cadmium	Arsenic	
Chromium, Total	Boron	
Cobalt	Cadmium	
Copper	Chromium, Total	
Iron	Cobalt	
Lead	Copper	
Mercury	Iron	
Nickel	Lead	
Silver	Mercury	
Tin	Nickel	
Vanadium	Silver	
Zinc	Tin	
	Vanadium	
	Zinc	
	Area 2	
	Acetone	Acetone
	Benzene	Benzene
	Molybdenum	Molybdenum
	Silver	Silver
	Vanadium	Vanadium

[a/] ft bgs = Feet below ground surface.

TABLE D.15

CALCULATIONS FOR ESTIMATING GENERIC SOIL-TO-GROUNDWATER SOIL SCREENING LEVELS [a/]
SWMU-41 AREA 1
DUGWAY PROVING GROUND, UTAH

Equations	Input Parameter Definition [b/]	Input Parameters
	C_w - Target soil leachate concentration (mg/L)	chemical-specific
C_w = PRG **x** DAF	SSL - Soil-to-Groundwater Soil Screening Level (mg/Kg)	chemical-specific
	DAF - Dilution-Attenuation Factor (Unitless)	20
Soil-to-Groundwater SSL =	K_{oc} - Soil organic carbon partition coefficient (L/Kg)	chemical-specific
C_w $[K_d + ((\theta_w + \theta_a * H')/\rho_b)]$	K_d - Soil-water partition coefficient (L/Kg)	chemical-specific
	f_{oc} - Fraction organic carbon content in soil (Kg/Kg)	0.02
Where:	θ_w - Water filled soil porosity (L_{water}/L_{soil})	0.3
$K_d = K_{oc} * f_{oc}$	θ_a - Air filled soil porosity (L_{air}/L_{soil})	0.13
	ρ_b - Dry soil bulk density (Kg/L)	1.5
	H' - Henry's law constant (Unitless)	chemical-specific

Analyte	PRG (mg/L)[c/]	C_w	K_{oc}[d/]	K_d[d/]	H'[d/]	Soil-to-GW SSL(mg/Kg)
Volatile Organic Compounds						
Phenanthrene[e/]	1.8	36	21,000	420	0.0017	15,000
Semivolatile Organic Compounds						
Benzo(a)anthracene	0.000092	0.0018	400,000	8000	0.00014	15
Benzo(g,h,i)perylene[e/]	0.18	3.6	2,700,000	54,000	0.000014	100,000[f/]
Chrysene	0.0092	0.18	400,000	8000	0.0039	1500
Fluoranthene	1.5	29	110,000	2100	0.00066	62,000
Pyrene	0.18	3.7	110,000	2100	0.00045	7700
Inorganics						
Aluminum	36	730	--[g/]	1500	--	100,000[f/]
Arsenic	0.000045	0.00090	--	31	--	0.028
Boron	7.3	150	--	3.0	--	470
Cadmium[e/]	0.018	0.36	--	4300	--	1600
Chromium, Total[e/]	0.11	2.2	--	14	--	31

Cobalt	0.73	15	--	45	--	660
Copper	1.5	29	--	35	--	1000
Lead[e/]	0.015	0.30	--	900	--	400[h/]
Mercury	0.011	0.22	--	200	--	44
Nickel	0.73	15	--	1900	--	28,000
Silver	0.18	3.6	--	110	--	400
Tin	22	440	--	250	--	100,000[f/]
Vanadium	0.036	0.73	--	1000	--	730
Zinc	11	220	--	530	--	100,000[f/]

[a/] Based on methods in USEPA (1996a).
[b/] Units are defined as follows: mg/L = milligrams per liter; mg/Kg = milligrams per kilogram; L/Kg = liters per kilogram; Kg/Kg = kilogram per kilogram; L_{water}/L_{soil} = liters of water per liters of soil; L_{air}/L_{soil} = liters of air per liters of soil; Kg/L = kilograms per liter.
[c/] Chemical-specific PRG from USEPA Region 9 (2004).
[d/] Chemical-specific K_{oc} and H' values for organic chemicals from USEPA (1996a) or USEPA EPI (2000) if not listed in USEPA (1996a). K_d values for inorganic compounds from USEPA (1996a; based on a site specific pH of 8.0) or base et al (1984) if not listed in USEPA (1996). [g/]
[e/] The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.
[f/] The value is a "ceiling limit" concentration because the risk-based value was greater than the USEPA Region 9 (2004) recommended ceiling limit of 100,000 mg/Kg.
[g/] "--" = Data unavailable.
[h/] A soil-to-groundwater SSL was not calculated for lead; a value of 400 mg/Kg is recommended by USEPA (1996b).

TABLE D.16

CALCULATIONS FOR ESTIMATING GENERIC SOIL-TO-GROUNDWATER SOIL SCREENING LEVELS [a/]
SWMU-41 AREA 2
DUGWAY PROVING GROUND, UTAH

Equations	Input Parameter Definition [b/]	Input Parameters
	C_w - Target soil leachate concentration (mg/L)	chemical-specific
C_w = PRG **x** DAF	SSL - Soil-to-Groundwater Soil Screening Level (mg/Kg)	chemical-specific
	DAF - Dilution-Attenuation Factor (Unitless)	20
Soil-to-Groundwater SSL =	K_{oc} - Soil organic carbon partition coefficient (L/Kg)	chemical-specific
$C_w\ [K_d + ((\theta_w + \theta_a{*}H')/\rho_b)]$	K_d - Soil-water partition coefficient (L/Kg)	chemical-specific
	f_{oc} - Fraction organic carbon content in soil (Kg/Kg)	0.02
Where:	θ_w - Water filled soil porosity (L_{water}/L_{soil})	0.3
$K_d = K_{oc} * f_{oc}$	θ_a - Air filled soil porosity (L_{air}/L_{soil})	0.13
	ρ_b - Dry soil bulk density (Kg/L)	1.5
	H' - Henry's law constant (Unitless)	chemical-specific

Analyte	PRG (mg/L)[c/]	C_w	K_{oc}[d/]	K_d[d/]	H'[d/]	Soil-to-GW SSL(mg/Kg)
Volatile Organic Compounds						
Acetone	5.5	110	0.58	0.012	0.0016	23
Benzene	0.00035	0.0071	59	1.2	0.23	0.0099
Inorganics						
Molybdenum	0.18	3.6	--[e/]	20	--	74
Silver	0.18	3.6	--	110	--	400
Vanadium	0.036	0.73	--	1000	--	730

[a/] Based on methods in USEPA (1996a).
[b/] Units are defined as follows: mg/L = milligrams per liter; mg/Kg = milligrams per kilogram; L/Kg = liters per kilogram; Kg/Kg = kilogram per kilogram; L_{water}/L_{soil} = liters of water per liters of soil; L_{air}/L_{soil} = liters of air per liters of soil; Kg/L = kilograms per liter.
[c/] Chemical-specific PRG from USEPA Region 9 (2004).
[d/] Chemical-specific K_{oc} and H' values for organic chemicals from USEPA (1996a) or USEPA EPI (2000) if not listed in USEPA (1996a). K_d values for inorganic compounds from USEPA (1996a; based on a site specific pH of 8.0) or base et al (1984) if not listed in USEPA (1996). [e/]
[e/] "--" = Data unavailable.

TABLE D.17

CALCULATIONS FOR ESTIMATING SOURCE AREA SPECIFIC SOIL-TO-GROUNDWATER SOIL SCREENING LEVELS [a/]
SWMU-41 AREA 1
DUGWAY PROVING GROUND, UTAH

Equations	Input Parameter Definition [b/]	Input Parameters
	C_w - Target soil leachate concentration (mg/L)	chemical-specific
C_w = PRG **x** DAF	SSL - Soil-to-Groundwater Soil Screening Level (mg/Kg)	chemical-specific
	DAF - Dilution-Attenuation Factor (Unitless)	site-specific
Soil-to-Groundwater SSL =	K_{oc} - Soil organic carbon partition coefficient (L/Kg)	chemical-specific
$C_w\ [K_d + ((\theta_w + \theta_a{*}H')/\rho_b)]$	K_d Soil-water partition coefficient (L/Kg)	chemical-specific
	f_{oc} - Fraction organic carbon content in soil (Kg/Kg)	0.02
Where:	θ_w - Water filled porosity (L_{water}/L_{soil})	0.3
$K_d = K_{oc} * f_{oc}$	θ_a - Air filled porosity (L_{air}/L_{soil})	0.13
	ρ_b - Dry soil bulk density (Kg/L)	1.5
	H' - Henry's law constant (Unitless)	chemical-specific

Chemical	PRG (mg/L)[c/]	DAF	C_w	K_{oc}[d/]	K_d[d/]	H'[d/]	Soil-to-GW SSL(mg/Kg)
Inorganics							
Arsenic	0.000045	49	0.0022	--[e/]	31	--	0.069 (15)[f/]
Chromium, Total[g/]	0.11	49	5.4	--	14	--	77
Mercury	0.011	49	0.54	--	200	--	110

a/ Based on methods in USEPA (1996a).
b/ Units are defined as follows: mg/L = milligrams per liter; mg/Kg = milligrams per kilogram; L/Kg = liters per kilogram; Kg/Kg = kilogram per kilogram; L_{water}/L_{soil} = liters of water per liters of soil; L_{air}/L_{soil} = liters of air per liters of soil; Kg/L = kilograms per liter.
c/ Chemical-specific PRG from USEPA Region 9 (2004).
d/ Chemical-specific K_{oc} and H' values for organic chemicals and K_d values for inorganic compounds from USEPA(1996a) or USEPA EPI(2000) if not listed in USEPA(1996a).
e/ "--" = Data unavailable.
f/ Source Area SSL calculated using the USEPA MCL for arsenic (10 µg/L).
g/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

ATTACHMENT 1

RESULTS OF THE DATA USABILITY REVIEW

ATTACHMENT 1

RESULTS OF THE DATA USABILITY REVIEW

Methods for evaluating the usability of data for site-attribution analyses and/or risk calculations have been described in the Background Metals Report (Parsons, 2001a) and the Risk Assumptions Document (Parsons, 2002a) and are not repeated here. The purpose of this appendix is to document the development of the final dataset used in the site-attribution analyses and/or risk calculations.

Analytical results from the site investigations at SWMU-41 are provided as Appendix C. A Visual Basic® data-management program was developed to query the initial data and generate a dataset that meets the data usability guidelines outlined in the Risk Assumptions Document (Parsons, 2002a). The data-management program produced: 1) a log of any records removed and the reasons for their removal (Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11); and 2) a formatted spreadsheet for use in generating data summary statistics (Data_Usability_2, Data_Usability_4, Data_Usability_6, Data_Usability_8, Data_Usability_10, and Data_Usability_12). Records removed from the initial dataset were grouped into the following categories:

- **Rejected data.** All rejected data (R-qualified in the electronic database) were removed and noted on the log sheet (Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11).

- **Non-detect results where one-half the method detection limits (MDLs) were greater than the maximum detected concentrations.** Non-detect analytical results where one-half the MDL (adjusted for matrix effects such as moisture content/dilution; equivalent to the USEPA [1989b] SQL) was greater than the maximum detected concentration were removed and noted on the log sheet (Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11).

- **Result obtained using multiple analytical methods.** The following rules were applied when multiple records existed for a single analyte: 1) If all results for a given analyte in a single sample were non-detect (U- or UJ-qualified), one-half the lowest MDL was retained and all other associated records removed; 2) If only one result for an analyte in a single sample was a detected value, the detected value was retained and all other associated records removed; or 3) If two or more

results for an analyte in a single sample were detected values, the maximum detected value was retained and all other associated records removed. The "Notes" column displayed in the log spreadsheet (Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11) contains one of the following record-removal explanations: a) "Based on all samples being Non Detect" indicates that the lowest result (one-half the lowest MDL) was retained and all other values removed; b) "Based on all samples being Detect" indicates that the maximum result was retained and all other values removed; and c) "Based on at least one sample being Non Detect" indicates that the detected result was retained and all other values removed.

- **Samples with quality control (QC) duplicates.** Duplicate sample pairs are defined as those data records for a given matrix with the same sampling date, location, sampling depth, and analyte. The following rules applied to these records: 1) If both results were non-detect, one-half the lowest MDL was retained and all other associated records removed; 2) If one of the duplicate results was a "detect," the average of the detected value and one-half the MDL of the non-detect sample was calculated and retained; or 3) If both results were detected values, the average was calculated and retained. Records removed from the dataset were noted on the log sheet (Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11), and one of the following record-removal explanations was included in the "Notes" column: a) "Based on all samples being Non Detect," which indicates that the record with the lowest result (one-half the lowest MDL) was retained and all other values removed; b) "This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, were removed." This note indicates that either both samples had detected values or there was one detect and one non-detect value.

Record results in the dataset reported as "0" (i.e., some non-detect results obtained during Phase I) were replaced with one-half the MDL. The data removal log sheets from the surface, subsurface (greater than 0.5 ft bgs), monitoring well, and mixed soils datasets from SWMU-41 are provided as Data_Usability_1, Data_Usability_3, Data_Usability_5, Data_Usability_7, Data_Usability_9, and Data_Usability_11. The final surface, subsurface, monitoring well, and mixed soil datasets used in the site-attribution analyses and/or risk calculations for SWMU-41 are provided as Data_Usability_2, Data_Usability_4, Data_Usability_6, Data_Usability_8, Data_Usability_10, and Data_Usability_12.

Data_Usability_1
SWMU-41 AREA 1 SURFACE SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,2,4-TRICHLOROBENZENE				
1,2-DICHLOROBENZENE				
1,3-DICHLOROBENZENE				
1,4-DICHLOROBENZENE				
2,4,5-TRICHLOROPHENOL				
2,4,6-TRICHLOROPHENOL				
2,4-DICHLOROPHENOL				
2,4-DIMETHYLPHENOL				
2,4-DINITROPHENOL				
2,4-DINITROTOLUENE				
2,6-DINITROTOLUENE				
2-CHLORONAPHTHALENE				
2-CHLOROPHENOL				
2-METHYLNAPHTHALENE				
2-METHYLPHENOL (o-CRESOL)				
2-NITROANILINE				
2-NITROPHENOL				
3,3'-DICHLOROBENZIDINE				
3-NITROANILINE				
3-NITROTOLUENE				
4,6-DINITRO-2-METHYLPHENOL				
4-BROMOPHENYL PHENYL ETHER				
4-CHLORO-3-METHYLPHENOL				
4-CHLOROANILINE				
4-CHLOROPHENYL PHENYL ETHER				
4-METHYLPHENOL (p-CRESOL)				
4-NITROANILINE				
4-NITROPHENOL				
ACENAPHTHENE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
ACENAPHTHYLENE				
ALDRIN				
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)				
ALPHA ENDOSULFAN				
ALUMINUM				
ANTHRACENE				
ANTIMONY				
ARSENIC				2
BARIUM				
BENZO(a)ANTHRACENE				
BENZO(a)PYRENE				
BENZO(b)FLUORANTHENE				
BENZO(g,h,i)PERYLENE				
BENZO(k)FLUORANTHENE				
BENZOIC ACID				
BENZYL ALCOHOL				
BENZYL BUTYL PHTHALATE				
BERYLLIUM				
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)				
BETA ENDOSULFAN				
bis(2-CHLOROETHOXY) METHANE				
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				
bis(2-CHLOROISOPROPYL) ETHER				
bis(2-ETHYLHEXYL) PHTHALATE				
BORON				
CADMIUM				
CALCIUM				
CHROMIUM, TOTAL				
CHRYSENE				
COBALT				
COPPER				
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)				
DIBENZ(a,h)ANTHRACENE				
DIBENZOFURAN				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
DIELDRIN				
DIETHYL PHTHALATE				
DIISOPROPYLMETHYLPHOSPHONATE				
DIMETHYL PHTHALATE				
DI-n-BUTYL PHTHALATE				
DI-n-OCTYLPHTHALATE				
ENDOSULFAN SULFATE				
ENDRIN				
ENDRIN ALDEHYDE				
ENDRIN KETONE				
FLUORANTHENE				
FLUORENE				
GAMMA BHC (LINDANE)				
HEPTACHLOR				
HEPTACHLOR EPOXIDE				
HEXACHLOROBENZENE				
HEXACHLOROBUTADIENE				
HEXACHLOROCYCLOPENTADIENE				
HEXACHLOROETHANE				
INDENO(1,2,3-c,d)PYRENE				
IRON				
ISODRIN				
ISOPHORONE				
ISOPROPYLMETHYL PHOSPHONIC ACID				
LEAD				2
MAGNESIUM				
MANGANESE				
MERCURY				
METHOXYCHLOR				
MOLYBDENUM				
NAPHTHALENE				
NICKEL				
NITROBENZENE				
N-NITROSODI-n-PROPYLAMINE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
N-NITROSODIPHENYLAMINE				
p,p'-DDD				
p,p'-DDE				
p,p'-DDT				
PENTACHLOROPHENOL				
PHENANTHRENE				
PHENOL				
POTASSIUM				
PYRENE				
SELENIUM			2	
SILVER				
SODIUM				
TELLURIUM				
THALLIUM				
THIODIGLYCOL				
TIN				
TOTAL ORGANIC CARBON				
TOXAPHENE				
TPH				
VANADIUM				
ZINC				
TOTAL	0	0	6	0

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
ARSENIC	0	16.4	041SO014	DTO041SS002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO013	DTO041SS001	Based on at least one sample being Detect
LEAD	0	7.44	041SO014	DTO041SS002	Based on at least one sample being Detect
LEAD	68.5	0	041SO013	DTO041SS001	Based on all samples being Detect
SELENIUM	0	20.7	041SO014	DTO041SS002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO013	DTO041SS001	Based on at least one sample being Detect

Data_Usability_2
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 AREA 1 SURFACE SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALUMINUM	7429-90-5	12100	MG/KG			12100	12100	9.400960732	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ALUMINUM	7429-90-5	21500	MG/KG			21500	21500	9.975808214	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ARSENIC	7440-38-2	28.1	MG/KG			28.1	28.1	3.335769576	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ARSENIC	7440-38-2	8.02	MG/KG			8.02	8.02	2.081938422	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BARIUM	7440-39-3	324	MG/KG			324	324	5.780743516	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
BARIUM	7440-39-3	289	MG/KG			289	289	5.666426688	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BENZO(a)ANTHRACENE	56-55-3	0.17	MG/KG			0.17	0.17	-1.771956842	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(g,h,i)PERYLENE	191-24-2	0.94	MG/KG			0.94	0.94	-0.061875404	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(g,h,i)PERYLENE	191-24-2	3.5	MG/KG			3.5	3.5	1.252762968	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BERYLLIUM	7440-41-7	0.674	MG/KG			0.674	0.674	-0.394525168	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BERYLLIUM	7440-41-7	0.913	MG/KG			0.913	0.913	-0.091019398	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BORON	7440-42-8	0	MG/KG	27.9	UJ	13.95		2.635479508	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
BORON	7440-42-8	0	MG/KG	50.4	UJ	25.2		3.226843995	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CADMIUM	7440-43-9	51.9	MG/KG			51.9	51.9	3.94931879	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CALCIUM	7440-70-2	100000	MG/KG			100000	100000	11.51292546	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CHROMIUM, TOTAL	7440-47-3	387	MG/KG			387	387	5.958424693	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CHROMIUM, TOTAL	7440-47-3	19.7	MG/KG			19.7	19.7	2.980618636	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CHRYSENE	218-01-9	0.47	MG/KG			0.47	0.47	-0.755022584	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
COBALT	7440-48-4	329	MG/KG			329	329	5.796057751	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
COBALT	7440-48-4	9.12	MG/KG			9.12	9.12	2.210469804	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
COPPER	7440-50-8	121	MG/KG			121	121	4.795790546	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
COPPER	7440-50-8	17.5	MG/KG			17.5	17.5	2.862200881	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
FLUORANTHENE	206-44-0	0.15	MG/KG			0.15	0.15	-1.897119985	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
IRON	7439-89-6	160000	MG/KG			160000	160000	11.98292909	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
IRON	7439-89-6	17700	MG/KG			17700	17700	9.781319919	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
LEAD	7439-92-1	70	MG/KG			70	70	4.248495242	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
LEAD	7439-92-1	14	MG/KG			14	14	2.63905733	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MAGNESIUM	7439-95-4	17500	MG/KG			17500	17500	9.76995616	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MAGNESIUM	7439-95-4	25200	MG/KG			25200	25200	10.13459927	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MANGANESE	7439-96-5	662	MG/KG			662	662	6.495265556	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MANGANESE	7439-96-5	298	MG/KG			298	298	5.697093487	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MERCURY	7487-94-7	45	MG/KG		J	45	45	3.80666249	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MERCURY	7487-94-7	0.477	MG/KG		J	0.477	0.477	-0.740238788	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
NICKEL	7440-02-0	133	MG/KG			133	133	4.890349128	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
NICKEL	7440-02-0	14.8	MG/KG			14.8	14.8	2.694627181	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PHENANTHRENE	85-01-8	0.09	MG/KG			0.09	0.09	-2.407945609	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
POTASSIUM	7440-09-7	4430	MG/KG			4430	4430	8.396154863	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
POTASSIUM	7440-09-7	7280	MG/KG			7280	7280	8.892886141	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
PYRENE	129-00-0	0.32	MG/KG			0.32	0.32	-1.139434283	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PYRENE	129-00-0	0.36	MG/KG			0.36	0.36	-1.021651248	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
SELENIUM	7782-49-2	0.79	MG/KG			0.79	0.79	-0.235722334	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
SILVER	7440-22-4	14.9	MG/KG			14.9	14.9	2.701361213	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
SODIUM	7440-23-5	909	MG/KG		J	909	909	6.812345094	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SODIUM	7440-23-5	977	MG/KG		J	977	977	6.884486652	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
TIN	7440-31-5	19.7	MG/KG			19.7	19.7	2.980618636	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
TOTAL ORGANIC CARBON		42100	MG/KG			42100	42100	10.64780302	DTO041SS001	041SO013	Water Quality	0.25	SO	0	2/15/1994
TOTAL ORGANIC CARBON		30600	MG/KG			30600	30600	10.32875529	DTO041SS002	041SO014	Water Quality	0.25	SO	0	2/15/1994
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
TPH		174	MG/KG			174	174	5.159055299	DTO041SS001	041SO013	TPH	0.25	SO	0	2/15/1994
TPH		810	MG/KG			810	810	6.697034248	DTO041SS002	041SO014	TPH	0.25	SO	0	2/15/1994
VANADIUM	7440-62-2	32.9	MG/KG			32.9	32.9	3.493472658	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
VANADIUM	7440-62-2	31	MG/KG			31	31	3.433987204	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ZINC	7440-66-6	932	MG/KG			932	932	6.837332815	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ZINC	7440-66-6	74.8	MG/KG			74.8	74.8	4.314817885	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994

Data_Usability_3
SWMU-41 AREA 1 SUBSURFACE SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,1,1-TRICHLOROETHANE				
1,1,2,2-TETRACHLOROETHANE				
1,1,2-TRICHLOROETHANE				
1,1-DICHLOROETHANE				
1,1-DICHLOROETHENE				
1,2,4-TRICHLOROBENZENE				
1,2-DICHLOROBENZENE				
1,2-DICHLOROETHANE				
1,2-DICHLOROPROPANE				
1,3-DICHLOROBENZENE				5
1,4-DICHLOROBENZENE				
2,4,5-TRICHLOROPHENOL				
2,4,6-TRICHLOROPHENOL				
2,4-DICHLOROPHENOL				
2,4-DIMETHYLPHENOL				
2,4-DINITROPHENOL				
2,4-DINITROTOLUENE				
2,6-DINITROTOLUENE				
2-CHLOROETHYL VINYL ETHER				
2-CHLORONAPHTHALENE				
2-CHLOROPHENOL				
2-HEXANONE				
2-METHYLNAPHTHALENE				
2-METHYLPHENOL (o-CRESOL)				
2-NITROANILINE				
2-NITROPHENOL				
3,3'-DICHLOROBENZIDINE				
3-NITROANILINE				
3-NITROTOLUENE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
4,6-DINITRO-2-METHYLPHENOL				
4-BROMOPHENYL PHENYL ETHER				
4-CHLORO-3-METHYLPHENOL				
4-CHLOROANILINE				
4-CHLOROPHENYL PHENYL ETHER				
4-METHYLPHENOL (p-CRESOL)				
4-NITROANILINE				
4-NITROPHENOL				
ACENAPHTHENE				
ACENAPHTHYLENE				
ACETONE				
ALDRIN				
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)				
ALPHA ENDOSULFAN				
ALPHA, GROSS				
ALUMINUM				
ANTHRACENE				
ANTIMONY				
ARSENIC				5
BARIUM				
BENZENE				
BENZO(a)ANTHRACENE				
BENZO(a)PYRENE				
BENZO(b)FLUORANTHENE				
BENZO(g,h,i)PERYLENE				
BENZO(k)FLUORANTHENE				
BENZOIC ACID				
BENZYL ALCOHOL				
BENZYL BUTYL PHTHALATE				
BERYLLIUM				
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)				
BETA ENDOSULFAN				
BETA, GROSS				
bis(2-CHLOROETHOXY) METHANE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				
bis(2-CHLOROISOPROPYL) ETHER				
bis(2-ETHYLHEXYL) PHTHALATE				
BORON				
BROMODICHLOROMETHANE				
BROMOFORM				
BROMOMETHANE				
CADMIUM				
CALCIUM				
CARBON DISULFIDE				
CARBON TETRACHLORIDE				
CHLOROBENZENE				
CHLOROETHANE				
CHLOROFORM				
CHLOROMETHANE				
CHROMIUM, TOTAL				
CHRYSENE				
cis-1,3-DICHLOROPROPENE				
COBALT				
COPPER				
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)				
DIBENZ(a,h)ANTHRACENE				
DIBENZOFURAN				
DIBROMOCHLOROMETHANE				
DIELDRIN				
DIETHYL PHTHALATE				
DIISOPROPYLMETHYLPHOSPHONATE				
DIMETHYL PHTHALATE				
DI-n-BUTYL PHTHALATE				
DI-n-OCTYLPHTHALATE				
ENDOSULFAN SULFATE				
ENDRIN				
ENDRIN ALDEHYDE				
ENDRIN KETONE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
ETHYLBENZENE				
FLUORANTHENE				
FLUORENE				
GAMMA BHC (LINDANE)				
HEPTACHLOR				
HEPTACHLOR EPOXIDE				
HEXACHLOROBENZENE				
HEXACHLOROBUTADIENE				
HEXACHLOROCYCLOPENTADIENE				
HEXACHLOROETHANE				
INDENO(1,2,3-c,d)PYRENE				
IRON				
ISODRIN				
ISOPHORONE				
ISOPROPYLMETHYL PHOSPHONIC ACID				
LEAD				5
MAGNESIUM				
MANGANESE				
MERCURY				
METHOXYCHLOR				
METHYL ETHYL KETONE (2-BUTANONE)				
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				
METHYLENE CHLORIDE				
MOLYBDENUM				
M-XYLENE (1,3-DIMETHYLBENZENE)				
NAPHTHALENE				
NICKEL				
NITROBENZENE				
N-NITROSODI-n-PROPYLAMINE				
N-NITROSODIPHENYLAMINE				
p,p'-DDD				
p,p'-DDE				
p,p'-DDT				
PENTACHLOROPHENOL				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
PHENANTHRENE				
PHENOL				
POTASSIUM				
PYRENE				
SELENIUM			5	
SILVER				
SODIUM				
STYRENE				
TELLURIUM				
TETRACHLOROETHYLENE (PCE)				
THALLIUM				
THIODIGLYCOL				
TIN				
TOLUENE				
TOTAL 1,2-DICHLOROETHENE				
TOTAL ORGANIC CARBON				
TOXAPHENE				
TPH				
trans-1,3-DICHLOROPROPENE				
TRICHLOROETHYLENE (TCE)				
TRICHLOROFLUOROMETHANE				
VANADIUM				
VINYL ACETATE				
VINYL CHLORIDE				
XYLENES, TOTAL				
ZINC				
TOTAL	0	0	20	0

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,3-DICHLOROBENZENE	0	0.14	041SO019	DTO041HA001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO018	DTO041HA001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO017	DTO041SB001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO016	DTO041SB001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO015	DTO041SB001	Based on all samples being Non Detect
ARSENIC	0	16.4	041SO019	DTO041HA001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO018	DTO041HA001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO017	DTO041SB001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO016	DTO041SB001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO015	DTO041SB001	Based on at least one sample being Detect
LEAD	0	7.44	041SO019	DTO041HA001	Based on at least one sample being Detect
LEAD	0	7.44	041SO017	DTO041SB001	Based on at least one sample being Detect
LEAD	0	7.44	041SO015	DTO041SB001	Based on at least one sample being Detect
LEAD	8.82	0	041SO016	DTO041SB001	Based on all samples being Detect
LEAD	9.67	0	041SO018	DTO041HA001	Based on all samples being Detect
SELENIUM	0	20.7	041SO019	DTO041HA001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO018	DTO041HA001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO017	DTO041SB001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO016	DTO041SB001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO015	DTO041SB001	Based on all samples being Non Detect

Data_Usability_4
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 AREA 1 SUBSURFACE SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	26.8	PCI/G			26.8	26.8	3.288401888	DTO041SB001	041SO015	RADD	3	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	10.3	PCI/G			10.3	10.3	2.332143895	DTO041SB001	041SO016	RADD	7	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	23.4	PCI/G			23.4	23.4	3.152736022	DTO041SB001	041SO017	RADD	14	SO	0	12/7/1993
ALUMINUM	7429-90-5	21400	MG/KG			21400	21400	9.971146201	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ALUMINUM	7429-90-5	35000	MG/KG			35000	35000	10.46310334	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ALUMINUM	7429-90-5	15100	MG/KG			15100	15100	9.622450023	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ALUMINUM	7429-90-5	12800	MG/KG			12800	12800	9.45720045	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ALUMINUM	7429-90-5	11600	MG/KG			11600	11600	9.358760377	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
ARSENIC	7440-38-2	8.6	MG/KG			8.6	8.6	2.151762203	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ARSENIC	7440-38-2	9.5	MG/KG			9.5	9.5	2.251291799	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ARSENIC	7440-38-2	9.96	MG/KG			9.96	9.96	2.298577072	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ARSENIC	7440-38-2	9.3	MG/KG			9.3	9.3	2.2300144	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ARSENIC	7440-38-2	11.9	MG/KG			11.9	11.9	2.4765384	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
BARIUM	7440-39-3	322	MG/KG			322	322	5.774551546	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BARIUM	7440-39-3	237	MG/KG			237	237	5.468060141	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BARIUM	7440-39-3	309	MG/KG			309	309	5.733341277	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BARIUM	7440-39-3	288	MG/KG			288	288	5.66296048	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BARIUM	7440-39-3	386	MG/KG			386	386	5.955837369	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BERYLLIUM	7440-41-7	1.06	MG/KG			1.06	1.06	0.058268908	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BERYLLIUM	7440-41-7	1.57	MG/KG			1.57	1.57	0.451075619	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BERYLLIUM	7440-41-7	0.6	MG/KG			0.6	0.6	-0.510825624	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BETA, GROSS	BETA	28.1	PCI/G			28.1	28.1	3.335769576	DTO041SB001	041SO015	RADD	3	SO	0	12/7/1993
BETA, GROSS	BETA	32.3	PCI/G			32.3	32.3	3.47506723	DTO041SB001	041SO016	RADD	7	SO	0	12/7/1993
BETA, GROSS	BETA	37.2	PCI/G			37.2	37.2	3.616308761	DTO041SB001	041SO017	RADD	14	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
BORON	7440-42-8	36.4	MG/KG			36.4	36.4	3.594568775	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BORON	7440-42-8	35.9	MG/KG			35.9	35.9	3.580737295	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BORON	7440-42-8	20.8	MG/KG			20.8	20.8	3.034952987	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BORON	7440-42-8	15.9	MG/KG			15.9	15.9	2.766319109	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BORON	7440-42-8	13.8	MG/KG			13.8	13.8	2.624668592	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CALCIUM	7440-70-2	160000	MG/KG			160000	160000	11.98292909	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
CALCIUM	7440-70-2	170000	MG/KG			170000	170000	12.04355372	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CALCIUM	7440-70-2	200000	MG/KG			200000	200000	12.20607265	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	21.3	MG/KG			21.3	21.3	3.058707073	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CHROMIUM, TOTAL	7440-47-3	26.8	MG/KG			26.8	26.8	3.288401888	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CHROMIUM, TOTAL	7440-47-3	13.1	MG/KG			13.1	13.1	2.57261223	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	10.4	MG/KG			10.4	10.4	2.341805806	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	8.52	MG/KG			8.52	8.52	2.142416341	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
COBALT	7440-48-4	10.6	MG/KG			10.6	10.6	2.360854001	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
COBALT	7440-48-4	9.21	MG/KG			9.21	9.21	2.22028985	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
COPPER	7440-50-8	20.5	MG/KG			20.5	20.5	3.020424886	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
COPPER	7440-50-8	16.7	MG/KG			16.7	16.7	2.815408719	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
COPPER	7440-50-8	14.1	MG/KG			14.1	14.1	2.646174797	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
COPPER	7440-50-8	12.5	MG/KG			12.5	12.5	2.525728644	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
COPPER	7440-50-8	11.2	MG/KG			11.2	11.2	2.415913778	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB001	041SO017	ABPs	14	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	2.1	U	1.05		0.048790164	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
IRON	7439-89-6	25900	MG/KG			25900	25900	10.16199825	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
IRON	7439-89-6	26600	MG/KG			26600	26600	10.18866649	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
IRON	7439-89-6	16000	MG/KG			16000	16000	9.680344001	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
IRON	7439-89-6	15000	MG/KG			15000	15000	9.61580548	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
IRON	7439-89-6	13600	MG/KG			13600	13600	9.517825072	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO017	ABPs	14	SO	0	12/7/1993
LEAD	7439-92-1	12	MG/KG			12	12	2.48490665	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
LEAD	7439-92-1	11.3	MG/KG			11.3	11.3	2.424802726	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
LEAD	7439-92-1	9.16	MG/KG		J	9.16	9.16	2.214846179	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
LEAD	7439-92-1	10.5	MG/KG			10.5	10.5	2.351375257	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
LEAD	7439-92-1	10.8	MG/KG		J	10.8	10.8	2.379546134	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
MAGNESIUM	7439-95-4	27400	MG/KG			27400	27400	10.21829829	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MAGNESIUM	7439-95-4	26000	MG/KG			26000	26000	10.16585182	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MAGNESIUM	7439-95-4	21000	MG/KG			21000	21000	9.952277717	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MAGNESIUM	7439-95-4	18500	MG/KG			18500	18500	9.825526011	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MAGNESIUM	7439-95-4	15500	MG/KG			15500	15500	9.648595303	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
MANGANESE	7439-96-5	418	MG/KG			418	418	6.035481433	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MANGANESE	7439-96-5	482	MG/KG			482	482	6.177944114	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MANGANESE	7439-96-5	386	MG/KG			386	386	5.955837369	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MANGANESE	7439-96-5	394	MG/KG			394	394	5.976350909	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MANGANESE	7439-96-5	305	MG/KG			305	305	5.720311777	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
MERCURY	7487-94-7	0.852	MG/KG			0.852	0.852	-0.160168752	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
NICKEL	7440-02-0	16.7	MG/KG			16.7	16.7	2.815408719	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
NICKEL	7440-02-0	17.1	MG/KG			17.1	17.1	2.839078464	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
NICKEL	7440-02-0	15.7	MG/KG			15.7	15.7	2.753660712	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
NICKEL	7440-02-0	10.3	MG/KG			10.3	10.3	2.332143895	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
NICKEL	7440-02-0	8.11	MG/KG			8.11	8.11	2.093097868	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
POTASSIUM	7440-09-7	6940	MG/KG			6940	6940	8.845057054	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
POTASSIUM	7440-09-7	9330	MG/KG			9330	9330	9.140990294	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
POTASSIUM	7440-09-7	5240	MG/KG			5240	5240	8.564076777	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
POTASSIUM	7440-09-7	4720	MG/KG			4720	4720	8.459564079	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
POTASSIUM	7440-09-7	4140	MG/KG			4140	4140	8.328451067	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
SODIUM	7440-23-5	1230	MG/KG		J	1230	1230	7.114769448	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SODIUM	7440-23-5	1260	MG/KG		J	1260	1260	7.138867	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SODIUM	7440-23-5	12400	MG/KG			12400	12400	9.425451752	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SODIUM	7440-23-5	13000	MG/KG			13000	13000	9.472704636	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SODIUM	7440-23-5	11600	MG/KG			11600	11600	9.358760377	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SB001	041SO017	ABPs	14	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
TOTAL ORGANIC CARBON		4950	MG/KG			4950	4950	8.507142856	DTO041HA001	041SO018	Water Quality	1.75	SO	0	12/16/1993
TOTAL ORGANIC CARBON		3280	MG/KG			3280	3280	8.095598701	DTO041HA001	041SO019	Water Quality	5.25	SO	0	12/16/1993
TOTAL ORGANIC CARBON		5180	MG/KG			5180	5180	8.552560335	DTO041SB001	041SO015	Water Quality	3	SO	0	12/7/1993
TOTAL ORGANIC CARBON		4090	MG/KG			4090	4090	8.316300249	DTO041SB001	041SO016	Water Quality	7	SO	0	12/7/1993
TOTAL ORGANIC CARBON		4420	MG/KG			4420	4420	8.393894975	DTO041SB001	041SO017	Water Quality	14	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SB001	041SO017	SVOCs	14	SO	0	12/7/1993
TPH		236	MG/KG			236	236	5.463831805	DTO041HA001	041SO018	TPH	1.75	SO	0	12/16/1993
TPH		57.9	MG/KG			57.9	57.9	4.058717385	DTO041HA001	041SO019	TPH	5.25	SO	0	12/16/1993
TPH		31.7	MG/KG			31.7	31.7	3.456316681	DTO041SB001	041SO015	TPH	3	SO	0	12/7/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041SB001	041SO016	TPH	7	SO	0	12/7/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041SB001	041SO017	TPH	14	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
VANADIUM	7440-62-2	38.9	MG/KG			38.9	38.9	3.660994251	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
VANADIUM	7440-62-2	38.8	MG/KG			38.8	38.8	3.658420247	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
VANADIUM	7440-62-2	22.5	MG/KG			22.5	22.5	3.113515309	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
VANADIUM	7440-62-2	17.8	MG/KG			17.8	17.8	2.879198457	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
VANADIUM	7440-62-2	16.5	MG/KG			16.5	16.5	2.803360381	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041SB001	041SO017	VOCs	14	SO	0	12/7/1993
ZINC	7440-66-6	70.9	MG/KG			70.9	70.9	4.261270434	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ZINC	7440-66-6	62.5	MG/KG			62.5	62.5	4.135166557	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ZINC	7440-66-6	46.5	MG/KG			46.5	46.5	3.839452313	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ZINC	7440-66-6	35.6	MG/KG			35.6	35.6	3.572345638	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ZINC	7440-66-6	28.1	MG/KG			28.1	28.1	3.335769576	DTO041SB001	041SO017	Metals	14	SO	0	12/7/1993

Data_Usability_5
SWMU-41 AREA 1 MIXED SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,1,1-TRICHLOROETHANE				
1,1,2,2-TETRACHLOROETHANE				
1,1,2-TRICHLOROETHANE				
1,1-DICHLOROETHANE				
1,1-DICHLOROETHENE				
1,2,4-TRICHLOROBENZENE				
1,2-DICHLOROBENZENE				
1,2-DICHLOROETHANE				
1,2-DICHLOROPROPANE				
1,3-DICHLOROBENZENE				4
1,4-DICHLOROBENZENE				
2,4,5-TRICHLOROPHENOL				
2,4,6-TRICHLOROPHENOL				
2,4-DICHLOROPHENOL				
2,4-DIMETHYLPHENOL				
2,4-DINITROPHENOL				
2,4-DINITROTOLUENE				
2,6-DINITROTOLUENE				
2-CHLOROETHYL VINYL ETHER				
2-CHLORONAPHTHALENE				
2-CHLOROPHENOL				
2-HEXANONE				
2-METHYLNAPHTHALENE				
2-METHYLPHENOL (o-CRESOL)				
2-NITROANILINE				
2-NITROPHENOL				
3,3'-DICHLOROBENZIDINE				
3-NITROANILINE				
3-NITROTOLUENE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
4,6-DINITRO-2-METHYLPHENOL				
4-BROMOPHENYL PHENYL ETHER				
4-CHLORO-3-METHYLPHENOL				
4-CHLOROANILINE				
4-CHLOROPHENYL PHENYL ETHER				
4-METHYLPHENOL (p-CRESOL)				
4-NITROANILINE				
4-NITROPHENOL				
ACENAPHTHENE				
ACENAPHTHYLENE				
ACETONE				
ALDRIN				
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)				
ALPHA ENDOSULFAN				
ALPHA, GROSS				
ALUMINUM				
ANTHRACENE				
ANTIMONY				
ARSENIC				6
BARIUM				
BENZENE				
BENZO(a)ANTHRACENE				
BENZO(a)PYRENE				
BENZO(b)FLUORANTHENE				
BENZO(g,h,i)PERYLENE				
BENZO(k)FLUORANTHENE				
BENZOIC ACID				
BENZYL ALCOHOL				
BENZYL BUTYL PHTHALATE				
BERYLLIUM				
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)				
BETA ENDOSULFAN				
BETA, GROSS				
bis(2-CHLOROETHOXY) METHANE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				
bis(2-CHLOROISOPROPYL) ETHER				
bis(2-ETHYLHEXYL) PHTHALATE				
BORON				
BROMODICHLOROMETHANE				
BROMOFORM				
BROMOMETHANE				
CADMIUM				
CALCIUM				
CARBON DISULFIDE				
CARBON TETRACHLORIDE				
CHLOROBENZENE				
CHLOROETHANE				
CHLOROFORM				
CHLOROMETHANE				
CHROMIUM, TOTAL				
CHRYSENE				
cis-1,3-DICHLOROPROPENE				
COBALT				
COPPER				
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)				
DIBENZ(a,h)ANTHRACENE				
DIBENZOFURAN				
DIBROMOCHLOROMETHANE				
DIELDRIN				
DIETHYL PHTHALATE				
DIISOPROPYLMETHYLPHOSPHONATE				
DIMETHYL PHTHALATE				
DI-n-BUTYL PHTHALATE				
DI-n-OCTYLPHTHALATE				
ENDOSULFAN SULFATE				
ENDRIN				
ENDRIN ALDEHYDE				
ENDRIN KETONE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
ETHYLBENZENE				
FLUORANTHENE				
FLUORENE				
GAMMA BHC (LINDANE)				
HEPTACHLOR				
HEPTACHLOR EPOXIDE				
HEXACHLOROBENZENE				
HEXACHLOROBUTADIENE				
HEXACHLOROCYCLOPENTADIENE				
HEXACHLOROETHANE				
INDENO(1,2,3-c,d)PYRENE				
IRON				
ISODRIN				
ISOPHORONE				
ISOPROPYLMETHYL PHOSPHONIC ACID				
LEAD				6
MAGNESIUM				
MANGANESE				
MERCURY				
METHOXYCHLOR				
METHYL ETHYL KETONE (2-BUTANONE)				
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				
METHYLENE CHLORIDE				
MOLYBDENUM				
M-XYLENE (1,3-DIMETHYLBENZENE)				
NAPHTHALENE				
NICKEL				
NITROBENZENE				
N-NITROSODI-n-PROPYLAMINE				
N-NITROSODIPHENYLAMINE				
p,p'-DDD				
p,p'-DDE				
p,p'-DDT				
PENTACHLOROPHENOL				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
PHENANTHRENE				
PHENOL				
POTASSIUM				
PYRENE				
SELENIUM			6	
SILVER				
SODIUM				
STYRENE				
TELLURIUM				
TETRACHLOROETHYLENE (PCE)				
THALLIUM				
THIODIGLYCOL				
TIN				
TOLUENE				
TOTAL 1,2-DICHLOROETHENE				
TOTAL ORGANIC CARBON				
TOXAPHENE				
TPH				
trans-1,3-DICHLOROPROPENE				
TRICHLOROETHYLENE (TCE)				
TRICHLOROFLUOROMETHANE				
VANADIUM				
VINYL ACETATE				
VINYL CHLORIDE				
XYLENES, TOTAL				
ZINC				
TOTAL	0	0	22	0

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,3-DICHLOROBENZENE	0	0.14	041SO019	DTO041HA001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO018	DTO041HA001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO016	DTO041SB001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO015	DTO041SB001	Based on all samples being Non Detect
ARSENIC	0	16.4	041SO019	DTO041HA001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO018	DTO041HA001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO016	DTO041SB001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO015	DTO041SB001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO014	DTO041SS002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO013	DTO041SS001	Based on at least one sample being Detect
LEAD	0	7.44	041SO019	DTO041HA001	Based on at least one sample being Detect
LEAD	0	7.44	041SO015	DTO041SB001	Based on at least one sample being Detect
LEAD	0	7.44	041SO014	DTO041SS002	Based on at least one sample being Detect
LEAD	8.82	0	041SO016	DTO041SB001	Based on all samples being Detect
LEAD	9.67	0	041SO018	DTO041HA001	Based on all samples being Detect
LEAD	68.5	0	041SO013	DTO041SS001	Based on all samples being Detect
SELENIUM	0	20.7	041SO019	DTO041HA001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO018	DTO041HA001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO016	DTO041SB001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO015	DTO041SB001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO014	DTO041SS002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO013	DTO041SS001	Based on at least one sample being Detect

Data_Usability_6
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 AREA 1 MIXED SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ALPHA, GROSS	ALPHA	26.8	PCI/G			26.8	26.8	3.288401888	DTO041SB001	041SO015	RADD	3	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	10.3	PCI/G			10.3	10.3	2.332143895	DTO041SB001	041SO016	RADD	7	SO	0	12/7/1993
ALUMINUM	7429-90-5	21400	MG/KG			21400	21400	9.971146201	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ALUMINUM	7429-90-5	35000	MG/KG			35000	35000	10.46310334	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ALUMINUM	7429-90-5	15100	MG/KG			15100	15100	9.622450023	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ALUMINUM	7429-90-5	12800	MG/KG			12800	12800	9.45720045	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ALUMINUM	7429-90-5	12100	MG/KG			12100	12100	9.400960732	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ALUMINUM	7429-90-5	21500	MG/KG			21500	21500	9.975808214	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ARSENIC	7440-38-2	8.6	MG/KG			8.6	8.6	2.151762203	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ARSENIC	7440-38-2	9.5	MG/KG			9.5	9.5	2.251291799	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ARSENIC	7440-38-2	9.96	MG/KG			9.96	9.96	2.298577072	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ARSENIC	7440-38-2	9.3	MG/KG			9.3	9.3	2.2300144	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ARSENIC	7440-38-2	28.1	MG/KG			28.1	28.1	3.335769576	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ARSENIC	7440-38-2	8.02	MG/KG			8.02	8.02	2.081938422	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BARIUM	7440-39-3	322	MG/KG			322	322	5.774551546	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BARIUM	7440-39-3	237	MG/KG			237	237	5.468060141	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BARIUM	7440-39-3	309	MG/KG			309	309	5.733341277	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BARIUM	7440-39-3	288	MG/KG			288	288	5.66296048	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BARIUM	7440-39-3	324	MG/KG			324	324	5.780743516	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
BARIUM	7440-39-3	289	MG/KG			289	289	5.666426688	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0.17	MG/KG			0.17	0.17	-1.771956842	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0.94	MG/KG			0.94	0.94	-0.061875404	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(g,h,i)PERYLENE	191-24-2	3.5	MG/KG			3.5	3.5	1.252762968	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BERYLLIUM	7440-41-7	1.06	MG/KG			1.06	1.06	0.058268908	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BERYLLIUM	7440-41-7	1.57	MG/KG			1.57	1.57	0.451075619	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BERYLLIUM	7440-41-7	0.6	MG/KG			0.6	0.6	-0.510825624	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BERYLLIUM	7440-41-7	0.674	MG/KG			0.674	0.674	-0.394525168	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
BERYLLIUM	7440-41-7	0.913	MG/KG			0.913	0.913	-0.091019398	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BETA, GROSS	BETA	28.1	PCI/G			28.1	28.1	3.335769576	DTO041SB001	041SO015	RADD	3	SO	0	12/7/1993
BETA, GROSS	BETA	32.3	PCI/G			32.3	32.3	3.47506723	DTO041SB001	041SO016	RADD	7	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
BORON	7440-42-8	36.4	MG/KG			36.4	36.4	3.594568775	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
BORON	7440-42-8	35.9	MG/KG			35.9	35.9	3.580737295	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
BORON	7440-42-8	20.8	MG/KG			20.8	20.8	3.034952987	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
BORON	7440-42-8	15.9	MG/KG			15.9	15.9	2.766319109	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
BORON	7440-42-8	0	MG/KG	27.9	UJ	13.95		2.635479508	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
BORON	7440-42-8	0	MG/KG	50.4	UJ	25.2		3.226843995	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CADMIUM	7440-43-9	51.9	MG/KG			51.9	51.9	3.94931879	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CALCIUM	7440-70-2	160000	MG/KG			160000	160000	11.98292909	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CALCIUM	7440-70-2	170000	MG/KG			170000	170000	12.04355372	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CALCIUM	7440-70-2	100000	MG/KG			100000	100000	11.51292546	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CALCIUM	7440-70-2	140000	MG/KG			140000	140000	11.8493977	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	21.3	MG/KG			21.3	21.3	3.058707073	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
CHROMIUM, TOTAL	7440-47-3	26.8	MG/KG			26.8	26.8	3.288401888	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
CHROMIUM, TOTAL	7440-47-3	13.1	MG/KG			13.1	13.1	2.57261223	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	10.4	MG/KG			10.4	10.4	2.341805806	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	387	MG/KG			387	387	5.958424693	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
CHROMIUM, TOTAL	7440-47-3	19.7	MG/KG			19.7	19.7	2.980618636	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
CHRYSENE	218-01-9	0.47	MG/KG			0.47	0.47	-0.755022584	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
COBALT	7440-48-4	10.6	MG/KG			10.6	10.6	2.360854001	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
COBALT	7440-48-4	9.21	MG/KG			9.21	9.21	2.22028985	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
COBALT	7440-48-4	329	MG/KG			329	329	5.796057751	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
COBALT	7440-48-4	9.12	MG/KG			9.12	9.12	2.210469804	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
COPPER	7440-50-8	20.5	MG/KG			20.5	20.5	3.020424886	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
COPPER	7440-50-8	16.7	MG/KG			16.7	16.7	2.815408719	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
COPPER	7440-50-8	14.1	MG/KG			14.1	14.1	2.646174797	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
COPPER	7440-50-8	12.5	MG/KG			12.5	12.5	2.525728644	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
COPPER	7440-50-8	121	MG/KG			121	121	4.795790546	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
COPPER	7440-50-8	17.5	MG/KG			17.5	17.5	2.862200881	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	2.1	U	1.05		0.048790164	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0.15	MG/KG			0.15	0.15	-1.897119985	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
IRON	7439-89-6	25900	MG/KG			25900	25900	10.16199825	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
IRON	7439-89-6	26600	MG/KG			26600	26600	10.18866649	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
IRON	7439-89-6	16000	MG/KG			16000	16000	9.680344001	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
IRON	7439-89-6	15000	MG/KG			15000	15000	9.61580548	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
IRON	7439-89-6	160000	MG/KG			160000	160000	11.98292909	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
IRON	7439-89-6	17700	MG/KG			17700	17700	9.781319919	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
LEAD	7439-92-1	12	MG/KG			12	12	2.48490665	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
LEAD	7439-92-1	11.3	MG/KG			11.3	11.3	2.424802726	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
LEAD	7439-92-1	9.16	MG/KG		J	9.16	9.16	2.214846179	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
LEAD	7439-92-1	10.5	MG/KG			10.5	10.5	2.351375257	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
LEAD	7439-92-1	70	MG/KG			70	70	4.248495242	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
LEAD	7439-92-1	14	MG/KG			14	14	2.63905733	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MAGNESIUM	7439-95-4	27400	MG/KG			27400	27400	10.21829829	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MAGNESIUM	7439-95-4	26000	MG/KG			26000	26000	10.16585182	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MAGNESIUM	7439-95-4	21000	MG/KG			21000	21000	9.952277717	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MAGNESIUM	7439-95-4	18500	MG/KG			18500	18500	9.825526011	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MAGNESIUM	7439-95-4	17500	MG/KG			17500	17500	9.76995616	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MAGNESIUM	7439-95-4	25200	MG/KG			25200	25200	10.13459927	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MANGANESE	7439-96-5	418	MG/KG			418	418	6.035481433	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MANGANESE	7439-96-5	482	MG/KG			482	482	6.177944114	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MANGANESE	7439-96-5	386	MG/KG			386	386	5.955837369	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MANGANESE	7439-96-5	394	MG/KG			394	394	5.976350909	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MANGANESE	7439-96-5	662	MG/KG			662	662	6.495265556	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MANGANESE	7439-96-5	298	MG/KG			298	298	5.697093487	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
MERCURY	7487-94-7	0.852	MG/KG			0.852	0.852	-0.160168752	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MERCURY	7487-94-7	45	MG/KG		J	45	45	3.80666249	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MERCURY	7487-94-7	0.477	MG/KG		J	0.477	0.477	-0.740238788	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
NICKEL	7440-02-0	16.7	MG/KG			16.7	16.7	2.815408719	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
NICKEL	7440-02-0	17.1	MG/KG			17.1	17.1	2.839078464	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
NICKEL	7440-02-0	15.7	MG/KG			15.7	15.7	2.753660712	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
NICKEL	7440-02-0	10.3	MG/KG			10.3	10.3	2.332143895	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
NICKEL	7440-02-0	133	MG/KG			133	133	4.890349128	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
NICKEL	7440-02-0	14.8	MG/KG			14.8	14.8	2.694627181	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PHENANTHRENE	85-01-8	0.09	MG/KG			0.09	0.09	-2.407945609	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
POTASSIUM	7440-09-7	6940	MG/KG			6940	6940	8.845057054	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
POTASSIUM	7440-09-7	9330	MG/KG			9330	9330	9.140990294	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
POTASSIUM	7440-09-7	5240	MG/KG			5240	5240	8.564076777	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
POTASSIUM	7440-09-7	4720	MG/KG			4720	4720	8.459564079	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
POTASSIUM	7440-09-7	4430	MG/KG			4430	4430	8.396154863	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
POTASSIUM	7440-09-7	7280	MG/KG			7280	7280	8.892886141	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
PYRENE	129-00-0	0.32	MG/KG			0.32	0.32	-1.139434283	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
PYRENE	129-00-0	0.36	MG/KG			0.36	0.36	-1.021651248	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SELENIUM	7782-49-2	0.79	MG/KG			0.79	0.79	-0.235722334	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SILVER	7440-22-4	14.9	MG/KG			14.9	14.9	2.701361213	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
SODIUM	7440-23-5	1230	MG/KG		J	1230	1230	7.114769448	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
SODIUM	7440-23-5	1260	MG/KG		J	1260	1260	7.138867	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
SODIUM	7440-23-5	12400	MG/KG			12400	12400	9.425451752	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
SODIUM	7440-23-5	13000	MG/KG			13000	13000	9.472704636	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
SODIUM	7440-23-5	909	MG/KG		J	909	909	6.812345094	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
SODIUM	7440-23-5	977	MG/KG		J	977	977	6.884486652	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041HA001	041SO018	ABPs	1.75	SO	0	12/16/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041HA001	041SO019	ABPs	5.25	SO	0	12/16/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SB001	041SO015	ABPs	3	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SB001	041SO016	ABPs	7	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SS001	041SO013	ABPs	0.25	SO	0	2/15/1994
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041SS002	041SO014	ABPs	0.25	SO	0	2/15/1994
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
TIN	7440-31-5	19.7	MG/KG			19.7	19.7	2.980618636	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TOTAL ORGANIC CARBON		4950	MG/KG			4950	4950	8.507142856	DTO041HA001	041SO018	Water Quality	1.75	SO	0	12/16/1993
TOTAL ORGANIC CARBON		3280	MG/KG			3280	3280	8.095598701	DTO041HA001	041SO019	Water Quality	5.25	SO	0	12/16/1993
TOTAL ORGANIC CARBON		5180	MG/KG			5180	5180	8.552560335	DTO041SB001	041SO015	Water Quality	3	SO	0	12/7/1993
TOTAL ORGANIC CARBON		4090	MG/KG			4090	4090	8.316300249	DTO041SB001	041SO016	Water Quality	7	SO	0	12/7/1993
TOTAL ORGANIC CARBON		42100	MG/KG			42100	42100	10.64780302	DTO041SS001	041SO013	Water Quality	0.25	SO	0	2/15/1994
TOTAL ORGANIC CARBON		30600	MG/KG			30600	30600	10.32875529	DTO041SS002	041SO014	Water Quality	0.25	SO	0	2/15/1994
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041HA001	041SO018	SVOCs	1.75	SO	0	12/16/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041HA001	041SO019	SVOCs	5.25	SO	0	12/16/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SB001	041SO015	SVOCs	3	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SB001	041SO016	SVOCs	7	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SS001	041SO013	SVOCs	0.25	SO	0	2/15/1994
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041SS002	041SO014	SVOCs	0.25	SO	0	2/15/1994
TPH		236	MG/KG			236	236	5.463831805	DTO041HA001	041SO018	TPH	1.75	SO	0	12/16/1993
TPH		57.9	MG/KG			57.9	57.9	4.058717385	DTO041HA001	041SO019	TPH	5.25	SO	0	12/16/1993
TPH		31.7	MG/KG			31.7	31.7	3.456316681	DTO041SB001	041SO015	TPH	3	SO	0	12/7/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041SB001	041SO016	TPH	7	SO	0	12/7/1993
TPH		174	MG/KG			174	174	5.159055299	DTO041SS001	041SO013	TPH	0.25	SO	0	2/15/1994
TPH		810	MG/KG			810	810	6.697034248	DTO041SS002	041SO014	TPH	0.25	SO	0	2/15/1994
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
VANADIUM	7440-62-2	38.9	MG/KG			38.9	38.9	3.660994251	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
VANADIUM	7440-62-2	38.8	MG/KG			38.8	38.8	3.658420247	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
VANADIUM	7440-62-2	22.5	MG/KG			22.5	22.5	3.113515309	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
VANADIUM	7440-62-2	17.8	MG/KG			17.8	17.8	2.879198457	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
VANADIUM	7440-62-2	32.9	MG/KG			32.9	32.9	3.493472658	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
VANADIUM	7440-62-2	31	MG/KG			31	31	3.433987204	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041HA001	041SO018	VOCs	1.75	SO	0	12/16/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041HA001	041SO019	VOCs	5.25	SO	0	12/16/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041SB001	041SO015	VOCs	3	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041SB001	041SO016	VOCs	7	SO	0	12/7/1993
ZINC	7440-66-6	70.9	MG/KG			70.9	70.9	4.261270434	DTO041HA001	041SO018	Metals	1.75	SO	0	12/16/1993
ZINC	7440-66-6	62.5	MG/KG			62.5	62.5	4.135166557	DTO041HA001	041SO019	Metals	5.25	SO	0	12/16/1993
ZINC	7440-66-6	46.5	MG/KG			46.5	46.5	3.839452313	DTO041SB001	041SO015	Metals	3	SO	0	12/7/1993
ZINC	7440-66-6	35.6	MG/KG			35.6	35.6	3.572345638	DTO041SB001	041SO016	Metals	7	SO	0	12/7/1993
ZINC	7440-66-6	932	MG/KG			932	932	6.837332815	DTO041SS001	041SO013	Metals	0.25	SO	0	2/15/1994
ZINC	7440-66-6	74.8	MG/KG			74.8	74.8	4.314817885	DTO041SS002	041SO014	Metals	0.25	SO	0	2/15/1994

Data_Usability_7
SWMU-41 MONITORING WELL SUBSURFACE SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,1,1-TRICHLOROETHANE				1
1,1,2,2-TETRACHLOROETHANE				1
1,1,2-TRICHLOROETHANE				1
1,1-DICHLOROETHANE				1
1,1-DICHLOROETHENE				1
1,2,4-TRICHLOROBENZENE				
1,2-DICHLOROBENZENE				
1,2-DICHLOROETHANE				1
1,2-DICHLOROPROPANE				1
1,3-DICHLOROBENZENE			12	1
1,4-DICHLOROBENZENE				
2,4,5-TRICHLOROPHENOL				
2,4,6-TRICHLOROPHENOL				
2,4-DICHLOROPHENOL				
2,4-DIMETHYLPHENOL				
2,4-DINITROPHENOL				
2,4-DINITROTOLUENE				
2,6-DINITROTOLUENE				
2-CHLOROETHYL VINYL ETHER				1
2-CHLORONAPHTHALENE				
2-CHLOROPHENOL				
2-HEXANONE				1
2-METHYLNAPHTHALENE				
2-METHYLPHENOL (o-CRESOL)				
2-NITROANILINE				
2-NITROPHENOL				
3,3'-DICHLOROBENZIDINE				
3-NITROANILINE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
3-NITROTOLUENE				
4,6-DINITRO-2-METHYLPHENOL				
4-BROMOPHENYL PHENYL ETHER				
4-CHLORO-3-METHYLPHENOL				
4-CHLOROANILINE				
4-CHLOROPHENYL PHENYL ETHER				
4-METHYLPHENOL (p-CRESOL)				
4-NITROANILINE				
4-NITROPHENOL				
ACENAPHTHENE				
ACENAPHTHYLENE				
ACETONE				1
ALDRIN				
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)				
ALPHA ENDOSULFAN				
ALPHA, GROSS				1
ALUMINUM				
ANTHRACENE				
ANTIMONY				
ARSENIC			12	
BARIUM				
BENZENE				1
BENZO(a)ANTHRACENE				
BENZO(a)PYRENE				
BENZO(b)FLUORANTHENE				
BENZO(g,h,i)PERYLENE				
BENZO(k)FLUORANTHENE				
BENZOIC ACID				
BENZYL ALCOHOL				
BENZYL BUTYL PHTHALATE				
BERYLLIUM				
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)				
BETA ENDOSULFAN				
BETA, GROSS				1

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
bis(2-CHLOROETHOXY) METHANE				
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				
bis(2-CHLOROISOPROPYL) ETHER				
bis(2-ETHYLHEXYL) PHTHALATE				
BORON				
BROMODICHLOROMETHANE				1
BROMOFORM				1
BROMOMETHANE				1
CADMIUM				
CALCIUM				
CARBON DISULFIDE				1
CARBON TETRACHLORIDE				1
CHLOROBENZENE				1
CHLOROETHANE				1
CHLOROFORM				1
CHLOROMETHANE				1
CHROMIUM, TOTAL				
CHRYSENE				
cis-1,3-DICHLOROPROPENE				1
COBALT				
COPPER				
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)				
DIBENZ(a,h)ANTHRACENE				
DIBENZOFURAN				
DIBROMOCHLOROMETHANE				1
DIELDRIN				
DIETHYL PHTHALATE				
DIISOPROPYLMETHYLPHOSPHONATE				1
DIMETHYL PHTHALATE				
DI-n-BUTYL PHTHALATE				
DI-n-OCTYLPHTHALATE				
ENDOSULFAN SULFATE				
ENDRIN				
ENDRIN ALDEHYDE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
ENDRIN KETONE				
ETHYLBENZENE				1
FLUORANTHENE				
FLUORENE				
GAMMA BHC (LINDANE)				
HEPTACHLOR				
HEPTACHLOR EPOXIDE				
HEXACHLOROBENZENE				
HEXACHLOROBUTADIENE				
HEXACHLOROCYCLOPENTADIENE				
HEXACHLOROETHANE				
INDENO(1,2,3-c,d)PYRENE				
IRON				
ISODRIN				
ISOPHORONE				
ISOPROPYLMETHYL PHOSPHONIC ACID				1
LEAD			12	
MAGNESIUM				
MANGANESE				
MERCURY				
METHOXYCHLOR				
METHYL ETHYL KETONE (2-BUTANONE)				1
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				1
METHYLENE CHLORIDE				1
MOLYBDENUM				
M-XYLENE (1,3-DIMETHYLBENZENE)				1
NAPHTHALENE				
NICKEL				
NITROBENZENE				
N-NITROSODI-n-PROPYLAMINE				
N-NITROSODIPHENYLAMINE				
p,p'-DDD				
p,p'-DDE				
p,p'-DDT				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
PENTACHLOROPHENOL				
PHENANTHRENE				
PHENOL				
POTASSIUM				
PYRENE				
SELENIUM			12	
SILVER				
SODIUM				
STYRENE				1
TELLURIUM				
TETRACHLOROETHYLENE (PCE)				1
THALLIUM				
THIODIGLYCOL				1
TIN				
TOLUENE				1
TOTAL 1,2-DICHLOROETHENE				1
TOTAL ORGANIC CARBON				
TOXAPHENE				
TPH				
trans-1,3-DICHLOROPROPENE				1
TRICHLOROETHYLENE (TCE)				1
TRICHLOROFLUOROMETHANE				1
VANADIUM				
VINYL ACETATE				1
VINYL CHLORIDE				1
XYLENES, TOTAL				1
ZINC				
TOTAL	0	0	48	43

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,3-DICHLOROBENZENE	0	0.14	041SO012	DTO041MW003	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO011	DTO041MW003	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO010	DTO041MW003	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO009	DTO041MW003	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO008	DTO041MW002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO007	DTO041MW002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO006	DTO041MW002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO005	DTO041MW002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO004	DTO041MW001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO003	DTO041MW001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO002	DTO041MW001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041SO001	DTO041MW001	Based on all samples being Non Detect
ARSENIC	0	16.4	041SO012	DTO041MW003	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO011	DTO041MW003	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO010	DTO041MW003	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO009	DTO041MW003	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO008	DTO041MW002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO007	DTO041MW002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO006	DTO041MW002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO005	DTO041MW002	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO004	DTO041MW001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO003	DTO041MW001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO002	DTO041MW001	Based on at least one sample being Detect
ARSENIC	0	16.4	041SO001	DTO041MW001	Based on at least one sample being Detect
LEAD	0	7.44	041SO012	DTO041MW003	Based on all samples being Non Detect
LEAD	0	7.44	041SO011	DTO041MW003	Based on at least one sample being Detect
LEAD	0	7.44	041SO010	DTO041MW003	Based on at least one sample being Detect
LEAD	0	7.44	041SO009	DTO041MW003	Based on at least one sample being Detect
LEAD	0	7.44	041SO008	DTO041MW002	Based on at least one sample being Detect
LEAD	0	7.44	041SO007	DTO041MW002	Based on at least one sample being Detect
LEAD	0	7.44	041SO006	DTO041MW002	Based on at least one sample being Detect
LEAD	0	7.44	041SO005	DTO041MW002	Based on at least one sample being Detect
LEAD	0	7.44	041SO004	DTO041MW001	Based on all samples being Non Detect
LEAD	0	7.44	041SO003	DTO041MW001	Based on at least one sample being Detect
LEAD	0	7.44	041SO002	DTO041MW001	Based on at least one sample being Detect
LEAD	0	7.44	041SO001	DTO041MW001	Based on at least one sample being Detect
SELENIUM	0	20.7	041SO012	DTO041MW003	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO011	DTO041MW003	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO010	DTO041MW003	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO009	DTO041MW003	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO008	DTO041MW002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO007	DTO041MW002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO006	DTO041MW002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO005	DTO041MW002	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO004	DTO041MW001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO003	DTO041MW001	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
SELENIUM	0	20.7	041SO002	DTO041MW001	Based on all samples being Non Detect
SELENIUM	0	20.7	041SO001	DTO041MW001	Based on all samples being Non Detect

Replicates

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,1,1-TRICHLOROETHANE	0	0.2	041SO001	DTO041MW001	Based on all samples being Non Detect
1,1,2,2-TETRACHLOROETHANE	0	0.2	041SO001	DTO041MW001	Based on all samples being Non Detect
1,1,2-TRICHLOROETHANE	0	0.33	041SO001	DTO041MW001	Based on all samples being Non Detect
1,1-DICHLOROETHANE	0	0.49	041SO001	DTO041MW001	Based on all samples being Non Detect
1,1-DICHLOROETHENE	0	0.27	041SO001	DTO041MW001	Based on all samples being Non Detect
1,2-DICHLOROETHANE	0	0.32	041SO001	DTO041MW001	Based on all samples being Non Detect
1,2-DICHLOROPROPANE	0	0.53	041SO001	DTO041MW001	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.14	041FD001	DTO041MW001	Based on all samples being Non Detect
2-CHLOROETHYL VINYL ETHER	0	0.5	041SO001	DTO041MW001	Based on all samples being Non Detect
2-HEXANONE	0	1	041SO001	DTO041MW001	Based on all samples being Non Detect
ACETONE	0	3.3	041SO001	DTO041MW001	Based on all samples being Non Detect
ALPHA, GROSS	16	0	041SO001	DTO041MW001	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
BENZENE	0	0.1	041SO001	DTO041MW001	Based on all samples being Non Detect
BETA, GROSS	30.7	0	041SO001	DTO041MW001	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
BROMODICHLOROMETHANE	0	0.2	041SO001	DTO041MW001	Based on all samples being Non Detect
BROMOFORM	0	0.2	041SO001	DTO041MW001	Based on all samples being Non Detect
BROMOMETHANE	0	0.26	041SO001	DTO041MW001	Based on all samples being Non Detect
CARBON DISULFIDE	0	0.6	041SO001	DTO041MW001	Based on all samples being Non Detect
CARBON TETRACHLORIDE	0	0.31	041SO001	DTO041MW001	Based on all samples being Non Detect
CHLOROBENZENE	0	0.1	041SO001	DTO041MW001	Based on all samples being Non Detect
CHLOROETHANE	0	0.64	041SO001	DTO041MW001	Based on all samples being Non Detect
CHLOROFORM	0	0.24	041SO001	DTO041MW001	Based on all samples being Non Detect
CHLOROMETHANE	0	0.96	041SO001	DTO041MW001	Based on all samples being Non Detect
cis-1,3-DICHLOROPROPENE	0	0.6	041SO001	DTO041MW001	Based on all samples being Non Detect
DIBROMOCHLOROMETHANE	0	0.25	041SO001	DTO041MW001	Based on all samples being Non Detect
DIISOPROPYLMETHYLPHOSPHONATE	0	0.0023	041SO007	DTO041MW002	Based on all samples being Non Detect
ETHYLBENZENE	0	0.19	041SO001	DTO041MW001	Based on all samples being Non Detect
ISOPROPYLMETHYL PHOSPHONIC ACID	0	0.5	041SO007	DTO041MW002	Based on all samples being Non Detect
METHYL ETHYL KETONE (2-BUTANONE)	0	4.3	041SO001	DTO041MW001	Based on all samples being Non Detect
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0	0.63	041SO001	DTO041MW001	Based on all samples being Non Detect
METHYLENE CHLORIDE	0	4.4	041SO001	DTO041MW001	Based on all samples being Non Detect
M-XYLENE (1,3-DIMETHYLBENZENE)	0	0.23	041SO001	DTO041MW001	Based on all samples being Non Detect
STYRENE	0	0.6	041SO001	DTO041MW001	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
TETRACHLOROETHYLENE (PCE)	0	0.16	041SO001	DTO041MW001	Based on all samples being Non Detect
THIODIGLYCOL	0	4.2	041SO007	DTO041MW002	Based on all samples being Non Detect
TOLUENE	0	0.1	041SO001	DTO041MW001	Based on all samples being Non Detect
TOTAL 1,2-DICHLOROETHENE	0	0.32	041SO001	DTO041MW001	Based on all samples being Non Detect
trans-1,3-DICHLOROPROPENE	0	0.6	041SO001	DTO041MW001	Based on all samples being Non Detect
TRICHLOROETHYLENE (TCE)	0	0.23	041SO001	DTO041MW001	Based on all samples being Non Detect
TRICHLOROFLUOROMETHANE	0	0.23	041SO001	DTO041MW001	Based on all samples being Non Detect
VINYL ACETATE	0	1	041SO001	DTO041MW001	Based on all samples being Non Detect
VINYL CHLORIDE	0	1.8	041SO001	DTO041MW001	Based on all samples being Non Detect
XYLENES, TOTAL	0	0.78	041SO001	DTO041MW001	Based on all samples being Non Detect

Data_Usability_8
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 MONITORING WELL SUBSURFACE SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.33	U	0.165		-1.801809805	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.27	U	0.135		-2.002480501	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.53	U	0.265		-1.328025453	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.49	U	0.245		-1.406497068	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.061	U	0.0305		-3.490028595	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,4-DINITROPHENOL	51-28-5	0	MG/KG	4.7	U	2.35		0.854415328	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	1.4	U	0.7		-0.356674944	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.055	U	0.0275		-3.593569274	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
2-HEXANONE	591-78-6	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.098	U	0.049		-3.015934981	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-NITROANILINE	88-74-4	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
2-NITROPHENOL	88-75-5	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	1.6	U	0.8		-0.223143551	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
3-NITROANILINE	99-09-2	0	MG/KG	3	U	1.5		0.405465108	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
3-NITROTOLUENE	99-08-1	0	MG/KG	0.34	U	0.17		-1.771956842	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.8	U	0.4		-0.916290732	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.93	U	0.465		-0.765717873	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-CHLOROANILINE	106-47-8	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.17	U	0.085		-2.465104022	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
4-NITROANILINE	100-01-6	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
4-NITROPHENOL	100-02-7	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ACENAPHTHENE	83-32-9	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
ACETONE	67-64-1	0	MG/KG	3.3	U	1.65		0.500775288	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ALDRIN	309-00-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	319-84-6	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ALPHA ENDOSULFAN	115-29-7	0	MG/KG	0.4	U	0.2		-1.609437912	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ALPHA, GROSS	ALPHA	15.95	PCI/G			15.95	15.95	2.766319109	DTO041MW001	041FD001	RADD	5	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	19.4	PCI/G			19.4	19.4	2.965273066	DTO041MW001	041SO002	RADD	9	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	14.8	PCI/G			14.8	14.8	2.694627181	DTO041MW001	041SO003	RADD	13	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	11.3	PCI/G			11.3	11.3	2.424802726	DTO041MW001	041SO004	RADD	19	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	17.6	PCI/G			17.6	17.6	2.867898902	DTO041MW002	041SO005	RADD	5	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	19.4	PCI/G			19.4	19.4	2.965273066	DTO041MW002	041SO006	RADD	9	SO	0	12/6/1993
ALPHA, GROSS	ALPHA	19.4	PCI/G			19.4	19.4	2.965273066	DTO041MW002	041SO007	RADD	13	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	10.6	PCI/G			10.6	10.6	2.360854001	DTO041MW002	041SO008	RADD	17.2	SO	0	12/7/1993
ALPHA, GROSS	ALPHA	22.1	PCI/G			22.1	22.1	3.095577609	DTO041MW003	041SO009	RADD	5	SO	0	12/2/1993
ALPHA, GROSS	ALPHA	25.8	PCI/G			25.8	25.8	3.250374492	DTO041MW003	041SO010	RADD	9	SO	0	12/2/1993
ALPHA, GROSS	ALPHA	27.1	PCI/G			27.1	27.1	3.299533728	DTO041MW003	041SO011	RADD	13	SO	0	12/2/1993
ALPHA, GROSS	ALPHA	12.2	PCI/G			12.2	12.2	2.501435952	DTO041MW003	041SO012	RADD	23.5	SO	0	12/2/1993
ALUMINUM	7429-90-5	17300	MG/KG			17300	17300	9.75846178	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
ALUMINUM	7429-90-5	16200	MG/KG			16200	16200	9.692766521	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
ALUMINUM	7429-90-5	18200	MG/KG			18200	18200	9.809176873	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
ALUMINUM	7429-90-5	11000	MG/KG			11000	11000	9.305650552	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
ALUMINUM	7429-90-5	13100	MG/KG			13100	13100	9.480367509	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
ALUMINUM	7429-90-5	19200	MG/KG			19200	19200	9.862665558	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
ALUMINUM	7429-90-5	12100	MG/KG			12100	12100	9.400960732	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
ALUMINUM	7429-90-5	8040	MG/KG			8040	8040	8.992184362	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
ALUMINUM	7429-90-5	13300	MG/KG			13300	13300	9.495519314	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
ALUMINUM	7429-90-5	17300	MG/KG			17300	17300	9.75846178	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
ALUMINUM	7429-90-5	20400	MG/KG			20400	20400	9.92329018	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
ALUMINUM	7429-90-5	11300	MG/KG			11300	11300	9.332558005	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ANTHRACENE	120-12-7	0	MG/KG	0.71	U	0.355		-1.03563749	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
ANTIMONY	7440-36-0	0	MG/KG	19.6	U	9.8		2.282382386	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
ARSENIC	7440-38-2	8.65	MG/KG			8.65	8.65	2.157559321	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
ARSENIC	7440-38-2	11.7	MG/KG			11.7	11.7	2.459588842	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
ARSENIC	7440-38-2	10.4	MG/KG			10.4	10.4	2.341805806	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
ARSENIC	7440-38-2	19.8	MG/KG			19.8	19.8	2.985681938	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
ARSENIC	7440-38-2	12.1	MG/KG			12.1	12.1	2.493205453	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
ARSENIC	7440-38-2	12.3	MG/KG			12.3	12.3	2.509599262	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
ARSENIC	7440-38-2	8.75	MG/KG			8.75	8.75	2.1690537	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
ARSENIC	7440-38-2	8.48	MG/KG			8.48	8.48	2.13771045	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
ARSENIC	7440-38-2	12.9	MG/KG			12.9	12.9	2.557227311	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
ARSENIC	7440-38-2	10.3	MG/KG			10.3	10.3	2.332143895	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
ARSENIC	7440-38-2	13	MG/KG			13	13	2.564949357	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
ARSENIC	7440-38-2	5.44	MG/KG			5.44	5.44	1.693779061	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
BARIUM	7440-39-3	398	MG/KG			398	398	5.986452005	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
BARIUM	7440-39-3	289	MG/KG			289	289	5.666426688	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
BARIUM	7440-39-3	244	MG/KG			244	244	5.497168225	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
BARIUM	7440-39-3	95.2	MG/KG			95.2	95.2	4.555979942	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
BARIUM	7440-39-3	475	MG/KG			475	475	6.163314804	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
BARIUM	7440-39-3	318	MG/KG			318	318	5.762051383	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
BARIUM	7440-39-3	250	MG/KG			250	250	5.521460918	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
BARIUM	7440-39-3	83.9	MG/KG			83.9	83.9	4.429625613	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
BARIUM	7440-39-3	422	MG/KG			422	422	6.045005314	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
BARIUM	7440-39-3	377	MG/KG			377	377	5.932245187	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
BARIUM	7440-39-3	281	MG/KG			281	281	5.638354669	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
BARIUM	7440-39-3	127	MG/KG			127	127	4.844187086	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
BENZENE	71-43-2	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZO(a)PYRENE	50-32-8	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.18	U	0.09		-2.407945609	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.13	U	0.065		-2.733368009	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZOIC ACID	65-85-0	0	MG/KG	3.1	U	1.55		0.438254931	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BERYLLIUM	7440-41-7	1	MG/KG			1	1	0	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
BERYLLIUM	7440-41-7	1.09	MG/KG			1.09	1.09	0.086177696	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
BERYLLIUM	7440-41-7	1.05	MG/KG			1.05	1.05	0.048790164	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
BERYLLIUM	7440-41-7	0.898	MG/KG			0.898	0.898	-0.107585211	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
BERYLLIUM	7440-41-7	1.05	MG/KG			1.05	1.05	0.048790164	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
BERYLLIUM	7440-41-7	0	MG/KG	0.427	U	0.2135		-1.544118446	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
BERYLLIUM	7440-41-7	1	MG/KG			1	1	0	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
BERYLLIUM	7440-41-7	0.979	MG/KG			0.979	0.979	-0.021223636	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
BERYLLIUM	7440-41-7	1.02	MG/KG			1.02	1.02	0.019802627	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
BERYLLIUM	7440-41-7	0.696	MG/KG			0.696	0.696	-0.362405619	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	319-85-7	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
BETA ENDOSULFAN	115-29-7	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BETA, GROSS	BETA	29.25	PCI/G			29.25	29.25	3.325036021	DTO041MW001	041FD001	RADD	5	SO	0	12/6/1993
BETA, GROSS	BETA	23.6	PCI/G			23.6	23.6	3.161246712	DTO041MW001	041SO002	RADD	9	SO	0	12/6/1993
BETA, GROSS	BETA	25.6	PCI/G			25.6	25.6	3.242592351	DTO041MW001	041SO003	RADD	13	SO	0	12/6/1993
BETA, GROSS	BETA	29.5	PCI/G			29.5	29.5	3.384390263	DTO041MW001	041SO004	RADD	19	SO	0	12/6/1993
BETA, GROSS	BETA	24.4	PCI/G			24.4	24.4	3.194583132	DTO041MW002	041SO005	RADD	5	SO	0	12/6/1993
BETA, GROSS	BETA	27.8	PCI/G			27.8	27.8	3.325036021	DTO041MW002	041SO006	RADD	9	SO	0	12/6/1993
BETA, GROSS	BETA	36.1	PCI/G			36.1	36.1	3.586292865	DTO041MW002	041SO007	RADD	13	SO	0	12/7/1993
BETA, GROSS	BETA	18.4	PCI/G			18.4	18.4	2.912350665	DTO041MW002	041SO008	RADD	17.2	SO	0	12/7/1993
BETA, GROSS	BETA	32.5	PCI/G			32.5	32.5	3.481240089	DTO041MW003	041SO009	RADD	5	SO	0	12/2/1993
BETA, GROSS	BETA	29.9	PCI/G			29.9	29.9	3.39785848	DTO041MW003	041SO010	RADD	9	SO	0	12/2/1993
BETA, GROSS	BETA	36.6	PCI/G			36.6	36.6	3.60004824	DTO041MW003	041SO011	RADD	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BETA, GROSS	BETA	17	PCI/G			17	17	2.833213344	DTO041MW003	041SO012	RADD	23.5	SO	0	12/2/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.36	U	0.18		-1.714798428	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
BORON	7440-42-8	22.1	MG/KG			22.1	22.1	3.095577609	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BORON	7440-42-8	23.2	MG/KG			23.2	23.2	3.144152279	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
BORON	7440-42-8	20.5	MG/KG			20.5	20.5	3.020424886	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
BORON	7440-42-8	17.8	MG/KG			17.8	17.8	2.879198457	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
BORON	7440-42-8	22.1	MG/KG			22.1	22.1	3.095577609	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
BORON	7440-42-8	42.8	MG/KG			42.8	42.8	3.756538103	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
BORON	7440-42-8	13.8	MG/KG			13.8	13.8	2.624668592	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
BORON	7440-42-8	12.6	MG/KG			12.6	12.6	2.533696814	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
BORON	7440-42-8	27.8	MG/KG			27.8	27.8	3.325036021	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
BORON	7440-42-8	31.4	MG/KG			31.4	31.4	3.446807893	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
BORON	7440-42-8	30.9	MG/KG			30.9	30.9	3.430756184	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
BORON	7440-42-8	19.4	MG/KG			19.4	19.4	2.965273066	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
BROMOFORM	75-25-2	0	MG/KG	0.2	U	0.1		-2.302585093	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
BROMOMETHANE	74-83-9	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
CADMIUM	7440-43-9	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
CALCIUM	7440-70-2	180000	MG/KG			180000	180000	12.10071213	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
CALCIUM	7440-70-2	200000	MG/KG			200000	200000	12.20607265	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
CALCIUM	7440-70-2	170000	MG/KG			170000	170000	12.04355372	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
CALCIUM	7440-70-2	53600	MG/KG			53600	53600	10.88930435	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
CALCIUM	7440-70-2	220000	MG/KG			220000	220000	12.30138283	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
CALCIUM	7440-70-2	160000	MG/KG			160000	160000	11.98292909	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
CALCIUM	7440-70-2	180000	MG/KG			180000	180000	12.10071213	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
CALCIUM	7440-70-2	61600	MG/KG			61600	61600	11.02841715	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
CALCIUM	7440-70-2	200000	MG/KG			200000	200000	12.20607265	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
CALCIUM	7440-70-2	200000	MG/KG			200000	200000	12.20607265	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
CALCIUM	7440-70-2	190000	MG/KG			190000	190000	12.15477935	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
CALCIUM	7440-70-2	72000	MG/KG			72000	72000	11.1844214	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CARBON DISULFIDE	75-15-0	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CHLOROBENZENE	108-90-7	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CHLOROETHANE	75-00-3	0	MG/KG	0.64	U	0.32		-1.139434283	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CHLOROFORM	67-66-3	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
CHLOROMETHANE	74-87-3	0	MG/KG	0.96	U	0.48		-0.733969175	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
CHROMIUM, TOTAL	7440-47-3	13.7	MG/KG			13.7	13.7	2.617395833	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	12.2	MG/KG			12.2	12.2	2.501435952	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	15.6	MG/KG			15.6	15.6	2.747270914	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	9.14	MG/KG			9.14	9.14	2.212660385	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	11.8	MG/KG			11.8	11.8	2.468099531	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	16.2	MG/KG			16.2	16.2	2.785011242	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
CHROMIUM, TOTAL	7440-47-3	9.24	MG/KG			9.24	9.24	2.223541886	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CHROMIUM, TOTAL	7440-47-3	8.07	MG/KG			8.07	8.07	2.088153482	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
CHROMIUM, TOTAL	7440-47-3	12.2	MG/KG			12.2	12.2	2.501435952	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
CHROMIUM, TOTAL	7440-47-3	14.3	MG/KG			14.3	14.3	2.660259537	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
CHROMIUM, TOTAL	7440-47-3	15.8	MG/KG			15.8	15.8	2.76000994	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
CHROMIUM, TOTAL	7440-47-3	8.87	MG/KG			8.87	8.87	2.182674796	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
CHRYSENE	218-01-9	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
COBALT	7440-48-4	6.72	MG/KG			6.72	6.72	1.905088155	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
COBALT	7440-48-4	6.45	MG/KG			6.45	6.45	1.864080131	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
COBALT	7440-48-4	7.13	MG/KG			7.13	7.13	1.964311234	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
COBALT	7440-48-4	4.1	MG/KG			4.1	4.1	1.410986974	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
COBALT	7440-48-4	6.3	MG/KG			6.3	6.3	1.840549633	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
COBALT	7440-48-4	7.43	MG/KG			7.43	7.43	2.005525859	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
COBALT	7440-48-4	0	MG/KG	2.5	U	1.25		0.223143551	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
COBALT	7440-48-4	6.4	MG/KG			6.4	6.4	1.85629799	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
COBALT	7440-48-4	5.88	MG/KG			5.88	5.88	1.771556762	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
COBALT	7440-48-4	6.89	MG/KG			6.89	6.89	1.930071085	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
COBALT	7440-48-4	4.53	MG/KG			4.53	4.53	1.510721939	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
COPPER	7440-50-8	12.4	MG/KG			12.4	12.4	2.517696473	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
COPPER	7440-50-8	10.9	MG/KG			10.9	10.9	2.388762789	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
COPPER	7440-50-8	12	MG/KG			12	12	2.48490665	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
COPPER	7440-50-8	4.59	MG/KG			4.59	4.59	1.523880024	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
COPPER	7440-50-8	14.5	MG/KG			14.5	14.5	2.674148649	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
COPPER	7440-50-8	16.3	MG/KG			16.3	16.3	2.791165108	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
COPPER	7440-50-8	16.9	MG/KG			16.9	16.9	2.827313622	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
COPPER	7440-50-8	6.32	MG/KG			6.32	6.32	1.843719208	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
COPPER	7440-50-8	22	MG/KG			22	22	3.091042453	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
COPPER	7440-50-8	13.5	MG/KG			13.5	13.5	2.602689685	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
COPPER	7440-50-8	12.8	MG/KG			12.8	12.8	2.549445171	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
COPPER	7440-50-8	5.51	MG/KG			5.51	5.51	1.706564623	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	319-86-8	0	MG/KG	0.21	U	0.105		-2.253794929	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.31	U	0.155		-1.864330162	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DIBENZOFURAN	132-64-9	0	MG/KG	0.38	U	0.19		-1.660731207	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DIELDRIN	60-57-1	0	MG/KG	0.079	U	0.0395		-3.231454607	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DIETHYL PHTHALATE	84-66-2	2.9	MG/KG			2.9	2.9	1.064710737	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW001	041SO001	ABPs	5	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW001	041SO002	ABPs	9	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW001	041SO003	ABPs	13	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW001	041SO004	ABPs	19	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW002	041SO005	ABPs	5	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW002	041SO006	ABPs	9	SO	0	12/6/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW002	041FD007	ABPs	13	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW002	041SO008	ABPs	17.2	SO	0	12/7/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW003	041SO009	ABPs	5	SO	0	12/2/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW003	041SO010	ABPs	9	SO	0	12/2/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW003	041SO011	ABPs	13	SO	0	12/2/1993
DIISOPROPYLMETHYLPHOSPHONATE	1445-75-6	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041MW003	041SO012	ABPs	23.5	SO	0	12/2/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.063	U	0.0315		-3.457767733	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ENDOSULFAN SULFATE	115-29-7	0	MG/KG	1.2	U	0.6		-0.510825624	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ENDRIN	72-20-8	0	MG/KG	1.3	U	0.65		-0.430782916	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ENDRIN ALDEHYDE	7421-93-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ENDRIN KETONE		0	MG/KG	0.28	U	0.14		-1.966112856	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
ETHYLBENZENE	100-41-4	0	MG/KG	0.19	U	0.095		-2.353878387	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
FLUORANTHENE	206-44-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
FLUORENE	86-73-7	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
GAMMA BHC (LINDANE)	58-89-9	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEPTACHLOR	76-44-8	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEPTACHLOR EPOXIDE	1024-57-3	0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.08	U	0.04		-3.218875825	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.97	U	0.485		-0.723606388	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.52	U	0.26		-1.347073648	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
HEXACHLOROETHANE	67-72-1	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	2.4	U	1.2		0.182321557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
IRON	7439-89-6	18100	MG/KG			18100	18100	9.803667217	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
IRON	7439-89-6	16500	MG/KG			16500	16500	9.71111566	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
IRON	7439-89-6	18600	MG/KG			18600	18600	9.83091686	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
IRON	7439-89-6	13100	MG/KG			13100	13100	9.480367509	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
IRON	7439-89-6	14200	MG/KG			14200	14200	9.560997244	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
IRON	7439-89-6	19100	MG/KG			19100	19100	9.857443614	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
IRON	7439-89-6	13500	MG/KG			13500	13500	9.510444964	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
IRON	7439-89-6	10800	MG/KG			10800	10800	9.287301413	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
IRON	7439-89-6	15300	MG/KG			15300	15300	9.635608107	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
IRON	7439-89-6	16000	MG/KG			16000	16000	9.680344001	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
IRON	7439-89-6	18800	MG/KG			18800	18800	9.841612149	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
IRON	7439-89-6	12300	MG/KG			12300	12300	9.417354541	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ISODRIN		0	MG/KG	0.48	U	0.24		-1.427116356	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
ISOPHORONE	78-59-1	0	MG/KG	0.39	U	0.195		-1.63475572	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW001	041SO001	ABPs	5	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW001	041SO002	ABPs	9	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW001	041SO003	ABPs	13	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW001	041SO004	ABPs	19	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW002	041SO005	ABPs	5	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW002	041SO006	ABPs	9	SO	0	12/6/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041FD007	ABPs	13	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	U	0.25		-1.386294361	DTO041MW002	041SO008	ABPs	17.2	SO	0	12/7/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW003	041SO009	ABPs	5	SO	0	12/2/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW003	041SO010	ABPs	9	SO	0	12/2/1993
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW003	041SO011	ABPs	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
ISOPROPYLMETHYL PHOSPHONIC ACID	1832-54-8	0	MG/KG	0.5	UJ	0.25		-1.386294361	DTO041MW003	041SO012	ABPs	23.5	SO	0	12/2/1993
LEAD	7439-92-1	11.9	MG/KG			11.9	11.9	2.4765384	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
LEAD	7439-92-1	9.46	MG/KG			9.46	9.46	2.247072383	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
LEAD	7439-92-1	9.57	MG/KG			9.57	9.57	2.258633205	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
LEAD	7439-92-1	0	MG/KG	5.77	U	2.885		1.0595249	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
LEAD	7439-92-1	10.1	MG/KG			10.1	10.1	2.312535424	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
LEAD	7439-92-1	10.1	MG/KG			10.1	10.1	2.312535424	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
LEAD	7439-92-1	9.27	MG/KG		J	9.27	9.27	2.22678338	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
LEAD	7439-92-1	4.55	MG/KG		J	4.55	4.55	1.515127233	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
LEAD	7439-92-1	8.98	MG/KG			8.98	8.98	2.194999882	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
LEAD	7439-92-1	9.18	MG/KG			9.18	9.18	2.217027205	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
LEAD	7439-92-1	10.6	MG/KG			10.6	10.6	2.360854001	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
LEAD	7439-92-1	0	MG/KG	6.04	U	3.02		1.105256831	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
MAGNESIUM	7439-95-4	19500	MG/KG			19500	19500	9.878169745	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
MAGNESIUM	7439-95-4	20800	MG/KG			20800	20800	9.942708266	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
MAGNESIUM	7439-95-4	22700	MG/KG			22700	22700	10.0301202	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
MAGNESIUM	7439-95-4	13100	MG/KG			13100	13100	9.480367509	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
MAGNESIUM	7439-95-4	14900	MG/KG			14900	14900	9.609116492	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
MAGNESIUM	7439-95-4	26100	MG/KG			26100	26100	10.16969059	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
MAGNESIUM	7439-95-4	18000	MG/KG			18000	18000	9.798127037	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
MAGNESIUM	7439-95-4	11100	MG/KG			11100	11100	9.314700387	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
MAGNESIUM	7439-95-4	16800	MG/KG			16800	16800	9.729134165	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
MAGNESIUM	7439-95-4	19600	MG/KG			19600	19600	9.883284845	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
MAGNESIUM	7439-95-4	21500	MG/KG			21500	21500	9.975808214	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
MAGNESIUM	7439-95-4	18500	MG/KG			18500	18500	9.825526011	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
MANGANESE	7439-96-5	403	MG/KG			403	403	5.998936562	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
MANGANESE	7439-96-5	406	MG/KG			406	406	6.00635316	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
MANGANESE	7439-96-5	506	MG/KG			506	506	6.226536669	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
MANGANESE	7439-96-5	177	MG/KG			177	177	5.176149733	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
MANGANESE	7439-96-5	310	MG/KG			310	310	5.736572297	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
MANGANESE	7439-96-5	420	MG/KG			420	420	6.040254711	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
MANGANESE	7439-96-5	441	MG/KG			441	441	6.089044875	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
MANGANESE	7439-96-5	172	MG/KG			172	172	5.147494477	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
MANGANESE	7439-96-5	336	MG/KG			336	336	5.81711116	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
MANGANESE	7439-96-5	341	MG/KG			341	341	5.831882477	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
MANGANESE	7439-96-5	431	MG/KG			431	431	6.06610809	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
MANGANESE	7439-96-5	265	MG/KG			265	265	5.579729826	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
MERCURY	7487-94-7	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
METHOXYCHLOR	72-43-5	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0	MG/KG	4.3	U	2.15		0.765467842	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.63	U	0.315		-1.15518264	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
METHYLENE CHLORIDE	75-09-2	0	MG/KG	4.4	U	2.2		0.78845736	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
MOLYBDENUM	7439-98-7	0	MG/KG	14.3	U	7.15		1.967112357	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
M-XYLENE (1,3-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
NAPHTHALENE	91-20-3	0	MG/KG	0.74	U	0.37		-0.994252273	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
NICKEL	7440-02-0	10.1	MG/KG			10.1	10.1	2.312535424	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
NICKEL	7440-02-0	9.17	MG/KG			9.17	9.17	2.215937286	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
NICKEL	7440-02-0	12.3	MG/KG			12.3	12.3	2.509599262	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
NICKEL	7440-02-0	6.16	MG/KG			6.16	6.16	1.818076778	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
NICKEL	7440-02-0	9.2	MG/KG			9.2	9.2	2.219203484	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
NICKEL	7440-02-0	11.8	MG/KG			11.8	11.8	2.468099531	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
NICKEL	7440-02-0	10.1	MG/KG			10.1	10.1	2.312535424	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
NICKEL	7440-02-0	5.21	MG/KG			5.21	5.21	1.650579856	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
NICKEL	7440-02-0	12.8	MG/KG			12.8	12.8	2.549445171	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
NICKEL	7440-02-0	11.6	MG/KG			11.6	11.6	2.451005098	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
NICKEL	7440-02-0	11.1	MG/KG			11.1	11.1	2.406945108	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
NICKEL	7440-02-0	7.04	MG/KG			7.04	7.04	1.95160817	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
NITROBENZENE	98-95-3	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	1.1	U	0.55		-0.597837001	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.29	U	0.145		-1.931021537	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
p,p'-DDD	72-54-8	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
p,p'-DDE	72-55-9	0	MG/KG	0.068	U	0.034		-3.381394754	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
p,p'-DDT	50-29-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.76	U	0.38		-0.967584026	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
PHENANTHRENE	85-01-8	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
PHENOL	108-95-2	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
POTASSIUM	7440-09-7	5900	MG/KG			5900	5900	8.68270763	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
POTASSIUM	7440-09-7	5310	MG/KG			5310	5310	8.577347114	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
POTASSIUM	7440-09-7	5840	MG/KG			5840	5840	8.672486076	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
POTASSIUM	7440-09-7	4380	MG/KG			4380	4380	8.384804003	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
POTASSIUM	7440-09-7	4100	MG/KG			4100	4100	8.318742253	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
POTASSIUM	7440-09-7	6850	MG/KG			6850	6850	8.832003931	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
POTASSIUM	7440-09-7	4320	MG/KG			4320	4320	8.371010681	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
POTASSIUM	7440-09-7	2570	MG/KG			2570	2570	7.851661178	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
POTASSIUM	7440-09-7	4280	MG/KG			4280	4280	8.361708289	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
POTASSIUM	7440-09-7	5320	MG/KG			5320	5320	8.579228582	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
POTASSIUM	7440-09-7	6080	MG/KG			6080	6080	8.712759975	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
POTASSIUM	7440-09-7	4590	MG/KG			4590	4590	8.431635303	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
PYRENE	129-00-0	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	UJ	0.2245		-1.493879572	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
SELENIUM	7782-49-2	0	MG/KG	0.449	U	0.2245		-1.493879572	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
SILVER	7440-22-4	0	MG/KG	0.803	U	0.4015		-0.912547746	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
SODIUM	7440-23-5	11400	MG/KG			11400	11400	9.341368634	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
SODIUM	7440-23-5	15300	MG/KG			15300	15300	9.635608107	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
SODIUM	7440-23-5	12000	MG/KG			12000	12000	9.392661929	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
SODIUM	7440-23-5	2150	MG/KG		J	2150	2150	7.673223121	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
SODIUM	7440-23-5	2150	MG/KG		J	2150	2150	7.673223121	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
SODIUM	7440-23-5	4070	MG/KG			4070	4070	8.311398278	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
SODIUM	7440-23-5	6910	MG/KG			6910	6910	8.840724917	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
SODIUM	7440-23-5	2620	MG/KG		J	2620	2620	7.870929597	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
SODIUM	7440-23-5	5070	MG/KG			5070	5070	8.531096097	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
SODIUM	7440-23-5	7510	MG/KG			7510	7510	8.923990745	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
SODIUM	7440-23-5	8520	MG/KG			8520	8520	9.05017162	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
SODIUM	7440-23-5	2110	MG/KG		J	2110	2110	7.654443226	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
STYRENE	100-42-5	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
TELLURIUM		0	MG/KG	14.9	U	7.45		2.008214032	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.16	U	0.08		-2.525728644	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
THALLIUM	7440-28-0	0	MG/KG	34.3	U	17.15		2.841998174	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW001	041SO001	ABPs	5	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW001	041SO002	ABPs	9	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW001	041SO003	ABPs	13	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW001	041SO004	ABPs	19	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW002	041SO005	ABPs	5	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW002	041SO006	ABPs	9	SO	0	12/6/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW002	041FD007	ABPs	13	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW002	041SO008	ABPs	17.2	SO	0	12/7/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW003	041SO009	ABPs	5	SO	0	12/2/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW003	041SO010	ABPs	9	SO	0	12/2/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW003	041SO011	ABPs	13	SO	0	12/2/1993
THIODIGLYCOL	111-48-8	0	MG/KG	4.2	U	2.1		0.741937345	DTO041MW003	041SO012	ABPs	23.5	SO	0	12/2/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
TIN	7440-31-5	0	MG/KG	7.43	U	3.715		1.312378678	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
TOLUENE	108-88-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
TOTAL 1,2-DICHLOROETHENE	540-59-0	0	MG/KG	0.32	U	0.16		-1.832581464	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
TOTAL ORGANIC CARBON		3860	MG/KG			3860	3860	8.258422462	DTO041MW001	041SO001	Water Quality	5	SO	0	12/6/1993
TOTAL ORGANIC CARBON		4930	MG/KG			4930	4930	8.503094267	DTO041MW001	041SO002	Water Quality	9	SO	0	12/6/1993
TOTAL ORGANIC CARBON		13300	MG/KG			13300	13300	9.495519314	DTO041MW001	041SO003	Water Quality	13	SO	0	12/6/1993
TOTAL ORGANIC CARBON		1540	MG/KG			1540	1540	7.339537695	DTO041MW001	041SO004	Water Quality	19	SO	0	12/6/1993
TOTAL ORGANIC CARBON		3160	MG/KG			3160	3160	8.058327307	DTO041MW002	041SO005	Water Quality	5	SO	0	12/6/1993
TOTAL ORGANIC CARBON		4320	MG/KG			4320	4320	8.371010681	DTO041MW002	041SO006	Water Quality	9	SO	0	12/6/1993
TOTAL ORGANIC CARBON		4110	MG/KG			4110	4110	8.321178307	DTO041MW002	041SO007	Water Quality	13	SO	0	12/7/1993
TOTAL ORGANIC CARBON		3120	MG/KG			3120	3120	8.045588281	DTO041MW002	041SO008	Water Quality	17.2	SO	0	12/7/1993
TOTAL ORGANIC CARBON		1120	MG/KG			1120	1120	7.021083964	DTO041MW003	041SO009	Water Quality	5	SO	0	12/2/1993
TOTAL ORGANIC CARBON		1600	MG/KG			1600	1600	7.377758908	DTO041MW003	041SO010	Water Quality	9	SO	0	12/2/1993
TOTAL ORGANIC CARBON		1000	MG/KG			1000	1000	6.907755279	DTO041MW003	041SO011	Water Quality	13	SO	0	12/2/1993
TOTAL ORGANIC CARBON		0	MG/KG	1000	U	500		6.214608098	DTO041MW003	041SO012	Water Quality	23.5	SO	0	12/2/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW001	041SO001	SVOCs	5	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW001	041SO002	SVOCs	9	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW001	041SO003	SVOCs	13	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW001	041SO004	SVOCs	19	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW002	041SO005	SVOCs	5	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW002	041SO006	SVOCs	9	SO	0	12/6/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW002	041SO007	SVOCs	13	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW002	041SO008	SVOCs	17.2	SO	0	12/7/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW003	041SO009	SVOCs	5	SO	0	12/2/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW003	041SO010	SVOCs	9	SO	0	12/2/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW003	041SO011	SVOCs	13	SO	0	12/2/1993
TOXAPHENE	8001-35-2	0	MG/KG	12	U	6		1.791759469	DTO041MW003	041SO012	SVOCs	23.5	SO	0	12/2/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW001	041SO001	TPH	5	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW001	041SO002	TPH	9	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW001	041SO003	TPH	13	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW001	041SO004	TPH	19	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW002	041SO005	TPH	5	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW002	041SO006	TPH	9	SO	0	12/6/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW002	041SO007	TPH	13	SO	0	12/7/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW002	041SO008	TPH	17.2	SO	0	12/7/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW003	041SO009	TPH	5	SO	0	12/2/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW003	041SO010	TPH	9	SO	0	12/2/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW003	041SO011	TPH	13	SO	0	12/2/1993
TPH		0	MG/KG	10	U	5		1.609437912	DTO041MW003	041SO012	TPH	23.5	SO	0	12/2/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.6	U	0.3		-1.203972804	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
VANADIUM	7440-62-2	21	MG/KG			21	21	3.044522438	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
VANADIUM	7440-62-2	23.3	MG/KG			23.3	23.3	3.148453361	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
VANADIUM	7440-62-2	25.1	MG/KG			25.1	25.1	3.222867846	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
VANADIUM	7440-62-2	28.9	MG/KG			28.9	28.9	3.363841595	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
VANADIUM	7440-62-2	19.1	MG/KG			19.1	19.1	2.949688335	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
VANADIUM	7440-62-2	29.9	MG/KG			29.9	29.9	3.39785848	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
VANADIUM	7440-62-2	16.1	MG/KG			16.1	16.1	2.778819272	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
VANADIUM	7440-62-2	21	MG/KG			21	21	3.044522438	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
VANADIUM	7440-62-2	23.5	MG/KG			23.5	23.5	3.157000421	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
VANADIUM	7440-62-2	26	MG/KG			26	26	3.258096538	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
VANADIUM	7440-62-2	28.7	MG/KG			28.7	28.7	3.356897123	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
VANADIUM	7440-62-2	24.3	MG/KG			24.3	24.3	3.19047635	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
VINYL ACETATE	108-05-4	0	MG/KG	1	U	0.5		-0.693147181	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
VINYL CHLORIDE	75-01-4	0	MG/KG	1.8	U	0.9		-0.105360516	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW001	041FD001	VOCs	5	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW001	041SO002	VOCs	9	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW001	041SO003	VOCs	13	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW001	041SO004	VOCs	19	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW002	041SO005	VOCs	5	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW002	041SO006	VOCs	9	SO	0	12/6/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW002	041SO007	VOCs	13	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW002	041SO008	VOCs	17.2	SO	0	12/7/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW003	041SO009	VOCs	5	SO	0	12/2/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW003	041SO010	VOCs	9	SO	0	12/2/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW003	041SO011	VOCs	13	SO	0	12/2/1993
XYLENES, TOTAL	1330-20-7	0	MG/KG	0.78	U	0.39		-0.94160854	DTO041MW003	041SO012	VOCs	23.5	SO	0	12/2/1993
ZINC	7440-66-6	45.1	MG/KG			45.1	45.1	3.808882247	DTO041MW001	041SO001	Metals	5	SO	0	12/6/1993
ZINC	7440-66-6	38.9	MG/KG			38.9	38.9	3.660994251	DTO041MW001	041SO002	Metals	9	SO	0	12/6/1993
ZINC	7440-66-6	44.5	MG/KG			44.5	44.5	3.795489189	DTO041MW001	041SO003	Metals	13	SO	0	12/6/1993
ZINC	7440-66-6	26.4	MG/KG			26.4	26.4	3.27336401	DTO041MW001	041SO004	Metals	19	SO	0	12/6/1993
ZINC	7440-66-6	35.9	MG/KG			35.9	35.9	3.580737295	DTO041MW002	041SO005	Metals	5	SO	0	12/6/1993
ZINC	7440-66-6	52.2	MG/KG			52.2	52.2	3.955082495	DTO041MW002	041SO006	Metals	9	SO	0	12/6/1993
ZINC	7440-66-6	32.8	MG/KG			32.8	32.8	3.490428515	DTO041MW002	041SO007	Metals	13	SO	0	12/7/1993
ZINC	7440-66-6	21.8	MG/KG			21.8	21.8	3.08190997	DTO041MW002	041SO008	Metals	17.2	SO	0	12/7/1993
ZINC	7440-66-6	39.5	MG/KG			39.5	39.5	3.676300672	DTO041MW003	041SO009	Metals	5	SO	0	12/2/1993
ZINC	7440-66-6	39.9	MG/KG			39.9	39.9	3.686376324	DTO041MW003	041SO010	Metals	9	SO	0	12/2/1993
ZINC	7440-66-6	43.8	MG/KG			43.8	43.8	3.779633817	DTO041MW003	041SO011	Metals	13	SO	0	12/2/1993
ZINC	7440-66-6	27.9	MG/KG			27.9	27.9	3.328626689	DTO041MW003	041SO012	Metals	23.5	SO	0	12/2/1993

