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CNC CHARLESTON
5090.3a

RESOURCE CONSERVATION AND RECOVERY REPORT ADDENDUM ZONE K CLOUTER ISLAND VOLUME 2 OF 2 APPENDICES A TO D CNC CHARLESTON SC

9/1/2002

ENSAFE

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY
CHARLESTON NAVAL COMPLEX
NORTH CHARLESTON, SOUTH CAROLINA
CTO-0158

ZONE K CLOUTER ISLAND
RFI REPORT ADDENDUM
Revision: 0

Volume II of II – Appendices A to D

SOUTHDIV Contract Number:
N62467-89-D-0318

Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA

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SEPTEMBER 2002

Release of this document requires the prior notification of the Commanding Officer of the Southern Division, Naval Facilities Engineering Command, Naval Base Charleston, South Carolina

Appendix A
Well Construction Logs

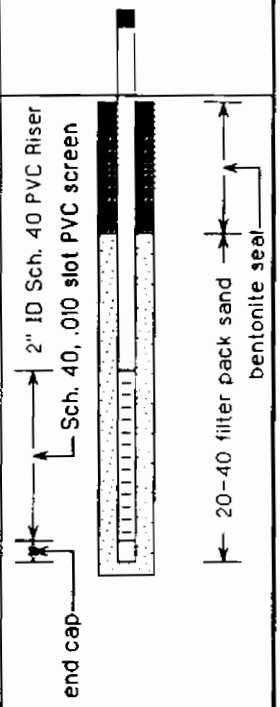
ENSAFE

Monitoring Well NBCKGDKCL1

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2320889.93 E, 376224.30 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *1130 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *1200 on 4-17-97*	Depth to Groundwater: *5.68 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *6.8 feet*
Geologist: *B. Blythe*	Well Screen: *4.0 to 6.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0			1	0	100		FILL	Surface Conditions: dredge spoil and grass.	
							SM ML	Sand: sandy silty soil; w/ organic matter.	
			2	0	100		SC	Sand. clayey; wet.	
			3	0	100			Not logged	
5			4	0	100		SP	Sand: black-gray; medium to coarse grained; wet.	
								Not logged	
10									
15									
20									

WELL DIAGRAM



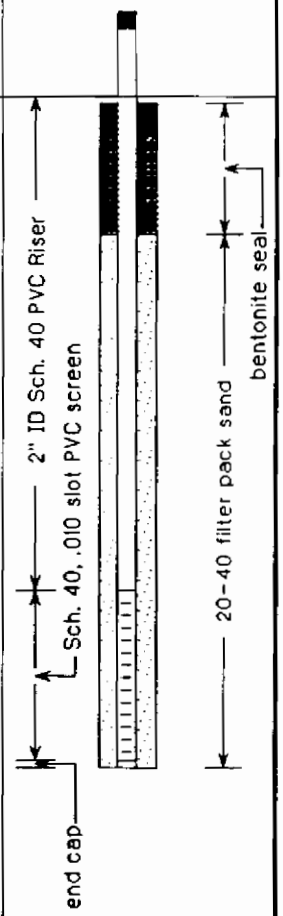
ENSAFE

Monitoring Well NBCK694002

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321065.78 E, 37592.138 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *1110 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *1130 on 4-17-97*	Depth to Groundwater: *9.27 feet TOC* Measured: *4/23/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *9.8 feet*
Geologist: *B. Blythe*	Well Screen: *7.2 to 9.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							Fill	Surface Conditions: dredge spoil and grass.	
			1	0	100		SM	Sand: silty organic soil.	
							OL		
							SP	Sand: fine.	
			2	0	100				
								Not logged	
							SC	Sand: clayey, moist.	
5			3	0	100			Not logged	
10									
15									
20									