Data_Usability_9
SWMU-41 AREA 2 SUBSURFACE SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,1,1-TRICHLOROETHANE				1
1,1,2,2-TETRACHLOROETHANE				1
1,1,2-TRICHLOROETHANE				1
1,1-DICHLOROETHANE				1
1,1-DICHLOROETHENE				1
1,2,4-TRICHLOROBENZENE				1
1,2-DICHLOROBENZENE			4	1
1,2-DICHLOROETHANE				1
1,2-DICHLOROPROPANE				1
1,3-DICHLOROBENZENE			4	1
1,4-DICHLOROBENZENE			4	1
2,4,5-TRICHLOROPHENOL				1
2,4,6-TRICHLOROPHENOL				1
2,4-DICHLOROPHENOL				1
2,4-DIMETHYLPHENOL				1
2,4-DINITROPHENOL				1
2,4-DINITROTOLUENE				1
2,6-DINITROTOLUENE				1
2-CHLOROETHYL VINYL ETHER				1
2-CHLORONAPHTHALENE				1
2-CHLOROPHENOL				1
2-HEXANONE				1
2-METHYLNAPHTHALENE				1
2-METHYLPHENOL (o-CRESOL)				1
2-NITROANILINE				1
2-NITROPHENOL				1
3,3'-DICHLOROBENZIDINE				1
3-NITROANILINE				1
4,6-DINITRO-2-METHYLPHENOL				1

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
4-BROMOPHENYL PHENYL ETHER				1
4-CHLORO-3-METHYLPHENOL				1
4-CHLOROANILINE				1
4-CHLOROPHENYL PHENYL ETHER				1
4-METHYLPHENOL (p-CRESOL)				1
4-NITROANILINE				1
4-NITROPHENOL				1
ACENAPHTHENE				1
ACENAPHTHYLENE				1
ACETONE				1
ALUMINUM				1
ANTHRACENE				1
ANTIMONY	2			
ARSENIC				1
BARIUM				1
BENZENE				1
BENZO(a)ANTHRACENE				1
BENZO(a)PYRENE				1
BENZO(b)FLUORANTHENE				1
BENZO(g,h,i)PERYLENE				1
BENZO(k)FLUORANTHENE				1
BENZOIC ACID				1
BENZYL ALCOHOL				1
BENZYL BUTYL PHTHALATE				1
BERYLLIUM				1
bis(2-CHLOROETHOXY) METHANE				1
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				1
bis(2-CHLOROISOPROPYL) ETHER				1
bis(2-ETHYLHEXYL) PHTHALATE				1
BROMODICHLOROMETHANE				1
BROMOFORM				1
BROMOMETHANE				1
CADMIUM				1
CALCIUM				1

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
CARBON DISULFIDE				1
CARBON TETRACHLORIDE				1
CHLOROBENZENE				1
CHLOROETHANE				1
CHLOROFORM				1
CHLOROMETHANE				1
CHROMIUM, TOTAL				1
CHRYSENE				1
cis-1,2-DICHLOROETHYLENE				1
cis-1,3-DICHLOROPROPENE				1
COBALT				1
COPPER				1
DIBENZ(a,h)ANTHRACENE				1
DIBENZOFURAN				1
DIBROMOCHLOROMETHANE				1
DICHLORODIFLUOROMETHANE				1
DIETHYL PHTHALATE				1
DIMETHYL PHTHALATE				1
DI-n-BUTYL PHTHALATE				1
DI-n-OCTYLPHTHALATE				1
ETHYLBENZENE				1
FLUORANTHENE				1
FLUORENE				1
HEXACHLOROBENZENE				1
HEXACHLOROBUTADIENE				1
HEXACHLOROCYCLOPENTADIENE				1
HEXACHLOROETHANE				1
INDENO(1,2,3-c,d)PYRENE				1
IRON				1
ISOPHORONE				1
LEAD				1
M,P-XYLENE (SUM OF ISOMERS)				1
MAGNESIUM				1
MANGANESE				1

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
MERCURY				1
METHYL ETHYL KETONE (2-BUTANONE)				1
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				1
METHYLENE CHLORIDE				1
MOLYBDENUM				1
NAPHTHALENE				1
NICKEL				1
NITROBENZENE				1
N-NITROSODI-n-PROPYLAMINE				1
N-NITROSODIPHENYLAMINE				1
O-XYLENE (1,2-DIMETHYLBENZENE)				1
PENTACHLOROPHENOL				1
pH				1
PHENANTHRENE				1
PHENOL				1
POTASSIUM				1
PYRENE				1
SELENIUM				1
SILVER				1
SODIUM				1
STYRENE				1
TETRACHLOROETHYLENE (PCE)				1
THALLIUM				1
TOLUENE				1
trans-1,2-DICHLOROETHENE				1
trans-1,3-DICHLOROPROPENE				1
TRICHLOROETHYLENE (TCE)				1
TRICHLOROFLUOROMETHANE				1
VANADIUM				1
VINYL ACETATE				1
VINYL CHLORIDE				1
ZINC				1
TOTAL	2	0	12	128

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,2-DICHLOROBENZENE	0	0.056	041SO022	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROBENZENE	0	0.059	041FD024	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROBENZENE	0	0.06	041SO024	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROBENZENE	0	0.06	041SO023	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.052	041SO022	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.055	041SO024	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.055	041FD024	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.056	041SO023	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.059	041SO022	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.062	041SO024	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.062	041FD024	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.063	041SO023	DTO041SB002	Based on all samples being Non Detect
Replicates					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,1,1-TRICHLOROETHANE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
1,1,2,2-TETRACHLOROETHANE	0	0.00096	041FD024	DTO041SB002	Based on all samples being Non Detect
1,1,2-TRICHLOROETHANE	0	0.0041	041FD024	DTO041SB002	Based on all samples being Non Detect
1,1-DICHLOROETHANE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
1,1-DICHLOROETHENE	0	0.0017	041SO024	DTO041SB002	Based on all samples being Non Detect
1,2,4-TRICHLOROBENZENE	0	0.038	041SO024	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROBENZENE	0	0.0009	041FD024	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROETHANE	0	0.001	041SO024	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROPROPANE	0	0.00085	041FD024	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.0011	041FD024	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4,5-TRICHLOROPHENOL	0	0.051	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4,6-TRICHLOROPHENOL	0	0.075	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4-DICHLOROPHENOL	0	0.03	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4-DIMETHYLPHENOL	0	0.24	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4-DINITROPHENOL	0	0.94	041SO024	DTO041SB002	Based on all samples being Non Detect
2,4-DINITROTOLUENE	0	0.03	041SO024	DTO041SB002	Based on all samples being Non Detect
2,6-DINITROTOLUENE	0	0.043	041SO024	DTO041SB002	Based on all samples being Non Detect
2-CHLOROETHYL VINYL ETHER	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
2-CHLORONAPHTHALENE	0	0.027	041SO024	DTO041SB002	Based on all samples being Non Detect
2-CHLOROPHENOL	0	0.031	041SO024	DTO041SB002	Based on all samples being Non Detect
2-HEXANONE	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
2-METHYLNAPHTHALENE	0	0.077	041SO024	DTO041SB002	Based on all samples being Non Detect
2-METHYLPHENOL (o-CRESOL)	0	0.082	041SO024	DTO041SB002	Based on all samples being Non Detect
2-NITROANILINE	0	0.064	041SO024	DTO041SB002	Based on all samples being Non Detect
2-NITROPHENOL	0	0.043	041SO024	DTO041SB002	Based on all samples being Non Detect
3,3'-DICHLOROBENZIDINE	0	0.47	041SO024	DTO041SB002	Based on all samples being Non Detect
3-NITROANILINE	0	0.24	041SO024	DTO041SB002	Based on all samples being Non Detect
4,6-DINITRO-2-METHYLPHENOL	0	0.94	041SO024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
4-BROMOPHENYL PHENYL ETHER	0	0.033	041SO024	DTO041SB002	Based on all samples being Non Detect
4-CHLORO-3-METHYLPHENOL	0	0.02	041SO024	DTO041SB002	Based on all samples being Non Detect
4-CHLOROANILINE	0	0.082	041SO024	DTO041SB002	Based on all samples being Non Detect
4-CHLOROPHENYL PHENYL ETHER	0	0.02	041SO024	DTO041SB002	Based on all samples being Non Detect
4-METHYLPHENOL (p-CRESOL)	0	0.07	041SO024	DTO041SB002	Based on all samples being Non Detect
4-NITROANILINE	0	0.053	041SO024	DTO041SB002	Based on all samples being Non Detect
4-NITROPHENOL	0	0.94	041SO024	DTO041SB002	Based on all samples being Non Detect
ACENAPHTHENE	0	0.027	041SO024	DTO041SB002	Based on all samples being Non Detect
ACENAPHTHYLENE	0	0.024	041SO024	DTO041SB002	Based on all samples being Non Detect
ACETONE	0.029	0.007	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
ALUMINUM	18900	1.1	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
ANTHRACENE	0	0.038	041SO024	DTO041SB002	Based on all samples being Non Detect
ARSENIC	15	0.35	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
BARIUM	240	0.28	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
BENZENE	0.0022	0.001	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
BENZO(a)ANTHRACENE	0	0.024	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZO(a)PYRENE	0	0.028	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZO(b)FLUORANTHENE	0	0.035	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZO(g,h,i)PERYLENE	0	0.031	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZO(k)FLUORANTHENE	0	0.02	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZOIC ACID	0	0.24	041SO024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
BENZYL ALCOHOL	0	0.24	041SO024	DTO041SB002	Based on all samples being Non Detect
BENZYL BUTYL PHTHALATE	0	0.027	041SO024	DTO041SB002	Based on all samples being Non Detect
BERYLLIUM	0.87	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
bis(2-CHLOROETHOXY) METHANE	0	0.031	041SO024	DTO041SB002	Based on all samples being Non Detect
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	0	0.045	041SO024	DTO041SB002	Based on all samples being Non Detect
bis(2-CHLOROISOPROPYL) ETHER	0	0.045	041SO024	DTO041SB002	Based on all samples being Non Detect
bis(2-ETHYLHEXYL) PHTHALATE	0	0.034	041SO024	DTO041SB002	Based on all samples being Non Detect
BROMODICHLOROMETHANE	0	0.00075	041FD024	DTO041SB002	Based on all samples being Non Detect
BROMOFORM	0	0.0058	041FD024	DTO041SB002	Based on all samples being Non Detect
BROMOMETHANE	0	0.0012	041SO024	DTO041SB002	Based on all samples being Non Detect
CADMIUM	0.19	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
CALCIUM	122000	29.8	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
CARBON DISULFIDE	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
CARBON TETRACHLORIDE	0	0.00075	041FD024	DTO041SB002	Based on all samples being Non Detect
CHLOROBENZENE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
CHLOROETHANE	0	0.0037	041FD024	DTO041SB002	Based on all samples being Non Detect
CHLOROFORM	0	0.0011	041FD024	DTO041SB002	Based on all samples being Non Detect
CHLOROMETHANE	0	0.0021	041SO024	DTO041SB002	Based on all samples being Non Detect
CHROMIUM, TOTAL	17	0.33	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
CHRYSENE	0	0.12	041SO024	DTO041SB002	Based on all samples being Non Detect
cis-1,2-DICHLOROETHYLENE	0	0.0013	041FD024	DTO041SB002	Based on all samples being Non Detect
cis-1,3-DICHLOROPROPENE	0	0.0009	041FD024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
COBALT	6.7	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
COPPER	13.3	0.078	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
DIBENZ(a,h)ANTHRACENE	0	0.024	041SO024	DTO041SB002	Based on all samples being Non Detect
DIBENZOFURAN	0	0.026	041SO024	DTO041SB002	Based on all samples being Non Detect
DIBROMOCHLOROMETHANE	0	0.0038	041SO024	DTO041SB002	Based on all samples being Non Detect
DICHLORODIFLUOROMETHANE	0	0.0013	041FD024	DTO041SB002	Based on all samples being Non Detect
DIETHYL PHTHALATE	0	0.028	041SO024	DTO041SB002	Based on all samples being Non Detect
DIMETHYL PHTHALATE	0	0.033	041SO024	DTO041SB002	Based on all samples being Non Detect
DI-n-BUTYL PHTHALATE	0	0.037	041SO024	DTO041SB002	Based on all samples being Non Detect
DI-n-OCTYLPHTHALATE	0	0.034	041SO024	DTO041SB002	Based on all samples being Non Detect
ETHYLBENZENE	0	0.0012	041SO024	DTO041SB002	Based on all samples being Non Detect
FLUORANTHENE	0	0.043	041SO024	DTO041SB002	Based on all samples being Non Detect
FLUORENE	0	0.021	041SO024	DTO041SB002	Based on all samples being Non Detect
HEXACHLOROBENZENE	0	0.024	041SO024	DTO041SB002	Based on all samples being Non Detect
HEXACHLOROBUTADIENE	0	0.047	041SO024	DTO041SB002	Based on all samples being Non Detect
HEXACHLOROCYCLOPENTADIENE	0	0.035	041SO024	DTO041SB002	Based on all samples being Non Detect
HEXACHLOROETHANE	0	0.065	041SO024	DTO041SB002	Based on all samples being Non Detect
INDENO(1,2,3-c,d)PYRENE	0	0.033	041SO024	DTO041SB002	Based on all samples being Non Detect
IRON	17200	7.8	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
ISOPHORONE	0	0.024	041SO024	DTO041SB002	Based on all samples being Non Detect
LEAD	9.9	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
M,P-XYLENE (SUM OF ISOMERS)	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
MAGNESIUM	19500	0.78	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
MANGANESE	412	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
MERCURY	0	0.012	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
METHYL ETHYL KETONE (2-BUTANONE)	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
METHYLENE CHLORIDE	0	0.0012	041SO024	DTO041SB002	Based on all samples being Non Detect
MOLYBDENUM	1.2	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
NAPHTHALENE	0	0.041	041SO024	DTO041SB002	Based on all samples being Non Detect
NICKEL	13.2	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
NITROBENZENE	0	0.11	041SO024	DTO041SB002	Based on all samples being Non Detect
N-NITROSODI-n-PROPYLAMINE	0	0.026	041SO024	DTO041SB002	Based on all samples being Non Detect
N-NITROSODIPHENYLAMINE	0	0.034	041SO024	DTO041SB002	Based on all samples being Non Detect
O-XYLENE (1,2-DIMETHYLBENZENE)	0	0.0038	041SO024	DTO041SB002	Based on all samples being Non Detect
PENTACHLOROPHENOL	0	0.94	041SO024	DTO041SB002	Based on all samples being Non Detect
pH	8.2	0.1	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
PHENANTHRENE	0	0.023	041SO024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
PHENOL	0	0.027	041SO024	DTO041SB002	Based on all samples being Non Detect
POTASSIUM	5600	3.5	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
PYRENE	0	0.03	041SO024	DTO041SB002	Based on all samples being Non Detect
SELENIUM	0.97	0.18	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
SILVER	0.16	0.071	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
SODIUM	3180	4.8	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
STYRENE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
TETRACHLOROETHYLENE (PCE)	0	0.00086	041FD024	DTO041SB002	Based on all samples being Non Detect
THALLIUM	0	0.26	041SO024	DTO041SB002	Based on all samples being Non Detect
TOLUENE	0	0.00086	041FD024	DTO041SB002	Based on all samples being Non Detect
trans-1,2-DICHLOROETHENE	0	0.0013	041SO024	DTO041SB002	Based on all samples being Non Detect
trans-1,3-DICHLOROPROPENE	0	0.0011	041FD024	DTO041SB002	Based on all samples being Non Detect
TRICHLOROETHYLENE (TCE)	0	0.00085	041FD024	DTO041SB002	Based on all samples being Non Detect
TRICHLOROFLUOROMETHANE	0	0.0011	041SO024	DTO041SB002	Based on all samples being Non Detect
VANADIUM	36.2	3.1	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.
VINYL ACETATE	0	0.0071	041FD024	DTO041SB002	Based on all samples being Non Detect
VINYL CHLORIDE	0	0.0023	041FD024	DTO041SB002	Based on all samples being Non Detect

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
ZINC	52.9	0.71	041SO024	DTO041SB002	This sample was removed based on one sample being Detect. Note that the last sample in this group was over-written on the risk pre-processing worksheet 'Macrodata' with the average NEWRESULT and the lowest MDL. All other samples, including this one, was removed.

Data_Usability_10
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 AREA 2 SUBSURFACE SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.00096	U	0.00048		-7.641724454	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.00081	U	0.000405		-7.811623491	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.00099	U	0.000495		-7.610952795	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.00095	U	0.000475		-7.652195754	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.0035	U	0.00175		-6.348139491	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.0042	U	0.0021		-6.165817934	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.004	U	0.002		-6.214608098	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.00091	U	0.000455		-7.695213139	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.0014	U	0.0007		-7.264430223	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.0017	U	0.00085		-7.070274208	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.0017	U	0.00085		-7.070274208	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.00076	U	0.00038		-7.875339305	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.00072	U	0.00036		-7.929406527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.00083	U	0.000415		-7.787232038	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.048	U	0.024		-3.729701449	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.051	U	0.0255		-3.669076827	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.051	U	0.0255		-3.669076827	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.071	U	0.0355		-3.338222583	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.075	U	0.0375		-3.283414346	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.075	U	0.0375		-3.283414346	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2,4-DINITROPHENOL	51-28-5	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
2,4-DINITROPHENOL	51-28-5	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
2,4-DINITROPHENOL	51-28-5	0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.007	U	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2-HEXANONE	591-78-6	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
2-HEXANONE	591-78-6	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
2-HEXANONE	591-78-6	0	MG/KG	0.007	U	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.072	U	0.036		-3.324236341	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.077	U	0.0385		-3.257097038	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.076	U	0.038		-3.270169119	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.078	U	0.039		-3.244193633	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.082	U	0.041		-3.194183212	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
2-NITROANILINE	88-74-4	0	MG/KG	0.06	U	0.03		-3.506557897	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
2-NITROANILINE	88-74-4	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
2-NITROANILINE	88-74-4	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
2-NITROPHENOL	88-75-5	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-NITROPHENOL	88-75-5	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-NITROPHENOL	88-75-5	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	0.47	U	0.235		-1.448169765	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	0.47	U	0.235		-1.448169765	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
3-NITROANILINE	99-09-2	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
3-NITROANILINE	99-09-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
3-NITROANILINE	99-09-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
4-CHLOROANILINE	106-47-8	0	MG/KG	0.078	U	0.039		-3.244193633	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLOROANILINE	106-47-8	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLOROANILINE	106-47-8	0	MG/KG	0.082	U	0.041		-3.194183212	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.066	U	0.033		-3.411247718	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.07	U	0.035		-3.352407217	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.069	U	0.0345		-3.366795955	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
4-NITROANILINE	100-01-6	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4-NITROANILINE	100-01-6	0	MG/KG	0.053	U	0.0265		-3.630610546	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4-NITROANILINE	100-01-6	0	MG/KG	0.052	U	0.026		-3.649658741	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
4-NITROPHENOL	100-02-7	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4-NITROPHENOL	100-02-7	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4-NITROPHENOL	100-02-7	0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
ACENAPHTHENE	83-32-9	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ACENAPHTHENE	83-32-9	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ACENAPHTHENE	83-32-9	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
ACETONE	67-64-1	0.037	MG/KG			0.037	0.037	-3.296837366	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
ACETONE	67-64-1	0.028	MG/KG			0.028	0.028	-3.575550769	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
ACETONE	67-64-1	0.0205	MG/KG			0.0205	0.0205	-4.422848629	DTO041SB002	041FD024	SW8260B	19.5	SO	0.014	12/20/2005
ALUMINUM	7429-90-5	18400	MG/KG			18400	18400	9.820105944	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
ALUMINUM	7429-90-5	18600	MG/KG			18600	18600	9.83091686	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
ALUMINUM	7429-90-5	19550	MG/KG			19550	19550	9.913437883	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
ANTHRACENE	120-12-7	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ANTHRACENE	120-12-7	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ANTHRACENE	120-12-7	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
ANTIMONY	7440-36-0	0.067	MG/KG		J	0.067	0.067	-2.70306266	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
ANTIMONY	7440-36-0	0.1	MG/KG		J	0.1	0.1	-2.302585093	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
ARSENIC	7440-38-2	12.4	MG/KG			12.4	12.4	2.517696473	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
ARSENIC	7440-38-2	9.8	MG/KG			9.8	9.8	2.282382386	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
ARSENIC	7440-38-2	13.75	MG/KG			13.75	13.75	2.525728644	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
BARIUM	7440-39-3	291	MG/KG			291	291	5.673323267	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
BARIUM	7440-39-3	320	MG/KG			320	320	5.768320996	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
BARIUM	7440-39-3	219.5	MG/KG			219.5	219.5	5.293304825	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
BENZENE	71-43-2	0.0016	MG/KG		J	0.0016	0.0016	-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BENZENE	71-43-2	0.0016	MG/KG		J	0.0016	0.0016	-6.43775165	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BENZENE	71-43-2	0.00135	MG/KG			0.00135	0.00135	-7.60090246	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BENZO(a)PYRENE	50-32-8	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(a)PYRENE	50-32-8	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(a)PYRENE	50-32-8	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.035	U	0.0175		-4.045554398	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BENZOIC ACID	65-85-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
BENZOIC ACID	65-85-0	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
BENZOIC ACID	65-85-0	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BERYLLIUM	7440-41-7	0.93	MG/KG			0.93	0.93	-0.072570693	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
BERYLLIUM	7440-41-7	0.94	MG/KG			0.94	0.94	-0.061875404	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
BERYLLIUM	7440-41-7	0.985	MG/KG			0.985	0.985	0.09531018	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.046	U	0.023		-3.772261063	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.045	U	0.0225		-3.79423997	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.046	U	0.023		-3.772261063	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.045	U	0.0225		-3.79423997	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.00063	U	0.000315		-8.062937919	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.00077	U	0.000385		-7.862267224	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.00074	U	0.00037		-7.902007552	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
BROMOFORM	75-25-2	0	MG/KG	0.0049	U	0.00245		-6.011667254	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMOFORM	75-25-2	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BROMOFORM	75-25-2	0	MG/KG	0.0057	U	0.00285		-5.860436285	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
BROMOMETHANE	74-83-9	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMOMETHANE	74-83-9	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BROMOMETHANE	74-83-9	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
CADMIUM	7440-43-9	0.31	MG/KG		J	0.31	0.31	-1.171182982	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
CADMIUM	7440-43-9	0.19	MG/KG		J	0.19	0.19	-1.660731207	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
CADMIUM	7440-43-9	0.19	MG/KG			0.19	0.19	-1.660731207	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
CALCIUM	7440-70-2	142000	MG/KG			142000	142000	11.86358234	DTO041SB002	041SO022	SW6020	4.75	SO	168	12/20/2005
CALCIUM	7440-70-2	155000	MG/KG			155000	155000	11.9511804	DTO041SB002	041SO023	SW6020	9.75	SO	178	12/20/2005
CALCIUM	7440-70-2	122500	MG/KG			122500	122500	11.71993963	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
CARBON DISULFIDE	75-15-0	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
CARBON DISULFIDE	75-15-0	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
CARBON DISULFIDE	75-15-0	0	MG/KG	0.007	U	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.00063	U	0.000315		-8.062937919	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.00077	U	0.000385		-7.862267224	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.00074	U	0.00037		-7.902007552	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
CHLOROBENZENE	108-90-7	0	MG/KG	0.00094	U	0.00047		-7.662777863	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROBENZENE	108-90-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROBENZENE	108-90-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
CHLOROETHANE	75-00-3	0	MG/KG	0.0031	U	0.00155		-6.469500348	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROETHANE	75-00-3	0	MG/KG	0.0038	U	0.0019		-6.265901393	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROETHANE	75-00-3	0	MG/KG	0.0036	U	0.0018		-6.319968614	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
CHLOROFORM	67-66-3	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROFORM	67-66-3	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROFORM	67-66-3	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
CHLOROMETHANE	74-87-3	0	MG/KG	0.0018	U	0.0009		-7.013115795	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROMETHANE	74-87-3	0	MG/KG	0.0022	U	0.0011		-6.812445099	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROMETHANE	74-87-3	0	MG/KG	0.0021	U	0.00105		-6.858965115	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
CHROMIUM, TOTAL	7440-47-3	18.6	MG/KG		J	18.6	18.6	2.923161581	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
CHROMIUM, TOTAL	7440-47-3	17.7	MG/KG		J	17.7	17.7	2.87356464	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
CHROMIUM, TOTAL	7440-47-3	18.05	MG/KG			18.05	18.05	2.949688335	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
CHRYSENE	218-01-9	0	MG/KG	0.11	U	0.055		-2.900422094	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
CHRYSENE	218-01-9	0	MG/KG	0.12	U	0.06		-2.813410717	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
CHRYSENE	218-01-9	0	MG/KG	0.12	U	0.06		-2.813410717	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
cis-1,2-DICHLOROETHYLENE	156-59-2	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
cis-1,2-DICHLOROETHYLENE	156-59-2	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
cis-1,2-DICHLOROETHYLENE	156-59-2	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.00076	U	0.00038		-7.875339305	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
COBALT	7440-48-4	6.6	MG/KG			6.6	6.6	1.887069649	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
COBALT	7440-48-4	6.8	MG/KG			6.8	6.8	1.916922612	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
COBALT	7440-48-4	6.85	MG/KG			6.85	6.85	1.945910149	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
COPPER	7440-50-8	14.5	MG/KG			14.5	14.5	2.674148649	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
COPPER	7440-50-8	13.1	MG/KG			13.1	13.1	2.57261223	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
COPPER	7440-50-8	13.55	MG/KG			13.55	13.55	2.624668592	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
DIBENZOFURAN	132-64-9	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIBENZOFURAN	132-64-9	0	MG/KG	0.026	U	0.013		-4.342805922	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIBENZOFURAN	132-64-9	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.0032	U	0.0016		-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.0039	U	0.00195		-6.239925906	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.0038	U	0.0019		-6.265901393	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
DICHLORODIFLUOROMETHANE	75-71-8	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
DICHLORODIFLUOROMETHANE	75-71-8	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
DICHLORODIFLUOROMETHANE	75-71-8	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	0.035	U	0.0175		-4.045554398	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	0.037	U	0.0185		-3.989984547	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	0.037	U	0.0185		-3.989984547	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
ETHYLBENZENE	100-41-4	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
ETHYLBENZENE	100-41-4	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
ETHYLBENZENE	100-41-4	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
FLUORANTHENE	206-44-0	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
FLUORANTHENE	206-44-0	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
FLUORANTHENE	206-44-0	0	MG/KG	0.042	U	0.021		-3.863232841	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
FLUORENE	86-73-7	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
FLUORENE	86-73-7	0	MG/KG	0.021	U	0.0105		-4.556380022	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
FLUORENE	86-73-7	0	MG/KG	0.021	U	0.0105		-4.556380022	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.044	U	0.022		-3.816712826	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.047	U	0.0235		-3.750754858	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.047	U	0.0235		-3.750754858	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.035	U	0.0175		-4.045554398	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
HEXACHLOROETHANE	67-72-1	0	MG/KG	0.062	U	0.031		-3.473768074	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROETHANE	67-72-1	0	MG/KG	0.066	U	0.033		-3.411247718	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROETHANE	67-72-1	0	MG/KG	0.065	U	0.0325		-3.42651519	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
IRON	7439-89-6	17000	MG/KG			17000	17000	9.740968623	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
IRON	7439-89-6	16400	MG/KG			16400	16400	9.705036614	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
IRON	7439-89-6	18050	MG/KG			18050	18050	9.846917201	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
ISOPHORONE	78-59-1	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ISOPHORONE	78-59-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ISOPHORONE	78-59-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
LEAD	7439-92-1	12.2	MG/KG			12.2	12.2	2.501435952	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
LEAD	7439-92-1	10.1	MG/KG			10.1	10.1	2.312535424	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
LEAD	7439-92-1	10.25	MG/KG			10.25	10.25	2.360854001	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
M,P-XYLENE (SUM OF ISOMERS)	1330-20-7	0	MG/KG	0.00097	U	0.000485		-7.631361667	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
M,P-XYLENE (SUM OF ISOMERS)	1330-20-7	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
M,P-XYLENE (SUM OF ISOMERS)	1330-20-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
MAGNESIUM	7439-95-4	20300	MG/KG			20300	20300	9.918376165	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
MAGNESIUM	7439-95-4	19200	MG/KG			19200	19200	9.862665558	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
MAGNESIUM	7439-95-4	20600	MG/KG			20600	20600	9.98506754	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
MANGANESE	7439-96-5	445	MG/KG			445	445	6.098074282	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
MANGANESE	7439-96-5	469	MG/KG			469	469	6.150602768	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
MANGANESE	7439-96-5	417	MG/KG			417	417	6.045005314	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
MERCURY	7487-94-7	0.18	MG/KG			0.18	0.18	-1.714798428	DTO041SB002	041SO022	SW7471A	4.75	SO	0.13	12/20/2005
MERCURY	7487-94-7	0.074	MG/KG		J	0.074	0.074	-2.603690186	DTO041SB002	041SO023	SW7471A	9.75	SO	0.14	12/20/2005
MERCURY	7487-94-7	0.009	MG/KG			0.009	0.009	-4.422848629	DTO041SB002	041FD024	SW7471A	19.5	SO	0.14	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0.013	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0.0088	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0.0094	MG/KG	0.007	UJ	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.007	U	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
METHYLENE CHLORIDE	75-09-2	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYLENE CHLORIDE	75-09-2	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
METHYLENE CHLORIDE	75-09-2	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041FD024	SW8260B	19.5	SO	0.014	12/20/2005
MOLYBDENUM	7439-98-7	1.2	MG/KG		J	1.2	1.2	0.182321557	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
MOLYBDENUM	7439-98-7	1.3	MG/KG		J	1.3	1.3	0.262364264	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
MOLYBDENUM	7439-98-7	1.15	MG/KG			1.15	1.15	0.09531018	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
NAPHTHALENE	91-20-3	0	MG/KG	0.039	U	0.0195		-3.937340813	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
NAPHTHALENE	91-20-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
NAPHTHALENE	91-20-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
NICKEL	7440-02-0	13.6	MG/KG			13.6	13.6	2.610069793	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
NICKEL	7440-02-0	14.1	MG/KG			14.1	14.1	2.646174797	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
NICKEL	7440-02-0	13.5	MG/KG			13.5	13.5	2.624668592	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
NITROBENZENE	98-95-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
NITROBENZENE	98-95-3	0	MG/KG	0.11	U	0.055		-2.900422094	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
NITROBENZENE	98-95-3	0	MG/KG	0.11	U	0.055		-2.900422094	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	0.026	U	0.013		-4.342805922	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
O-XYLENE (1,2-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.0032	U	0.0016		-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
O-XYLENE (1,2-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.0039	U	0.00195		-6.239925906	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
O-XYLENE (1,2-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.0038	U	0.0019		-6.265901393	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.93	U	0.465		-0.765717873	DTO041SB002	041FD024	SW8270C	19.5	SO	2.3	12/20/2005
pH		7.5	PH UNITS			7.5	7.5	2.014903021	DTO041SB002	041SO022	SW9045C	4.75	SO		12/20/2005
pH		7.8	PH UNITS			7.8	7.8	2.054123734	DTO041SB002	041SO023	SW9045C	9.75	SO		12/20/2005
pH		8.15	PH UNITS			8.15	8.15	2.091864062	DTO041SB002	041FD024	SW9045C	19.5	SO		12/20/2005
PHENANTHRENE	85-01-8	0	MG/KG	0.021	U	0.0105		-4.556380022	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PHENANTHRENE	85-01-8	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
PHENANTHRENE	85-01-8	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
PHENOL	108-95-2	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PHENOL	108-95-2	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
PHENOL	108-95-2	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
POTASSIUM	7440-09-7	5740	MG/KG			5740	5740	8.655214489	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
POTASSIUM	7440-09-7	5520	MG/KG			5520	5520	8.616133139	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
POTASSIUM	7440-09-7	5835	MG/KG			5835	5835	8.711113884	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
PYRENE	129-00-0	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PYRENE	129-00-0	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
PYRENE	129-00-0	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041FD024	SW8270C	19.5	SO	0.47	12/20/2005
SELENIUM	7782-49-2	0.94	MG/KG		J	0.94	0.94	-0.061875404	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
SELENIUM	7782-49-2	0.91	MG/KG		J	0.91	0.91	-0.094310679	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
SELENIUM	7782-49-2	0.985	MG/KG			0.985	0.985	0	DTO041SB002	041FD024	SW6020	19.5	SO	1.4	12/20/2005
SILVER	7440-22-4	0.22	MG/KG		J	0.22	0.22	-1.514127733	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
SILVER	7440-22-4	0.19	MG/KG		J	0.19	0.19	-1.660731207	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
SILVER	7440-22-4	0.17	MG/KG			0.17	0.17	-1.714798428	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
SODIUM	7440-23-5	882	MG/KG			882	882	6.782192056	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
SODIUM	7440-23-5	2390	MG/KG			2390	2390	7.779048645	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
SODIUM	7440-23-5	3285	MG/KG			3285	3285	8.1285852	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
STYRENE	100-42-5	0	MG/KG	0.00091	U	0.000455		-7.695213139	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
STYRENE	100-42-5	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
STYRENE	100-42-5	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.00073	U	0.000365		-7.915613204	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.00085	U	0.000425		-7.763421389	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
THALLIUM	7440-28-0	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
THALLIUM	7440-28-0	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
THALLIUM	7440-28-0	0	MG/KG	0.25	U	0.125		-2.079441542	DTO041SB002	041FD024	SW6020	19.5	SO	0.71	12/20/2005
TOLUENE	108-88-3	0.0013	MG/KG	0.00073	U	0.000365		-7.915613204	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TOLUENE	108-88-3	0.0016	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TOLUENE	108-88-3	0.0021	MG/KG	0.00085	UJ	0.000425		-7.763421389	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
trans-1,2-DICHLOROETHENE	156-60-5	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
trans-1,2-DICHLOROETHENE	156-60-5	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
trans-1,2-DICHLOROETHENE	156-60-5	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.00072	U	0.00036		-7.929406527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.00083	U	0.000415		-7.787232038	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.00096	U	0.00048		-7.641724454	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041FD024	SW8260B	19.5	SO	0.007	12/20/2005
VANADIUM	7440-62-2	37.3	MG/KG			37.3	37.3	3.618993327	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
VANADIUM	7440-62-2	33.6	MG/KG		J	33.6	33.6	3.514526067	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
VANADIUM	7440-62-2	37.05	MG/KG			37.05	37.05	3.634951112	DTO041SB002	041FD024	SW6020	19.5	SO	35.3	12/20/2005
VINYL ACETATE	108-05-4	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
VINYL ACETATE	108-05-4	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
VINYL ACETATE	108-05-4	0	MG/KG	0.007	U	0.0035		-5.65499231	DTO041SB002	041SO024	SW8260B	19.5	SO	0.014	12/20/2005
VINYL CHLORIDE	75-01-4	0	MG/KG	0.0019	U	0.00095		-6.959048573	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
VINYL CHLORIDE	75-01-4	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
VINYL CHLORIDE	75-01-4	0	MG/KG	0.0022	U	0.0011		-6.812445099	DTO041SB002	041SO024	SW8260B	19.5	SO	0.007	12/20/2005
ZINC	7440-66-6	58.6	MG/KG			58.6	58.6	4.070734697	DTO041SB002	041SO022	SW6020	4.75	SO	3.4	12/20/2005
ZINC	7440-66-6	54.5	MG/KG			54.5	54.5	3.998200702	DTO041SB002	041SO023	SW6020	9.75	SO	3.6	12/20/2005
ZINC	7440-66-6	53.85	MG/KG			53.85	53.85	4.003690194	DTO041SB002	041FD024	SW6020	19.5	SO	3.5	12/20/2005

Data_Usability_11
SWMU-41 AREA 2 MIXED SOILS DATA REMOVAL LOG

DUGWAY PROVING GROUND, UTAH

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
1,1,1-TRICHLOROETHANE				
1,1,2,2-TETRACHLOROETHANE				
1,1,2-TRICHLOROETHANE				
1,1-DICHLOROETHANE				
1,1-DICHLOROETHENE				
1,2,4-TRICHLOROBENZENE				
1,2-DICHLOROBENZENE				2
1,2-DICHLOROETHANE				
1,2-DICHLOROPROPANE				
1,3-DICHLOROBENZENE				2
1,4-DICHLOROBENZENE				2
2,4,5-TRICHLOROPHENOL				
2,4,6-TRICHLOROPHENOL				
2,4-DICHLOROPHENOL				
2,4-DIMETHYLPHENOL				
2,4-DINITROPHENOL				
2,4-DINITROTOLUENE				
2,6-DINITROTOLUENE				
2-CHLOROETHYL VINYL ETHER				
2-CHLORONAPHTHALENE				
2-CHLOROPHENOL				
2-HEXANONE				
2-METHYLNAPHTHALENE				
2-METHYLPHENOL (o-CRESOL)				
2-NITROANILINE				
2-NITROPHENOL				
3,3'-DICHLOROBENZIDINE				
3-NITROANILINE				
4,6-DINITRO-2-METHYLPHENOL				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
4-BROMOPHENYL PHENYL ETHER				
4-CHLORO-3-METHYLPHENOL				
4-CHLOROANILINE				
4-CHLOROPHENYL PHENYL ETHER				
4-METHYLPHENOL (p-CRESOL)				
4-NITROANILINE				
4-NITROPHENOL				
ACENAPHTHENE				
ACENAPHTHYLENE				
ACETONE				
ALUMINUM				
ANTHRACENE				
ANTIMONY				
ARSENIC				
BARIUM				
BENZENE				
BENZO(a)ANTHRACENE				
BENZO(a)PYRENE				
BENZO(b)FLUORANTHENE				
BENZO(g,h,i)PERYLENE				
BENZO(k)FLUORANTHENE				
BENZOIC ACID				
BENZYL ALCOHOL				
BENZYL BUTYL PHTHALATE				
BERYLLIUM				
bis(2-CHLOROETHOXY) METHANE				
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)				
bis(2-CHLOROISOPROPYL) ETHER				
bis(2-ETHYLHEXYL) PHTHALATE				
BROMODICHLOROMETHANE				
BROMOFORM				
BROMOMETHANE				
CADMIUM				
CALCIUM				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
CARBON DISULFIDE				
CARBON TETRACHLORIDE				
CHLOROBENZENE				
CHLOROETHANE				
CHLOROFORM				
CHLOROMETHANE				
CHROMIUM, TOTAL				
CHRYSENE				
cis-1,2-DICHLOROETHYLENE				
cis-1,3-DICHLOROPROPENE				
COBALT				
COPPER				
DIBENZ(a,h)ANTHRACENE				
DIBENZOFURAN				
DIBROMOCHLOROMETHANE				
DICHLORODIFLUOROMETHANE				
DIETHYL PHTHALATE				
DIMETHYL PHTHALATE				
DI-n-BUTYL PHTHALATE				
DI-n-OCTYLPHTHALATE				
ETHYLBENZENE				
FLUORANTHENE				
FLUORENE				
HEXACHLOROBENZENE				
HEXACHLOROBUTADIENE				
HEXACHLOROCYCLOPENTADIENE				
HEXACHLOROETHANE				
INDENO(1,2,3-c,d)PYRENE				
IRON				
ISOPHORONE				
LEAD				
M,P-XYLENE (SUM OF ISOMERS)				
MAGNESIUM				
MANGANESE				

ANALYTE	R FLAGS	Max PARVAL	MULTIPLE ANALYSES	REPLICATES
MERCURY				
METHYL ETHYL KETONE (2-BUTANONE)				
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				
METHYLENE CHLORIDE				
MOLYBDENUM				
NAPHTHALENE				
NICKEL				
NITROBENZENE				
N-NITROSODI-n-PROPYLAMINE				
N-NITROSODIPHENYLAMINE				
O-XYLENE (1,2-DIMETHYLBENZENE)				
PENTACHLOROPHENOL				
pH				
PHENANTHRENE				
PHENOL				
POTASSIUM				
PYRENE				
SELENIUM				
SILVER				
SODIUM				
STYRENE				
TETRACHLOROETHYLENE (PCE)				
THALLIUM				
TOLUENE				
trans-1,2-DICHLOROETHENE				
trans-1,3-DICHLOROPROPENE				
TRICHLOROETHYLENE (TCE)				
TRICHLOROFLUOROMETHANE				
VANADIUM				
VINYL ACETATE				
VINYL CHLORIDE				
ZINC				
TOTAL	0	0	6	0

ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
Multiples					
ANALYTE	PARVAL	MDL	FLDSAMPID	LOCID	NOTE
1,2-DICHLOROBENZENE	0	0.056	041SO022	DTO041SB002	Based on all samples being Non Detect
1,2-DICHLOROBENZENE	0	0.06	041SO023	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.052	041SO022	DTO041SB002	Based on all samples being Non Detect
1,3-DICHLOROBENZENE	0	0.056	041SO023	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.059	041SO022	DTO041SB002	Based on all samples being Non Detect
1,4-DICHLOROBENZENE	0	0.063	041SO023	DTO041SB002	Based on all samples being Non Detect

Data_Usability_12
FINAL DATASET FOR SITE-ATTRIBUTION ANALYSIS AND/OR RISK CALCULATIONS
SWMU-41 AREA 2 MIXED SOILS

DUGWAY PROVING GROUND, UTAH

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.00096	U	0.00048		-7.641724454	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,1-TRICHLOROETHANE	71-55-6	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.00081	U	0.000405		-7.811623491	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,2,2-TETRACHLOROETHANE	79-34-5	0	MG/KG	0.00099	U	0.000495		-7.610952795	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.0035	U	0.00175		-6.348139491	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1,2-TRICHLOROETHANE	79-00-5	0	MG/KG	0.0042	U	0.0021		-6.165817934	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.00091	U	0.000455		-7.695213139	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1-DICHLOROETHANE	75-34-3	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.0014	U	0.0007		-7.264430223	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,1-DICHLOROETHENE	75-35-4	0	MG/KG	0.0017	U	0.00085		-7.070274208	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
1,2,4-TRICHLOROBENZENE	120-82-1	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.00076	U	0.00038		-7.875339305	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROBENZENE	95-50-1	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROETHANE	107-06-2	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.00072	U	0.00036		-7.929406527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,2-DICHLOROPROPANE	78-87-5	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,3-DICHLOROBENZENE	541-73-1	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
1,4-DICHLOROBENZENE	106-46-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.048	U	0.024		-3.729701449	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4,5-TRICHLOROPHENOL	95-95-4	0	MG/KG	0.051	U	0.0255		-3.669076827	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.071	U	0.0355		-3.338222583	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4,6-TRICHLOROPHENOL	88-06-2	0	MG/KG	0.075	U	0.0375		-3.283414346	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4-DICHLOROPHENOL	120-83-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4-DIMETHYLPHENOL	105-67-9	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,4-DINITROPHENOL	51-28-5	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
2,4-DINITROPHENOL	51-28-5	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,4-DINITROTOLUENE	121-14-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2,6-DINITROTOLUENE	606-20-2	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
2-CHLOROETHYL VINYL ETHER	110-75-8	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-CHLORONAPHTHALENE	91-58-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-CHLOROPHENOL	95-57-8	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-HEXANONE	591-78-6	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
2-HEXANONE	591-78-6	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.072	U	0.036		-3.324236341	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-METHYLNAPHTHALENE	91-57-6	0	MG/KG	0.077	U	0.0385		-3.257097038	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.078	U	0.039		-3.244193633	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-METHYLPHENOL (o-CRESOL)	95-48-7	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
2-NITROANILINE	88-74-4	0	MG/KG	0.06	U	0.03		-3.506557897	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
2-NITROANILINE	88-74-4	0	MG/KG	0.064	U	0.032		-3.442019376	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
2-NITROPHENOL	88-75-5	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
2-NITROPHENOL	88-75-5	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	0.44	U	0.22		-1.514127733	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
3,3'-DICHLOROBENZIDINE	91-94-1	0	MG/KG	0.47	U	0.235		-1.448169765	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
3-NITROANILINE	99-09-2	0	MG/KG	0.22	U	0.11		-2.207274913	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
3-NITROANILINE	99-09-2	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4,6-DINITRO-2-METHYLPHENOL	534-52-1	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-BROMOPHENYL PHENYL ETHER	101-55-3	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLORO-3-METHYLPHENOL		0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLOROANILINE	106-47-8	0	MG/KG	0.078	U	0.039		-3.244193633	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLOROANILINE	106-47-8	0	MG/KG	0.083	U	0.0415		-3.182061852	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.066	U	0.033		-3.411247718	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
4-METHYLPHENOL (p-CRESOL)	106-44-5	0	MG/KG	0.07	U	0.035		-3.352407217	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
4-NITROANILINE	100-01-6	0	MG/KG	0.05	U	0.025		-3.688879454	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4-NITROANILINE	100-01-6	0	MG/KG	0.053	U	0.0265		-3.630610546	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
4-NITROPHENOL	100-02-7	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
4-NITROPHENOL	100-02-7	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
ACENAPHTHENE	83-32-9	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ACENAPHTHENE	83-32-9	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ACENAPHTHYLENE	208-96-8	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ACETONE	67-64-1	0.037	MG/KG			0.037	0.037	-3.296837366	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
ACETONE	67-64-1	0.028	MG/KG			0.028	0.028	-3.575550769	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
ALUMINUM	7429-90-5	18400	MG/KG			18400	18400	9.820105944	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
ALUMINUM	7429-90-5	18600	MG/KG			18600	18600	9.83091686	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
ANTHRACENE	120-12-7	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ANTHRACENE	120-12-7	0	MG/KG	0.038	U	0.019		-3.9633163	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ANTIMONY	7440-36-0	0.067	MG/KG		J	0.067	0.067	-2.70306266	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
ANTIMONY	7440-36-0	0.1	MG/KG		J	0.1	0.1	-2.302585093	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
ARSENIC	7440-38-2	12.4	MG/KG			12.4	12.4	2.517696473	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
ARSENIC	7440-38-2	9.8	MG/KG			9.8	9.8	2.282382386	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
BARIUM	7440-39-3	291	MG/KG			291	291	5.673323267	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
BARIUM	7440-39-3	320	MG/KG			320	320	5.768320996	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
BENZENE	71-43-2	0.0016	MG/KG		J	0.0016	0.0016	-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BENZENE	71-43-2	0.0016	MG/KG		J	0.0016	0.0016	-6.43775165	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(a)ANTHRACENE	56-55-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(a)PYRENE	50-32-8	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
BENZO(a)PYRENE	50-32-8	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(b)FLUORANTHENE	205-99-2	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(g,h,i)PERYLENE	191-24-2	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.019	U	0.0095		-4.65646348	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZO(k)FLUORANTHENE	207-08-9	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZOIC ACID	65-85-0	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
BENZOIC ACID	65-85-0	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.23	U	0.115		-2.162823151	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZYL ALCOHOL	100-51-6	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
BENZYL BUTYL PHTHALATE	85-68-7	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BERYLLIUM	7440-41-7	0.93	MG/KG			0.93	0.93	-0.072570693	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
BERYLLIUM	7440-41-7	0.94	MG/KG			0.94	0.94	-0.061875404	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROETHOXY) METHANE	111-91-1	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)	111-44-4	0	MG/KG	0.046	U	0.023		-3.772261063	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-CHLOROISOPROPYL) ETHER	108-60-1	0	MG/KG	0.046	U	0.023		-3.772261063	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
bis(2-ETHYLHEXYL) PHTHALATE	117-81-7	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.00063	U	0.000315		-8.062937919	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMODICHLOROMETHANE	75-27-4	0	MG/KG	0.00077	U	0.000385		-7.862267224	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BROMOFORM	75-25-2	0	MG/KG	0.0049	U	0.00245		-6.011667254	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMOFORM	75-25-2	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
BROMOMETHANE	74-83-9	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
BROMOMETHANE	74-83-9	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CADMIUM	7440-43-9	0.31	MG/KG		J	0.31	0.31	-1.171182982	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
CADMIUM	7440-43-9	0.19	MG/KG		J	0.19	0.19	-1.660731207	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
CALCIUM	7440-70-2	142000	MG/KG			142000	142000	11.86358234	DTO041SB002	041SO022	SW6020	4.75	SO	168	12/20/2005
CALCIUM	7440-70-2	155000	MG/KG			155000	155000	11.9511804	DTO041SB002	041SO023	SW6020	9.75	SO	178	12/20/2005
CARBON DISULFIDE	75-15-0	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
CARBON DISULFIDE	75-15-0	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.00063	U	0.000315		-8.062937919	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CARBON TETRACHLORIDE	56-23-5	0	MG/KG	0.00077	U	0.000385		-7.862267224	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROBENZENE	108-90-7	0	MG/KG	0.00094	U	0.00047		-7.662777863	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROBENZENE	108-90-7	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROETHANE	75-00-3	0	MG/KG	0.0031	U	0.00155		-6.469500348	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROETHANE	75-00-3	0	MG/KG	0.0038	U	0.0019		-6.265901393	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROFORM	67-66-3	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROFORM	67-66-3	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHLOROMETHANE	74-87-3	0	MG/KG	0.0018	U	0.0009		-7.013115795	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
CHLOROMETHANE	74-87-3	0	MG/KG	0.0022	U	0.0011		-6.812445099	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
CHROMIUM, TOTAL	7440-47-3	18.6	MG/KG		J	18.6	18.6	2.923161581	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
CHROMIUM, TOTAL	7440-47-3	17.7	MG/KG		J	17.7	17.7	2.87356464	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
CHRYSENE	218-01-9	0	MG/KG	0.11	U	0.055		-2.900422094	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
CHRYSENE	218-01-9	0	MG/KG	0.12	U	0.06		-2.813410717	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
cis-1,2-DICHLOROETHYLENE	156-59-2	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005

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cis-1,2-DICHLOROETHYLENE	156-59-2	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.00076	U	0.00038		-7.875339305	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
cis-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.00093	U	0.000465		-7.673473152	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
COBALT	7440-48-4	6.6	MG/KG			6.6	6.6	1.887069649	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
COBALT	7440-48-4	6.8	MG/KG			6.8	6.8	1.916922612	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
COPPER	7440-50-8	14.5	MG/KG			14.5	14.5	2.674148649	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
COPPER	7440-50-8	13.1	MG/KG			13.1	13.1	2.57261223	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIBENZ(a,h)ANTHRACENE	53-70-3	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIBENZOFURAN	132-64-9	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIBENZOFURAN	132-64-9	0	MG/KG	0.026	U	0.013		-4.342805922	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.0032	U	0.0016		-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
DIBROMOCHLOROMETHANE	124-48-1	0	MG/KG	0.0039	U	0.00195		-6.239925906	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
DICHLORODIFLUOROMETHANE	75-71-8	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
DICHLORODIFLUOROMETHANE	75-71-8	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIETHYL PHTHALATE	84-66-2	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DIMETHYL PHTHALATE	131-11-3	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	0.035	U	0.0175		-4.045554398	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DI-n-BUTYL PHTHALATE	84-74-2	0	MG/KG	0.037	U	0.0185		-3.989984547	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
DI-n-OCTYLPHTHALATE	117-84-0	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
ETHYLBENZENE	100-41-4	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
ETHYLBENZENE	100-41-4	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
FLUORANTHENE	206-44-0	0	MG/KG	0.04	U	0.02		-3.912023005	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
FLUORANTHENE	206-44-0	0	MG/KG	0.043	U	0.0215		-3.839702344	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
FLUORENE	86-73-7	0	MG/KG	0.02	U	0.01		-4.605170186	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
FLUORENE	86-73-7	0	MG/KG	0.021	U	0.0105		-4.556380022	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROBENZENE	118-74-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.044	U	0.022		-3.816712826	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROBUTADIENE	87-68-3	0	MG/KG	0.047	U	0.0235		-3.750754858	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
HEXACHLOROCYCLOPENTADIENE	77-47-4	0	MG/KG	0.036	U	0.018		-4.017383521	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
HEXACHLOROETHANE	67-72-1	0	MG/KG	0.062	U	0.031		-3.473768074	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
HEXACHLOROETHANE	67-72-1	0	MG/KG	0.066	U	0.033		-3.411247718	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	0.031	U	0.0155		-4.166915255	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
INDENO(1,2,3-c,d)PYRENE	193-39-5	0	MG/KG	0.033	U	0.0165		-4.104394898	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
IRON	7439-89-6	17000	MG/KG			17000	17000	9.740968623	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
IRON	7439-89-6	16400	MG/KG			16400	16400	9.705036614	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
ISOPHORONE	78-59-1	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
ISOPHORONE	78-59-1	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
LEAD	7439-92-1	12.2	MG/KG			12.2	12.2	2.501435952	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
LEAD	7439-92-1	10.1	MG/KG			10.1	10.1	2.312535424	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
M,P-XYLENE (SUM OF ISOMERS)	1330-20-7	0	MG/KG	0.00097	U	0.000485		-7.631361667	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
M,P-XYLENE (SUM OF ISOMERS)	1330-20-7	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
MAGNESIUM	7439-95-4	20300	MG/KG			20300	20300	9.918376165	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
MAGNESIUM	7439-95-4	19200	MG/KG			19200	19200	9.862665558	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
MANGANESE	7439-96-5	445	MG/KG			445	445	6.098074282	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
MANGANESE	7439-96-5	469	MG/KG			469	469	6.150602768	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
MERCURY	7487-94-7	0.18	MG/KG			0.18	0.18	-1.714798428	DTO041SB002	041SO022	SW7471A	4.75	SO	0.13	12/20/2005
MERCURY	7487-94-7	0.074	MG/KG		J	0.074	0.074	-2.603690186	DTO041SB002	041SO023	SW7471A	9.75	SO	0.14	12/20/2005
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0.013	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYL ETHYL KETONE (2-BUTANONE)	78-93-3	0.0088	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108-10-1	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
METHYLENE CHLORIDE	75-09-2	0	MG/KG	0.001	U	0.0005		-7.60090246	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
METHYLENE CHLORIDE	75-09-2	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
MOLYBDENUM	7439-98-7	1.2	MG/KG		J	1.2	1.2	0.182321557	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
MOLYBDENUM	7439-98-7	1.3	MG/KG		J	1.3	1.3	0.262364264	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
NAPHTHALENE	91-20-3	0	MG/KG	0.039	U	0.0195		-3.937340813	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
NAPHTHALENE	91-20-3	0	MG/KG	0.041	U	0.0205		-3.887330393	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
NICKEL	7440-02-0	13.6	MG/KG			13.6	13.6	2.610069793	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
NICKEL	7440-02-0	14.1	MG/KG			14.1	14.1	2.646174797	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
NITROBENZENE	98-95-3	0	MG/KG	0.1	U	0.05		-2.995732274	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
NITROBENZENE	98-95-3	0	MG/KG	0.11	U	0.055		-2.900422094	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	0.024	U	0.012		-4.422848629	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
N-NITROSODI-n-PROPYLAMINE	621-64-7	0	MG/KG	0.026	U	0.013		-4.342805922	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.032	U	0.016		-4.135166557	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
N-NITROSODIPHENYLAMINE	86-30-6	0	MG/KG	0.034	U	0.017		-4.074541935	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
O-XYLENE (1,2-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.0032	U	0.0016		-6.43775165	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
O-XYLENE (1,2-DIMETHYLBENZENE)	1330-20-7	0	MG/KG	0.0039	U	0.00195		-6.239925906	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.89	U	0.445		-0.809680997	DTO041SB002	041SO022	SW8270C	4.75	SO	2.1	12/20/2005
PENTACHLOROPHENOL	87-86-5	0	MG/KG	0.94	U	0.47		-0.755022584	DTO041SB002	041SO023	SW8270C	9.75	SO	2.3	12/20/2005
pH		7.5	PH UNITS			7.5	7.5	2.014903021	DTO041SB002	041SO022	SW9045C	4.75	SO		12/20/2005
pH		7.8	PH UNITS			7.8	7.8	2.054123734	DTO041SB002	041SO023	SW9045C	9.75	SO		12/20/2005
PHENANTHRENE	85-01-8	0	MG/KG	0.021	U	0.0105		-4.556380022	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PHENANTHRENE	85-01-8	0	MG/KG	0.023	U	0.0115		-4.465408244	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
PHENOL	108-95-2	0	MG/KG	0.025	U	0.0125		-4.382026635	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PHENOL	108-95-2	0	MG/KG	0.027	U	0.0135		-4.305065594	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
POTASSIUM	7440-09-7	5740	MG/KG			5740	5740	8.655214489	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
POTASSIUM	7440-09-7	5520	MG/KG			5520	5520	8.616133139	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
PYRENE	129-00-0	0	MG/KG	0.028	U	0.014		-4.268697949	DTO041SB002	041SO022	SW8270C	4.75	SO	0.44	12/20/2005
PYRENE	129-00-0	0	MG/KG	0.03	U	0.015		-4.199705078	DTO041SB002	041SO023	SW8270C	9.75	SO	0.47	12/20/2005
SELENIUM	7782-49-2	0.94	MG/KG		J	0.94	0.94	-0.061875404	DTO041SB002	041SO022	SW6020	4.75	SO	1.3	12/20/2005
SELENIUM	7782-49-2	0.91	MG/KG		J	0.91	0.91	-0.094310679	DTO041SB002	041SO023	SW6020	9.75	SO	1.4	12/20/2005
SILVER	7440-22-4	0.22	MG/KG		J	0.22	0.22	-1.514127733	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
SILVER	7440-22-4	0.19	MG/KG		J	0.19	0.19	-1.660731207	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
SODIUM	7440-23-5	882	MG/KG			882	882	6.782192056	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
SODIUM	7440-23-5	2390	MG/KG			2390	2390	7.779048645	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
STYRENE	100-42-5	0	MG/KG	0.00091	U	0.000455		-7.695213139	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
STYRENE	100-42-5	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.00073	U	0.000365		-7.915613204	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TETRACHLOROETHYLENE (PCE)	127-18-4	0	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
THALLIUM	7440-28-0	0	MG/KG	0.24	U	0.12		-2.120263536	DTO041SB002	041SO022	SW6020	4.75	SO	0.67	12/20/2005
THALLIUM	7440-28-0	0	MG/KG	0.26	U	0.13		-2.040220829	DTO041SB002	041SO023	SW6020	9.75	SO	0.71	12/20/2005
TOLUENE	108-88-3	0.0013	MG/KG	0.00073	U	0.000365		-7.915613204	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TOLUENE	108-88-3	0.0016	MG/KG	0.00089	U	0.000445		-7.717436276	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
trans-1,2-DICHLOROETHENE	156-60-5	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005

PARAMETER	CASNUM	RES	UNIT	DETLIMIT	VQUAL	NEW RESULT	N Detects	LOG(RES)	LOCATION_CODE	SAMPLE_NO	USER_TEST_PANEL	(SED+SBD)/2	MATRIX	RL	LOGDATE
trans-1,2-DICHLOROETHENE	156-60-5	0	MG/KG	0.0013	U	0.00065		-7.338538195	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.0009	U	0.00045		-7.706262975	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
trans-1,3-DICHLOROPROPENE	542-75-6	0	MG/KG	0.0011	U	0.00055		-7.50559228	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.00072	U	0.00036		-7.929406527	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TRICHLOROETHYLENE (TCE)	79-01-6	0	MG/KG	0.00087	U	0.000435		-7.740164527	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.00096	U	0.00048		-7.641724454	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
TRICHLOROFLUOROMETHANE	75-69-4	0	MG/KG	0.0012	U	0.0006		-7.418580903	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
VANADIUM	7440-62-2	37.3	MG/KG			37.3	37.3	3.618993327	DTO041SB002	041SO022	SW6020	4.75	SO	33.6	12/20/2005
VANADIUM	7440-62-2	33.6	MG/KG		J	33.6	33.6	3.514526067	DTO041SB002	041SO023	SW6020	9.75	SO	35.6	12/20/2005
VINYL ACETATE	108-05-4	0	MG/KG	0.006	U	0.003		-5.80914299	DTO041SB002	041SO022	SW8260B	4.75	SO	0.012	12/20/2005
VINYL ACETATE	108-05-4	0	MG/KG	0.0073	U	0.00365		-5.613028111	DTO041SB002	041SO023	SW8260B	9.75	SO	0.015	12/20/2005
VINYL CHLORIDE	75-01-4	0	MG/KG	0.0019	U	0.00095		-6.959048573	DTO041SB002	041SO022	SW8260B	4.75	SO	0.006	12/20/2005
VINYL CHLORIDE	75-01-4	0	MG/KG	0.0023	U	0.00115		-6.767993337	DTO041SB002	041SO023	SW8260B	9.75	SO	0.007	12/20/2005
ZINC	7440-66-6	58.6	MG/KG			58.6	58.6	4.070734697	DTO041SB002	041SO022	SW6020	4.75	SO	3.4	12/20/2005
ZINC	7440-66-6	54.5	MG/KG			54.5	54.5	3.998200702	DTO041SB002	041SO023	SW6020	9.75	SO	3.6	12/20/2005

ATTACHMENT 2

SUMMARY STATISTICS, BOX-AND-WHISKER PLOTS, AND HISTOGRAMS FOR CHEMICALS IN SOILS

SUMMARY STATISTICS TABLES

(ATTACHMENT 2)

SUMMARY STATISTICS FOR SWMU-41 AREA 1 SURFACE SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency Detects	Total	Percent	Range of Values (mg/Kg)[a/] Detected Concentrations Minimum	Maximum	Detection Limits Minimum	Maximum	Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
Volatile Organic Compounds									
Phenanthrene	1	2	50	0.090		0.032		NA[d/]	22,000
Semivolatile Organic Compounds									
Benzo(a)anthracene	1	2	50	0.17		0.041		NA	0.62
Benzo(g,h,i)perylene	2	2	100	0.94	3.5	-- [e/]	--	NA	2300
Chrysene	1	2	50	0.47		0.032		NA	62
Fluoranthene	1	2	50	0.15		0.032		NA	2300
Pyrene	2	2	100	0.32	0.36	--	--	NA	2300
Petroleum Hydrocarbons									
Petroleum Hydrocarbons (Total)	2	2	100	170	810	--	--	NA	NA
Inorganics									
Aluminum	2	2	100	12,000	22,000	--	--	**19,000**	76,000
Arsenic	2	2	100	8.0	28	--	--	**13**	**0.39**
Barium	2	2	100	290	320	--	--	470	5400
Beryllium	2	2	100	0.67	0.91	--	--	1.1	150
Cadmium	1	2	50	52		1.2		**0.80**	74
Calcium	2	2	100	100,000	140,000	--	--	200,000	EN (Not Toxic)[f/]
Chromium, Total	2	2	100	20	390	--	--	**17**	1500
Cobalt	2	2	100	9.1	330	--	--	**7.5**	900
Copper	2	2	100	18	120	--	--	**20**	3100
Iron	2	2	100	18,000	160,000	--	--	**20,000**	EN (200,000)
Lead	2	2	100	14	70	--	--	**22**	400
Magnesium	2	2	100	18,000	25,000	--	--	31,000	EN (550,000)
Manganese	2	2	100	300	660	--	--	**470**	1800
Mercury	2	2	100	0.48	45	--	--	**0.20**	**23**
Nickel	2	2	100	15	130	--	--	**15**	1600
Potassium	2	2	100	4400	7300	--	--	7900	EN (Not Toxic)

SUMMARY STATISTICS FOR SWMU-41 AREA 1 SURFACE SOIL SAMPLES (CONTINUED)

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency			Range of Values (mg/Kg)[a/]				Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
				Detected Concentrations		Detection Limits			
	Detects	Total	Percent	Minimum	Maximum	Minimum	Maximum		
Selenium	1	2	50	0.79		0.45		2.0	390
Silver	1	2	50	15		0.80		ND[g/]	390
Sodium	2	2	100	910	980	--	--	12,000	EN (Not Toxic)
Tin	1	2	50	20		7.4		NA	47,000
Vanadium	2	2	100	31	33	--	--	**30**	78
Zinc	2	2	100	75	930	--	--	**67**	23,000

[a/] mg/Kg = Milligram per kilogram. Surface soil samples are defined as samples collected at or above 0.5 ft bgs. The arithmetic mean and the standard deviation were not calculated since there were less than eight samples collected.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] NA = Not available.

[e/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

[f/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

[g/] ND = Not detected. Detection limits of silver in backgound soil samples ranged from 2 to 0.8 mg/Kg (Parsons, 2001a).

Bolded Values = Maximum detected concentration exceeds this value.

SUMMARY STATISTICS FOR SWMU-41 AREA 1 SUBSURFACE SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency Detects	Total	Percent	Range of Values (mg/Kg)[a/] Detected Concentrations Minimum	Maximum	Detection Limits Minimum	Maximum	Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
Petroleum Hydrocarbons									
Petroleum Hydrocarbons (Total)	3	5	60	32	240	10		NA[d/]	NA
Inorganics									
Aluminum	5	5	100	12,000	35,000	-- [e/]	--	**19,000**	76,000
Arsenic	5	5	100	8.6	12	--	--	13	**0.39**
Barium	5	5	100	240	390	--	--	470	5400
Beryllium	3	5	60	0.60	1.6	0.43		**1.1**	150
Boron	5	5	100	14	36	--	--	NA	16,000
Calcium	5	5	100	140,000	200,000	--	--	200,000	EN (Not Toxic)[f/]
Chromium, Total	5	5	100	8.5	27	--	--	**17**	1500
Cobalt	2	5	40	9.2	11	2.5		**7.5**	900
Copper	5	5	100	11	21	--	--	**20**	3100
Iron	5	5	100	14,000	27,000	--	--	**20,000**	EN (200,000)
Lead	5	5	100	9.2	12	--	--	22	400
Magnesium	5	5	100	16,000	27,000	--	--	31,000	EN (550,000)
Manganese	5	5	100	310	480	--	--	**470**	1800
Mercury	1	5	20	0.85		0.050		**0.20**	23
Nickel	5	5	100	8.1	17	--	--	**15**	1600
Potassium	5	5	100	4100	9300	--	--	**7900**	EN (Not Toxic)
Sodium	5	5	100	1200	13,000	--	--	**12,000**	EN (Not Toxic)
Vanadium	5	5	100	17	39	--	--	**30**	78
Zinc	5	5	100	28	71	--	--	**67**	23,000

[a/] mg/Kg = Milligram per kilogram. Subsurface soil samples are defined as samples collected below 0.5 ft bgs. The arithmetic mean and the standard deviation were not calculated since there were less than eight samples collected.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] NA = Not available.

[e/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

[f/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

Bolded Values = Maximum detected concentration exceeds this value.

SUMMARY STATISTICS FOR SWMU-41 AREA 1 MIXED SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency Detects	Total	Percent	Range of Values (mg/Kg)[a/] Detected Concentrations Minimum	Maximum	Detection Limits Minimum	Maximum	Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
Volatile Organic Compounds									
Phenanthrene	1	6	17	0.090		0.032		NA[d/]	22,000
Semivolatile Organic Compounds									
Benzo(a)anthracene	1	6	17	0.17		0.041		NA	0.62
Benzo(g,h,i)perylene	2	6	33	0.94	3.5	0.18		NA	2300
Chrysene	1	6	17	0.47		0.032		NA	62
Fluoranthene	1	6	17	0.15		0.032		NA	2300
Pyrene	2	6	33	0.32	0.36	0.083		NA	2300
Petroleum Hydrocarbons									
Petroleum Hydrocarbons (Total)	5	6	83	32	810	10		NA	NA
Inorganics									
Aluminum	6	6	100	12,000	35,000	-- [e/]	--	**19,000**	76,000
Arsenic	6	6	100	8.0	28	--	--	**13**	**0.39**
Barium	6	6	100	240	320	--	--	470	5400
Beryllium	5	6	83	0.60	1.6	0.43		**1.1**	150
Boron	4	6	67	16	36	28	50	NA	16,000
Cadmium	1	6	17	52		1.2		**0.80**	74
Calcium	6	6	100	100,000	170,000	--	--	200,000	EN (Not Toxic)[f/]
Chromium, Total	6	6	100	10	390	--	--	**17**	1500
Cobalt	4	6	67	9.1	330	2.5		**7.5**	900
Copper	6	6	100	13	120	--	--	**20**	3100
Iron	6	6	100	15,000	160,000	--	--	**20,000**	EN (200,000)
Lead	6	6	100	9.2	70	--	--	**22**	400
Magnesium	6	6	100	18,000	27,000	--	--	31,000	EN (550,000)
Manganese	6	6	100	300	660	--	--	**470**	1800
Mercury	3	6	50	0.48	45	0.050		**0.20**	**23**
Nickel	6	6	100	10	130	--	--	**15**	1600

SUMMARY STATISTICS FOR SWMU-41 AREA 1 MIXED SOIL SAMPLES (CONTINUED)

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency			Range of Values (mg/Kg)[a/]				Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
				Detected Concentrations		Detection Limits			
	Detects	Total	Percent	Minimum	Maximum	Minimum	Maximum		
Potassium	6	6	100	4400	9300	--	--	**7900**	EN (Not Toxic)
Selenium	1	6	17	0.79		0.45		2.0	390
Silver	1	6	17	15		0.80		ND [g/]	390
Sodium	6	6	100	910	13,000	--	--	**12,000**	EN (Not Toxic)
Tin	1	6	17	20		7.4		NA	47,000
Vanadium	6	6	100	18	39	--	--	**30**	78
Zinc	6	6	100	36	930	--	--	**67**	23,000

[a/] mg/Kg = Milligram per kilogram. Mixed soil samples are defined as samples collected at or above 10 ft bgs. The arithmetic mean and the standard deviation were not calculated since there were less than eight samples collected.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] NA = Not available.

[e/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

[f/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

[g/] ND = Not detected. Detection limits of silver in backgound soil samples ranged from 2 to 0.8 mg/Kg (Parsons, 2001a).

Bolded Values = Maximum detected concentration exceeds this value.

SUMMARY STATISTICS FOR SWMU-41 AREA 2 SUBSURFACE SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency			Range of Values (mg/Kg)[a/]				Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
				Detected Concentrations		Detection Limits			
	Detects	Total	Percent	Minimum	Maximum	Minimum	Maximum		
Volatile Organic Compounds									
Acetone	3	3	100	0.021	0.037	--[d/]	--	NA[e/]	14,000
Benzene	3	3	100	0.0014	0.0016	--	--	NA	0.64
Inorganics									
Aluminum	3	3	100	18,000	20,000	--	--	**19,000**	76,000
Antimony	2	2	100	0.067	0.10	--	--	10	31
Arsenic	3	3	100	9.8	14	--	--	**13**	**0.39**
Barium	3	3	100	220	320	--	--	470	5400
Beryllium	3	3	100	0.93	0.99	--	--	1.1	150
Cadmium	3	3	100	0.19	0.31	--	--	0.80	74
Calcium	3	3	100	120,000	160,000	--	--	200,000	EN (Not Toxic)[f/]
Chromium, Total	3	3	100	18	19	--	--	**17**	1500
Cobalt	3	3	100	6.6	6.9	--	--	7.5	900
Copper	3	3	100	13	15	--	--	20	3100
Iron	3	3	100	16,000	18,000	--	--	20,000	EN (200,000)
Lead	3	3	100	10	12	--	--	22	400
Magnesium	3	3	100	19,000	21,000	--	--	31,000	EN (550,000)
Manganese	3	3	100	420	470	--	--	470	1800
Mercury	3	3	100	0.0090	0.18	--	--	0.20	23
Molybdenum	3	3	100	1.2	1.3	--	--	NA	390
Nickel	3	3	100	14	14	--	--	15	1600
Potassium	3	3	100	5500	5800	--	--	7900	EN (Not Toxic)
Selenium	3	3	100	0.91	0.99	--	--	2.0	390

SUMMARY STATISTICS FOR SWMU-41 AREA 2 SUBSURFACE SOIL SAMPLES (CONTINUED)

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency			Range of Values (mg/Kg)[a/]				Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
				Detected Concentrations		Detection Limits			
	Detects	Total	Percent	Minimum	Maximum	Minimum	Maximum		
Silver	3	3	100	0.17	0.22	--	--	ND[g/]	390
Sodium	3	3	100	880	3300	--	--	12,000	EN (Not Toxic)
Vanadium	3	3	100	34	37	--	--	**30**	78
Zinc	3	3	100	54	59	--	--	67	23,000

[a/] mg/Kg = Milligram per kilogram. Subsurface soil samples are defined as samples collected below 0.5 ft bgs. The arithmetic mean and the standard deviation were not calculated since there were less than eight samples collected.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

[e/] NA = Not available.

[f/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

[g/] ND = Not detected. Detection limits of silver in backgound soil samples ranged from 2 to 0.8 mg/Kg (Parsons, 2001a).

Bolded Values = Maximum detected concentration exceeds this value.

SUMMARY STATISTICS FOR SWMU-41 AREA 2 MIXED SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency Detects	Total	Percent	Range of Values (mg/Kg)[a/] Detected Concentrations Minimum	Maximum	Detection Limits Minimum	Maximum	Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
Volatile Organic Compounds									
Acetone	2	2	100	0.028	0.037	-- [d/]	--	NA [e/]	14,000
Benzene	2	2	100	0.0016		--	--	NA	0.64
Inorganics									
Aluminum	2	2	100	18,000	19,000	--	--	19,000	76,000
Antimony	2	2	100	0.067	0.10	--	--	10	31
Arsenic	2	2	100	9.8	12	--	--	13	**0.39**
Barium	2	2	100	290	320	--	--	470	5400
Beryllium	2	2	100	0.93	0.94	--	--	1.1	150
Cadmium	2	2	100	0.19	0.31	--	--	0.80	74
Calcium	2	2	100	140,000	160,000	--	--	200,000	EN (Not Toxic) [f/]
Chromium, Total	2	2	100	18	19	--	--	**17**	1500
Cobalt	2	2	100	6.6	6.8	--	--	7.5	900
Copper	2	2	100	13	15	--	--	20	3100
Iron	2	2	100	16,000	17,000	--	--	20,000	EN (200,000)
Lead	2	2	100	10	12	--	--	22	400
Magnesium	2	2	100	19,000	20,000	--	--	31,000	EN (550,000)
Manganese	2	2	100	450	470	--	--	470	1800
Mercury	2	2	100	0.074	0.18	--	--	0.20	23
Molybdenum	2	2	100	1.2	1.3	--	--	NA	390
Nickel	2	2	100	14	14	--	--	15	1600
Potassium	2	2	100	5500	5700	--	--	7900	EN (Not Toxic)
Selenium	2	2	100	0.91	0.94	--	--	2.0	390
Silver	2	2	100	0.19	0.22	--	--	ND [g/]	390

SUMMARY STATISTICS FOR SWMU-41 AREA 2 MIXED SOIL SAMPLES (CONTINUED)

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency			Range of Values (mg/Kg)[a/]				Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
				Detected Concentrations		Detection Limits			
	Detects	Total	Percent	Minimum	Maximum	Minimum	Maximum		
Sodium	2	2	100	880	2400	--	--	12,000	EN (Not Toxic)
Vanadium	2	2	100	34	37	--	--	**30**	78
Zinc	2	2	100	55	59	--	--	67	23,000

[a/] mg/Kg = Milligram per kilogram. Mixed soil samples are defined as samples collected at or above 10 ft bgs. The arithmetic mean and the standard deviation were not calculated since there were less than eight samples collected.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

[e/] NA = Not available.

[f/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

[g/] ND = Not detected. Detection limits of silver in backgound soil samples ranged from 2 to 0.8 mg/Kg (Parsons, 2001a).

Bolded Values = Maximum detected concentration exceeds this value.

SUMMARY STATISTICS FOR SWMU-41 MONITORING WELL SUBSURFACE SOIL SAMPLES

DUGWAY PROVING GROUND, UTAH

Chemical	Detection Frequency Detects	Total	Percent	Range of Values (mg/Kg)[a/] Detected Concentrations Minimum	Maximum	Detection Limits Minimum	Maximum	Mean (mg/Kg)	Standard Devation (mg/Kg)	Background Comparison Value (mg/Kg)[b/]	Residential Soil PRG (mg/Kg)[c/]
Semivolatile Organic Compounds											
Diethyl Phthalate	1	12	8	2.9		0.24		~[d/]	~	NA[e/]	49,000
Inorganics											
Aluminum	12	12	100	8000	20,000	--[f/]	--	15,000	3800	**19,000**	76,000
Arsenic	12	12	100	5.4	20	--	--	11	3.5	**13**	**0.39**
Barium	12	12	100	84	480	--	--	280	130	**470**	5400
Beryllium	9	12	75	0.70	1.1	0.43		0.79	0.36	1.1	150
Boron	12	12	100	13	43	--	--	24	8.4	NA	16,000
Calcium	12	12	100	54,000	220,000	--	--	160,000	59,000	**200,000**	EN (Not Toxic)[g/]
Chromium, Total	12	12	100	8.1	16	--	--	12	2.9	17	1500
Cobalt	10	12	83	4.1	7.4	2.5		5.4	2.2	7.5	900
Copper	12	12	100	4.6	22	--	--	12	5.1	**20**	3100
Iron	12	12	100	11,000	19,000	--	--	16,000	2800	20,000	EN (200,000)
Lead	10	12	83	4.6	12	5.8	6.0	8.3	3.0	22	400
Magnesium	12	12	100	11,000	26,000	--	--	19,000	4200	31,000	EN (550,000)
Manganese	12	12	100	170	510	--	--	350	100	**470**	1800
Nickel	12	12	100	5.2	13	--	--	9.7	2.5	15	1600
Potassium	12	12	100	2600	6900	--	--	5000	1100	7900	EN (Not Toxic)
Sodium	12	12	100	2100	15,000	--	--	6700	4400	**12,000**	EN (Not Toxic)
Vanadium	12	12	100	16	30	--	--	24	4.2	30	78
Zinc	12	12	100	22	52	--	--	37	8.8	67	23,000

[a/] mg/Kg = Milligram per kilogram. Subsurface soil samples are defined as samples collected below 0.5 ft bgs.

[b/] Lower of the 95-percent upper tolerance limit or the maximum detected background soil concentration (Parsons, 2001a).

[c/] PRG = Preliminary Remediation Goal (USEPA Region 9, 2004). PRG for cadmium based on USEPA (USEPA, 2003e) toxicity value in food rather than water. Total chromium is assumed to consist of CrVI:CrIII at a ratio of 1:6 (USEPA Region 9, 2004) and PRG based on unadjusted toxicity data from USEPA (USEPA, 2003e).

[d/] "~" = Chemical did not meet the minimum sample number ($N \geq 8$) and detection frequency (≥ 20) required to calculate mean and standard deviation.

[e/] NA = Not available.

[f/] "--" = Detection limits not reported because chemical was detected in 100-percent of the samples.

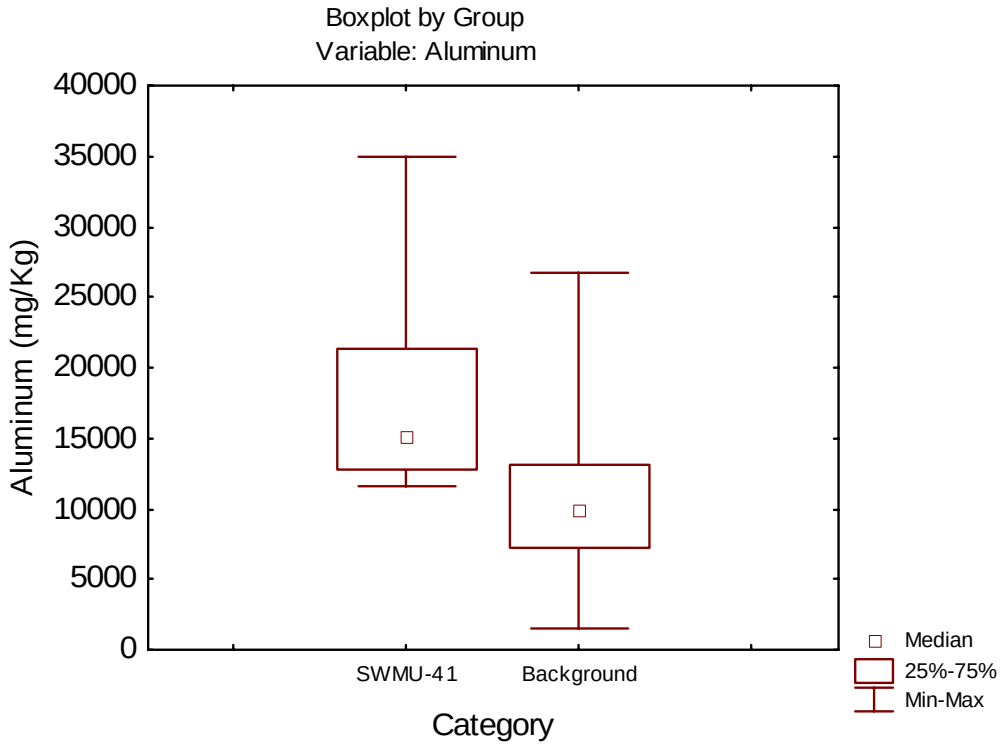
[g/] EN = Essential nutrient. Value in parenthesis taken from Table 2.2 of the Risk Assumptions Document (Parsons, 2002a).

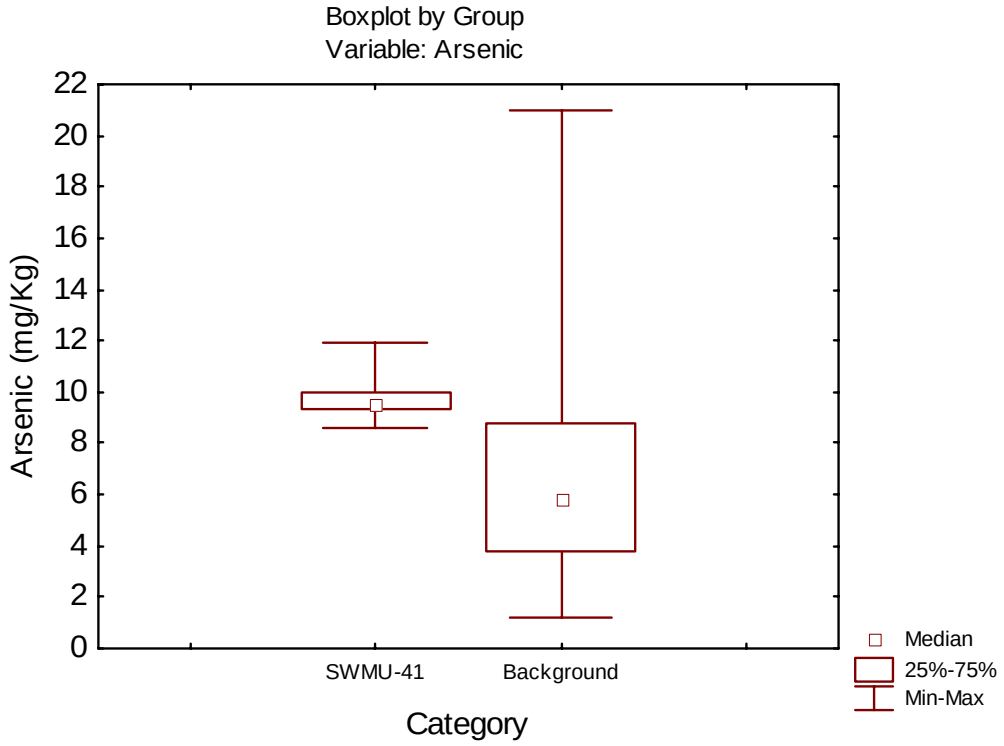
Bolded Values = Maximum detected concentration exceeds this value.

BOX-AND-WHISKER PLOTS

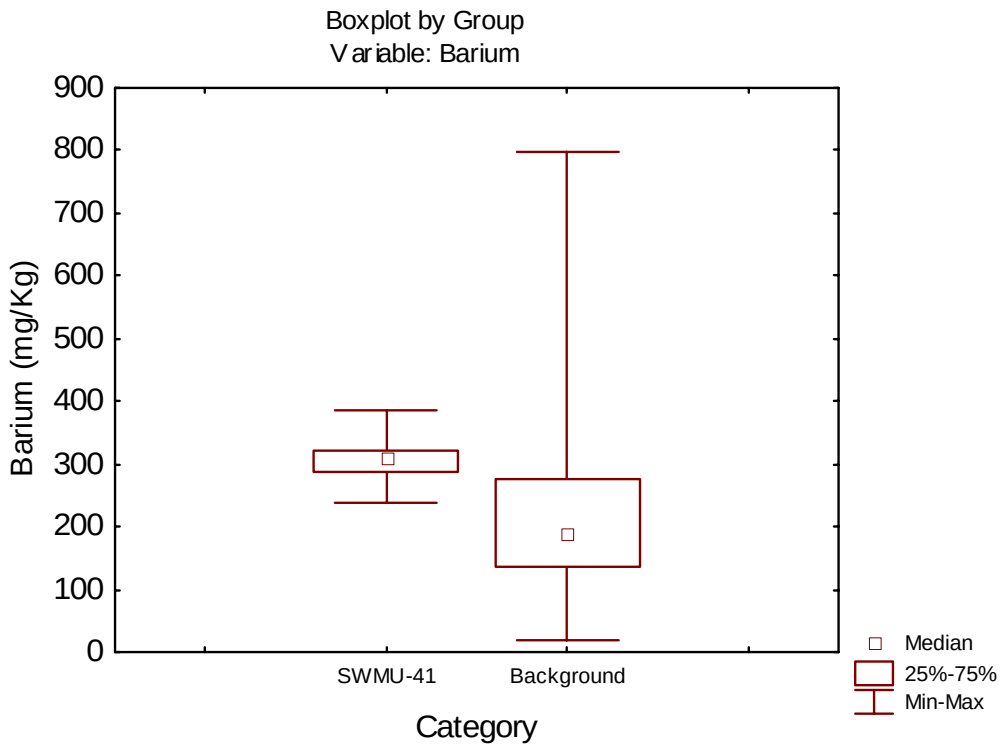
(ATTACHMENT 2)

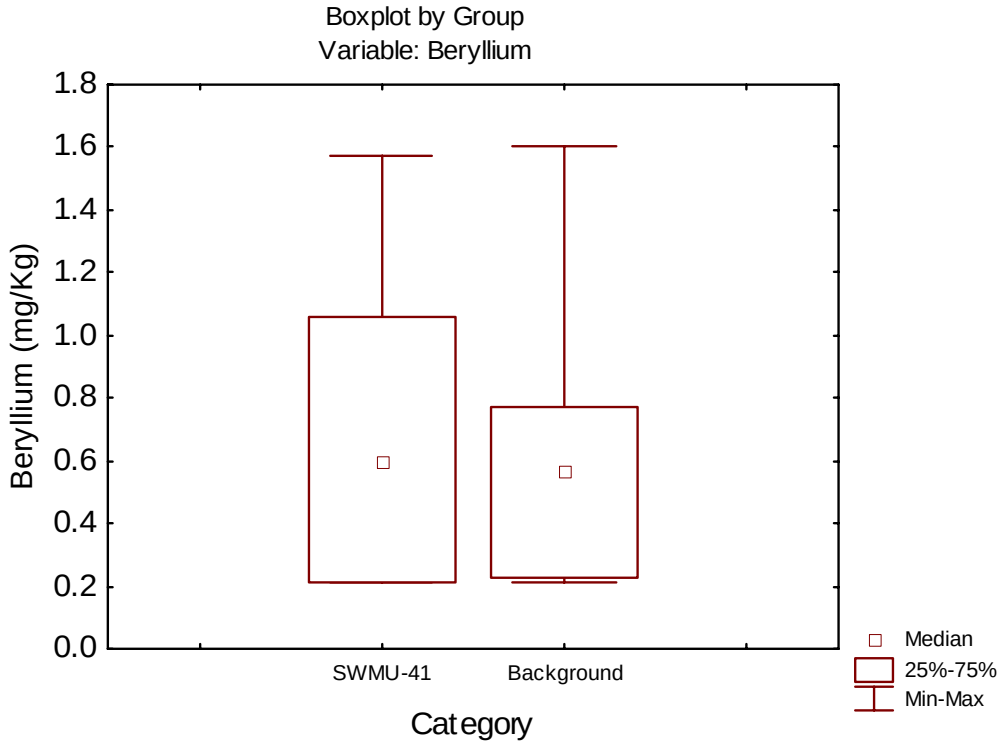
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



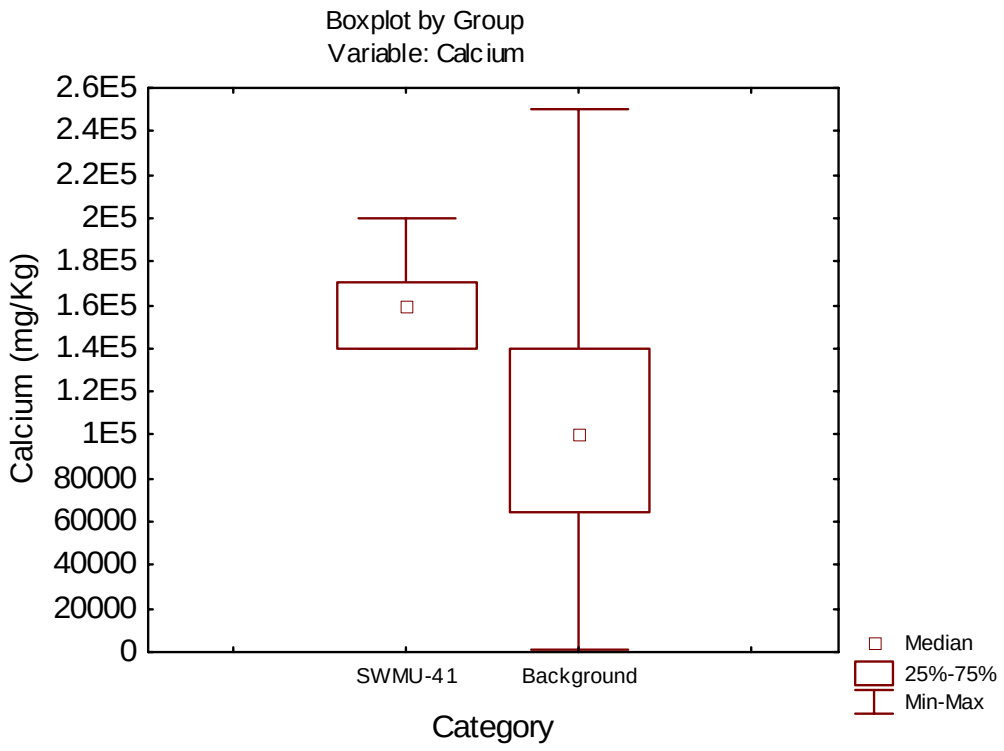


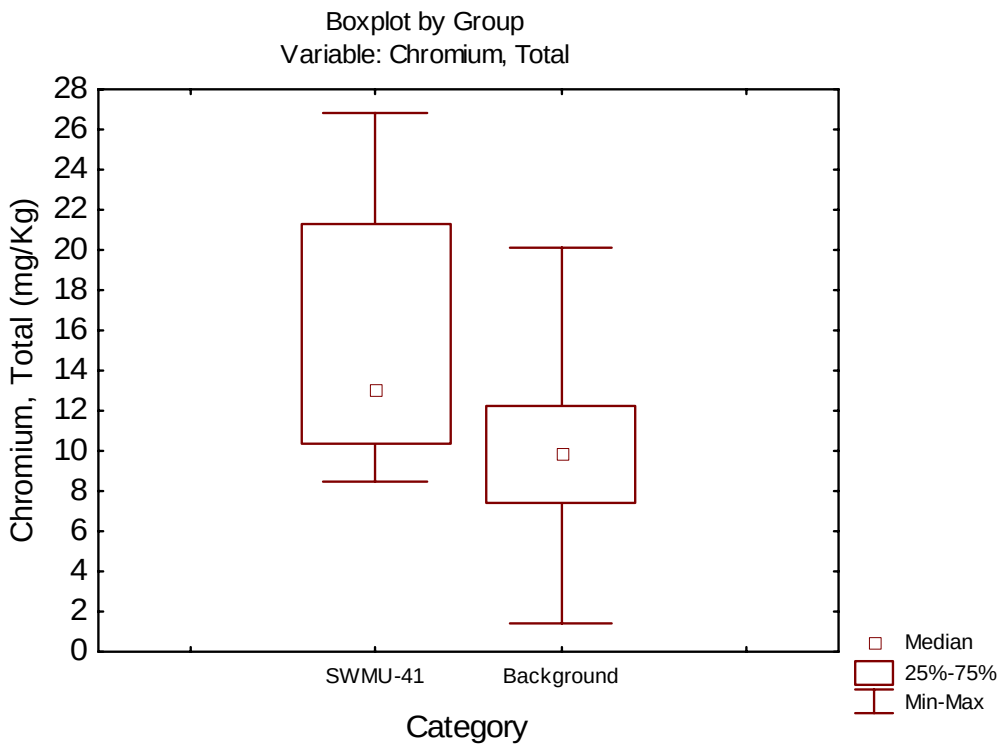
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



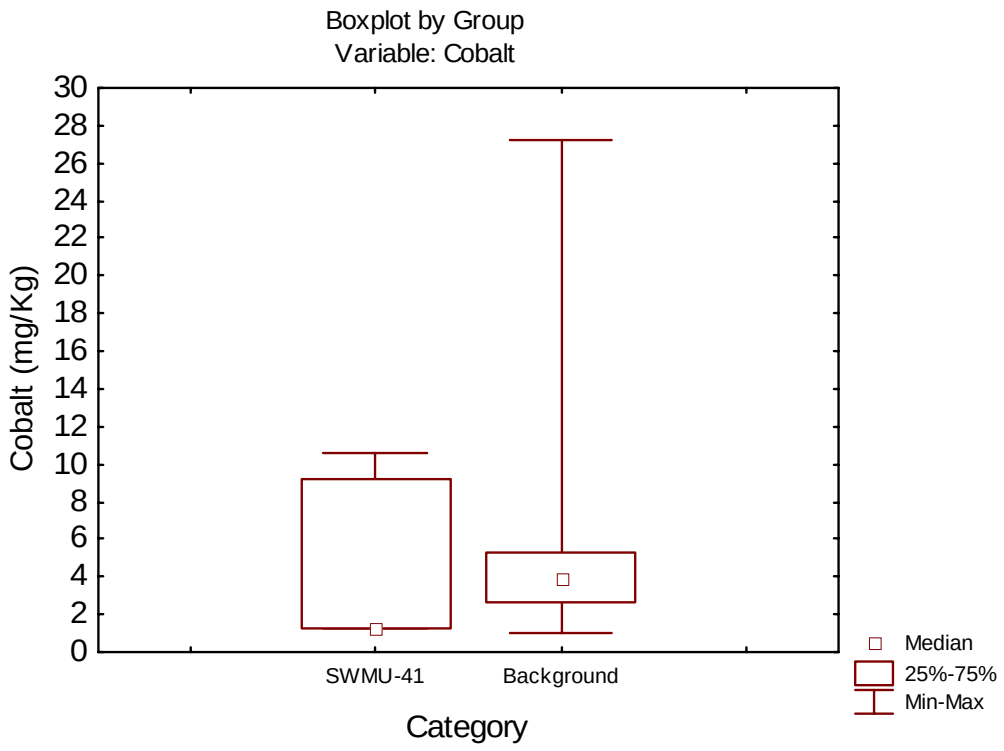


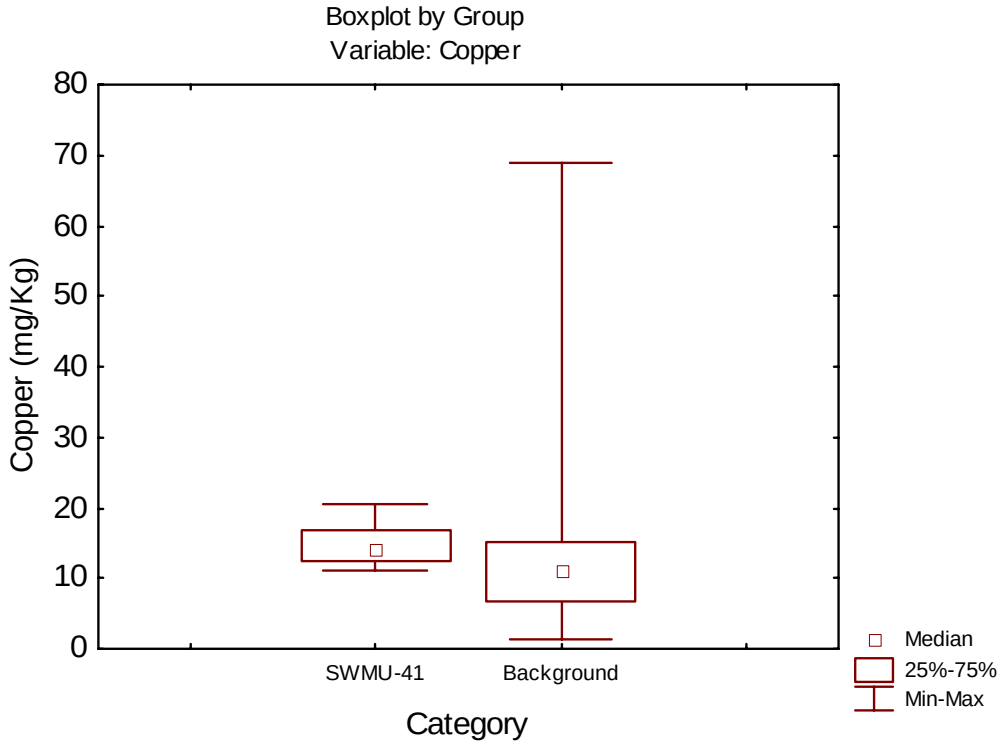
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



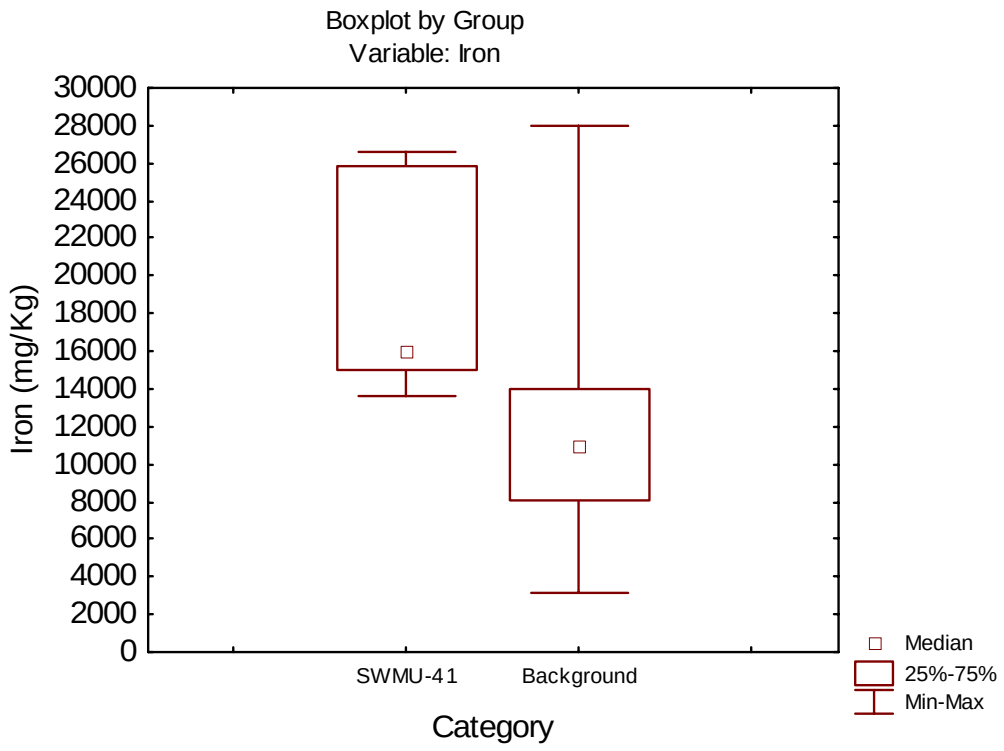


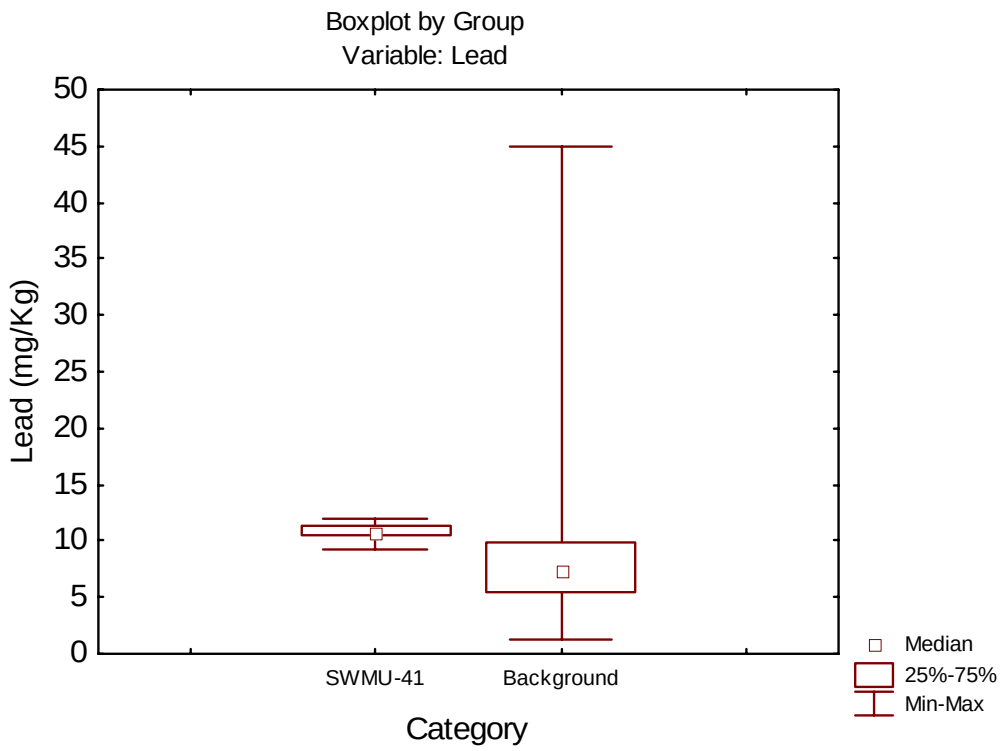
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



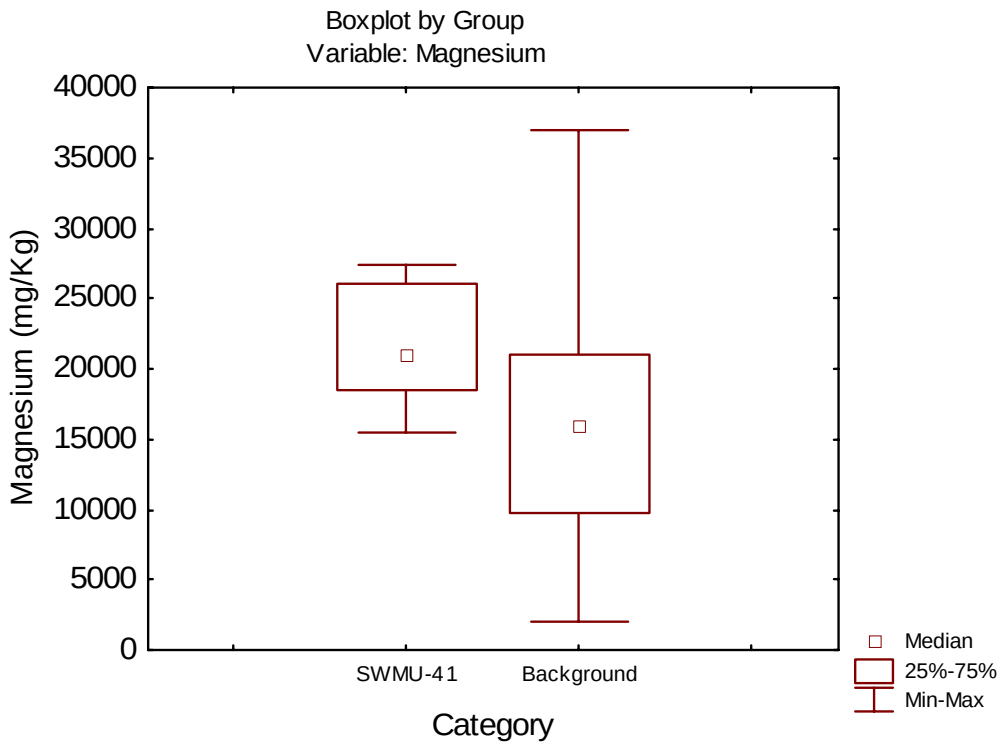


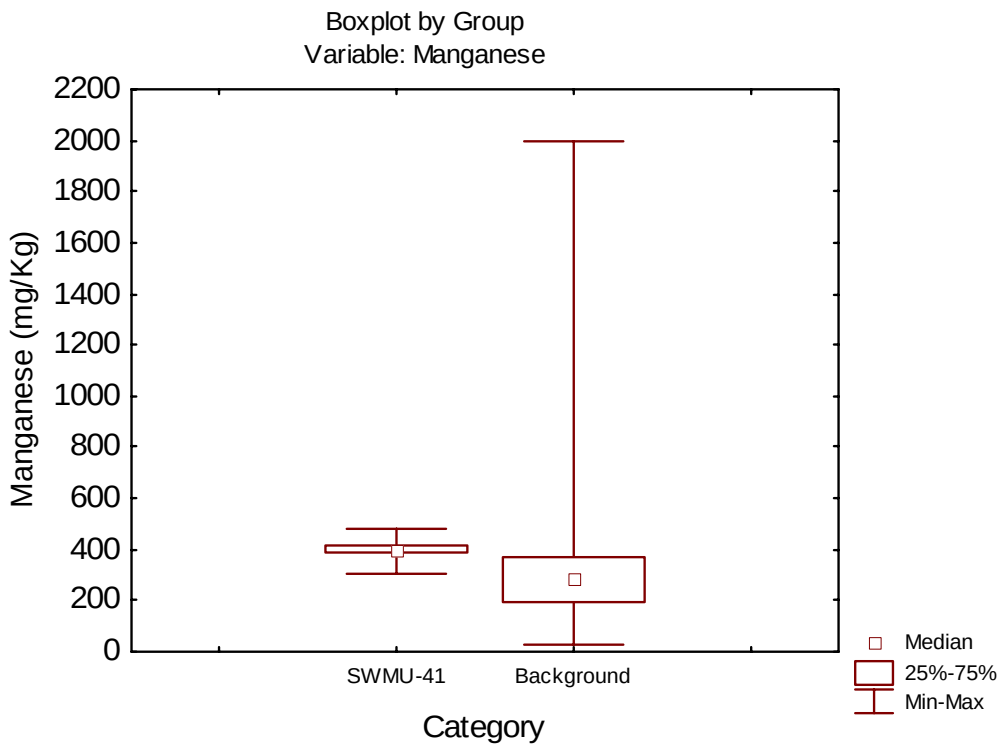
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



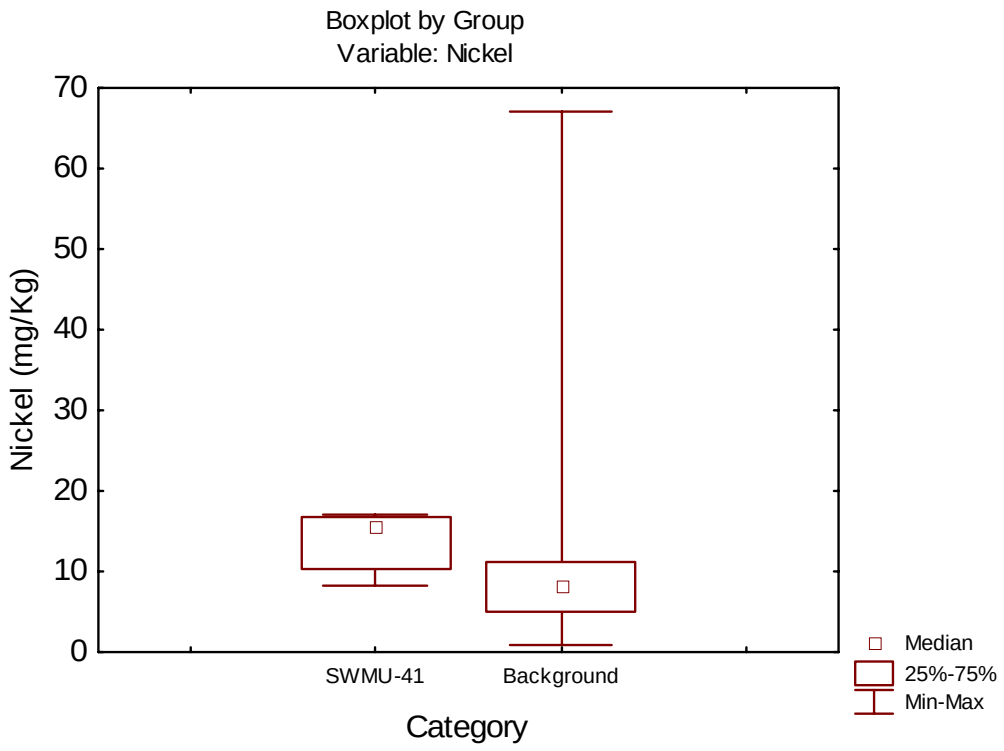


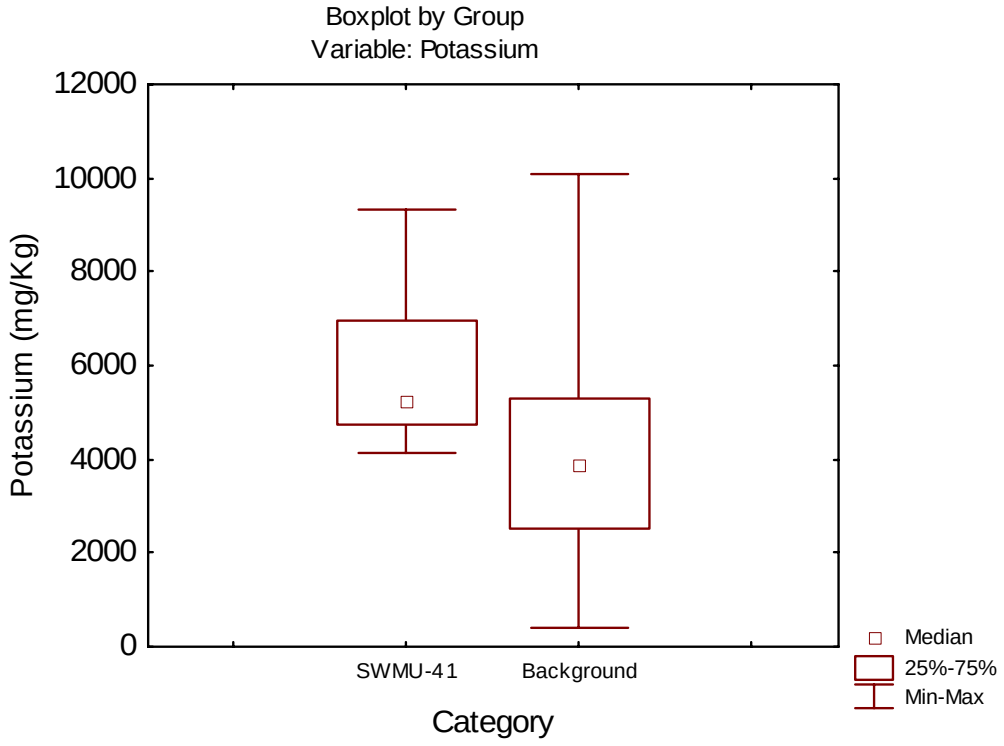
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



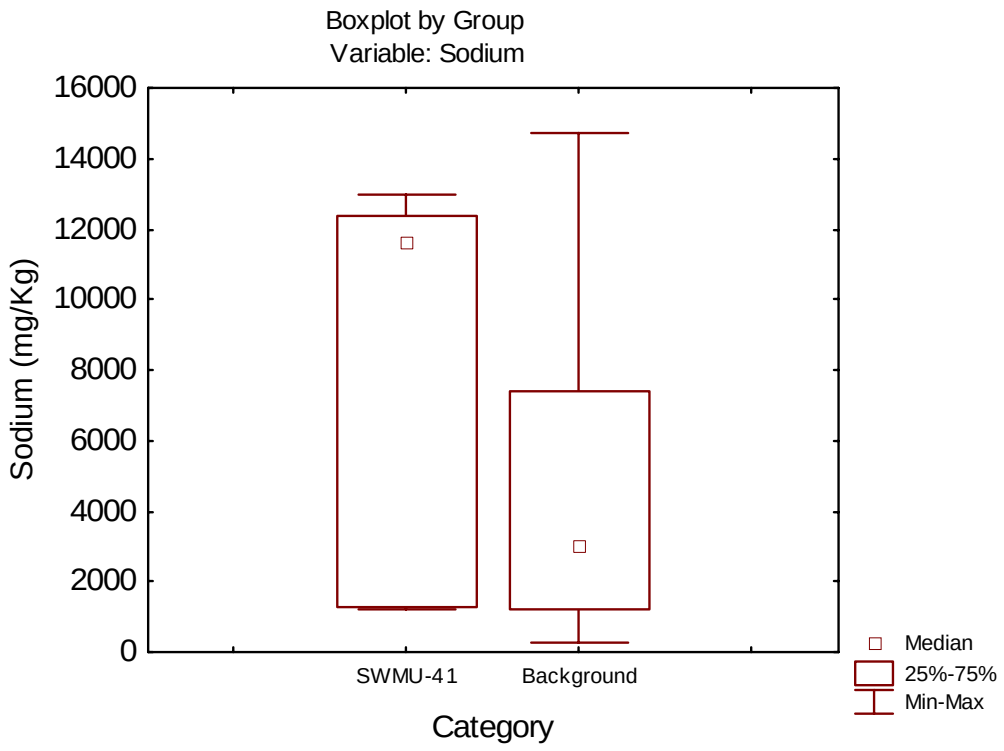


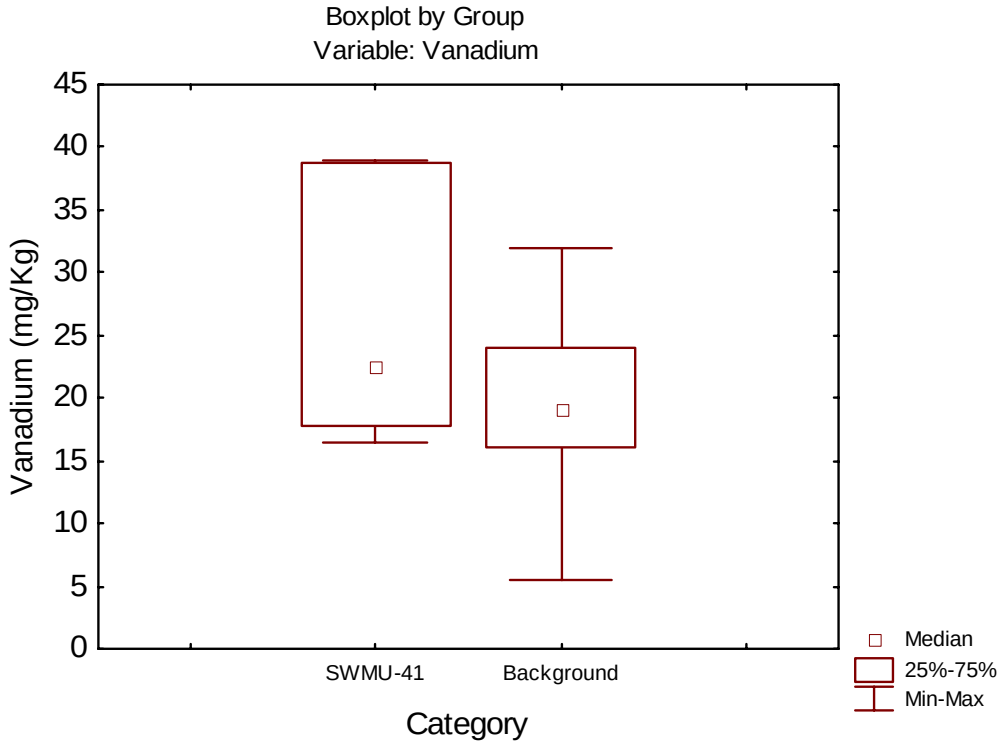
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS



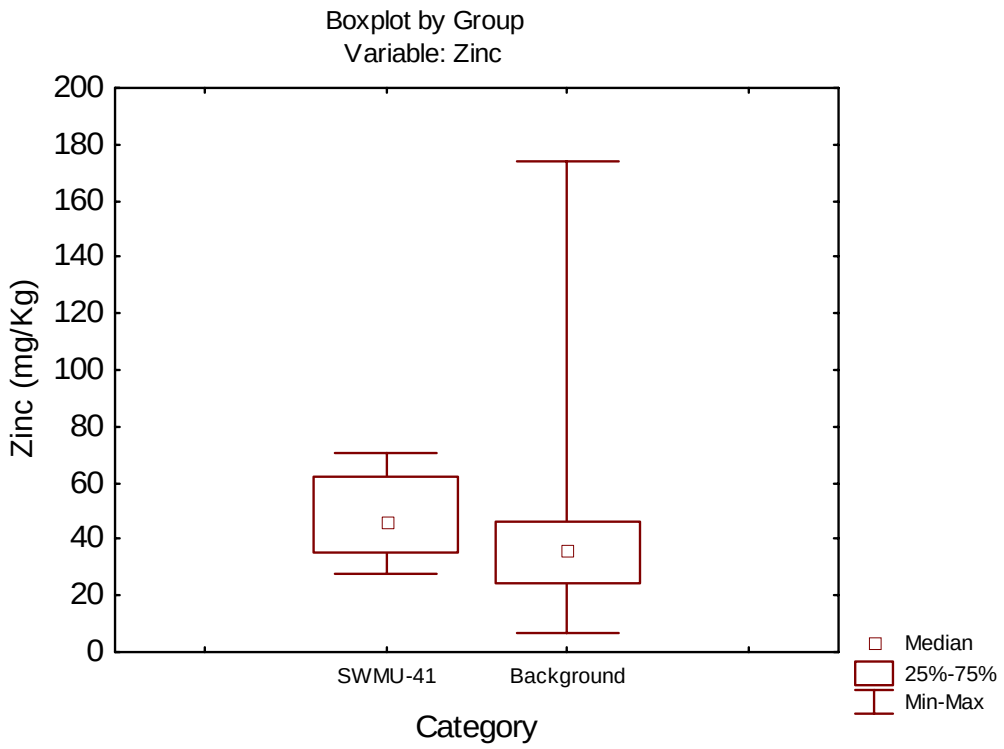


BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS

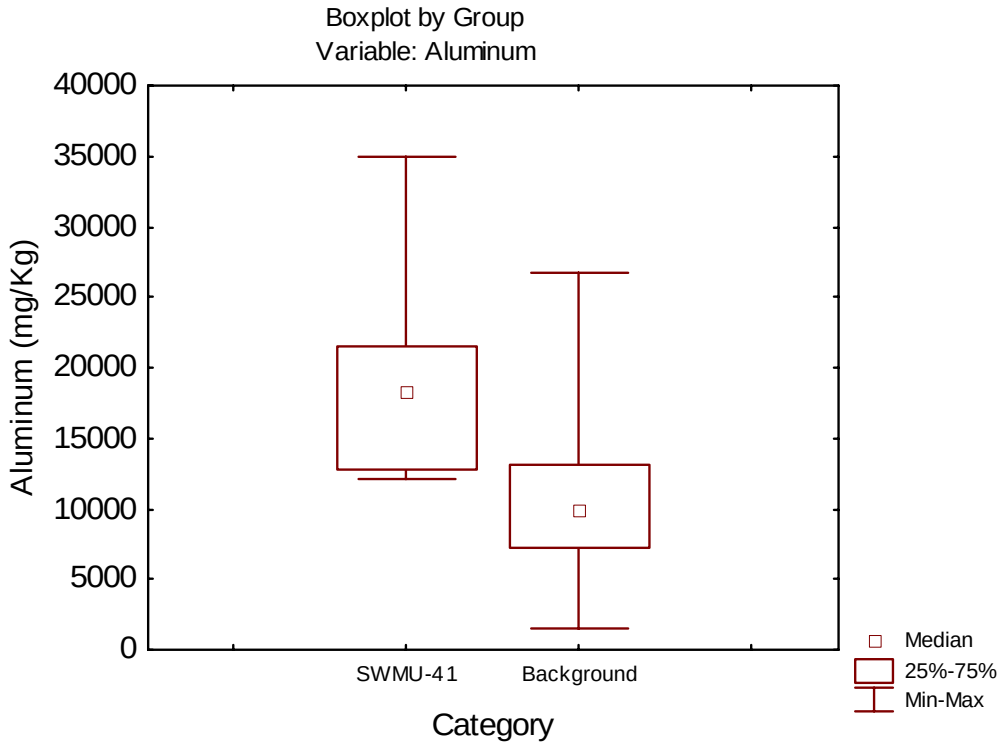


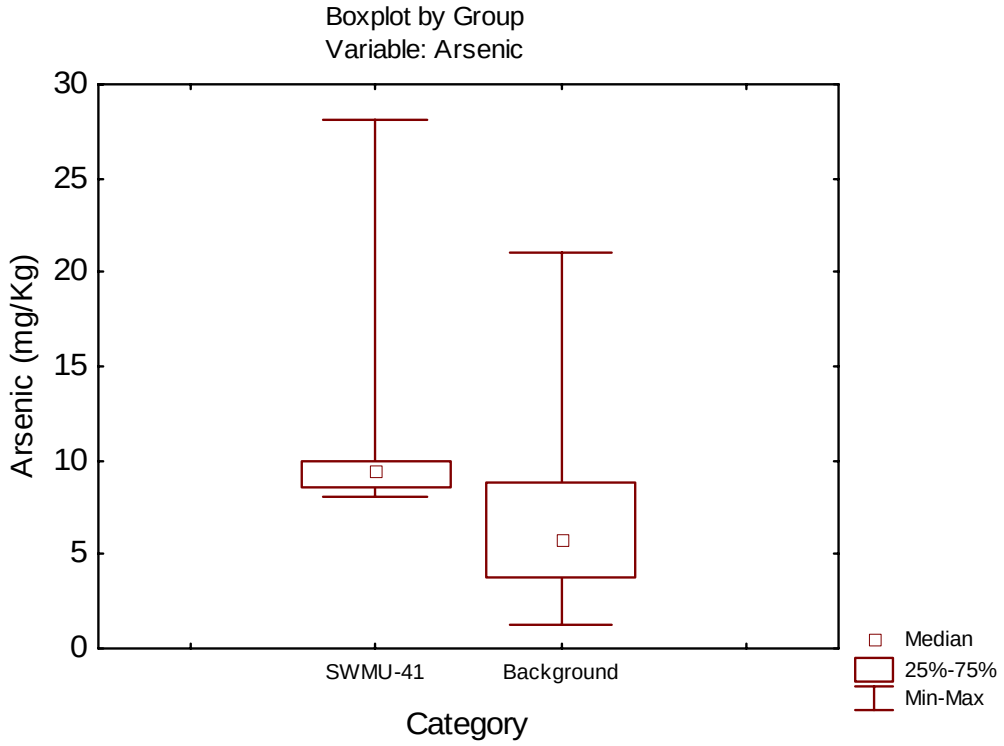


BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 SUBSURFACE SOILS

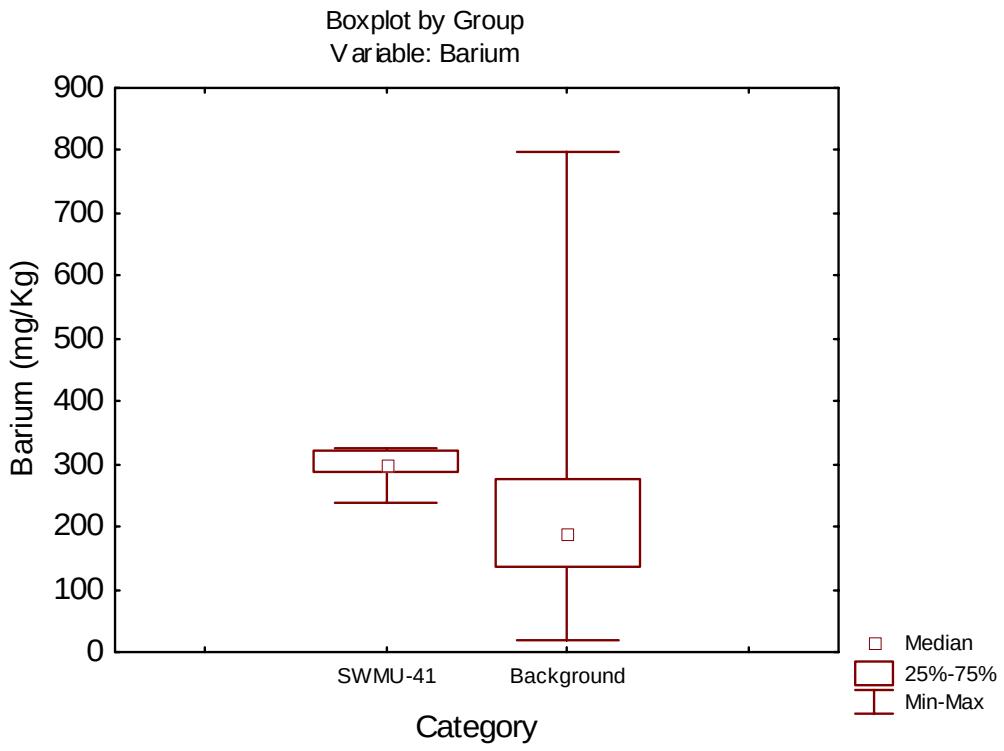


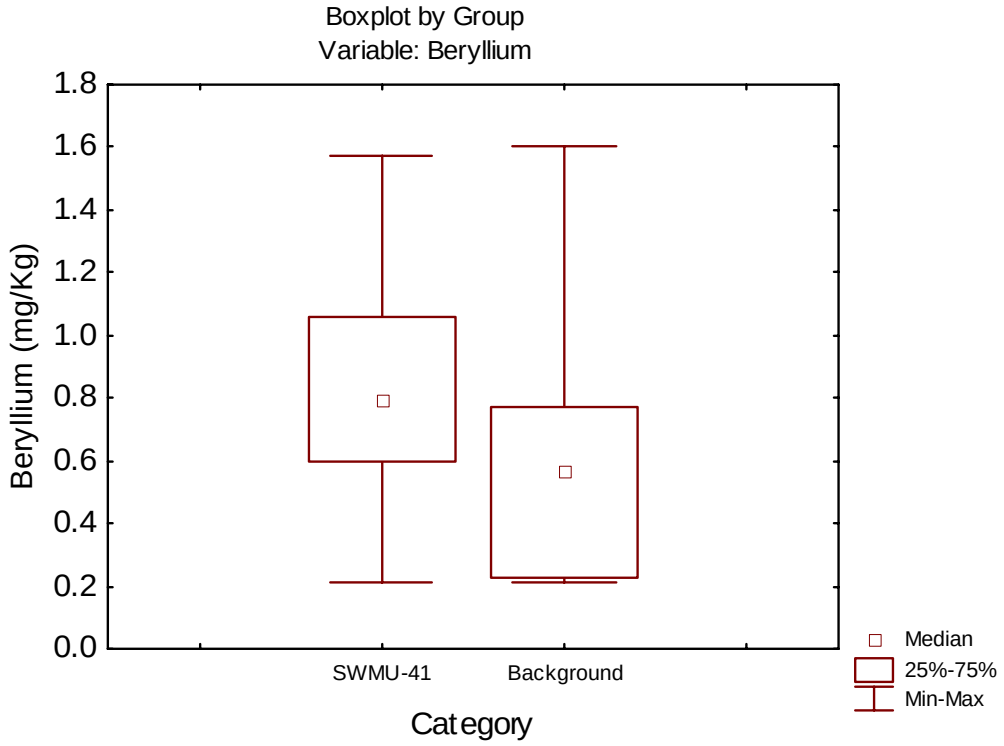
BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 MIXED SOILS





BOX-AND-WHISKER PLOTS SWMU-41 AREA 1 MIXED SOILS





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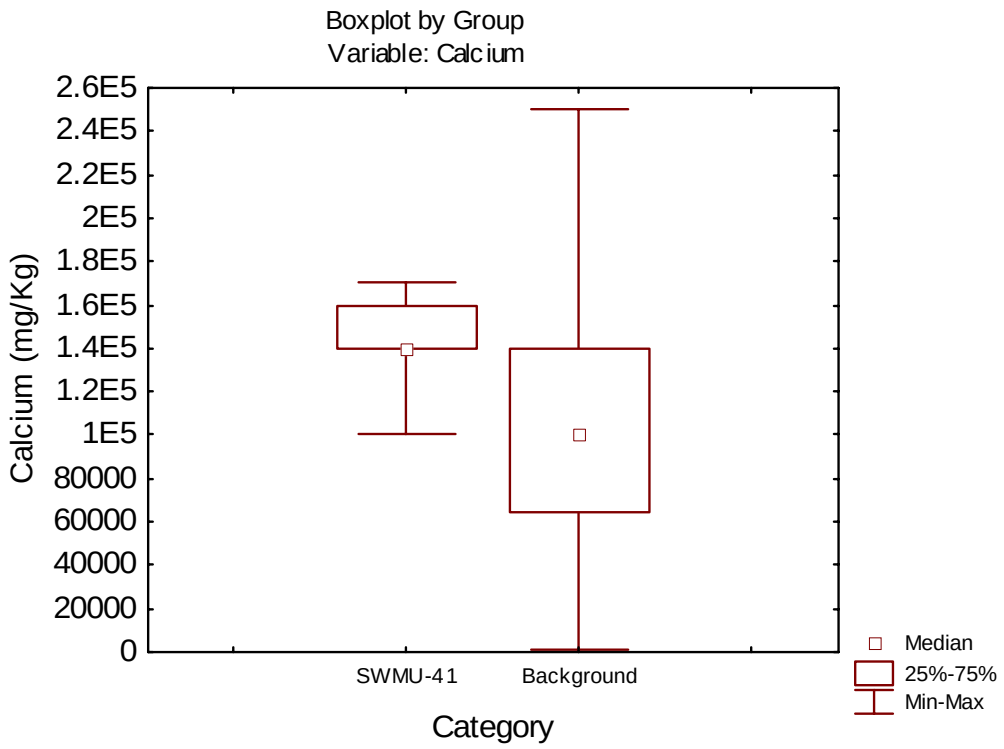

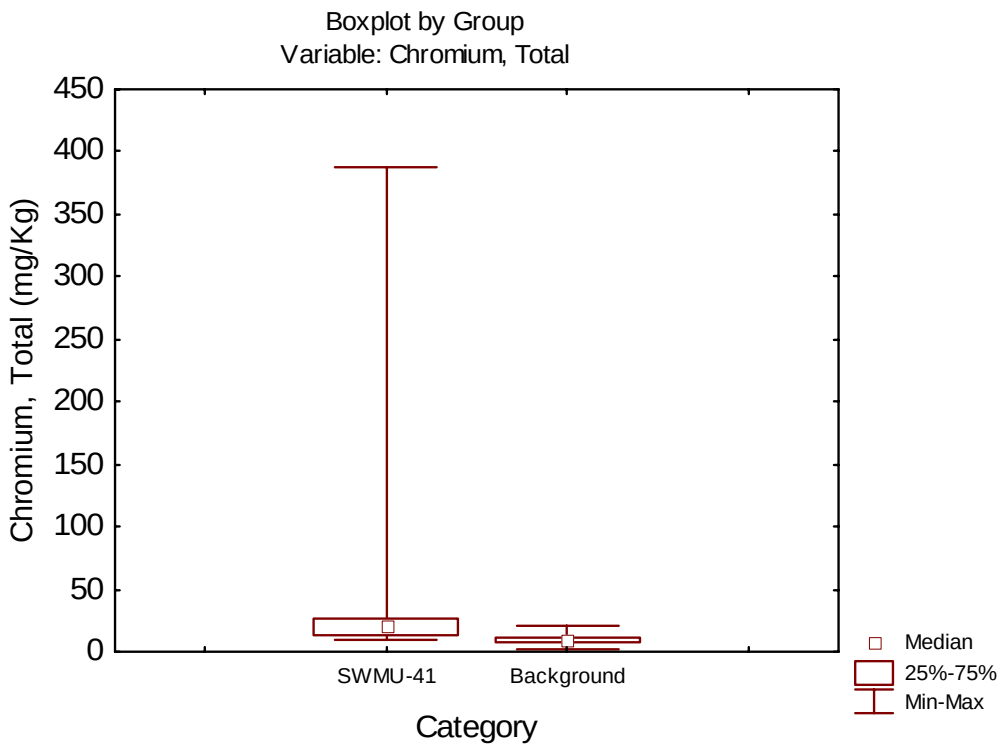

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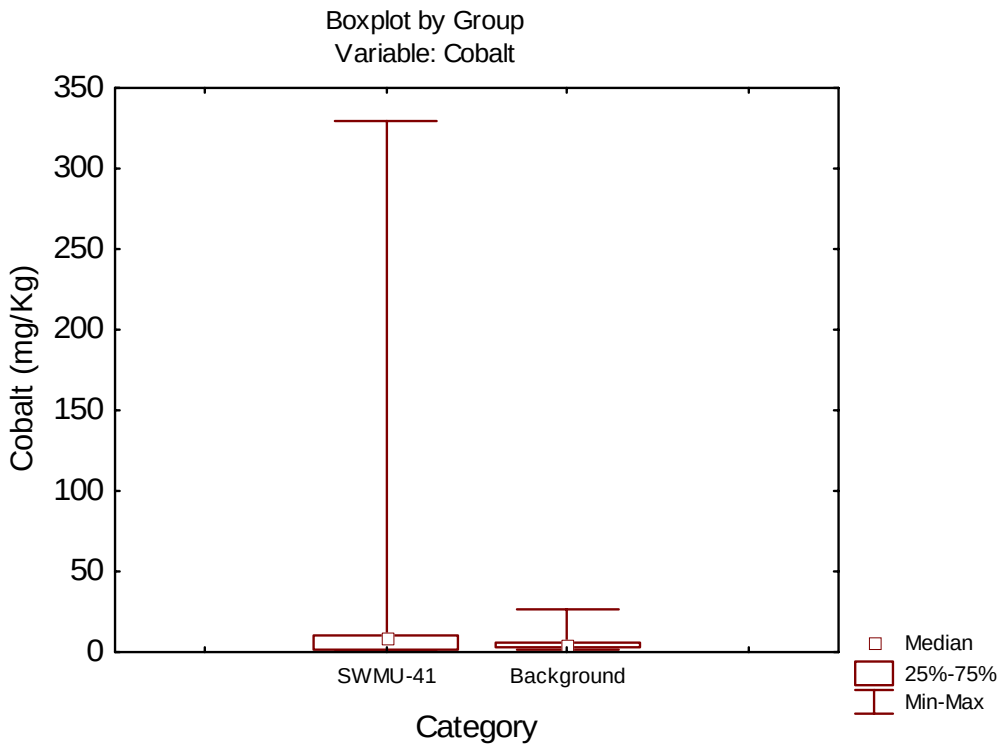

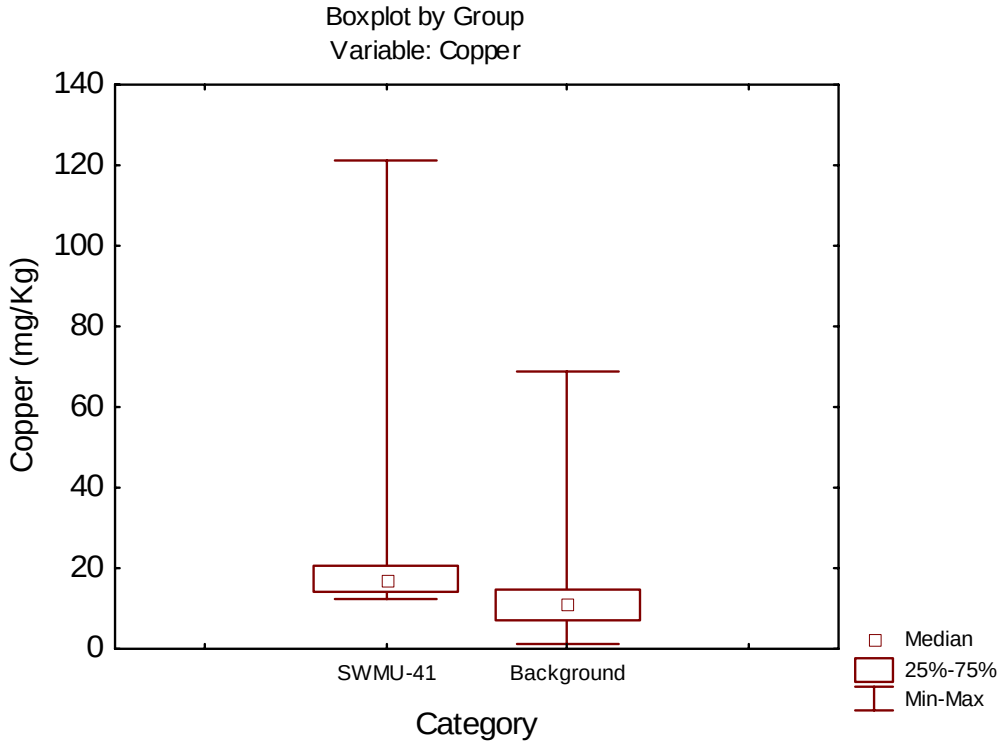

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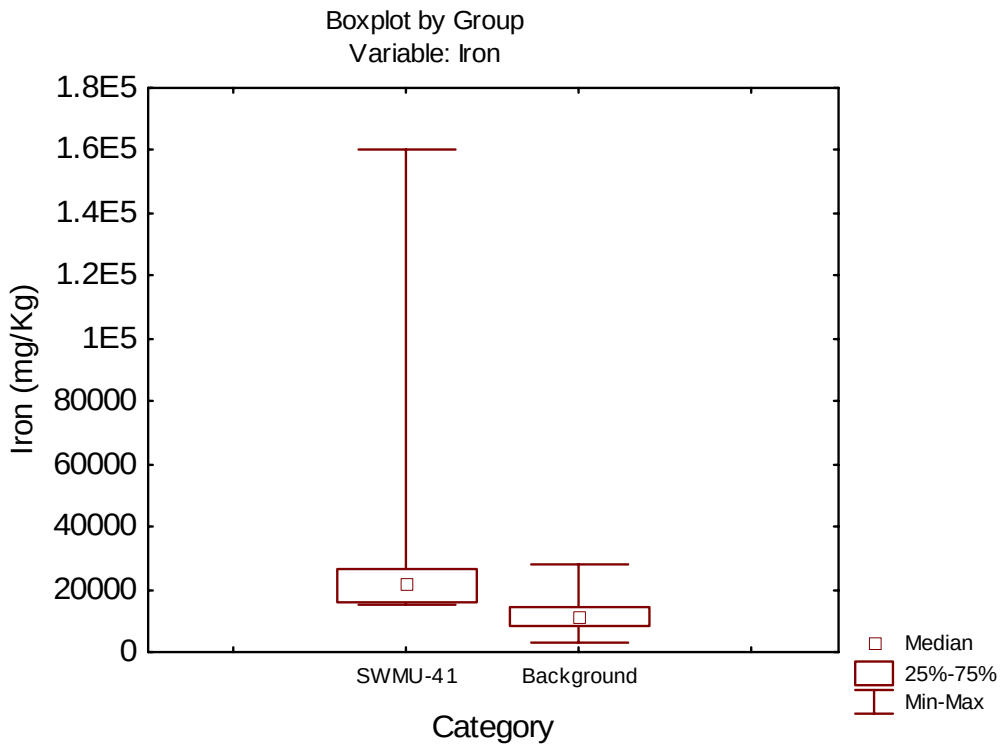

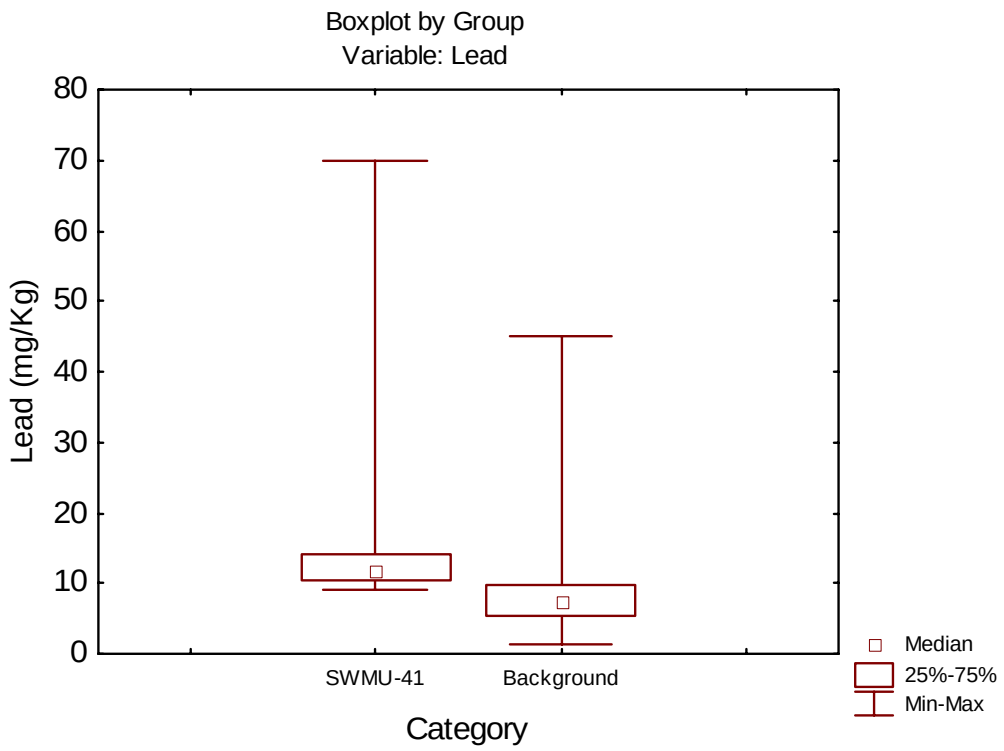

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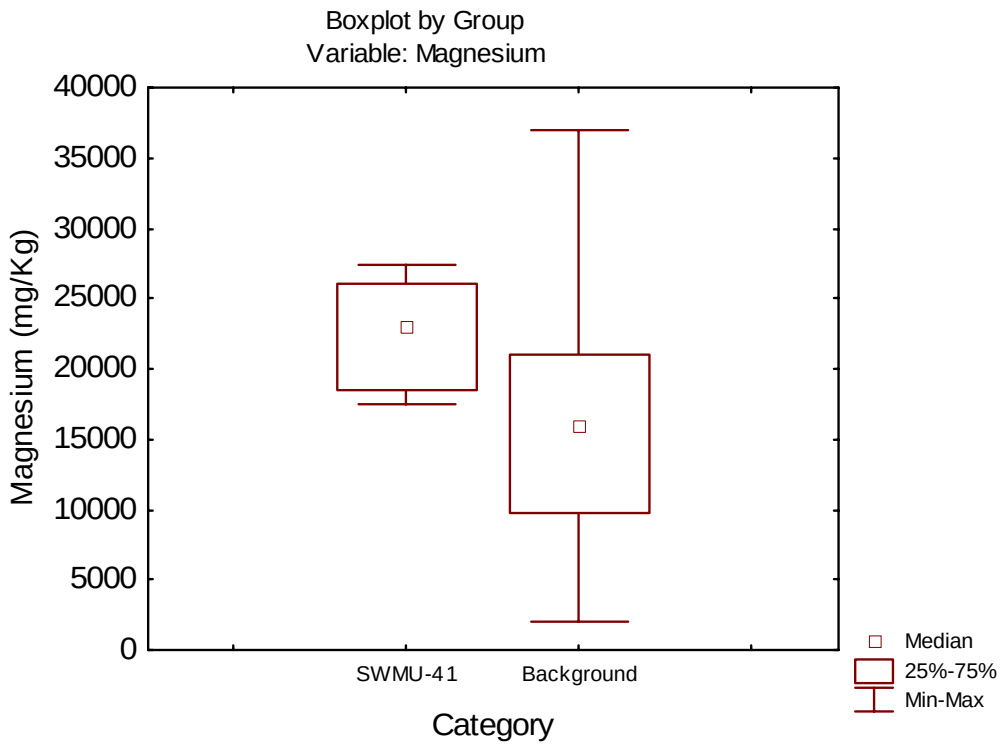

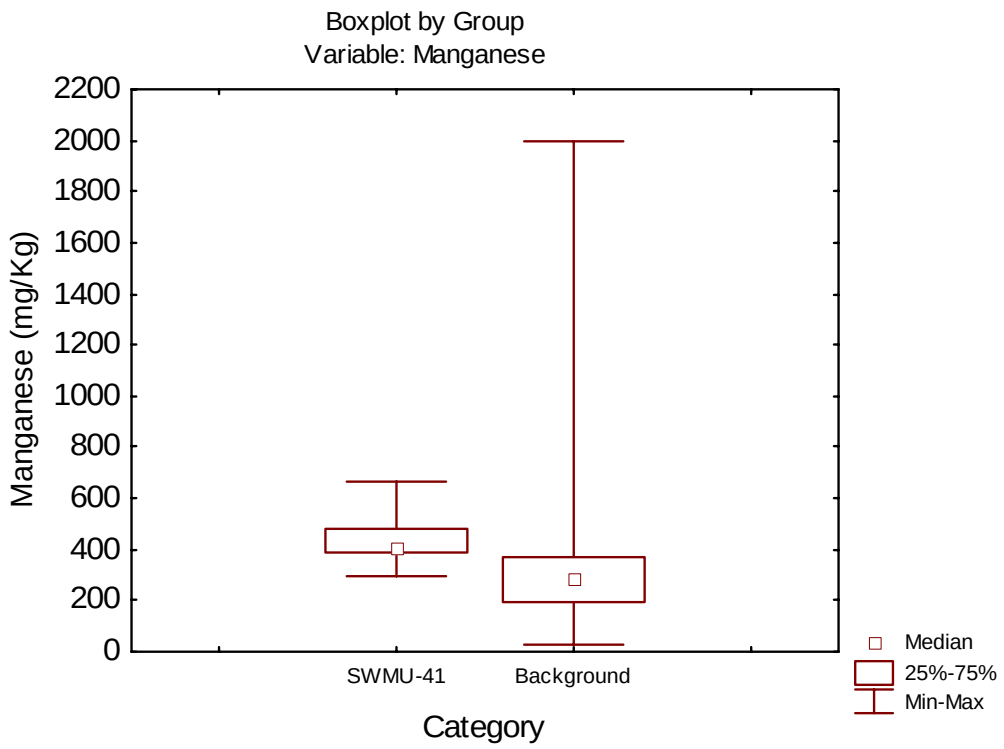

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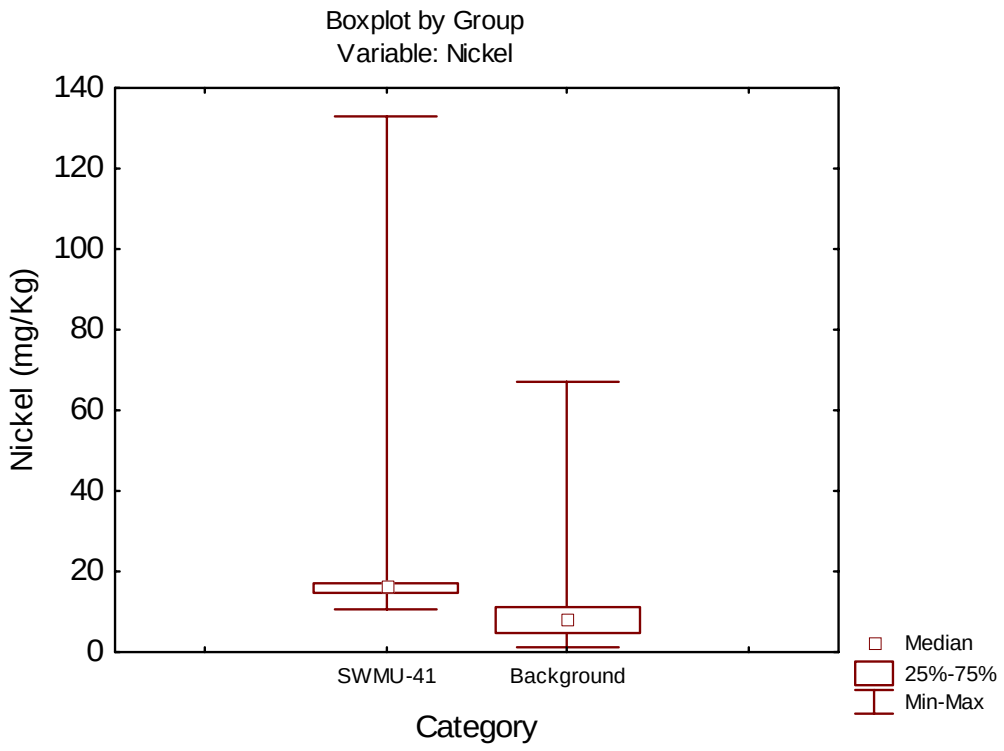

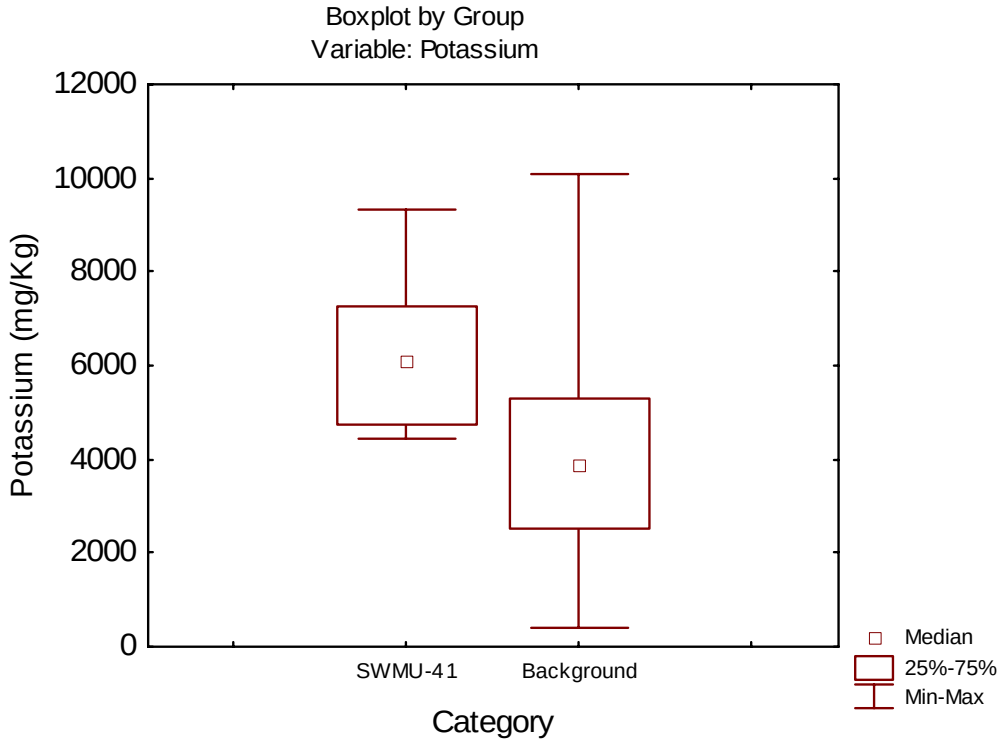

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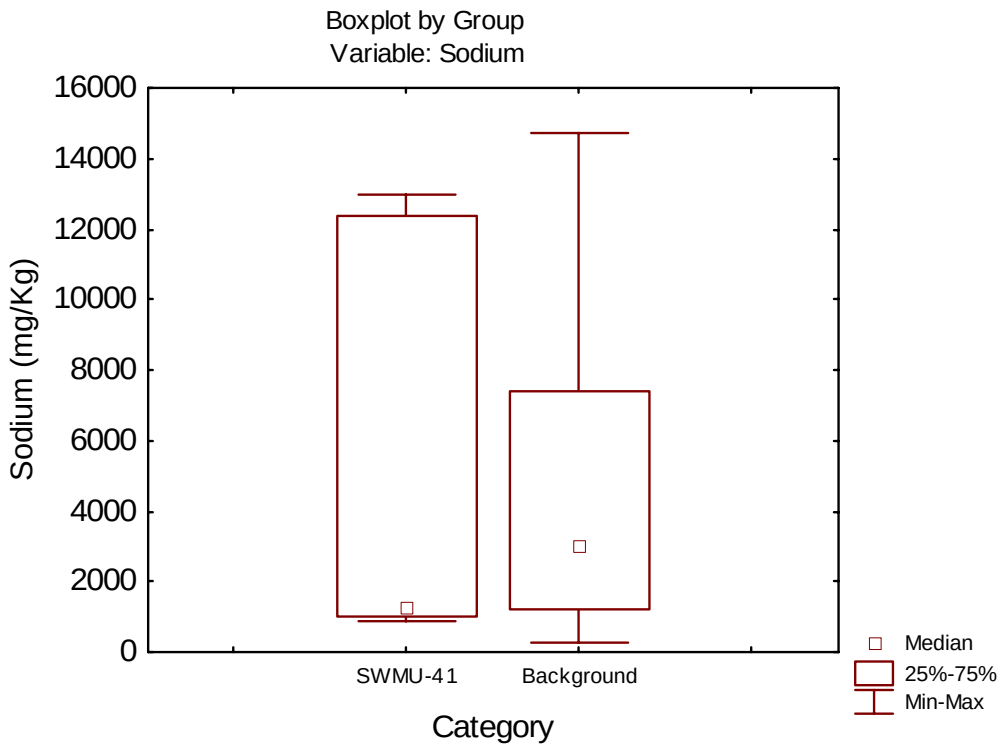

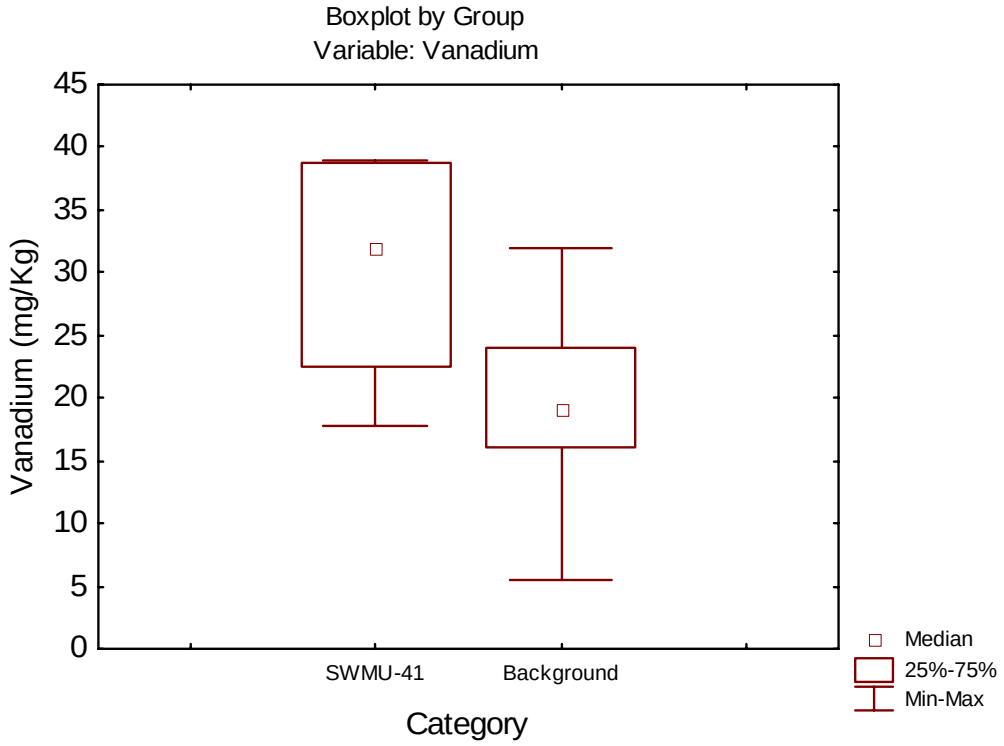

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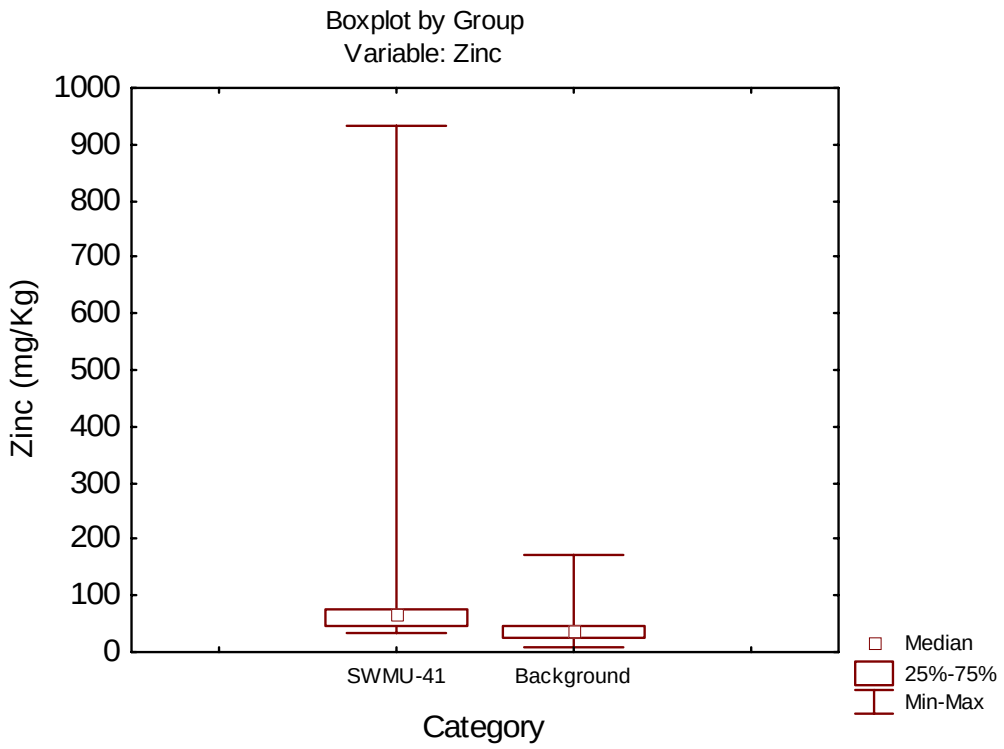
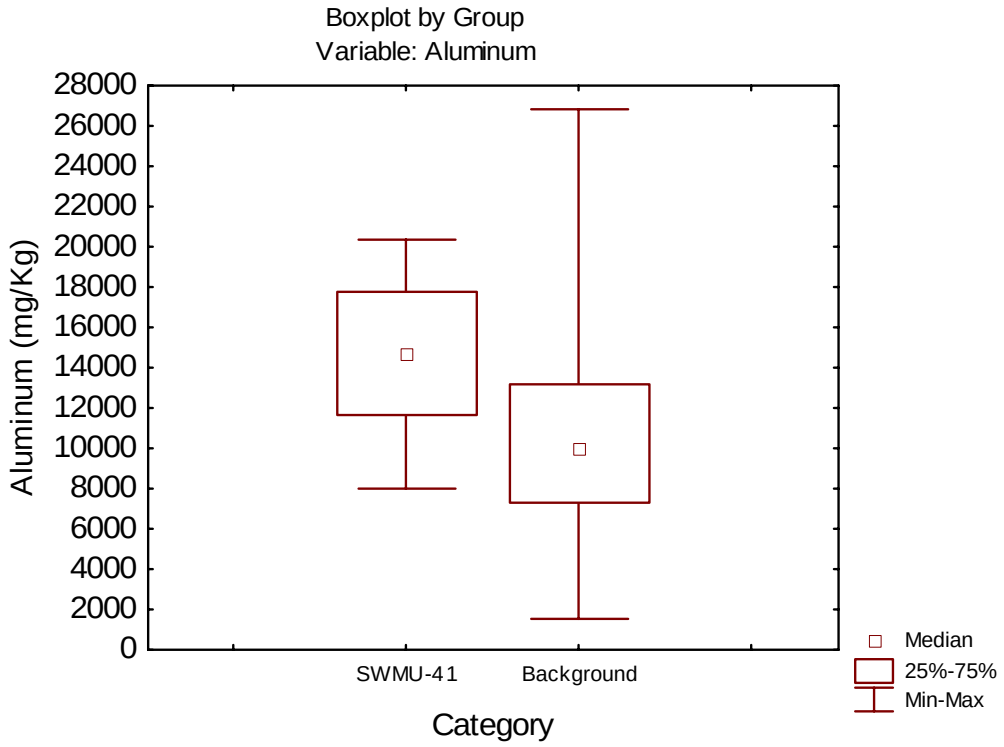
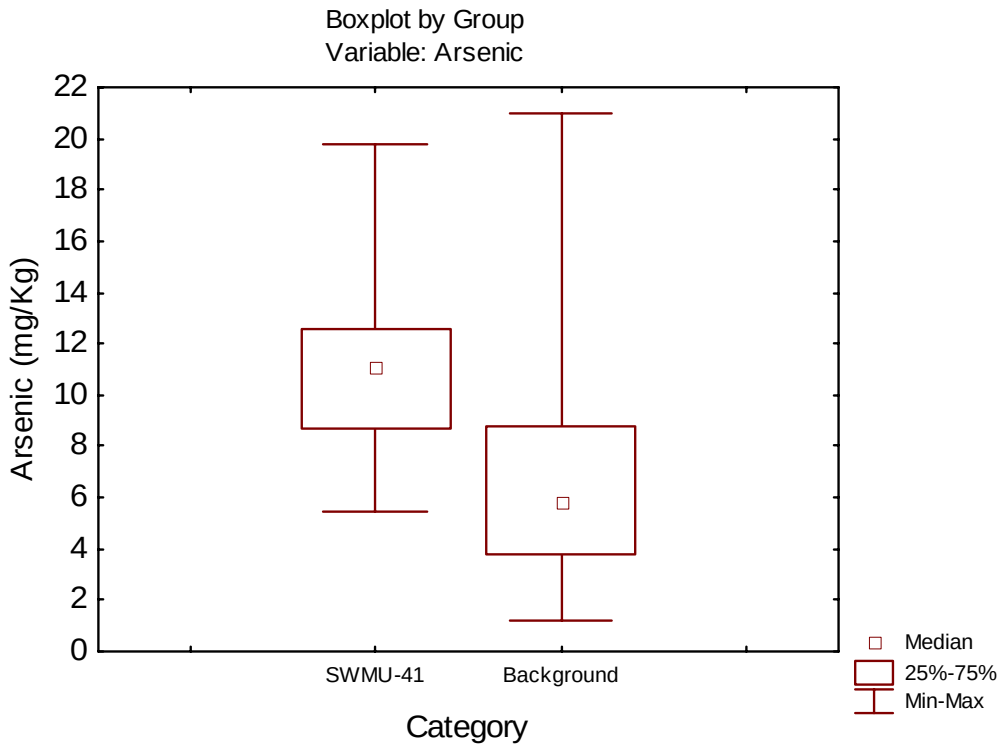
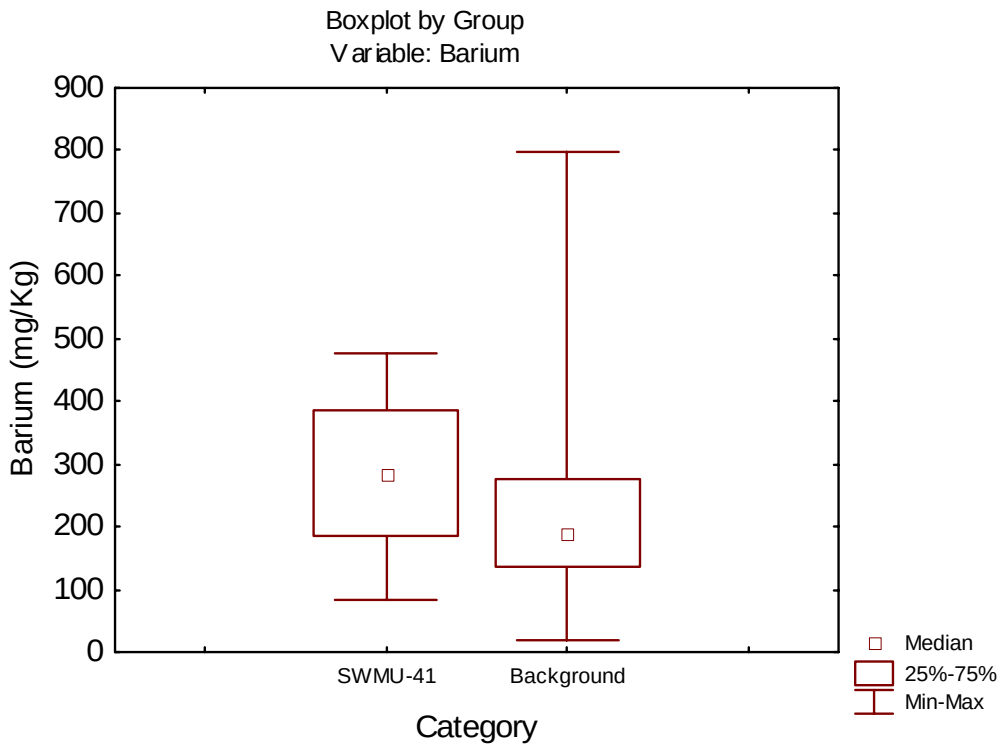


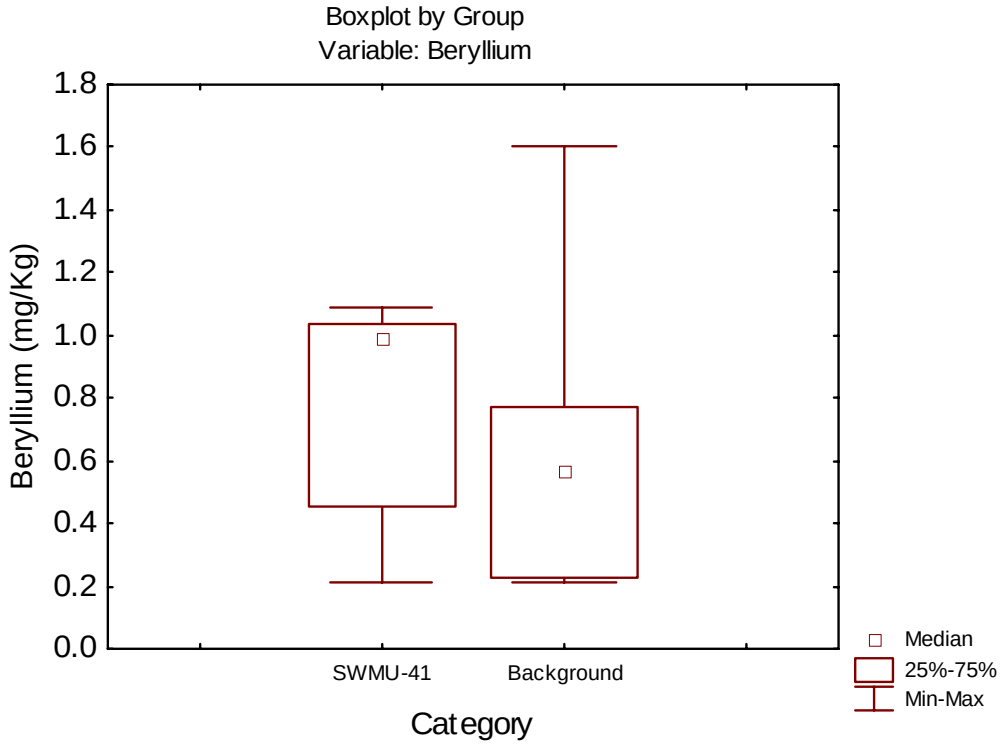
BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES



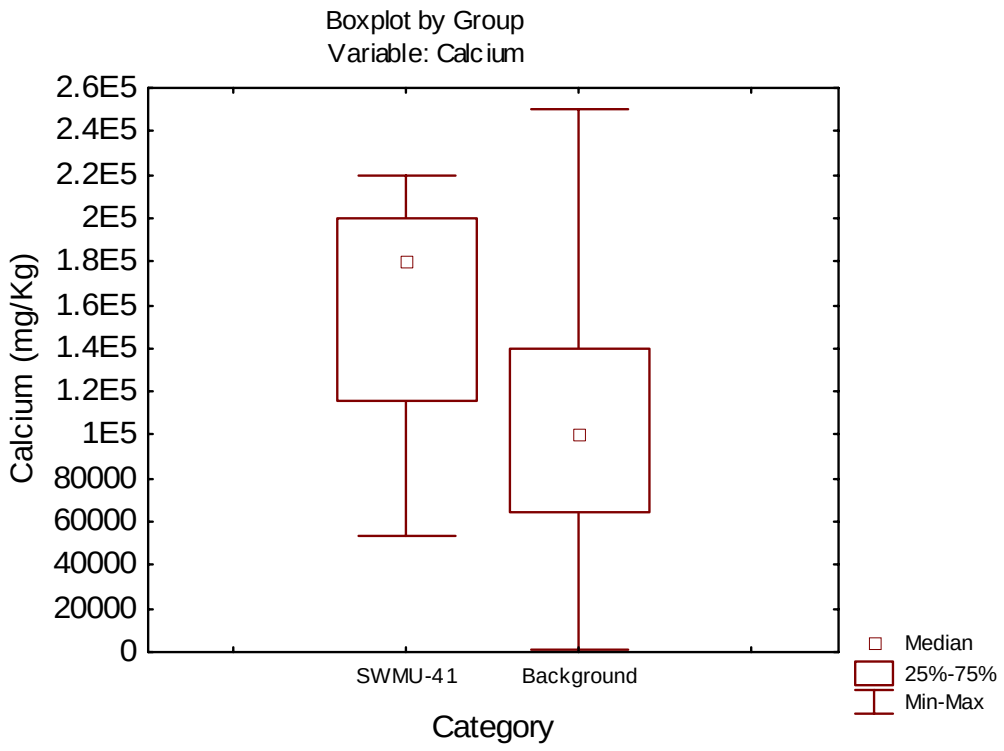


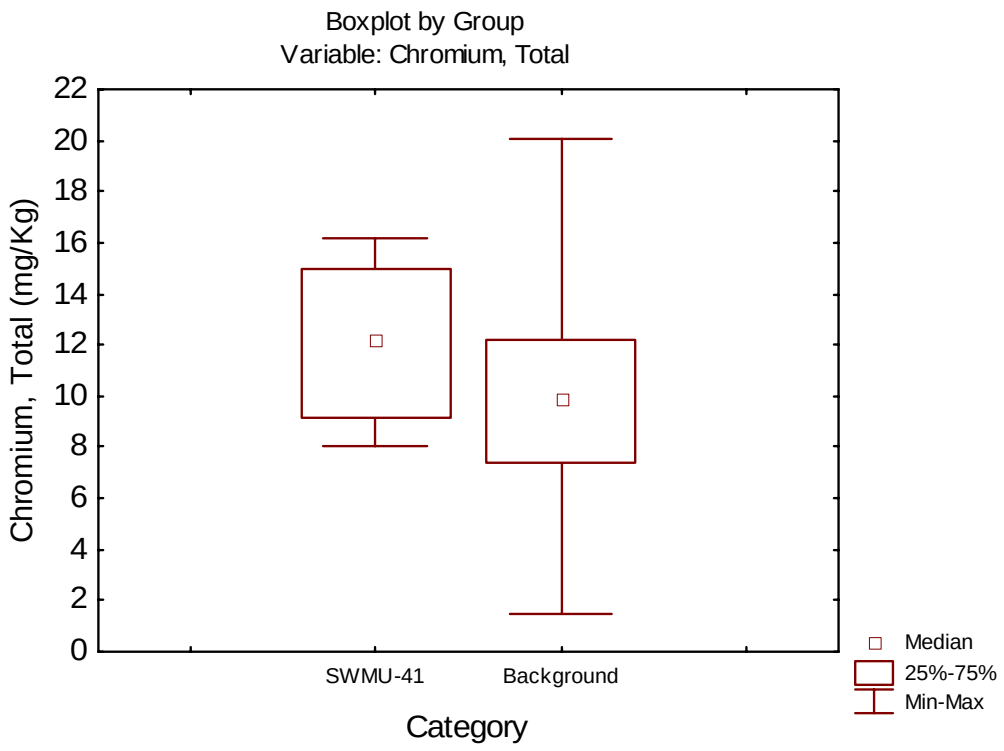
BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES



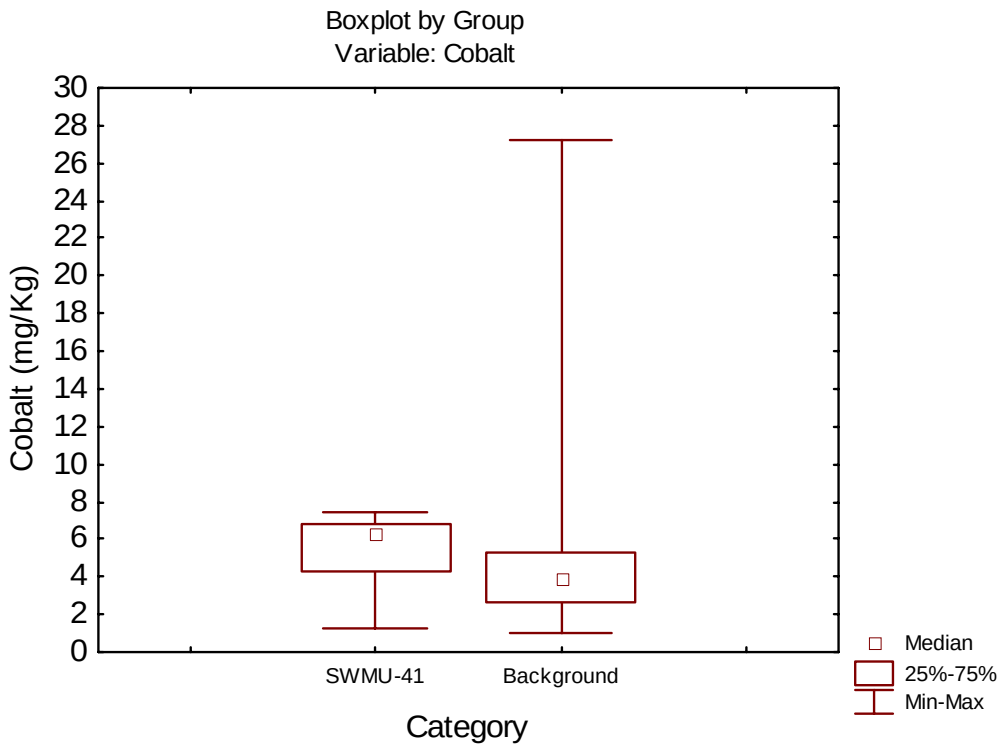


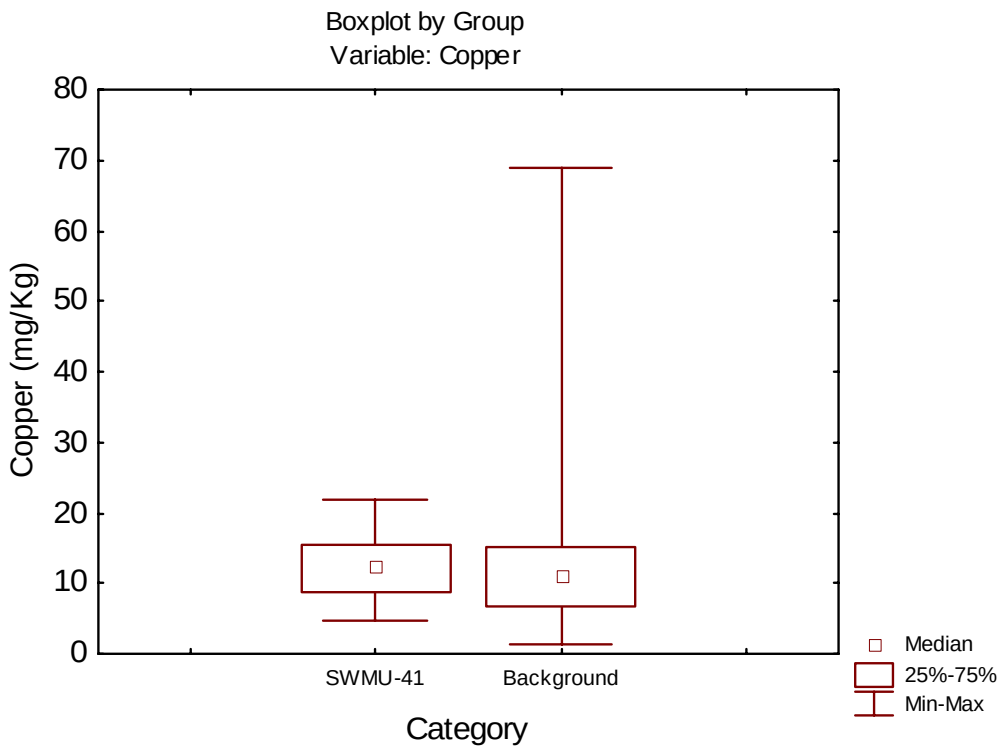
BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES



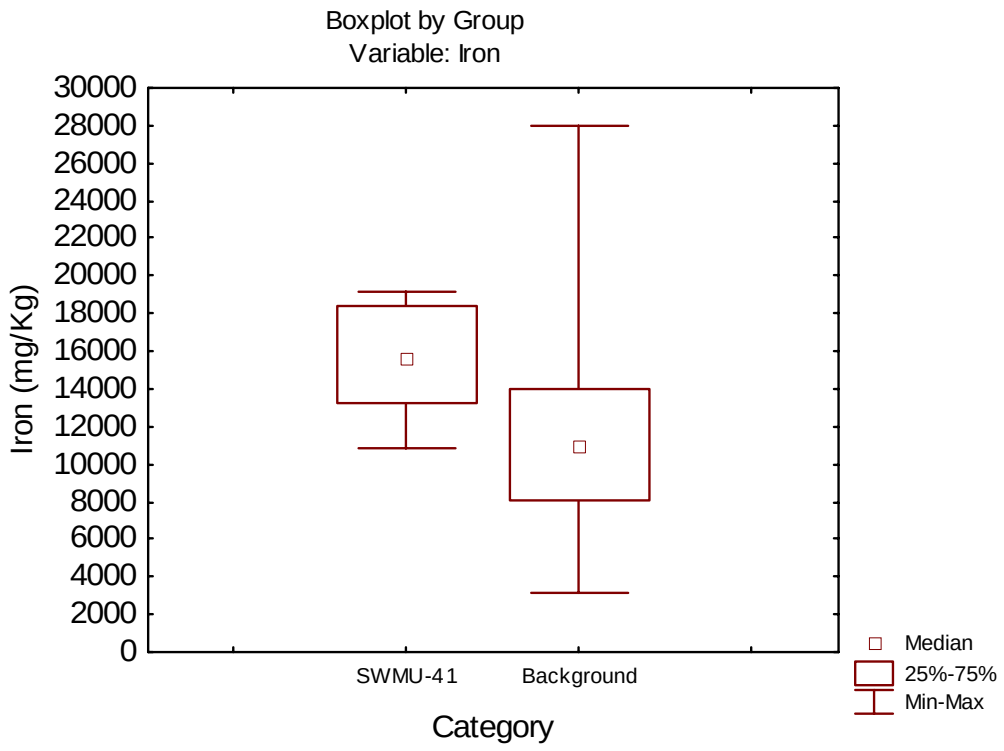


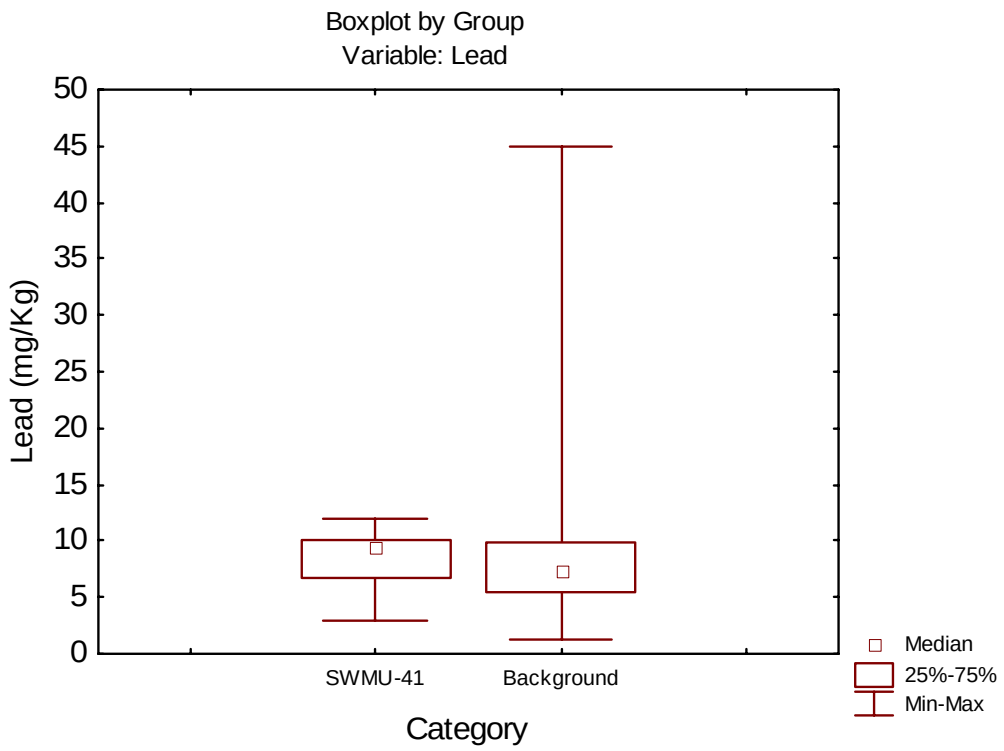
BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES





BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES





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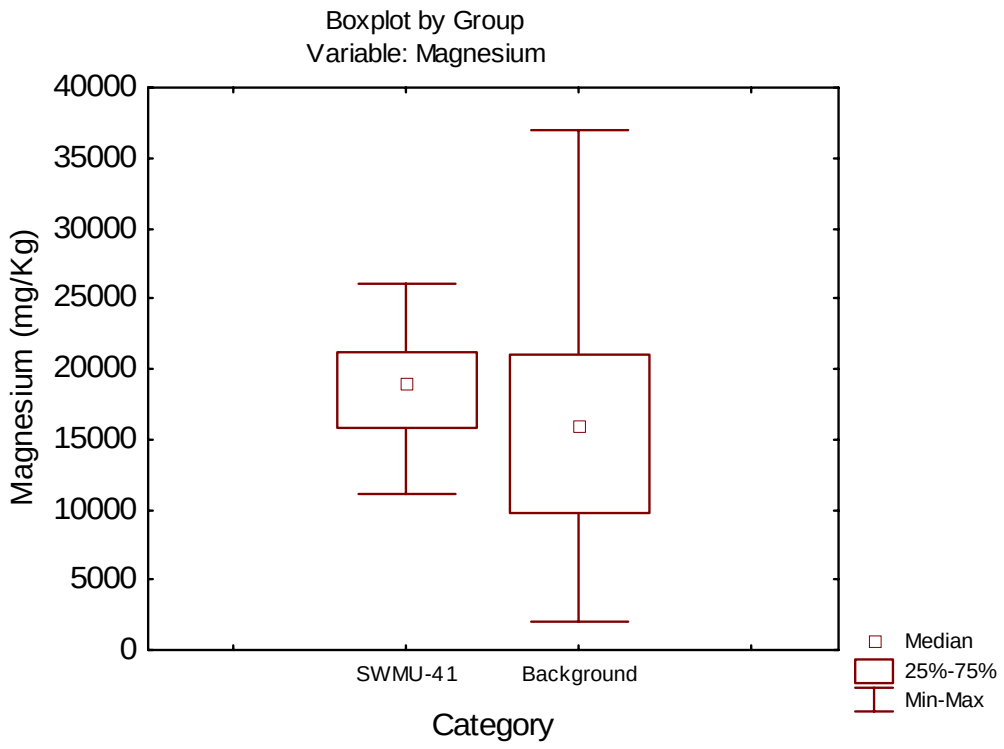
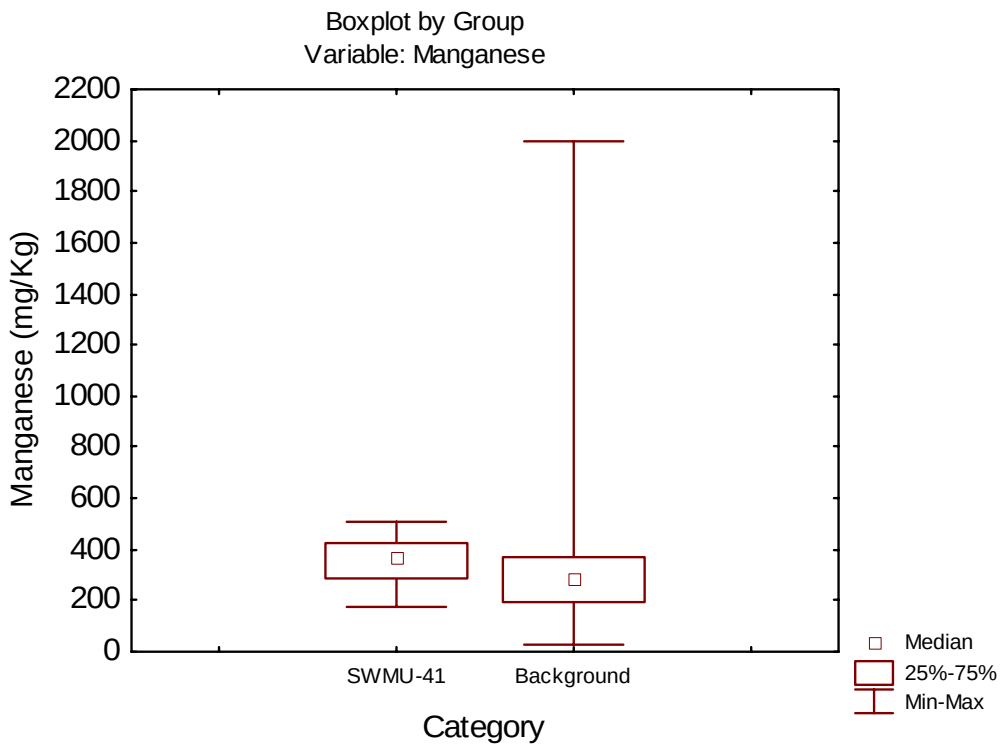
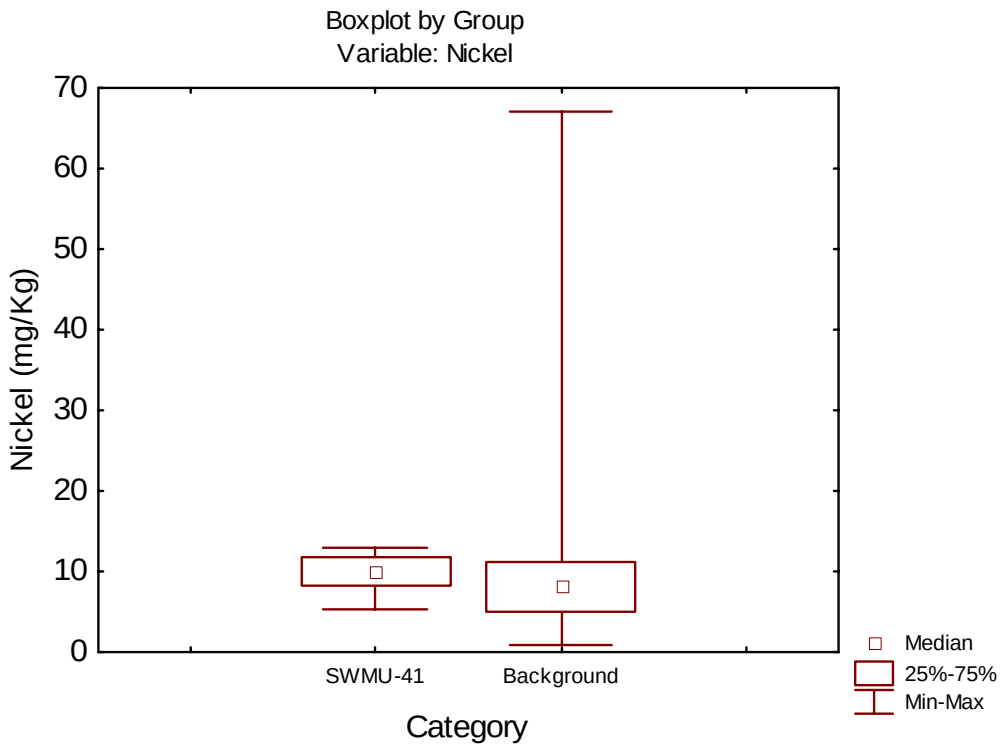
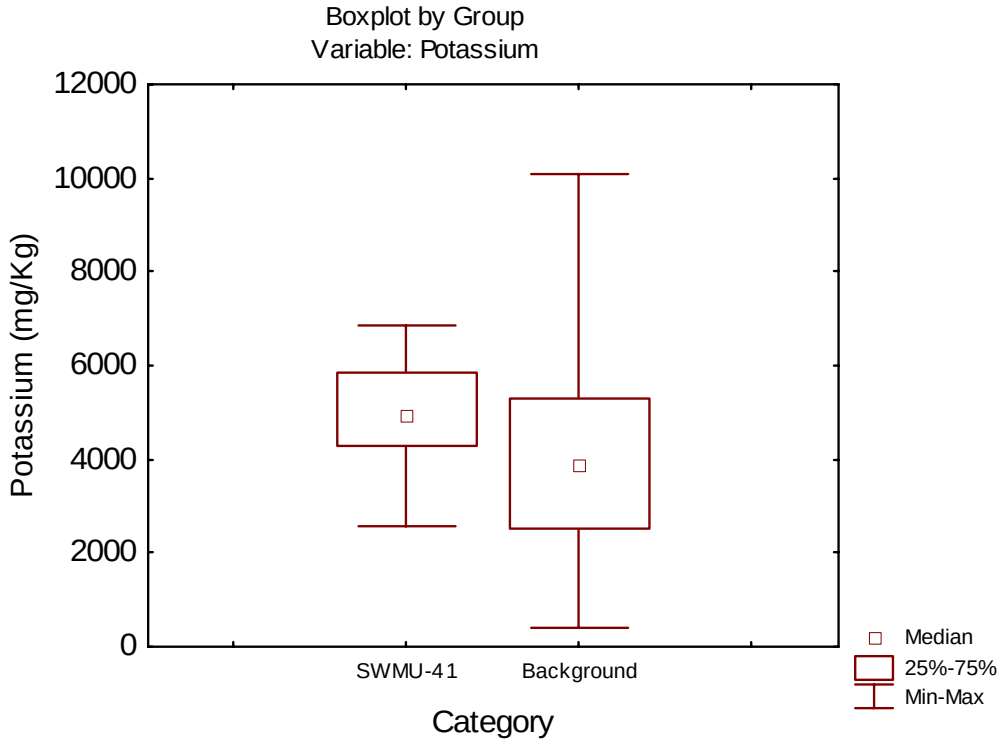




BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES





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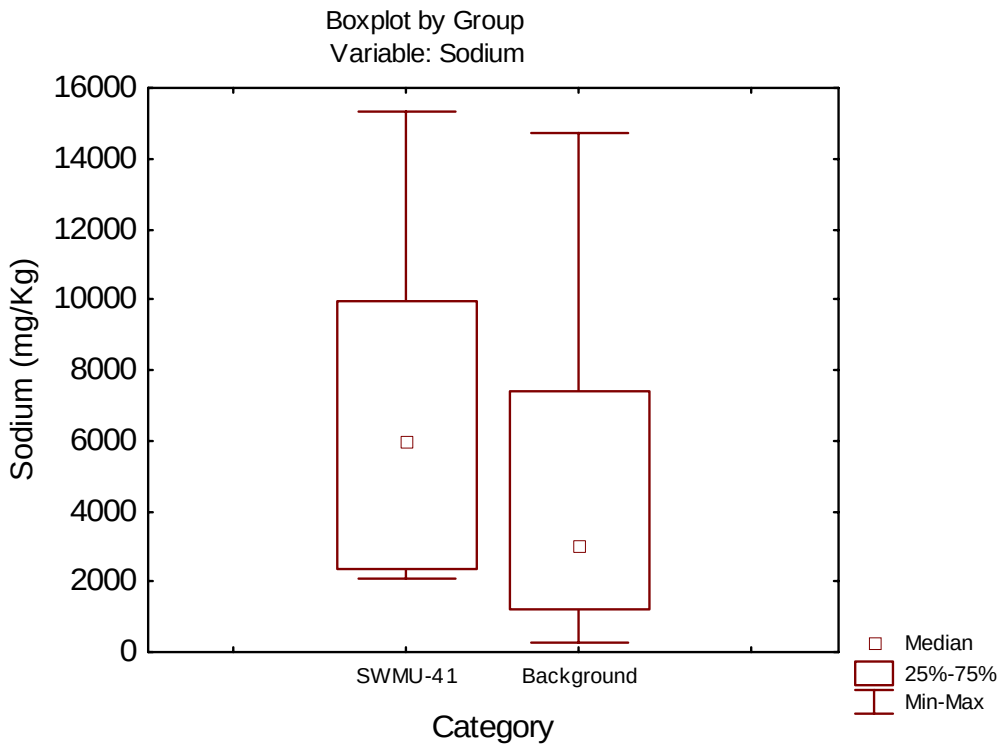
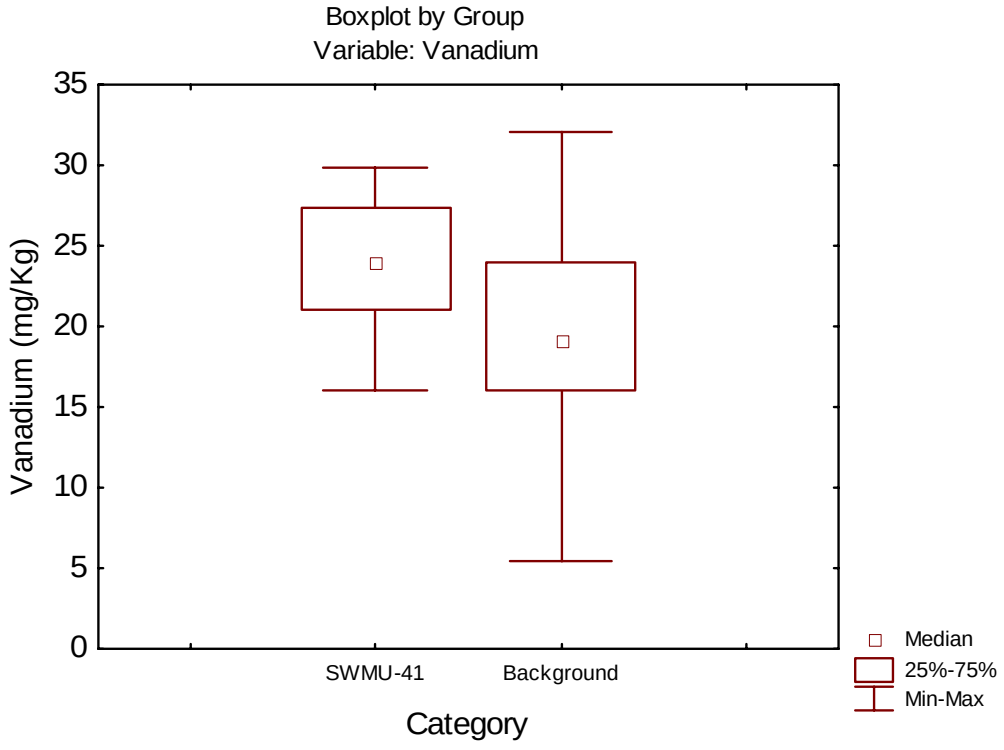
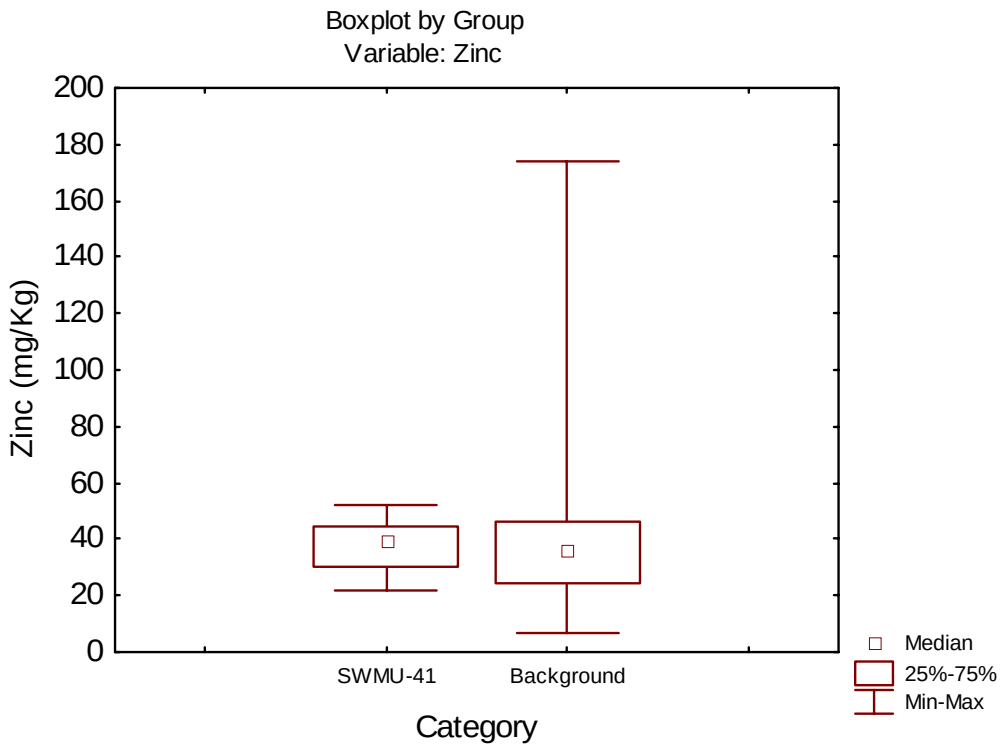




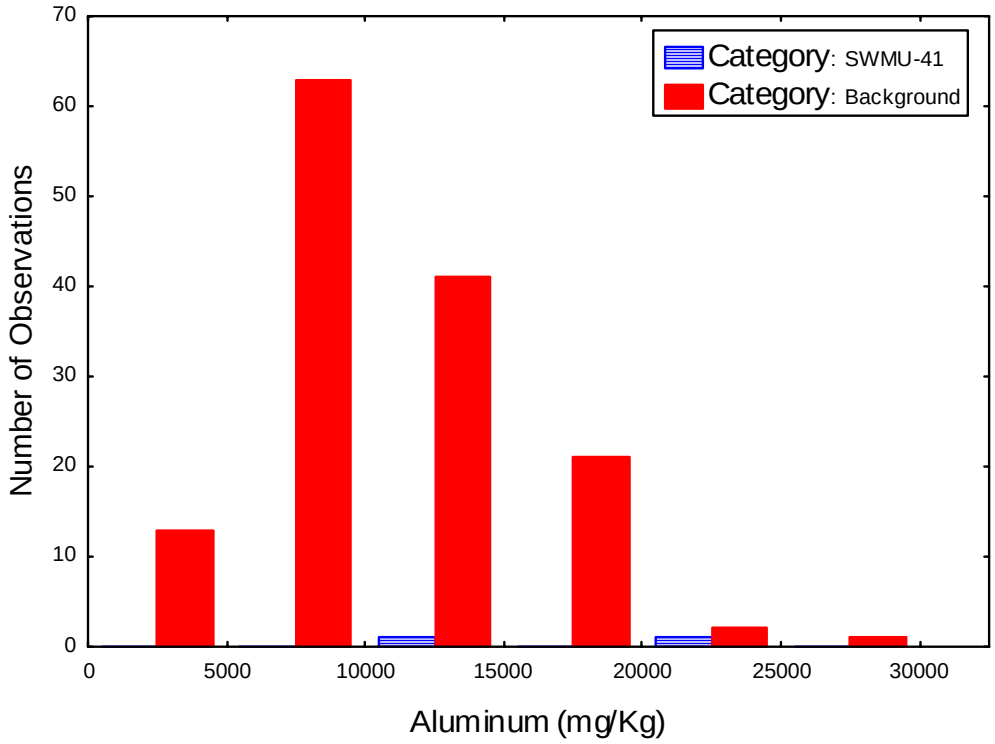
BOX-AND-WHISKER PLOTS SWMU-41 MONITORING WELL SOIL SAMPLES

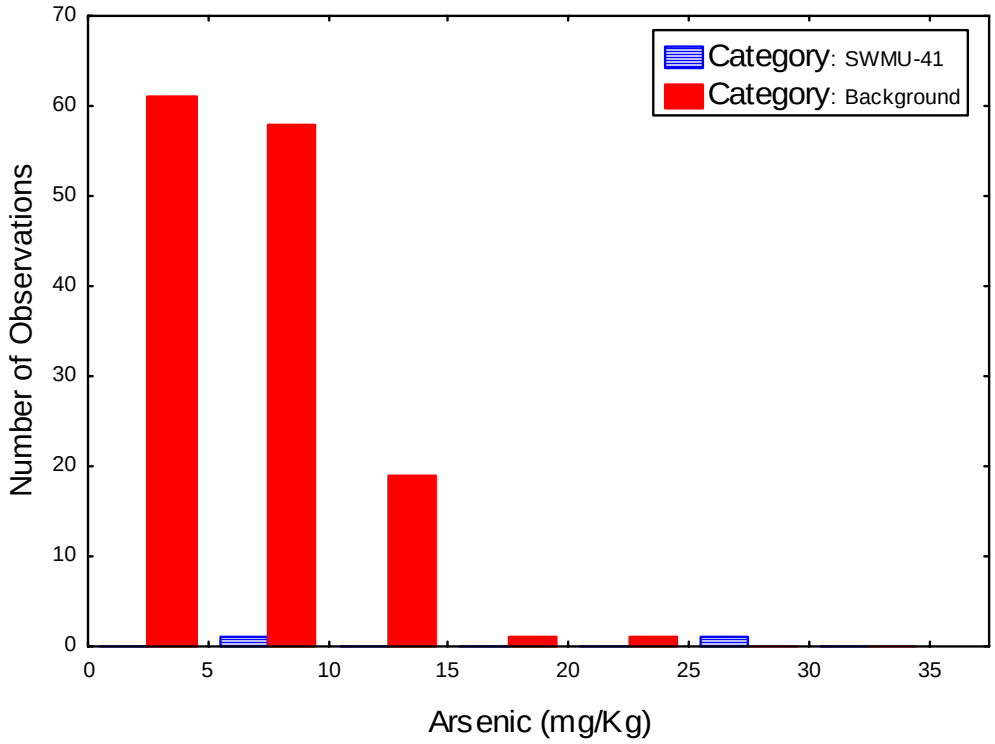


HISTOGRAMS

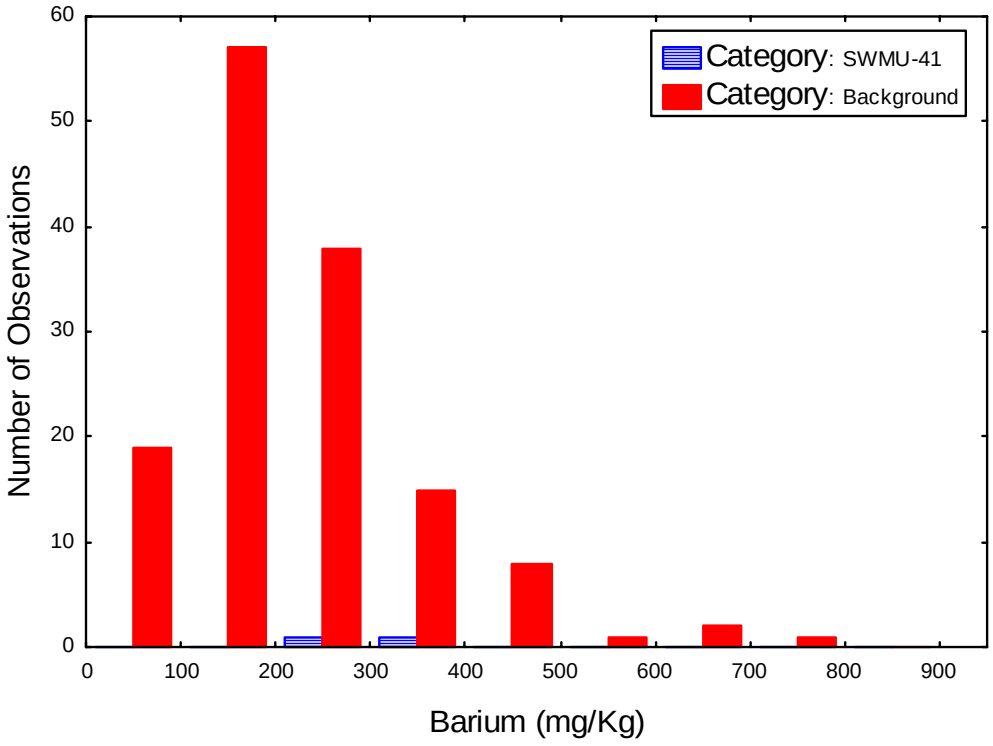
(ATTACHMENT 2)

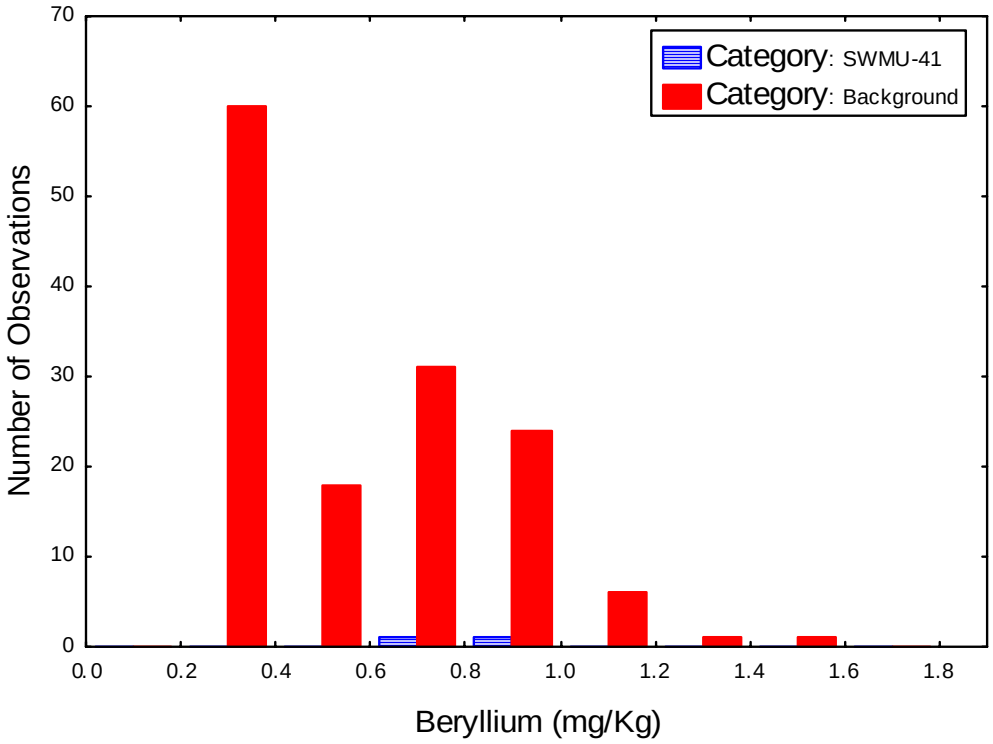
HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS



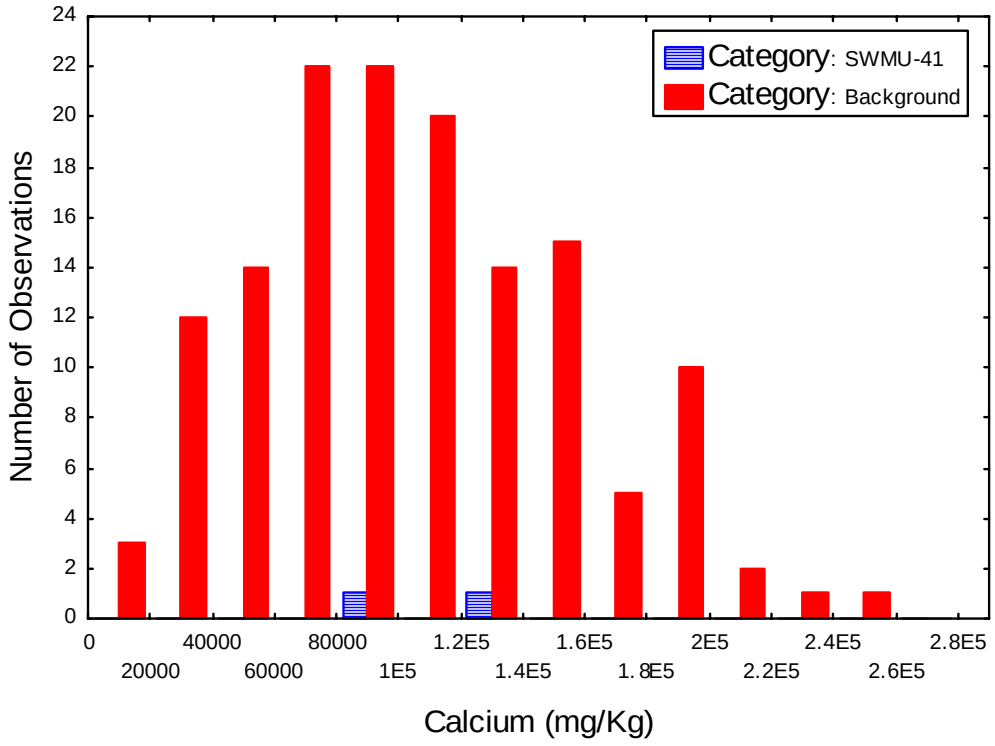


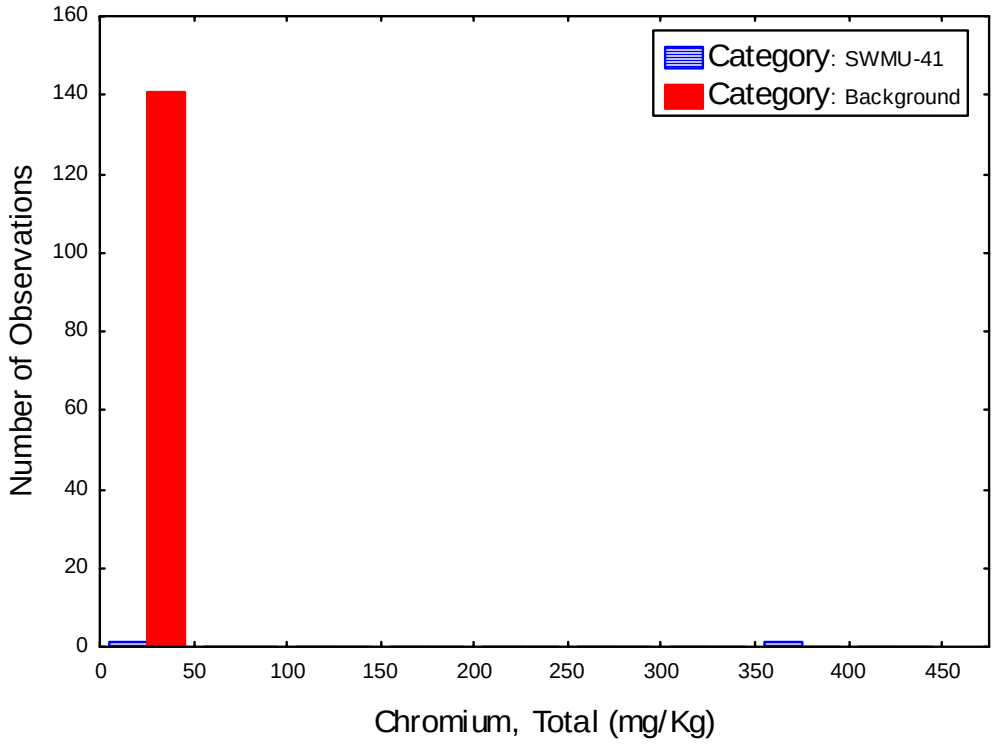
HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS



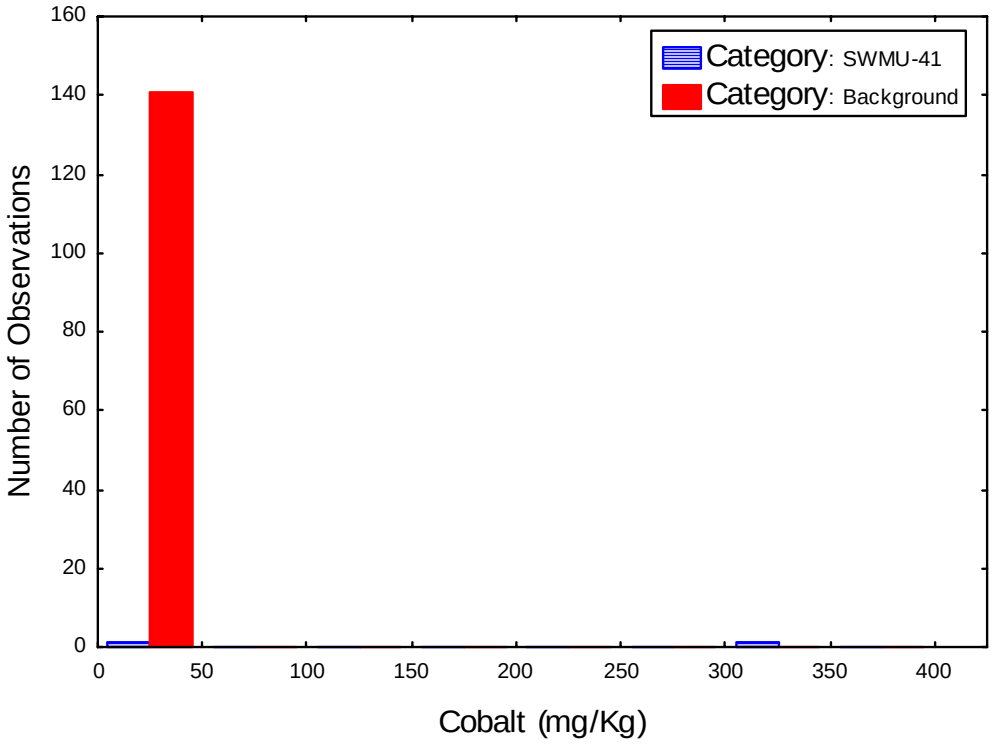


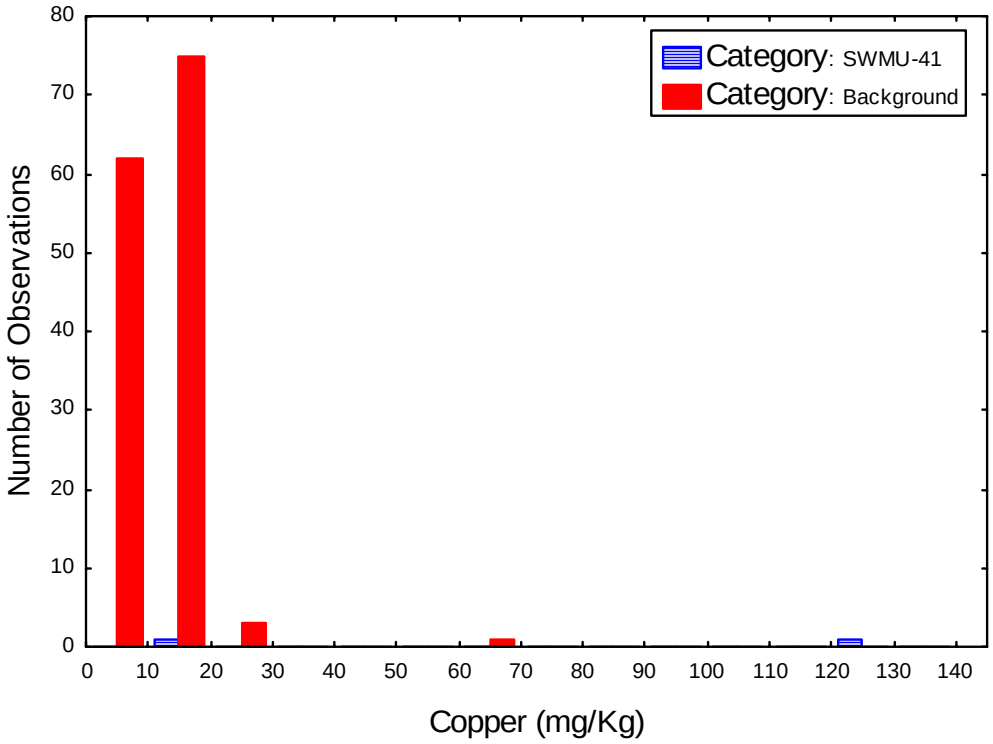
HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS



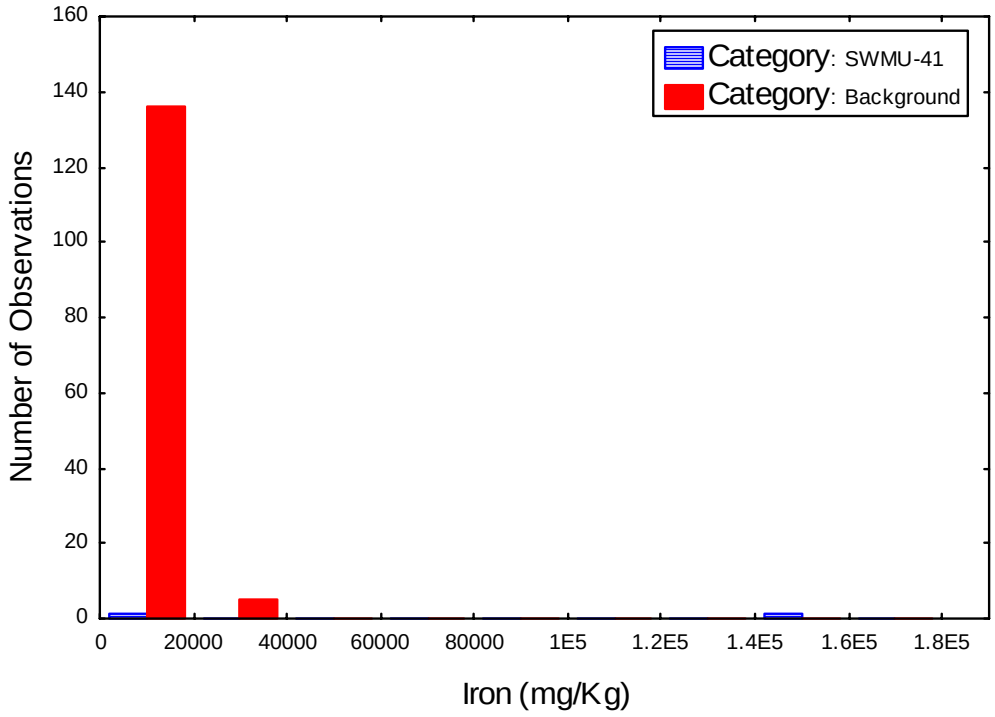


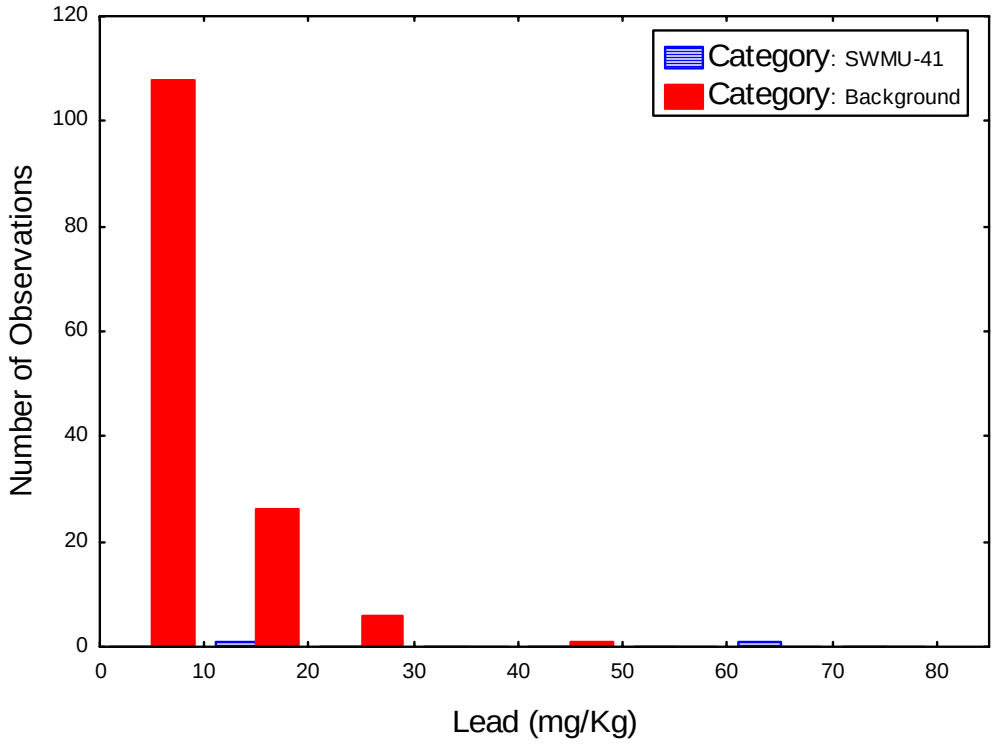
HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS





HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS





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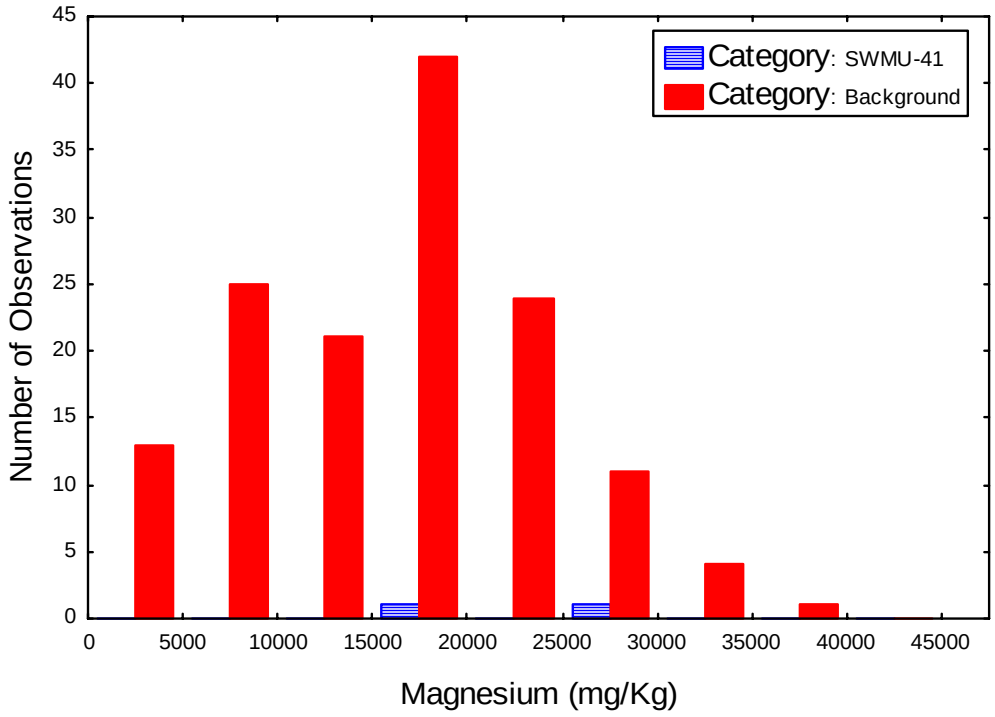
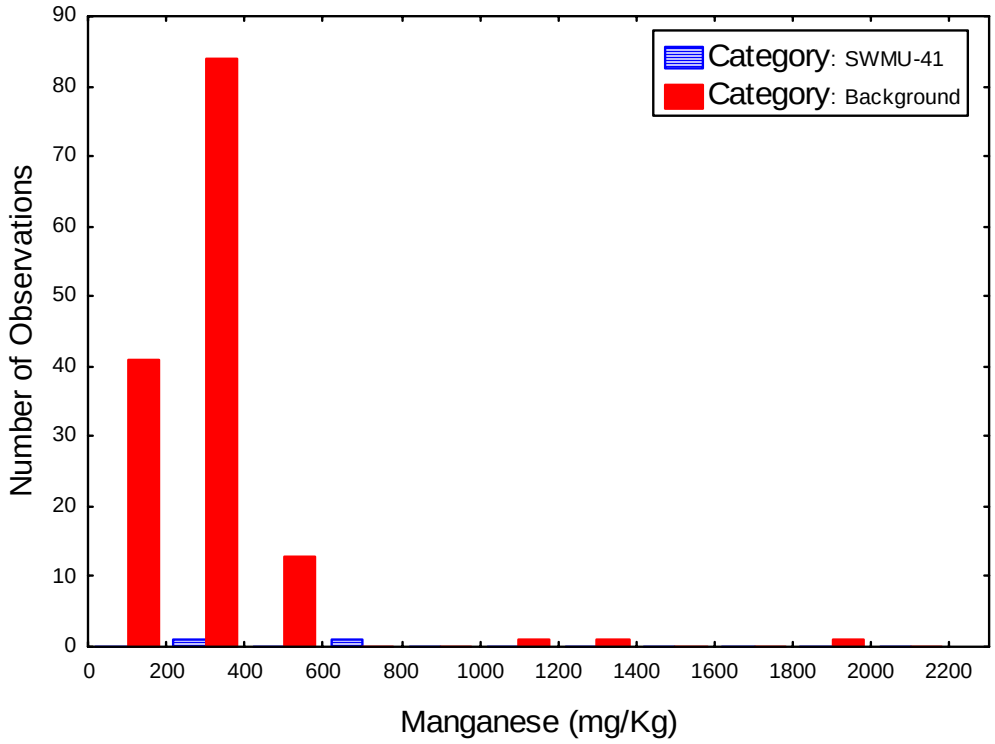
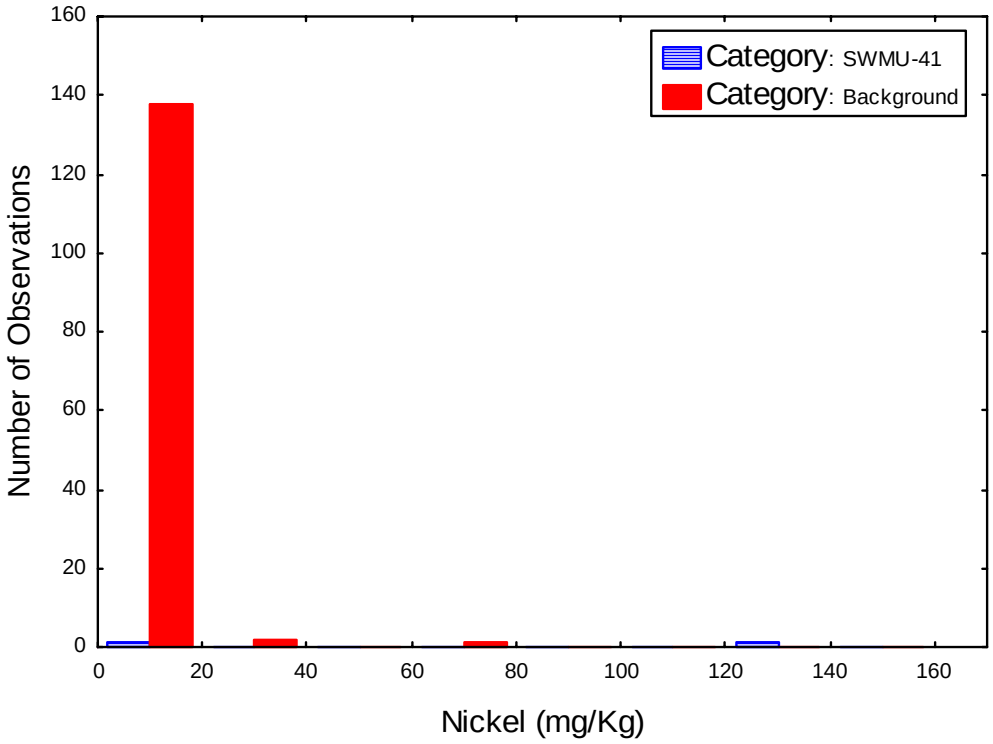
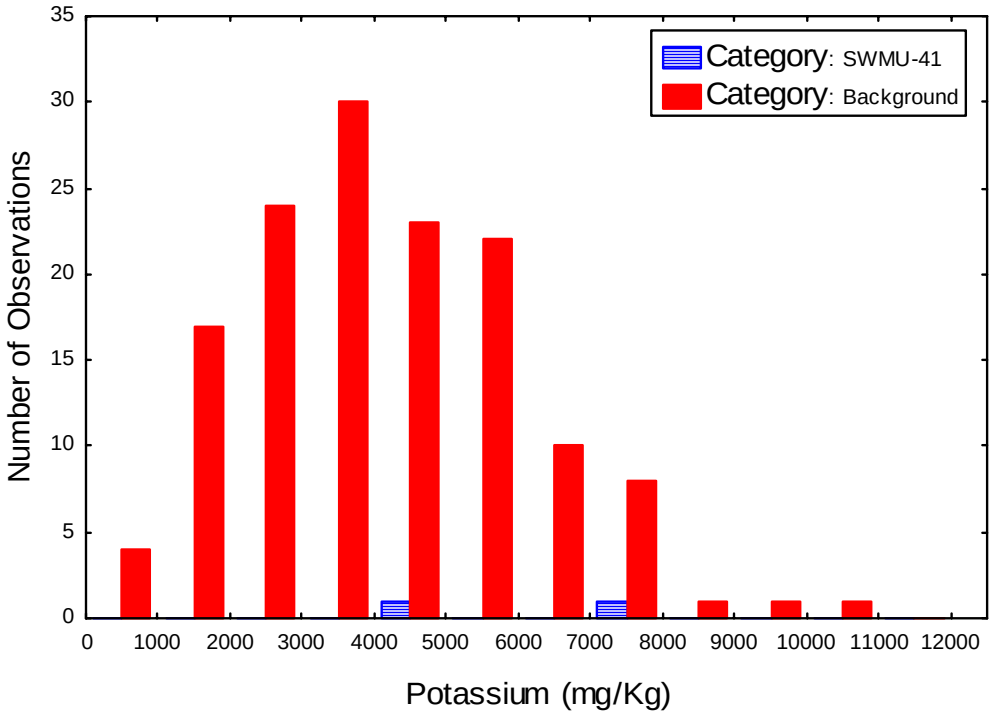


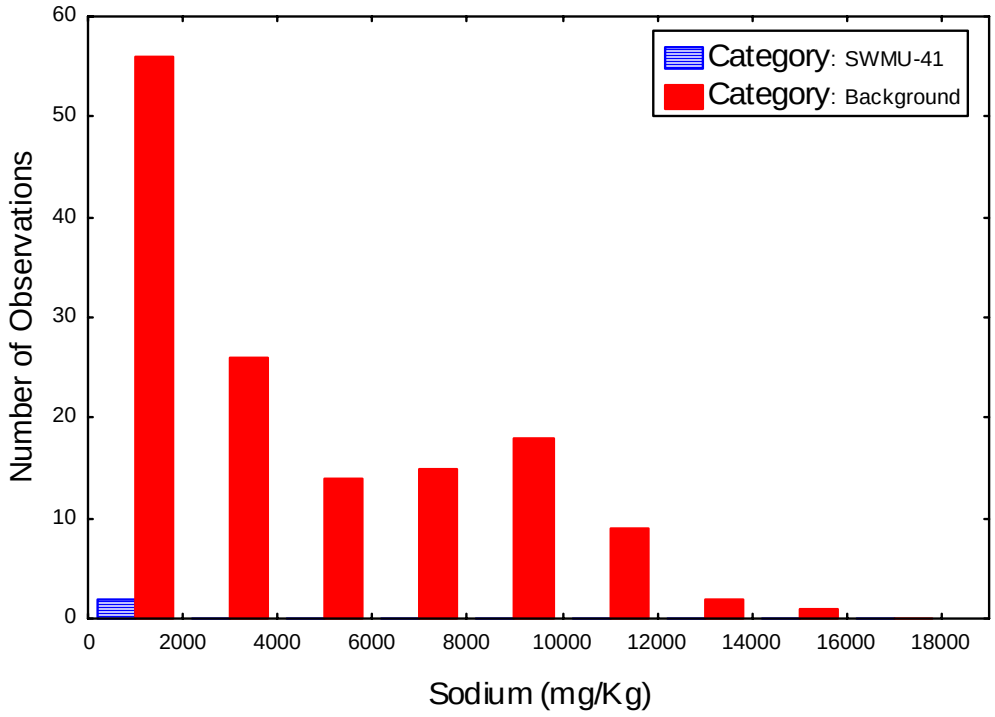


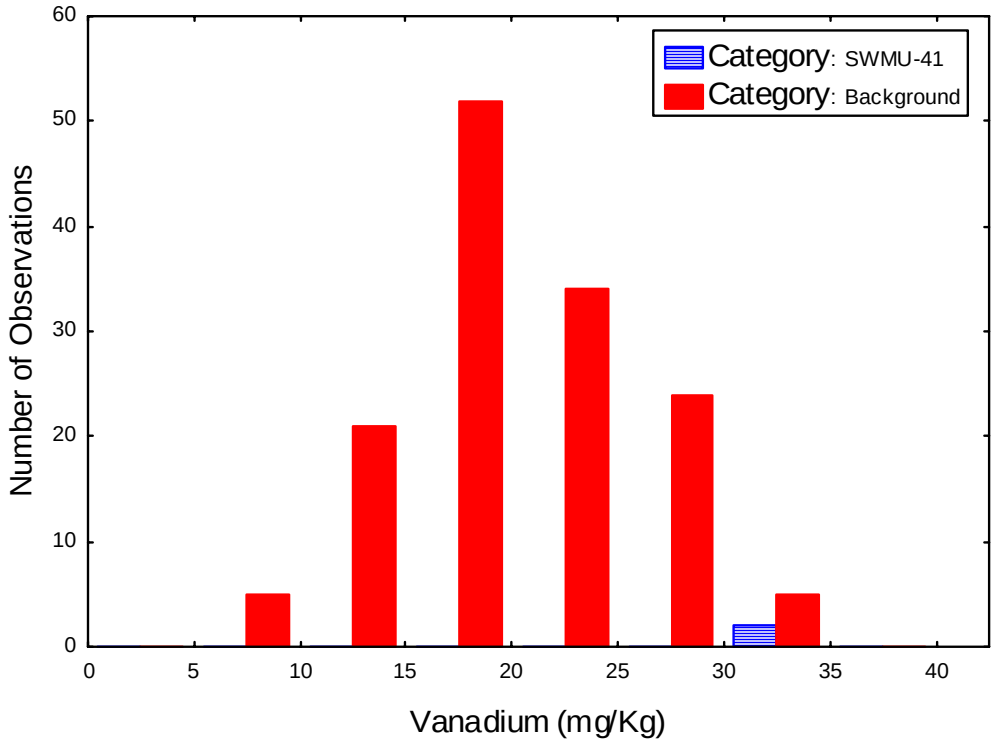
HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS





HISTOGRAMS SWMU-41 AREA 1 SURFACE SOILS





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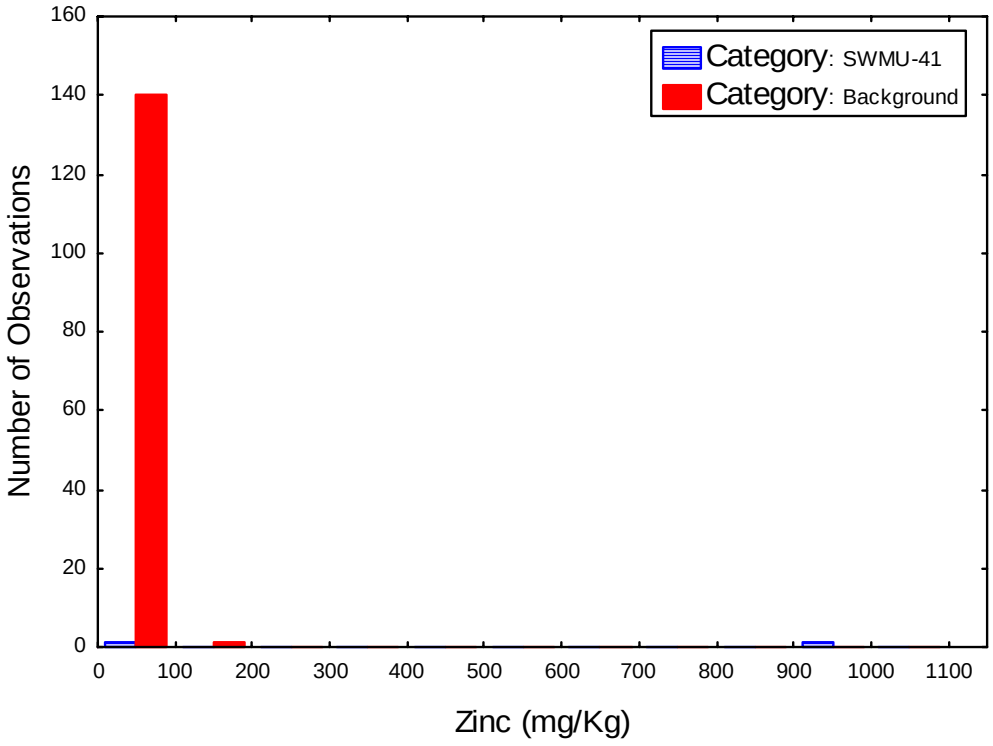
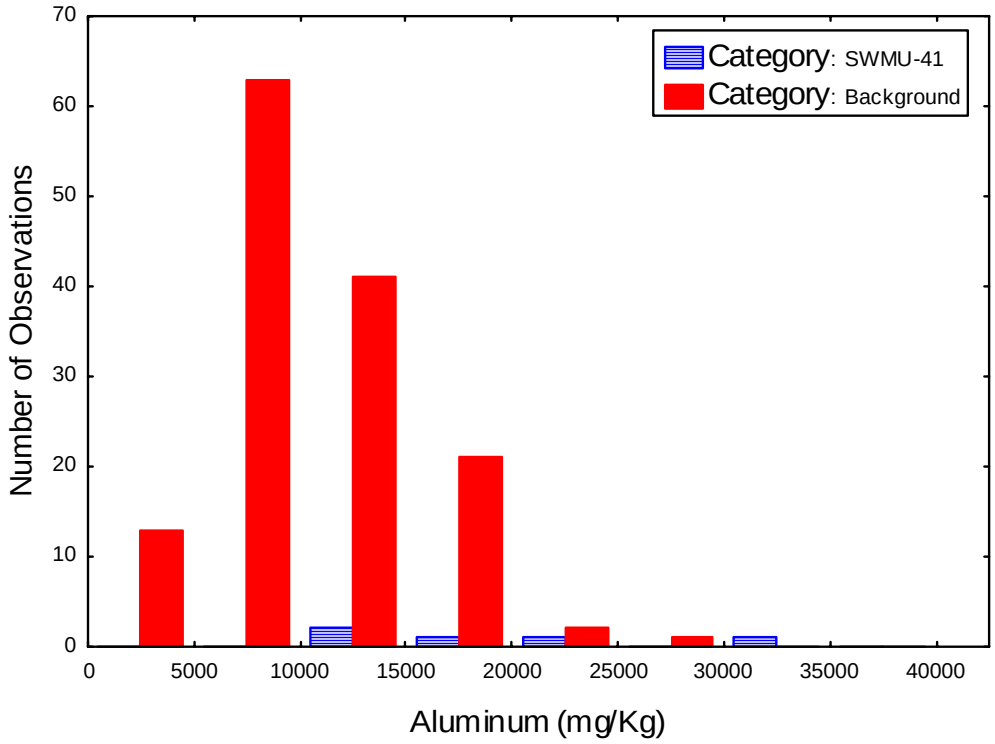
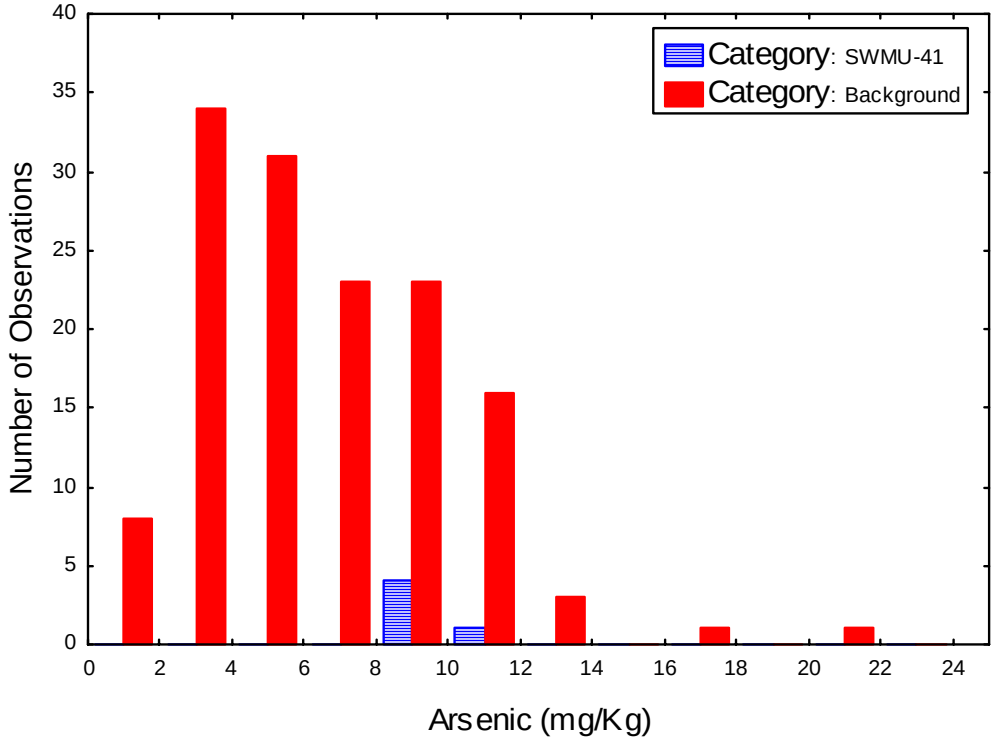


HISTOGRAMS SWMU-41 AREA 1 SUBSURFACE SOILS





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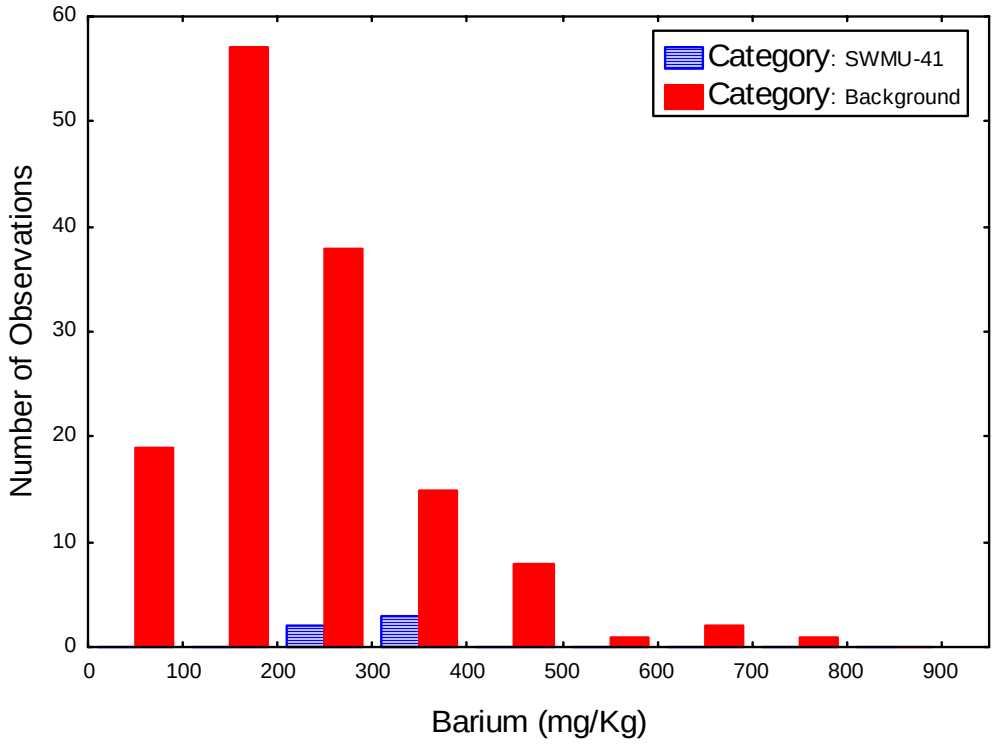

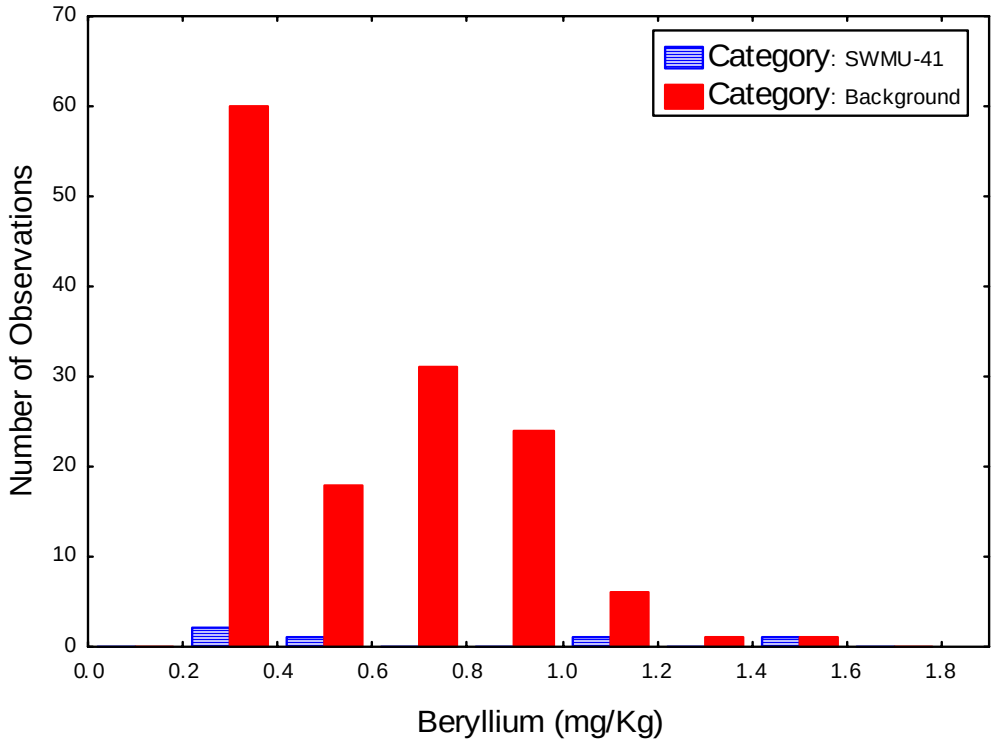

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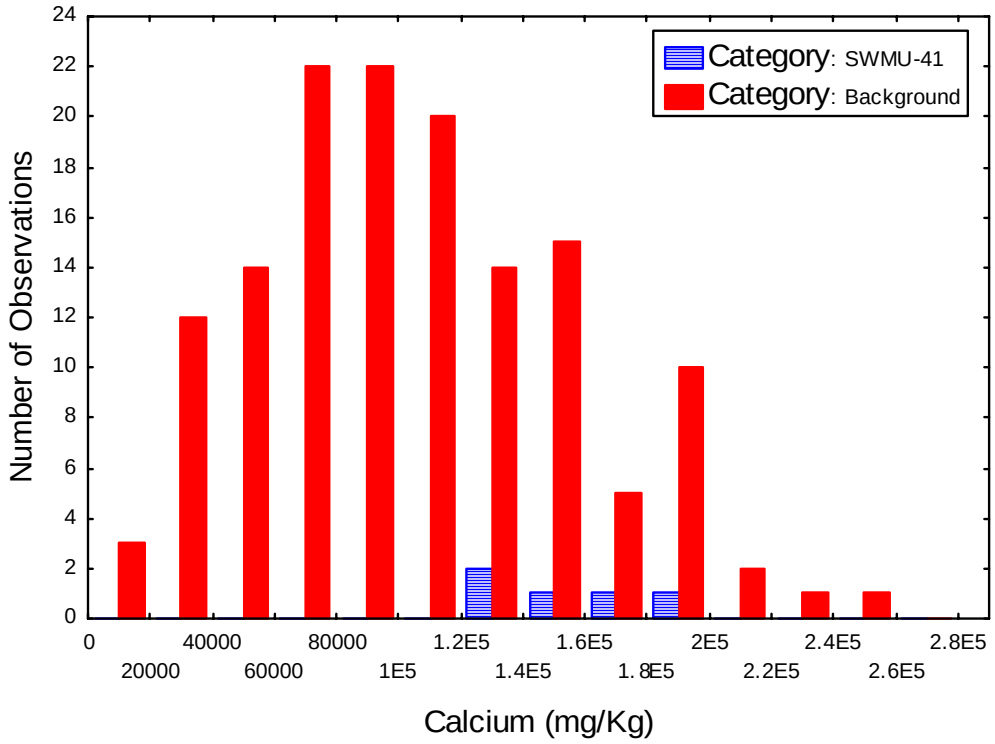

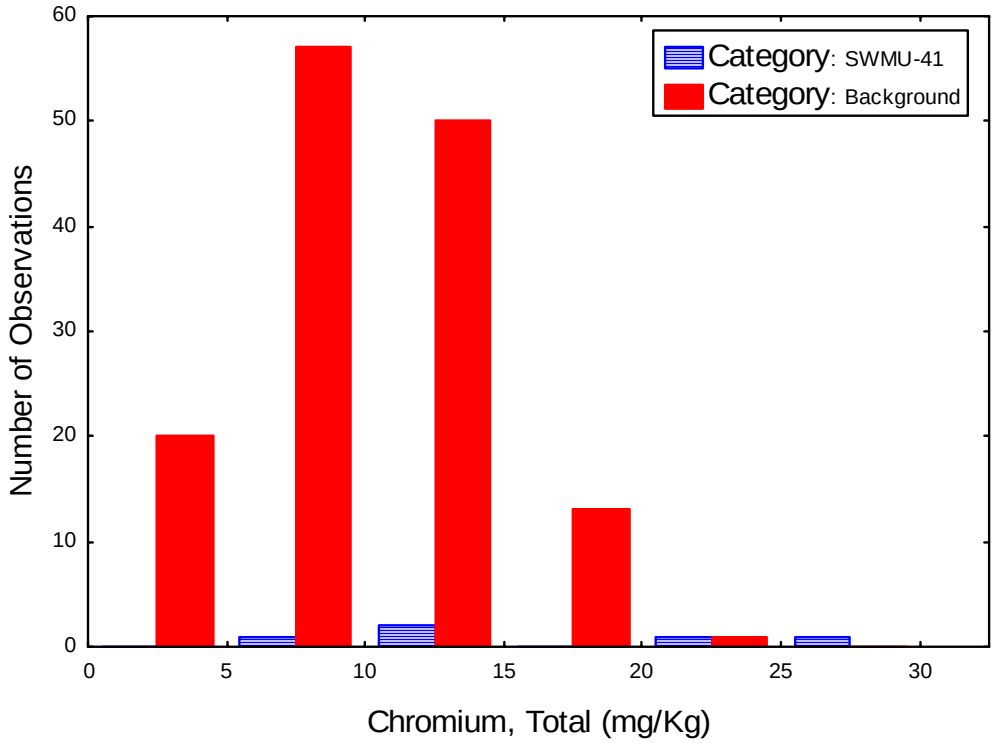

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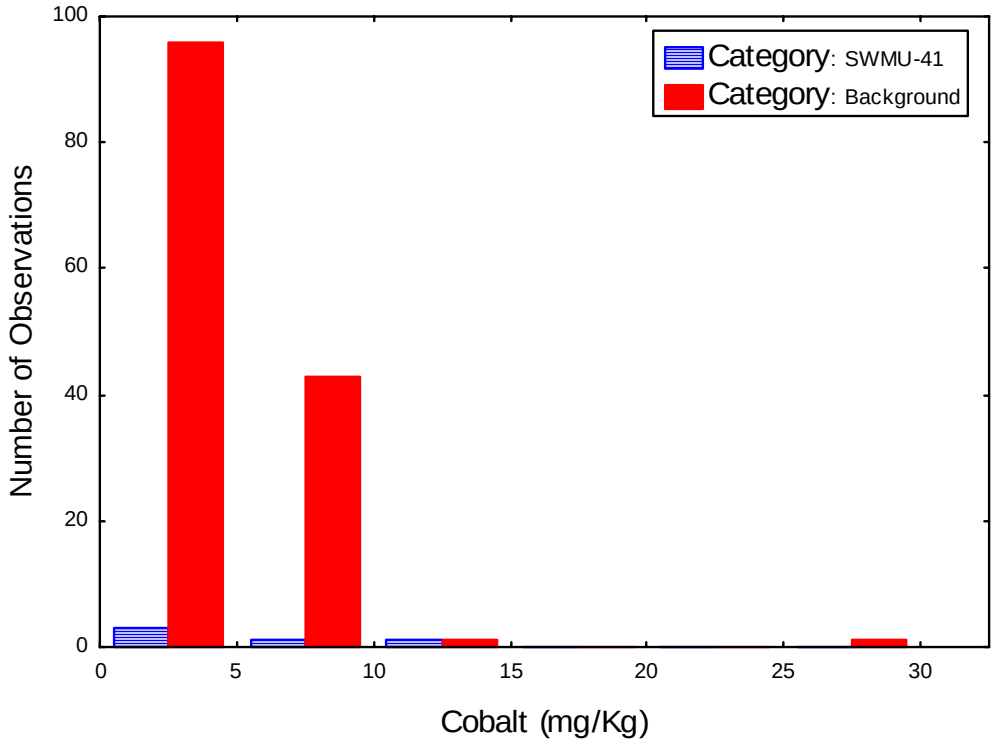

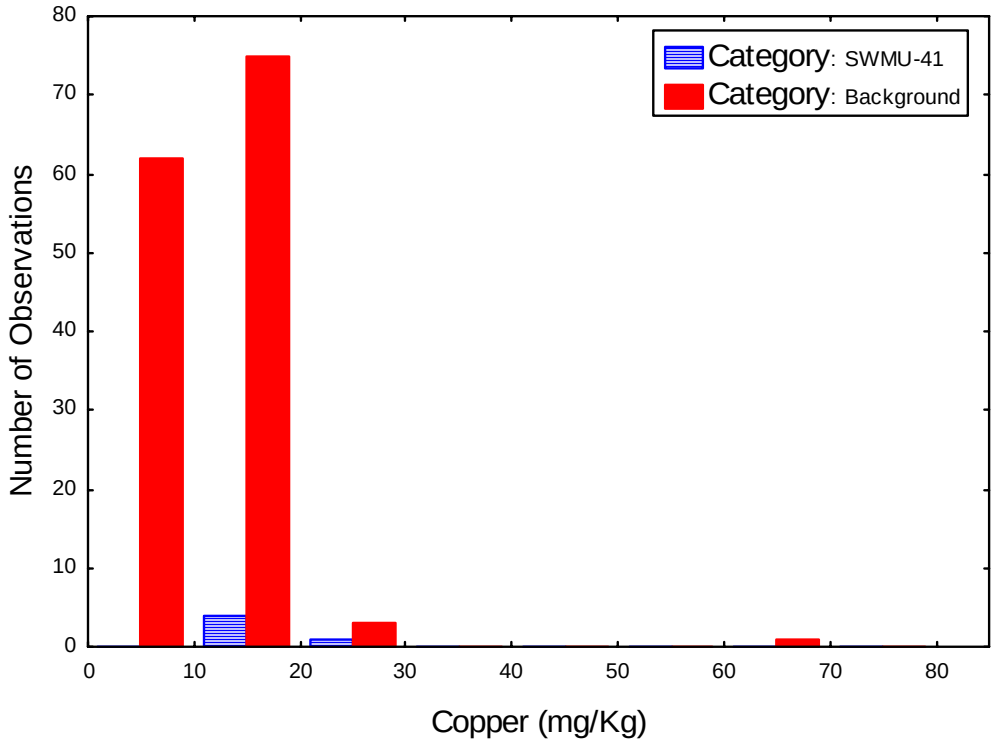

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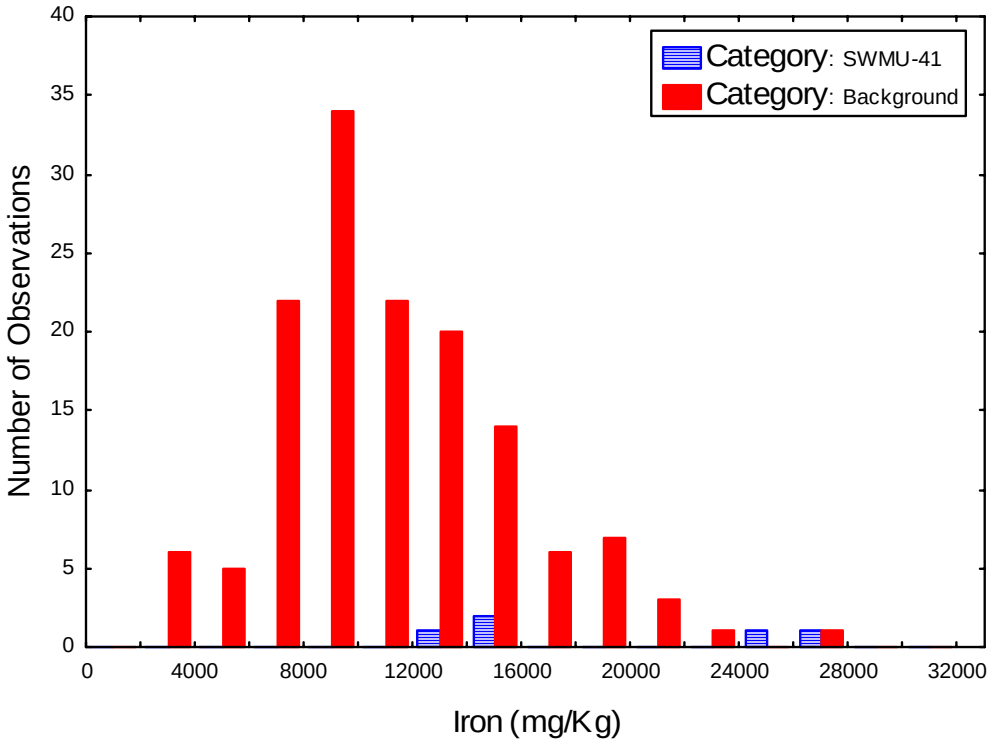

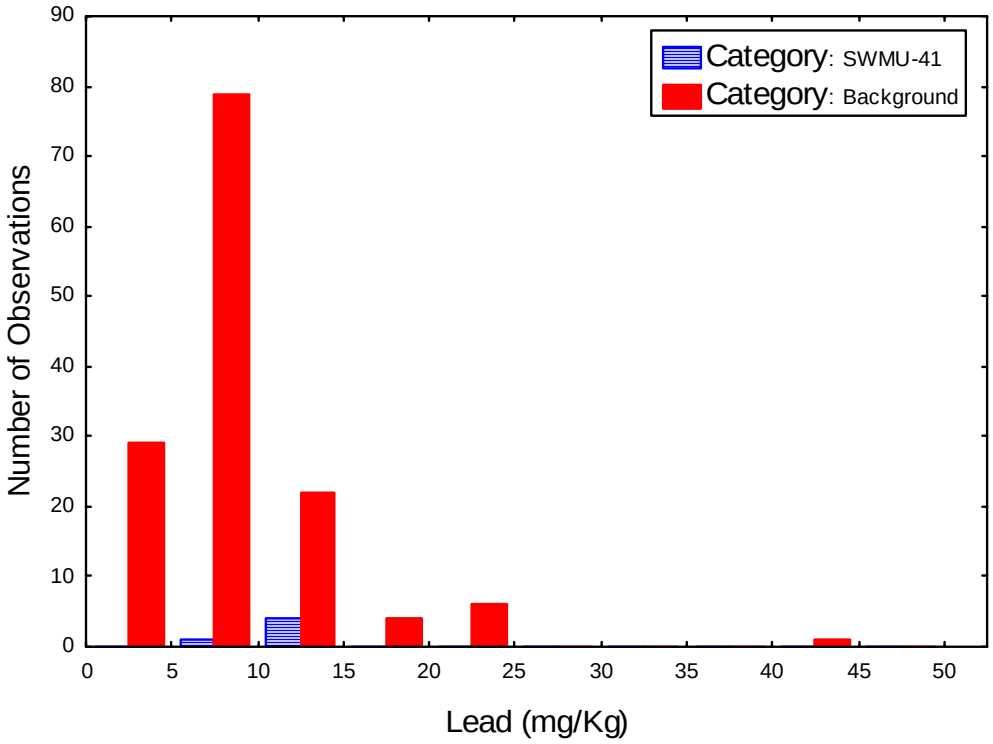

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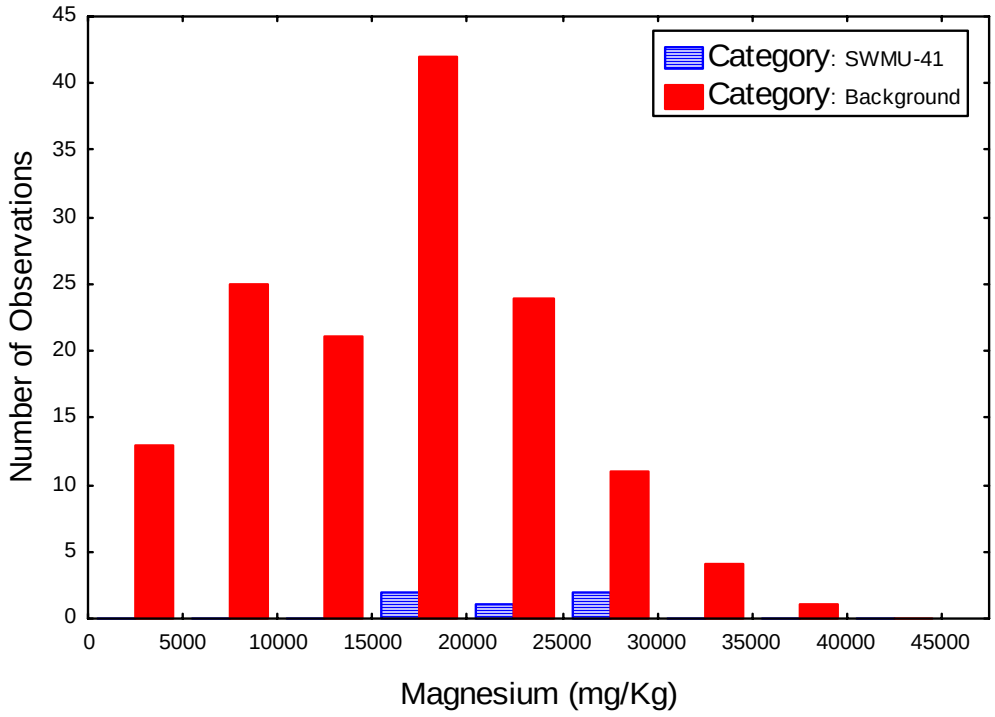

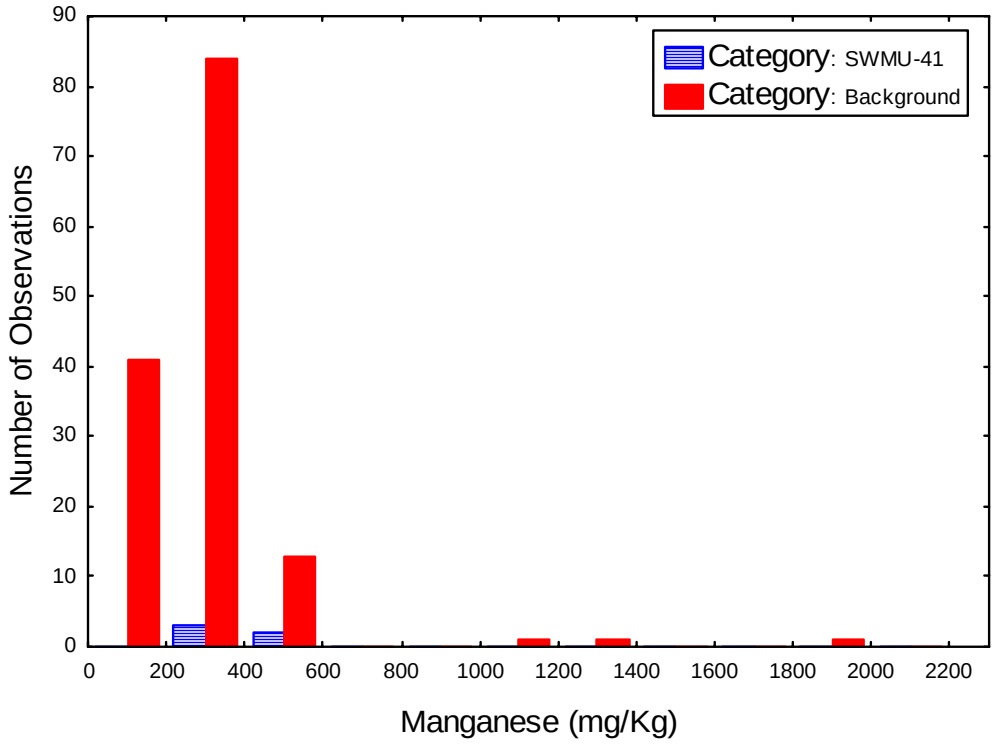

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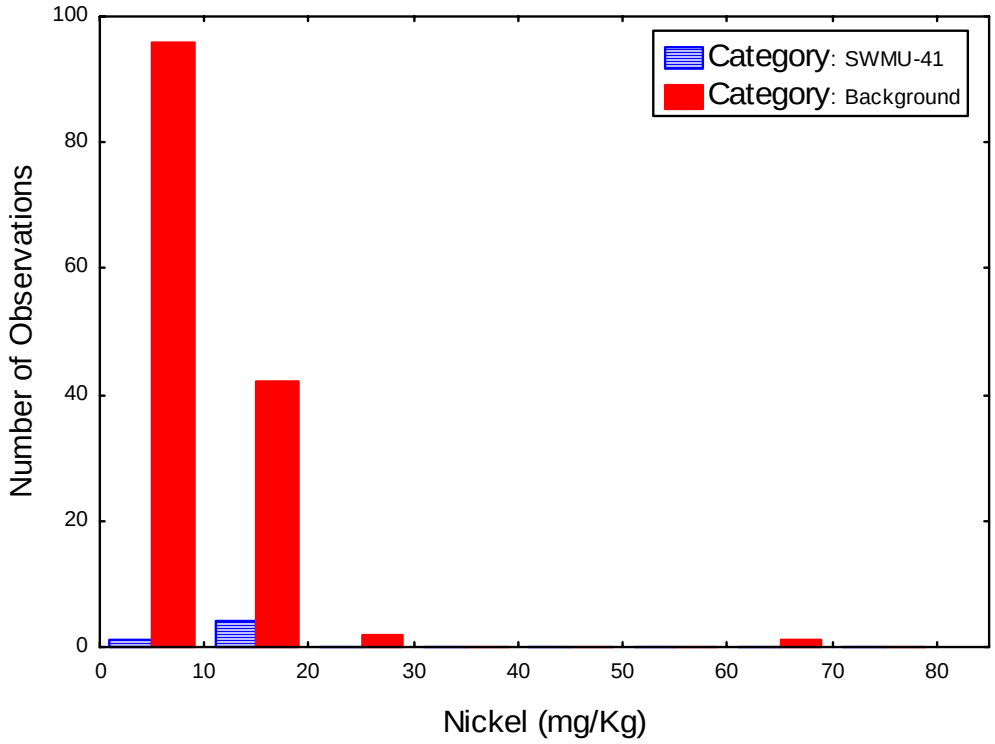

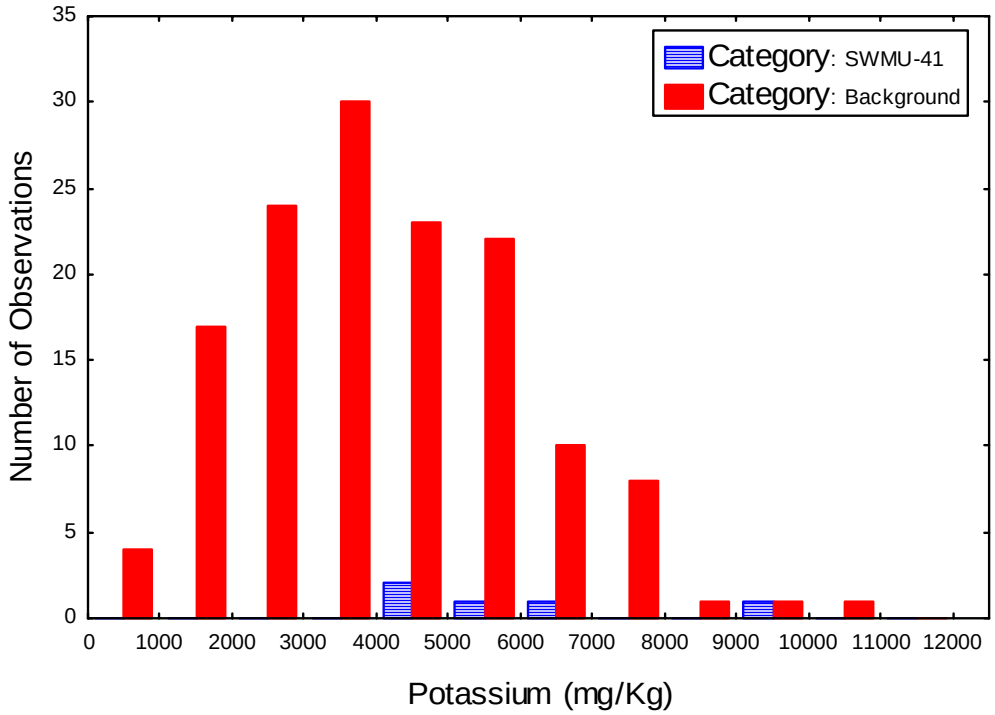

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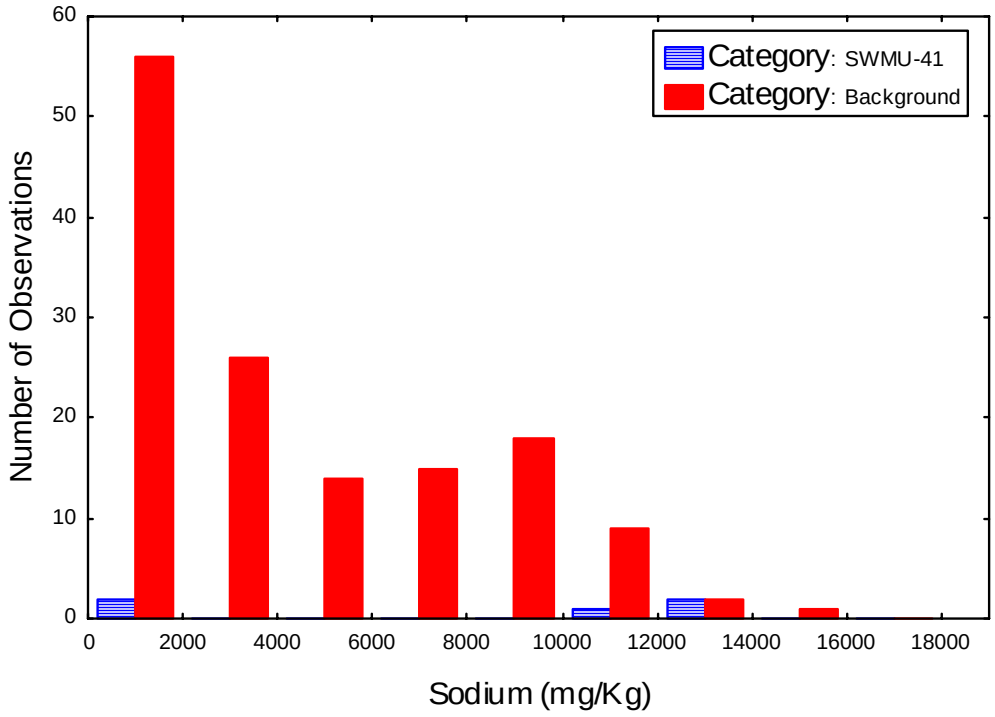

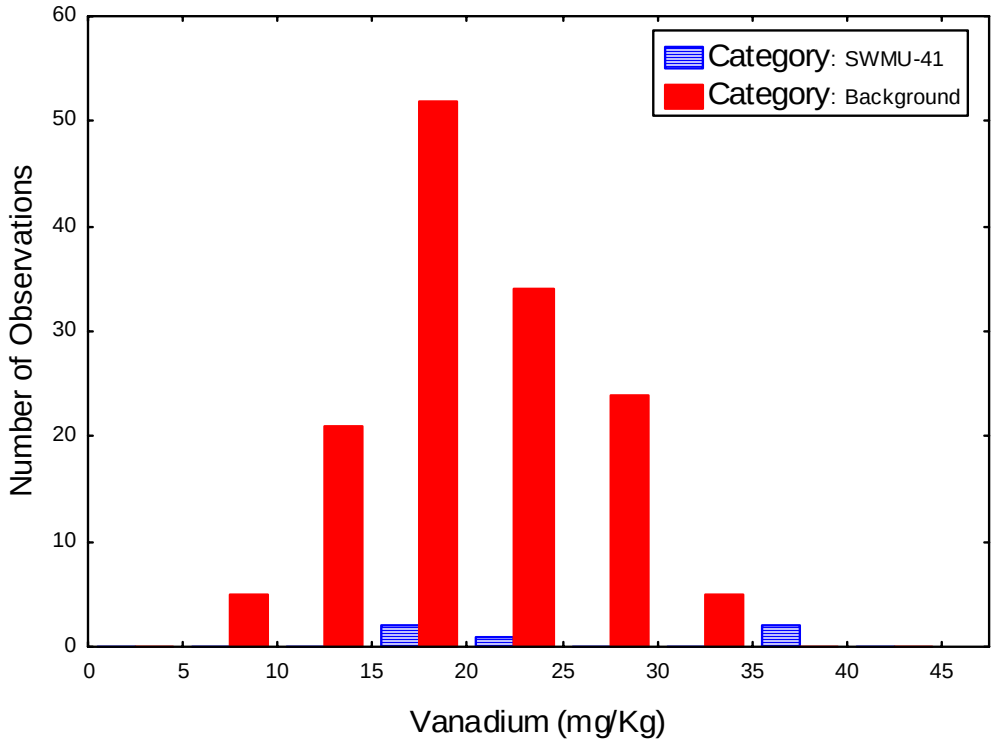

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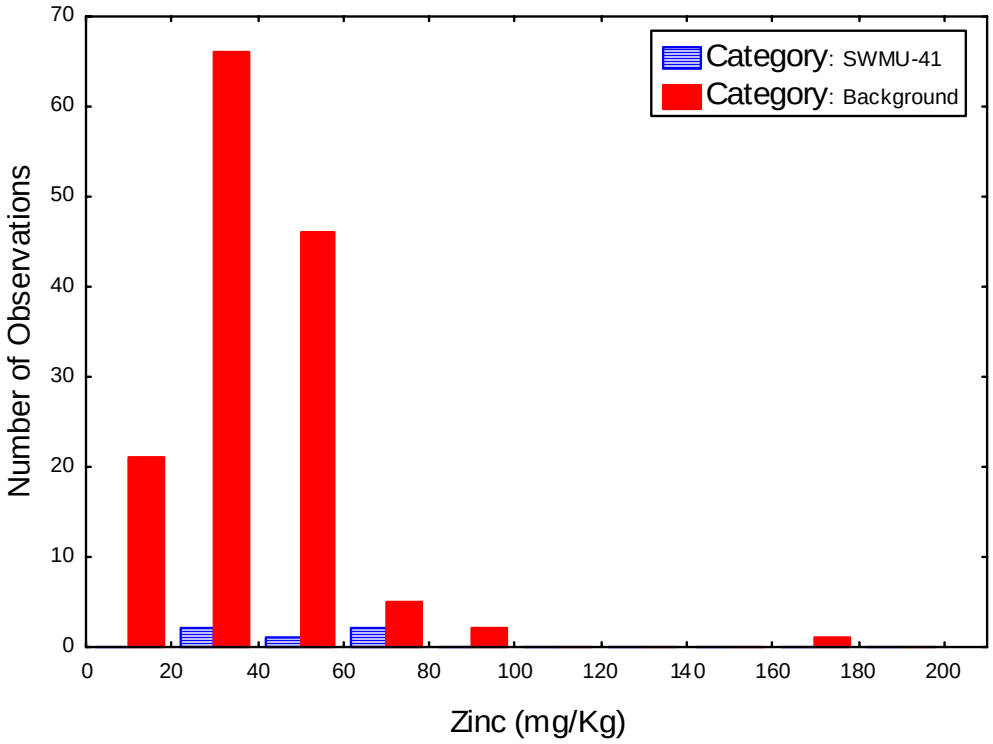

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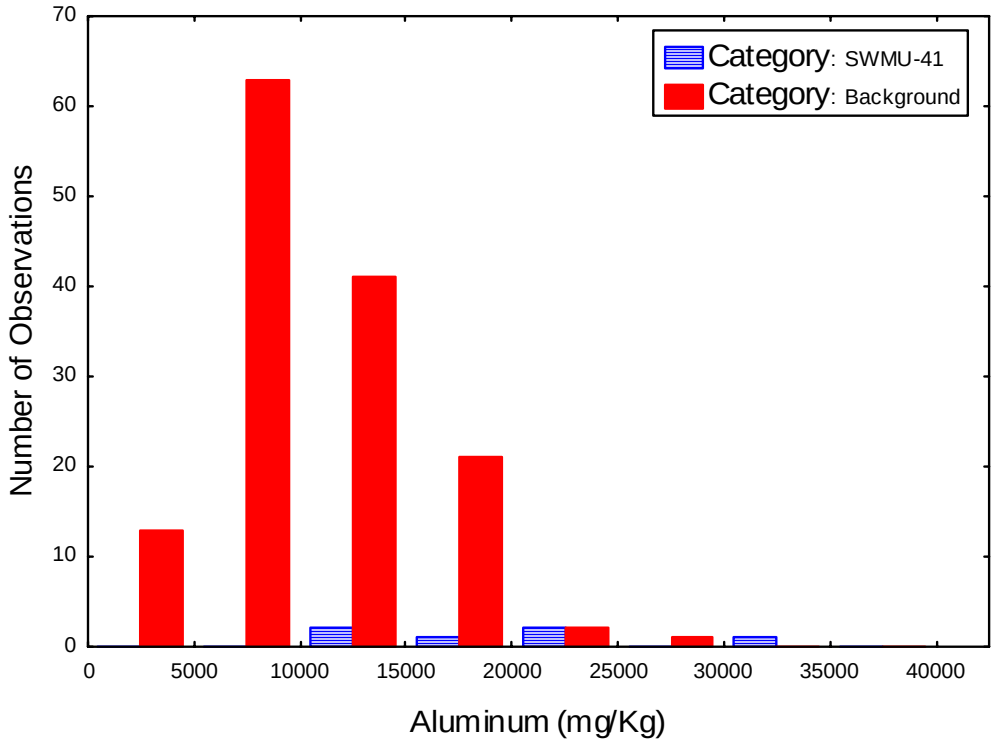

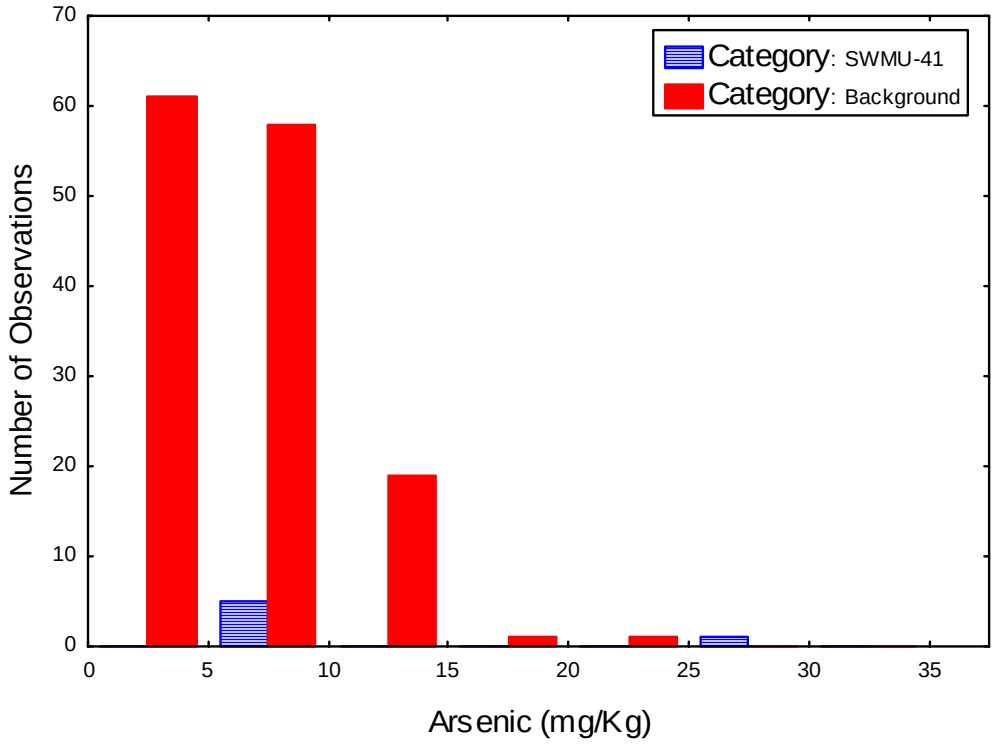

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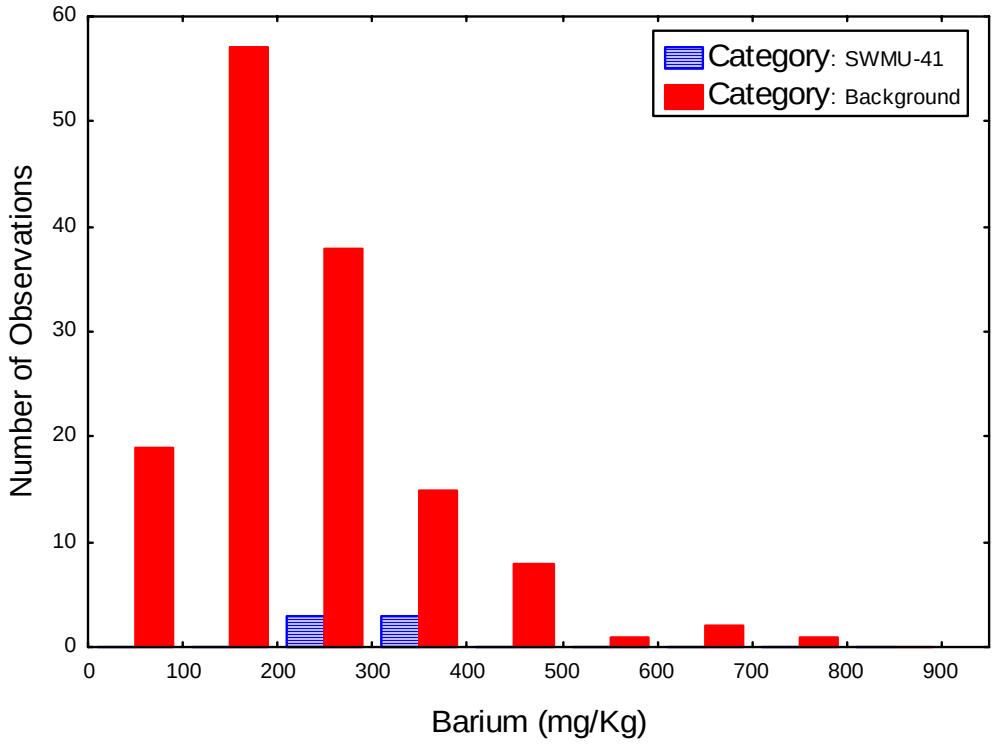