WELL DIAGRAM



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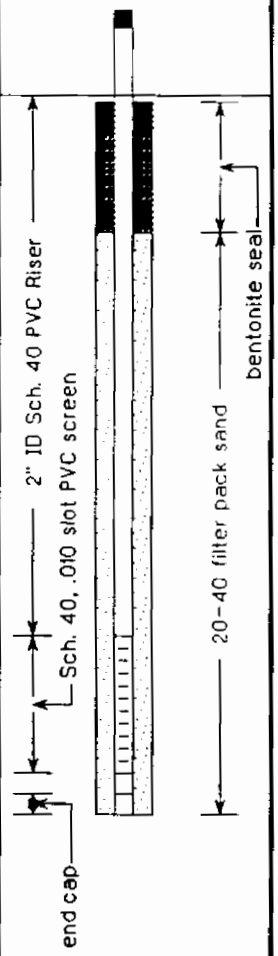
Monitoring Well NBCK694003

Project: *ZONE K – Naval Base Charleston*	Coordinates: *232116.5.70 E, 375743.75 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *1010 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *1110 on 4-17-97*	Depth to Groundwater: *9.22 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *10.5 feet*
Geologist: *B. Blythe*	Well Screen: *7.9 to 9.9 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0	X		1	0	100		Fill	Surface Conditions: dredge spoil and grass.	
							SC ML	Sand: clayey; w/organic matter; roots; gravel.	
								Not logged	
5	X								
			7	0	100		CL	Clay: gray; tight; marsh clay.	
10									
15									
20									

WELL DIAGRAM



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Monitoring Well NBCK694004

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321675.55 E, 375975.81 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *1200 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *N/A on 4-17-97*	Depth to Groundwater: *5.96 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert #1236)*	Total Depth: *7.0 feet*
Geologist: *B. Blythe*	Well Screen: *4.4 to 6.4 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
5								Not logged		2" ID Sch. 40 PVC Riser Sch. 40, .010 slot PVC screen end cap 20-40 filter pack sand bentonite seal
10										
15										
20										

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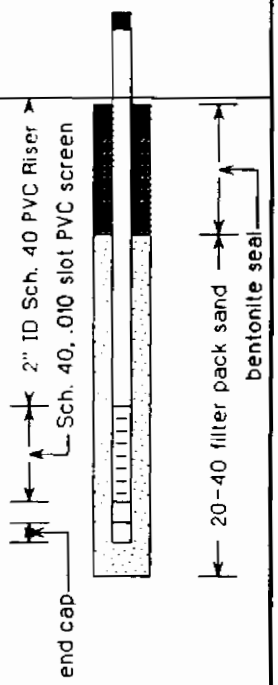
Monitoring Well NBCK694005

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321450.72 E, 375520.66 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *0920 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *1015 on 4-17-97*	Depth to Groundwater: *4.65 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *6.5 feet*
Geologist: *B. Blythe*	Well Screen: *4.5 to 5.9 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0	X		1	0	100		Fill	Surface Conditions: dredge spoil and grass.	
							SM	Sand: dark-brown; silty soil; w/ organic matter.	
							ML		
							SC	Sand: light tan; clayey.	
	X		2	0	100			Not logged	
5									
	X						SP SW	Sand: gray; medium grained; shell hash; wet.	
			3	0	100				
10									
15									
20									

WELL DIAGRAM



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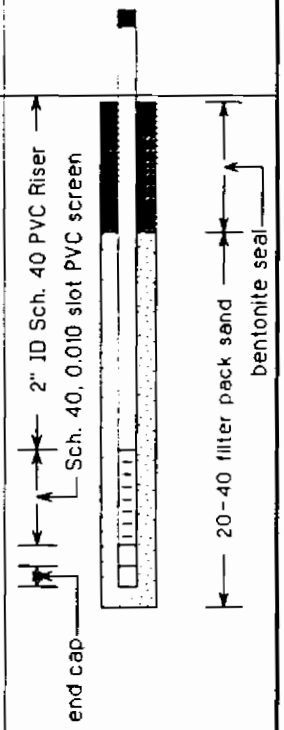
Monitoring Well NBCK694006