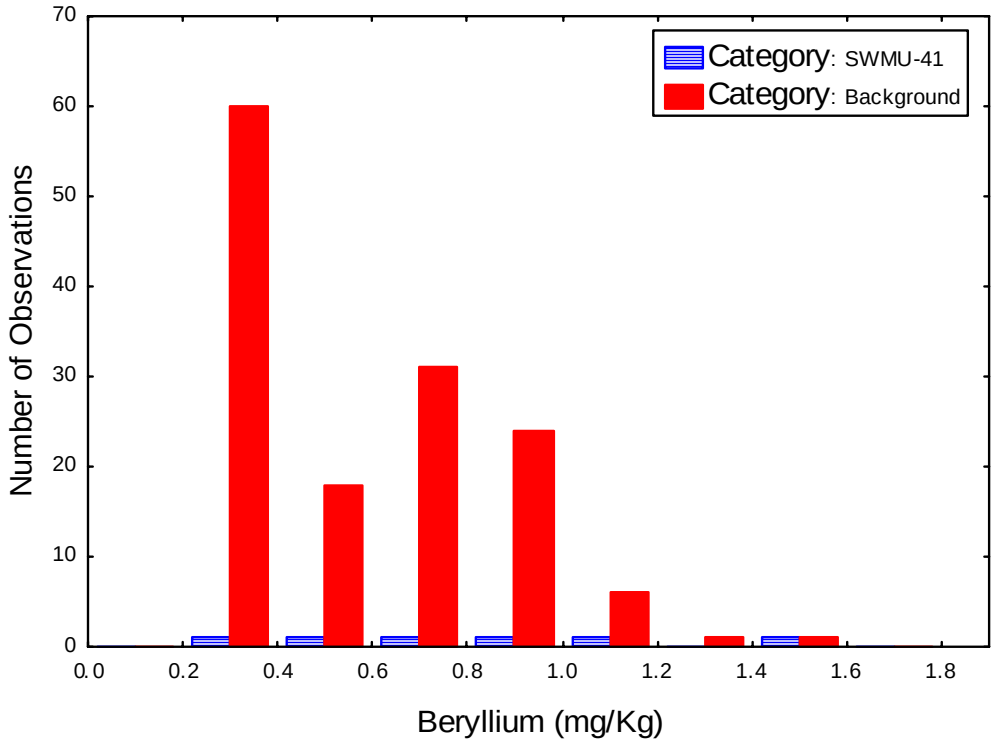

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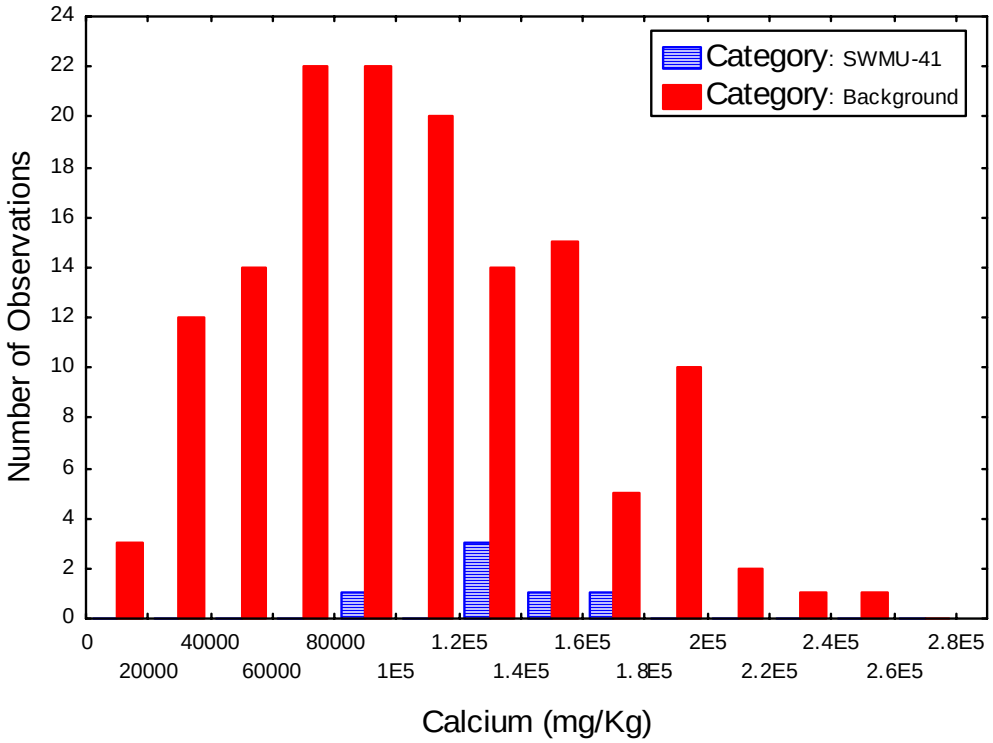

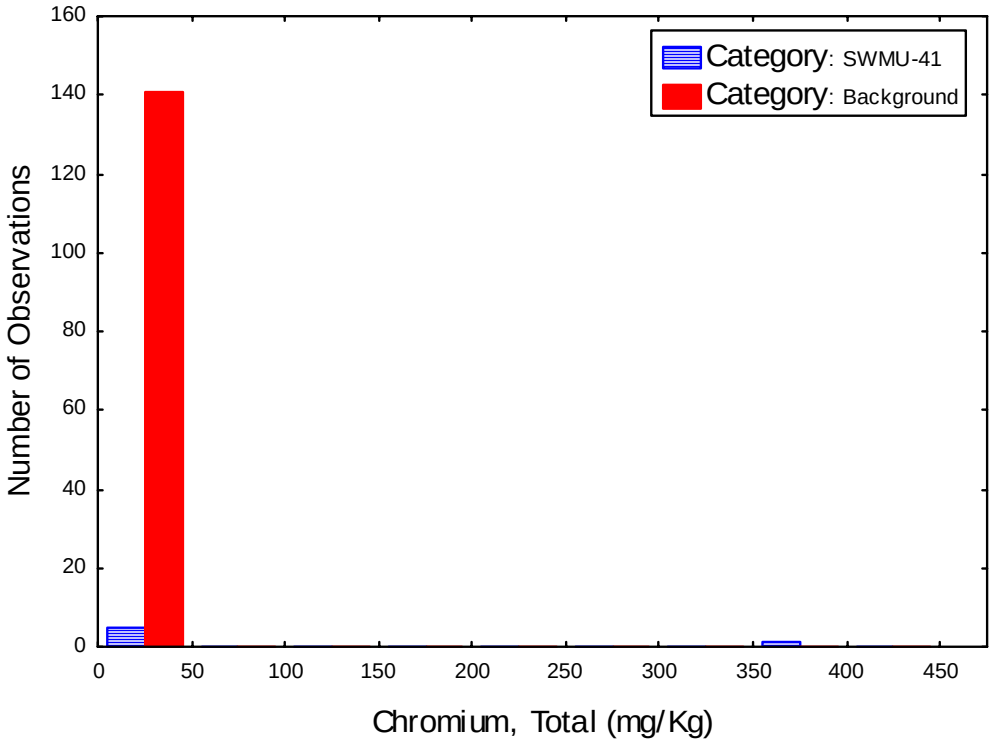

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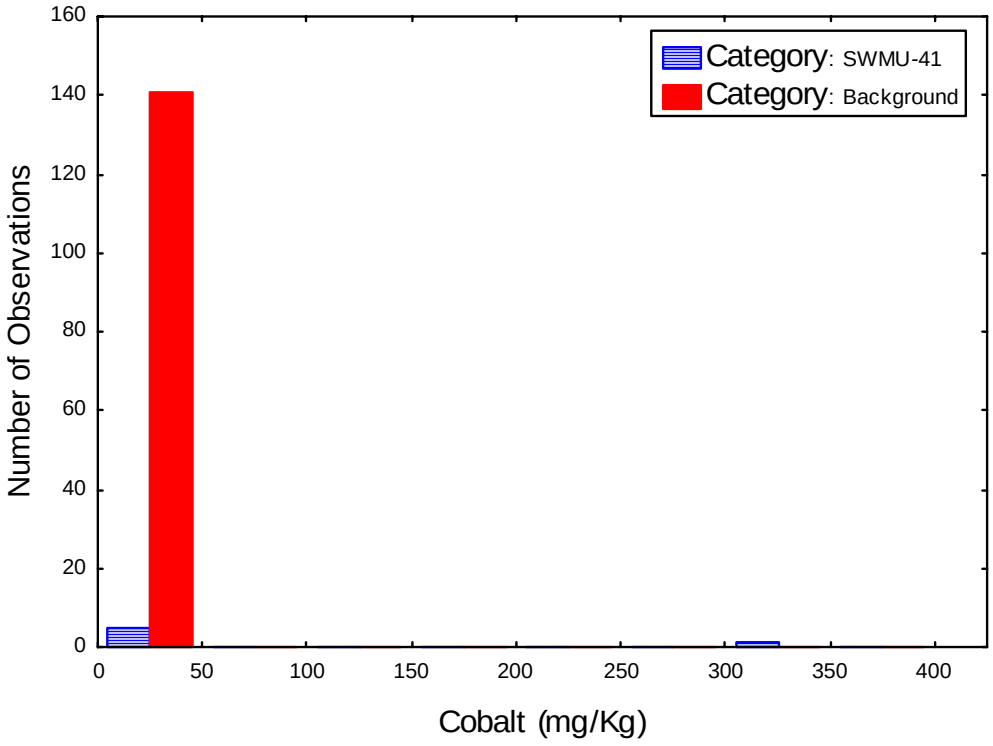

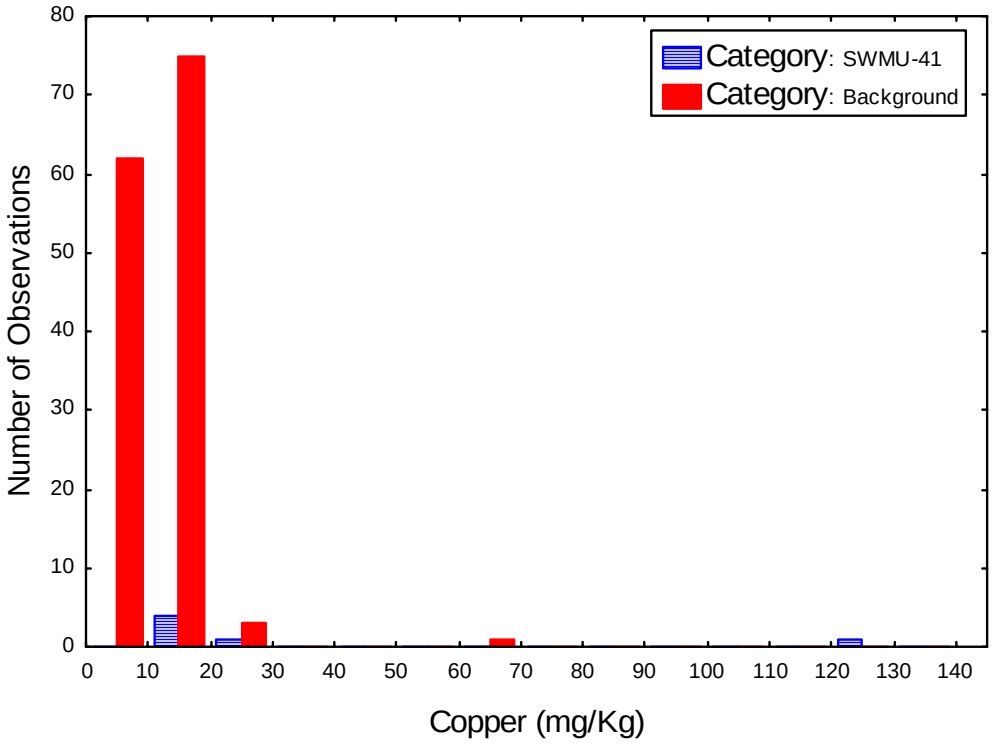

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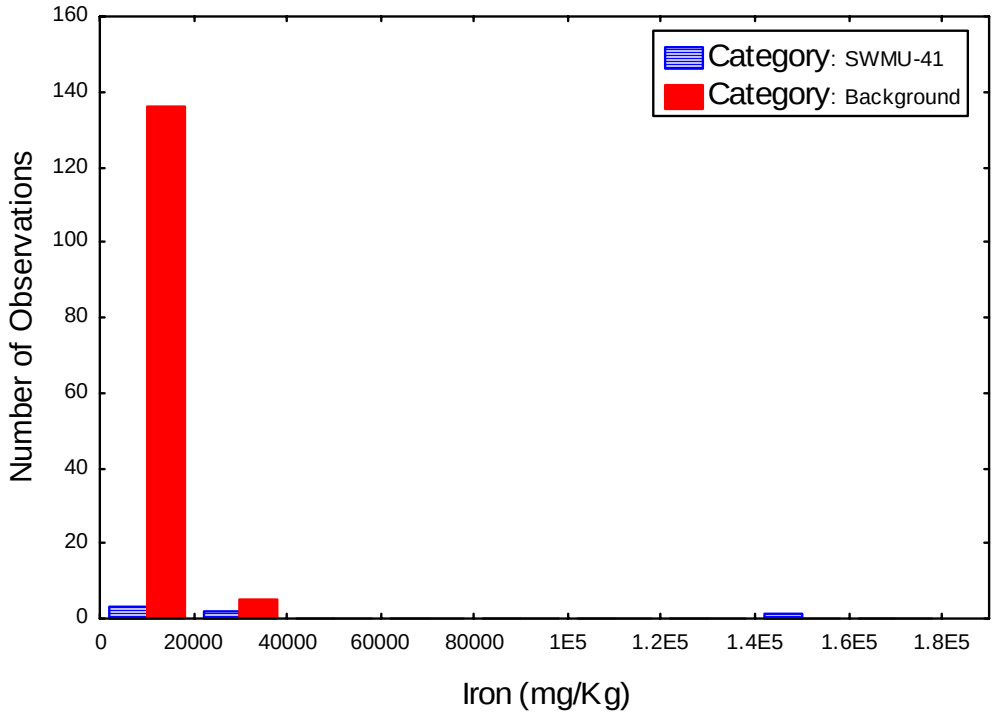

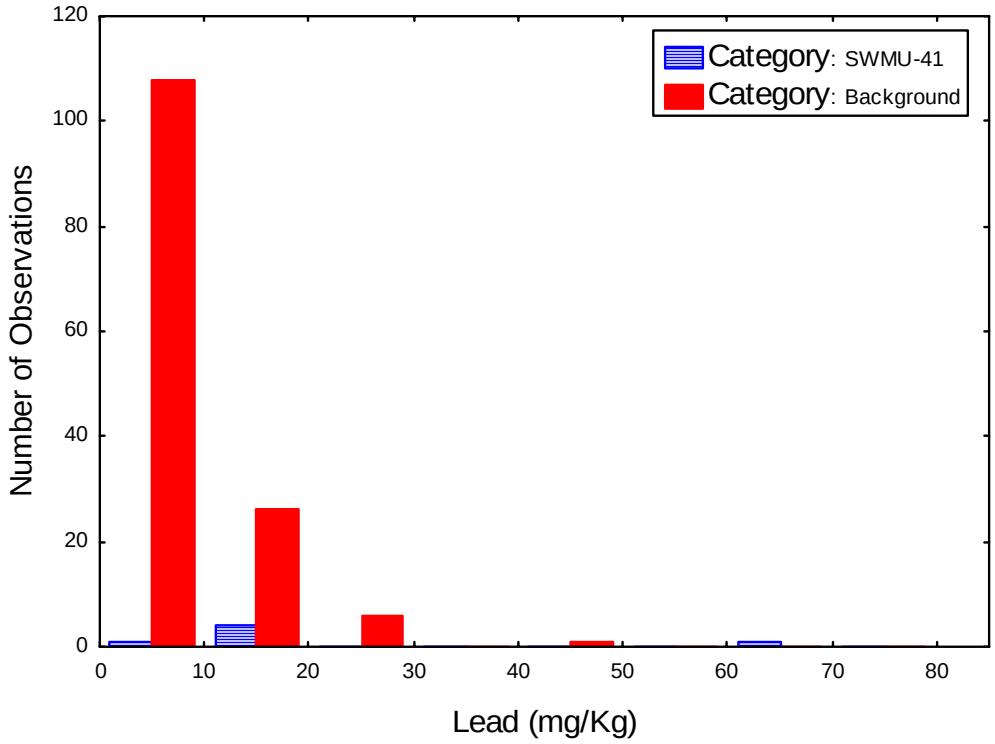

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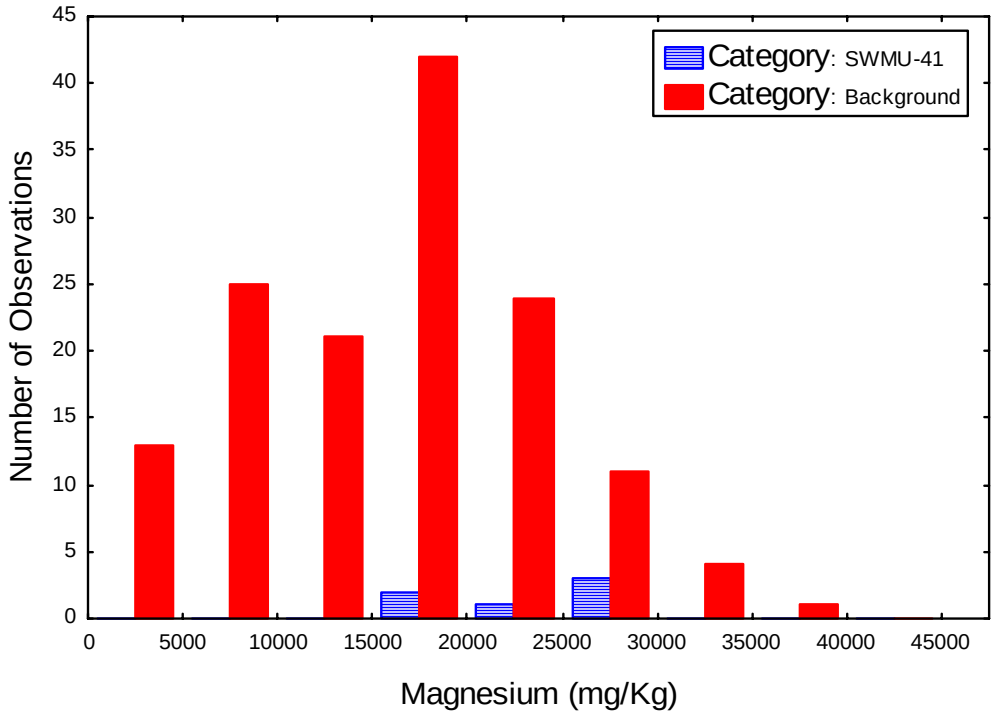

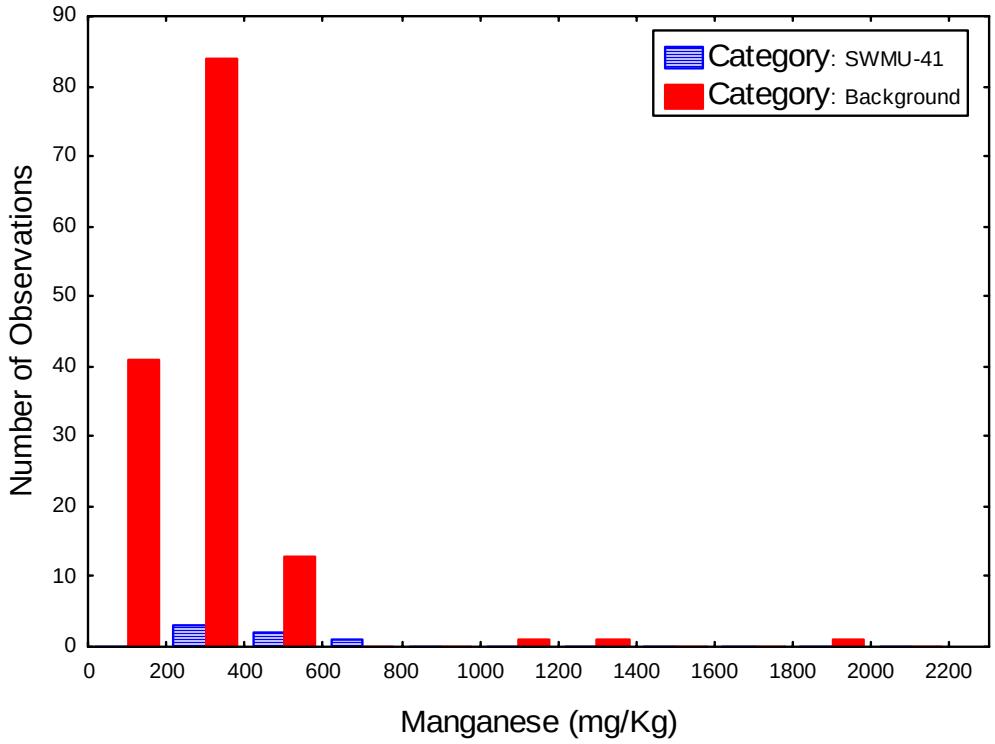

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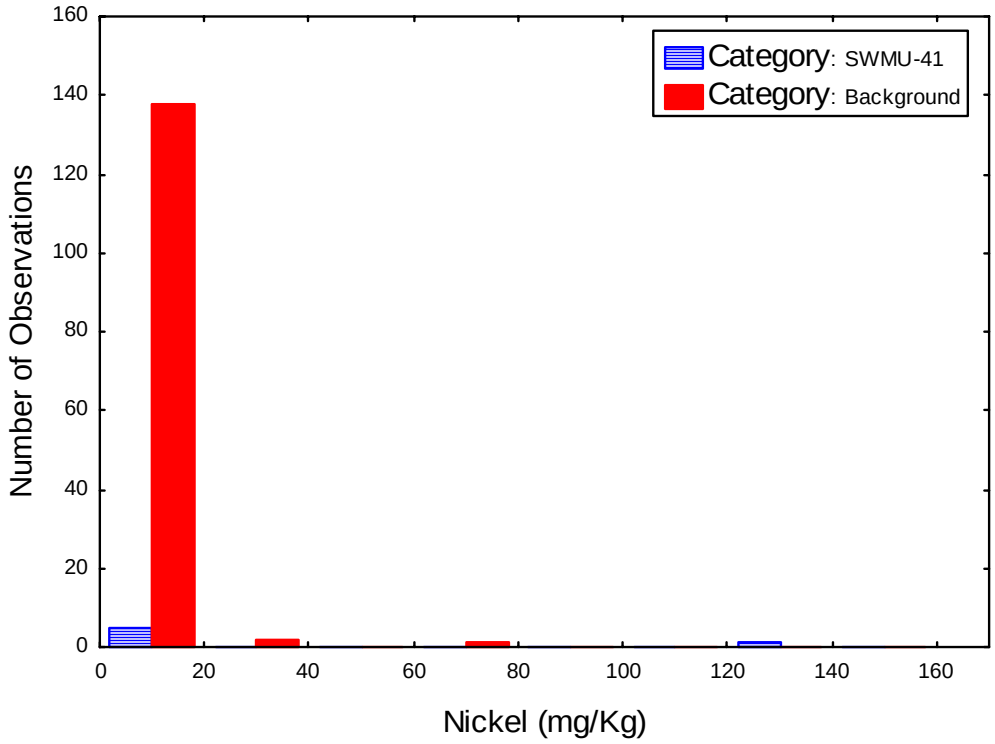

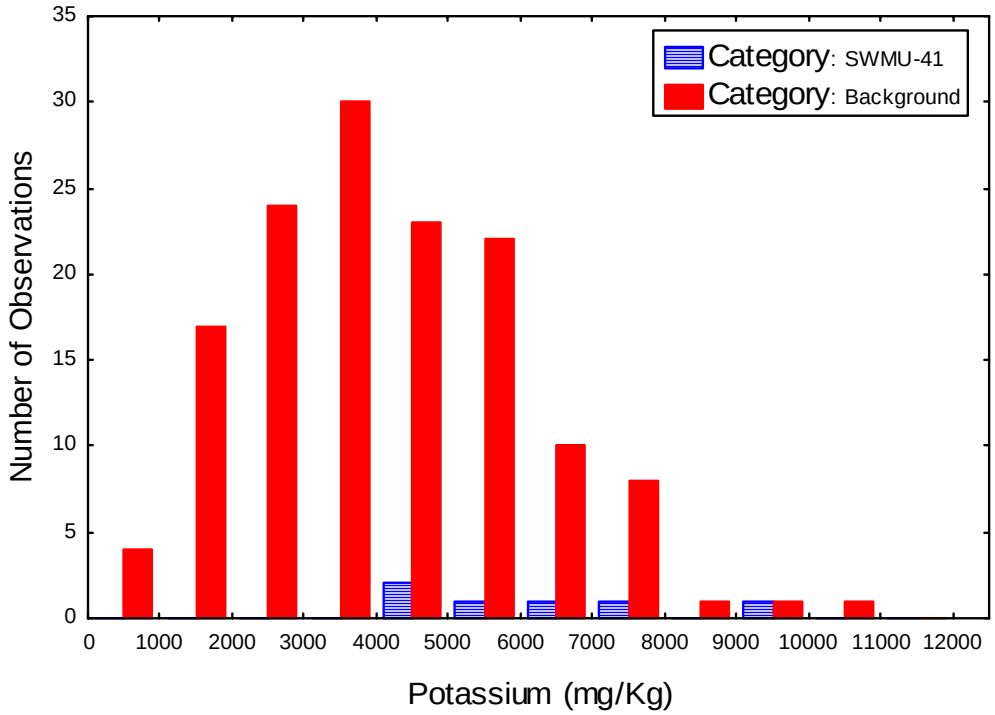

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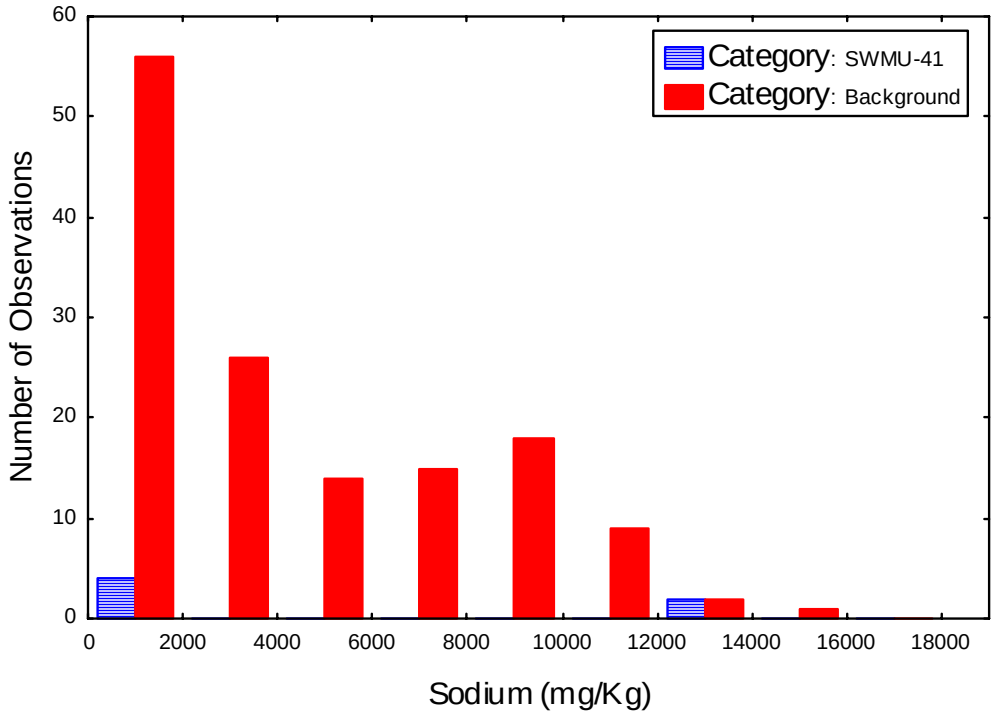

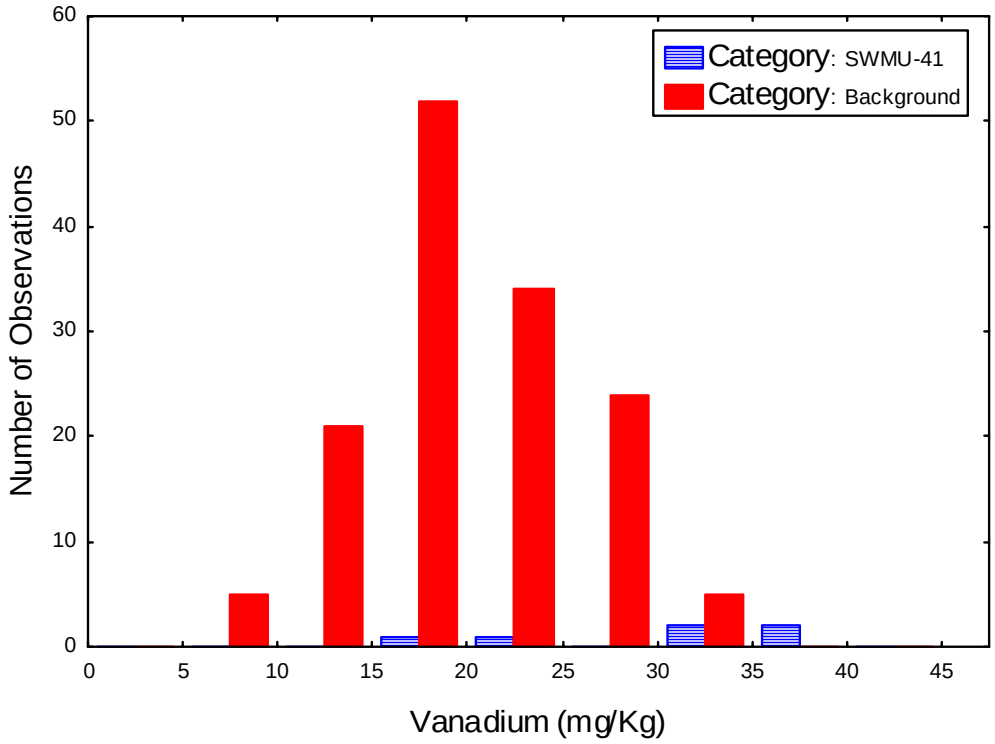

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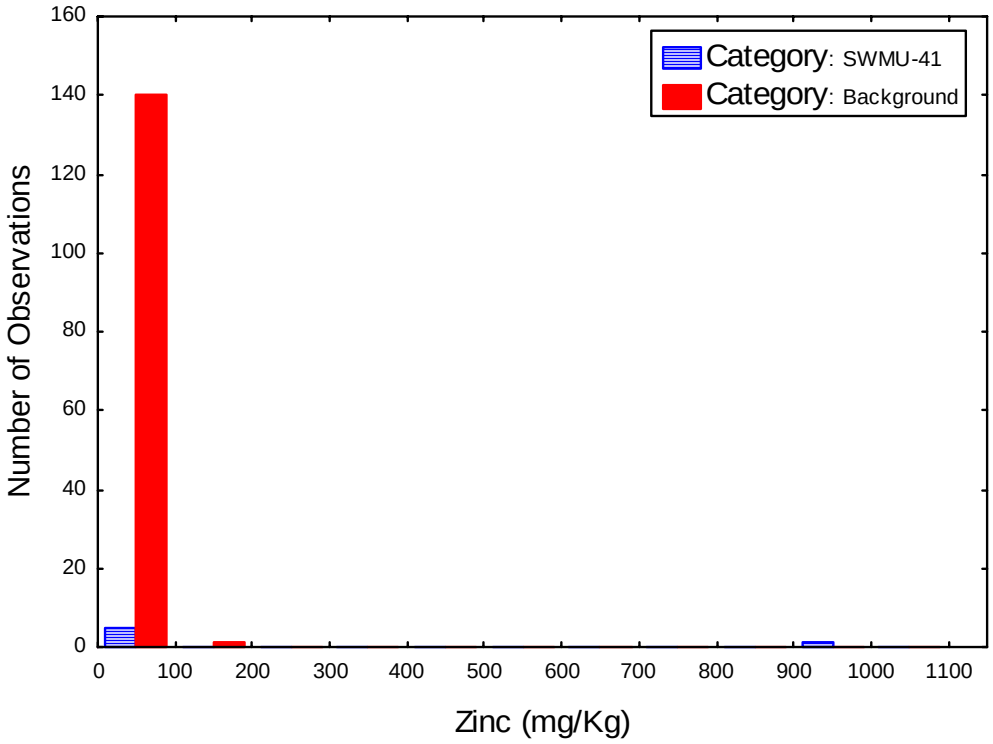

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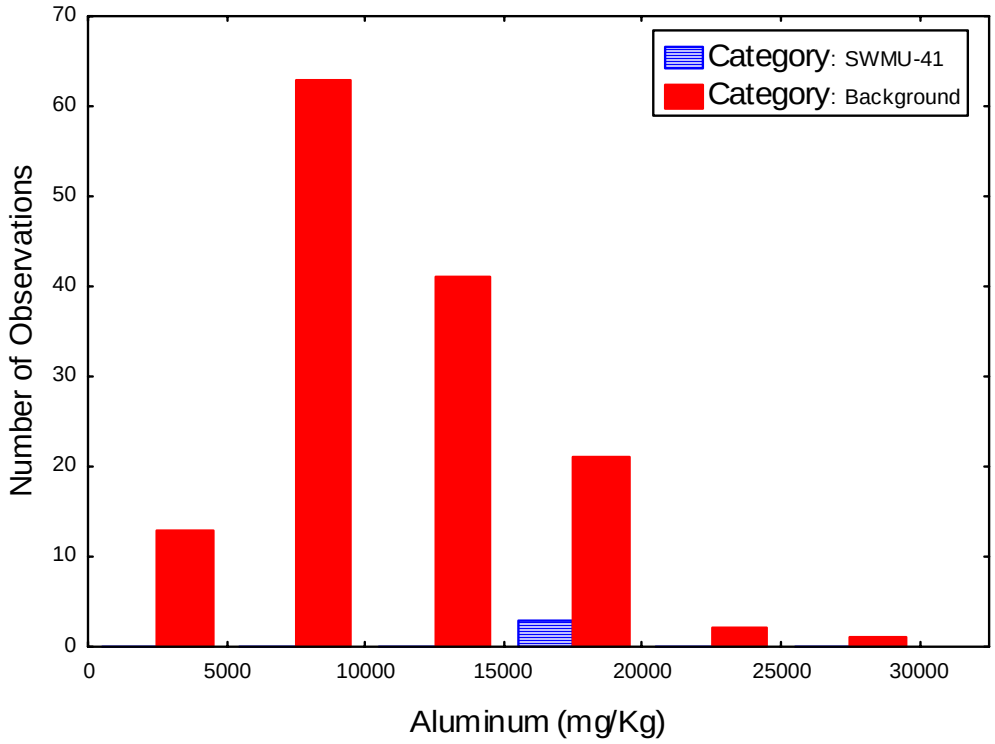

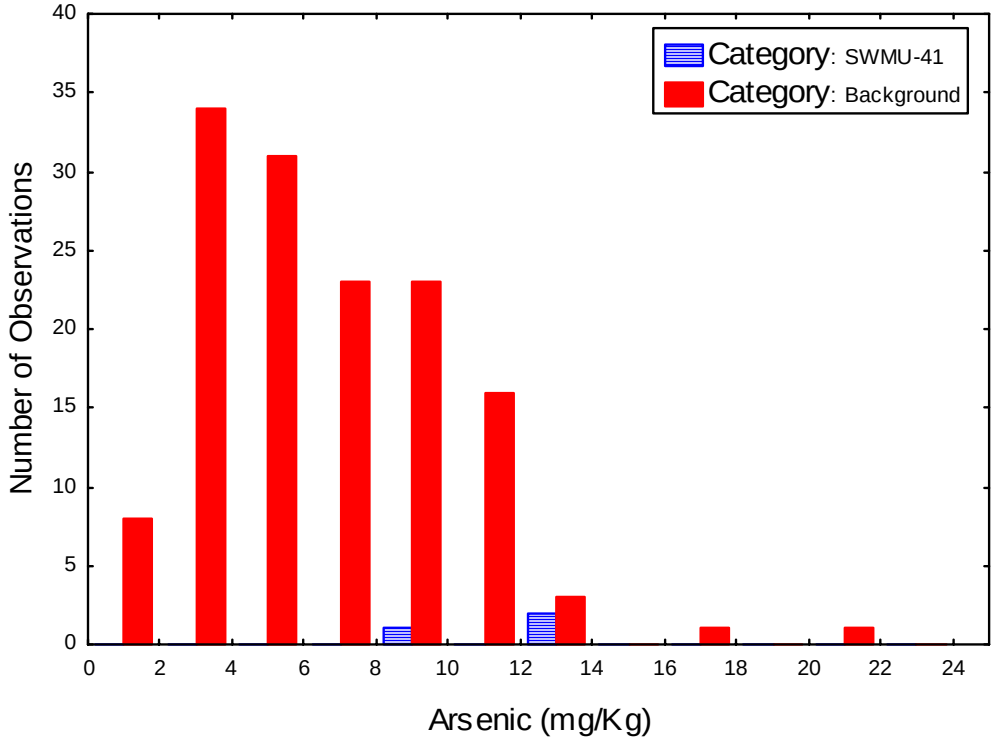

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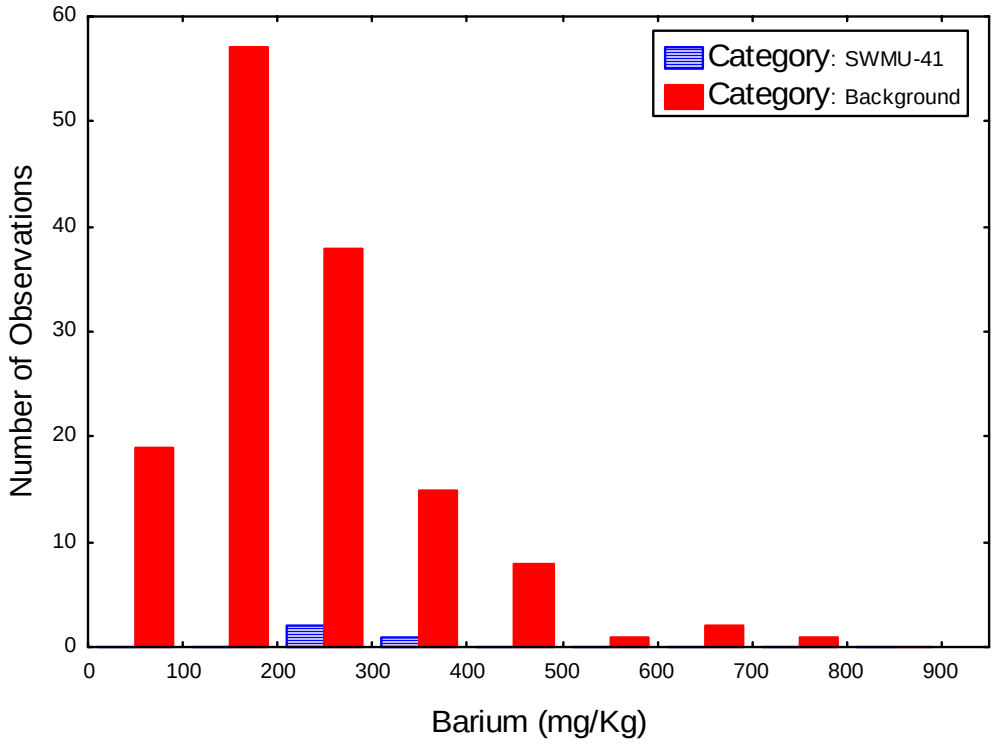

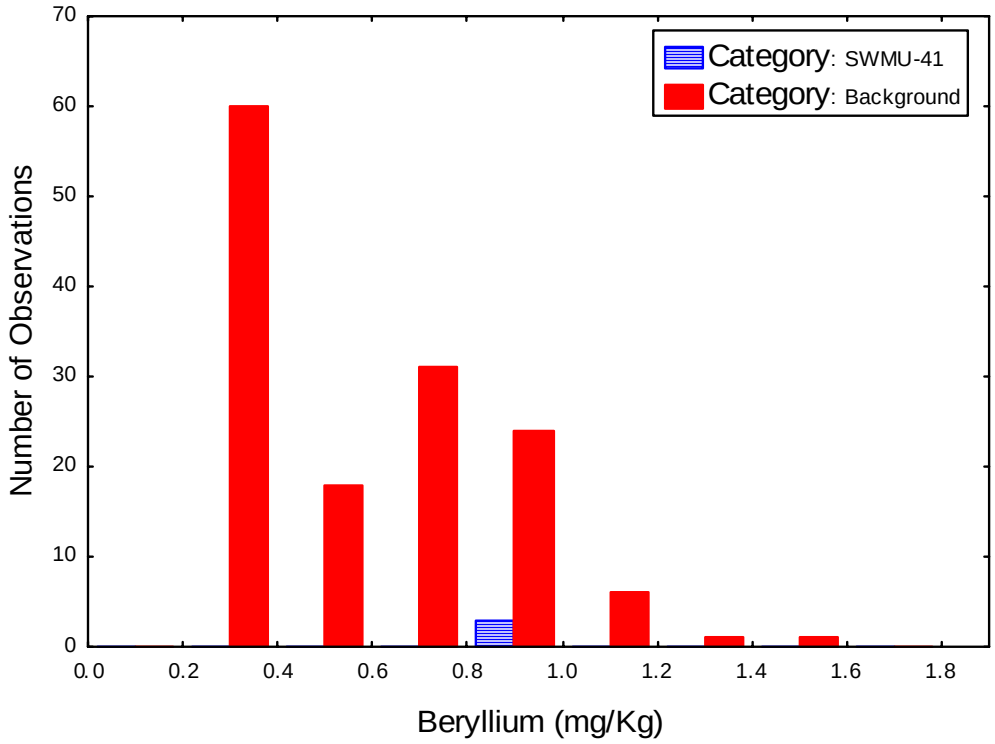

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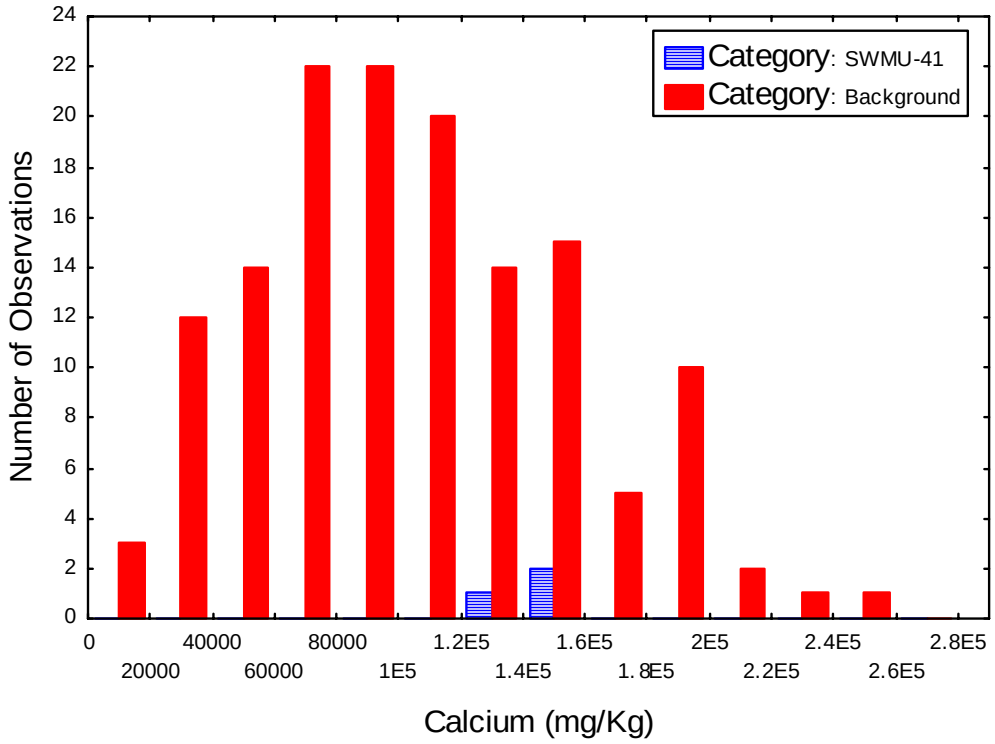

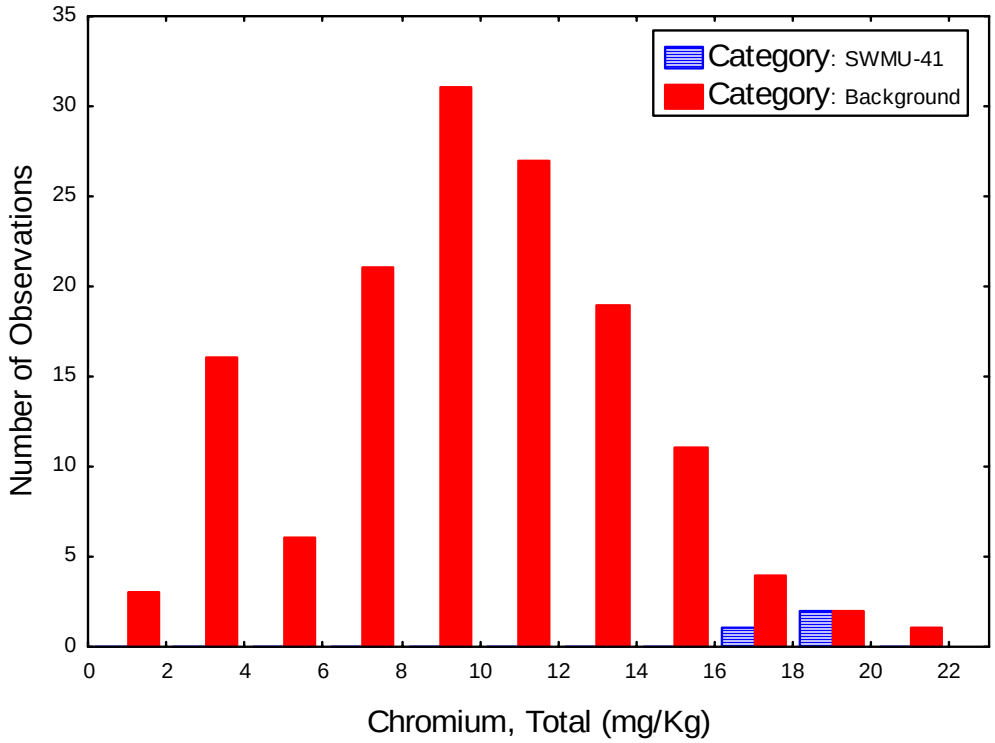

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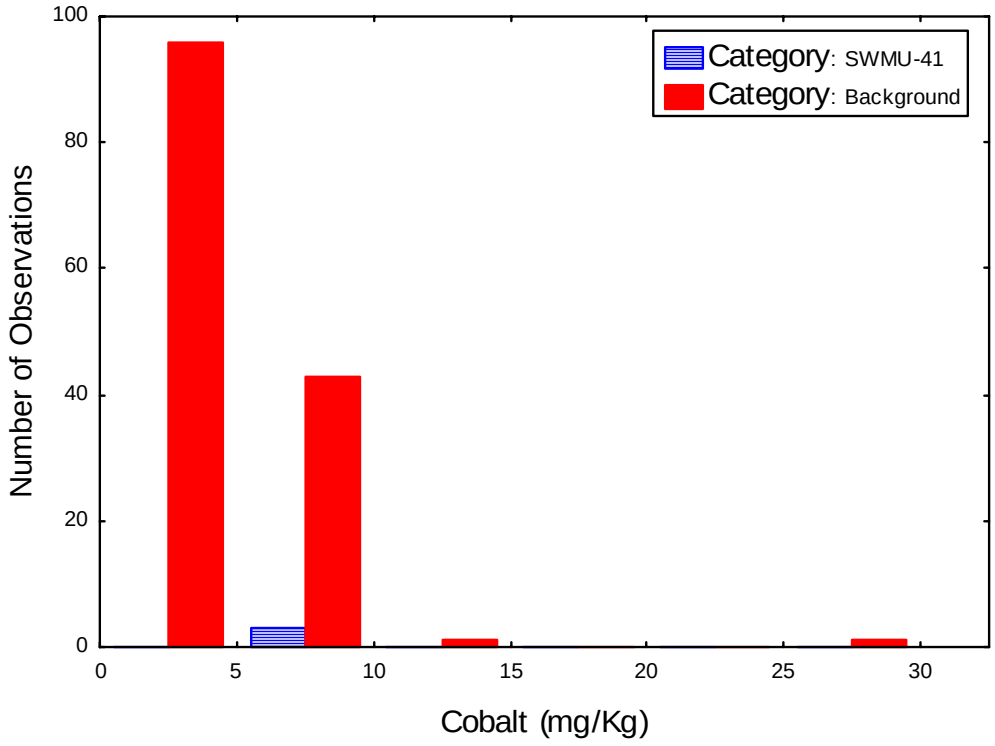

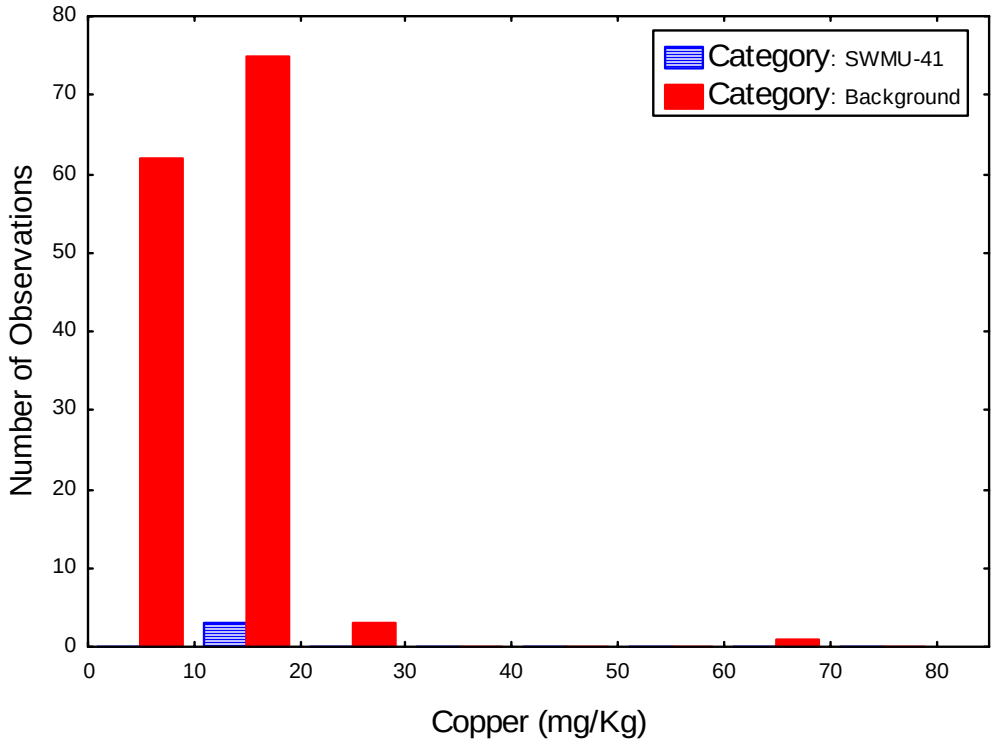

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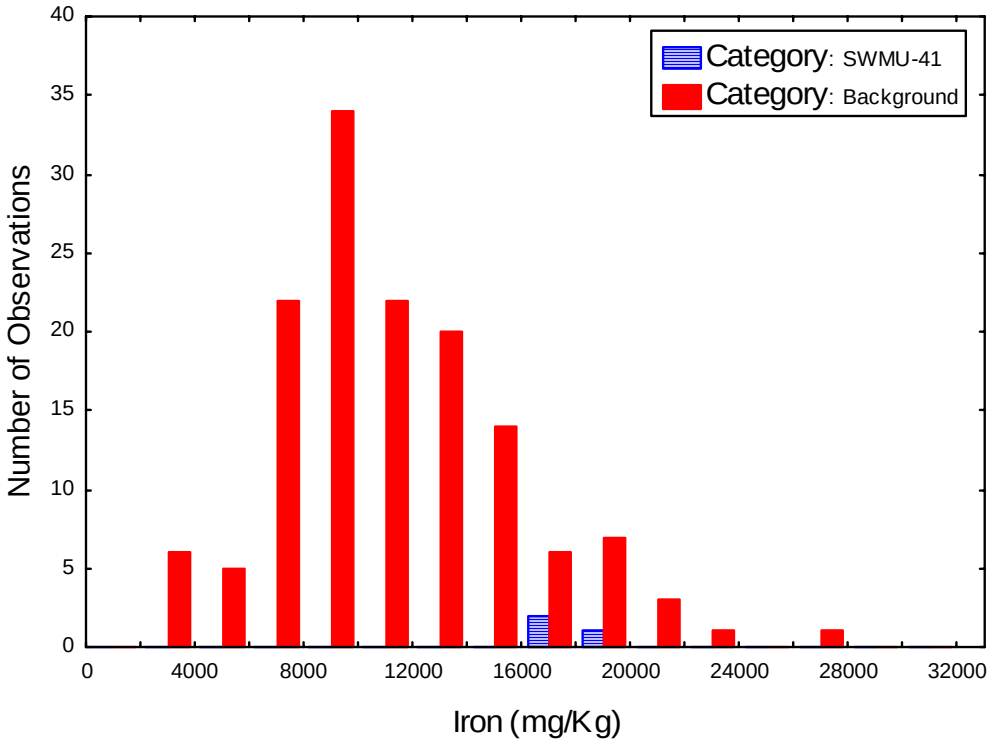

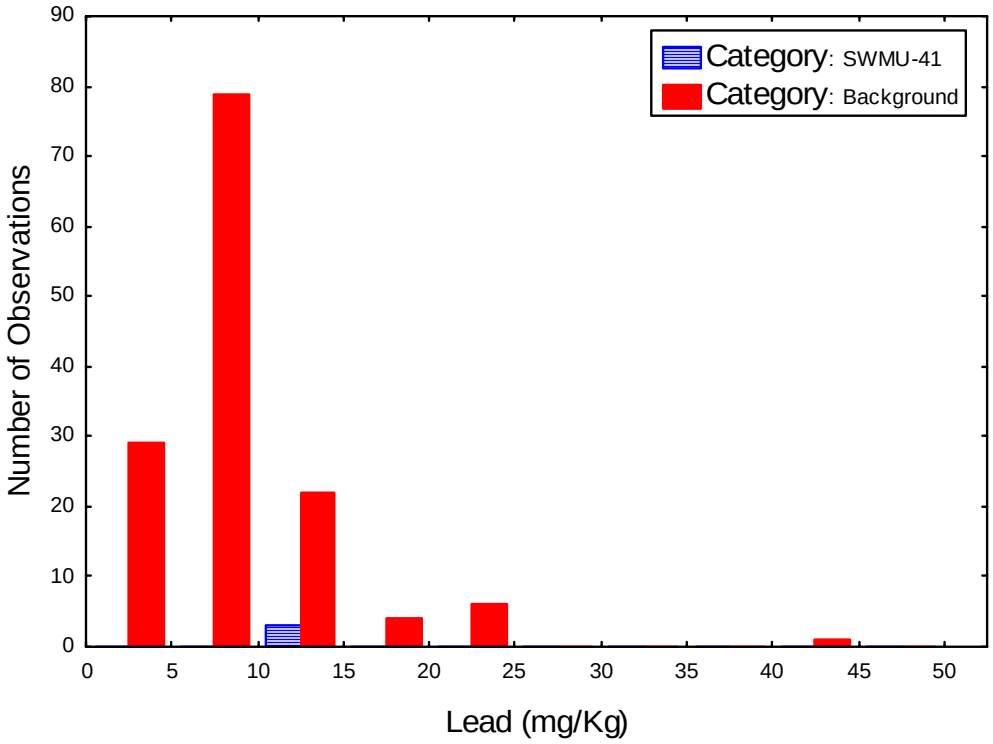

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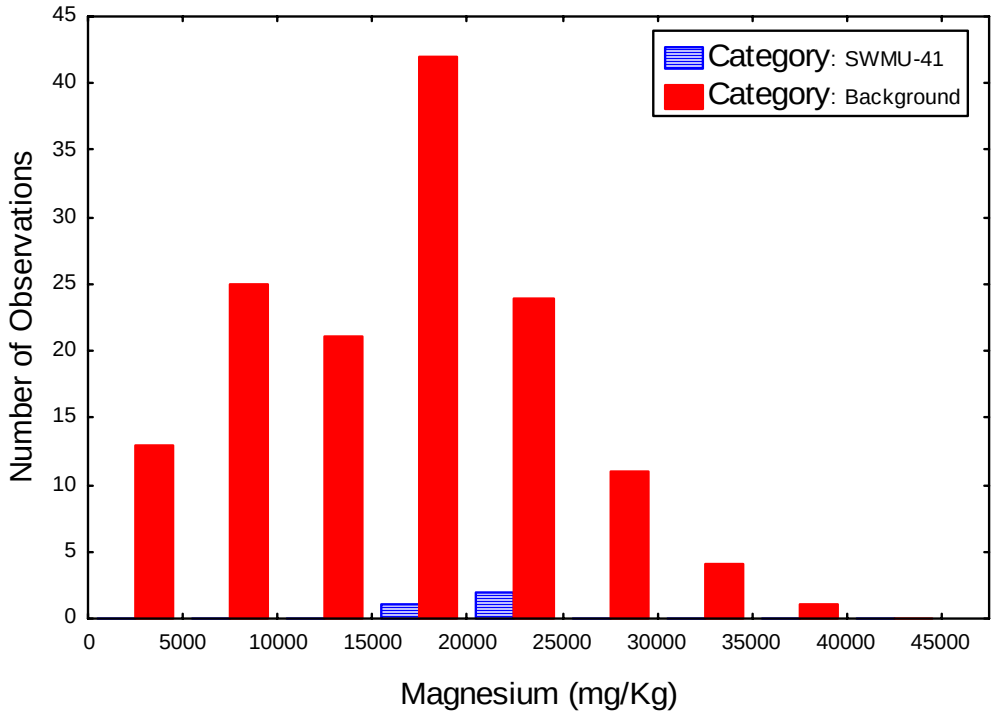

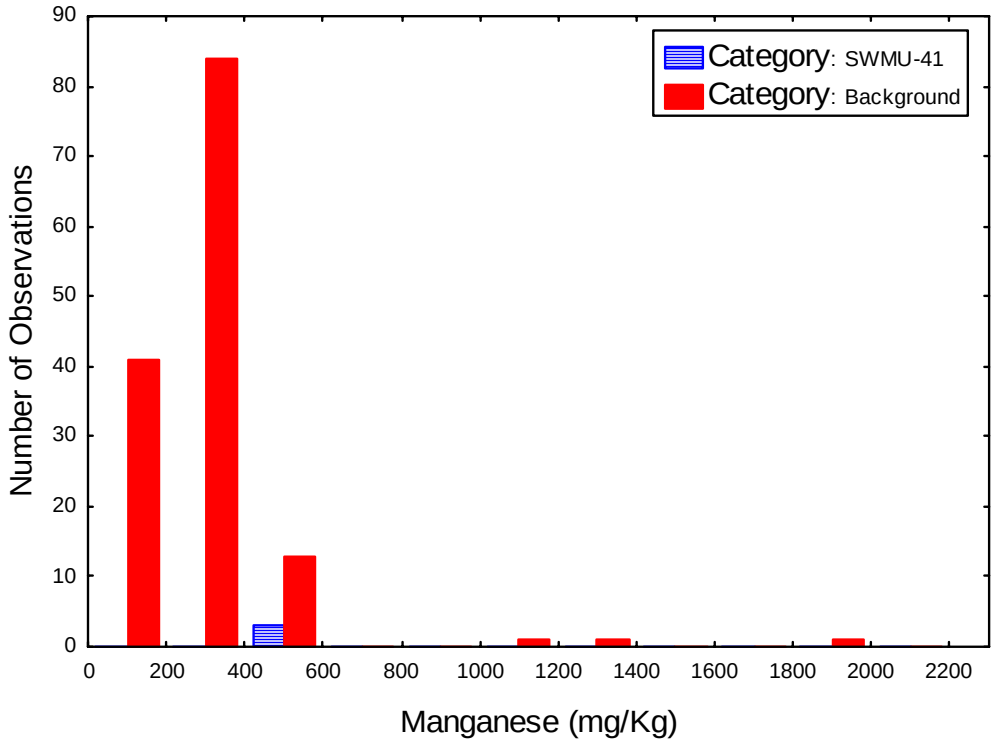

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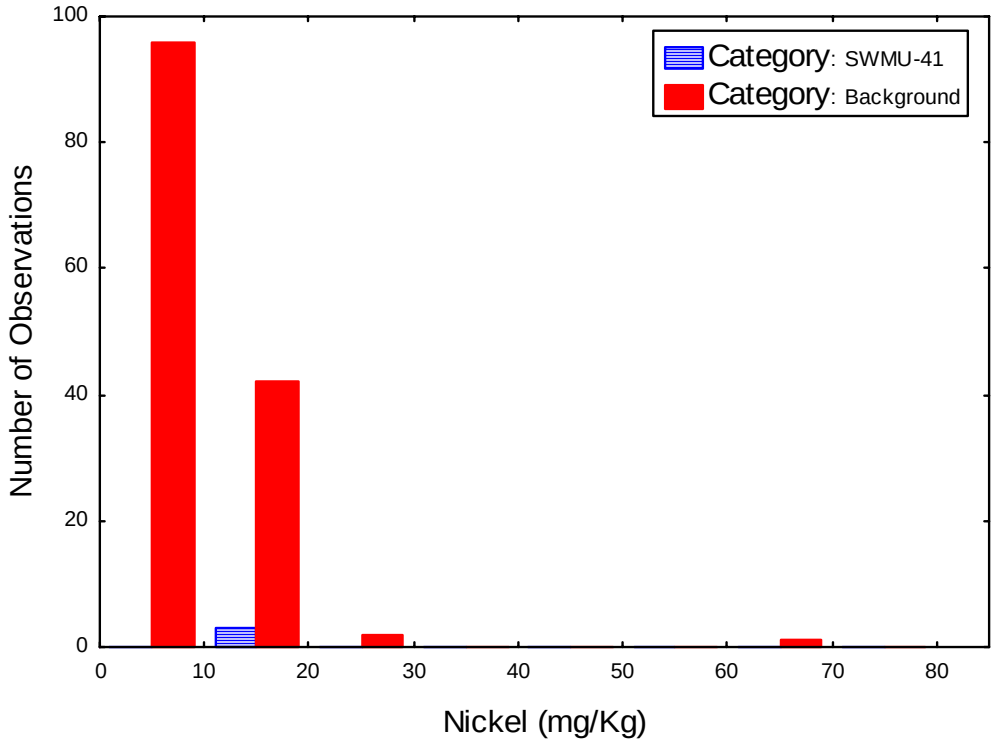

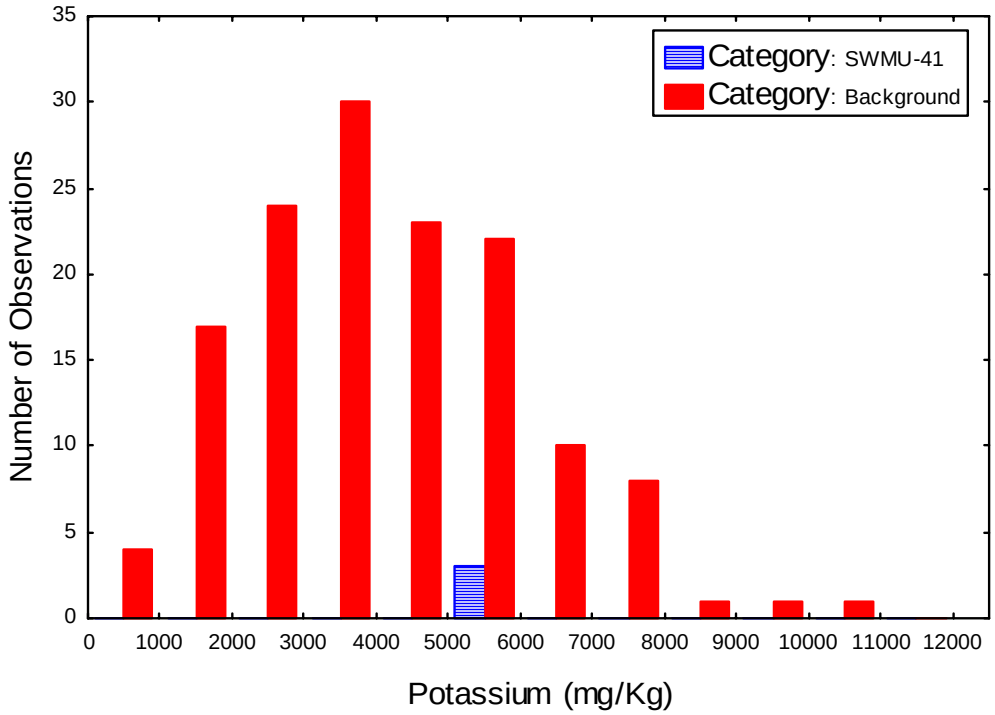

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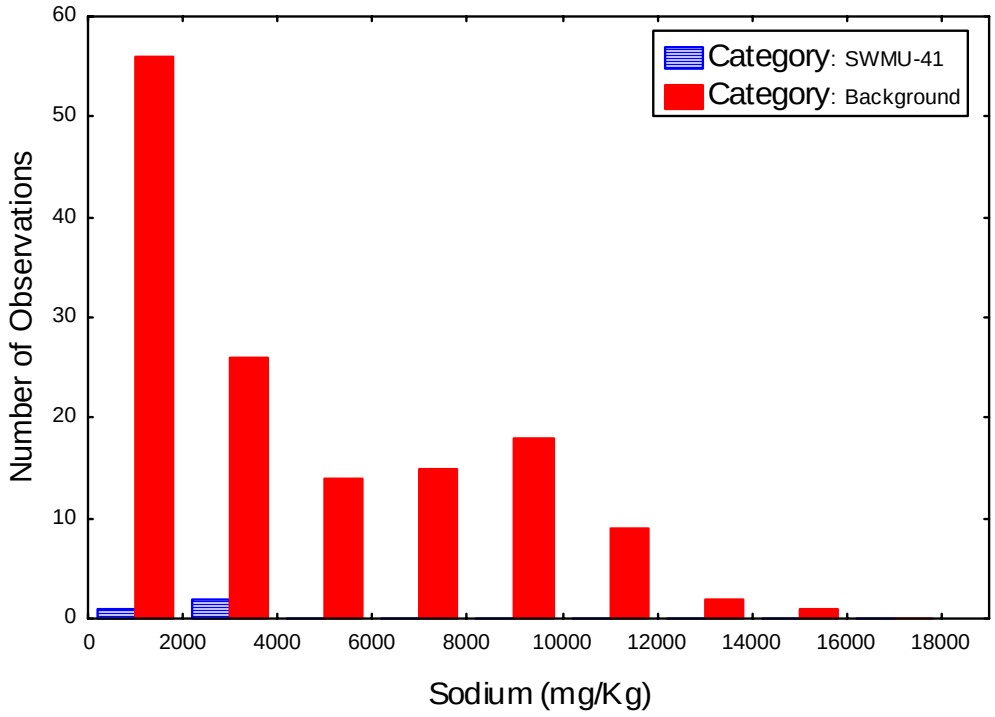

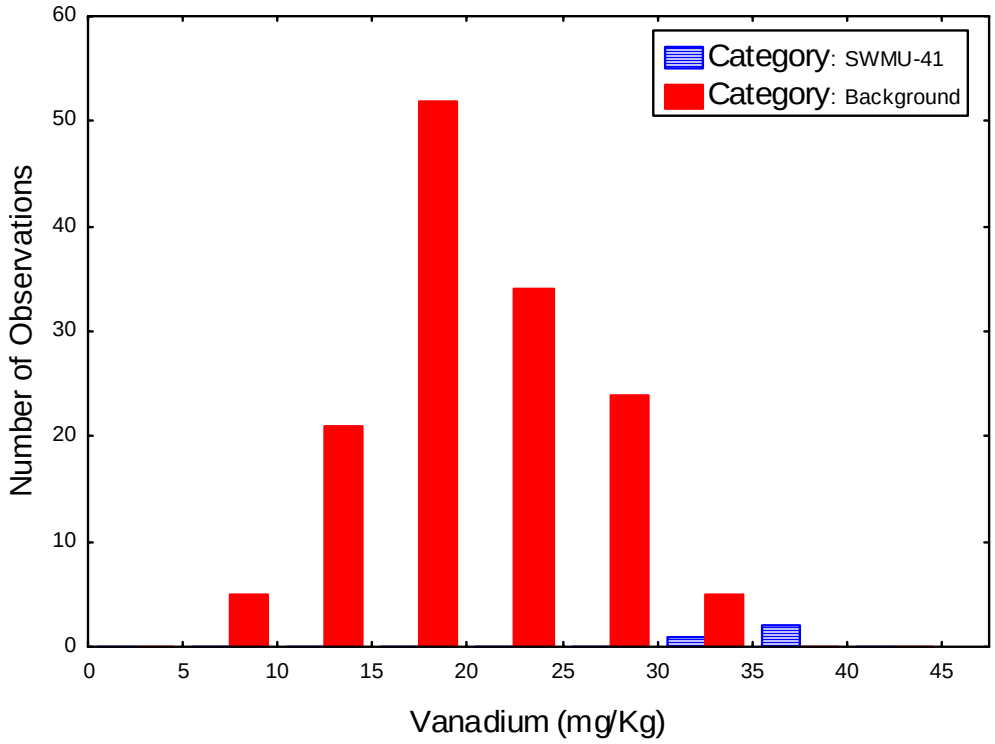

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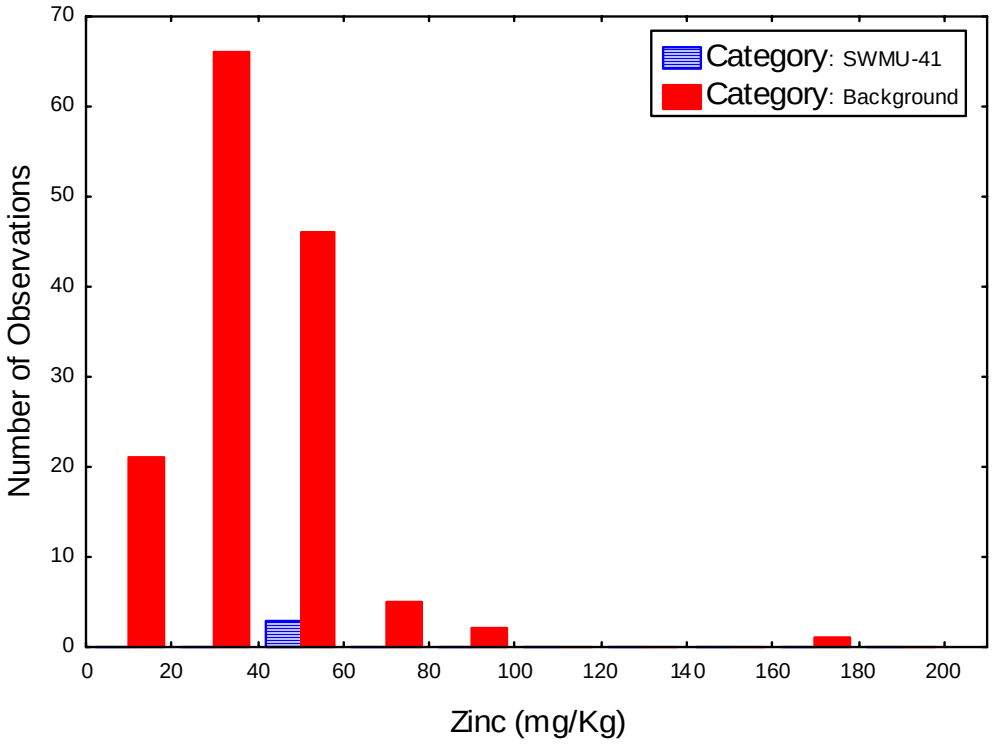

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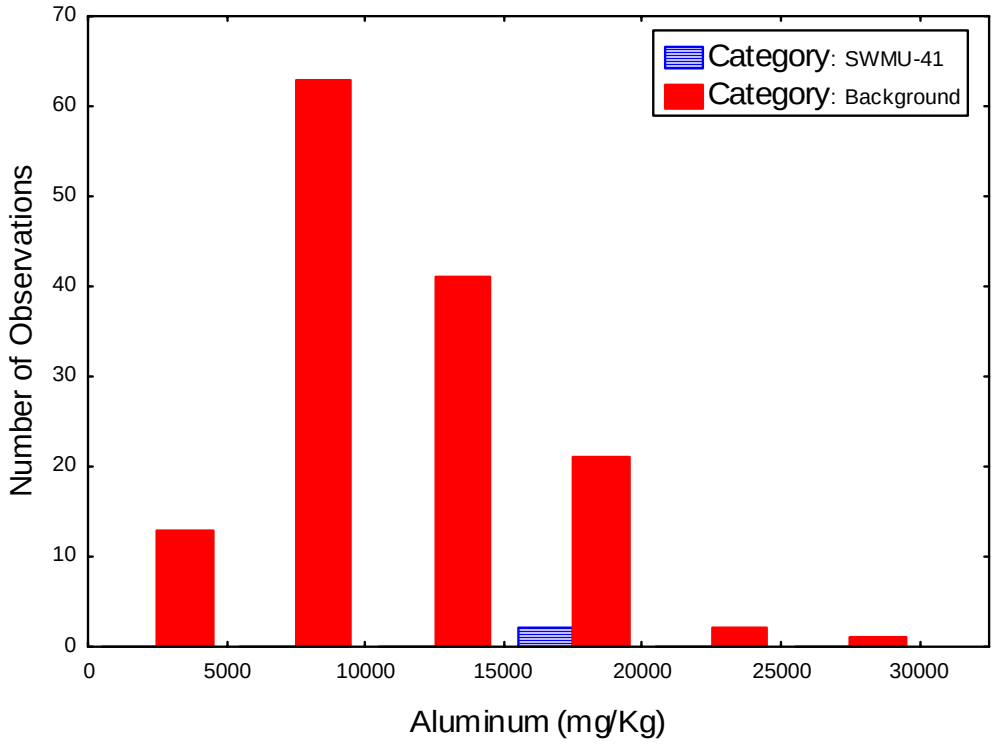

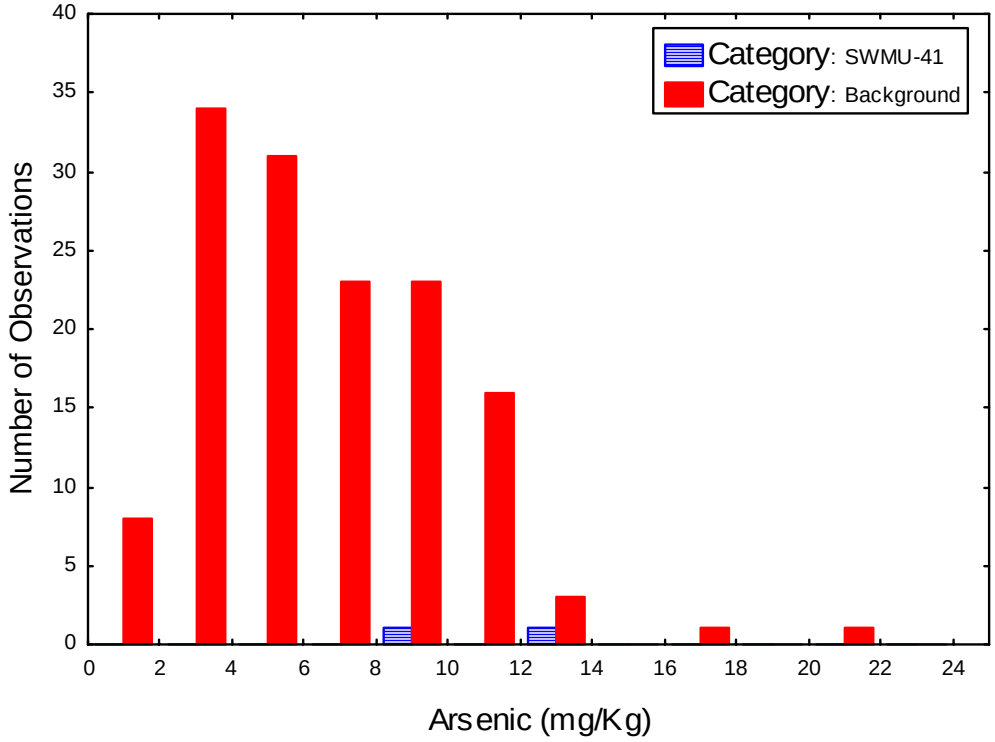

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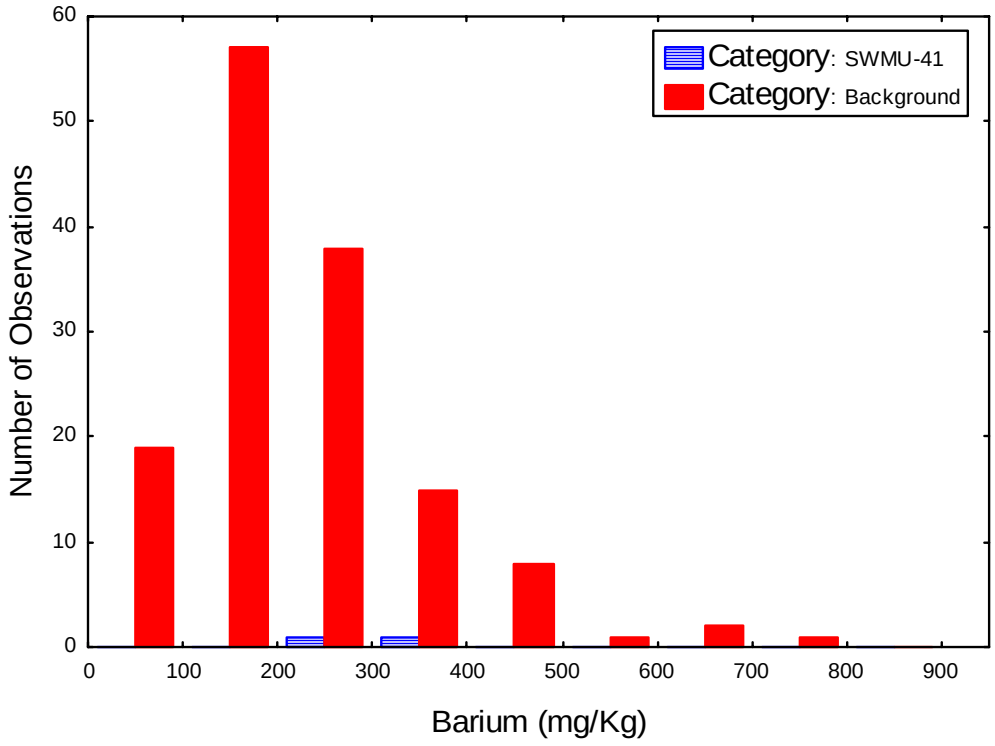

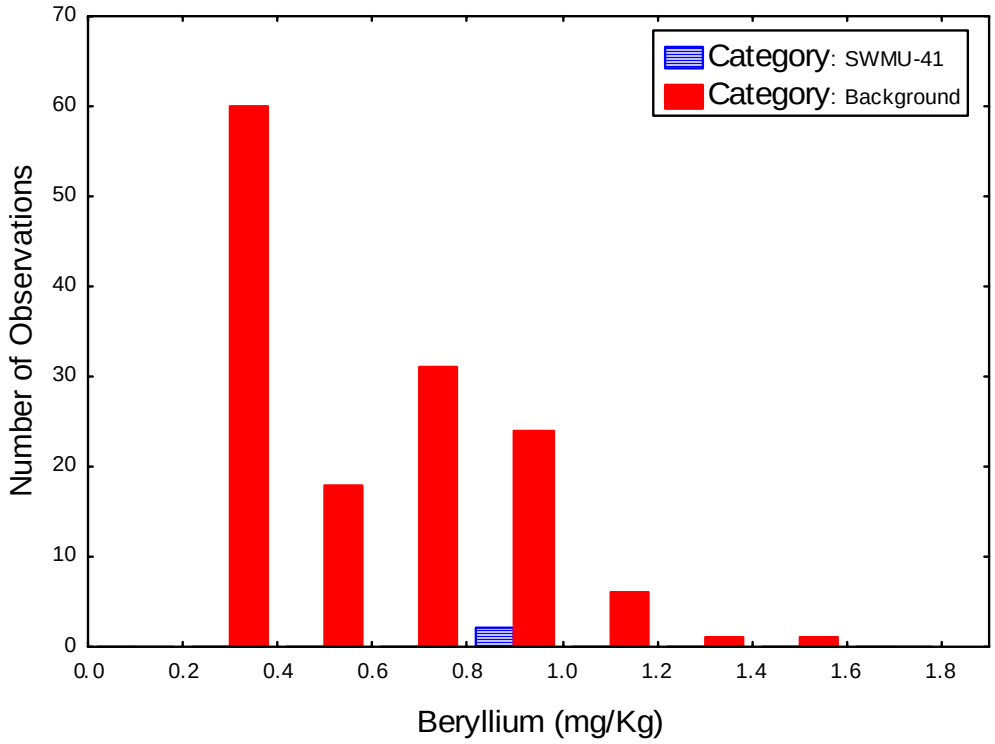

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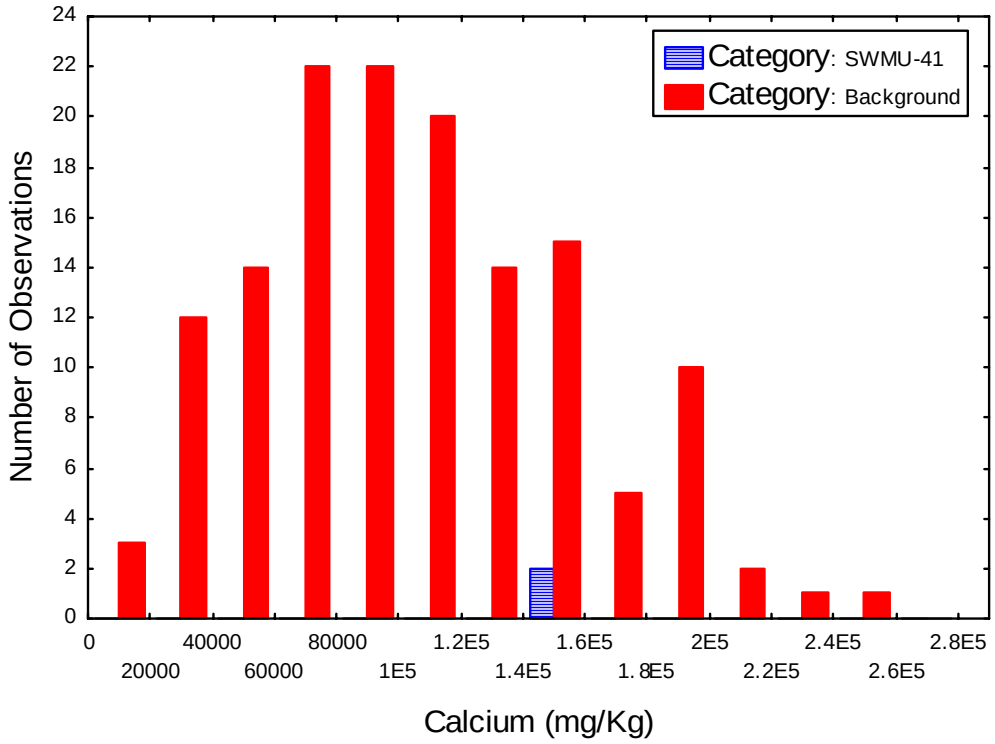

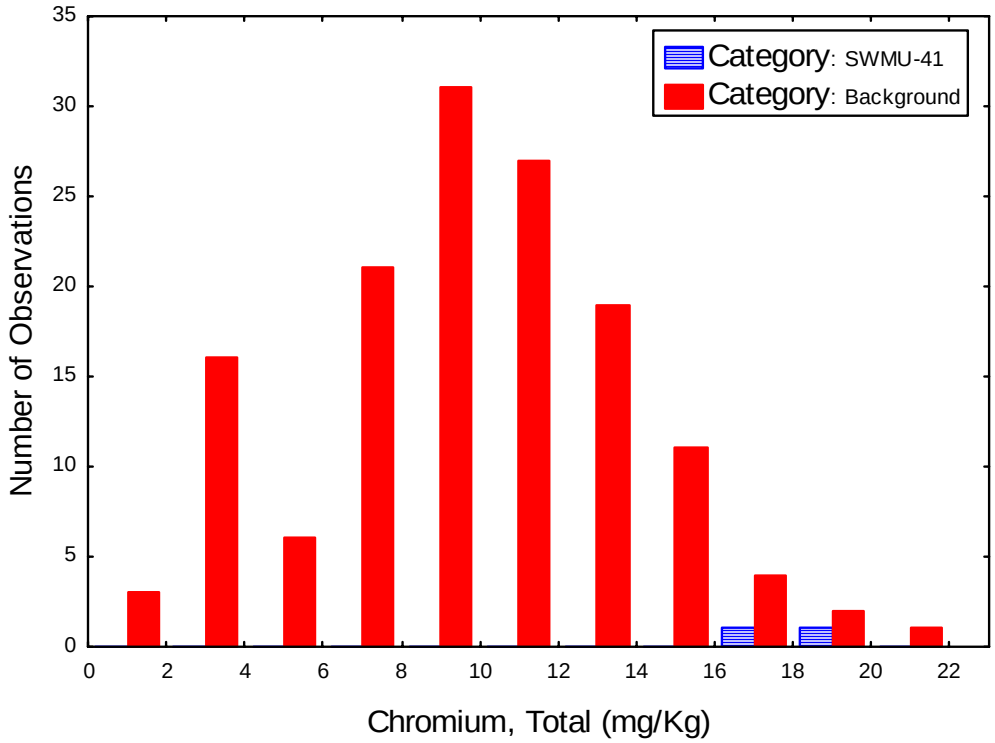

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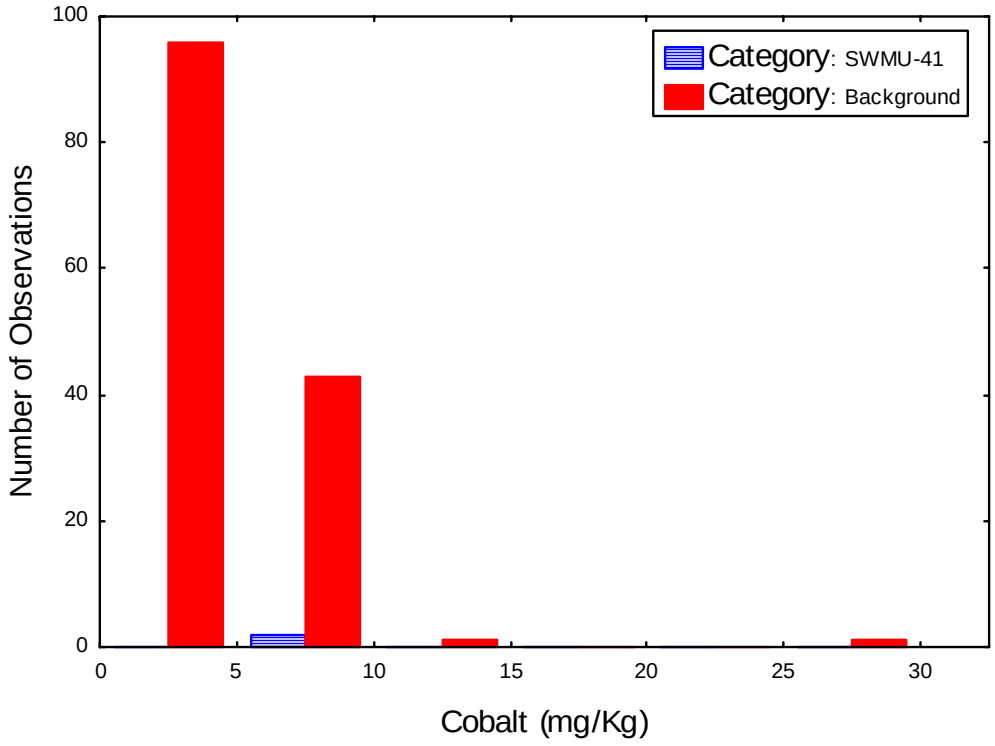

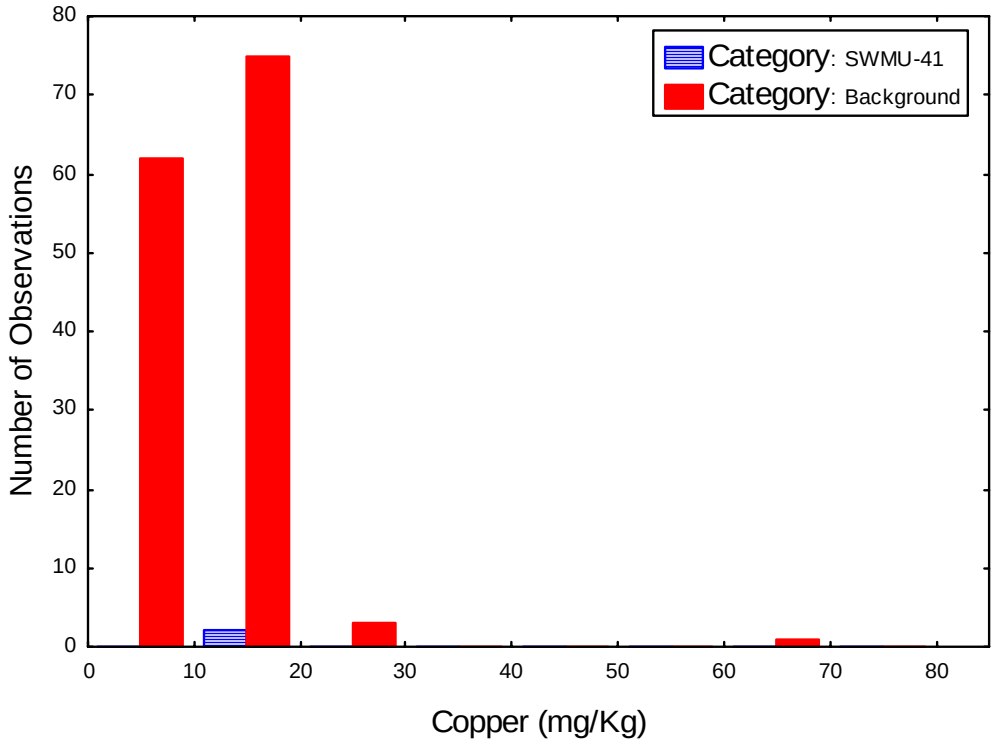

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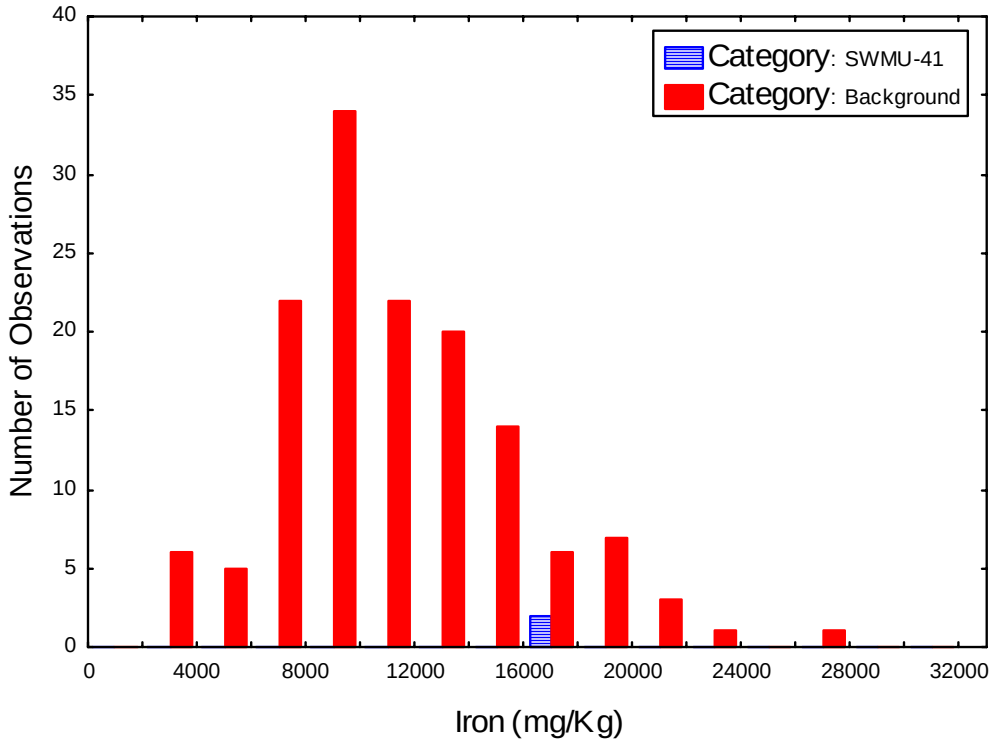

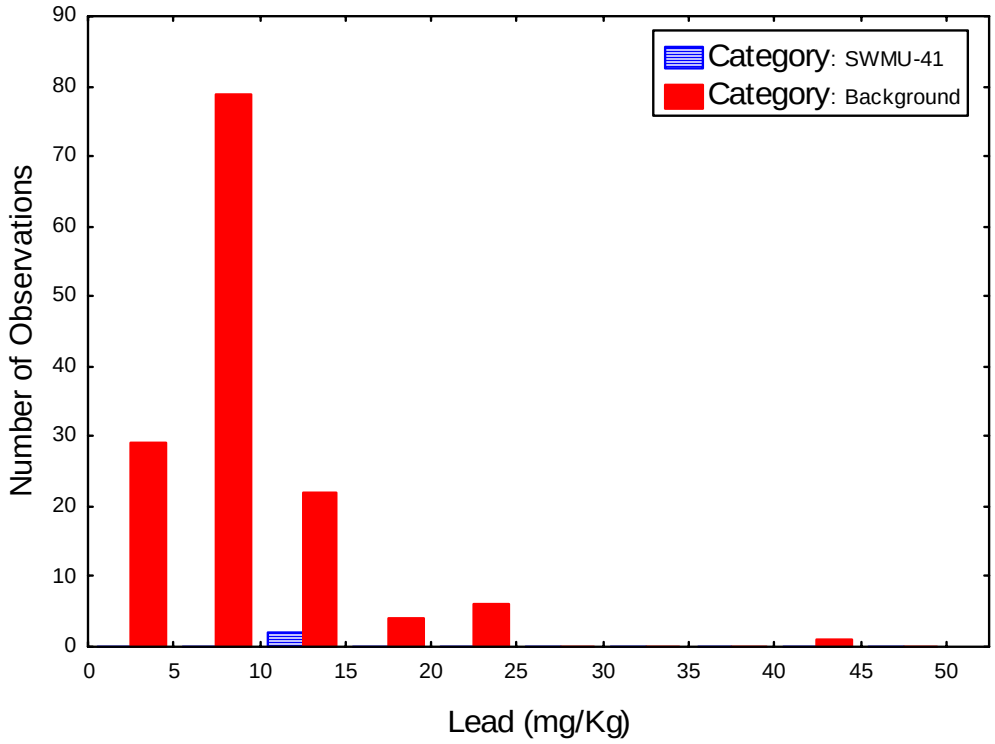

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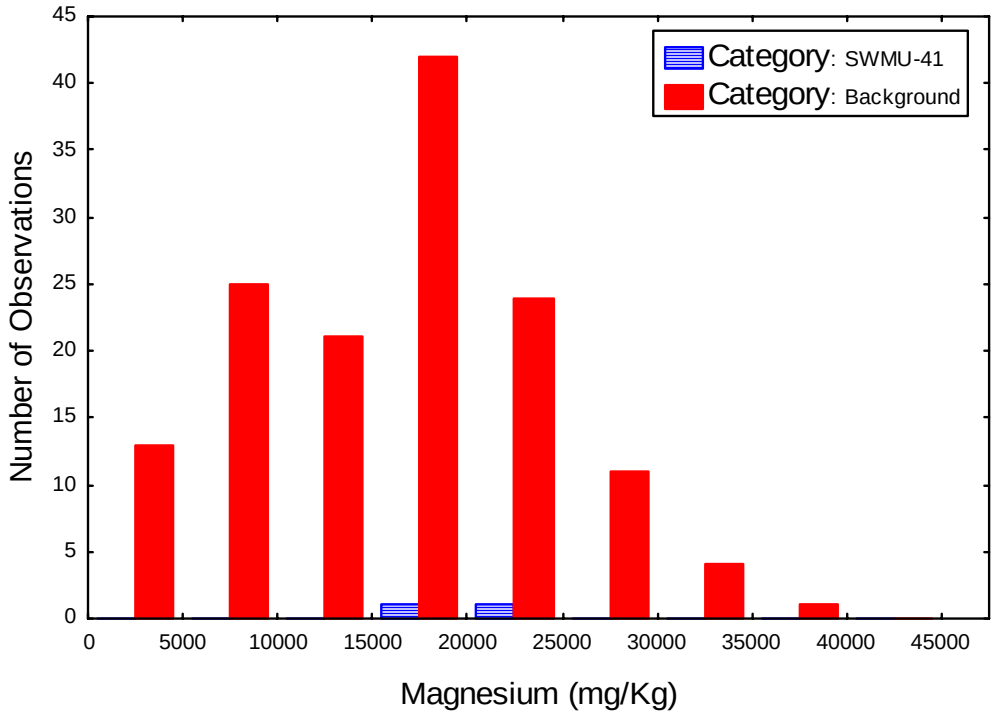

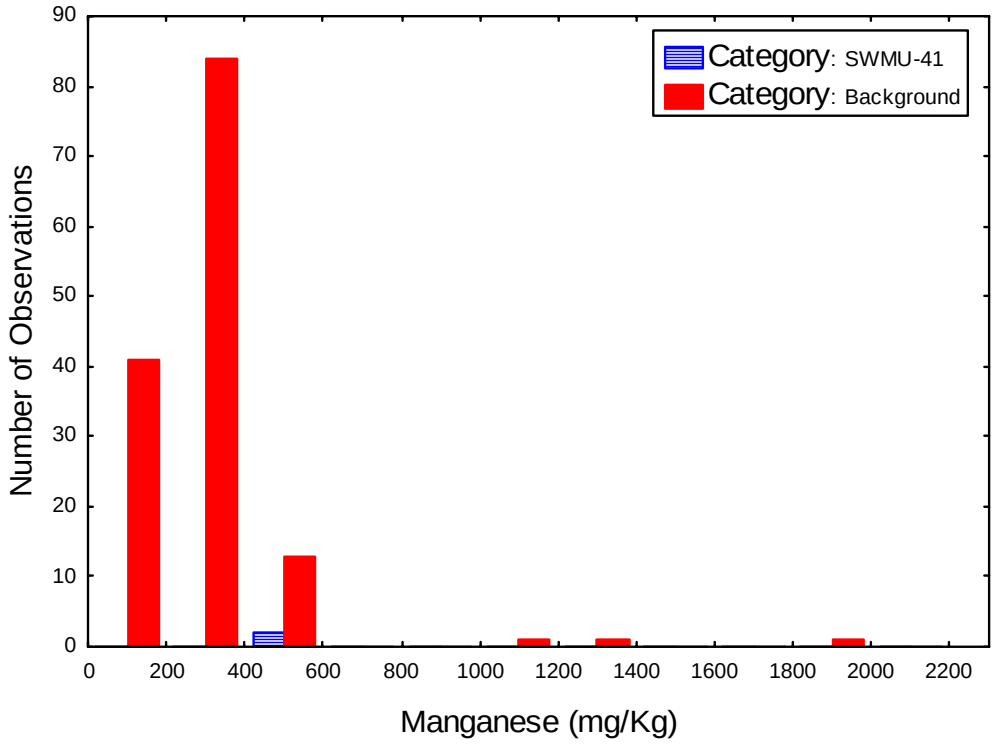

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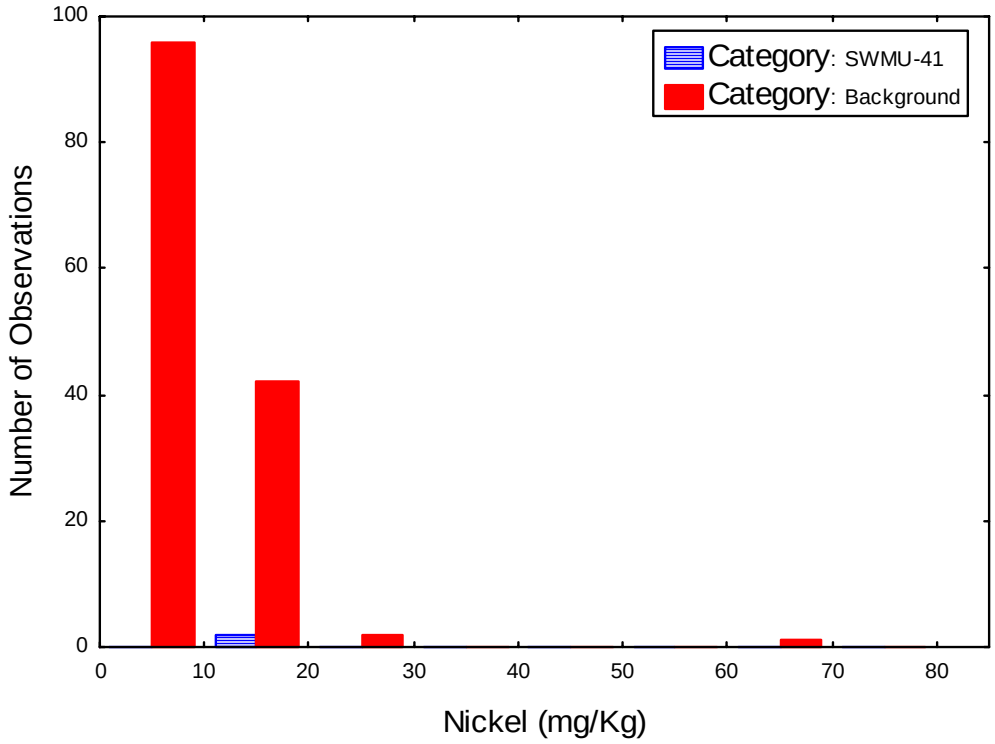