Project: *ZONE K – Naval Base Charleston*	Coordinates: *232156.61 E, 375507.63 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *0920 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *0945 on 4-17-97*	Depth to Groundwater: *1.63 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *7.2 feet*
Geologist: *B. Blythe*	Well Screen: *5.2 to 6.6 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0	X		1	0	100		Fill	Surface Conditions: dredge spoil and grass.	
							SC	Sand: clayey; w/ organic matter.	
	X		2	0	100		OL	Clay: wet.	
								Not logged	
5	X		3	0	100		SP SW	Sand: loose; medium grained; w/ shell hash; wet.	
10									
15									
20									

WELL DIAGRAM



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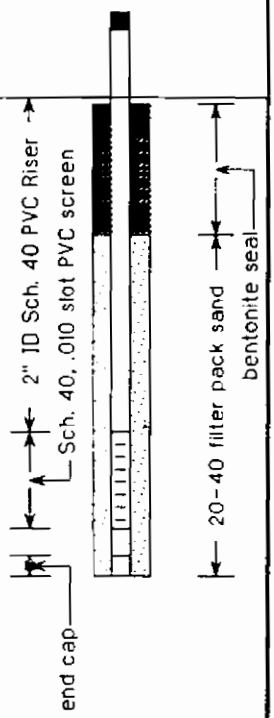
Monitoring Well NBCK694007

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321759.12 E, 375526.18 N*
Location: *Charleston, SC*	Surface Elevation: *N/A feet msl*
Started at *0850 on 4-17-97*	TOC Elevation: *N/A feet msl*
Completed at *0920 on 4-17-97*	Depth to Groundwater: *2.30 feet TOC* Measured: *4/21/97*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *N/A feet msl*
Drilling Company: *Miller Drilling (SC cert# 1236)*	Total Depth: *6.9 feet*
Geologist: *B. Blythe*	Well Screen: *4.9 to 6.3 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							SC	Surface Conditions: dredge spoil and grass.	
			1	0	100		OL	Sand: dark-brown; clayey; w/ organic matter.	
			2	0	100		SP	Sand: light tan; wet.	
								Not logged	
5							SP SW	Sand: gray; medium grained; shell hash; wet.	
			3	0	100				
10									
15									
20									

WELL DIAGRAM



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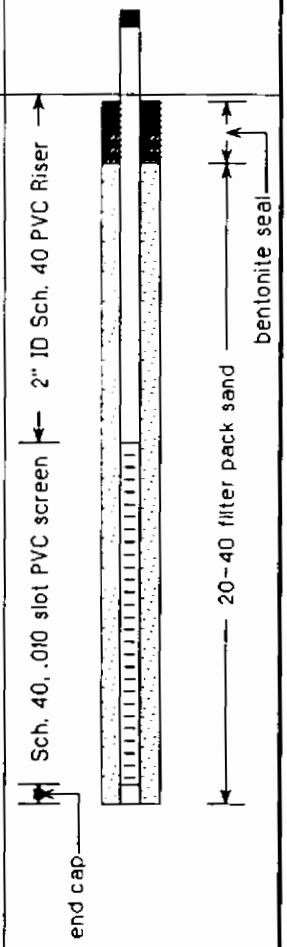
Monitoring Well NBCK694008

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321068.30 E, 376006.94 N*
Location: *Charleston, SC*	Surface Elevation: *11.6 feet msl*
Started at *on 12/8/99*	TOC Elevation: *14.94 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *11.12 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *3.82 feet msl*
Drilling Company: *AET (SC cert# 1435)*	Total Depth: *10.4 feet*
Geologist: *T. Temple*	Well Screen: *5.1 to 10.1 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							SC	Surface Conditions: sparse vegetation, grass, sand.	
								Sand: lt. brown to gray, clayey.	
									10.1
								Sand: gray, coarse.	
5							SP		
10									12
								Total Depth of well = 10.4 ft bgs.	
15									
20									