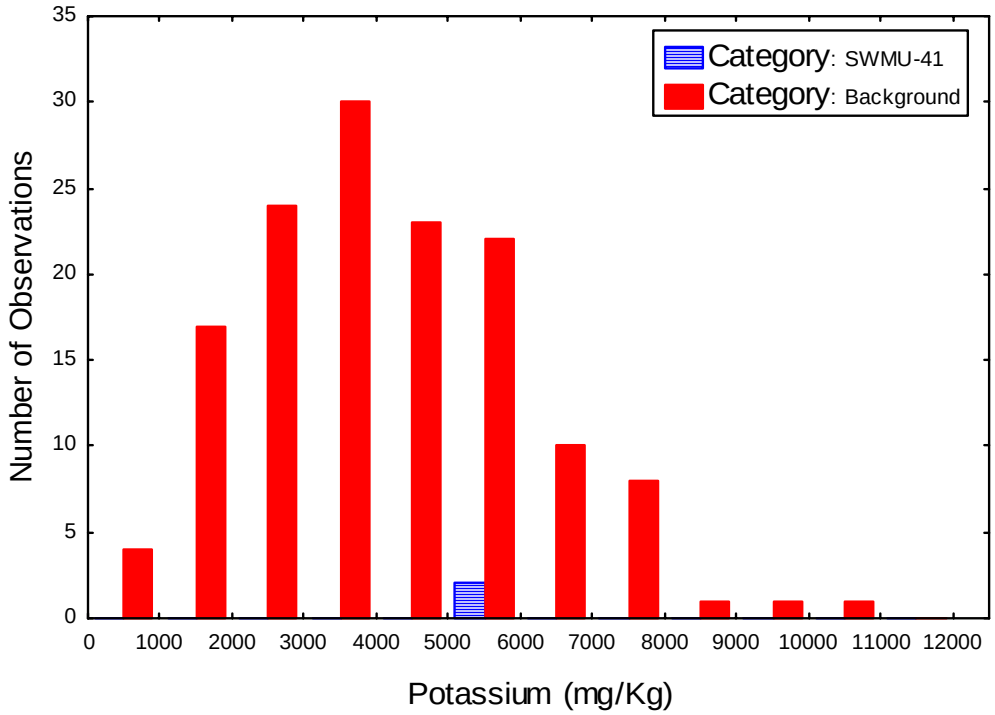

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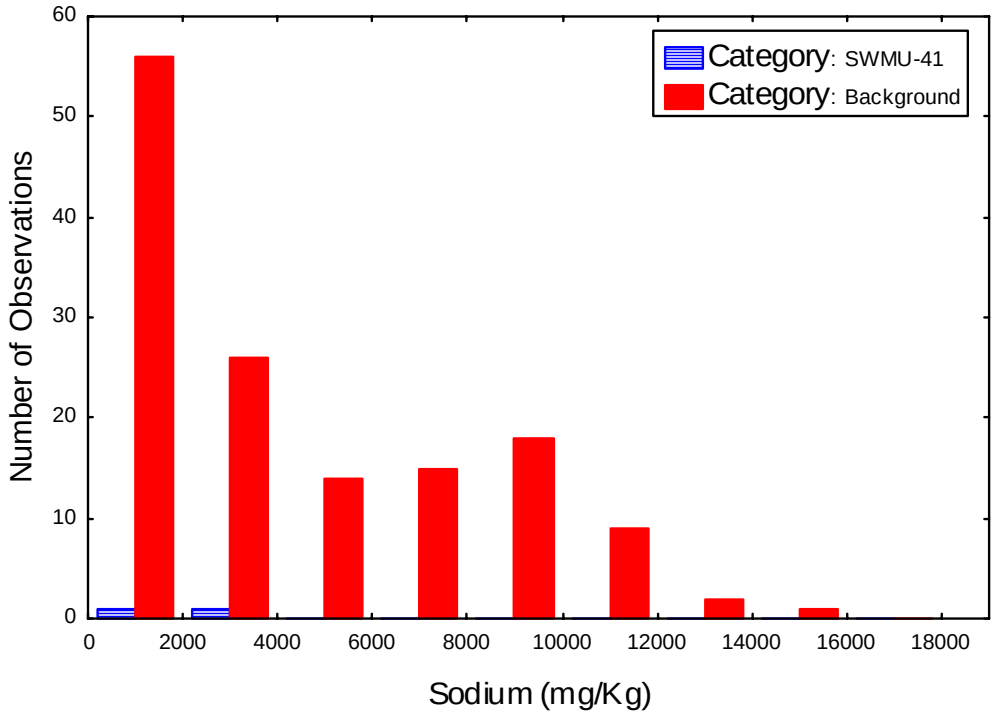
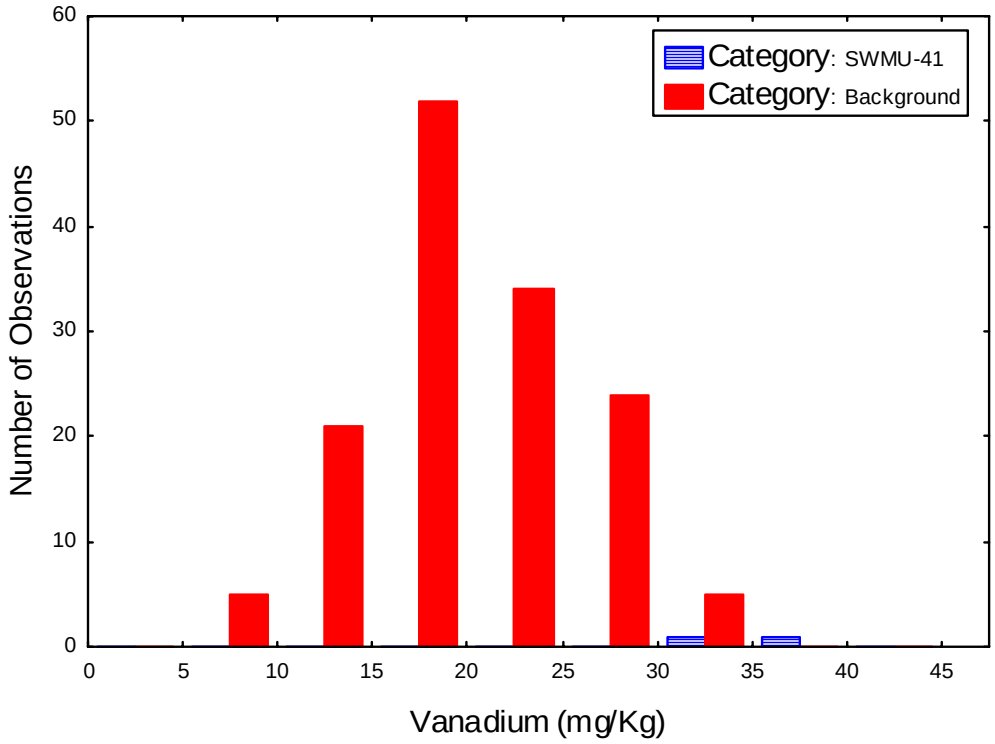
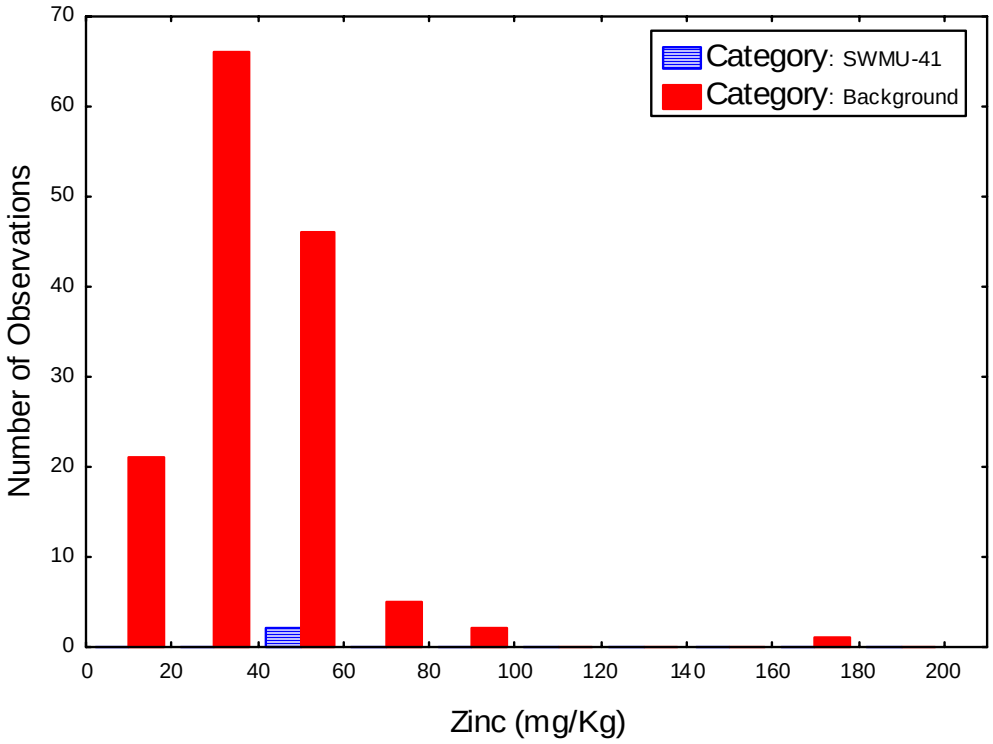
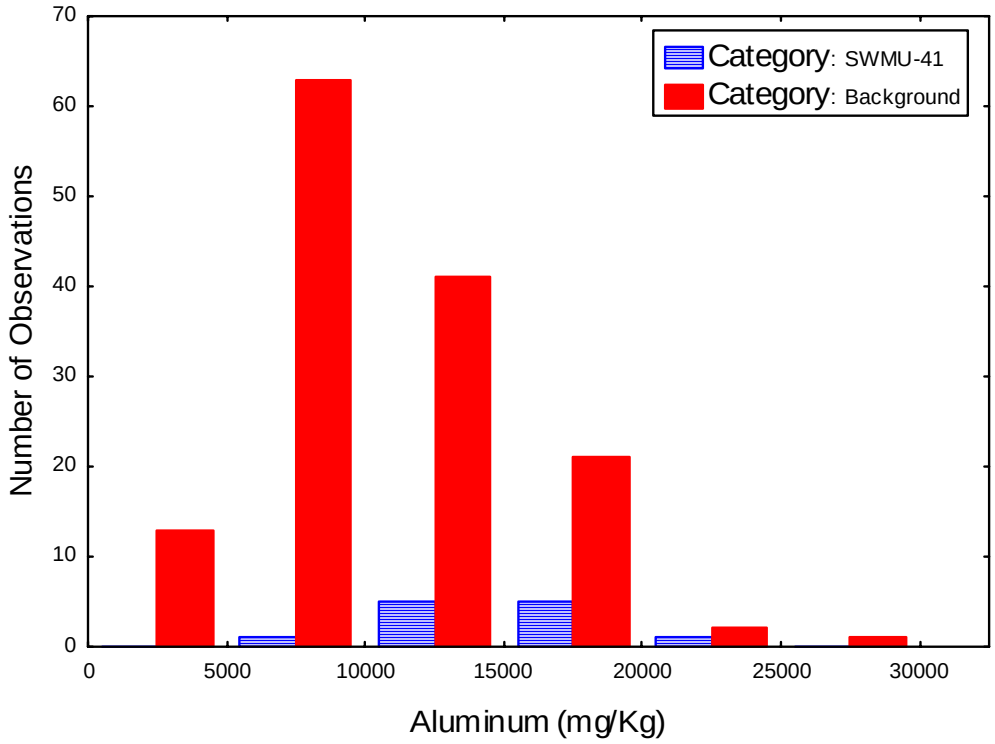


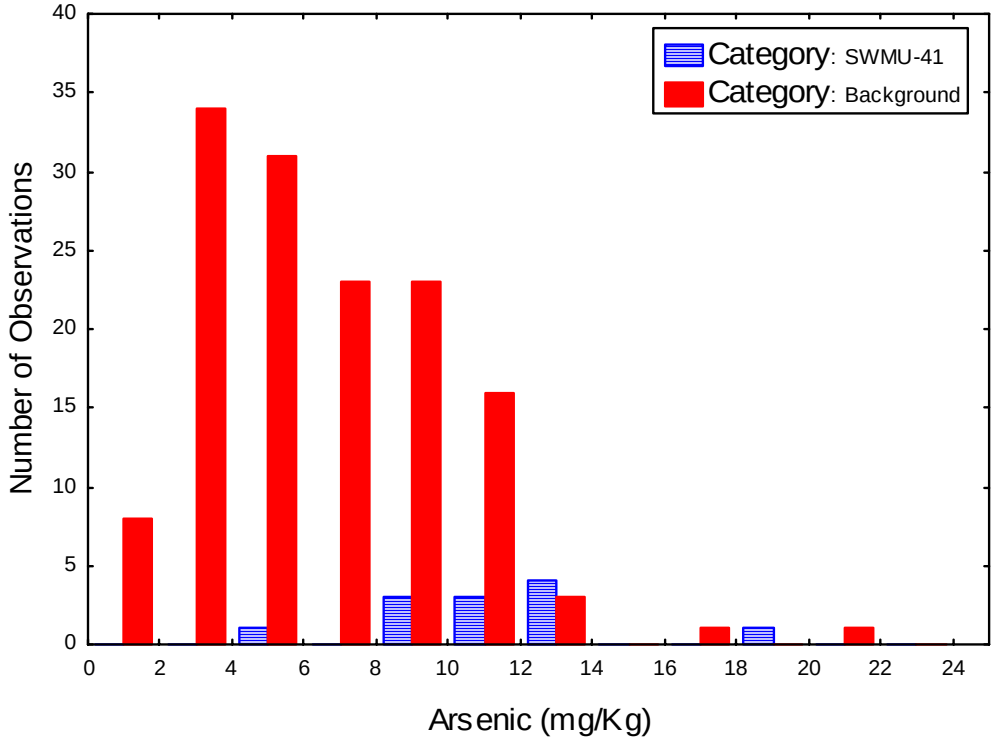


HISTOGRAMS SWMU-41 AREA 2 MIXED SOILS



HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES





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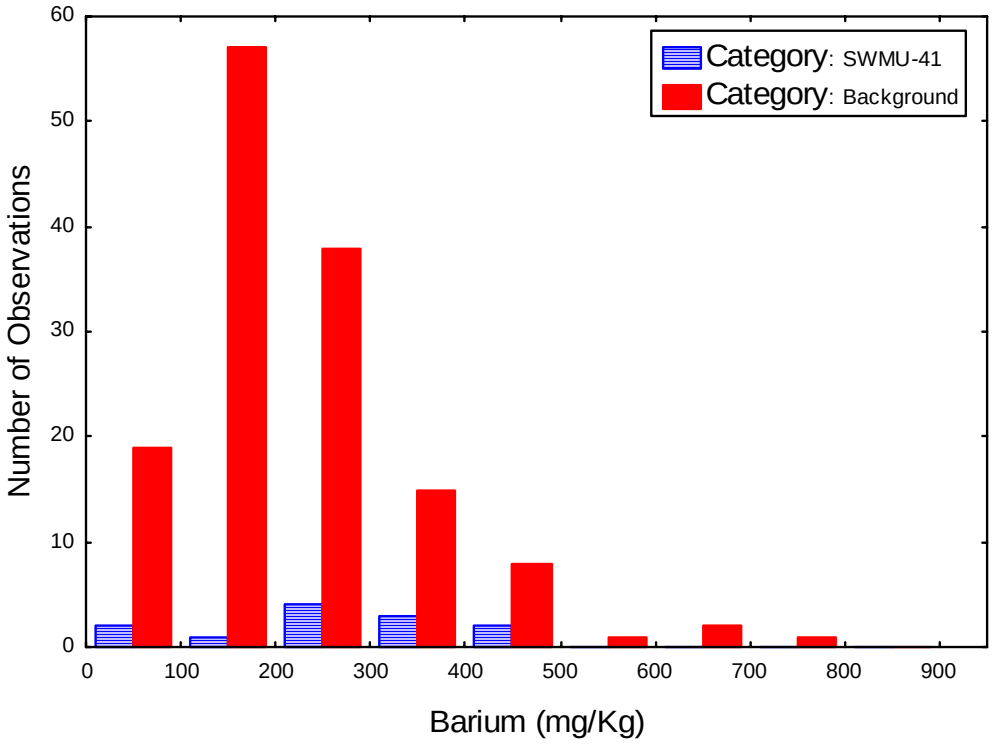
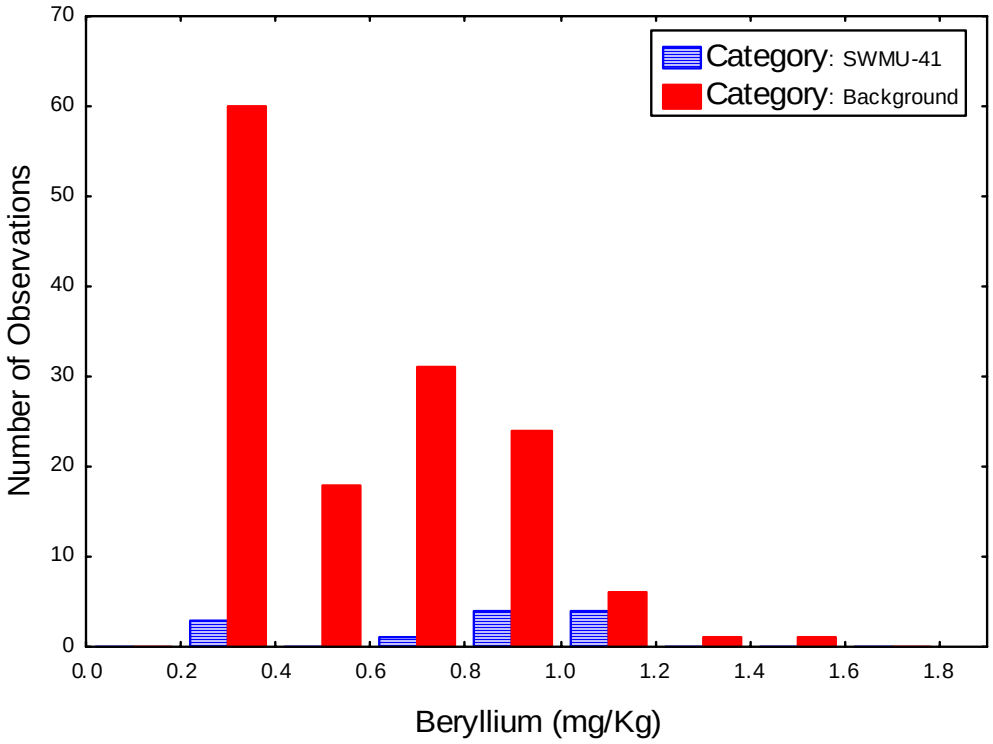
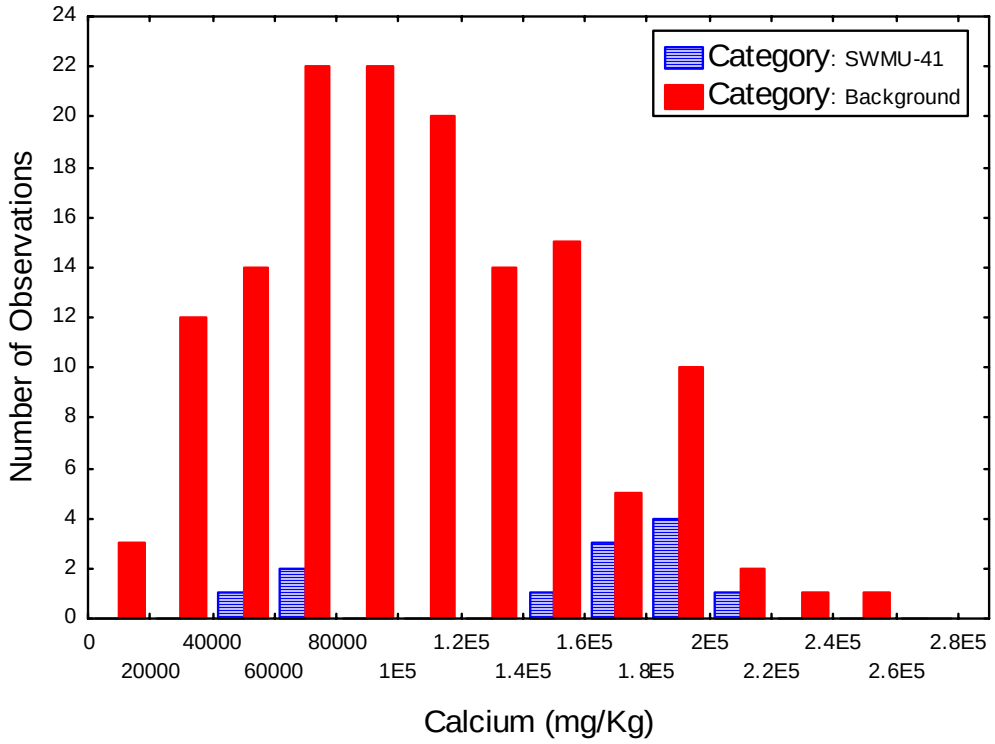
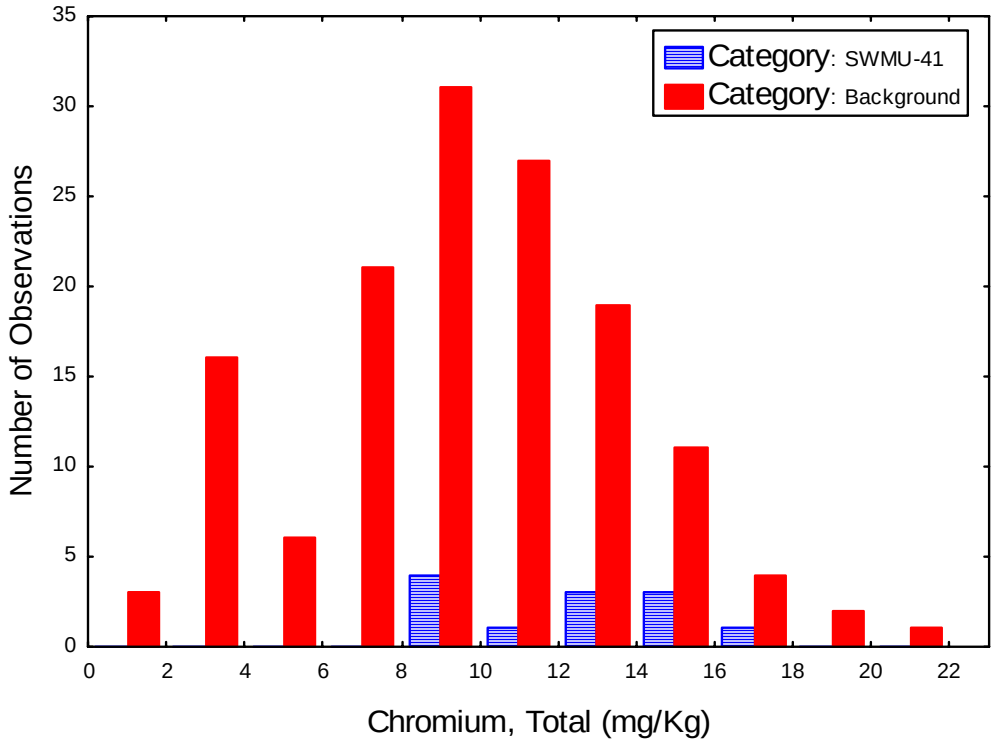


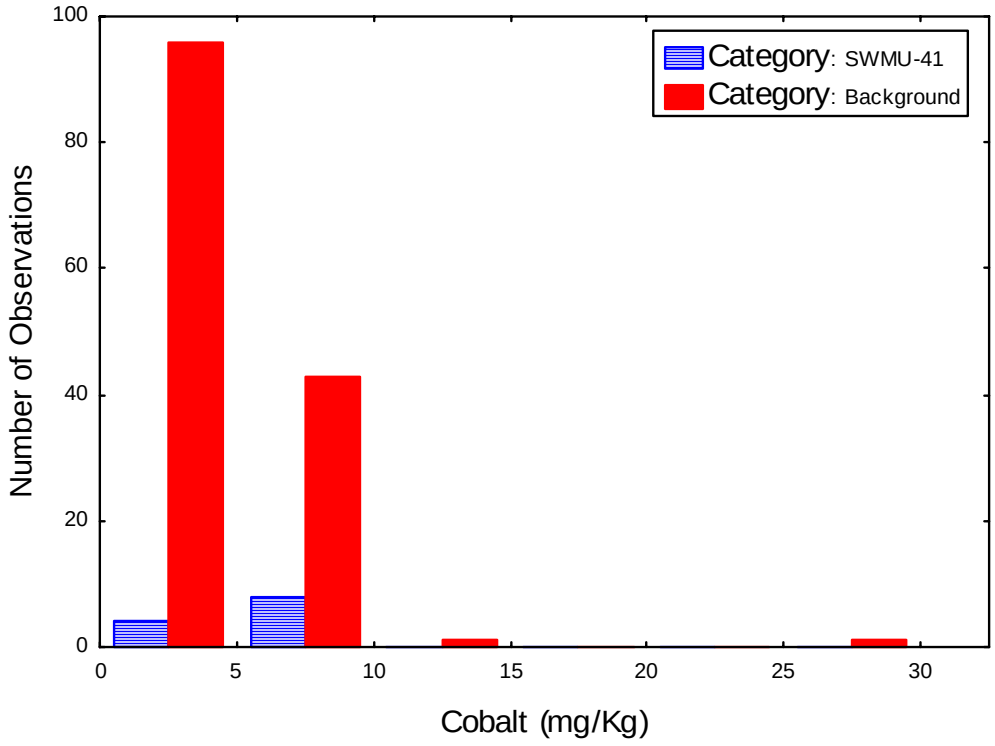


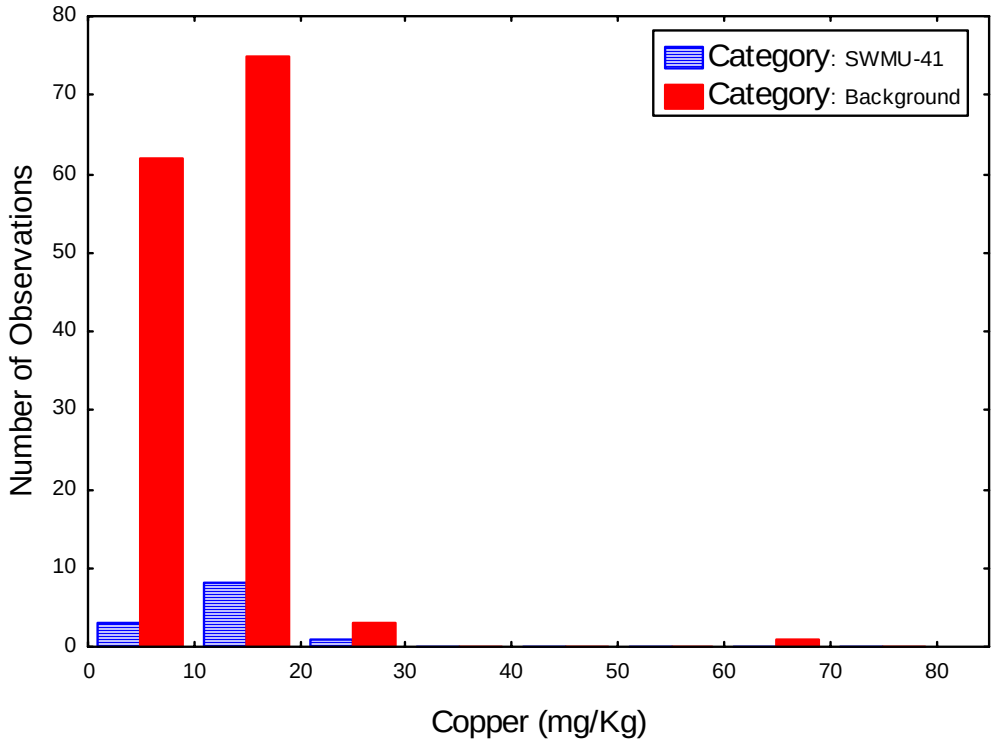
HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES





HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES





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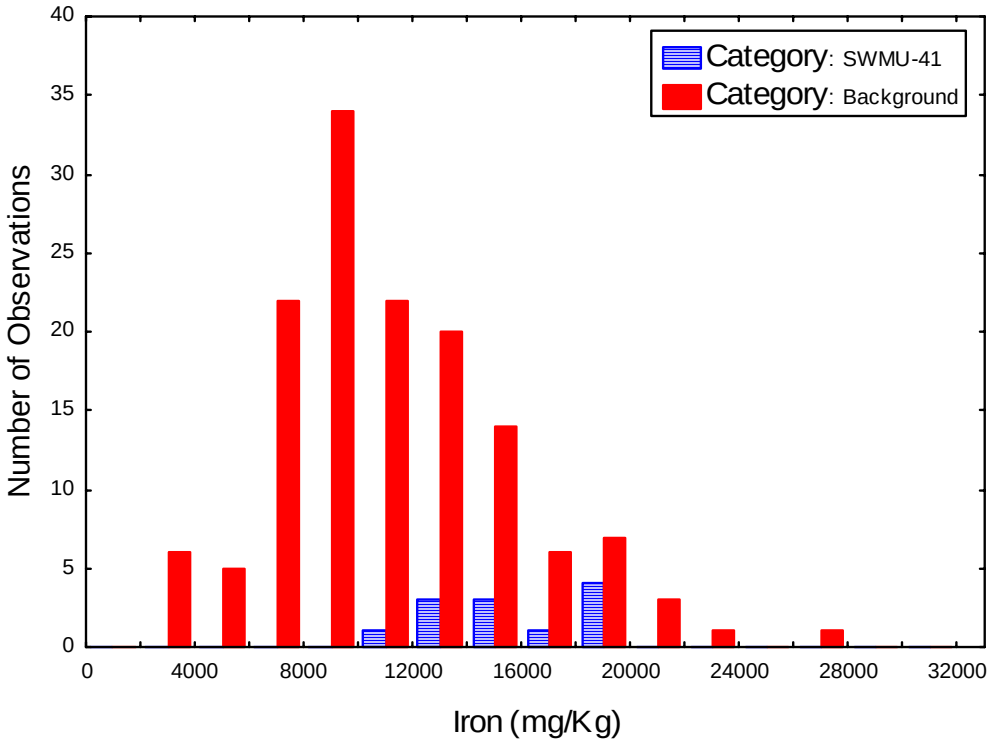

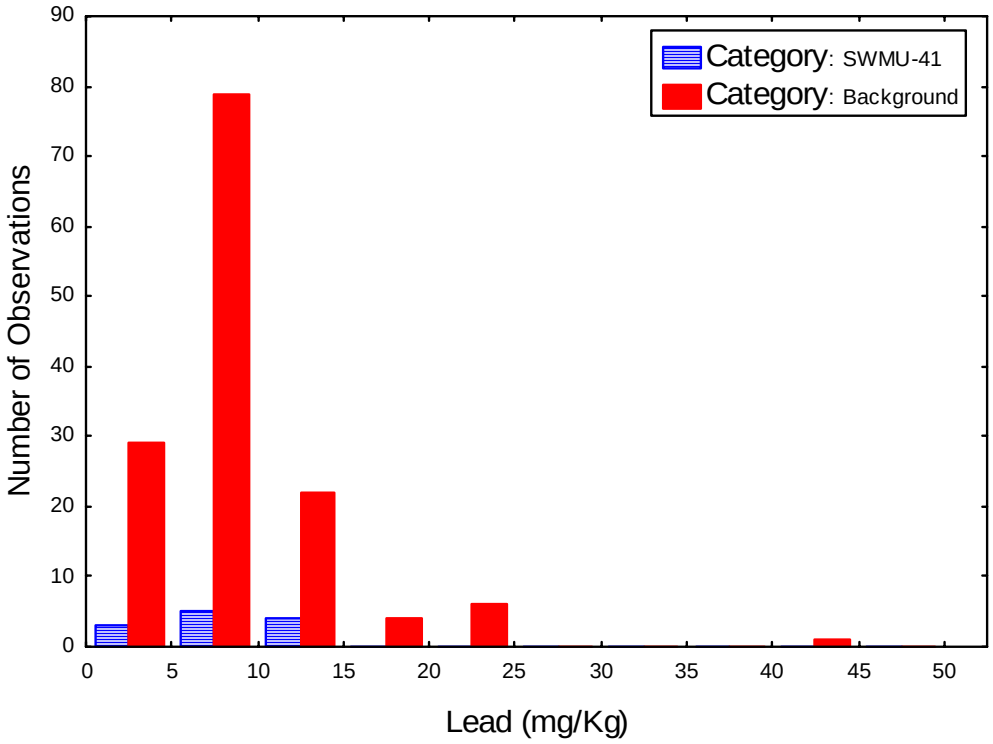

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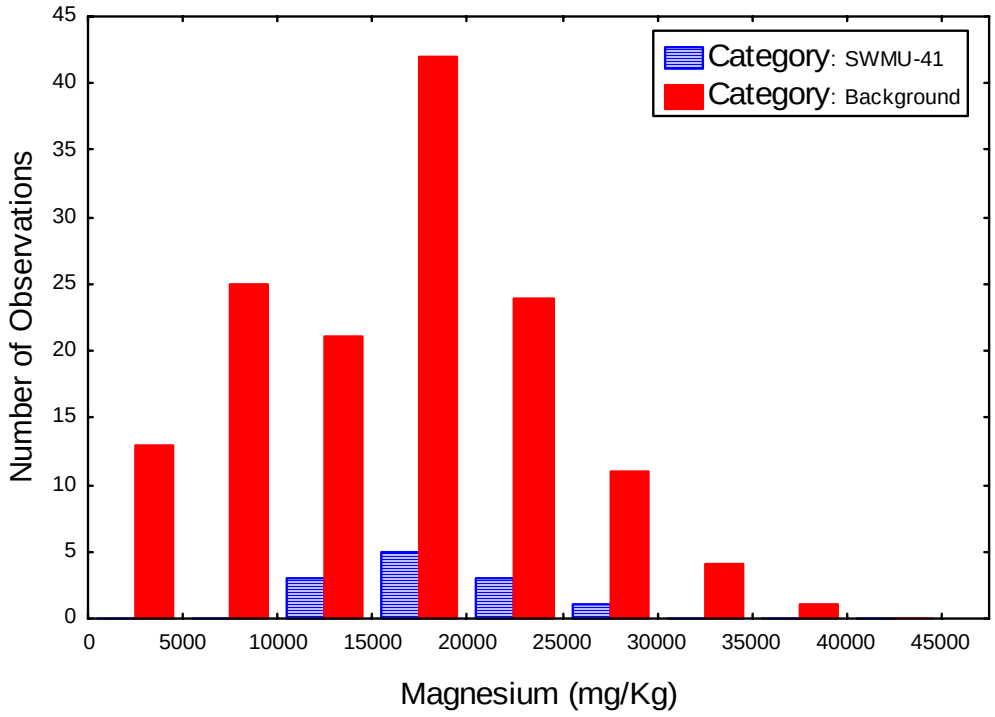
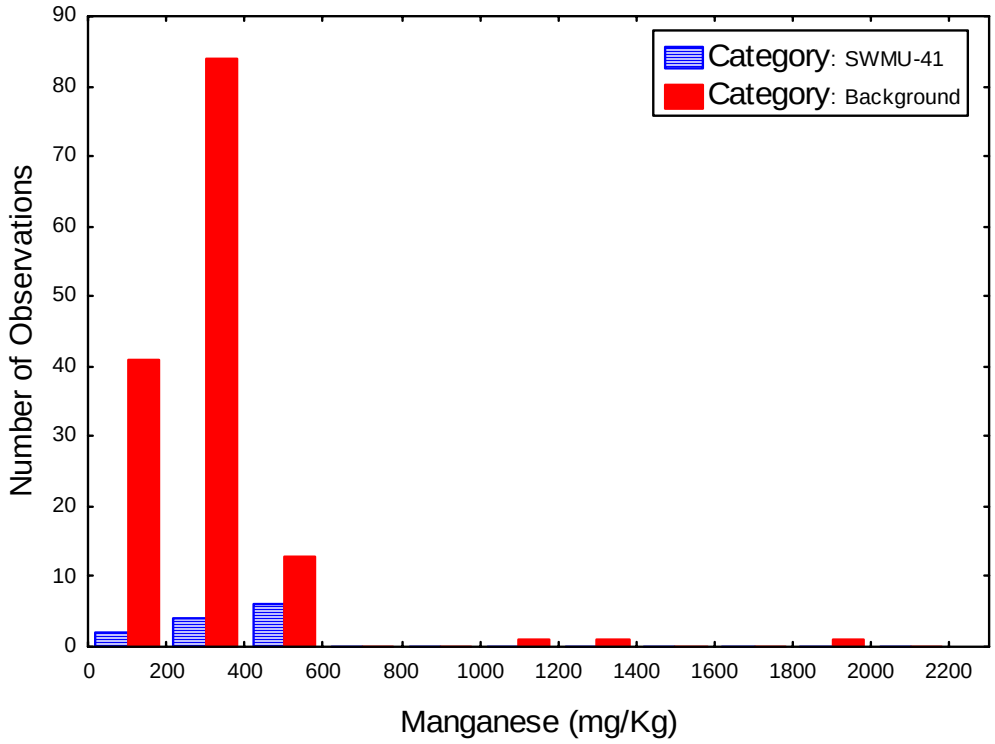
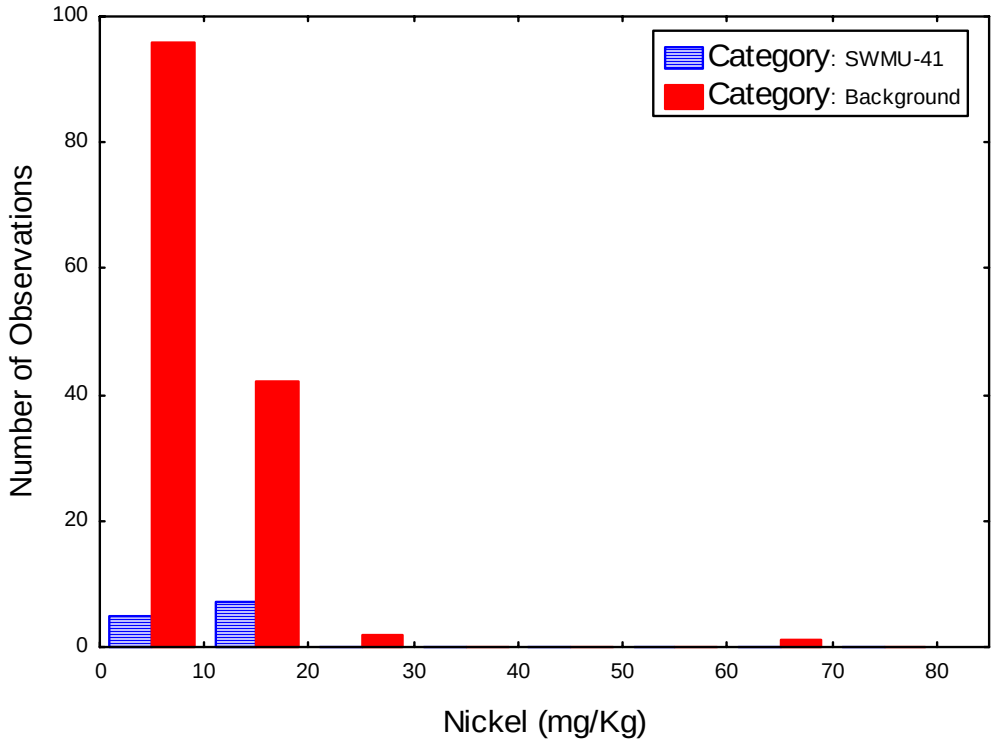
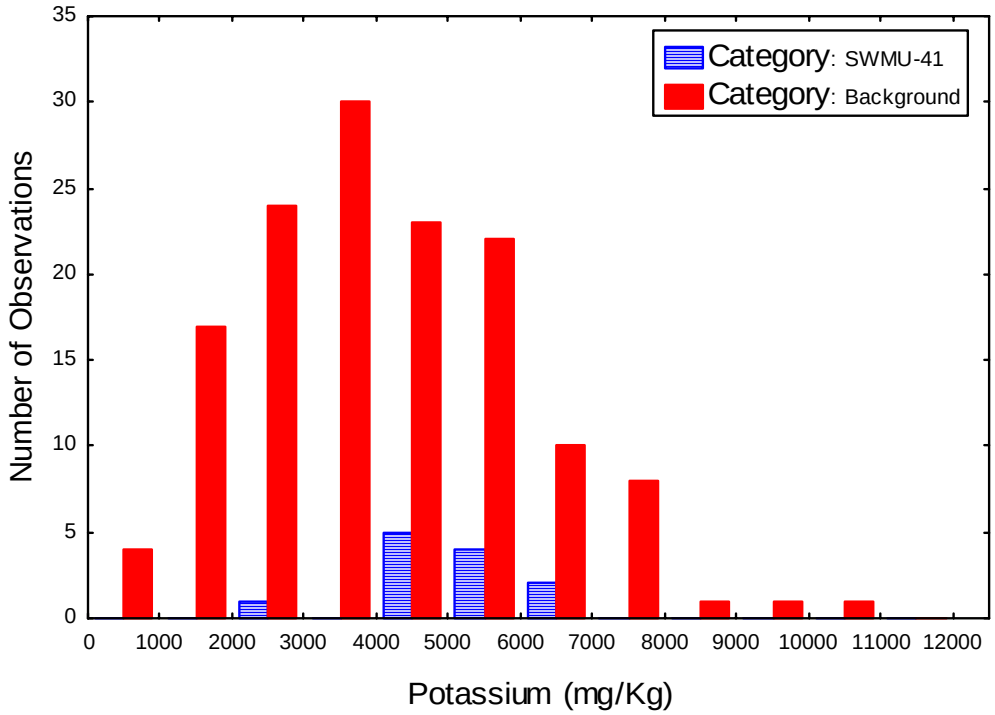


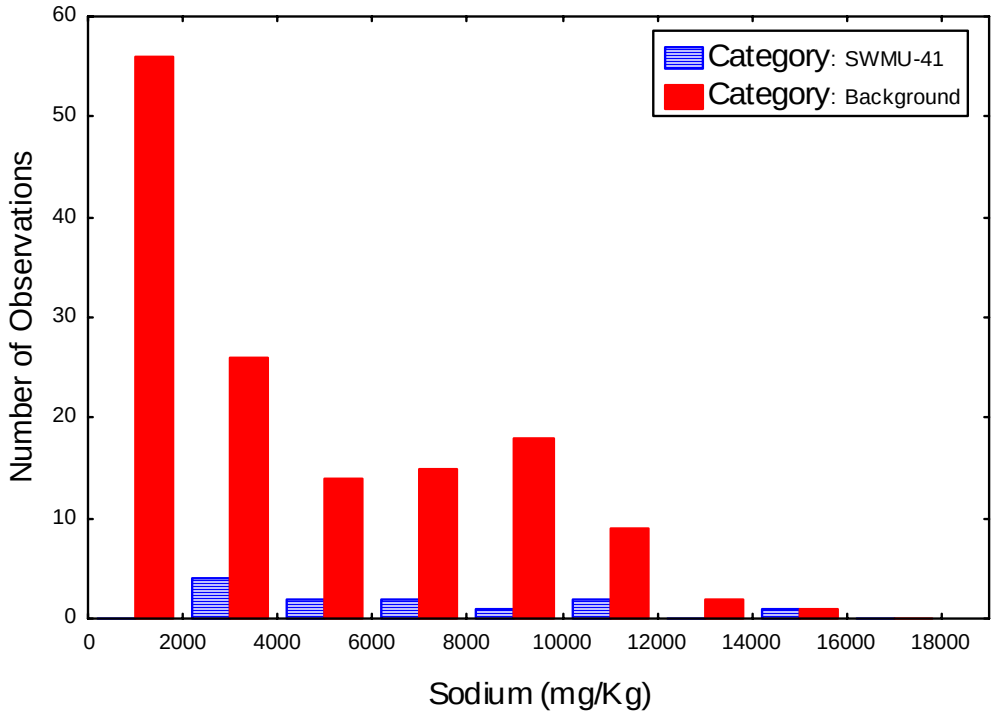


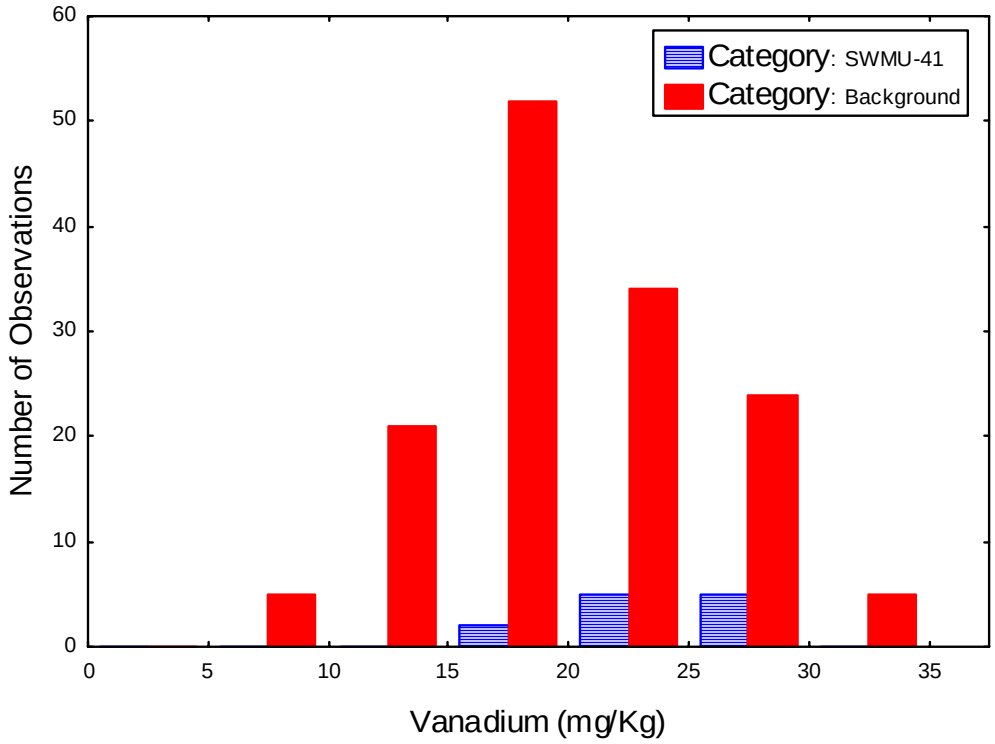
HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES



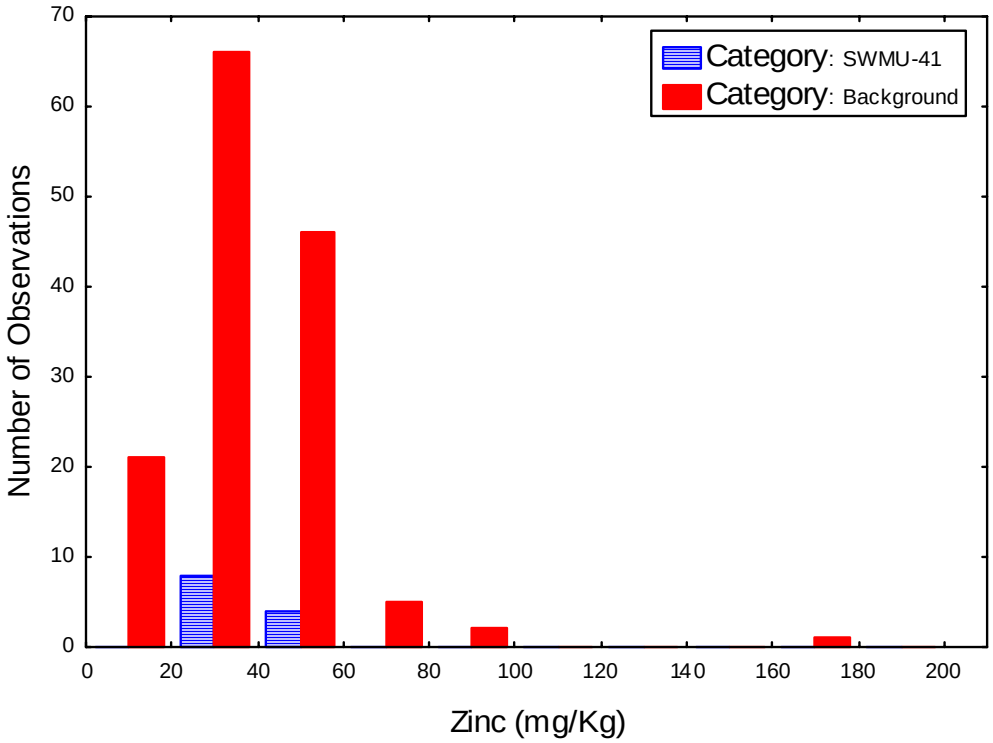


HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES





HISTOGRAMS SWMU-41 MONITORING WELL SOIL SAMPLES



APPENDIX E

SUPPORTING CALCULATIONS FOR HRA

SUPPORTING CALCULATIONS FOR HRA

TABLE E.HRA.1
NONINTRUSIVE WORKER
CARCINOGENIC AND NONCARCINOGENIC RISK ESTIMATES -- INGESTION OF SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive Worker	
COPC Concentration in Soil/Sediment ($C_{soil/sed}$)	chemical-specific	mg/Kg
Soil/Sediment Ingestion Rate ($IR_{soil/sed}$)	100	mg/day
Exposure Frequency (EF)	225	days/yr
Exposure Duration (ED)	25	yrs
Fraction Contaminated Soil/Sediment Ingested (FI)	1	unitless
Conversion Factor (CF)	0.000001	Kg/mg
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_{nc})	25	yrs
Oral Slope Factor (SF_o)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose on (RfD_o)	chemical-specific	mg/Kg-day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)(SF_o)}{(BW)(AT_c)(365 day/year)}$$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)}{(RfD_o)(BW)(AT_{nc})(365 day/year)}$$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	SF_o $(mg/Kg\text{-}day)^{-1}$ [d/]	RFD_o (mg/Kg-day)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds								
Phenanthrene[e/]	85-01-8	0.09	--[f/]	0.3	--	--	2.6E-07	<1%
Semivolatile Organic Compounds								
Benzo(a)anthracene	56-55-3	0.17	0.73	--	3.9E-08	<1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	--	0.03	--	--	1.0E-04	<1%
Chrysene	218-01-9	0.47	0.0073	--	1.1E-09	<1%	--	--
Fluoranthene	206-44-0	0.15	--	0.04	--	--	3.3E-06	<1%
Pyrene	129-00-0	0.36	--	0.03	--	--	1.1E-05	<1%
Inorganics								
Arsenic	7440-38-2	28.1	1.5	0.0003	1.3E-05	100%	8.2E-02	25%
Cadmium[e/]	7440-43-9	51.9	--	0.001	--	--	4.6E-02	14%
Chromium, Total[e/]	7440-47-3	387	--	0.021	--	--	1.6E-02	5%
Cobalt	7440-48-4	329	--	0.02	--	--	1.4E-02	4%
Copper	7440-50-8	121	--	0.04	--	--	2.7E-03	<1%
Lead[e/]	7439-92-1	70	--	--	--	--	--	--

Mercury	7487-94-7	45	--	0.0003	--	--	1.3E-01	40%
Nickel	7440-02-0	133	--	0.02	--	--	5.9E-03	2%
Silver	7440-22-4	14.9	--	0.005	--	--	2.6E-03	<1%
Tin	7440-31-5	19.7	--	0.6	--	--	2.9E-05	<1%
Vanadium	7440-62-2	32.9	--	0.001	--	--	2.9E-02	9%
Zinc	7440-66-6	932	--	0.3	--	--	2.7E-03	<1%
				Pathway Sums	1.3E-05		3.3E-01	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration, mg/Kg = Milligrams per kilogram.

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.2
NONINTRUSIVE WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- DERMAL CONTACT WITH SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive Worker	
COPC Concentration in Soil (C_{soil})	chemical-specific	mg/Kg
Exposure Frequency (EF)	225	days/yr
Fraction of EF in Contact with Soil (ET)	1	unitless
Exposure Duration (ED)	25	yrs
Exposed Body Surface Area (SA)	3300	cm^2
Soil-to-Skin Adherence Factor (AF)	0.2	mg/cm^2-event
Dermal Soil Absorption Factor (DAF)	chemical-specific	unitless
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_n)	25	yrs
Oral Slope Factor Adjusted for GI Absorption (SF_d)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose Adjusted for GI Absorption (RfD_d)	chemical-specific	mg/Kg-day
Conversion Factor (CF)	0.000001	Kg/mg
Oral Absorption Factor (OAF)	chemical-specific	unitless
Event Frequency (EV)	1	events/day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(SF_d)(CF)(EV)}{(BW)(AT_c)(365 days/year)}$$

Where $SF_d = SF_o/OAF$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(CF)(EV)}{(RfD_d)(BW)(AT_n)(365 days/year)}$$

Where $RfD_d = (RfD_o)*(OAF)$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	DAF (unitless)	SF_d $(mg/Kg\text{-}day)^{-1}$ [d/]	RFD_d (mg/Kg)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds									
Phenanthrene[e/]	85-01-8	0.09	0.13	--[f/]	0.3	--	--	2.3E-07	<1%
Semivolatile Organic Compounds									
Benzo(a)anthracene	56-55-3	0.17	0.13	0.73	--	3.3E-08	1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	0.13	--	0.03	--	--	8.8E-05	<1%
Chrysene	218-01-9	0.47	0.13	0.0073	--	9.3E-10	<1%	--	--
Fluoranthene	206-44-0	0.15	0.13	--	0.04	--	--	2.8E-06	<1%
Pyrene	129-00-0	0.36	0.13	--	0.03	--	--	9.1E-06	<1%
Inorganics									
Arsenic	7440-38-2	28.1	0.03	1.5	0.0003	2.6E-06	99%	1.6E-02	57%
Cadmium[e/]	7440-43-9	51.9	0.001	--	0.000025	--	--	1.2E-02	42%

Chromium, Total[e/]	7440-47-3	387	--	--	0.000273	--	--	--	--
Cobalt	7440-48-4	329	--	--	0.02	--	--	--	--
Copper	7440-50-8	121	--	--	0.012	--	--	--	--
Lead[e/]	7439-92-1	70	--	--	--	--	--	--	--
Mercury	7487-94-7	45	--	--	0.000021	--	--	--	--
Nickel	7440-02-0	133	--	--	0.0008	--	--	--	--
Silver	7440-22-4	14.9	--	--	0.0002	--	--	--	--
Tin	7440-31-5	19.7	--	--	0.06	--	--	--	--
Vanadium	7440-62-2	32.9	--	--	0.000026	--	--	--	--
Zinc	7440-66-6	932	--	--	0.06	--	--	--	--
					Pathway Sums	2.7E-06		2.8E-02	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration,

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.3
CALCULATIONS FOR ESTIMATING VOLATILIZATION FACTOR AND PARTICULATE EMISSION FACTOR [a/]
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Equations

$$VF = \frac{Q/C \times (3.14 \times D_A \times T)^{1/2} \times 10^{-4}}{(2 \times \rho_b \times D_A)}$$

where:

$$D_A = \frac{[(\theta_a^{10/3} D_i H' + \theta_w^{10/3} D_w)/n^2]}{\rho_b K_d + \theta_w + \theta_a H'}$$

$$PEF = Q/C\left[\frac{3600\text{seconds/hour}}{0.036(1-V)(U_m/U_t)^3(F(x))}\right]$$

Input Parameter	Definition	Value
VF	Volatilization factor (m^3/Kg) [b/]	Calculated below
A	Area (Acres)	1
Q/C	Inverse of the mean concentration at the center of source (g/m^2-s per Kg/m^3) [c/]	68.47
T	Exposure interval (s) [d/]	9.5E+08
ρ_b	Dry soil bulk density (g/cm^3) [e/]	1.5
D_A	Apparent Diffusivity (cm^2/s) [f/]	Calculated below
θ_a	Air-filled soil porosity (L_{air}/L_{soil}) [g/]	0.13
D_i	Diffusivity in air (cm^2/s)	chemical-specific
H'	Henry's law constant (dimensionless)	chemical-specific
θ_w	Water-filled soil porosity (L_{water}/L_{soil}) [h/]	0.3 [i/]
D_w	Diffusivity in water (cm^2/s)	chemical-specific
n	Total soil porosity (L_{pore}/L_{soil}) [j/]	0.43
K_d	Soil-water partion coefficient (cm^3/g) [k/] = K_{oc} x f_{oc} (organics)	chemical-specific
K_{oc}	Soil organic carbon partition coefficient (cm^3/g)	chemical-specific
f_{oc}	Fraction of organic carbon (unitless)	0.02
PEF	Particulate Emission Factor (m^3/Kg)	9.9E+08
V	Fraction of vegetative cover (unitless)	0.5
U_m	Mean annual wind speed (m/s)	4.69
U_t	Equivalent threshold value of wind speed at 7 m (m/s)	11.32
F(x)	Function dependent on U_m/U_t derived using Cowherd et al. (1985) (unitless)	0.194

COPC [l/]	D_i	D_w	H'	K_{oc}	K_d	D_a	VF
Volatile Organic Compounds							
Phenanthrene[m/]	3.8E-02	7.5E-06	1.7E-03	2.1E+04	4.2E+02	1.8E-09	2.9E+06
Semivolatile Organic Compounds							
Benzo(a)anthracene	5.1E-02	9.0E-06	1.4E-04	4.0E+05	8.0E+03	7.6E-11	1.4E+07
Benzo(g,h,i)perylene[m/]	2.2E-02	5.3E-06	1.4E-05	2.7E+06	5.4E+04	6.3E-12	5.0E+07
Chrysene	2.5E-02	6.2E-06	3.9E-03	4.0E+05	8.0E+03	1.0E-10	1.2E+07

Fluoranthene	3.0E-02	6.4E-06	6.6E-04	1.1E+05	2.1E+03	2.3E-10	8.2E+06
Pyrene	2.7E-02	7.2E-06	4.5E-04	1.1E+05	2.1E+03	2.5E-10	7.9E+06
Inorganics							
Aluminum	--[n/]	--	--	--	1.5E+03	7.2E+02	--
Arsenic	--	--	--	--	3.1E+01	--	--
Boron	--	--	--	--	3.0E+00	--	--
Cadmium[m/]	--	--	--	--	4.3E+03	1.3E+02	--
Chromium, Total[m/]	--	--	--	--	1.4E+01	--	--
Cobalt	--	--	--	--	4.5E+01	--	--
Copper	--	--	--	--	3.5E+01	--	--
Lead[m/]	--	--	--	--	9.0E+02	6.0E+04	--
Mercury	--	--	--	--	2.0E+02	--	--
Nickel	--	--	--	--	1.9E+03	4.3E+02	--
Silver	--	--	--	--	1.1E+02	--	--
Tin	--	--	--	--	2.5E+02	--	--
Vanadium	--	--	--	--	1.0E+03	4.1E+03	--
Zinc	--	--	--	--	5.3E+02	--	--

[a/] Calculations and default values were done per USEPA (1996a) Soil Screening Guidance: Users Guide.

[b/] m^3/kg = Cubic meters per kilogram.

[c/] g/m^2-s per kg/m^3 = Grams per square meter second per kilogram per cubic meter. The Q/C term was based on SWMU-specific source area, climatic zone, and Salt Lake City, Utah (USEPA, 1996a).

[d/] s = Seconds.

[e/] g/cm^3 = Grams per cubic centimeter.

[f/] cm^2/s = Square centimeters per second.

[g/] L_{air}/L_{soil} = Liters of air per liters of soil.

[h/] L_{water}/L_{soil} = Liters of water per liters of soil.

[i/] Default value recommended by USEPA (1996a) in Equation 10. This value is consistent with the default value recommended by USEPA (2003f).

[j/] L_{pore}/L_{soil} = Liters pore space per liters of soil.

[k/] cm^3/g = Cubic centimeters per gram.

[l/] COPC = Chemical of potential concern.

[m/] The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

[n/] "--" = Data unavailable.

TABLE E.HRA.4
NONINTRUSIVE WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- INHALATION OF VOLATILES/PARTICULATES FROM SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive Worker	
COPC Ambient Air Concentration due to volatile (organics) or particulate (inorganics) emissions from soil (Cair-VOC/Particulate)	chemical-specific	µg/m^3
Exposure Frequency (EF)	225	days/yr
Exposure Duration (ED)	25	yrs
Fraction of EF in Contact with Soil (ET)	0.25	unitless
Averaging Time, Carcinogens (AT_C)	70	yrs
Averaging Time, Noncarcinogens (AT_N)	25	yrs
Inhalation Unit Risk Factor(URF)	chemical-specific	(µg/m^3)$^{-1}$
Inhalation Reference Concentration (RfC)	chemical-specific	µg/m^3
Volatilization Factor (VF)	chemical-specific	m^3/Kg
Particulate emission factor (PEF)	9.92543E+08	m^3/kg

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)(URF)}{(AT_c)(365 days/year)}$$

Non-Carcinogenic:

$$HQ = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)}{(RfC)(AT_{nc})(365\ days/year)}$$

where:

$$C_{air-VOC} = \frac{C_{soil}}{VF}$$ for organics; and

$$C_{air-Particulate} = \frac{C_{soil}}{PEF}$$ for inorganics

COPC[a/]	CAS[b/]	EPC (µg/Kg) [c/]	Volatilization Factor (m^3/Kg)[d/]	$C_{air-VOC/Particulate}$ (µg/m^3)[e/]	URF (µg/m^3)$^{-1}$	RFC (µg/m^3)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds										
Phenanthrene[f/]	85-01-8	90	2.9E+06	3.1E-05	--[g/]	--	--	--	--	--
Semivolatile Organic Compounds										
Benzo(a)anthracene	56-55-3	170	1.4E+07	1.2E-05	--	--	--	--	--	--
Benzo(g,h,i)perylene[f/]	191-24-2	3500	5.0E+07	7.1E-05	--	--	--	--	--	--
Chrysene	218-01-9	470	1.2E+07	3.8E-05	--	--	--	--	--	--
Fluoranthene	206-44-0	150	8.2E+06	1.8E-05	--	--	--	--	--	--
Pyrene	129-00-0	360	7.9E+06	4.5E-05	--	--	--	--	--	--
Inorganics										
Arsenic	7440-38-2	28100	--	2.8E-05	0.0043	--	6.7E-09	7%	--	--
Cadmium[f/]	7440-43-9	51900	--	5.2E-05	0.0018	--	5.2E-09	5%	--	--

Chromium, Total[f/]	7440-47-3	387000	--	3.9E-04	0.00171	0.7	3.7E-08	37%	8.6E-05	3%
Cobalt	7440-48-4	329000	--	3.3E-04	0.0028	0.0202	5.1E-08	51%	2.5E-03	97%
Copper	7440-50-8	121000	--	1.2E-04	--	--	--	--	--	--
Lead[f/]	7439-92-1	70000	--	7.1E-05	--	--	--	--	--	--
Mercury	7487-94-7	45000	--	4.5E-05	--	--	--	--	--	--
Nickel	7440-02-0	133000	--	1.3E-04	--	--	--	--	--	--
Silver	7440-22-4	14900	--	1.5E-05	--	--	--	--	--	--
Tin	7440-31-5	19700	--	2.0E-05	--	--	--	--	--	--
Vanadium	7440-62-2	32900	--	3.3E-05	--	--	--	--	--	--
Zinc	7440-66-6	932000	--	9.4E-04	--	--	--	--	--	--
					Pathway Sums		1.0E-07		2.6E-03	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ µg/Kg = Micrograms per kilogram.

d/ m^3/kg = Cubic meters per kilogram. Volatilization Factors used for volatile organic compounds only.

e/ µg/m^3 = Micrograms per cubic meter.

f/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

g/ "--" = Data unavailable.

TABLE E.HRA.5
NONINTRUSIVE CARR/DITTO WORKER
CARCINOGENIC AND NONCARCINOGENIC RISK ESTIMATES -- INGESTION OF SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive CARR/DITTO Worker	
COPC Concentration in Soil/Sediment ($C_{soil/sed}$)	chemical-specific	mg/Kg
Soil/Sediment Ingestion Rate ($IR_{soil/sed}$)	100	mg/day
Exposure Frequency (EF)	100	days/yr
Exposure Duration (ED)	25	yrs
Fraction Contaminated Soil/Sediment Ingested (FI)	1	unitless
Conversion Factor (CF)	0.000001	Kg/mg
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_{nc})	25	yrs
Oral Slope Factor (SF_o)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose on (RfD_o)	chemical-specific	mg/Kg-day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)(SF_o)}{(BW)(AT_c)(365 day/year)}$$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)}{(RfD_o)(BW)(AT_{nc})(365 day/year)}$$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	SF_o $(mg/Kg\text{-}day)^{-1}$ [d/]	RFD_o (mg/Kg-day)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds								
Phenanthrene[e/]	85-01-8	0.09	--[f/]	0.3	--	--	1.2E-07	<1%
Semivolatile Organic Compounds								
Benzo(a)anthracene	56-55-3	0.17	0.73	--	1.7E-08	<1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	--	0.03	--	--	4.6E-05	<1%
Chrysene	218-01-9	0.47	0.0073	--	4.8E-10	<1%	--	--
Fluoranthene	206-44-0	0.15	--	0.04	--	--	1.5E-06	<1%
Pyrene	129-00-0	0.36	--	0.03	--	--	4.7E-06	<1%
Inorganics								
Arsenic	7440-38-2	28.1	1.5	0.0003	5.9E-06	100%	3.7E-02	25%
Cadmium[e/]	7440-43-9	51.9	--	0.001	--	--	2.0E-02	14%
Chromium, Total[e/]	7440-47-3	387	--	0.021	--	--	7.2E-03	5%
Cobalt	7440-48-4	329	--	0.02	--	--	6.4E-03	4%
Copper	7440-50-8	121	--	0.04	--	--	1.2E-03	<1%
Lead[e/]	7439-92-1	70	--	--	--	--	--	--

Mercury	7487-94-7	45	--	0.0003	--	--	5.9E-02	40%
Nickel	7440-02-0	133	--	0.02	--	--	2.6E-03	2%
Silver	7440-22-4	14.9	--	0.005	--	--	1.2E-03	<1%
Tin	7440-31-5	19.7	--	0.6	--	--	1.3E-05	<1%
Vanadium	7440-62-2	32.9	--	0.001	--	--	1.3E-02	9%
Zinc	7440-66-6	932	--	0.3	--	--	1.2E-03	<1%
				Pathway Sums	5.9E-06		1.5E-01	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration, mg/Kg = Milligrams per kilogram.

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.6
NONINTRUSIVE CARR/DITTO WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- DERMAL CONTACT WITH SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive CARR/DITTO Worker	
COPC Concentration in Soil (C_{soil})	chemical-specific	mg/Kg
Exposure Frequency (EF)	100	days/yr
Fraction of EF in Contact with Soil (ET)	1	unitless
Exposure Duration (ED)	25	yrs
Exposed Body Surface Area (SA)	3300	cm^2
Soil-to-Skin Adherence Factor (AF)	0.2	mg/cm^2-event
Dermal Soil Absorption Factor (DAF)	chemical-specific	unitless
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_n)	25	yrs
Oral Slope Factor Adjusted for GI Absorption (SF_d)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose Adjusted for GI Absorption (RfD_d)	chemical-specific	mg/Kg-day
Conversion Factor (CF)	0.000001	Kg/mg
Oral Absorption Factor (OAF)	chemical-specific	unitless
Event Frequency (EV)	1	events/day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(SF_d)(CF)(EV)}{(BW)(AT_c)(365 days/year)}$$

Where $SF_d = SF_o/OAF$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(CF)(EV)}{(RfD_d)(BW)(AT_n)(365 days/year)}$$

Where $RfD_d = (RfD_o)*(OAF)$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	DAF (unitless)	SF_d $(mg/Kg\text{-}day)^{-1}$[d/]	RFD_d (mg/Kg)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds									
Phenanthrene[e/]	85-01-8	0.09	0.13	--[f/]	0.3	--	--	1.0E-07	<1%
Semivolatile Organic Compounds									
Benzo(a)anthracene	56-55-3	0.17	0.13	0.73	--	1.5E-08	1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	0.13	--	0.03	--	--	3.9E-05	<1%
Chrysene	218-01-9	0.47	0.13	0.0073	--	4.1E-10	<1%	--	--
Fluoranthene	206-44-0	0.15	0.13	--	0.04	--	--	1.3E-06	<1%
Pyrene	129-00-0	0.36	0.13	--	0.03	--	--	4.0E-06	<1%
Inorganics									
Arsenic	7440-38-2	28.1	0.03	1.5	0.0003	1.2E-06	99%	7.3E-03	57%

Cadmium[e/]	7440-43-9	51.9	0.001	--	0.000025	--	--	5.4E-03	42%
Chromium, Total[e/]	7440-47-3	387	--	--	0.000273	--	--	--	--
Cobalt	7440-48-4	329	--	--	0.02	--	--	--	--
Copper	7440-50-8	121	--	--	0.012	--	--	--	--
Lead[e/]	7439-92-1	70	--	--	--	--	--	--	--
Mercury	7487-94-7	45	--	--	0.000021	--	--	--	--
Nickel	7440-02-0	133	--	--	0.0008	--	--	--	--
Silver	7440-22-4	14.9	--	--	0.0002	--	--	--	--
Tin	7440-31-5	19.7	--	--	0.06	--	--	--	--
Vanadium	7440-62-2	32.9	--	--	0.000026	--	--	--	--
Zinc	7440-66-6	932	--	--	0.06	--	--	--	--
					Pathway Sums	1.2E-06		1.3E-02	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration,

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.7
NONINTRUSIVE CARR/DITTO WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- INHALATION OF VOLATILES/PARTICULATES FROM SURFACE SOIL
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Nonintrusive CARR/DITTO Worker	
COPC Ambient Air Concentration due to volatile (organics) or particulate (inorganics) emissions from soil (Cair-VOC/Particulate)	chemical-specific	µg/m^3
Exposure Frequency (EF)	100	days/yr
Exposure Duration (ED)	25	yrs
Fraction of EF in Contact with Soil (ET)	0.25	unitless
Averaging Time, Carcinogens (AT_C)	70	yrs
Averaging Time, Noncarcinogens (AT_N)	25	yrs
Inhalation Unit Risk Factor(URF)	chemical-specific	(µg/m^3)$^{-1}$
Inhalation Reference Concentration (RfC)	chemical-specific	µg/m^3
Volatilization Factor (VF)	chemical-specific	m^3/Kg
Particulate emission factor (PEF)	9.92543E+08	m^3/kg

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)(URF)}{(AT_c)(365 days/year)}$$

Non-Carcinogenic:

$$HQ = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)}{(RfC)(AT_{nc})(365\ days/year)}$$

where:

$$C_{air-VOC} = \frac{C_{soil}}{VF}$$ for organics; and

$$C_{air-Particulate} = \frac{C_{soil}}{PEF}$$ for inorganics

COPC[a/]	CAS[b/]	EPC (µg/Kg) [c/]	Volatilization Factor (m^3/Kg)[d/]	$C_{air-VOC/Particulate}$ (µg/m^3)[e/]	URF (µg/m^3)$^{-1}$	RFC (µg/m^3)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds										
Phenanthrene[f/]	85-01-8	90	2.9E+06	3.1E-05	--[g/]	--	--	--	--	--
Semivolatile Organic Compounds										
Benzo(a)anthracene	56-55-3	170	1.4E+07	1.2E-05	--	--	--	--	--	--
Benzo(g,h,i)perylene[f/]	191-24-2	3500	5.0E+07	7.1E-05	--	--	--	--	--	--
Chrysene	218-01-9	470	1.2E+07	3.8E-05	--	--	--	--	--	--
Fluoranthene	206-44-0	150	8.2E+06	1.8E-05	--	--	--	--	--	--
Pyrene	129-00-0	360	7.9E+06	4.5E-05	--	--	--	--	--	--
Inorganics										
Arsenic	7440-38-2	28100	--	2.8E-05	0.0043	--	3.0E-09	7%	--	--

Cadmium[f/]	7440-43-9	51900	--	5.2E-05	0.0018	--	2.3E-09	5%	--	--
Chromium, Total[f/]	7440-47-3	387000	--	3.9E-04	0.00171	0.7	1.6E-08	37%	3.8E-05	3%
Cobalt	7440-48-4	329000	--	3.3E-04	0.0028	0.0202	2.3E-08	51%	1.1E-03	97%
Copper	7440-50-8	121000	--	1.2E-04	--	--	--	--	--	--
Lead[f/]	7439-92-1	70000	--	7.1E-05	--	--	--	--	--	--
Mercury	7487-94-7	45000	--	4.5E-05	--	--	--	--	--	--
Nickel	7440-02-0	133000	--	1.3E-04	--	--	--	--	--	--
Silver	7440-22-4	14900	--	1.5E-05	--	--	--	--	--	--
Tin	7440-31-5	19700	--	2.0E-05	--	--	--	--	--	--
Vanadium	7440-62-2	32900	--	3.3E-05	--	--	--	--	--	--
Zinc	7440-66-6	932000	--	9.4E-04	--	--	--	--	--	--
					Pathway Sums		4.4E-08		1.2E-03	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ µg/Kg = Micrograms per kilogram.

d/ m^3/kg = Cubic meters per kilogram. Volatilization Factors used for volatile organic compounds only.

e/ µg/m^3 = Micrograms per cubic meter.

f/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

g/ "--" = Data unavailable.

TABLE E.HRA.8
INTRUSIVE WORKER
CARCINOGENIC AND NONCARCINOGENIC RISK ESTIMATES -- INGESTION OF MIXED SOIL (0-10 FT BGS)
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Intrusive Worker	
COPC Concentration in Soil/Sediment ($C_{soil/sed}$)	chemical-specific	mg/Kg
Soil/Sediment Ingestion Rate ($IR_{soil/sed}$)	330	mg/day
Exposure Frequency (EF)	60	days/yr
Exposure Duration (ED)	1	yrs
Fraction Contaminated Soil/Sediment Ingested (FI)	1	unitless
Conversion Factor (CF)	0.000001	Kg/mg
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_{nc})	1	yrs
Oral Slope Factor (SF_o)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose on (RfD_o)	chemical-specific	mg/Kg-day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)(SF_o)}{(BW)(AT_c)(365 day/year)}$$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil/sed})(IR_{soil/sed})(EF)(ED)(FI)(CF)}{(RfD_o)(BW)(AT_{nc})(365 day/year)}$$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	SF_o $(mg/Kg\text{-}day)^{-1}$ [d/]	RFD_o (mg/Kg-day)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds								
Phenanthrene[e/]	85-01-8	0.09	--[f/]	0.3	--	--	2.3E-07	<1%
Semivolatile Organic Compounds								
Benzo(a)anthracene	56-55-3	0.17	0.73	--	1.4E-09	<1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	--	0.03	--	--	9.0E-05	<1%
Chrysene	218-01-9	0.47	0.0073	--	3.8E-11	<1%	--	--
Fluoranthene	206-44-0	0.15	--	0.04	--	--	2.9E-06	<1%
Pyrene	129-00-0	0.36	--	0.03	--	--	9.3E-06	<1%
Inorganics								
Aluminum	7429-90-5	35000	--	1	--	--	2.7E-02	8%
Arsenic	7440-38-2	28.1	1.5	0.0003	4.7E-07	100%	7.3E-02	22%
Boron	7440-42-8	36.4	--	0.2	--	--	1.4E-04	<1%
Cadmium[e/]	7440-43-9	51.9	--	0.001	--	--	4.0E-02	12%
Chromium, Total[e/]	7440-47-3	387	--	0.021	--	--	1.4E-02	4%
Cobalt	7440-48-4	329	--	0.02	--	--	1.3E-02	4%

Copper	7440-50-8	121	--	0.04	--	--	2.3E-03	<1%
Lead[e/]	7439-92-1	70	--	--	--	--	--	--
Mercury	7487-94-7	45	--	0.0003	--	--	1.2E-01	36%
Nickel	7440-02-0	133	--	0.02	--	--	5.2E-03	2%
Silver	7440-22-4	14.9	--	0.005	--	--	2.3E-03	<1%
Tin	7440-31-5	19.7	--	0.6	--	--	2.5E-05	<1%
Vanadium	7440-62-2	38.9	--	0.001	--	--	3.0E-02	9%
Zinc	7440-66-6	932	--	0.3	--	--	2.4E-03	<1%
				Pathway Sums	4.7E-07		3.3E-01	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration, mg/Kg = Milligrams per kilogram.

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.9
INTRUSIVE WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- DERMAL CONTACT WITH MIXED SOIL (0-10 FT BGS)
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Intrusive Worker	
COPC Concentration in Soil (C_{soil})	chemical-specific	mg/Kg
Exposure Frequency (EF)	60	days/yr
Fraction of EF in Contact with Soil (ET)	1	unitless
Exposure Duration (ED)	1	yrs
Exposed Body Surface Area (SA)	3300	cm^2
Soil-to-Skin Adherence Factor (AF)	0.3	mg/cm^2-event
Dermal Soil Absorption Factor (DAF)	chemical-specific	unitless
Averaging Time, Carcinogens (AT_c)	70	yrs
Averaging Time, Noncarcinogens (AT_n)	1	yrs
Oral Slope Factor Adjusted for GI Absorption (SF_d)	chemical-specific	$(mg/Kg\text{-}day)^{-1}$
Body Weight (BW)	70	Kg
Oral Reference Dose Adjusted for GI Absorption (RfD_d)	chemical-specific	mg/Kg-day
Conversion Factor (CF)	0.000001	Kg/mg
Oral Absorption Factor (OAF)	chemical-specific	unitless
Event Frequency (EV)	1	events/day

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(SF_d)(CF)(EV)}{(BW)(AT_c)(365 days/year)}$$

Where $SF_d = SF_o/OAF$

Non-Carcinogenic:

$$Hazard = \frac{(C_{soil})(EF)(ET)(ED)(SA)(AF)(DAF)(CF)(EV)}{(RfD_d)(BW)(AT_n)(365 days/year)}$$

Where $RfD_d = (RfD_o)*(OAF)$

COPC [a/]	CAS [b/]	EPC (mg/Kg)[c/]	DAF (unitless)	SF_d $(mg/Kg\text{-}day)^{-1}$ [d/]	RFD_d (mg/Kg)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds									
Phenanthrene[e/]	85-01-8	0.09	0.13	--[f/]	0.3	--	--	9.1E-08	<1%
Semivolatile Organic Compounds									
Benzo(a)anthracene	56-55-3	0.17	0.13	0.73	--	5.4E-10	1%	--	--
Benzo(g,h,i)perylene[e/]	191-24-2	3.5	0.13	--	0.03	--	--	3.5E-05	<1%
Chrysene	218-01-9	0.47	0.13	0.0073	--	1.5E-11	<1%	--	--
Fluoranthene	206-44-0	0.15	0.13	--	0.04	--	--	1.1E-06	<1%
Pyrene	129-00-0	0.36	0.13	--	0.03	--	--	3.6E-06	<1%
Inorganics									
Aluminum	7429-90-5	35000	--	--	0.1	--	--	--	--
Arsenic	7440-38-2	28.1	0.03	1.5	0.0003	4.2E-08	99%	6.5E-03	57%
Boron	7440-42-8	36.4	--	--	0.2	--	--	--	--

Cadmium[e/]	7440-43-9	51.9	0.001	--	0.000025	--	--	4.8E-03	42%
Chromium, Total[e/]	7440-47-3	387	--	--	0.000273	--	--	--	--
Cobalt	7440-48-4	329	--	--	0.02	--	--	--	--
Copper	7440-50-8	121	--	--	0.012	--	--	--	--
Lead[e/]	7439-92-1	70	--	--	--	--	--	--	--
Mercury	7487-94-7	45	--	--	0.000021	--	--	--	--
Nickel	7440-02-0	133	--	--	0.0008	--	--	--	--
Silver	7440-22-4	14.9	--	--	0.0002	--	--	--	--
Tin	7440-31-5	19.7	--	--	0.06	--	--	--	--
Vanadium	7440-62-2	38.9	--	--	0.000026	--	--	--	--
Zinc	7440-66-6	932	--	--	0.06	--	--	--	--
					Pathway Sums	4.3E-08		1.1E-02	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ Exposure Point Concentration,

d/ mg/Kg-day = Milligrams per kilogram-day.

e/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

f/ "--" = Data unavailable.

TABLE E.HRA.10
INTRUSIVE WORKER
CARCINOGENIC AND NONCOARCINOGENIC RISK ESTIMATES -- INHALATION OF VOLATILES/PARTICULATES FROM MIXED SOIL (0-10 FT BGS)
SWMU - 41 AREA 1
DUGWAY PROVING GROUND, UTAH

Exposure Assumptions

Receptor	Intrusive Worker	
COPC Ambient Air Concentration due to volatile (organics) or particulate (inorganics) emissions from soil (Cair-VOC/Particulate)	chemical-specific	µg/m^3
Exposure Frequency (EF)	60	days/yr
Exposure Duration (ED)	1	yrs
Fraction of EF in Contact with Soil (ET)	1	unitless
Averaging Time, Carcinogens (AT_C)	70	yrs
Averaging Time, Noncarcinogens (AT_N)	1	yrs
Inhalation Unit Risk Factor(URF)	chemical-specific	(µg/m^3)$^{-1}$
Inhalation Reference Concentration (RfC)	chemical-specific	µg/m^3
Volatilization Factor (VF)	chemical-specific	m^3/Kg
Particulate emission factor (PEF)	9.92543E+08	m^3/kg

Risk and Hazard Equations

Carcinogenic:

$$Risk = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)(URF)}{(AT_c)(365 days/year)}$$

Non-Carcinogenic:

$$HQ = \frac{(C_{air-VOC/Particulate})(EF)(ED)(ET)}{(RfC)(AT_{nc})(365\ days/year)}$$

where:

$$C_{air-VOC} = \frac{C_{soil}}{VF}$$ for organics; and

$$C_{air-Particulate} = \frac{C_{soil}}{PEF}$$ for inorganics

COPC[a/]	CAS[b/]	EPC (µg/Kg) [c/]	Volatilization Factor (m^3/Kg)[d/]	$C_{air-VOC/Particulate}$ (µg/m^3)[e/]	URF (µg/m^3)$^{-1}$	RFC (µg/m^3)	Cancer Risk	% Of Total	Hazard Quotient	% Of Total
Volatile Organic Compounds										
Phenanthrene[f/]	85-01-8	90	2.9E+06	3.1E-05	--[g/]	--	--	--	--	--
Semivolatile Organic Compounds										
Benzo(a)anthracene	56-55-3	170	1.4E+07	1.2E-05	--	--	--	--	--	--
Benzo(g,h,i)perylene[f/]	191-24-2	3500	5.0E+07	7.1E-05	--	--	--	--	--	--
Chrysene	218-01-9	470	1.2E+07	3.8E-05	--	--	--	--	--	--
Fluoranthene	206-44-0	150	8.2E+06	1.8E-05	--	--	--	--	--	--
Pyrene	129-00-0	360	7.9E+06	4.5E-05	--	--	--	--	--	--
Inorganics										
Aluminum	7429-90-5	3.5E+07	--	3.5E-02	--	4.9	--	--	1.2E-03	30%
Arsenic	7440-38-2	28100	--	2.8E-05	0.0043	--	2.9E-10	7%	--	--

Boron	7440-42-8	36400	--	3.7E-05	--	19.95	--	--	3.0E-07	<1%
Cadmium[f/]	7440-43-9	51900	--	5.2E-05	0.0018	--	2.2E-10	5%	--	--
Chromium, Total[f/]	7440-47-3	387000	--	3.9E-04	0.00171	0.7	1.6E-09	37%	9.2E-05	2%
Cobalt	7440-48-4	329000	--	3.3E-04	0.0028	0.0202	2.2E-09	51%	2.7E-03	68%
Copper	7440-50-8	121000	--	1.2E-04	--	--	--	--	--	--
Lead[f/]	7439-92-1	70000	--	7.1E-05	--	--	--	--	--	--
Mercury	7487-94-7	45000	--	4.5E-05	--	--	--	--	--	--
Nickel	7440-02-0	133000	--	1.3E-04	--	--	--	--	--	--
Silver	7440-22-4	14900	--	1.5E-05	--	--	--	--	--	--
Tin	7440-31-5	19700	--	2.0E-05	--	--	--	--	--	--
Vanadium	7440-62-2	38900	--	3.9E-05	--	--	--	--	--	--
Zinc	7440-66-6	932000	--	9.4E-04	--	--	--	--	--	--
					Pathway Sums		4.3E-09		4.0E-03	

a/ COPC = Chemical of potential concern.

b/ CAS = Chemical Abstracts Service number.

c/ µg/Kg = Micrograms per kilogram.

d/ m^3/kg = Cubic meters per kilogram. Volatilization Factors used for volatile organic compounds only.

e/ µg/m^3 = Micrograms per cubic meter.

f/ The toxicity data for these chemicals were not derived via traditional methods and are described in Section 3.4.

g/ "--" = Data unavailable.

DATA ENTRY SHEET

TABLE E.HRA.11
VOLATILIZATION FROM SOIL INTO INDOOR AIR
DATA ENTRY SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

SL-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
71432	1.60E+00	Benzene

MORE ↓

ENTER Average soil temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) L_b (cm)	ENTER Totals must add up to value of L_t (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
11	200	200	0	200			C		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum A soil organic carbon fraction, f_{oc}^A (unitless)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum B soil organic carbon fraction, f_{oc}^B (unitless)
C	1.43	0.459	0.215	0.02					

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	5

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

TABLE E.HRA.12
VOLATILIZATION FROM SOIL INTO INDOOR AIR
CHEMICAL PROPERTIES SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H ($atm\text{-}m^3/mol$)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Physical state at soil temperature, (S,L,G)
8.80E-02	9.80E-06	5.56E-03	25	7,342	353.24	562.16	5.89E+01	1.75E+03	7.8E-06	3.0E-02	L

END

INTERMEDIATE CALCULATIONS SHEET

TABLE E.HRA.13
VOLATILIZATION FROM SOIL INTO INDOOR AIR
INTERCALCS SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Initial soil concentration used, C_R ($\mu g/kg$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
9.46E+08	1	0.244	ERROR	ERROR	0.324	2.26E-09	0.821	1.86E-09	4,000	1.60E+00	2.54E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)	Convection path length, L_p (cm)
1.80E+06	2.22E-04	200	8,112	2.83E-03	1.21E-01	1.76E-04	3.81E-03	0.00E+00	0.00E+00	3.81E-03	1	200

Soil-water partition coefficient, K_d (cm^3/g)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Finite source β term (unitless)	Finite source ψ term $(sec)^{-1}$	Time for source depletion, τ_D (sec)	Exposure duration > time for source depletion (YES/NO)
1.18E+00	1.44E+02	0.10	8.33E+01	3.81E-03	4.00E+02	2.32E+237	3.24E-03	4.67E-01	NA	NA	NA	NA

Finite source indoor attenuation coefficient, $<\alpha>$ (unitless)	Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$)	Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Additional Biodegredation Attenuation Factor
NA	NA	NA	NA	7.8E-06	3.0E-02	10

END

TABLE E.HRA.14
VOLATILIZATION FROM SOIL INTO INDOOR AIR
RESULTS SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	2.36E+06	NA

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.5E-07	1.5E-03

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	6.71E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.7E-07

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

DATA ENTRY SHEET

TABLE E.HRA.15
VOLATILIZATION FROM SOIL INTO INDOOR AIR
DATA ENTRY SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

GW-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
75003	3.40E-01	Chloroethane

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)
			Totals must add up to value of L_{WT} (cell G28)					
11	200	670.56	670.56			A	C	C

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)
C	1.43	0.459	0.215					

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP (g/cm-s^2)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculat Q_{soil} (L/m)
10	40	1000	1000	366	0.1	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

TABLE E.HRA.16
VOLATILIZATION FROM SOIL INTO INDOOR AIR
CHEMICAL PROPERTIES SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF ($(\mu g/m^3)^{-1}$)	Reference conc., RfC (mg/m^3)
2.71E-01	1.15E-05	1.11E-02	25	5,879	285.30	460.40	2.37E+01	6.71E+03	0.0E+00	1.0E+01

END

INTERMEDIATE CALCULATIONS SHEET

TABLE E.HRA.17
VOLATILIZATION FROM SOIL INTO INDOOR AIR
INTERCALCS SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	470.56	0.244	ERROR	ERROR	0.324	2.26E-09	0.821	1.86E-09	81.52	0.459	0.047	0.412	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
2.54E+04	1.80E+06	2.22E-04	200	5,893	6.78E-03	2.91E-01	1.76E-04	1.17E-02	0.00E+00	0.00E+00	5.90E-05	3.32E-04	470.56

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
200	9.89E+01	0.10	8.33E+01	1.17E-02	4.00E+02	1.31E+77	4.93E-05	4.87E-03	NA	1.0E+01

END

TABLE E.HRA.18
VOLATILIZATION FROM SOIL INTO INDOOR AIR
RESULTS SHEET
SWMU-41

DUGWAY PROVING GROUND, UTAH

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	6.71E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.7E-07

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

SCROLL DOWN TO "END"

END

TABLE E.HRA.19

GROUNDWATER RISK SCREENING USING RESIDENTIAL PRGs[a/]
SWMU - 41
DUGWAY PROVING GROUND, UTAH

Preliminary COPC[b/]	CAS #[c/]	Maximum Site Concentration (µg/L)[d/]	Residential PRG[e/] (µg/L) Noncancer	Residential PRG[e/] (µg/L) Cancer	Residential HQ[f/]	Residential Cancer Risk[g/]
Volatile Organic Compounds						
Chloromethane	74-87-3	0.34	1.6E+02	--[h/]	2E-03	--
			Cumulative Hazard and Risk		2.1E-03	--

a/ PRG = Preliminary remediation goal; USEPA Region 9 (2004).

b/ COPC = Chemical of potential concern.

c/ CAS = Chemical abstracts service number.

d/ µg/L = Micrograms per liter.

e/ Noncancer and cancer PRGs are from the "Air-H_2O" spreadsheet in USEPA Region 9 (2004).

f/ HQ = Hazard Quotient; HQ = (THQ X C_{max}/PRG), where target hazard quotient (THQ) = 1 and C_{max} = maxiumum site concentration. All values have been rounded to one significant figure (including cumulative hazard and risk estimates).

g/ Cancer Risk = (C_{max} X TCR/PRG), where target cancer risk (TCR) = 1E-6 and C_{max} = maxiumum site concentration.

h/ "--" = USEPA Region 9 PRGs were not available for the indicated endpoint of toxicity.

APPENDIX F

RADIOLOGICAL SURVERY

APPENDIX F

SWMU-41 RADIOLOGICAL SURVEY REPORT

DUGWAY PROVING GROUND, UTAH

OCTOBER 2006

LIST OF ACRONYMS

µCi	microcurie
µR/hr	microroentgens per hour
ALARA	as low as reasonably achievable
CFR	Code of Federal Regulations
Ci	curie
Co-60	cobalt-60
cpm	counts per minute
Cs-137	cesium-137
DCGL	derived concentration guideline level
dpm	decays per minute
dpm/100cm^2	decays per minute per 100 square centimeters
GM	Geiger-Mueller
m	meter
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDA	minimum detectable activity
MeV	milli electron volts
min	minutes
mrem hr^{-1} per µCi	millirem per hour per microcurie
mrem/yr	millirem per year
NaI	sodium iodide
pCi/g	picocuries per gram
Pb-210	lead-210
Po-210	polonium-210
Ra-226	radium-226
RW	radiological warfare
SOP	standard operating procedure
STL	Severn Trent Laboratories
Ta-182	tantalum-182
TEDE	total effective dose
Th-234	thorium-234
U-238	uranium-238
USAF	United States Air Force
USNRC	United States Nuclear Regulatory Commission
WRS	Wilcoxon Rank Sum

LIST OF FIGURES

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F.3.4	Building 1004 Measurement Locations
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F.1 Introduction

F.1.1 Purpose of Appendix

The purpose of this appendix is to document the results of the radiological surveys performed at Dugway Proving Ground (DPG) SWMU-41 inside Buildings 1002, 1004, and 1005; within the underground pipe chase connecting those buildings (SWMU-41 Tunnel); and at the evaporation pond (SWMU-41 Pond). Investigation activities at SWMU-41 were completed in accordance with the *Final Phase II RCRA Facility Work Plan – SWMUs 11 and 41 Radiological Survey* (work plan) (Parsons, 2005). The work plan was approved by the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste.

Radiation surveys at SWMU-41 were performed in accordance with the *Multi Agency Radiation Survey and Site Investigation Manual* (MARSSIM; United States Nuclear Regulatory Commission [USNRC], 2000), and other applicable USNRC guidance, for the purpose of demonstrating that the surveyed areas within SWMU-41 met the criteria for free release and unrestricted use. The intent of this survey was to serve as both a characterization and, if appropriate, a final status survey.

Additional non-radiological work has been performed at SWMU-41 as part of the Phase II investigation and is documented in main body of this report.

F.1.2 Appendix Organization

A description and site history of SWMU-41 is presented in the remainder of Section F.1 of this appendix. Section F.2 details the SWMU-41 survey design, including the release criteria, conceptual dose model, and survey methodology. Section F.3 presents the results of the surveys at SWMU-41 Building 1002, 1004, 1005, Tunnel, and Pond, respectively. The conclusions and recommendations for further work at SWMU-41 are presented in Section F.4. Cited references in this appendix are listed in Section F.5.

F.1.3 Site Description and History

SWMU-41 is approximately 0.25 miles northeast of Ditto, in the Avery Area. It is listed in the Corrective Action Permit as a lined evaporation pond used to dispose liquid wastes generated in Building 1010 and other associated buildings. During the Phase II investigation, SWMU-41 was expanded to include the liquid waste disposal and treatment system (Building

1002) and associated treatment tanks and vaults, the Air Filter Building (1004) and related Building 1005, and a pipe chase tunnel (SWMU-41 Tunnel) containing buried pipes associated with the Operations Building (1010) and Building 1004, in addition to the evaporation pond into which these pipes drained. Figure F.1.1 shows the buildings and features at SWMU-41 described below.

The following information was obtained from the *Operation Manual – Able Area* (The Ralph M. Parsons Company, 1952), which describes the planned operations and design criteria of the facility. It is not known if the actual operations conducted at the facility were consistent with the procedures and conditions identified in the manual. The Operations Building (Building 1010) contained offices, laboratories, staff shop, change rooms, boiler and equipment rooms, substation and emergency generators, and a handling and filling cell with monitoring room. It is believed that the handling and filling cell was used to load test munitions with tantalum-182 (Ta-182), a radioactive material. The handling and filling cell area of Building 1010 may have also been used for irradiation studies using a 3600-curie (Ci) cobalt-60 (Co-60) sealed radioactive source. The Decontamination Building (Building 1003) was used for washing equipment contaminated by operations in the area. Limited historical records indicate that the Building 1003 may have also been associated with the packaging of radioactive wastes, and later with animal irradiation studies using a 30 Ci Co-60 sealed source during the late 1950s and early 1960s, although in some reports it is referenced as Building 1006 (UDEQ, 1992; DPG, 1958). Buildings 1010 and 1003 are currently in use for non-radiological activities (e.g., office space, vehicle maintenance). Available historical evidence indicates that all radioactive sources were removed from these buildings by the mid-1960s, and that the licenses under which these sources were used (43-01316-04 and 43-01316-09) have either been terminated (USNRC, 2001a) or retired (USNRC, 2001b). As such, these buildings were not included in the radiological survey conducted at SWMU-41. These documents are included with this appendix as Attachment F-1.

Potentially contaminated liquid wastes from the laboratory sinks, handling and filling cell, and monitoring room of Building 1010, and from the floor drains and sinks of the Building 1003 were conveyed though a series of retention tanks for pH treatment and storage to allow for radioactive decay. The pumps and piping associated with this system were located in the below-ground Liquid Waste Disposal System Building (Building 1002). The liquid waste pipes entered Building 1002 from Building 1010 and Building 1003 by a pipe chase tunnel (SWMU-41

Tunnel). The three carbon steel 40,000 gallon retention tanks are located in concrete vaults situated below ground around Building 1002. A pH sensor and caustic flood system were used to neutralize the wastes in the collection tanks. Following neutralization, water was held in the retention tanks until radioactivity levels had lessened to the degree where it was safe for the water to be discharged to the open evaporation pond (SWMU-41 Pond) for final disposal. Building 1002 can be accessed via a ground-level door and a stairwell.

Ventilation systems carried potentially contaminated exhaust air from the handling and filling cell, laboratory hoods, change room, and monitoring room in Building 1010 through a series of ducts in the SWMU-41 Tunnel to the Air Filter Building (Building 1004). Filters accessible at the top of Building 1004 were used to filter radioactive material from exhaust air prior to discharge to the atmosphere. When expended, the filters were removed via openings on the roof and lowered into a water-filled decay chamber located underneath Building 1004. After radioactivity on the filters had decayed to safe levels, the decay chamber could be accessed at ground level by a door on the east side of the building, which opened to a grated floor. Standard procedure was to raise decayed filters from the chamber via a block and tackle, remove the media, and reuse the filter frame. The decay chamber was approximately 12-15 feet (ft) in depth, and the manual indicates that water was to be kept at the design level of 2 ft below the horizontal grates at all times. Air handling system controls and sampling ports described in the manual are assumed to be accessible via the double doors on the west side of Building 1004 – these doors were locked at the time of the survey and this area was inaccessible.

A second, smaller building (Building 1005) that was not explicitly named in the manual is located to the east of Building 1004. Building 1005 is assumed to be part of the ventilation system, as it is linked with Building 1004 by large piping and has an air filter port. However, its exact purpose within the system is not known.

The SWMU-41 Pond is approximately 75 by 75 ft, and is surrounded by a berm approximately 3 ft high. The berm and base of the pond were sealed with asphalt; however, at the time of the survey, the asphalt was cracked and covered with soil throughout much of the pond. Several large shrubs and other vegetation are also present in the pond. Treated discharge water entered the SWMU-41 Pond from an open-air pipe on the north side of the pond. At the time of the survey, no water was present in the pond.

The radiological characterization survey prescribed in the work plan and performed in May 2005 consisted of the following buildings and areas at SWMU-41:

- Building 1002 - Liquid Waste Disposal System Building
- Building 1004 - Large Air Filter Building
- Building 1005 – Small Air Filter Building
- Tunnel connecting Building 1002 to Buildings 1003 and 1010 (SWMU-41 Tunnel)
- Evaporation pond (SWMU-41 Pond)

As discussed above, Buildings 1010 and 1003 were not included in the SWMU-41 radiological surveys. Building 1003 has been investigated as a nickel-cadmium battery building with the designation SWMU-172. At the time of the survey, the Building 1010 was occupied by the United States Air Force (USAF), and the access point to the SWMU-41 Tunnel connecting that building to the rest of the system was sealed.

SWMU-175
MONUMENT
(NFA)

FORMER OPERATIONS BUILDING 1010

UNDERGROUND WASTEWATER PIPE TUNNEL

SWMU-138
MONUMENT
(NFA)

BATTERY SHOP 1003

HWMU-166
MONUMENT
(NFA)

BLDG 1005

AIR FILTER BLDG 1004

SWMU-172
MONUMENT

SWMU-184
MONUMENT
(NFA)

HWMU-40
MONUMENT

SWMU-41
POND
BACKGROUND
AREA

PUMP HOUSE AND TANK ENCLOSURE (UNDERGROUND) 1002

SWMU-41
MONUMENT

EVAPORATION POND (1000) WITH CRACKED ASPHALT LINING

N

100 0 100
Feet

LEGEND

- SWMU/HWMU MONUMENT
- FENCE
- RADIOLOGICAL SURVEY GRID
- BUILDING

FIGURE F.1.1

SITE MAP
SWMU-41, EVAPORATION POND
DITTO AREA

DUGWAY PROVING GROUND RFI

PARSONS

w:/dpg/arcview/phase2/report/41/41_sitemap_for_dxf_only.mxd 10/19/06

F.2 Survey Design

The radiological surveys at SWMU-41 were designed to characterize any residual radioactive contamination present at the site, and if appropriate, provide for adequate information to determine if the surveyed areas meet the requirements for unrestricted use. As discussed above, MARSSIM was used extensively in the preparation of the work plan and in the interpretation of the survey results presented in this report.

F.2.1 Radionuclides of Concern

While the *Operations Manual – Able Area* does not specify the radionuclides used in the handling and filling cell, it may have been used to load munitions with short-lived Ta-182 (half-life of 115 days) for the radiological warfare (RW) tests conducted during the 1950s that are summarized in several declassified reports. The manual describes one aspect of the basis for the cell design as being based on a "radioisotope whose mean energy level is 1.2 MeV [milli electron volts]" – approximately 90-percent of the gamma emissions from Ta-182 are between 1.122 and 1.231 MeV (Bureau of Radiological Health, 1970), so Ta-182 would meet this description. The retention system described in the manual for the storage and decay of radioactive wastes is consistent with the use of a short-lived radionuclide such as Ta-182, which would be at negligible levels after 10 half-lives, or slightly over 3 years. Given the timeframe of RW operations at DPG and the short half-life of Ta-182, it would not be present in any form at SWMU-41.

Further, the manual states, "The design of these facilities has been based on operations using definite half-life beta and gamma emitting isotopes. Operations using alpha materials have not been contemplated, and the use of longer half-life emitters would require a re-evaluation of the adequacy of the liquid waste disposal system. Furthermore, the use of the evaporation basin for final disposal of washdown liquids containing alpha emitters, if in sufficient concentration, is not deemed advisable." As a result, it is assumed that there are no alpha-emitting radionuclides of concern at SWMU-41.

Based on the historical records described above, Co-60 is the only known radionuclide of concern (ROC) at SWMU-41. Co-60 is a relatively long-lived (half-life of 5.271 years) beta and gamma emitter (Shleien, et al., 1998). It should be noted that all available records indicate the Co-60 was used only in sealed sources – i.e., the material was not in a loose or dispersible form.

While a breach of a sealed Co-60 source is possible, there are no records from DPG that indicate that any such breaches occurred. Due to the limited site history, non-radionuclide specific field measurements and laboratory analyses (Sections F.2.6 and F.2.7) were conducted to determine if any additional site-related ROCs were present at SWMU-41.

F.2.2 Appropriate Release Criteria

Per Code of Federal Regulations Title 10, Chapter 20 (10 CFR 20), and applicable state of Utah guidance, the release criteria allowing unrestricted use at a site is an above-background total effective dose equivalent (TEDE) of 25 millirem per year (mrem/yr) to an average receptor in the critical group, or the group of individuals most likely to receive the highest dose from residual radioactive material at the site (10 CFR 20.1402; R313-15-402). In addition, exposures associated with the site must be As Low As Reasonably Achievable (ALARA), defined in 10 CFR 20.1003 as "making every reasonable effort to maintain exposures as far below the dose limits…as is practical."

F.2.3 Conceptual Dose Model/Exposure Pathway and Screening Levels

The generic building surface and soil screening levels listed in the work plan were obtained from Volume 2 of NUREG-1757 (USNRC, 2003). The screening levels in that document are above-background surface or soil concentrations that result in the TEDE of 25 mrem/yr discussed above. Per NUREG-1757, a generic screening analysis using look-up values rather than development of site-specific Derived Concentration Guideline Levels (DCGLs) is appropriate at SWMU-41 due to the limited potential for contamination and the more conservative nature of screening values. DCGLs are the site-specific levels of residual radioactive material that correspond to allowable radiation dose standards.

The values in the look-up tables in NUREG-1757 were derived using default inputs for the USNRC model DandD for individual radionuclides. The screening value for surface contamination is reported in terms of activity per area, or decays per minute per 100 square centimeters (dpm/100cm^2) and is based on a scenario of occupancy within a building with contaminated surfaces, with the critical group consisting of adult male workers involved in light industry. The building surface screening value for Co-60 is 7,100 dpm/100cm^2.

The screening value for soil contamination is reported in units of activity per gram of soil, or picocuries per gram (pCi/g). The default scenario for soil contamination is that of the resident farmer, who lives and works on a farm, producing and consuming a fraction of their diet from the site. In addition, all water required for drinking, domestic, and agricultural use is obtained from an on-site well. The soil screening value for Co-60 is 3.8 pCi/g.

As discussed below, smear samples were collected at several locations at SWMU-41 to assess levels of removable contamination. Per NUREG-1757, the screening level for removable activity should be 10-percent of the screening level for total surface contamination. Therefore, a screening level of 710 dpm/100cm^2 was used to assess all gross beta radiation measurements on smears (Co-60 is a beta emitter). Because there is no alpha-emitting ROC, a generic USNRC screening value of 1,000 dpm/100cm^2 for natural uranium was used to assess the alpha radiation measurements for the smear samples.

F.2.4 Classification of Survey Units

Impacted areas, according to MARSSIM, are defined as areas that have some potential for containing radioactive material. Impacted areas are further divided into individual survey units which are evaluated separately and are classified using the following definitions:

- Class 1 Survey Units: Areas that have, or had prior to remediation, a potential for radioactive contamination (based on site operating history) or known contamination (based on previous radiological surveys). Examples of Class 1 areas include: 1) site areas previously subjected to remedial actions, 2) locations where leaks or spills are known to have occurred, 3) former burial or disposal sites, 4) waste storage sites, and 5) areas with contaminants in discrete solid pieces of material with high specific activity. Historical survey information would support a high probability that the area may contain residual contamination that would exceed the generic screening levels, or the DCGLs, as defined by MARSSIM.

- Class 2 Survey Units: These areas have, or had prior to remediation, a potential for radioactive contamination or known contamination, but are not expected to exceed the screening levels. To justify changing an area's classification from Class 1 to Class 2, the existing data (from the historical site assessment, scoping surveys, or characterization surveys) should provide a high degree of confidence that no individual measurement

would exceed the screening levels or DCGLs. Examples of areas that might be classified as Class 2 for a final status survey include: 1) locations where radioactive materials were present in an unsealed form (e.g., process facilities), 2) potentially contaminated transport routes, 3) areas downwind from stack release points, 4) upper walls and ceilings of some buildings or rooms subjected to airborne radioactivity, 5) areas where low concentrations of radioactive materials were handled, and 6) areas on the perimeter of former contamination control areas.

- Class 3 Survey Units: Any impacted areas that are not expected to contain any residual radioactivity, or are expected to contain levels of residual radioactivity at a small fraction of the DCGLs, based on site operating history and previous radiological surveys. Examples of areas that might be classified as Class 3 include buffer zones around Class 1 or Class 2 areas, and areas with very low potential for residual contamination that lack sufficient information to justify a non-impacted classification.

Prior to radiation survey activities, SWMU-41 locations were divided into survey units, which were classified according to the expected potential for residual contamination. A total of five survey units were established. Per the work plan, Buildings 1002 and 1004 were classified as Class 2 survey units based on their locations within the system. Building 1005, the SWMU-41 Tunnel, and the SWMU-41 Pond were classified as Class 3 survey units.

F.2.5 Background Areas

Because naturally-occurring radioactivity may be present in significant amounts in the environment, appropriate background (or reference) areas must be selected prior to the collection of data from an impacted area. In addition, several man-made radionuclides may be present in the environment due to atmospheric weapons testing. In order to prevent decision errors, the background area should have similar physical, chemical, geological, radiological, and biological characteristics as the survey unit.

Background areas for the SWMU-41 survey units were determined upon arrival onsite. For building surfaces, several factors were considered in selecting the background area, such as construction timeframe, types of materials present, and the size of the building. The background area selected for the building surface measurements at SWMU-41 was the boiler room of Building 5326 in English Village. Building materials that were present in the boiler room that

were similar to those in the SWMU-41 buildings and tunnel included painted concrete, unpainted concrete, and cinder block. In addition, several metal surfaces in Building 5326, including exposed pipes and the boiler, were similar to those found in the SWMU-41 buildings and tunnel.

For the SWMU-41 Pond, a suitable background area (Pond Background) was located immediately to the east of the Avery Area fence. This area consisted of hard-packed surface soil and small vegetation. In addition, the gravel parking area near the Parsons field trailer in the Ditto Area was also used to account for any natural variability due to the presence of rocks and debris within the SWMU-41 Pond.

F.2.6 Survey Instrumentation

The SWMU-41 radiation surveys were conducted with a variety of field instruments to detect elevated levels of beta and gamma radiation. Two types of field measurements were collected – scanning and direct measurements. Scanning measurements are real-time measurements conducted by moving a detector over a surface at a specified speed. The technician either listens to an audio output or watches the meter output to determine if elevated radioactivity levels are encountered. Direct measurements (referred to as *static* measurements in the work plan; *direct* will be used in this report to be consistent with MARSSIM) are measurements conducted by holding a detector over a surface and counting the radioactivity interactions over a set period of time. The count time for the direct measurements at SWMU-41 was 1 minute (min). All instruments were used in accordance with MARSSIM and with the standard operating procedures (SOPs) included with the work plan.

The types of field instruments used during the SWMU-41 surveys are summarized in Table F.2.1 and are as follows:

- Ludlum Model 44-9 Geiger-Mueller (GM) pancake probe: Scanning and 1-min direct measurements for gross beta and gamma radiation on surfaces to determine compliance with the surface activity screening level.
- Ludlum Model 44-20 3-inch by 3-inch (3”x3”) sodium iodide (NaI) gamma scintillation detector: Scanning and 1-min direct measurements to assess ambient gamma radiation levels.

- Ludlum Model 19 exposure rate meter: Ambient gamma exposure rates to assess real-time worker exposure for safety purposes only. Reports directly in exposure rate units of microroentgens per hour (µR/hr).

Table F.2.1 lists operating parameters for the instruments, including the calculated minimum detectable activity (MDA) for each instrument for both scanning and direct measurements. The MDA calculation takes into account background levels, instrument efficiency, scanning efficiency, and the physical or active probe area, per MARSSIM. The MDAs for the 1-min direct measurements using the GM pancake were below the Co-60 surface screening level of 7,100 dpm/100cm^2, indicating sufficient capabilities. Since the 3”x3” NaI survey unit measurements were compared directly to background measurements, an MDA calculation was not required for that instrument. Also, an MDA is typically not calculated for the Model 19 exposure rate meter, but it should be noted that the instrument was sensitive down to 1 µR/hr, sufficient to detect exposure rates at 500 µR/hr, the “stop work” limit specified in the site-specific health and safety plan.

For the surveys at Building 1004, measurements with the GM pancake and the 3”x3” NaI were performed using a 25 ft long cable between the detector and the meter due to the depth of the surfaces below ground. Surveys were performed at the remaining SWMU-41 survey units using a 5 ft cable between the detector and meter.

All instruments used for the SWMU-41 surveys were calibrated by the manufacturer or according to manufacturer’s specifications by the rental vendor. All instruments were calibrated in February or April 2005 for the work conducted in May 2005. Instrument function checks were completed a minimum of two times per day that each instrument was used. Source and background measurements taken in a fixed geometry jig were input into control charts to determine instrument performance. A 1 microcurie (µCi) cesium-137 (Cs-137) source was used. Source measurements were flagged if the measurement was outside of the 2 sigma range, and the cause for an abnormally high or low measurement was investigated (e.g., measurement high due to increased humidity from rain). If the instrument had several consecutive measurements outside of the 2 sigma range, or if a general trend was observed, the instrument was removed from service until an explanation could be found.

Six datasets of instrument function check measurements were collected, consisting of two 3”x3” NaI setups, three GM pancake setups, and the Model 19 exposure rate meter (Attachment

F-2). Function check measurements for all instruments and cable configurations were within acceptable ranges for the duration of the field work.

F.2.7 Sampling Methodology

Per MARSSIM, field measurement locations were labeled and documented to ensure reproducibility and defensibility. Survey grids were established for both Building 1002 and the SWMU-41 Pond. In Building 1002, a 1 meter (m) by 1 m grid spacing was used. For the SWMU-41 Pond, a 2 m by 2 m grid spacing was used. In the other survey units, measurement locations were described and mapped as accurately as possible. Field survey forms were standardized to ensure that the appropriate data were collected.

Several types of samples were collected during the SWMU-41 surveys to supplement and/or confirm the field measurements and provide additional information about the site. The types of samples are discussed in further detail below, and sampling results are discussed in Section 3.

Surface and subsurface (i.e., greater than 6 inches in depth) soil samples were collected at the SWMU-41 Pond and its background area. The surface and select subsurface soil samples were analyzed by Severn Trent Laboratories (STL) in St. Louis, Missouri, using gamma spectroscopy to identify all gamma-emitting radionuclides that were present. The laboratory reported all common naturally-occurring gamma emitters when detected, and reported Co-60 and Cs-137 (which is common in background due to fallout) for all analyses. Gross alpha and beta analyses were also performed [BY WHO? STL??]on the surface and subsurface soil samples to provide further characterization information. A total of five background and 21 SWMU-41 Pond surface soil samples were collected. Six SWMU-41 Pond subsurface soil samples were collected by hand auger.

Smear samples were collected at Background Building 5326, Building 1002, and in the SWMU-41 Tunnel. These samples are collected by rubbing a cloth filter over an area to assess levels of removable (i.e., not fixed in place) radioactive contamination. Five smears were collected from each noted area and were counted for gross alpha and beta radioactivity at an off-site location using a Ludlum 43-10-1 Phoswich tray counter.

Two material samples were collected from the SWMU-41 Tunnel. Scrapings were collected from accessible or cut piping and underwent gamma spectroscopy and gross alpha and beta analyses at STL in St. Louis.

F.2.8 Compliance Approach

A two-part evaluation was used to determine if the SWMU-41 survey units met the release criteria. This evaluation follows the process outlined in MARSSIM Section 8 for the Scenario A null hypothesis, which assumes that the median survey unit measurement exceeds that of the reference area by more than the screening level. In other words, the survey unit is assumed to have residual contamination greater than the release criterion or screening level until it has been proven otherwise. It should be noted that this statistical process is different than that used for the site-attribution analyses at DPG. Per MARSSIM Section 8 and the flowchart presented in Figure F.2.1, the process for evaluating gross measurements is as follows:

1. Difference between the largest survey unit measurement and the smallest background area measurement is less than the screening level or DCGL – *Survey unit meets the release criterion.*
2. Difference of the survey unit average and the background area average is greater than the screening level – *Survey unit does not meet the release criterion.*
3. Difference between any survey unit measurement and any background area measurement is greater than the screening level and the difference of the survey unit average and the background area average is less than the screening level – *Conduct Wilcoxon Rank Sum (WRS) test and elevated measurement comparison.*

Where required, the WRS test was performed using the Microsoft Excel spreadsheet formulae shown in MARSSIM Appendix I. To facilitate the comparisons described above, the units of the GM pancake measurements in cpm were converted to dpm/100cm^2 using the detector's active probe area, the instrument efficiency, and a source efficiency (i.e., the efficiency of the radioactivity from the source material in striking the detector, applicable only to non-penetrating alpha or beta radiation).

Due to the uncertainties and assumptions (i.e., regarding detection area, efficiency, etc.) involved in converting the ambient 3"x3" NaI data into a surface activity concentration, the 3"x3" NaI data were kept in the measured units of cpm and compared directly with the appropriate background dataset in cpm. That evaluation utilized the MARSSIM Scenario B null hypothesis, which assumes that the survey unit data are indistinguishable from background. If the WRS test passes and the null hypothesis is accepted, it can be stated that there is no residual

radioactivity above background within the survey unit. The survey results and data evaluation for each SWMU-41 survey unit are presented in Section F.3.

The second part of the evaluation was to conduct an elevated measurement comparison. The elevated measurement comparison involves a point-by-point comparison of the field GM pancake measurements with the background-corrected Co-60 screening level (i.e., the average background measurement plus the screening level), and a comparison of the maximum site 3”x3” NaI measurement with the maximum background 3”x3” NaI measurement, to determine if localized areas of contamination exist.

Table F.2.1
Field Instrumentation
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Instrument	Setup ID	Measurement Type	Detector		Meter		Probe Area (cm2) [1/]	Instrument Efficiency [2/]	1 Minute Direct MDA (dpm/100cm2) [3/]	Scanning MDA (dpm/100cm2) [4/]
GM Pancake	*GM 2 Yellow*	Beta-Gamma	Ludlum Model 44-9	PR112967	Ludlum Model 2221	117613	15	5%	*Buildings* : 1413 *Pond* : 1635	*Buildings* : 15482 / 6924 *Pond* : 17915 / 8012
GM Pancake	*GM 2 Orange*	Beta-Gamma	Ludlum Model 44-9	PR112195	Ludlum Model 2221	94955	15	5%	*Buildings* : 1413 *Pond* : 1635	*Buildings* : 15482 / 6924 *Pond* : 17915 / 8012
3"x3" NaI	*3x3 Orange*	Ambient Gamma	Ludlum Model 44-20	PR202073	Ludlum Model 2221	117626	N/A [5/]	N/A	N/A	N/A
Exposure Rate Meter	*Model 19*	Ambient Gamma [6/]	Ludlum Model 19	104556	-- [7/]		N/A	N/A	N/A	N/A

[1/] cm2 = square centimeters. Listed area is active probe area.

[2/] Instrument efficiency for the GM pancake probe is the detector efficiency of 20% listed in MARSSIM multiplied by a source efficiency correction factor of 25%.

[3/] dpm/100cm2 = decays per minute per 100 square centimeters; MDA = minimum detectable activity. Direct MDA was calculated per Section 6 of MARSSIM, and adjusted using the average background measurement from Building 5326 or the Pond Background.

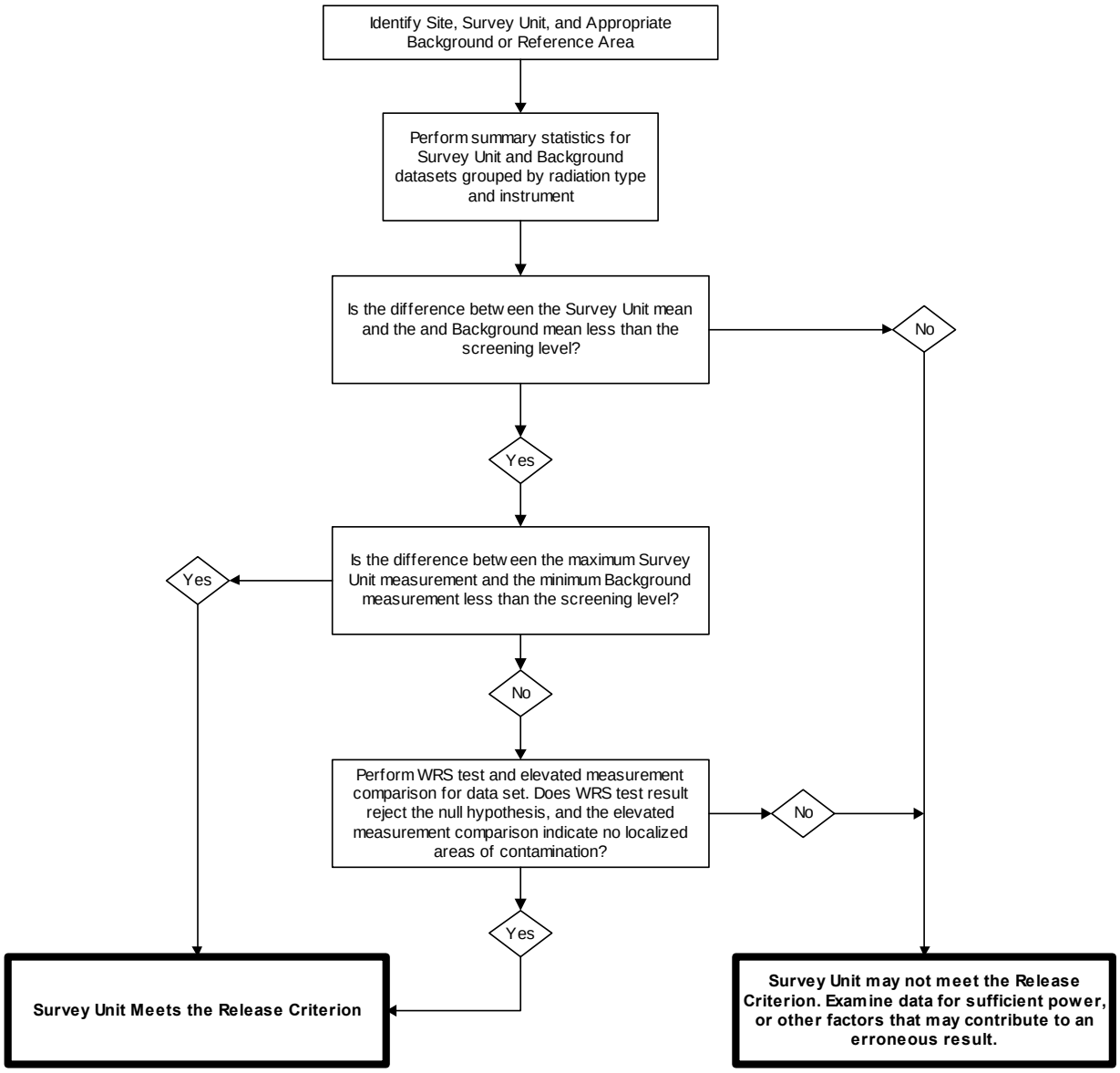
[4/] Scanning MDAs calculated per MARSSIM Section 6 using the average background measurement from Building 5326 or the Pond Background. For each MDA, two numbers are listed. The first refers to first stage scanning (i.e., 1 second observation time; initial scan) and the second refers to second stage scanning (i.e., 5 second observation time; secondary scan after an elevated area is found).

[5/] The 3"x3" NaI and Model 19 exposure rate meters were used to measure ambient gamma radiation levels. As such, results were not converted to surface activity units, and MDAs were not calculated.

[6/] The Model 19 reports in units of exposure (i.e., microroentgens per hour) and was used only to screen areas for safety purposes.

[7/] "--" = the meter and detector for the Model 19 are combined into one unit.

MARSSIM Scenario A - Data Evaluation Flowchart



Adapted from Section 8 of MARSSIM (NRC, 2000)

FIGURE F.2.1

MARSSIM SCENARIO A DATA EVALUATION FLOWCHART

SWMU-41 RADIOLOGICAL SURVEY

DUGWAY PROVING GROUND RFI

F.3 Survey Results

F.3.1 Summary of Background Area Results

To the extent practicable, background surveys were conducted in a manner consistent with surveys in impacted areas. Background measurements were collected at different points during the day to attempt to account for potential sources of variability due to factors such as humidity levels and temperature changes. All background field measurements are presented in Attachment F-3.

F.3.1.1 Building 5326

As discussed in Section F.2.5, the boiler room of Building 5326 in the English Village was used as the background area for the survey units with building surfaces – Buildings 1002, 1004, and 1005, and the SWMU-41 Tunnel. Twenty-five 1 m by 1 m measurement locations were set up on the walls and floor in Building 5326 (Figure F.3.1), and both scanning and direct measurements were collected with the GM pancake and 3”x3” NaI from each location. Summary statistics for the measurement results from Building 5326 are presented in Tables F.3.1.a and F.3.1.b.

Five background smear samples were collected from Building 5326 and were analyzed for gross alpha and beta radiation. Summary statistics for the gross results from the background smear samples are presented in Table F.3.2. Complete data from the smear analyses are presented in Attachment F-4.

F.3.1.2 Pond Background

Twenty 2 m by 2 m grids were set up at the Pond Background for scanning, one-minute direct measurements, and surface soil samples (Figure F.3.2). As discussed in Section F.2.5, five additional one-minute direct measurements were collected on the gravel parking area near the Parsons field trailer in the Ditto area. Summary statistics of the GM pancake and 3”x3” NaI measurements collected at the Pond Background (including the additional measurements near the Parsons field trailer) are presented in Tables F.3.1.a and F.3.1.b.

Five soil samples were collected from the Pond Background. Analytical results from the gamma spectroscopy, gross alpha, and gross beta analyses on those samples are presented in Table F.3.3. Co-60 was not detected in any of the samples.

F.3.2 Survey of Building 1002

F.3.2.1 Summary of Survey Activities

As discussed in Section 2.4, Building 1002 was considered a Class 2 survey unit. Per the work plan and MARSSIM guidance for Class 2 survey units, 50-percent of wall, floor, and other horizontal (e.g., piping) surfaces below 2 m were included in the survey. Approximately 10-percent of the walls and horizontal surfaces above 2 m were also included.

The 1 m by 1 m survey grid was marked on the floor and walls with chalk and is shown in Figure F.3.3. Each grid was given a unique identifier based on its location on a wall or floor and the column and row in which was located. As shown in Figure F.3.3, access to several wall and floor grids was limited by piping or other objects; if a particular grid in the pattern was blocked, measurements were collected at a nearby grid as a replacement.

Several feet of piping were suspended above the floor in Building 1002, ranging from approximately 2 to 7 ft above ground. Five separate lengths of pipe in Building 1002 were considered to be separate measurement locations. In addition, a water tank in the southwest corner of the building and a section of the staircase were also considered to be separate measurement locations.

Several large pumps were attached to the floor in Building 1002. Because they were immovable, the pumps were considered to be part of the floor, and were included in the measured surfaces for a given floor location. Other miscellaneous objects on the floor, such as wooden pallets, were also included in with the measurements for a particular floor location. All objects within a given survey grid location were noted on the field forms.

F.3.2.2 Survey Results and Analysis

F.3.2.2.1 Initial Data Reduction and Statistical Testing

As discussed in Section F.2.8, GM Pancake measurement data from Building 1002 were converted from units of cpm to dpm/100cm^2 (Attachment F-5). Tables F.3.4.a and F.3.4.b present the summary statistics of the GM pancake and 3”x3” NaI measurements, respectively, taken at Building 1002. Table F.3.5 presents the initial data reduction for the Building 1002 GM pancake direct measurements. The GM pancake dataset demonstrated a difference between the survey unit mean and the background area mean less than the screening level. However, the difference between the survey unit maximum measurement and the background area minimum

measurement for the dataset was not less than the screening level. As a result, the WRS test was performed.

The WRS tests for Building 1002 are presented in Attachment F-6 and are summarized in Table F.3.6. The tests for the GM pancake data resulted in the rejection of the Scenario A null hypothesis that the median survey unit measurement exceeds that in the background area by more than the screening level, and as such, the GM pancake dataset passed (i.e., met the release criterion). The test for the 3”x3” NaI data resulted in the acceptance of the Scenario B null hypothesis that the survey unit data are indistinguishable from background.

F.3.2.2.2 Elevated Measurement Comparison

The elevated measurement comparison for Building 1002 is summarized in Table F.3.7. Zero of the 89 Building 1002 3”x3” NaI measurements exceeded the maximum 3”x3” NaI background measurement of 25,280 cpm. Likewise, none of the GM pancake measurements were greater than the GM pancake background-corrected screening level of 15,009 dpm/100cm^2. Based on these data, it was concluded that there were no areas of elevated surface activity in Building 1002 and that residual radioactivity levels are ALARA.

F.3.2.2.3 Smear and Material Sampling

A total of four smears were collected from pipe, floor and wall surfaces in Building 1002. Smear S-I1 was analyzed twice, and both results were used in the summary statistics (Table F.3.8). Location S-I1 is located on the southern wall in grid I1 – this grid was selected because it was below a pipe marked “Evap Pond” and there appeared to be white mineral deposits (as if from a leak) on the wall. The smear was collected on the deposits. All alpha and beta results are below the removable activity screening levels (1,000 and 710 dpm/100cm^2, respectively) discussed in Section F.2.3. The complete data set from the smear analyses is presented as Attachment F-4.

F.3.2.3 Conclusions for Building 1002

The initial data reduction and WRS tests conducted for the GM pancake and 3”x3” NaI field survey data demonstrated that Building 1002 meets the release criterion for Co-60. In addition, the elevated measurement comparison of the survey data demonstrated that no localized areas of contamination were present. Smear samples from Building 1002 confirmed that removable activity levels were below screening levels. As such, Building 1002 meets the release criterion of 25 mrem/yr, and is suitable for unrestricted use.

F.3.3 Survey of Building 1004

F.3.3.1 Summary of Survey Activities

As discussed in Section 2.4, Building 1004 was considered a Class 2 survey unit. Per the work plan and MARSSIM guidance for Class 2 survey units, 50-percent scanning was prescribed for Building 1004. However, during the field surveys it was noted that the accessible areas of the building consisted of a grated metal floor over a deep (i.e., 12-15 ft) trough, and typical scanning surveys of those surfaces were not feasible. In addition, the metal floor did not appear structurally sound, making extended surveys while standing on that floor potentially unsafe. One-minute direct measurements using the GM pancake and 3”x3” NaI were collected from 20 wall, metal floor, and trough (collected by dropping the detector using a telescoping pole and 25-ft cable) locations from Building 1004. All measurements were collected with the 25-ft cable. Measurements were collected in Building 1004 only within the central part of the building containing the grated floor and decay chamber. Approximate measurement locations are shown in Figure F.3.4.

F.3.3.2 Survey Results and Analysis

F.3.3.2.1 Initial Data Reduction and Statistical Testing

As discussed in Section F.2.8, GM Pancake measurement data from Building 1004 were converted from units of cpm to dpm/100cm^2 (Attachment F-7). Tables F.3.9a and F.3.9.b present the summary statistics of the GM pancake and 3”x3” NaI measurements, respectively, taken at Building 1004. Table F.3.10 presents the initial data reduction for the Building 1004 GM Pancake direct measurements.

As discussed in Section F.3.3.1, survey measurements collected at Building 1004 required the use of a 25-ft cable to allow the detectors to be lowered to depth. Background measurements were collected at Building 5326 with only a 5-ft cable setup. To account for the difference in instrument response from the longer cable, the background measurements from the instrument function checks (Section F.2.6; Attachment F-2) were compared, and it was determined that the response at background levels for the 3”x3” NaI was reduced by approximately 38-percent using a 25-ft cable. Correspondingly, each 3”x3” NaI measurement from Building 5326 was reduced by 38-percent to generate a new background dataset.

The GM pancake dataset demonstrated a difference between the survey unit mean and the background area mean less than the screening level. The difference between the survey unit maximum measurement for the GM pancake dataset and the background area minimum measurement was less than the screening level, indicating that the GM pancake survey data met the release criterion without any additional statistical testing required.

The WRS test for the 3”x3” NaI data from Building 1004 is presented in Attachment F-8 and is summarized in Table F.3.11. The test for the 3”x3” NaI data resulted in the acceptance of the Scenario B null hypothesis that the survey unit data are indistinguishable from background.

F.3.3.2.2 Elevated Measurement Comparison

The elevated measurement comparison for Building 1004 is summarized in Table F.3.12. Zero out of the 20 Building 1004 3”x3” NaI measurements exceeded the maximum background measurement corrected for the 25-ft cable. In addition, none of the GM pancake measurements were greater than the GM pancake background-corrected screening level of 15,009 dpm/100cm^2. Based on these data, it was concluded that there were no areas of elevated surface activity in Building 1004 and that residual radioactivity levels are ALARA.

F.3.3.2.3 Smear and Material Sampling

No smear or material sampling was conducted at Building 1004.

F.3.3.3 Conclusions for Building 1004

The initial data reduction and/or WRS tests conducted for the GM pancake and 3”x3” NaI field survey data demonstrated that Building 1004 meets the release criterion for Co-60. In addition, the elevated measurement comparison of the survey data demonstrated that no localized areas of contamination were present. As such, the surveyed area within Building 1004 meets the release criterion of 25 mrem/yr, and is suitable for unrestricted use.

Based on the known history of SWMU-41 and Building 1004, and the time since the facility was used, it is unlikely that additional ROCs or higher levels of residual radioactive material would be present in the additional areas within Building 1004 that were not surveyed. Therefore, the entirety of Building 1004 meets the release criterion of 25 mrem/yr and is suitable for unrestricted use.

F.3.4 Survey of Building 1005

F.3.4.1 Summary of Survey Activities

As noted in Section 2.4, Building 1005 was classified as a Class 3 survey unit, and as such, measurement locations were biased towards areas with the highest likelihood of residual contamination (e.g., the air filter, corners). One-minute direct measurements using the GM pancake and 3”x3” NaI were taken at 20 locations within Building 1005, with scanning measurements were performed at nine of those locations. Due to the small size of the building, the first 10 and second 10 direct measurements were generally located near one another – for example, locations 3 and 13 were on the air filter, locations 10 and 20 were in a small concrete trough beneath the air filter, etc. In addition, scanning was performed over smaller, more accessible locations (e.g., 1 ft by 1ft area of outer door or air filter), rather than on a survey grid basis. Approximate measurement locations in Building 1005 are shown in Figure F.3.5.

F.3.4.2 Survey Results and Analysis

F.3.4.2.1 Initial Data Reduction and Statistical Testing

As discussed in Section 2.8, GM pancake data from Building 1005 were converted from units of cpm to dpm/100cm^2 (Attachment F-9). Tables F.3.13.a and F.3.13.b present the summary statistics of the GM pancake and 3”x3” NaI measurements, respectively, taken at Building 1005. Table F.3.14 presents the initial data reduction for the Building 1005 GM pancake direct measurements. The GM pancake dataset demonstrated a difference between the survey unit mean and the background area mean less than the screening level. However, the difference between the survey unit maximum measurement and the reference area minimum measurement for the GM pancake dataset was not less than the screening level. As a result, the WRS test was performed.

The WRS tests for Building 1005 are presented in Attachment F-10 and are summarized in Table F.3.15. The test for the GM pancake data resulted in the rejection of the Scenario A null hypothesis that the median survey unit measurement exceeds that in the background area by more than the screening level, and as such, that dataset passed (i.e., met the release criterion). The test for the 3”x3” NaI data resulted in the acceptance of the Scenario B null hypothesis that the survey unit data are indistinguishable from background.

F.3.4.2.2 Elevated Measurement Comparison

The elevated measurement comparison for Building 1005 is summarized in Table F.3.16. Zero out of the 20 Building 1005 3”x3” NaI direct measurements exceeded the maximum 3”x3” NaI background measurement of 25,280 cpm. All GM pancake direct measurements were below the GM pancake background-corrected screening level of 15,009 dpm/100cm^2. Based on these data, it was concluded that there were no areas of elevated surface activity in Building 1005 and that residual radioactivity levels are ALARA.

F.3.4.2.3 Smear and Material Sampling

No smear or material sampling was conducted at Building 1005.

F.3.4.3 Conclusions for Building 1005

The initial data reduction and WRS tests conducted for the GM pancake and 3”x3” NaI field survey data demonstrated that Building 1005 meets the release criterion for Co-60. In addition, the elevated measurement comparison of the survey data demonstrated that no localized areas of contamination were present. As such, Building 1005 meets the release criterion of 25 mrem/yr, and is suitable for unrestricted use.

F.3.5 Survey of SWMU-41 Tunnel

F.3.5.1 Summary of Survey Activities

As noted in Section F.2.4, the SWMU-41 Tunnel was classified as a Class 3 survey unit, and as such measurement locations were biased towards areas with the highest likelihood of residual contamination (e.g., corners, horizontal surfaces). One-minute direct measurements were taken using the GM pancake and 3”x3” NaI at 21 locations within the tunnel. Scanning over a small area (i.e., not survey grid based) was performed at 16 of those locations. Approximate measurement locations in the SWMU-41 Tunnel are shown in Figure F.3.6.

F.3.5.2 Survey Results and Analysis

F.3.5.2.1 Initial Data Reduction and Statistical Testing

As discussed in Section F.2.8, field measurement data from the SWMU-41 Tunnel were converted from units of cpm to dpm/100cm^2 (Attachment F-11). Tables F.3.17.a and F.3.17.b present the summary statistics of the GM pancake and 3”x3” NaI measurements, respectively,

taken in the SWMU-41 Tunnel. Table F.3.18 presents the initial data reduction for the SWMU-41 Tunnel GM pancake direct measurements. The GM pancake dataset demonstrated a difference between the survey unit mean and the background area mean less than the screening level. However, the difference between the survey unit maximum measurement and the reference area minimum measurement for both datasets was not less than the screening level. As a result, the WRS test was performed.

The WRS tests for the SWMU-41 Tunnel are presented in Attachment F-12 and are summarized in Table F.3.19. The test for the GM pancake data resulted in the rejection of the Scenario A null hypothesis that the median survey unit measurement exceeds that in the background area by more than the screening level, and as such, the GM pancake dataset passed (i.e., met the release criterion). The test for the 3”x3” NaI data resulted in the acceptance of the Scenario B null hypothesis that the survey unit data are indistinguishable from background.

F.3.5.2.2 Elevated Measurement Comparison

The elevated measurement comparison for the SWMU-41 Tunnel is summarized in Table F.3.20. Zero out of 21 SWMU-41 Tunnel NaI direct measurements exceeded the maximum 3”x3” NaI background measurement of 25,280 cpm. All GM pancake direct measurements were below the interior background corrected screening level of 15,009 dpm/100cm^2.

It was noted in the field that several locations at the north (i.e., closed) end of the SWMU-41 Tunnel near Building 1010 had apparently elevated GM pancake scanning measurements ranging up to 26,667 dpm/100cm^2 (Table F.3.18). Because no 3”x3” NaI measurements were elevated in these locations, and because smear samples collected at these locations did not indicate the presence of radioactivity (Section F.3.5.2.3), it was concluded that these elevated scanning measurements were the likely result of beta emissions from the buildup of naturally-occurring radon gas progeny on tunnel surfaces. As such, it was concluded that there were no areas of contamination in the SWMU-41 Tunnel and that residual radioactivity levels are ALARA.

F.3.5.2.3 Smear and Material Sampling

A total of four smears were collected from pipe, floor and wall surfaces in the SWMU-41 Tunnel. Smear 5/5/05 #18 was analyzed twice, and both results were used in the summary statistics (Table F.3.21). All alpha and beta results are below the removable activity screening

levels (1,000 and 710 dpm/100cm^2, respectively) discussed in Section F.2.3. The complete data set from the smear analyses is presented as Attachment F-4. Location 5/5/05 #18 was on top of the elbow of a large metal pipe approximately 5 ft off the floor. The location was at the corner of the east-west section and north-south section of tunnel running immediately south of Building 1010. That location was also the location of the maximum GM pancake one-minute measurement.

Two material samples were collected from accessible piping within the SWMU-41 tunnel. Material was scraped from one pipe segment lying on the floor (location 9) and from the open end of a cut pipe extending from the wall (location 10). The material samples underwent analysis for gross alpha and beta radiation, and gamma spectroscopy. No background material samples were collected.

Results from the SWMU-41 Tunnel material sampling are summarized in Table F.3.22. Only four radionuclides (Co-60, Cs-137, thorium-234 [Th-234], and uranium-238 [U-238]) were detected in the two SWMU-41 Tunnel material samples using gamma spectroscopy. The Cs-137 result was below the generic soil screening level for Cs-137 (11 pCi/g; USNRC, 2003). Because there is no history of Cs-137 use at SWMU-41, and because the radionuclide was detected in background soil samples, it was concluded that the detected amount of Cs-137 is not the result of site activities. U-238 and Th-234 are naturally-occurring radionuclides, and there is no history of their use at SWMU-41. As such, it was concluded that U-238 and Th-234 present in the material samples from the SWMU-41 Tunnel are not the result of site activities. The measured Co-60 concentration (6.28 pCi/g) in the pipe scraping from location 10 exceeded the soil screening level of 3.8 pCi/g, and is discussed in further detail below.

F.3.5.3 Conclusions for SWMU-41 Tunnel

The initial data reduction and WRS tests conducted for the GM pancake and 3”x3” NaI field survey data demonstrated that the SWMU-41 Tunnel meets the release criterion for Co-60. In addition, the elevated measurement comparison of the survey data demonstrated that no localized areas of contamination were present. On that basis, the SWMU-41 Tunnel meets the release criterion of 25 mrem/yr, and is suitable for unrestricted use.

GM pancake scanning measurements and smear measurements in the SWMU-41 Tunnel suggested the presence of radon progeny deposited on tunnel surfaces. Since the tunnel is sealed

at one end, a forced increase in ventilation and/or air flow within the tunnel is recommended to mitigate any potential exposures to radon gas, if long term occupancy in the tunnel is required.

While the scrapings from the cut pipe at location 10 had detectable levels of Co-60 based on laboratory analysis, the field measurements conducted at that location did not indicate any residual radioactivity. In addition, the soil screening level used for comparison in Section F.3.5.2.3 may not be appropriate for a receptor within the tunnel – a likely receptor being exposed to any residual material within the SWMU-41 Tunnel would either be a worker conducting a survey or investigation, or personnel using the tunnel for training exercises, rather than the farmer upon which the conservative generic soil screening levels are based. This concentration of Co-60 does not represent a failure of the survey unit to comply with the release criteria because it is not consistent with the Co-60 concentrations found in the material collected from the other pipe, or with the surface activities measured throughout the SWMU-41 Tunnel. As such, the SWMU-41 Tunnel is ALARA and is suitable for free release.

F.3.6 Survey of SWMU-41 Pond

F.3.6.1 Summary of Survey Activities

As noted in Section F.2.4, the SWMU-41 Pond was classified as a Class 3 survey unit based on a lower likelihood of residual contamination, but a scanning frequency of 50-percent was also stipulated. A 2 m by 2 m survey grid was established on the pond area to the top of the surrounding berm. Scanning and one-minute direct measurements were collected using the GM pancake and 3”x3” NaI at 99 of the accessible survey grids. Twenty-one SWMU-41 Pond surface soil samples were collected, and an additional six SWMU-41 Pond subsurface soil samples were collected by hand auger. In addition, scanning using the 3”x3” NaI was performed over a 1 m width around the perimeter of the pond. Approximate measurement locations at the SWMU-41 Pond are shown in Figure F.3.7.

F.3.6.2 Survey Results and Analysis

F.3.6.2.1 Initial Data Reduction and Statistical Testing

As discussed in Section F.2.8, GM pancake measurement data from the SWMU-41 Pond were converted from units of cpm to dpm/100cm^2 (Attachment F-13). Tables F.3.23.a and F.3.23.b present the summary statistics of the GM pancake and 3”x3” NaI measurements,

respectively, taken at the SWMU-41 Pond. Table F.3.24 presents the initial data reduction for the Building 1002 GM pancake direct measurements. The GM pancake dataset demonstrated a difference between the survey unit mean and the background area mean less than the screening level. However, the difference between the survey unit maximum measurement and the reference area minimum measurement for the GM pancake dataset was not less than the screening level. As a result, the WRS test was performed.

The WRS tests for the SWMU-41 Pond are presented in Attachment F-14 and are summarized in Table F.3.25. The test for the GM pancake data resulted in the rejection of the Scenario A null hypothesis that the median survey unit measurement exceeds that in the background area by more than the screening level, and as such, the GM pancake dataset passed (i.e., met the release criterion). The test for the 3”x3” NaI data resulted in the acceptance of the Scenario B null hypothesis that the survey unit data are indistinguishable from background.

F.3.6.2.2 Elevated Measurement Comparison

The elevated measurement comparison for the SWMU-41 Pond is summarized in Table F.3.26. Seven out of 99 SWMU-41 Pond 3”x3” NaI direct measurements exceeded the maximum 3”x3” NaI background measurement of 25,321 cpm. These measurement locations were in the centered in the northern half of the pond, primarily to the east of the raised pond inlet pipe (Figure F.3.7). One additional scanning measurement in this area also exceeded the maximum background scanning measurement. During the surveys it was noted that these areas had a ground cover consisting of smooth reddish-colored rocks, and that the elevated readings in this area may be the result of naturally-occurring radioactivity from these rocks. All GM pancake measurements were below the GM pancake background-corrected screening level of 17,607 dpm/100cm^2.

F.3.6.2.3 Soil Sampling

Surface soil samples were collected from the evaporation pond at 18 random locations, 2 prescribed locations (at the pond inlet and outlet pipes), and 1 biased location based on scanning results (location K-4). All surface soil samples were analyzed for gross alpha and gross beta radiation, and underwent gamma spectroscopy. Subsurface (i.e., greater than 6 inches in depth) soil samples were collected at four locations, and all underwent gross alpha and gross beta

analyses. The two subsurface samples from biased location K-4 also underwent gamma spectroscopy. No background subsurface samples were collected.

Results for Co-60 from the SWMU-41 Pond soil samples were compared directly with the soil screening levels listed in Section F.2.3. Results from the gamma spectroscopy, gross alpha, and gross beta analyses performed for the SWMU-41 Pond surface soil samples are presented in Table F.3.27.a and are summarized in Table F.3.27.b. The gamma spectroscopy results from the two subsurface samples at location K-4 are presented in Table F.3.28.a. Results from gross alpha and gross beta analyses on SWMU-41 Pond subsurface soil samples are summarized and are compared with background results in Table F.3.28.b. In the surface (0-6 inch) interval, Co-60 was detected in only 2 of the 21 SWMU-41 Pond samples, and by comparison, was detected in none of the background surface samples. The maximum detected Co-60 concentration (1.54 pCi/g, at surface location K-4) was below the Co-60 screening level (3.8 pCi/g).

In addition, Cs-137 was detected in 15 of 21 SWMU-41 Pond surface samples, and in all 5 Pond Background samples. While Cs-137 is not a naturally-occurring radionuclide, it is commonly found in the environment as a result of fallout from atmospheric weapons testing. The maximum detected concentration of Cs-137 (8.1 pCi/g, at surface location K-4) was below the generic soil screening level for Cs-137 (11 pCi/g; USNRC, 2003). Because there is no history of Cs-137 use at SWMU-41, and because the isotope was detected in background samples, it was concluded that the detected levels of Cs-137 are not the result of site activities.

All other individual radionuclides detected by gamma spectroscopy were naturally-occurring, and were detected at background levels. The average gross alpha and gross beta results from the SWMU-41 Pond were slightly less than the average background results (Table F.3.27.a). The maximum gross beta measurement (44.5 pCi/g) was from SWMU-41 Pond location J-5.

The gamma spectroscopy performed on the two subsurface samples from location K-4 (in the 2.5-5 ft and 3-4 ft intervals) detected only naturally-occurring radionuclides (Table F.3.28.a). One SWMU-41 Pond subsurface gross alpha result exceeded the range of background surface results (37.1 pCi/g, at location J-12).[So - how do we write off this exceedance/why does it drop out by the conclusions for the pond??] The remaining subsurface gross alpha and gross beta results were within the range of background surface concentrations (Table F.3.28.b).

In 1993, 17 Phase I subsurface soil samples were collected at varying depths within and near the SWMU-41 Pond during the installation of monitoring wells (i.e, MW01, MW02, and MW03) and during other sampling activities. The results from the gross alpha and gross beta analysis performed on these samples is summarized in Table F.3.29. Results were within the 2005 gross alpha and gross beta background results.

F.3.6.3 Conclusions for SWMU-41 Pond

The initial data reduction and WRS tests conducted for the GM pancake and 3”x3” NaI field survey data demonstrated that the SWMU-41 Pond meets the release criterion for Co-60. Scanning measurements and the elevated measurement comparison of the survey data indicated a potentially elevated area in the northern half of the pond, with the highest measurements and analytical results at SWMU-41 Pond location K-4. The individual Co-60 and Cs-137 results from location K-4 were below their respective screening levels. In addition, the average Co-60 and Cs-137 concentrations from the SWMU-41 Pond (Table F.3.27.b) meet the Unity Rule (i.e., the sum of the relative fraction of each average detected result to their respective screening level is less than 1; USNRC, 2003) when cumulative effects are considered, as shown below:

$$Co-60\,\frac{1.29\ pCi/g}{3.8\ pCi/g}+Cs-137\,\frac{1.12\ pCi/g}{11\ pCi/g}=0.44<1$$

On that basis, the SWMU-41 Pond meets the release criterion of 25 mrem/yr, and is suitable for unrestricted use.

Table F.3.1.a
Summary Statistics of Background Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm2)** [1/]	**Mean (dpm/100cm2)**	**Standard Deviation (dpm/100cm2)**	**Maximum (dpm/100cm2)**	**Median (dpm/100cm2)**
Interior - Bldg 5326	25	4800	7909	1706	11333	8267
Exterior - Pond Background	25	6267	10507	2027	13600	10933

	Scanning Measurements		
Dataset	**Mean Range (dpm/100cm2)**		**Upper Bound (dpm/100cm2)**
	Minimum	***Maximum***	
Interior - Bldg 5326	1889	16611	24000
Exterior - Pond Background	3467	22133	26667

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

Table F.3.1.b
Summary Statistics of Background Field Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Direct Measurements					
	Number of Measurements	Minimum (cpm) [1/]	Mean (cpm)	Standard Deviation (cpm)	Maximum (cpm)	Median (cpm)
Interior - Bldg 5326	25	16414	22156	1668	25280	22079
Interior - Blgd 5326 mod [2/]	25	10160	13715	1033	15648	13667
Exterior - Pond Background	25	17864	23385	2294	25321	24205

Dataset	Scanning Measurements		
	Mean Range (cpm)		Upper Bound (cpm)
	Minimum	*Maximum*	
Interior - Bldg 5326	20458	24163	27100
Exterior - Pond Background	22785	26405	27400

[1/] cpm = counts per minute.

[2/] GM and 3x3 measurements at 1004 were taken with a 25 ft cable, which reduced the background of the 3x3 detector by approximately 38.1%, based on background measurements (i.e., without the radioactive source) taken during instrument function checks. The existing Building 5326 background summary statistics were similarly reduced by 38.1% to account for the longer cable length.

Table F.3.2
Summary Statistics of Background Removable Activity Measurements
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Datasets	Number of Measurements	Minimum (dpm) [1/]	Average (dpm)	Standard Deviation (dpm)	Maximum (dpm)	Median (dpm)
Smear - Alpha	5	0.0	0.9	1.2	2.2	0.0
Smear - Beta	5	455.3	510.9	35.1	543.3	520.9

[1/] dpm = decays per minute.

Table F.3.3
Background Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO034 Bkgd-A3 Surface			Location 041SO035 Bkgd-B4 Surface			Location 041SO036 Bkgd-C1 Surface		
Radionuclides of Concern	**Result (pCi/g) [1/]**	**Uncertainty (pCi/g)**	**MDL (pCi/g) [2/]**	**Result (pCi/g)**	**Uncertainty (pCi/g)**	**MDL (pCi/g)**	**Result (pCi/g)**	**Uncertainty (pCi/g)**	**MDL (pCi/g)**
Ac-228	0.8 U [3/]	0.4	0.8	0.6	0.4	0.4	0.8	0.3	0.3
Bi-214	0.9	0.3	0.2	1.0	0.3	0.2	0.9	0.2	0.2
Co-60	-0.02 U	0.06	0.1	-0.02 U	0.05	0.1	0.02 U	0.07	0.1
Cs-137	0.3	0.1	0.1	0.5	0.2	0.1	0.4	0.1	0.1
K-40	13.9	2.7	0.7	12.9	2.3	0.8	13.7	2.6	1.2
Pb-212	0.8	0.2	0.2	0.8	0.2	0.2	0.9	0.2	0.1
Pb-214	0.9	0.2	0.2	1.0	0.2	0.2	0.9	0.2	0.1
Ra-226	0.9	0.3	0.2	1.0	0.3	0.2	0.9	0.2	0.2
Ra-228	0.8 U	0.3	0.7	0.6	0.4	0.4	0.8	0.3	0.3
Th-232	0.8 U	0.3	0.7	0.6	0.4	0.4	0.8	0.3	0.3
Tl-208	0.3	0.1	0.1	0.2	0.1	0.1	0.3	0.1	0.1
Gross Alpha	26.4	7.6	7	30	7.8	6	14.3	5.1	4.5
Gross Beta	23.2	4.2	4.3	24.1	4.1	3.9	25.3	6.4	8.4

[1/] pCi/g = picocuries per gram.
[2/] MDL = method detection limit.
[3/] U = not detected.

Table F.3.3 (cont.)
Background Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO037 Bkgd-D4 Surface			Location 041SO038 Bkgd-E5 Surface			Background Summary Stats			
Radionuclides of Concern	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Minimum (pCi/g)	Maximum (pCi/g)	Average (pCi/g)	# Detects
Ac-228	0.6	0.4	0.4	1.1	0.5	0.3	0.6	1.1	0.8	4
Bi-214	0.9	0.3	0.2	0.8	0.3	0.2	0.8	1.0	0.9	5
Co-60	-0.001 U	0.05	0.1	-0.02 U	0.1	0.1	--	--	--	0
Cs-137	0.3	0.1	0.1	0.4	0.1	0.1	0.3	0.5	0.4	5
K-40	15.3	2.9	0.2	15.4	2.8	1	12.9	15.4	14.2	5
Pb-212	0.9	0.2	0.2	0.9	0.2	0.1	0.8	0.9	0.9	5
Pb-214	1.0	0.2	0.2	1.1	0.2	0.2	0.9	1.1	1.0	5
Ra-226	0.9	0.2	0.2	0.8	0.2	0.2	0.8	1.0	0.9	5
Ra-228	0.6	0.4	0.3	1.1	0.4	0.3	0.6	1.1	0.8	4
Th-232	0.6	0.4	0.3	1.1	0.4	0.3	0.6	1.1	0.8	4
Tl-208	0.3	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.3	5
Gross Alpha	19.3	6.2	6	20.7	6.4	5.6	14.3	30.0	22.1	5
Gross Beta	24.2	5	5.8	29.4	6	6.8	23.2	29.4	25.2	5

Table F.3.4.a
Summary Statistics of Building 1002 Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm^2)** [1/]	**Average (dpm/100cm^2)**	**Standard Deviation (dpm/100cm^2)**	**Maximum (dpm/100cm^2)**	**Median (dpm/100cm^2)**
1002 - GM	89	5200	8650	1436	12800	8400

	Scanning Measurements		
Dataset	**Average Range (dpm/100cm^2)**		**Upper Bound (dpm/100cm^2)**
	Minimum	***Maximum***	
1002 - GM	1858	17858	24000

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

Table F.3.4.b
Summary Statistics of Building 1002 Field Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (cpm) [1/]**	**Average (cpm)**	**Standard Deviation (cpm)**	**Maximum (cpm)**	**Median (cpm)**
1002 - 3x3 NaI	89	17049	20576	1080	22343	20816

	Scanning Measurements		
Dataset	**Average Range (cpm)**		**Upper Bound (cpm)**
	Minimum	***Maximum***	
1002 - 3x3 NaI	19121	22130	24400

[1/] cpm = counts per minute.

Table F.3.5
Initial Reduction of Building 1002 Data - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Survey Unit		Background Area					
Dataset	**Mean (dpm/100cm2) [1/]**	**Maximum (dpm/100cm2)**	**Mean (dpm/100cm2)**	**Minimum (dpm/100cm2)**	**Screening Level (dpm/100cm2) [2/]**	**Difference between SU mean and bkgd mean less than screening level? [3/]**	**Difference between SU max and bkgd min less than screening level? [3/]**	**Conclusion**
1002 - GM	8650	12800	7909	4800	7100	Yes	**No**	Perform WRS Test

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The Co-60 screening level from NUREG-1757, Volume 2 (USNRC, 2003).

[3/] Data reduction criteria based on MARSSIM Table 8.2 for gross measurements.

Table F.3.6
Summary of Building 1002 Wilcoxon Rank Sum Tests
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Survey Unit	Measurement [1/]	Valid N Survey [2/]	Valid N Background [2/]	Critical Value [3/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [4/, 5/]	Conclusion [6/]
Using MARSSIM Scenario A and cobalt-60 screening level							
1002	GM Pancake	25	89	1677.7	2548	Reject	**Survey Unit Meets Release Criterion**
Using MARSSIM Scenario B and comparison with background							
1002	3x3 NaI	25	89	5403.7	4327	Accept	**3x3 NaI data are indistinguishable from background**

[1/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[2/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[3/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM Appendix I.

[4/] Per MARSSIM for Scenario A, if the Sum of Background Area Ranks is greater than the Critical Value, the Scenario A null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the screening level is rejected, and the survey unit passes (i.e., the survey unit meets the release criterion). The WRS test spreadsheets for Building 1002 (per MARSSIM Appendix I) are presented in Attachment F-6.

[5/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the the survey unit is indistinguishable from background is accepted and the survey unit passes.

[6/] Conclusions for these survey units are based on the WRS test results, and the initial data reduction shown in Table 3-5.

Table F.3.7
Elevated Measurement Comparison of Building 1002 Data
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Maximum (dpm/100cm^2) [1/]	Background-Corrected Screening Level (dpm/100cm^2) [2/]	Conclusion
1002 - GM	12800	15009	No elevated levels present
Dataset	**Maximum (cpm) [3/]**	**Maximum Background (cpm) [4/]**	**Conclusion**
1002 - 3x3 NaI	22343	25280	No elevated levels present

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The background-corrected screening level is the Co-60 surface screening level (7,100 dpm/100cm^2) plus the average background measurement from Building 5326 for that instrument.

[3/] cpm = counts per minute.

[4/] Maximum background measurement per Table F.3.1.b.

Table F.3.8
Summary Statistics of Building 1002 Removable Activity Measurements
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Datasets	Number of Measurements	Minimum (dpm) [1/]	Average (dpm)	Standard Deviation (dpm)	Maximum (dpm)	Median (dpm)
Smear - Alpha	5	2.2	10.6	9.5	22.0	4.4
Smear - Beta	5	509.7	557.2	37.4	596.3	550.2

[1/] dpm = decays per minute. Raw data presented in Attachment F-04.

Table F.3.9.a
Summary Statistics of Building 1004 Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm^2)** [1/]	**Average (dpm/100cm^2)**	**Standard Deviation (dpm/100cm^2)**	**Maximum (dpm/100cm^2)**	**Median (dpm/100cm^2)**
1004 - GM	20	4533	6947	1355	9600	6933

[1/] dpm/100cm2 = decays per minute per 100 square centimeters. Scanning measurements were not collected in Building 1004.

Table F.3.9.b
Summary Statistics of Building 1004 Field Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	Number of Measurements	Minimum (cpm) [1/]	Average (cpm)	Standard Deviation (cpm)	Maximum (cpm)	Median (cpm)
1004 - 3x3 NaI	20	9773	12698	1333	14238	12792

[1/] cpm = counts per minute. Scanning measurements were not collected in Building 1004.

Table F.3.10
Initial Reduction of Building 1004 Data - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Survey Unit		Background Area					
Dataset	**Mean (dpm/100cm2) [1/]**	**Maximum (dpm/100cm2)**	**Mean (dpm/100cm2)**	**Minimum (dpm/100cm2)**	**Screening Level (dpm/100cm2) [2/]**	**Difference between SU mean and bkgd mean less than screening level? [3/]**	**Difference between SU max and bkgd min less than screening level? [3/]**	**Conclusion**
1004 - GM	6947	9600	7909	4800	7100	Yes	Yes	**Survey Unit Meets Release Criterion**

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The Co-60 screening level from NUREG-1757, Volume 2 (USNRC, 2003).

[3/] Data reduction criteria based on MARSSIM Table 8.2 for gross measurements.

Table F.3.11
Summary of Building 1004 Wilcoxon Rank Sum Tests
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Survey Unit	Measurement [1/]	Valid N Survey [2/]	Valid N Background [2/]	Critical Value [3/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [4/]	Conclusion [5/]
Using MARSSIM Scenario B and comparison with background							
1004	3x3 NaI	25	20	545.8	336	Accept	**3x3 NaI data are indistinguishable from background**

[1/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[2/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[3/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM Appendix I.

[4/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the the survey unit is indistinguishable from background is accepted and the survey unit passes. The WRS test spreadsheets for Building 1004 (per MARSSIM Appendix I) are presented in Attachment F-8.

[5/] Conclusions for these survey units are based on the WRS test results, and the initial data reduction shown in Table F.3.10.

Table F.3.12
Elevated Measurement Comparison of Building 1004 Data
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Maximum (dpm/100cm^2) [1/]	Background-Corrected Screening Level (dpm/100cm^2) [2/]	Conclusion
1004 - GM	9600	15009	No elevated levels present
Dataset	**Maximum (cpm) [3/]**	**Maximum Background (cpm) [4/]**	**Conclusion**
1004 - 3x3 NaI	14238	15648	No elevated levels present

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The background-corrected screening level is the Co-60 surface screening level (7,100 dpm/100cm^2) plus the average background measurement from Building 5326 for that instrument.

[3/] cpm = counts per minute.

[4/] Maximum background measurement per Table F.3.1.b.

Table F.3.13.a
Summary Statistics of Building 1005 Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm^2)** [1/]	**Average (dpm/100cm^2)**	**Standard Deviation (dpm/100cm^2)**	**Maximum (dpm/100cm^2)**	**Median (dpm/100cm^2)**
1005 - GM	20	4933	8013	2547	12267	7667

	Scanning Measurements		
Dataset	**Average Range (dpm/100cm^2)**		**Upper Bound (dpm/100cm^2)**
	Minimum	***Maximum***	
1005 - GM	1481	17185	21333

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

Table F.3.13.b
Summary Statistics of Building 1005 Field Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (cpm) [1/]**	**Average (cpm)**	**Standard Deviation (cpm)**	**Maximum (cpm)**	**Median (cpm)**
1005 - 3x3	20	13415	18080	3078	23947	17623

	Scanning Measurements		
Dataset	**Average Range (cpm)**		**Upper Bound (cpm)**
	Minimum	***Maximum***	
1005 - 3x3	17422	19856	24400

[1/] cpm = counts per minute.

Table F.3.14
Initial Reduction of Building 1005 Data - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Survey Unit		Background Area					
Dataset	**Mean (dpm/100cm2) [1/]**	**Maximum (dpm/100cm2)**	**Mean (dpm/100cm2)**	**Minimum (dpm/100cm2)**	**Screening Level (dpm/100cm2) [2/]**	**Difference between SU mean and bkgd mean less than screening level? [3/]**	**Difference between SU max and bkgd min less than screening level? [3/]**	**Conclusion**
1005 - GM	8013	12267	7909	4800	7100	Yes	**No**	Perform WRS Test

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The Co-60 screening level from NUREG-1757, Volume 2 (USNRC, 2003).

[3/] Data reduction criteria based on MARSSIM Table 8.2 for gross measurements.

Table F.3.15
Summary of Building 1005 Wilcoxon Rank Sum Test
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Survey Unit	Measurement [1/]	Valid N Survey [2/]	Valid N Background [2/]	Critical Value [3/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [4/, 5/]	Conclusion [6/]
Using MARSSIM Scenario A and cobalt-60 screening level							
1005	GM Pancake	25	20	647	821	Reject	**Survey Unit Meets Release Criterion**
Using MARSSIM Scenario B and comparison with background							
1005	3x3 NaI	25	20	545.8	280	Accept	**3x3 NaI data are indistinguishable from background**

[1/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[2/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[3/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM Appendix I.

[4/] Per MARSSIM for Scenario A, if the Sum of Background Area Ranks is greater than the Critical Value, the Scenario A null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the screening level is rejected, and the survey unit passes (i.e., the survey unit meets the release criterion). The WRS test spreadsheets for Building 1005 (per MARSSIM Appendix I) are presented in Attachment F-10.

[5/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the the survey unit is indistinguishable from background is accepted and the survey unit passes.

[6/] Conclusions for these survey units are based on the WRS test results, and the initial data reduction shown in Table F.3.14.

Table F.3.16
Elevated Measurement Comparison of Building 1005 Data
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Maximum (dpm/100cm^2) [1/]	Background-Corrected Screening Level (dpm/100cm^2) [2/]	Conclusion
1005 - GM	12267	15009	No elevated levels present
Dataset	**Maximum (cpm) [3/]**	**Maximum Background (cpm) [4/]**	**Conclusion**
1005 - 3x3 NaI	23947	25280	No elevated levels present

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The background-corrected screening level is the Co-60 surface screening level (7,100 dpm/100cm^2) plus the average background measurement from Building 5326 for that instrument.

[3/] cpm = counts per minute.

[4/] Maximum background measurement per Table F.3.1.b.

Table F.3.17.a
Summary Statistics of SWMU-41 Tunnel Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm^2)** [1/]	**Average (dpm/100cm^2)**	**Standard Deviation (dpm/100cm^2)**	**Maximum (dpm/100cm^2)**	**Median (dpm/100cm^2)**
Tunnel - GM	21	5867	9098	2076	13333	9200

	Scanning Measurements		
Dataset	**Average Range (dpm/100cm^2)**		**Upper Bound (dpm/100cm^2)**
	Minimum	***Maximum***	
Tunnel - GM	2500	19333	26667

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

Table F.3.17.b
Summary Statistics of SWMU-41 Tunnel Field Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (cpm) [1/]**	**Average (cpm)**	**Standard Deviation (cpm)**	**Maximum (cpm)**	**Median (cpm)**
Tunnel - 3x3 NaI	21	16981	19881	1617	22304	20239

	Scanning Measurements		
Dataset	**Average Range (cpm)**		**Upper Bound (cpm)**
	Minimum	***Maximum***	
Tunnel - 3x3 NaI	18100	20888	22600

[1/] cpm = counts per minute.

Table F.3.18
Initial Reduction of SWMU-41 Tunnel Data - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Survey Unit		Background Area					
Dataset	**Mean (dpm/100cm2) [1/]**	**Maximum (dpm/100cm2)**	**Mean (dpm/100cm2)**	**Minimum (dpm/100cm2)**	**Screening Level (dpm/100cm2) [2/]**	**Difference between SU mean and bkgd mean less than screening level? [3/]**	**Difference between SU max and bkgd min less than screening level? [3/]**	**Conclusion**
GM Pancake	9098	13333	7909	4800	7100	Yes	**No**	Perform WRS Test

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The Co-60 screening level from NUREG-1757, Volume 2 (USNRC, 2003).

[3/] Data reduction criteria based on MARSSIM Table 8.2 for gross measurements.

Table F.3.19
Summary of SWMU-41 Tunnel Wilcoxon Rank Sum Test
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Survey Unit	Measurement [1/]	Valid N Survey [2/]	Valid N Background [2/]	Critical Value [3/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [4/, 5/]	Conclusion [6/]
Using MARSSIM Scenario A and cobalt-60 screening level							
Tunnel	GM Pancake	25	21	662.1	821	Reject	**Survey Unit Meets Release Criterion**
Using MARSSIM Scenario B and comparison with background							
Tunnel	3x3 NaI	25	21	582.4	301	Accept	**3x3 NaI data are indistinguishable from background**

[1/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[2/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[3/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM Appendix I.

[4/] Per MARSSIM for Scenario A, if the Sum of Background Area Ranks is greater than the Critical Value, the Scenario A null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the screening level is rejected, and the survey unit passes (i.e., the survey unit meets the release criterion). The WRS test spreadsheets for the SWMU-41 Tunnel (per MARSSIM Appendix I) are presented in Attachment F-12.

[5/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the the survey unit is indistinguishable from background is accepted and the survey unit passes.

[6/] Conclusions for these survey units are based on the WRS test results, and the initial data reduction shown in Table F.3.18.

Table F.3.20
Elevated Measurement Comparison of SWMU-41 Tunnel Data
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Maximum (dpm/100cm^2) [1/]	Background-Corrected Screening Level (dpm/100cm^2) [2/]	Conclusion
Tunnel - GM	13333	15009	No elevated levels present
Dataset	**Maximum (cpm) [3/]**	**Maximum Background (cpm) [4/]**	**Conclusion**
Tunnel - 3x3 NaI	22304	25280	No elevated levels present

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The background-corrected screening level is the Co-60 surface screening level (7,100 dpm/100cm^2) plus the average background measurement from Building 5326 for that instrument.

[3/] cpm = counts per minute.

[4/] Maximum background measurement per Table F.3.1.b.

Table F.3.21
Summary Statistics of SWMU-41 Tunnel Removable Activity Measurements
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Number of Measurements	Minimum (dpm) [1/]	Average (dpm)	Standard Deviation (dpm)	Maximum (dpm)	Median (dpm)
Smear - Alpha	5	6.6	24.2	20.4	52.9	17.6
Smear - Beta	5	551.6	611.7	54.2	675.9	585.2

[1/] dpm = decays per minute.

Table F.3.22
Material Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Tunnel Location 9 - MS004			Tunnel Location 10 - MS005		
	Scrapings from pipe segment on ground			Scrapings from cut pipe leading into wall		
Radionuclides of Concern	Result (pCi/g) [1/]	Uncertainty (pCi/g)	MDL (pCi/g) [2/]	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Co-60	0.2 U [3/]	0.1	0.2	6.3	0.6	0.2
Cs-137	0.1 U	0.1	0.1	1.9	0.3	0.2
Th-234	0.6	0.6	0.6	1.0	0.8	1.0
U-238	0.6	0.6	0.6	1.0	0.8	1.0
Gross Alpha	6.9	4.2	5.5	12.7	5.4	6.2
Gross Beta	5.4	2.9	4.4	19.1	5.6	7.5

[1/] pCi/g = picocuries per gram.

[2/] MDL = method detection limit, as reported by the laboratory

[3/] U = not detected.

Table F.3.23.a
Summary Statistics of SWMU-41 Pond Field Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Direct Measurements					
Dataset	**Number of Measurements**	**Minimum (dpm/100cm^2)** [1/]	**Average (dpm/100cm^2)**	**Standard Deviation (dpm/100cm^2)**	**Maximum (dpm/100cm^2)**	**Median (dpm/100cm^2)**
Pond - GM	99	6533	9417	1493	14800	9200

	Scanning Measurements		
Dataset	**Average Range (dpm/100cm^2)**		**Upper Bound (dpm/100cm^2)**
	Minimum	***Maximum***	
Pond - GM	2303	18923	26667

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

Table F.3.24
Initial Reduction of SWMU-41 Pond Data - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Survey Unit		Background Area					
Dataset	**Mean (dpm/100cm2) [1/]**	**Maximum (dpm/100cm2)**	**Mean (dpm/100cm2)**	**Minimum (dpm/100cm2)**	**Screening Level (dpm/100cm2) [2/]**	**Difference between SU mean and bkgd mean less than screening level? [3/]**	**Difference between SU max and bkgd min less than screening level? [3/]**	**Conclusion**
GM Pancake	9417	14800	10507	6267	7100	Yes	**No**	Perform WRS Test

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The Co-60 screening level from NUREG-1757, Volume 2 (USNRC, 2003).

[3/] Data reduction criteria based on MARSSIM Table 8.2 for gross measurements.

Table F.3.25
Summary of SWMU-41 Pond Wilcoxon Rank Sum Test
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Survey Unit	Measurement [1/]	Valid N Survey [2/]	Valid N Background [2/]	Critical Value [3/]	Sum of Background Area Ranks	Accept/Reject Null Hypothesis? [4/, 5/]	Conclusion [6/]
Using MARSSIM Scenario A and cobalt-60 screening level							
Pond	GM Pancake	25	99	1826.6	2795	Reject	**Survey Unit Meets Release Criterion**
Using MARSSIM Scenario B and comparison with background							
Pond	3x3 NaI	25	99	6502.2	5529	Accept	**3x3 NaI data are indistinguishable from background**

[1/] Measurements from each survey unit were grouped by instrument for the Wilcoxon Rank Sum (WRS) test.

[2/] The Valid N for a dataset refers to the number of measurements from that dataset used in the WRS test.

[3/] The Critical Value for the WRS test was calculated for the number of measurements in the survey unit and background areas per MARSSIM Appendix I.

[4/] Per MARSSIM for Scenario A, if the Sum of Background Area Ranks is greater than the Critical Value, the Scenario A null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the screening level is rejected, and the survey unit passes (i.e., the survey unit meets the release criterion). The WRS test spreadsheets for the SWMU-41 Pond (per MARSSIM Appendix I) are presented in Attachment F-14.

[5/] Per MARSSIM for Scenario B, if the Sum of Background Area Ranks is less than the Critical Value, the Scenario B null hypothesis that the the survey unit is indistinguishable from background is accepted and the survey unit passes.

[6/] Conclusions for these survey units are based on the WRS test results, and the initial data reduction shown in Table F.3.24.

Table F.3.26
Elevated Measurement Comparison of SWMU-41 Pond Data
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

Dataset	Maximum (dpm/100cm^2) [1/]	Background-Corrected Screening Level (dpm/100cm^2) [2/]	Conclusion	
Pond - GM	14800	17607	No elevated levels present	

Dataset	Maximum (cpm) [3/]	Maximum Background (cpm) [4/]	Conclusion	
Pond - 3x3 NaI	29739	25321	Seven direct measurements greater than maximum background (location/measurement):	
			I04	25367
			E04	25448
			J03	25706
			F05	25726
			H03	25985
			J04	27213
			K04	29739

[1/] dpm/100cm2 = decays per minute per 100 square centimeters.

[2/] The background-corrected screening level is the Co-60 surface screening level (7,100 dpm/100cm^2) plus the average background measurement from Building 5326 for that instrument.

[3/] cpm = counts per minute.

[4/] Maximum background measurement per Table F.3.1.b.

Table F.3.27.a
SWMU-41 Pond Surface Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO051 A2 Surface			Location 041SO047 A12 Surface			Location 041SO055 B11 Surface			Location 041SO048 B13 Surface		
Radionuclides of Concern	Result (pCi/g) [1/]	Uncertainty (pCi/g)	MDL (pCi/g) [2/]	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Ac-228	0.8 U [3/]	0.4	0.8	0.7 U	0.3	0.6	0.8	0.3	0.2	0.5 U	0.2	0.5
Bi-214	1.2	0.3	0.2	0.61	0.21	0.17	0.7	0.2	0.2	0.7	0.21	0.17
Co-60	-0.01 U	0.1	0.1	0.01 U	0.1	0.1	0.01 U	0.04	0.1	0.05 U	0.1	0.1
Cs-137	0.04 U	0.1	0.1	0.04 U	0.1	0.1	0.1 U	0.1	0.1	0.3	0.1	0.1
K-40	11.2	2.7	0.3	9.1	2	0.7	10.4	2.1	1.1	11.4	2.3	0.9
Pb-212	0.9	0.2	0.1	0.4	0.2	0.2	0.7	0.2	0.1	0.6	0.1	0.2
Pb-214	1.1	0.3	0.2	0.7	0.2	0.1	0.8	0.2	0.2	0.6	0.2	0.2
Ra-226	1.1	0.3	0.2	0.6	0.2	0.2	0.7	0.2	0.2	0.7	0.2	0.2
Ra-228	0.8 U	0.3	0.8	0.7 U	0.3	0.6	0.8	0.3	0.2	0.5 U	0.2	0.5
Th-232	0.8 U	0.3	0.8	0.7 U	0.3	0.6	0.8	0.3	0.2	0.5 U	0.2	0.5
Tl-208	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1
Gross Alpha	13.2	6.2	7.9	23.7	7.3	6.7	21.3	6.8	6.8	17.5	6	5.7
Gross Beta	27.8	6.2	7.4	19.1	3.6	3.9	23.7	4.2	4.2	21.8	4.3	4.9

[1/] pCi/g = picocuries per gram.

[2/] MDL = method detection limit.

[3/] U = not detected.

Table F.3.27.a (cont.)
SWMU-41 Pond Surface Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO042 D1 Surface			Location 041SO052 D5 Surface			Location 041SO050 E10 Surface			Location 041SO043 F7 Surface		
Radionuclides of Concern	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Ac-228	0.5	0.3	0.2	0.3 U	0.2	0.4	0.4	0.3	0.3	0.4 U	0.3	0.5
Bi-214	0.8	0.2	0.2	0.4	0.2	0.1	0.5	0.2	0.1	0.7	0.2	0.2
Co-60	-0.01 U	0.1	0.1	0.05 U	0.04	0.1	0.01 U	0.04	0.1	0.001 U	0.05	0.1
Cs-137	0.03 U	0.05	0.1	0.5	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1
K-40	10.7	2.3	1.1	6.7	1.4	0.1	9.7	1.8	0.9	9.1	2.0	0.7
Pb-212	0.7	0.2	0.2	0.3	0.1	0.1	0.4	0.1	0.1	0.4	0.1	0.2
Pb-214	0.6	0.2	0.2	0.5	0.1	0.1	0.6	0.2	0.1	0.7	0.2	0.2
Ra-226	0.8	0.2	0.2	0.4	0.2	0.1	0.5	0.2	0.1	0.7	0.2	0.2
Ra-228	0.5	0.3	0.3	0.3 U	0.2	0.4	0.4	0.3	0.3	0.4 U	0.2	0.5
Th-232	0.5	0.3	0.3	0.3 U	0.2	0.4	0.4	0.3	0.3	0.4 U	0.2	0.5
Tl-208	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2 U	0.1	0.2
Gross Alpha	14.9	5.7	6.2	18.1	6.4	6.8	17.4	6	6.1	15.4	6.1	6.8
Gross Beta	21.2	4.1	4.4	27.3	4.9	5.1	25.2	5.6	6.7	20.9	5.6	7.5

Table F.3.27.a (cont.)
SWMU-41 Pond Surface Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO053 G2 Surface			Location 041SO045 G10 Surface			Location 041SO057 H3 Surface			Location 041SO046 H11 Surface		
Radionuclides of Concern	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Ac-228	0.6 U	0.3	0.6	0.8	0.3	0.3	0.6 U	0.3	0.7	0.5 U	0.2	0.5
Bi-214	0.5	0.2	0.2	0.8	0.2	0.2	0.6	0.2	0.2	1	0.2	0.2
Co-60	-0.01 U	0.03	0.1	-0.01 U	0.05	0.1	1.0	0.2	0.1	-0.01 U	0.1	0.1
Cs-137	0.3	0.1	0.1	0.1	0.1	0.1	3.5	0.5	0.1	1.2	0.2	0.1
K-40	7.1	1.6	1.1	8.2	2	1	8.5	2.1	0.8	8.3	1.8	1.1
Pb-212	0.5	0.1	0.1	0.7	0.2	0.1	0.6	0.2	0.2	0.4	0.1	0.1
Pb-214	0.6	0.2	0.2	0.8	0.2	0.2	0.6	0.2	0.2	0.7	0.2	0.1
Ra-226	0.5	0.2	0.2	0.8	0.2	0.2	0.6	0.2	0.2	0.5	0.2	0.2
Ra-228	0.6 U	0.3	0.6	0.8	0.3	0.3	0.7	0.3	0.7	0.5 U	0.2	0.5
Th-232	0.6 U	0.3	0.6	0.8	0.3	0.3	0.7	0.3	0.7	0.5 U	0.2	0.5
Tl-208	0.1 U	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Gross Alpha	12.1	5.2	6	20.3	6.1	5.1	22.7	7.2	6.9	16	6.2	6.8
Gross Beta	23.9	5	5.8	23.4	4.3	4.6	30.5	6.6	7.7	29.4	5.9	6.6

Table F.3.27.a (cont.)
SWMU-41 Pond Surface Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO058 H13 Surface			Location 041SO049 I8 Surface			Location 041SO044 J5 Surface			Location 041SO039 J6 Surface		
Radionuclides of Concern	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Ac-228	0.5 U	0.2	0.5	0.1 U	0.2	0.5	0.4	0.3	0.3	1.1 U	0.4	0.8
Bi-214	0.4	0.2	0.1	0.5	0.2	0.2	0.6	0.2	0.1	0.76	0.22	0.22
Co-60	0.02 U	0.04	0.1	0.04 U	0.1	0.1	0.01 U	0.1	0.1	-0.005 U	0.1	0.1
Cs-137	0.4	0.1	0.1	0.4	0.1	0.1	0.8	0.2	0.1	0.03 U	0.1	0.1
K-40	7.6	1.8	0.9	8.6	1.9	0.6	7.9	1.6	0.2	13.7	2.8	1
Pb-212	0.4	0.1	0.1	0.5	0.1	0.1	0.5	0.1	0.1	0.9	0.2	0.2
Pb-214	0.6	0.2	0.1	0.5	0.2	0.2	0.6	0.2	0.1	1	0.2	0.2
Ra-226	0.4	0.1	0.1	0.5	0.2	0.2	0.6	0.2	0.1	0.8	0.2	0.2
Ra-228	0.5 U	0.2	0.5	0.2 U	0.2	0.5	0.4	0.3	0.3	1.1 U	0.4	0.8
Th-232	0.5 U	0.2	0.5	0.2 U	0.2	0.5	0.4	0.3	0.3	1.1 U	0.4	0.8
Tl-208	0.10	0.06	0.06	0.2	0.1	0.1	0.2	0.1	0.1	0.45	0.13	0.09
Gross Alpha	24.9	7.6	7.4	18.5	6.3	5.8	14.4	6.3	7.7	17	6.3	7
Gross Beta	25.5	4.7	5.1	19	3.9	4.3	44.5	7.8	7.8	19.8	3.6	3.9

Table F.3.27.a (cont.)
SWMU-41 Pond Surface Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Location 041SO059 K4 Surface			Location 041SO040 K9 Surface			Location 041SO054 K12 Surface			Location 041SO056 M4 Surface			Location 041SO041 N5 Surface		
Radionuclides of Concern	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)	Result (pCi/g)	Uncertainty (pCi/g)	MDL (pCi/g)
Ac-228	0.3 U	0.4	0.7	1.0 U	0.4	0.7	0.29	0.21	0.27	0.7	0.3	0.3	0.8 U	0.4	0.8
Bi-214	0.7	0.2	0.2	0.8	0.2	0.2	0.54	0.16	0.13	0.6	0.2	0.2	0.8	0.3	0.2
Co-60	1.5	0.3	0.1	0.1 U	0.1	0.2	0.02 U	0.04	0.1	0.03 U	0.1	0.1	-0.02 U	0.1	0.1
Cs-137	8.1	1	0.1	0.2	0.1	0.1	0.22	0.1	0.1	0.4	0.1	0.1	0.04 U	0.1	0.2
K-40	8.1	2.1	1.1	14	2.6	0.8	5.2	1.5	1	9.1	1.9	0.8	13.4	3.1	1.5
Pb-212	0.7	0.1	0.2	0.7	0.2	0.2	0.44	0.1	0.1	0.5	0.2	0.1	0.8	0.2	0.2
Pb-214	0.5	0.2	0.3	0.8	0.2	0.1	0.58	0.2	0.1	0.7	0.2	0.1	0.9	0.2	0.2
Ra-226	0.7	0.2	0.2	0.8	0.2	0.2	0.54	0.2	0.1	0.6	0.2	0.1	0.8	0.3	0.2
Ra-228	0.3 U	0.4	0.7	1.0 U	0.3	0.7	0.29	0.2	0.27	0.7	0.3	0.4	0.9 U	0.4	0.8
Th-232	0.3 U	0.4	0.7	1.0 U	0.3	0.7	0.29	0.2	0.27	0.7	0.3	0.4	0.9 U	0.4	0.8
Tl-208	0.2	0.1	0.1	0.3	0.1	0.1	0.16	0.1	0.1	0.2	0.1	0.1	0.49	0.14	0.09
Gross Alpha	22.5	6.5	5.1	21.8	6.5	5.8	27.8	7.7	6.1	14.7	5.7	6.4	13.9	5.6	6
Gross Beta	31.8	4.9	4.3	24.1	5	5.7	21.8	3.8	3.7	22.5	4.9	5.7	26.5	6.5	8.2

Table F.3.27.b
SWMU-41 Pond Surface Soil Sampling Summary
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	SWMU-41 Pond Summary Stats				Background Summary Stats			
Radionuclides of Concern	Minimum (pCi/g) [1/]	Maximum (pCi/g)	Average (pCi/g)	# Detects	Minimum (pCi/g)	Maximum (pCi/g)	Average (pCi/g)	# Detects
Ac-228	0.3	0.8	0.5	7	0.6	1.1	0.8	4
Bi-214	0.4	1.2	0.7	21	0.8	1.0	0.9	5
Co-60	1.0	1.5	1.3	2	--	--	--	0
Cs-137	0.1	8.1	1.1	15	0.3	0.5	0.4	5
K-40	5.2	14	9.4	21	12.9	15.4	14.2	5
Pb-212	0.3	0.9	0.6	21	0.8	0.9	0.9	5
Pb-214	0.5	1.1	0.7	21	0.9	1.1	1.0	5
Ra-226	0.4	1.1	0.7	21	0.8	1.0	0.9	5
Ra-228	0.3	0.8	0.5	7	0.6	1.1	0.8	4
Th-232	0.3	0.8	0.5	7	0.6	1.1	0.8	4
Tl-208	0.1	0.5	0.2	19	0.2	0.3	0.3	5
Gross Alpha	12.1	27.8	18.5	21	14.3	30.0	22.1	5
Gross Beta	19	44.5	25.2	21	23.2	29.4	25.2	5

[1/] pCi/g = picocuries per gram.

Table F.3.28.a
SWMU-41 Pond Subsurface Soil Sampling Results - Gamma Spectroscopy
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Gamma Spectroscopy					
Radionuclides of Concern	**Location 041SO062 Result (pCi/g) [1/]**	**K4 2.5 - 3 ft bgs Uncertainty (pCi/g)**	**MDL (pCi/g) [2/]**	**Location 041SO063 Result (pCi/g)**	**K4 3 - 4 ft bgs Uncertainty (pCi/g)**	**MDL (pCi/g)**
Ac-228	0.8	0.4	0.4	0.9 U [3/]	0.4	0.7
Bi-214	1.1	0.3	0.2	1.2	0.3	0.2
Co-60	0.06 U	0.1	0.2	-0.01 U	0.1	0.1
Cs-137	0.1 U	0.1	0.2	0.003 U	0.1	0.1
K-40	10.6	2.4	1.4	10.2	2.6	1.5
Pb-210	1.7	1.2	1.2	0.9 U	0.8	1.5
Pb-212	0.8	0.2	0.1	0.7	0.2	0.2
Pb-214	1.0	0.2	0.2	1.2	0.3	0.2
Ra-226	1.1	0.3	0.2	1.2	0.3	0.2
Ra-228	0.8	0.4	0.5	0.9 U	0.4	0.7
Th-232	0.8	0.4	0.5	0.9 U	0.4	0.7
Th-234	2.2	1.3	1.4	2.1	1.0	1.2
Tl-208	0.3	0.1	0.1	0.3	0.1	0.1
U-238	2.2	1.3	1.4	2.1	0.9	1.2

[1/] pCi/g = picocuries per gram.
[2/] MDL = method detection limit.
[3/] U = not detected.

Table F.3.28.b
SWMU-41 Pond Subsurface Soil Sampling Results - Alpha/Beta
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

	Gross Alpha			*Gross Beta*		
Sample Location	**Result (pCi/g)** [1/]	**Uncertainty (pCi/g)**	**MDL (pCi/g)** [2/]	**Result (pCi/g)**	**Uncertainty (pCi/g)**	**MDL (pCi/g)**
H13 (1.5-2)	22.6	7	7.1	23.4	4.6	5.1
H3 (1.5-2)	28	7.2	5.1	19.9	3.8	4.1
J12 (1.5-2)	37.1	8.9	6.5	27.2	4.6	4.5
J12 (3-4)	25.6	7.4	6.7	20.9	5	6.2
K4 (2.5-3)	26.3	7.2	6	21.4	4.6	5.4
K4 (3-4)	26.2	7.4	6.7	18.9	4	4.7

Summary Statstics - SWMU-41 Pond Subsurface						
Dataset	**Number of Measurements**	**Minimum (pCi/g)**	**Average (pCi/g)**	**Standard Deviation (pCi/g)**	**Maximum (pCi/g)**	**Median (pCi/g)**
Gross Alpha	6	22.6	27.6	5.0	37.1	26.3
Gross Beta	6	18.9	22.0	3.0	27.2	21.2

Surface Soil Background - 2005						
Dataset	**Number of Measurements**	**Minimum (pCi/g)**	**Average (pCi/g)**	**Standard Deviation (pCi/g)**	**Maximum (pCi/g)**	**Median (pCi/g)**
Gross Alpha	5	14.3	22.1	6.2	30.0	20.7
Gross Beta	5	23.2	25.2	2.4	29.4	24.2

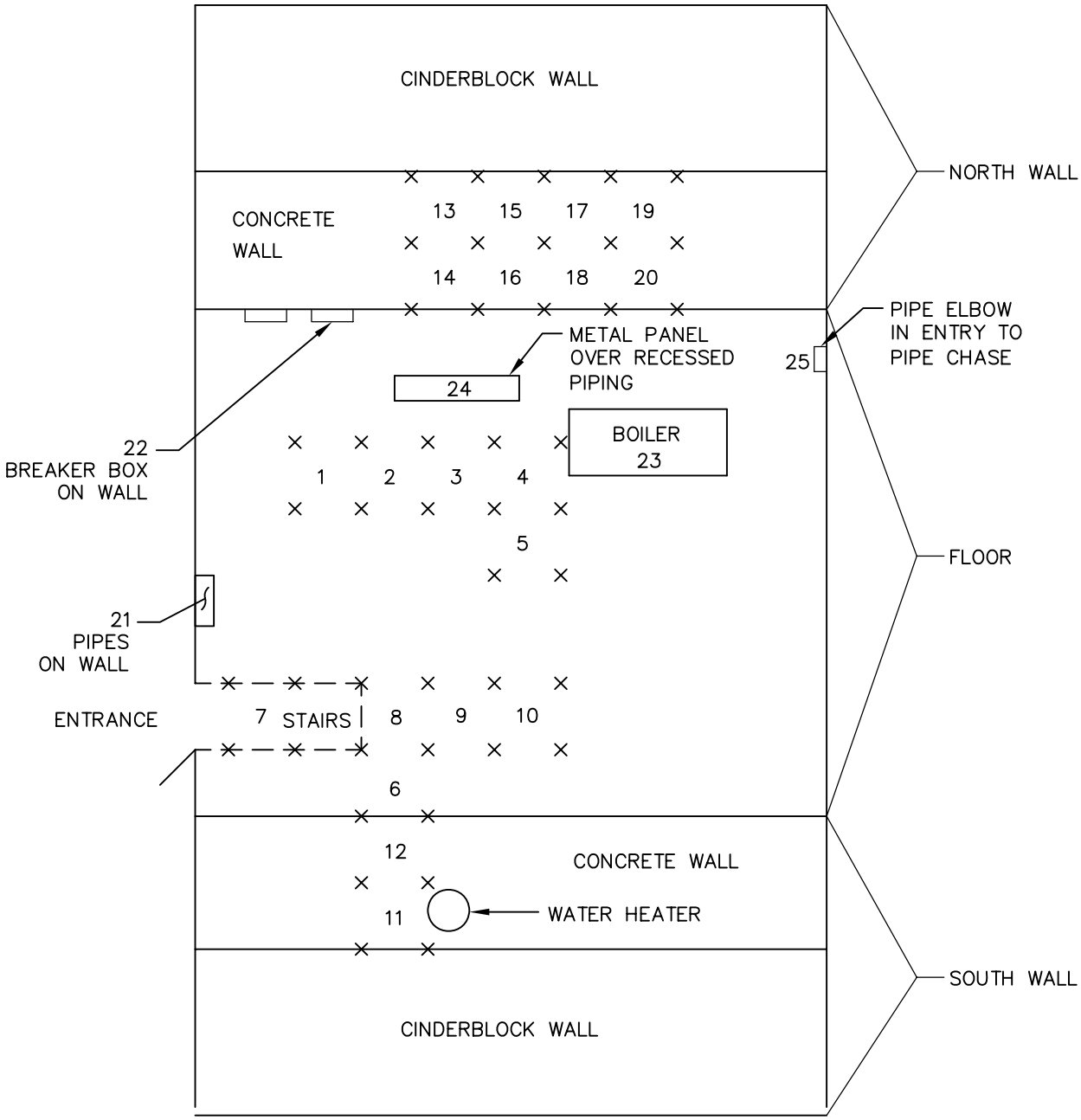
[1/] pCi/g = picocuries per gram.
[2/] MDL = method detection limit.

Table F.3.29
Summary of 1993 SWMU-41 Soil Sampling Results
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

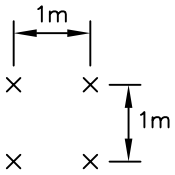
Analysis	Number of Samples	Minimum (pCi/g) [1/]	Average (pCi/g)	Standard Deviation (pCi/g)	Maximum (pCi/g)	Median (pCi/g)
Gross Alpha	17	10.3	18.2	5.9	27.1	19.4
Gross Beta	17	17	28.9	5.8	37.2	29.5

Surface Soil Background - 2005						
Dataset	Number of Measurements	Minimum (pCi/g)	Average (pCi/g)	Standard Deviation (pCi/g)	Maximum (pCi/g)	Median (pCi/g)
Gross Alpha	5	14.3	22.1	6.2	30.0	20.7
Gross Beta	5	23.2	25.2	2.4	29.4	24.2

[1/] pCi/g = picocuries per gram.
[2/] MDL = method detection limit.