WELL DIAGRAM



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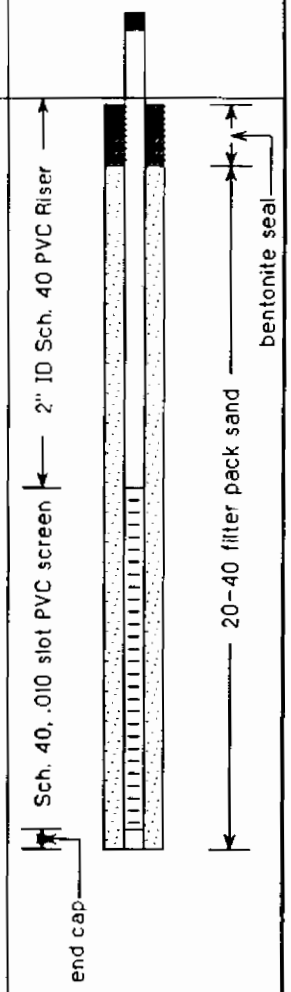
Monitoring Well NBCK694009

Project: *ZONE K – Naval Base Charleston*	Coordinates: *232163.29 E, 375803.90 N*
Location: *Charleston, SC*	Surface Elevation: *11.0 feet msl*
Started at *on 12/8/99*	TOC Elevation: *14.51 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *11.34 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *3.17 feet msl*
Drilling Company: *AEI (SC cert# 1435)*	Total Depth: *11.0 feet*
Geologist: *T. Temple*	Well Screen: *5.7' to 10.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							SC	Surface Conditions: dredge spoil and grass. Sand: gray, clayey; debris (bricks, rocks) from 1-3'.	
									8
5							SP	Sand: gray, coarse	
10									0
								Total Depth of Well = 11 ft bgs	
15									
20									

WELL DIAGRAM



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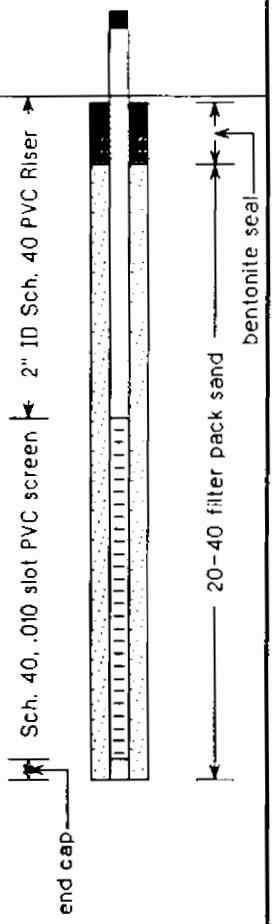
Monitoring Well NBCK694010

Project: *ZONE K – Naval Base Charleston*	Coordinates: *232764.28 E, 375509.56 N*
Location: *Charleston, SC*	Surface Elevation: *4.7 feet msl*
Started at *on 12/8/99*	TOC Elevation: *5.00 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *10.0 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *DRY feet msl*
Drilling Company: *AEI (SC cert# 1435)*	Total Depth: *10 feet*
Geologist: *T. Temple*	Well Screen: *4.7 to 9.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							CL CH	Surface Conditions: sparse vegetation, marshy due to seasonal flooding Clay: brown-red, moist.	
									2.2
5							SC CL	Clay: brown to gray, sandy.	
10								Total Depth of Well = 10 ft bgs.	5.3
15									
20									