LEGEND



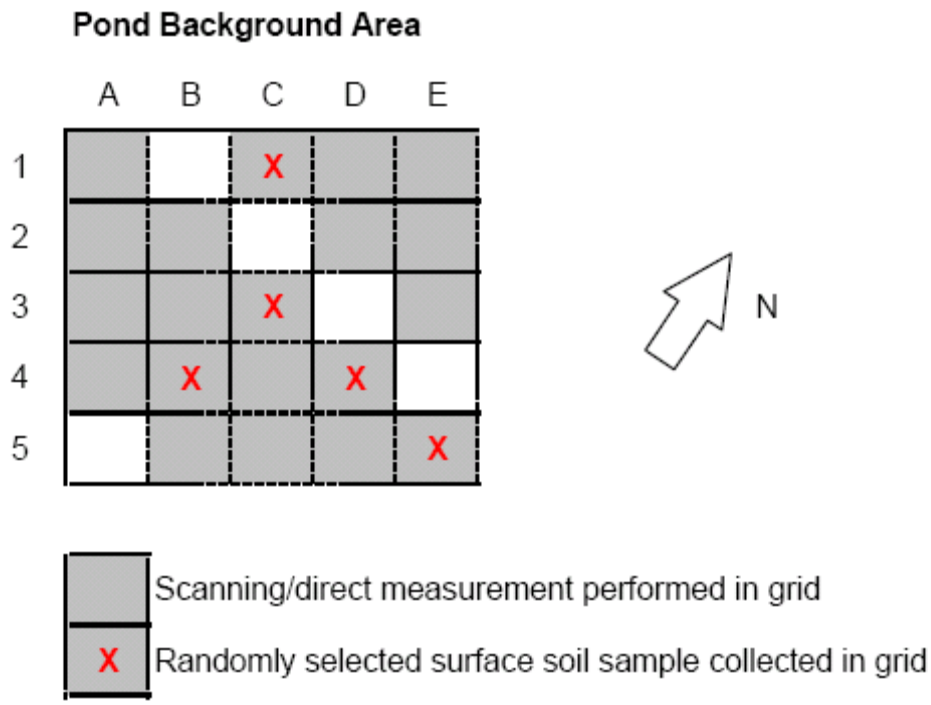
SCANNING GRID

FIGURE F.3.1

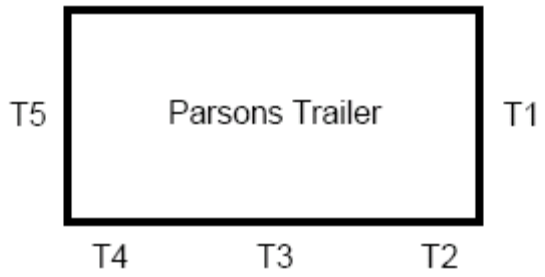
BUILDING 5326 MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY
DUGWAY PROVING GROUND RFI

S:\ES\cad\744148\06DN0270.dwg 10/19/2006 8:23AM JLH



NW corner of A-1 is approximately 6.7 feet east of Avery area fence



Measurement locations are approximately 10 ft away from trailer

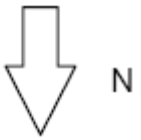


FIGURE F.3.2

POND BACKGROUND MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY

DUGWAY PROVING GROUND RFI

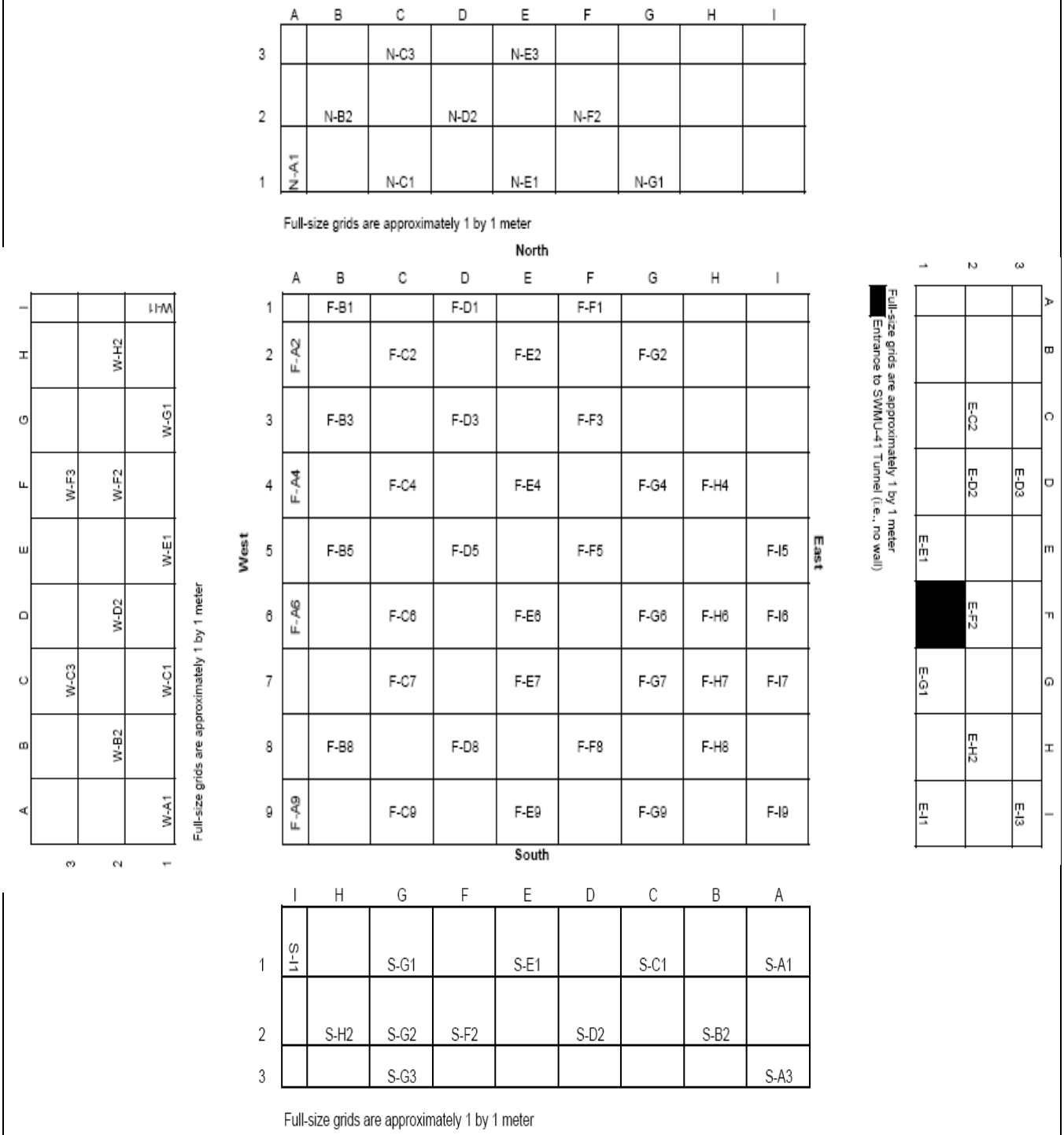
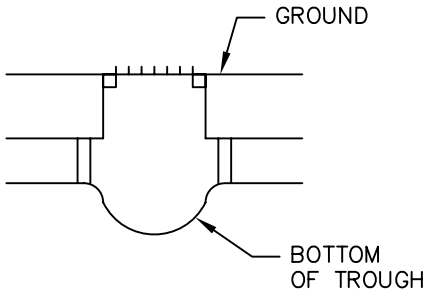


FIGURE F.3.3

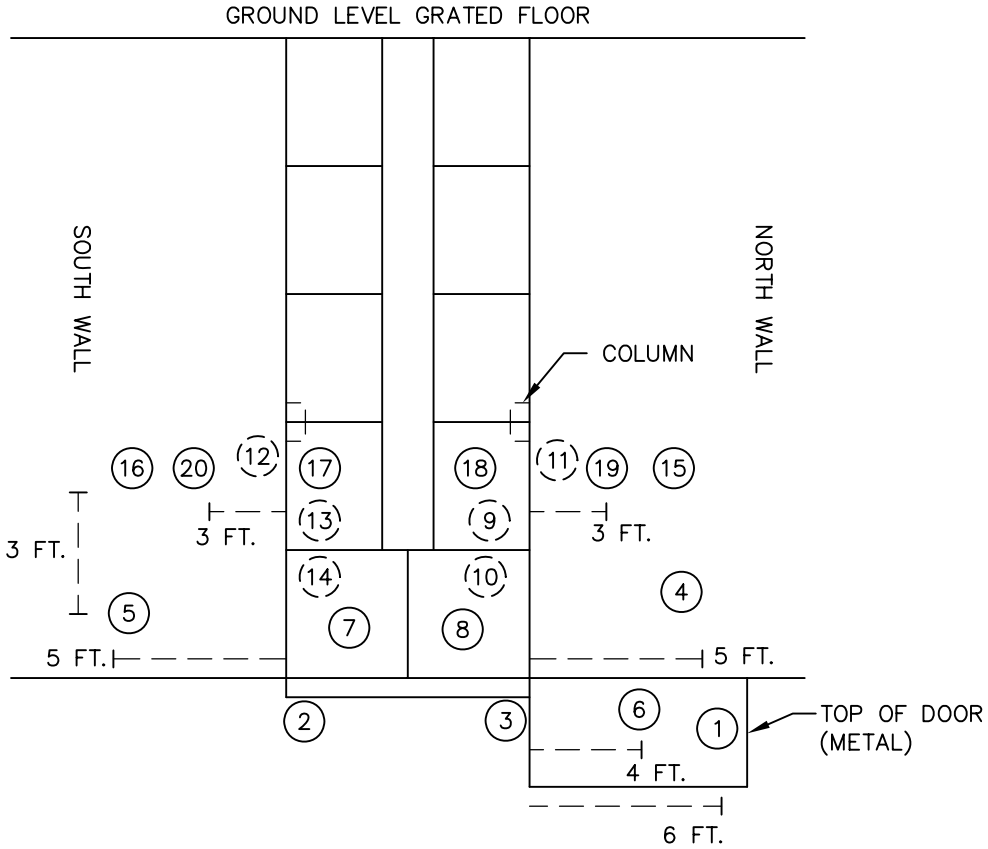
BUILDING 1002 MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY

DUGWAY PROVING GROUND RFI



PROFILE VIEW



LEGEND

(1) ABOVEGROUND MEASUREMENT

(9) DROP MEASUREMENT

FIGURE F.3.4

BUILDING 1004 MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY
DUGWAY PROVING GROUND RFI

S:\ES\cad\744148\06DN0269.dwg 10/19/2006 8:22AM JLH

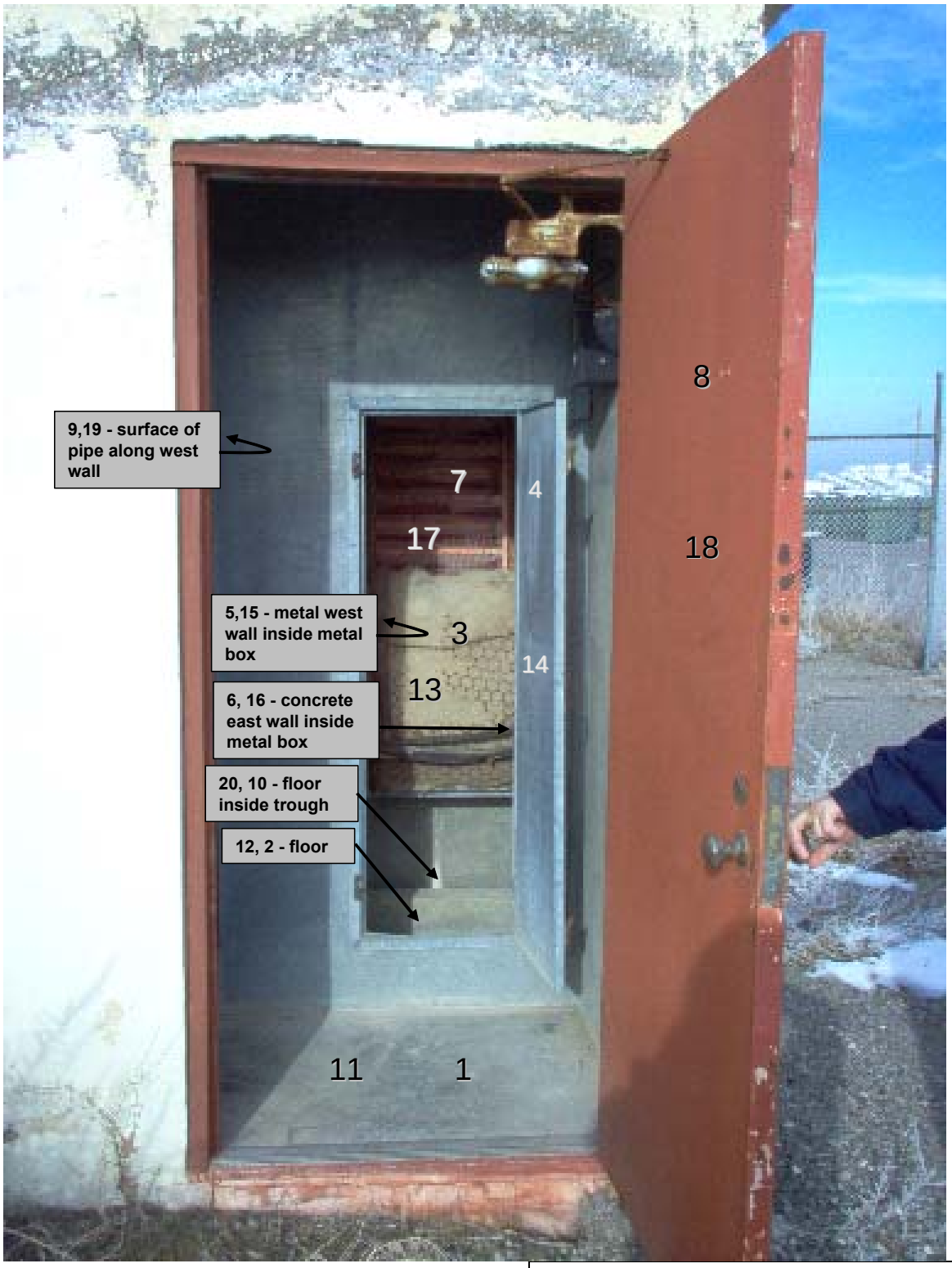


FIGURE F.3.5

BUILDING 1005 MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY

DUGWAY PROVING GROUND RFI

S:\ES\cad\744148\06DN0266.dwg 10/19/2006 8:21AM JLH

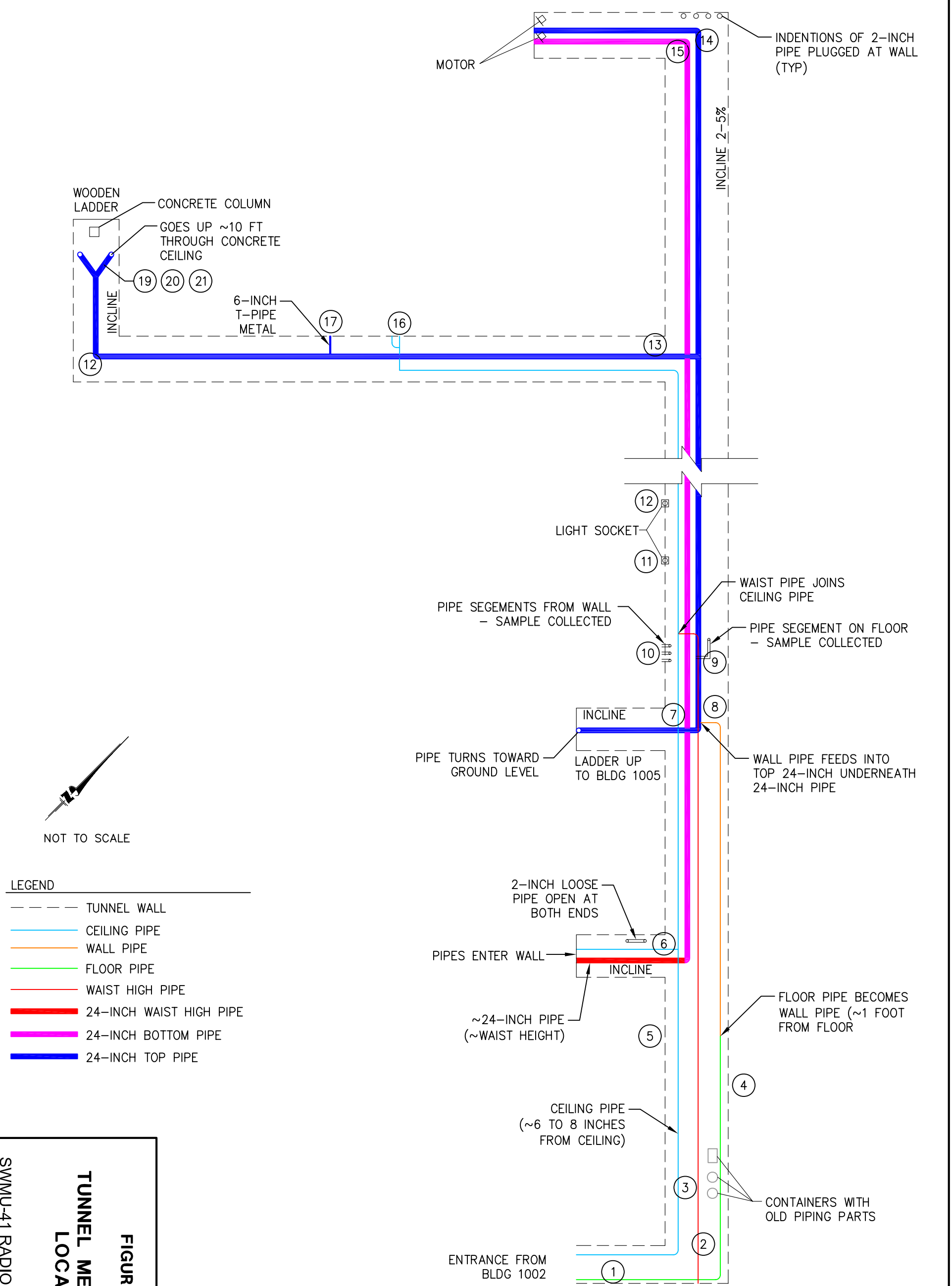


FIGURE F.3.6

TUNNEL MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY
DUGWAY PROVING GROUND RFI

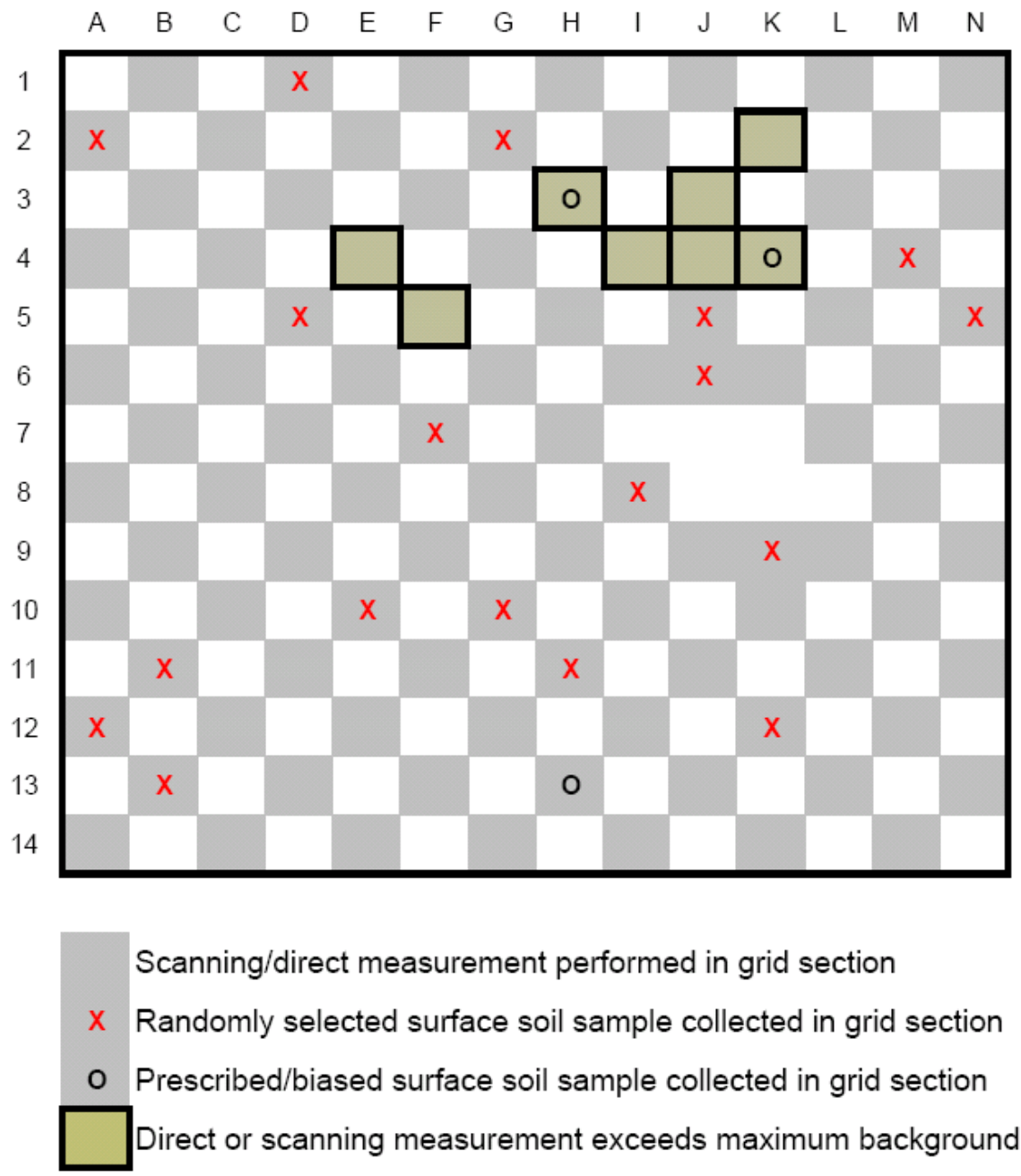


FIGURE F.3.7

SWMU-41 POND MEASUREMENT LOCATIONS

SWMU-41 RADIOLOGICAL SURVEY

DUGWAY PROVING GROUND RFI

F.4 Summary of Results and Conclusions

The results and conclusions of the SWMU-41 radiological survey are summarized below by survey unit.

- *Building 1002 (Section F.3.2)*: Field survey measurements and associated statistical testing demonstrated that levels of residual radioactivity in Building 1002 did not exceed the building surface screening level for Co-60. In addition, smear sampling results did not exceed the screening levels for removable activity. As such, Building 1002 met the 25 mrem/yr release criterion.

- *Building 1004 (Section F.3.3)*: Field survey measurements and associated statistical testing demonstrated that levels of residual radioactivity in the decay chamber and its ground level access area in Building 1004 did not exceed the building surface screening level for Co-60. As such, these areas of Building 1004 met the 25 mrem/yr release criterion. Based on the known history of SWMU-41 and Building 1004, it is unlikely that the other areas within the building would have higher contamination levels, and it is concluded that all of Building 1004 meets the 25 mrem/yr release criterion.

- *Building 1005 (Section F.3.4)*: Field survey measurements and associated statistical testing demonstrated that levels of residual radioactivity in Building 1005 did not exceed the building surface screening level for Co-60. In addition, smear sampling results did not exceed the screening levels for removable activity. As such, Building 1005 met the 25 mrem/yr release criterion.

- *SWMU-41 Tunnel (Section F.3.5)*: Field survey measurements and associated statistical testing demonstrated that levels of residual radioactivity in the SWMU-41 Tunnel did not exceed the building surface screening level for Co-60. In addition, smear sampling results did not exceed the screening levels for removable activity. Detectable alpha and beta radiation on smear samples and elevated GM pancake measurements were observed near the north end of the tunnel, and were attributed to the presence of naturally-occurring radon and radon progeny within the tunnel. A scraping from an open pipe within the tunnel had a Co-60 result that exceeded the soil screening level for Co-60;

however, this result by itself does not constitute a failure of the survey unit. As such, the SWMU-41 Tunnel met the 25 mrem/yr release criterion.

- *SWMU-41 Pond (Section F.3.6)*: Field survey measurements and associated statistical testing demonstrated that levels of residual radioactivity at the SWMU-41 Pond did not exceed the surface screening level for Co-60. In addition, soil sampling results did not exceed the soil screening levels individually or cumulatively. As such, the SWMU-41 Pond met the 25 mrem/yr release criterion.

F.5 References

10 CFR 20.1402. *Radiological Criteria for Unrestricted Use.*

Abelquist, 2001. *Decommissioning Health Physics: A Handbook for MARSSIM Users*, Institute of Physics Publishing, Philadelphia, Pennsylvania.

Bureau of Radiological Health, 1970. *Radiological Health Handbook*, Revised Edition, United States Department of Health, Education, and Welfare, Public Health Service, Food and Drug Administration, January.

The Ralph M. Parsons Company, 1952. *Operating Manual, Able Area, Dugway Proving Ground, Tooele, Utah*, Contract No. DA-18-108-CML-3653, August.

Parsons. 2005. *Final Phase II RCRA Facility Work Plan SWMUs 11 and 41 Radiological Survey*. Parsons, Salt Lake City, March.

Shleien, et al., 1998. *Handbook of Health Physics and Radiological Health*, Third Edition, Williams & Wilkins, Baltimore, Maryland.

USNRC, 2000. *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, NUREG-1575, Revision 1, United States Nuclear Regulatory Commission, August.

USNRC, 2001a. Letter from Dwight Chamberlain, USNRC, to Clair McBride, Department of the Army, March 26, 2001.

USNRC, 2001b. Letter from Jacqueline Cook, USNRC, to Clair McBride, Department of the Army, October 12, 2001.

USNRC, 2003. *Consolidated NMSS Decommissioning Guidance*, NUREG-1757, Volume 2, United States Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, September.

ATTACHMENTS

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

March 26, 2001

Mr. Clair D. McBride, Safety Officer
Department of the Army
Dugway Proving Ground
Headquarter's DPG
Dugway, Utah 84022-5000

SUBJECT: TERMINATED LICENSE REVIEW

Dear Mr. McBride:

On March 13, 2001, the NRC concluded its technical review of a formerly licensed site located at the Dugway Proving Ground in Dugway, Utah. Details of this technical and administrative review are provided in the enclosure to this letter. In summary, the U.S. Atomic Energy Commission (AEC) authorized the Army to possess radioactive material for use in research and development. Byproduct Material License No. 43-01316-04 was issued by the AEC on April 22, 1960, and was terminated on December 26, 1962. A recent independent docket file review by Oak Ridge National Laboratory (ORNL) identified that the docketed materials contained insufficient information to support closing out all areas where the Department of the Army had used byproduct material under the AEC license.

The NRC, through its technical review process, has determined that: (1) the radioactive material was properly transferred to other licensees during 1962, (2) the two former areas of use appeared to have been adequately decontaminated and decommissioned in the past, (3) the onsite limited radiological surveys made by NRC inspectors at the two sites did not identify or result in the discovery of any licensed material, and (4) decommissioning of the formerly identified waste burial pit will be conducted under the Army's current NRC license. Therefore, based on the above findings, this concludes our review of this terminated docket file.

If you have any questions concerning this letter, please contact D. Blair Spitzberg, Ph.D., Chief, Fuel Cycle and Decommissioning Branch at (817) 860-8191 or Mr. Robert Evans at (817) 860-8234.

Sincerely,

/RA/

Dwight D. Chamberlain, Director
Division of Nuclear Materials Safety

Docket No.: 030-90032
License No.: 43-01316-04 (terminated)

Enclosure: Site Status Report

cc:
Utah Radiation Control Program Director

bcc w/enclosure (via ADAMS distrib):
EWMerschoff
JTBuckley, NMSS/DWM/DCB (T 7 F27)
DDChamberlain
DBSpitzberg
LLHowell
RJEvans
FCDB
MIS System
RIV File (5th Floor)

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RIV:DNMS:FCDB		C:FCDB		D:DNMS	
RJEvans		DBSpitzberg		DDChamberlain	
/RA/		***/RA/***JEWitten for		***/RA/***	
03/13/01		03/26/01		03/26/01	

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ENCLOSURE

Site Status Report

Final ORNL Score: 13

Docket No. 030-90032

License No. 43-01316-04

Licensee Name: Department of the Army

Site Name: Radioactive Test Facility (Able Area and Radiation Test Pad)
U.S. Army Chemical Corps Proving Ground

Site Address: Dugway Proving Ground
Dugway, Utah 84022-5000

Regional Contact: Robert Evans, PE, CHP, Health Physicist
Fuel Cycle & Decommissioning Branch
Division of Nuclear Materials Safety
Region IV

Status Summary:

Byproduct Material License 43-01316-04 was issued by the Atomic Energy Commission (AEC) to the Army on April 22, 1960, authorizing the possession of 6500 curies of cobalt-60 for storage only. Subsequent amendments to the license added 6.5 curies of cobalt-60 for use by the Army in research and development activities for the development of corrosion resistant pellets. The licensee anticipated using these cobalt-60 pellets on an outdoor test pad to simulate a radiation field. In reviewing the docketed information, it appears that the project lost its funding, and the Army transferred the material to other licensees. The docket file indicates that the 6500 curies of cobalt-60 was shipped to Fort McClellan, Alabama, while the 6.5 curies was shipped as radioactive waste for disposal at Scoville, Idaho. AEC License No. 43-01316-04 was subsequently terminated at the licensee's request on December 26, 1962.

Oak Ridge National Laboratories' (ORNL) independent review of the docket file determined that decommissioning records were incomplete. ORNL indicated to the NRC that the docket file did not contain records of buildings, soil, equipment removal, decommissioning and/or decontamination activities. Also missing from the docket files were records relating to the final survey of the affected sites.

The Army currently has an active NRC Materials License, No. 43-01316-09. With the assistance of the radiation safety officer (RSO), three NRC inspectors performed a limited radiological survey of the two areas where radioactive materials were reputed to have been used in licensed activities, the Able Area and the Rad Pad. Able Area consisted of a small complex of buildings located about 11 miles from the main gate. The Rad Pad was a circular concrete pad 200 yards in diameter that was located near Able Area. The site survey was conducted on September 25-26, 2000. The specific areas radiologically surveyed by the inspectors included (1950-1960's names of the areas):

Building 1004 - Air Filter Building
Building 1006 - Decontamination Building
Building 1010 - Filling Cell
Building 1016 - Heat Test Cell/Storage Igloo
Building 1020 - Warehouse
Building 1030 - Control Building
Building 1034 - Fuse Loading Building
Rad Pad

The inspectors used two Ludlum Model 19 microRoentgen meters and one Ludlum Model 14C survey meter to conduct these radiation surveys. Background levels (10 microRoentgens per hour) were measured by the inspectors in all areas with the exception of one area that contained a small quantity of depleted uranium possessed under an active Air Force permit. Radiological surveys conducted by the inspectors did not identify any radioactive material that had been previously possessed under AEC License No. 43-01316-04.

At the request of the NRC inspectors, the RSO performed a documentation search but was unable to locate additional records at Dugway Proving Ground related to this license.

During the staff review of the terminated license file and corresponding documentation, the inspectors noted that the licensee had disposed of radioactive waste material in a below ground disposal pit during the 1960's. The below ground disposal pit is located about 30 miles from the main gate in an area previously referred to as the Granite Mountain Area Radioactive Waste Landfill. This landfill was reputed to have been used for disposal of both chemical and radioactive waste material. The inspectors toured this area but were unable to detect any radioactivity above background readings of 20-30 microRoentgens per hour on the surface of the landfill.

The Granite Mountain Area Radioactive Waste Landfill has been designated as Solid Waste Management Unit No. 11 by the licensee and is one of approximately 170 units at Dugway Proving Ground. A Phase I screen was conducted by the Army during the 1993-1994 time frame to determine if any hazardous waste material was present at this location. The Army noted slightly elevated beta radiation levels, however, the Army did not measure and record gamma radiation levels. It was assumed that gamma exposure rates were not measured because the landfill was located next to a granite mountain that had high levels of naturally occurring radioactivity.

Based on this preliminary screen, the Army concluded that a Phase II screen was necessary to further characterize the wastes in the landfill. When the Army conducts Phase II testing they plan to define the nature and extent of the contamination, including possible groundwater impacts. A work plan was created to document how the Army will implement Phase II testing. The licensee plans to conduct the Phase II testing of the landfill in the near future.

By letter dated June 5, 2000, and in accordance with the provisions of 10 CFR 20.304, the licensee formally notified the NRC about this former burial pit. Decommissioning activities for the radioactive waste disposal pit will be conducted under NRC License No. 43-01316-09 and in accordance with guidance provided in the NRC’s letter to the licensee dated March 13, 2001.

In conclusion, based on the above considerations, Region IV recommends the closure of this terminated site docket file. Review of this file determined that materials previously possessed under this license were transferred offsite during 1962. Additional decommissioning records were not located by the Army, but the inspectors noted that the areas in question have been decommissioned and decontaminated in the past. In conducting a limited radiological survey, the inspectors determined that the former areas of use were free of cobalt-60 contamination. Finally, the decommissioning activities for the former waste burial pit will be conducted under the Army's current NRC license.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 12, 2001

Department of the Army
ATTN: Clair D. McBride
Radiation Safety Officer
Commander, Dugway Proving Ground
Dugway, UT 84022-5000

SUBJECT: RETIREMENT OF YOUR NRC RADIOACTIVE MATERIALS LICENSE

On April 30, 2001, you contacted the U.S. Nuclear Regulatory Commission and indicated that you wished to terminate your NRC radioactive materials license. As the expiration date of your license has passed, it may not be terminated. However, your license may be retired. The NRC staff has reviewed your NRC Form 314. Based on its review, the staff has concluded that: 1) all licensable radioactive material has been removed from your facility and 2) residual radioactive material attributable to licensed activities does not exceed current NRC criteria.

Based on these conclusions no further remediation or actions with respect to NRC regulated material is required. Your facilities are suitable for unrestricted use and NRC license number 43-01316-09 for your facilities at Department of the Army's Dugway Proving Ground, Dugway, Utah, is hereby terminated.

If you have questions or require clarification on any of the information stated above, please contact me at (817) 860-8132.

Sincerely,

/RA/
Jacqueline D. Cook, Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-12715
License: 43-01316-09
Control: 468609

Enclosures: As stated

Materials License Termination/Retirement Form

LICENSE #:	43-01316-09	DOCKET #: 030-12715	
LICENSEE:	Department of the Army	EXPIRATION DATE: April 30, 2001 DATE OF CONTACT: April 30, 2001	
ADDRESS:	Commander, Dugway Proving Ground Dugway, UT 84022-5000	CONTACTED BY: Clair D. McBride TITLE: Radiation Safety Officer TELEPHONE: 435-831-5317	

LICENSE RETIRED: X

LICENSE TRANSFERRED:

LICENSE TRANSFERRED TO: NAME:
ADDRESS:

TELEPHONE:

BASIS FOR TERMINATION AND/OR RETIREMENT: All licensed material removed from facility and transferred to the manufacturer or disposed to a permitted waste facility by an Army contracted vendor. The date of NRC Form 314 is the same as the expiration date (4/30/01); receipt of NRC Form 314 was 5/3/01 - 3 days after expiration date. License expired and NRC can not terminate an expired license.

TERMINATION DOCUMENTATION

1. License termination meets Type I criteria: Y ___X___ N _____

___X___ Licensee used sealed sources only and the most recent leak test demonstrates that they did not leak while in the licensee's possession

___X___ Licensee used radioactive material with $T_{½} \leq 60$ days and it has decayed to less than the activity in 10 CFR Part 20, Appendix C

2. License termination meets type II criteria: Y ___X____ N _____

_____ Licensee possessed and used only sealed sources but cannot demonstrate that the sources did not leak while in the licensee's possession

_____ Licensee possessed unsealed radioactive material with $T_{½} \leq 60$ days but the maximum activity authorized under the license has not decayed to less than the quantity specified in 10 CFR Part 20, Appendix C

___X___ Licensee possessed unsealed radioactive material with $T_{½} > 60$ days but ≤ 120 days

___X___ Licensee possessed ^{14}C or ^{3}H but the total activity and use authorized under the license warrants decommissioning under Type II (describe rationale above)

3. License termination meets Type III criteria: Y _____ N __X____

_____ Decommissioning qualifies for a categorical exclusion under 10 CFR 51.22(c) and

_____ Licensee will decommission its facility in accordance with the NRC's criteria for unrestricted use

4. License termination meets Type IV criteria: Y _____ N __X____

_____ Decommissioning does not qualify for a categorical exclusion under 10 CFR 51.22(c)

_____ Licensee will decommission its facility such that residual radioactive material may remain in excess of NRC's criteria for unrestricted use

5. Termination survey required: Y _____ N __X____

_____ Termination survey submitted by licensee

_____ Termination survey satisfies NRC survey requirements

6. Form 314 or equivalent submitted: Y ___X___ N _____

___X___ Staff verified disposition of sealed sources or unsealed radioactive material by:
____X__ letter from Form 314 recipient **(see attachments to NRC Form 314 dated 4/30/01 and supplemental information submitted via facsimile on 9/18/01)**
_____ call to Form 314 recipient

7. Licensee transfer records discussed in 10 CFR Parts 30.35, 30.36, 30.51; 40.36, 40.42, 40.61; or 70.25, 70.38, 70.51 Y ___X___ N _____

___X___ to USNRC
_____ To individual assuming responsibility for the license, with a copy of the cover letter to NRC

8. NRC closeout inspection required: Y _____ N ___X___

_____ Closeout inspection performed:

on:
Inspector:

9. Closeout survey performed: Y _____ N ___X___

on:
by:

Licensing staff
completing form: Jacqueline D. Cook ***/RA/*** Date: 10/12/01

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
43-01316-09

Docket or Reference Number
030-12715

Amendment No. 12

Department of the Army
Commander, Dugway Proving Ground
Dugway, UT 84022-5000

In accordance with NRC Form 314 dated April 30, 2001, License No. 43-01316-09 is hereby retired.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Date October 12, 2001

By _____

Jacqueline D. Cook, Health Physicist
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011

Attachment F-02

Serial #	Radionuclide	Half-life	Unit	Activity (uCi)	Activity (dpm)
5205-04	Th-230	7.54E+04	yr	0.00513	11388.6
5206-04	Tc-99	2.13E+05	yr	0.00375	8325
544-96	Cs-137	30	yr	1.109	2461980

Attachment F-3
Background Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Sampler Initials	Gross Direct (cpm) 1/	1 Sigma Uncertainty (cpm) 2/	Gross Activity (dpm/100cm2) 3/	1 Sigma Uncertainty (dpm/100cm2) 4/
Building 5326 (Interior Survey Units)								
5326-1	GM 2 Orange	5/4/2005	1419	JRH	52	7.2	6933	961
5326-2	GM 2 Orange	5/4/2005	1424	JRH	70	8.4	9333	1116
5326-3	GM 2 Orange	5/4/2005	1429	JRH	70	8.4	9333	1116
5326-4	GM 2 Orange	5/4/2005	1434	JRH	66	8.1	8800	1083
5326-5	GM 2 Orange	5/4/2005	1439	JRH	62	7.9	8267	1050
5326-6	GM 2 Orange	5/4/2005	1449	JRH	63	7.9	8400	1058
5326-7	GM 2 Orange	5/4/2005	1455	JRH	78	8.8	10400	1178
5326-8	GM 2 Orange	5/4/2005	1504	JRH	67	8.2	8933	1091
5326-9	GM 2 Orange	5/4/2005	1500	JRH	55	7.4	7333	989
5326-10	GM 2 Orange	5/4/2005	1444	JRH	52	7.2	6933	961
5326-11	GM 2 Orange	5/4/2005	1509	JRH	70	8.4	9333	1116
5326-12	GM 2 Orange	5/4/2005	1514	JRH	37	6.1	4933	811
5326-13	GM 2 Orange	5/4/2005	1532	JRH	47	6.9	6267	914
5326-14	GM 2 Orange	5/4/2005	1536	JRH	50	7.1	6667	943
5326-15	GM 2 Orange	5/4/2005	1542	JRH	36	6.0	4800	800
5326-16	GM 2 Orange	5/4/2005	1547	JRH	53	7.3	7067	971
5326-17	GM 2 Orange	5/4/2005	1552	JRH	43	6.6	5733	874
5326-18	GM 2 Orange	5/4/2005	1556	JRH	67	8.2	8933	1091
5326-19	GM 2 Orange	5/4/2005	1527	JRH	52	7.2	6933	961
5326-20	GM 2 Orange	5/4/2005	1524	JRH	51	7.1	6800	952
5326-21	GM 2 Orange	5/5/2005	1646	JRH	67	8.2	8933	1091
5326-22	GM 2 Orange	5/5/2005	1650	JRH	62	7.9	8267	1050
5326-23	GM 2 Orange	5/5/2005	1654	JRH	49	7.0	6533	933
5326-24	GM 2 Orange	5/5/2005	1657	JRH	79	8.9	10533	1185
5326-25	GM 2 Orange	5/5/2005	1700	JRH	85	9.2	11333	1229
Pond Background (Exterior Survey Units)								
Bkgd-A1	GM 2 Orange	5/3/2005	1621	JRH	85	9.2	11333	1229
Bkgd-A2	GM 2 Orange	5/8/2005	833	JRH	93	9.6	12400	1286
Bkgd-A3	GM 2 Orange	5/8/2005	837	JRH	47	6.9	6267	914
Bkgd-A4	GM 2 Orange	5/8/2005	841	JRH	73	8.5	9733	1139
Bkgd-B2	GM 2 Orange	5/3/2005	-- 5/	JRH	91	9.5	12133	1272
Bkgd-B3	GM 2 Orange	5/4/2005	1030	JRH	102	10.1	13600	1347
Bkgd-B4	GM 2 Orange	5/8/2005	850	JRH	100	10.0	13333	1333
Bkgd-B5	GM 2 Orange	5/8/2005	846	JRH	89	9.4	11867	1258
Bkgd-C1	GM 2 Orange	5/8/2005	900	JRH	77	8.8	10267	1170
Bkgd-C3	GM 2 Orange	5/3/2005	1634	JRH	91	9.5	12133	1272
Bkgd-C4	GM 2 Orange	5/4/2005	1023	JRH	82	9.1	10933	1207
Bkgd-C5	GM 2 Orange	5/8/2005	855	JRH	97	9.8	12933	1313
Bkgd-D1	GM 2 Orange	5/8/2005	904	JRH	88	9.4	11733	1251
Bkgd-D2	GM 2 Orange	5/8/2005	905	JRH	75	8.7	10000	1155
Bkgd-D4	GM 2 Orange	5/3/2005	--	JRH	85	9.2	11333	1229
Bkgd-D5	GM 2 Orange	5/4/2005	1015	JRH	88	9.4	11733	1251
Bkgd-E1	GM 2 Orange	5/8/2005	818	JRH	76	8.7	10133	1162
Bkgd-E2	GM 2 Orange	5/8/2005	823	JRH	56	7.5	7467	998
Bkgd-E3	GM 2 Orange	5/8/2005	827	JRH	75	8.7	10000	1155
Bkgd-E5	GM 2 Orange	5/3/2005	--	JRH	88	9.4	11733	1251
Bkgd-T1	GM 2 Orange	5/8/2005	1222	JRH	49	7.0	6533	933
Bkgd-T2	GM 2 Orange	5/8/2005	1223	JRH	68	8.2	9067	1099
Bkgd-T3	GM 2 Orange	5/8/2005	1225	JRH	63	7.9	8400	1058
Bkgd-T4	GM 2 Orange	5/8/2005	1226	JRH	73	8.5	9733	1139
Bkgd-T5	GM 2 Orange	5/8/2005	1227	JRH	59	7.7	7867	1024

1/ cpm = counts per minute. Measurement collected for one minute.
2/ One sigma uncertainty calculated by taking the square root of the measurement in cpm.
3/ dpm/100cm2 = decays per minute per 100 square centimeters. Conversion from cpm to dpm/100cm2 using active probe area and instrument efficiency.
4/ One sigma uncertainty was converted from cpm to dpm/100cm2 using the active probe area and instrument efficiency.

Attachment F-3
Background Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Sampler Initials	Gross Direct (cpm) 1/	1 Sigma Uncertainty (cpm) 2/	Gross Activity (dpm/100cm2) 3/	1 Sigma Uncertainty (dpm/100cm2) 4/

5/ "--" = measurement time not recorded.

Attachment F-4
Smear Sampling Results - May 2005
SWMU-41 Radiological Survey
Dugway Proving Ground, Utah

No.	Sample	Collection Date	Collection Time	Measurement Date	Measurement Time	Meter ID	Alpha (counts)	Beta (counts)	Count Time (min)	Alpha Count Rate (cpm) 1/	Gross Alpha Count Rate (dpm) 2/	Beta Count Rate (cpm)	Gross Beta Count Rate (dpm)	Net Alpha (dpm)	Net Beta (dpm)	Alpha Screening Level (dpm/100cm2)	Beta Screening Level (dpm/100cm2)
	Background			5/18/2005	852	193695/202583	0	370	5	0	0.000	74	516.7				
	Th-230 check			5/18/2005	858	193695/202583	4240	836	1	4240	11676.8	836	5837.6				
	Tc-99 check			5/18/2005	902	193695/202583	15	2400	1	15	165.2	2400	8379.4				
5/4/05 #1	5326 Boiler Room	5/4/2005	1610	5/18/2005	908	193695/202583	1	383	5	0.2	2.2	76.6	534.9	2.2 *	13.6 *	1000	1000
5/4/05 #5	5326 Boiler Room	5/4/2005	1610	5/18/2005	915	193695/202583	1	326	5	0.2	2.2	65.2	455.3	2.2 *	-66.0 *	1000	1000
5/4/05 #7	5326 Boiler Room	5/4/2005	1610	5/18/2005	922	193695/202583	0	389	5	0	0	77.8	543.3	0.0 *	22.0 *	1000	1000
5/4/05 #11	5326 Boiler Room	5/4/2005	1610	5/18/2005	928	193695/202583	0	373	5	0	0	74.6	520.9	0.0 *	-0.3 *	1000	1000
5/4/05 #18	5326 Boiler Room	5/4/2005	1610	5/18/2005	936	193695/202583	0	358	5	0	0	71.6	500.0	0.0 *	-21.3 *	1000	1000
5/5/05 #18	Tunnel	5/5/2005	1548	5/18/2005	957	193695/202583	17	474	5	3.4	37.5	94.8	662.0	37.5	140.7	1000	1000
5/5/05 #19	Tunnel	5/5/2005	1548	5/18/2005	1004	193695/202583	8	418	5	1.6	17.6	83.6	583.8	17.6	62.5 *	1000	1000
5/5/05 #20	Tunnel	5/5/2005	1548	5/18/2005	1012	193695/202583	3	419	5	0.6	6.6	83.8	585.2	6.6	63.9 *	1000	1000
5/5/05 #21	Tunnel	5/5/2005	1548	5/18/2005	1019	193695/202583	3	395	5	0.6	6.6	79	551.6	6.6	30.4 *	1000	1000
Pipe #4	Bldg. 1002	5/6/2005	1750	5/18/2005	1033	193695/202583	2	384	5	0.4	4.4	76.8	536.3	4.4 *	15.0 *	1000	1000
F-E9	Bldg. 1002	5/6/2005	1746	5/18/2005	1046	193695/202583	1	425	5	0.2	2.2	85	593.5	2.2 *	72.3 *	1000	1000
F-I6	Bldg. 1002	5/6/2005	1744	5/18/2005	1052	193695/202583	2	427	5	0.4	4.4	85.4	596.3	4.4 *	75.1 *	1000	1000
S-I1	Bldg. 1002	5/6/2005	1748	5/18/2005	1059	193695/202583	9	365	5	1.8	19.8	73	509.7	19.8	-11.5 *	1000	1000
S-I1 (2)	Bldg. 1002	5/6/2005	1748	5/18/2005	1104	193695/202583	10	394	5	2	22.0	78.8	550.2	22.0	29.0 *	1000	1000
5/5/05 #18 (2)	Tunnel	5/5/2005	1548	5/18/2005	1115	193695/202583	24	484	5	4.8	52.9	96.8	675.9	52.9	154.7	1000	1000
	Background			5/18/2005	1122	193695/202583	0	753	10	0	0.000	75.3	525.8				
	Background w/ planchet			5/18/2005	1142	193695/202583	1	714	10	0.1	1.102	71.4	498.6				
	Th-230 check			5/18/2005	1229	193695/202583	4039	762	1	4039	44492.910	762	2660.4				
	Tc-99 check			5/18/2005	1231	193695/202583	13	2366	1	13	143.206	2366	8260.6				

Instrument Used: Ludlum 43-10-1 Phoswich Smear Counter (PR202583) with Ludlum 2360 Scaler (193695); Calibration due date:23-Mar-06

* = below detection limit (MDA)
Shaded results are considered to have detectable activity

Pre-measurement Instrument Check

	Alpha Count Rate (cpm)	Beta Count Rate (cpm)
Bkgd	0	74
Th-230	4240	836
Tc-99	15	2400

Post-measurement Instrument Check

	Alpha Count Rate (cpm)	Beta Count Rate (cpm)
Bkgd	0	75.3
Th-230	4039	762
Tc-99	13	2366

Instrument Efficiency Determination

	Alpha	Beta			
			Th-230 Source	11,400 dpm	
Pre-check	0.372	0.288	Tc-99 Source	8,320 dpm	
Post-check	0.354	0.284			
				Alpha	Beta
			Average Efficiency	0.363	0.286

Th-230 source: DNS-11 (5205-04, 11,400 dpm, 3/3/04)
Tc-99 source: DNS-12 (5206-04, 8,320 dpm, 3/2/04)

Screening Levels
From NRC 1.86: alpha removable for natural uranium
From NRC 1.86: beta removable for beta-gamma emitters
From NUREG-1757,Vol.2: 720 dpm/100cm2 removable for Co-60

Notes:
1/ cpm = counts per minute
2/ dpm = decays per minute

MDA Calculation (Based on Abelquist, 2001)

$$MDA = \frac{3 + 3.29\sqrt{R_B T_{S+B}\left(1 + \frac{T_{S+B}}{T_B}\right)}}{K T_{S+B}}$$

Alpha measurements

R_B	0	Background Count Rate (cpm)
T_B	10	Background Count Time
T_{S+B}	5	Sample Count Time
K	0.0908	Constant accounting for instrument efficiency and source efficiency
e_i	0.363	instrument efficiency (ability of detector to detect known quantity of radioactivity)
e_s	0.25	source efficiency (ability of source to transmit radiation to be detected by detector)
MDA	**6.6**	**dpm**

Beta Measurements

R_B	74.65	Background Count Rate (cpm)
T_B	10	Background Count Time
T_{S+B}	5	Sample Count Time
K	0.1432	Constant accounting for instrument efficiency and source efficiency
e_i	0.286	instrument efficiency
e_s	0.5	source efficiency
MDA	**112.9**	**dpm**

Attachment F-5
Building 1002 Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	Net Direct (cpm) 2/	1 Sigma Uncertainty (cpm) 3/	Gross Activity (dpm/100cm2) 4/	Net Activity (dpm/100cm2)	1 Sigma Uncertainty (dpm/100cm2) 5/
F-A2	GM 2 Orange	5/6/2005	1717	58	-1.3	14.9	7733	-173	1986
F-A4	GM 2 Orange	5/6/2005	1728	63	3.7	15.1	8400	493	2008
F-A6	GM 2 Orange	5/6/2005	1732	53	-6.3	14.7	7067	-840	1963
F-A9	GM 2 Orange	5/6/2005	835	58	-1.3	14.9	7733	-173	1986
F-B1	GM 2 Orange	5/6/2005	1659	60	0.7	15.0	8000	93	1995
F-B3	GM 2 Orange	5/6/2005	1704	67	7.7	15.2	8933	1027	2026
F-B5	GM 2 Orange	5/6/2005	1707	75	15.7	15.5	10000	2093	2061
F-B8	GM 2 Orange	5/6/2005	943	76	16.7	15.5	10133	2227	2065
F-C2	GM 2 Orange	5/6/2005	1643	63	3.7	15.1	8400	493	2008
F-C3	GM 2 Orange	5/7/2005	848	81	21.7	15.6	10800	2893	2086
F-C4	GM 2 Orange	5/6/2005	1647	77	17.7	15.5	10267	2360	2069
F-C6	GM 2 Orange	5/6/2005	1650	75	15.7	15.5	10000	2093	2061
F-C7	GM 2 Orange	5/6/2005	949	72	12.7	15.4	9600	1693	2048
F-C9	GM 2 Orange	5/6/2005	936	75	15.7	15.5	10000	2093	2061
F-D1	GM 2 Orange	5/6/2005	1620	69	9.7	15.3	9200	1293	2035
F-D3	GM 2 Orange	5/6/2005	1625	87	27.7	15.8	11600	3693	2112
F-D5	GM 2 Orange	5/6/2005	1629	70	10.7	15.3	9333	1427	2039
F-D8	GM 2 Orange	5/6/2005	930	96	36.7	16.1	12800	4893	2149
F-E2	GM 2 Orange	5/6/2005	1531	77	17.7	15.5	10267	2360	2069
F-E4	GM 2 Orange	5/6/2005	1536	51	-8.3	14.7	6800	-1107	1954
F-E6	GM 2 Orange	5/6/2005	1541	65	5.7	15.1	8667	760	2017
F-E7	GM 2 Orange	5/6/2005	955	68	8.7	15.2	9067	1160	2030
F-E9	GM 2 Orange	5/6/2005	924	64	4.7	15.1	8533	627	2013
F-F1	GM 2 Orange	5/6/2005	1504	73	13.7	15.4	9733	1827	2052
F-F3	GM 2 Orange	5/6/2005	1508	82	22.7	15.7	10933	3027	2091
F-F5	GM 2 Orange	5/6/2005	1512	76	16.7	15.5	10133	2227	2065
F-F8	GM 2 Orange	5/6/2005	1001	72	12.7	15.4	9600	1693	2048
F-G2	GM 2 Orange	5/6/2005	1424	72	12.7	15.4	9600	1693	2048
F-G4	GM 2 Orange	5/6/2005	1350	61	1.7	15.0	8133	227	1999

Attachment F-5
Building 1002 Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	Net Direct (cpm) 2/	1 Sigma Uncertainty (cpm) 3/	Gross Activity (dpm/100cm2) 4/	Net Activity (dpm/100cm2)	1 Sigma Uncertainty (dpm/100cm2) 5/
F-G6	GM 2 Orange	5/6/2005	1410	87	27.7	15.8	11600	3693	2112
F-G7	GM 2 Orange	5/6/2005	1007	75	15.7	15.5	10000	2093	2061
F-G9	GM 2 Orange	5/6/2005	1013	73	13.7	15.4	9733	1827	2052
F-H4	GM 2 Orange	5/6/2005	1202	76	16.7	15.5	10133	2227	2065
F-H6	GM 2 Orange	5/6/2005	1154	87	27.7	15.8	11600	3693	2112
F-H7	GM 2 Orange	5/6/2005	1050	60	0.7	15.0	8000	93	1995
F-H8	GM 2 Orange	5/6/2005	1045	62	2.7	15.0	8267	360	2004
F-I5	GM 2 Orange	5/6/2005	1159	88	28.7	15.9	11733	3827	2116
F-I6	GM 2 Orange	5/6/2005	1418	72	12.7	15.4	9600	1693	2048
F-I7	GM 2 Orange	5/6/2005	1114	60	0.7	15.0	8000	93	1995
F-I9	GM 2 Orange	5/6/2005	1102	56	-3.3	14.8	7467	-440	1977
W-A1	GM 2 Orange	5/6/2005	831	47	-12.3	14.5	6267	-1640	1936
W-B2	GM 2 Orange	5/6/2005	815	60	0.7	15.0	8000	93	1995
W-C1	GM 2 Orange	5/6/2005	826	58	-1.3	14.9	7733	-173	1986
W-C3	GM 2 Orange	5/6/2005	821	66	6.7	15.2	8800	893	2021
W-D2	GM 2 Orange	5/6/2005	1735	51	-8.3	14.7	6800	-1107	1954
W-E1	GM 2 Orange	5/6/2005	1754	60	0.7	15.0	8000	93	1995
W-F2	GM 2 Orange	5/6/2005	1744	47	-12.3	14.5	6267	-1640	1936
W-F3	GM 2 Orange	5/6/2005	1748	47	-12.3	14.5	6267	-1640	1936
W-G1	GM 2 Orange	5/6/2005	1739	67	7.7	15.2	8933	1027	2026
W-G2	GM 2 Orange	5/7/2005	842	56	-3.3	14.8	7467	-440	1977
W-H2	GM 2 Orange	5/6/2005	1725	65	5.7	15.1	8667	760	2017
W-I1	GM 2 Orange	5/6/2005	1721	55	-4.3	14.8	7333	-573	1972
S-A1	GM 2 Orange	5/6/2005	1058	60	0.7	15.0	8000	93	1995
S-A3	GM 2 Orange	5/6/2005	1108	81	21.7	15.6	10800	2893	2086
S-B2	GM 2 Orange	5/6/2005	1023	59	-0.3	14.9	7867	-40	1990
S-C1	GM 2 Orange	5/6/2005	1018	70	10.7	15.3	9333	1427	2039
S-D2	GM 2 Orange	5/6/2005	917	66	6.7	15.2	8800	893	2021
S-E1	GM 2 Orange	5/6/2005	912	52	-7.3	14.7	6933	-973	1959

Attachment F-5
Building 1002 Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	Net Direct (cpm) 2/	1 Sigma Uncertainty (cpm) 3/	Gross Activity (dpm/100cm2) 4/	Net Activity (dpm/100cm2)	1 Sigma Uncertainty (dpm/100cm2) 5/
S-F2	GM 2 Orange	5/6/2005	907	55	-4.3	14.8	7333	-573	1972
S-G1	GM 2 Orange	5/6/2005	856	54	-5.3	14.8	7200	-707	1968
S-G2	GM 2 Orange	5/6/2005	848	53	-6.3	14.7	7067	-840	1963
S-G3	GM 2 Orange	5/6/2005	900	63	3.7	15.1	8400	493	2008
S-H2	GM 2 Orange	5/6/2005	844	57	-2.3	14.9	7600	-307	1981
S-I1	GM 2 Orange	5/6/2005	839	60	0.7	15.0	8000	93	1995
N-A1	GM 2 Orange	5/6/2005	1712	69	9.7	15.3	9200	1293	2035
N-B2	GM 2 Orange	5/6/2005	1655	50	-9.3	14.6	6667	-1240	1950
N-C1	GM 2 Orange	5/6/2005	1634	39	-20.3	14.2	5200	-2707	1899
N-C3	GM 2 Orange	5/6/2005	1639	61	1.7	15.0	8133	227	1999
N-D2	GM 2 Orange	5/6/2005	1616	58	-1.3	14.9	7733	-173	1986
N-E1	GM 2 Orange	5/6/2005	1551	58	-1.3	14.9	7733	-173	1986
N-E3	GM 2 Orange	5/6/2005	1545	63	3.7	15.1	8400	493	2008
N-F2	GM 2 Orange	5/6/2005	1438	67	7.7	15.2	8933	1027	2026
N-G1	GM 2 Orange	5/6/2005	1433	66	6.7	15.2	8800	893	2021
E-C2	GM 2 Orange	5/6/2005	1405	72	12.7	15.4	9600	1693	2048
E-D2	GM 2 Orange	5/6/2005	1355	79	19.7	15.6	10533	2627	2078
E-D3	GM 2 Orange	5/6/2005	1400	76	16.7	15.5	10133	2227	2065
E-E1	GM 2 Orange	5/6/2005	1147	64	4.7	15.1	8533	627	2013
E-F2	GM 2 Orange	5/6/2005	1141	58	-1.3	14.9	7733	-173	1986
E-G1	GM 2 Orange	5/6/2005	1135	65	5.7	15.1	8667	760	2017
E-H2	GM 2 Orange	5/6/2005	1129	51	-8.3	14.7	6800	-1107	1954
E-I1	GM 2 Orange	5/6/2005	1119	64	4.7	15.1	8533	627	2013
E-I3	GM 2 Orange	5/6/2005	1124	50	-9.3	14.6	6667	-1240	1950
Pipe 1	GM 2 Orange	5/6/2005	1456	54	-5.3	14.8	7200	-707	1968
Pipe 2	GM 2 Orange	5/6/2005	1450	60	0.7	15.0	8000	93	1995
Pipe 3	GM 2 Orange	5/6/2005	1519	56	-3.3	14.8	7467	-440	1977
Pipe 4	GM 2 Orange	5/6/2005	1759	56	-3.3	14.8	7467	-440	1977
Pipe 5	GM 2 Orange	5/6/2005	1526	62	2.7	15.0	8267	360	2004

Attachment F-5
Building 1002 Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	Net Direct (cpm) 2/	1 Sigma Uncertainty (cpm) 3/	Gross Activity (dpm/100cm2) 4/	Net Activity (dpm/100cm2)	1 Sigma Uncertainty (dpm/100cm2) 5/
Stairs 1	GM 2 Orange	5/6/2005	1804	72	12.7	15.4	9600	1693	2048
Tank 1	GM 2 Orange	5/7/2005	834	63	3.7	15.1	8400	493	2008

1/ cpm = counts per minute.
2/ Net measurement calculated by subtracting average background measurement from Building 5326 for that instrument.
3/ One sigma uncertainty of net measurement calculated per MARSSIM Section 6.
4/ dpm/100cm2 = decays per minute per 100 square centimeters. Conversion from cpm to dpm/100cm2 using active probe area and instrument efficiency.
5/ One sigma uncertainty of net surface activity propagated using Abelquist, 2001, Chapter 15.

Attachment F-06 Building 1002 GM Pancake Data

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

DCGLw = 7100 dpm/100cm2

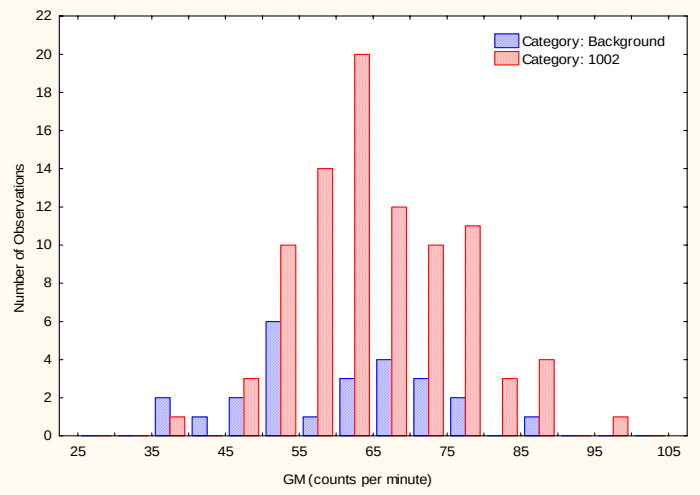
DATA	AREA	ADJUSTED DATA	RANKS	REFERENCE AREA RANKS
6933	R	14033	98	98
9333	R	16433	110	110
9333	R	16433	110	110
8800	R	15900	105	105
8267	R	15367	102.5	102.5
8400	R	15500	104	104
10400	R	17500	112	112
8933	R	16033	107	107
7333	R	14433	101	101
6933	R	14033	98	98
9333	R	16433	110	110
4933	R	12033	90	90
6267	R	13367	93	93
6667	R	13767	95	95
4800	R	11900	89	89
7067	R	14167	100	100
5733	R	12833	92	92
8933	R	16033	107	107
6933	R	14033	98	98
6800	R	13900	96	96
8933	R	16033	107	107
8267	R	15367	102.5	102.5
6533	R	13633	94	94
10533	R	17633	113	113
11333	R	18433	114	114
7733	S	7733	24.5	0
8400	S	8400	43	0
7067	S	7067	11.5	0
7733	S	7733	24.5	0
8000	S	8000	32.5	0
8933	S	8933	56	0
10000	S	10000	72.5	0
10133	S	10133	76.5	0
8400	S	8400	43	0
10800	S	10800	82.5	0
10267	S	10267	79.5	0
10000	S	10000	72.5	0
9600	S	9600	65.5	0
10000	S	10000	72.5	0
9200	S	9200	59.5	0
11600	S	11600	86	0
9333	S	9333	61.5	0
12800	S	12800	91	0
10267	S	10267	79.5	0
6800	S	6800	8	0
8667	S	8667	50	0
9067	S	9067	58	0
8533	S	8533	47	0
9733	S	9733	69.5	0
10933	S	10933	84	0
10133	S	10133	76.5	0
9600	S	9600	65.5	0
9600	S	9600	65.5	0
8133	S	8133	37.5	0
11600	S	11600	86	0
10000	S	10000	72.5	0
9733	S	9733	69.5	0
10133	S	10133	76.5	0
11600	S	11600	86	0
8000	S	8000	32.5	0
8267	S	8267	39.5	0
11733	S	11733	88	0
9600	S	9600	65.5	0
8000	S	8000	32.5	0
7467	S	7467	18.5	0
6267	S	6267	3	0
8000	S	8000	32.5	0
7733	S	7733	24.5	0
8800	S	8800	53	0
6800	S	6800	8	0
8000	S	8000	32.5	0
6267	S	6267	3	0
6267	S	6267	3	0
8933	S	8933	56	0
7467	S	7467	18.5	0
8667	S	8667	50	0
7333	S	7333	15.5	0
8000	S	8000	32.5	0
10800	S	10800	82.5	0
7867	S	7867	28	0
9333	S	9333	61.5	0
8800	S	8800	53	0
6933	S	6933	10	0
7333	S	7333	15.5	0
7200	S	7200	13.5	0
7067	S	7067	11.5	0
8400	S	8400	43	0
7600	S	7600	21	0
8000	S	8000	32.5	0
9200	S	9200	59.5	0

WRS test using MARSSIM Scenario A and cobalt-60 screening level

Performed per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	7909
St Dev	1706
Median	8267
Min	4800
Max	11333

Survey Unit Stats	
Count	89
Mean	8650
St Dev	1436
Median	8400
Min	5200
Max	12800



Attachment F-06 ***Building 1002 GM Pancake Data*** ***WRS test using MARSSIM Scenario A and cobalt-60 screening level***

6667	S	6667	5.5	0
5200	S	5200	1	0
8133	S	8133	37.5	0
7733	S	7733	24.5	0
7733	S	7733	24.5	0
8400	S	8400	43	0
8933	S	8933	56	0
8800	S	8800	53	0
9600	S	9600	65.5	0
10533	S	10533	81	0
10133	S	10133	76.5	0
8533	S	8533	47	0
7733	S	7733	24.5	0
8667	S	8667	50	0
6800	S	6800	8	0
8533	S	8533	47	0
6667	S	6667	5.5	0
7200	S	7200	13.5	0
8000	S	8000	32.5	0
7467	S	7467	18.5	0
7467	S	7467	18.5	0
8267	S	8267	39.5	0
9600	S	9600	65.5	0
8400	S	8400	43	0
		Sum =	6555	2548

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

# of R:	25	*m*
# of S:	89	*n*
Avg Rank R:	101.9	
Avg Rank S:	45.0	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario A from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 95% percentile of standard normal distribution = 1.645

k = 1677.7

Since the sum of reference area ranks is greater than the critical value, the null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the $DCGL_W$ is rejected (i.e., survey unit passes). *Scenario A*

Attachment F-06 ***Building 1002 3x3 NaI Data***

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

LBGR 0 counts per minute (cpm)

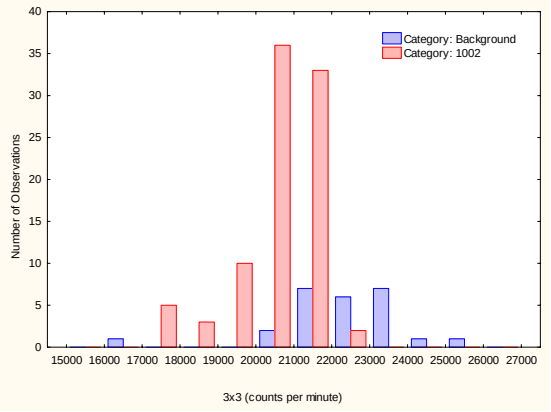
DATA	AREA	ADJUSTED DATA	RANKS	SURVEY AREA RANKS
25280	R	25280	114	0
24034	R	24034	113	0
23819	R	23819	111	0
22876	R	22876	105	0
23064	R	23064	108	0
22471	R	22471	104	0
23941	R	23941	112	0
23300	R	23300	110	0
23093	R	23093	109	0
23021	R	23021	106	0
22060	R	22060	99	0
21325	R	21325	74	0
22079	R	22079	100	0
21776	R	21776	94	0
22006	R	22006	98	0
21418	R	21418	83	0
22314	R	22314	102	0
21216	R	21216	71	0
23060	R	23060	107	0
21749	R	21749	93	0
21033	R	21033	62	0
20396	R	20396	26	0
16414	R	16414	1	0
21415	R	21415	82	0
20738	R	20738	44	0
21978	S	21978	97	97
21032	S	21032	61	61
19936	S	19936	18	18
20856	S	20856	53	53
21687	S	21687	89	89
21808	S	21808	95	95
20773	S	20773	45	45
22343	S	22343	103	103
21689	S	21689	90	90
21103	S	21103	64.5	64.5
20976	S	20976	56	56
20726	S	20726	43	43
20785	S	20785	47	47
20588	S	20588	35	35
21203	S	21203	70	70
21103	S	21103	64.5	64.5
20617	S	20617	38	38
21022	S	21022	60	60
21124	S	21124	68	68
20413	S	20413	27	27
19779	S	19779	14	14
18342	S	18342	7	7
21492	S	21492	85	85
20593	S	20593	36	36
20872	S	20872	54	54
20011	S	20011	20	20
20777	S	20777	46	46
20702	S	20702	41	41
20467	S	20467	29	29
20169	S	20169	23	23
17621	S	17621	5	5
20855	S	20855	52	52
20560	S	20560	32	32
20505	S	20505	30	30
20989	S	20989	57	57
20712	S	20712	42	42
20457	S	20457	28	28
21721	S	21721	92	92
21526	S	21526	87	87
21524	S	21524	86	86
19828	S	19828	15	15
20535	S	20535	31	31
20840	S	20840	50.5	50.5
21317	S	21317	73	73
20884	S	20884	55	55
19887	S	19887	17	17
20585	S	20585	34	34
21241	S	21241	72	72
21345	S	21345	77	77
20664	S	20664	40	40
21332	S	21332	75	75
21710	S	21710	91	91
20816	S	20816	48	48
21392	S	21392	81	81
21391	S	21391	80	80
21062	S	21062	63	63
20613	S	20613	37	37
21105	S	21105	66	66
17268	S	17268	3	3
19875	S	19875	16	16
19571	S	19571	12	12
20346	S	20346	25	25
19664	S	19664	13	13
19947	S	19947	19	19
22136	S	22136	101	101
21114	S	21114	67	67
21368	S	21368	78	78

WRS test using MARSSIM Scenario B and comparison to background

Performed per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	22156
St Dev	1668
Median	22079
Min	16414
Max	25280

Survey Unit Stats	
Count	89
Mean	20576
St Dev	1080
Median	20816
Min	17049
Max	22343



Attachment F-06 ***Building 1002 3x3 NaI Data*** ***WRS test using MARSSIM Scenario B and comparison to background***

21601	S	21601	88	88
20824	S	20824	49	49
17671	S	17671	6	6
21485	S	21485	84	84
20644	S	20644	39	39
20131	S	20131	22	22
21388	S	21388	79	79
20840	S	20840	50.5	50.5
21338	S	21338	76	76
20198	S	20198	24	24
20103	S	20103	21	21
21199	S	21199	69	69
20571	S	20571	33	33
21019	S	21019	59	59
21828	S	21828	96	96
19176	S	19176	11	11
17377	S	17377	4	4
19095	S	19095	10	10
18674	S	18674	8	8
18760	S	18760	9	9
21012	S	21012	58	58
17049	S	17049	2	2
		Sum =	6555	4327

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

		for Scenario B
# of R:	25	*n*
# of S:	89	*m*
Avg Rank R:	173.08	
Avg Rank S:	25.03370787	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario B from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 97.5% percentile of standard normal distribution = 1.960

k = 5403.7

Since the sum of survey unit ranks is less than the critical value, the null hypothesis that the difference between the survey unit median and the background median is less than the LBGR (i.e., the survey unit is indistinguishable from background) is accepted and the survey unit passes. *Scenario B*

Attachment F-7
Building 1004 Direct Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	1 Sigma Uncertainty (cpm) 2/
1004-1	Orange 3x3	5/7/2005	1112	9773	99
1004-2	Orange 3x3	5/7/2005	1113	12004	110
1004-3	Orange 3x3	5/7/2005	1114	12078	110
1004-4	Orange 3x3	5/7/2005	1115	12584	112
1004-5	Orange 3x3	5/7/2005	1116	12992	114
1004-6	Orange 3x3	5/7/2005	1111	9906	100
1004-7	Orange 3x3	5/7/2005	1119	11711	108
1004-8	Orange 3x3	5/7/2005	1120	11643	108
1004-9	Orange 3x3	5/7/2005	1132	14164	119
1004-10	Orange 3x3	5/7/2005	1133	14137	119
1004-11	Orange 3x3	5/7/2005	1134	13896	118
1004-12	Orange 3x3	5/7/2005	1135	14238	119
1004-13	Orange 3x3	5/7/2005	1137	14175	119
1004-14	Orange 3x3	5/7/2005	1138	14165	119
1004-15	Orange 3x3	5/7/2005	1122	12939	114
1004-16	Orange 3x3	5/7/2005	1121	12644	112
1004-17	Orange 3x3	5/7/2005	1126	11957	109
1004-18	Orange 3x3	5/7/2005	1125	12130	110
1004-19	Orange 3x3	5/7/2005	1124	13294	115
1004-20	Orange 3x3	5/7/2005	1127	13534	116

1/ cpm = counts per minute.
2/ One sigma uncertainty calculated by taking the square root of the measurement in cpm.

Attachment F-08 *Building 1004 3x3 NaI Data*

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

LBGR 0 counts per minute (cpm)

DATA	AREA	ADJUSTED DATA	RANKS	SURVEY AREA RANKS
15648	R	15648	45	0
14877	R	14877	44	0
14744	R	14744	42	0
14160	R	14160	32	0
14277	R	14277	39	0
13910	R	13910	30	0
14819	R	14819	43	0
14423	R	14423	41	0
14295	R	14295	40	0
14250	R	14250	37	0
13655	R	13655	26	0
13200	R	13200	18	0
13667	R	13667	27	0
13479	R	13479	23	0
13622	R	13622	25	0
13258	R	13258	20	0
13812	R	13812	28	0
13133	R	13133	17	0
14274	R	14274	38	0
13463	R	13463	22	0
13019	R	13019	16	0
12625	R	12625	11	0
10160	R	10160	3	0
13256	R	13256	19	0
12837	R	12837	13	0
9773	S	9773	1	1
12004	S	12004	7	7
12078	S	12078	8	8
12584	S	12584	10	10
12992	S	12992	15	15
9906	S	9906	2	2
11711	S	11711	5	5
11643	S	11643	4	4
14164	S	14164	33	33
14137	S	14137	31	31
13896	S	13896	29	29
14238	S	14238	36	36
14175	S	14175	35	35
14165	S	14165	34	34
12939	S	12939	14	14
12644	S	12644	12	12
11957	S	11957	6	6
12130	S	12130	9	9
13294	S	13294	21	21
13534	S	13534	24	24
		Sum =	1035	336

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

		for Scenario B
# of R:	25	*n*
# of S:	20	*m*
Avg Rank R:	13.44	
Avg Rank S:	34.95	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario B from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 97.5% percentile of standard normal distribution = 1.960

k = 545.8

Since the sum of survey unit ranks is less than the critical value, the null hypothesis that the difference between the survey unit median and the background median is less than the LBGR (i.e., the survey unit is indistinguishable from background) is accepted and the survey unit passes. *Scenario B*

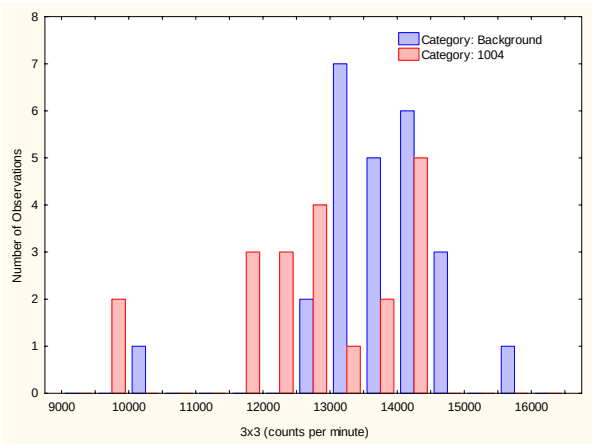
WRS test using MARSSIM Scenario B and comparison to backgroun

Performed per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	13715
St Dev	1033
Median	13667
Min	10160
Max	15648

Survey Unit Stats	
Count	20
Mean	12698
St Dev	1333
Median	12792
Min	9773
Max	14238

Reference/background area data were reduced by 38.1% to account for the longer cable used for Building 1004. Background measurements during the daily function checks (Attachment F-2) were observed to be reduced by an average of 38.1% as a result of the longer cable. The average source measurement was reduced by only 13.3%, so it was decided to conservatively reduce background by the greater amount.



Attachment F-9
Building 1005 Direct Measurements - GM Pancake
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Gross Direct (cpm) 1/	Net Direct (cpm) 2/	1 Sigma Uncertainty (cpm) 3/	Gross Activity (dpm/100cm2) 4/	Net Activity (dpm/100cm2)	1 Sigma Uncertainty (dpm/100cm2) 5/
1005-1	GM 2 Orange	5/7/2005	907	86	26.7	15.8	11466.7	3560	2108
1005-2	GM 2 Orange	5/7/2005	912	73	13.7	15.4	9733.3	1827	2052
1005-3	GM 2 Orange	5/7/2005	917	73	13.7	15.4	9733.3	1827	2052
1005-4	GM 2 Orange	5/7/2005	921	51	-8.3	14.7	6800.0	-1107	1954
1005-5	GM 2 Orange	5/7/2005	926	37	-22.3	14.2	4933.3	-2973	1890
1005-6	GM 2 Orange	5/7/2005	932	63	3.7	15.1	8400.0	493	2008
1005-7	GM 2 Orange	5/7/2005	937	52	-7.3	14.7	6933.3	-973	1959
1005-8	GM 2 Orange	5/7/2005	941	47	-12.3	14.5	6266.7	-1640	1936
1005-9	GM 2 Orange	5/7/2005	945	38	-21.3	14.2	5066.7	-2840	1894
1005-10	GM 2 Orange	5/7/2005	949	71	11.7	15.3	9466.7	1560	2043
1005-11	GM 2 Orange	5/7/2005	907	69	9.7	15.3	9200.0	1293	2035
1005-12	GM 2 Orange	5/7/2005	912	91	31.7	16.0	12133.3	4227	2128
1005-13	GM 2 Orange	5/7/2005	917	82	22.7	15.7	10933.3	3027	2091
1005-14	GM 2 Orange	5/7/2005	921	39	-20.3	14.2	5200.0	-2707	1899
1005-15	GM 2 Orange	5/7/2005	926	38	-21.3	14.2	5066.7	-2840	1894
1005-16	GM 2 Orange	5/7/2005	932	71	11.7	15.3	9466.7	1560	2043
1005-17	GM 2 Orange	5/7/2005	937	42	-17.3	14.3	5600.0	-2307	1913
1005-18	GM 2 Orange	5/7/2005	941	43	-16.3	14.4	5733.3	-2173	1918
1005-19	GM 2 Orange	5/7/2005	945	44	-15.3	14.4	5866.7	-2040	1922
1005-20	GM 2 Orange	5/7/2005	949	92	32.7	16.0	12266.7	4360	2133

1/ cpm = counts per minute.
2/ Net measurement calculated by subtracting average background measurement from Building 5326 for that instrument.
3/ One sigma uncertainty of net measurement calculated per MARSSIM Section 6.
4/ dpm/100cm2 = decays per minute per 100 square centimeters. Conversion from cpm to dpm/100cm2 using active probe area and instrument efficiency.
5/ One sigma uncertainty of net surface activity propagated using Abelquist, 2001, Chapter 15.

Attachment F-10 Building 1005 3x3 NaI Data

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

LBGR 0 counts per minute (cpm)

DATA	AREA	ADJUSTED DATA	RANKS	SURVEY AREA RANKS
25280	R	25280	45	0
24034	R	24034	44	0
23819	R	23819	41	0
22876	R	22876	35	0
23064	R	23064	38	0
22471	R	22471	33	0
23941	R	23941	42	0
23300	R	23300	40	0
23093	R	23093	39	0
23021	R	23021	36	0
22060	R	22060	30	0
21325	R	21325	21	0
22079	R	22079	31	0
21776	R	21776	28	0
22006	R	22006	29	0
21418	R	21418	25	0
22314	R	22314	32	0
21216	R	21216	20	0
23060	R	23060	37	0
21749	R	21749	27	0
21033	R	21033	18	0
20396	R	20396	16	0
16414	R	16414	7	0
21415	R	21415	24	0
20738	R	20738	17	0
21196	S	21196	19	19
21433	S	21433	26	26
17699	S	17699	12	12
17297	S	17297	9	9
16711	S	16711	8	8
18023	S	18023	13	13
15947	S	15947	6	6
14209	S	14209	3	3
13756	S	13756	2	2
22662	S	22662	34	34
21347	S	21347	22	22
21357	S	21357	23	23
18306	S	18306	14	14
17546	S	17546	11	11
17536	S	17536	10	10
18909	S	18909	15	15
15897	S	15897	5	5
14405	S	14405	4	4
13415	S	13415	1	1
23947	S	23947	43	43
		Sum =	1035	280

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

		for Scenario B
# of R:	25	*n*
# of S:	20	*m*
Avg Rank R:	11.2	
Avg Rank S:	37.75	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario B from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 97.5% percentile of standard normal distribution = 1.960

k = 545.8

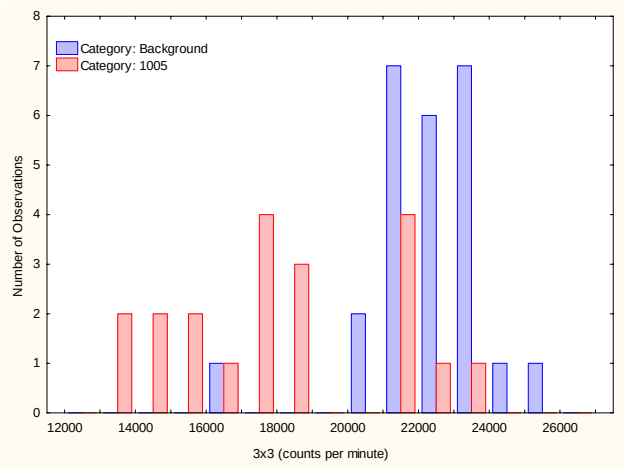
Since the sum of survey unit ranks is less than the critical value, the null hypothesis that the difference between the survey unit median and the background median is less than the LBGR (i.e., the survey unit is indistinguishable from background) is accepted and the survey unit passes. *Scenario B*

WRS test using MARSSIM Scenario B and comparison to backgroun

Per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	22156
St Dev	1668
Median	22079
Min	16414
Max	25280

Survey Unit Stats	
Count	20
Mean	18080
St Dev	3078
Median	17623
Min	13415
Max	23947



Attachment F-11
SWMU-41 Tunnel Scanning Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Minimum (cpm) 1/	Maximum (cpm)
TNL-1	Orange 3x3	5/5/2005	1105	-- 2/	--
TNL-2	Orange 3x3	5/5/2005	1107	20000	22000
TNL-3	Orange 3x3	5/5/2005	1111	19700	22200
TNL-4	Orange 3x3	5/5/2005	1115	19700	22400
TNL-5	Orange 3x3	5/5/2005	1121	--	--
TNL-6	Orange 3x3	5/5/2005	1125	19600	21400
TNL-7	Orange 3x3	5/5/2005	1128	13500	19100
TNL-8	Orange 3x3	5/5/2005	1134	14900	17900
TNL-9	Orange 3x3	5/5/2005	1137	18300	21000
TNL-10	Orange 3x3	5/5/2005	1140	--	--
TNL-11	Orange 3x3	5/5/2005	1143	--	--
TNL-12	Orange 3x3	5/5/2005	1148	18700	21700
TNL-13	Orange 3x3	5/5/2005	1154	19600	22100
TNL-14	Orange 3x3	5/5/2005	1200	16600	19300
TNL-15	Orange 3x3	5/5/2005	1204	15400	18700
TNL-16	Orange 3x3	5/5/2005	1211	19900	22500
TNL-17	Orange 3x3	5/5/2005	1216	17900	20300
TNL-18	Orange 3x3	5/5/2005	1221	18400	20300
TNL-19	Orange 3x3	5/5/2005	1224	17100	20700
TNL-20	Orange 3x3	5/5/2005	1226	20300	22600
TNL-21	Orange 3x3	5/5/2005	1227	--	--

1/ cpm = counts per minute.
2/ "--" = scanning measurements not taken at this location.

Attachment F-12 SWMU-41 Tunnel 3x3 NaI Data

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

LBGR 0 cpm (cpunts per minute)

DATA	AREA	ADJUSTED DATA	RANKS	SURVEY AREA RANKS
25280	R	25280	46	0
24034	R	24034	45	0
23819	R	23819	43	0
22876	R	22876	37	0
23064	R	23064	40	0
22471	R	22471	36	0
23941	R	23941	44	0
23300	R	23300	42	0
23093	R	23093	41	0
23021	R	23021	38	0
22060	R	22060	32	0
21325	R	21325	22	0
22079	R	22079	33	0
21776	R	21776	29	0
22006	R	22006	30	0
21418	R	21418	25	0
22314	R	22314	35	0
21216	R	21216	21	0
23060	R	23060	39	0
21749	R	21749	28	0
21033	R	21033	18	0
20396	R	20396	14	0
16414	R	16414	1	0
21415	R	21415	24	0
20738	R	20738	17	0
22304	S	22304	34	34
21105	S	21105	20	20
21652	S	21652	26	26
21080	S	21080	19	19
20239	S	20239	12	12
20380	S	20380	13	13
18171	S	18171	5	5
17019	S	17019	3	3
18769	S	18769	8	8
18623	S	18623	7	7
20639	S	20639	16	16
20158	S	20158	11	11
20482	S	20482	15	15
17983	S	17983	4	4
16981	S	16981	2	2
21335	S	21335	23	23
19118	S	19118	9	9
19282	S	19282	10	10
18444	S	18444	6	6
21688	S	21688	27	27
22040	S	22040	31	31
		Sum =	1081	301

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

		for Scenario B
# of R:	25	*n*
# of S:	21	*m*
Avg Rank R:	12.04	
Avg Rank S:	37.14285714	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario B from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 97.5% percentile of standard normal distribution = 1.960

k = 582.4

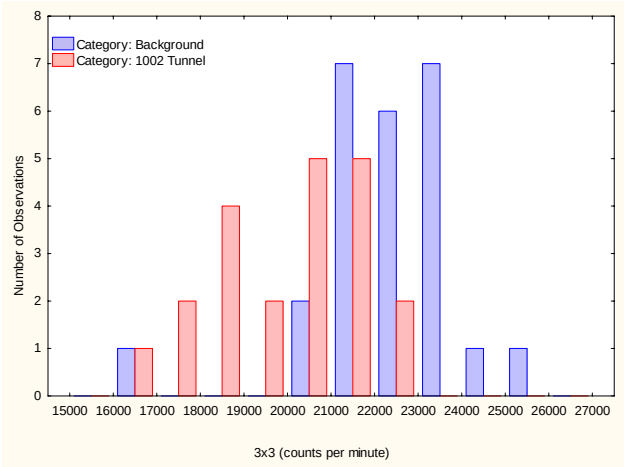
Since the sum of survey unit ranks is less than the critical value, the null hypothesis that the difference between the survey unit median and the background median is less than the LBGR (i.e., the survey unit is indistinguishable from background) is accepted and the survey unit passes. *Scenario B*

WRS test using MARSSIM Scenario B and comparison to bac

Performed per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	22156
St Dev	1668
Median	22079
Min	16414
Max	25280

Survey Unit Stats	
Count	21
Mean	19881
St Dev	1617
Median	20239
Min	16981
Max	22304



Attachment F-13
SWMU-41 Pond Scanning Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Minimum (cpm) 1/	Maximum (cpm)
A02	Orange 3x3	5/8/2005	1440	20000	24400
A04	Orange 3x3	5/8/2005	1434	19400	23000
A06	Orange 3x3	5/8/2005	1427	18300	22600
A08	Orange 3x3	5/8/2005	1420	19000	23300
A10	Orange 3x3	5/8/2005	1414	19500	23200
A12	Orange 3x3	5/8/2005	1409	20200	23000
A14	Orange 3x3	5/8/2005	1400	20900	25700
B01	Orange 3x3	5/8/2005	1131	17500	23600
B03	Orange 3x3	5/8/2005	1139	18700	23400
B05	Orange 3x3	5/8/2005	1149	18900	22700
B07	Orange 3x3	5/8/2005	1334	19900	22900
B09	Orange 3x3	5/8/2005	1341	20500	23100
B11	Orange 3x3	5/8/2005	1348	20700	24000
B13	Orange 3x3	5/8/2005	1353	20400	24500
C02	Orange 3x3	5/8/2005	1121	17700	23800
C04	Orange 3x3	5/8/2005	1113	19000	24800
C06	Orange 3x3	5/8/2005	1106	17400	20600
C08	Orange 3x3	5/8/2005	1100	17900	21500
C10	Orange 3x3	5/8/2005	1052	18100	21800
C12	Orange 3x3	5/8/2005	1048	18800	22300
C14	Orange 3x3	5/8/2005	1038	17500	22200
D01	Orange 3x3	5/8/2005	954	17300	20600
D03	Orange 3x3	5/8/2005	959	19400	22300
D05	Orange 3x3	5/8/2005	1006	17700	21500
D07	Orange 3x3	5/8/2005	1012	17000	20600
D09	Orange 3x3	5/8/2005	1018	17800	20400
D11	Orange 3x3	5/8/2005	1025	18600	20900
D13	Orange 3x3	5/8/2005	1031	17600	21900
E02	Orange 3x3	5/8/2005	946	17300	23000
E04	Orange 3x3	5/8/2005	939	22300	27400
E06	Orange 3x3	5/8/2005	933	18600	21600
E08	Orange 3x3	5/8/2005	926	18100	20900
E10	Orange 3x3	5/7/2005	1735	17400	20700
E12	Orange 3x3	5/7/2005	1729	18400	20800
E14	Orange 3x3	5/7/2005	1722	18800	22800
F01	Orange 3x3	5/7/2005	1637	17800	20500
F03	Orange 3x3	5/7/2005	1642	18900	26700
F05	Orange 3x3	5/7/2005	1647	22100	25300
F07	Orange 3x3	5/7/2005	1658	18600	23900
F09	Orange 3x3	5/7/2005	1704	17200	20900
F11	Orange 3x3	5/7/2005	1709	18600	24200
F13	Orange 3x3	5/7/2005	1715	18500	27500
G02	Orange 3x3	5/7/2005	1630	19000	23900
G04	Orange 3x3	5/7/2005	1625	21700	25300

Attachment F-13
SWMU-41 Pond Scanning Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Minimum (cpm) [1/]	Maximum (cpm)
G06	Orange 3x3	5/7/2005	1618	20300	26700
G08	Orange 3x3	5/7/2005	1611	17700	20500
G10	Orange 3x3	5/7/2005	1606	18300	21400
G12	Orange 3x3	5/7/2005	1601	18900	22600
G14	Orange 3x3	5/7/2005	1555	18500	22500
H01	Orange 3x3	5/7/2005	1445	17900	21500
H03	Orange 3x3	5/7/2005	1451	19000	28500
H05	Orange 3x3	5/7/2005	1526	21000	25700
H07	Orange 3x3	5/7/2005	1533	18600	21500
H09	Orange 3x3	5/7/2005	1538	18700	21000
H11	Orange 3x3	5/7/2005	1542	19300	22300
H13	Orange 3x3	5/7/2005	1548	18400	24200
I02	Orange 3x3	5/7/2005	1432	20300	26200
I04	Orange 3x3	5/7/2005	1419	22900	28500
I06	Orange 3x3	5/7/2005	1413	18600	21600
I08	Orange 3x3	5/7/2005	1408	18100	20700
I10	Orange 3x3	5/7/2005	1403	17600	21100
I12	Orange 3x3	5/7/2005	1357	19500	22200
I14	Orange 3x3	5/7/2005	1350	19300	22200
J01	Orange 3x3	5/4/2005	1708	18500	21200
J03	Orange 3x3	5/7/2005	1319	24400	35600
J04	Orange 3x3	5/7/2005	1426	22100	37200
J05	Orange 3x3	5/7/2005	1323	19100	25500
J06	Orange 3x3	5/7/2005	1326	18900	22100
J09	Orange 3x3	5/7/2005	1333	18100	21700
J11	Orange 3x3	5/7/2005	1339	18100	20600
J13	Orange 3x3	5/7/2005	1344	19400	22900
K02	Orange 3x3	5/4/2005	1701	20000	29700
K04	Orange 3x3	5/4/2005	1654	25100	36400
K06	Orange 3x3	5/4/2005	957	19100	22500
K09	Orange 3x3	5/4/2005	949	18800	22300
K10	Orange 3x3	5/4/2005	941	18700	21900
K12	Orange 3x3	5/4/2005	934	19400	22800
K14	Orange 3x3	5/4/2005	925	19800	23400
L01	Orange 3x3	5/4/2005	822	19100	21900
L03	Orange 3x3	5/4/2005	827	19700	27400
L05	Orange 3x3	5/4/2005	838	18400	25600
L07	Orange 3x3	5/4/2005	849	18700	22600
L09	Orange 3x3	5/4/2005	855	18000	22800
L11	Orange 3x3	5/4/2005	907	18800	23600
L13	Orange 3x3	5/4/2005	916	19300	23500
M02	Orange 3x3	5/3/2005	-- [2/]	19400	23300
M04	Orange 3x3	5/3/2005	--	18000	21700
M06	Orange 3x3	5/3/2005	--	17600	21800

Attachment F-13
SWMU-41 Pond Scanning Measurements - 3x3 NaI
SWMU-41 Radiological Survey
Dugway Proving Ground, UT

Survey Grid	Meter ID	Date	Time	Minimum (cpm) 1/	Maximum (cpm)
M08	Orange 3x3	5/3/2005	--	17100	20800
M10	Orange 3x3	5/3/2005	--	17400	21200
M12	Orange 3x3	5/3/2005	--	18300	23000
M14	Orange 3x3	5/3/2005	--	17300	23000
N01	Orange 3x3	5/3/2005	--	17900	21400
N03	Orange 3x3	5/3/2005	--	19300	23600
N05	Orange 3x3	5/3/2005	--	17200	22000
N07	Orange 3x3	5/3/2005	--	17500	22200
N09	Orange 3x3	5/3/2005	--	17600	23200
N11	Orange 3x3	5/3/2005	--	17400	22400
N13	Orange 3x3	5/3/2005	--	17500	21900
South Perimeter	Orange 3x3	5/8/2005	1526	21900	25400
West Perimeter	Orange 3x3	5/8/2005	1543	21210	26500
North Perimeter	Orange 3x3	5/8/2005	1458	22100	26100
East Perimeter	Orange 3x3	5/8/2005	1510	21900	26300

1/ cpm = counts per minute.
2/ "--" = measurement time not recorded.

Attachment F-14 SWMU-41 Pond GM Pancake Data

Spreadsheet Formulas for the Wilcoxon Rank Sum Test*

DCGLw = 7100 dpm/100cm2

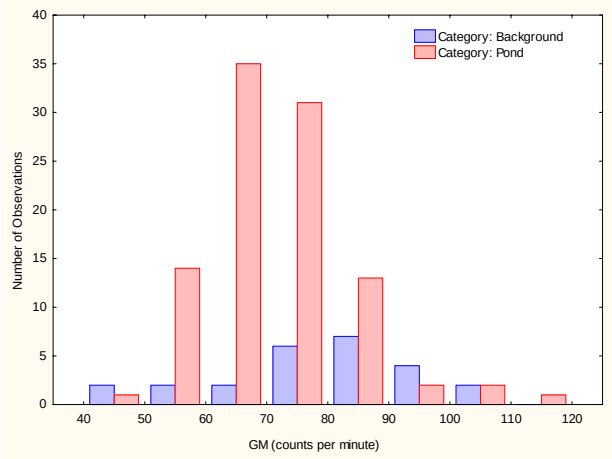
DATA	AREA	ADJUSTED DATA	RANKS	REFERENCE AREA RANKS
11333	R	18433	113.5	113.5
12400	R	19500	121	121
6267	R	13367	97	97
9733	R	16833	106.5	106.5
12133	R	19233	119.5	119.5
13600	R	20700	124	124
13333	R	20433	123	123
11867	R	18967	118	118
10267	R	17367	111	111
12133	R	19233	119.5	119.5
10933	R	18033	112	112
12933	R	20033	122	122
11733	R	18833	116	116
10000	R	17100	108.5	108.5
11333	R	18433	113.5	113.5
11733	R	18833	116	116
10133	R	17233	110	110
7467	R	14567	101	101
10000	R	17100	108.5	108.5
11733	R	18833	116	116
6533	R	13633	100	100
9067	R	16167	105	105
8400	R	15500	104	104
9733	R	16833	106.5	106.5
7867	R	14967	103	103
11867	S	11867	94	0
9600	S	9600	58.5	0
7333	S	7333	7.5	0
8400	S	8400	24.5	0
9600	S	9600	58.5	0
9467	S	9467	55	0
13600	S	13600	98.5	0
8133	S	8133	17	0
8267	S	8267	20.5	0
8933	S	8933	41	0
9600	S	9600	58.5	0
10000	S	10000	70	0
9867	S	9867	66.5	0
11467	S	11467	92	0
9867	S	9867	66.5	0
11333	S	11333	90.5	0
12133	S	12133	95.5	0
10133	S	10133	73	0
8267	S	8267	20.5	0
9067	S	9067	45.5	0
10933	S	10933	84	0
10267	S	10267	76	0
8800	S	8800	35	0
11333	S	11333	90.5	0
11600	S	11600	93	0
8667	S	8667	30.5	0
8800	S	8800	35	0
7600	S	7600	10	0
8400	S	8400	24.5	0
8533	S	8533	28	0
8933	S	8933	41	0
8800	S	8800	35	0
11067	S	11067	86.5	0
7600	S	7600	10	0
7067	S	7067	5	0
7867	S	7867	13.5	0
6933	S	6933	3	0
10133	S	10133	73	0
8267	S	8267	20.5	0
7867	S	7867	13.5	0
9600	S	9600	58.5	0
9733	S	9733	63	0
8133	S	8133	17	0
8400	S	8400	24.5	0
10267	S	10267	76	0
7867	S	7867	13.5	0
11200	S	11200	89	0
9200	S	9200	49	0
9867	S	9867	66.5	0
10400	S	10400	79	0
12133	S	12133	95.5	0
11067	S	11067	86.5	0
6933	S	6933	3	0
14800	S	14800	102	0
10667	S	10667	82.5	0
8667	S	8667	30.5	0
11067	S	11067	86.5	0

WRS test using MARSSIM Scenario A and cobalt-60 screening I

Per MARSSIM, Appendix I

Reference Area Stats	
Count	25
Mean	10507
St Dev	2027
Median	10933
Min	6267
Max	13600

Survey Unit Stats	
Count	99
Mean	9417
St Dev	1493
Median	9200
Min	6533
Max	14800



Attachment F-14 ***SWMU-41 Pond GM Pancake Data*** ***WRS test using MARSSIM Scenario A and cobalt-60 screening l***

10400	S	10400	79	0
9600	S	9600	58.5	0
9733	S	9733	63	0
9200	S	9200	49	0
8400	S	8400	24.5	0
8267	S	8267	20.5	0
8800	S	8800	35	0
9600	S	9600	58.5	0
13600	S	13600	98.5	0
10000	S	10000	70	0
8800	S	8800	35	0
10267	S	10267	76	0
9333	S	9333	52.5	0
9333	S	9333	52.5	0
8933	S	8933	41	0
9067	S	9067	45.5	0
9333	S	9333	52.5	0
11067	S	11067	86.5	0
9067	S	9067	45.5	0
10533	S	10533	81	0
8533	S	8533	28	0
10000	S	10000	70	0
8800	S	8800	35	0
9733	S	9733	63	0
7200	S	7200	6	0
10400	S	10400	79	0
8533	S	8533	28	0
9200	S	9200	49	0
8933	S	8933	41	0
8933	S	8933	41	0
8800	S	8800	35	0
7333	S	7333	7.5	0
9333	S	9333	52.5	0
10667	S	10667	82.5	0
7867	S	7867	13.5	0
6533	S	6533	1	0
6933	S	6933	3	0
9067	S	9067	45.5	0
8133	S	8133	17	0
7600	S	7600	10	0
10133	S	10133	73	0
9867	S	9867	66.5	0
		Sum =	7750	2795

* This spreadsheet is designed to work with a set of twenty measurements, 10 from the survey unit (S) and 10 from the background reference area (R). If a different number of measurements have been performed, it is necessary to modify the spreadsheet to account for the change in the number of measurements.

# of R:	25	*m*
# of S:	99	*n*
Avg Rank R:	111.8	
Avg Rank S:	50.05050505	

For *m* or *n* greater than 20, the critical value (k) can be calculated for Scenario A from

$$\frac{m(n+m+1)}{2} + z\sqrt{\frac{nm(n+m+1)}{12}}$$

z = 95% percentile of standard normal distribution = 1.645

k = 1826.6

Since the sum of reference area ranks is greater than the critical value, the null hypothesis that the median survey unit measurement exceeds that in the reference area by more than the $DCGL_W$ is rejected (i.e., survey unit passes). *Scenario A*