WELL DIAGRAM



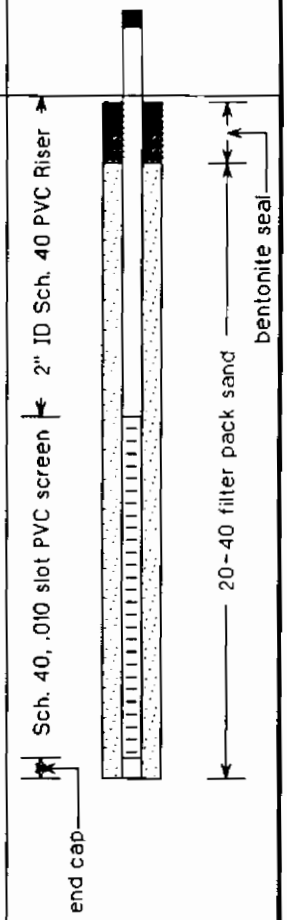
ENSAFE

Monitoring Well NBCK694011

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321775.09 E, 375557.31 N*
Location: *Charleston, SC*	Surface Elevation: *4.9 feet msl*
Started at *on 12/8/99*	TOC Elevation: *5.83 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *2.55 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *3.28 feet msl*
Drilling Company: *AEI (SC cert# 1435)*	Total Depth: *10 feet*
Geologist: *T. Temple*	Well Screen: *4.7 to 9.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							CH	Surface Conditions: sparse trees (2-3" dia.); seasonal high tide flooding Clay; brown-red; wet.	
									3.4
5							SC CL	Sand: brown-gray; clayey.	
10								Total Depth of Well = 10 ft bgs	5.1
15									
20									

WELL DIAGRAM



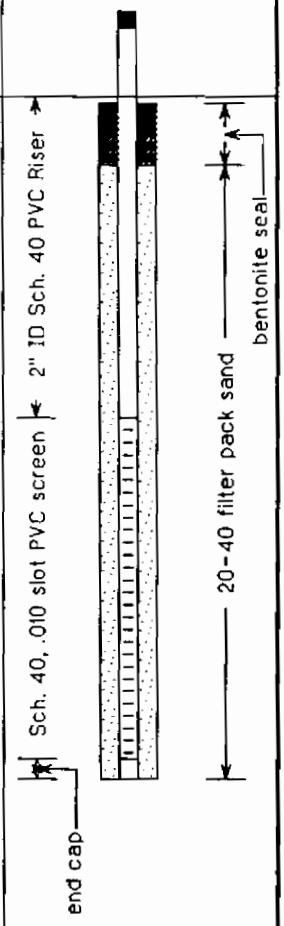
ENSAFE

Monitoring Well NBCK694012

Project: *ZONE K – Naval Base Charleston*	Coordinates: *232759.94 E, 375645.41 N*
Location: *Charleston, SC*	Surface Elevation: *5.4 feet msl*
Started at *on 12/8/99*	TOC Elevation: *7.01 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *4.61 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *2.40 feet msl*
Drilling Company: *AEI (SC cert# 1435)*	Total Depth: *10 feet*
Geologist: *T. Temple*	Well Screen: *4.7 to 9.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							CH	Surface Conditions: leaf litter, sparse vegetation, dredge spoil; area prone to seasonal high tide flooding	5.4
								Clay: red-brown; wet.	4.4
5							SC	Sand: gray; coarse; clayey.	
10									4.6
15									
20									

WELL DIAGRAM



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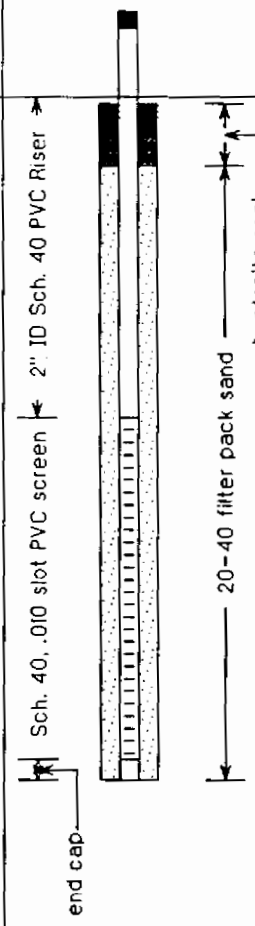
Monitoring Well NBCK694013

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2321099.28 E, 375810.51 N*
Location: *Charleston, SC*	Surface Elevation: *6.5 feet msl*
Started at *on 12/8/99*	TOC Elevation: *6.60 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *4.55 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *2.05 feet msl*
Drilling Company: *AEI (SC cert# 1435)*	Total Depth: *10 feet*
Geologist: *T. Temple*	Well Screen: *4.7 to 9.7 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							SP	Surface Conditions: dredge spoil and grass.	
								Sand: lt. brown to gray; coarse.	
5									
10								Total Depth of well = 10 ft bgs	3.5
15									
20									

WELL DIAGRAM



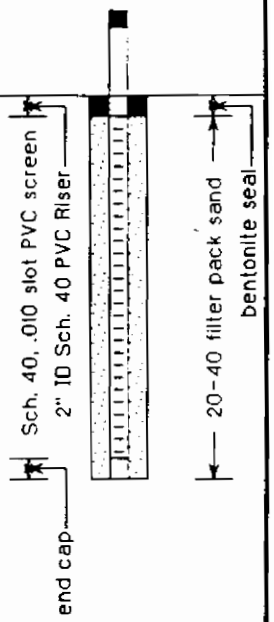
ENSAFE

Monitoring Well NBCK694014

Project: *ZONE K – Naval Base Charleston*	Coordinates: *2320920.30 E, 376105.42 N*
Location: *Charleston, SC*	Surface Elevation: *5.4 feet msl*
Started at *on 12/8/99*	TOC Elevation: *5.79 feet msl*
Completed at *on 12/8/99*	Depth to Groundwater: *3.08 feet TOC* Measured: *12/10/99*
Drilling Method: *2.5 inch hand auger.*	Groundwater Elevation: *2.71 feet msl*
Drilling Company: *AET (SC cert# 1435)*	Total Depth: *5.6 feet*
Geologist: *T. Temple*	Well Screen: *0.3 to 5.3 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	SAMPLE NO.	OVA (ppm)	% RECOVERY	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0							SP	Surface Conditions: loose sand, dredge spoil, leaf litter; area prone to seasonal high tide flooding. Sand: tan, beach sand.	
5									2
								Total Depth of well = 5.6 ft bgs	
10									
15									
20									

WELL DIAGRAM



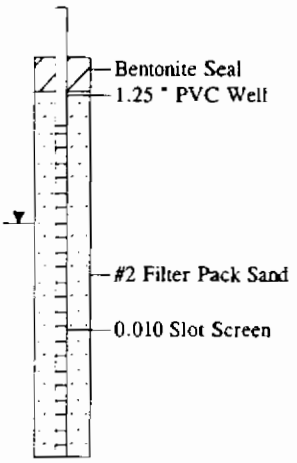
LOG OF BORING NBCK694015

Charleston Naval Complex
Clouter Island
Charleston, South Carolina
EnSafe Job # 0158-001

Date Completed	: 04/12/02	Northing Coordinate	: 375815.9
Drilling Method	: 3.25" Hand Auger	Easting Coordinate	: 2321215.1
Driller	: ProSonic SC Cert #963	Ground Elev	: 13.9
Sampling Method	: Logged from cuttings	Top of Casing Elev	: 18.08
Logged By	: Peter Bayley		

Depth in feet	Surf. Elev. 13.9	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	% Recovery	Samples
0							
1	13	CL-CH		Clay: brown; trace sand, trace to some silt; moist.			
2	12						
3	11	OL		Silt: dark grey to black; moist to wet. at 3 ft: wet at 3.5 to 4.0 ft: w/some thin sand laminae.			
4	10						
5	9	SP		No recovery: probably sand based on feel of auger in boring.			
6	8						
7	7						
8	6						
9	5						
10	4						
11	3						
12	2						
13	1						
14	0						
15	-1						
16	-2						
17	-3						
18	-4						
19	-5						
20	-6						

Well: NBCK694015
Elev.: 18.08



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07-09-2

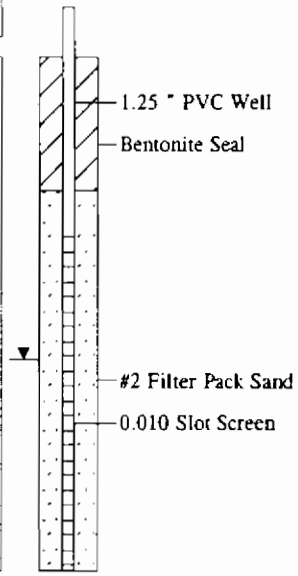
LOG OF BORING NBCK694016

Charleston Naval Complex
Clouter Island
Charleston, South Carolina
EnSafe Job # 0158-001

Date Completed	: 04/12/02	Northing Coordinate	: 375557.5
Drilling Method	: 3.25" Hand Auger	Easting Coordinate	: 2321427.7
Driller	: ProSonic SC Cert #963	Ground Elev	: 6.8
Sampling Method	: Logged from cuttings	Top of Casing Elev	: 9.15
Logged By	: Peter Bayley		

Depth in feet	Surf. Elev. 6.8	USCS	GRAPHIC	DESCRIPTION	PID (ppm)	% Recovery	Samples
0–3	6–4	CL-CH		Clay: brown, trace to some silt; moist.			
3–8	4–(-1)	OL		Silt: dark grey to black; w/shells, gravel, and chunks of Cooper Marl. at 4 ft: water.			

Well: NBCK694016
Elev.: 9.15



Appendix B

Analytical Reports and Chains of Custody

CHAIN OF CUSTODY RECORD

ENSAFE
800-588-7962
MEMPHIS, TENNESSEE
CHARLESTON, SC; CINCINNATI, OH; DALLAS, TX; JACKSON, TN; KNOXVILLE, TN; LANCASTER, PA; NASHVILLE, TN; NORFOLK, VA; PADUCAH, KY; PENSACOLA, FL; RALEIGH, NC; COLOGNE, GERMANY

PROJECT/JOB NO: 0158-01 9-000-00
COC NO:
PO NO: 4918
REL NO:
LAB NAME: SOUTHWEST LABS

CLIENT NAVY - CLOUTER IS. PROJECT MANAGER STEVE PARKER
LOCATION CHARLESTON, SC TELE/FAX NO. 843.884.0029 / 856.0107
SAMPLERS: (SIGNATURE)

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: TAL METALS	REMARKS
694EWØ16F1	4-19-02	1025	W	900 ml NM POLY	4°	HNO3	1	X	
694GWØ16Ø1	4-19-02	1112	W				1	X	
694GWØ16F1	4-19-02	1110	W				1	X	
694GWØ15F1	4-19-02	1220	W				1	X	
694GWØ15Ø1	4-19-02	1210	W				1	X	
694GWØØ9F3	4-19-02	1420	W				1	X	
694GWØØ9Ø3	4-19-02	1410	W				1	X	
694GWØ13F3	4-22-02	1150	W				1	X	
694HWØ13F3	4-22-02	1150	W				1	X	
694GWØ13Ø3	4-22-02	1140	W				1	X	
694HWØ13Ø3	4-22-02	1140	W				1	X	

4-22-02

RELINQUISHER:	DATE	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
J. WATSON	4-22-02						
PRINTED: J. WATSON	TIME 1530	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: ENSAFE		COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 341676 9855
SEND RESULTS TO: Charlie Veazey

COMMENTS: 28 DAY TURNAROUND TIME - RESULTS TO STEVE PARKER (ENSAFE)
DC03

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2
REV. 05/98

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: GDKGWCL101

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/15/97

WELL NO.: GDKCL1 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS:

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple D Bradford

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694004

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694005

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.79

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1015 Finished 1035

Volume purged 0.75 GALLONS

Comments on Well Recovery Goes Dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1032 5/16/97

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1015	1020	1035
Well Volume Purged (gal.)	0.25	0.50	0.75
pH (units)	6.51	7.04	7.20
Conductivity (μmho)	11.9	12.8	12.9
Turbidity	28	6	0
Water Temperature (°C)	19.0	19.3	19.3
Salinity	0.71	0.73	0.73
Depth to water (ft.)	6.80	-	-

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: GDKGWCL102

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 7/18/97

WELL NO.: GDKCL1 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Overcast 78 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Watson D Mc Connell T Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694002

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694002

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.91

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1120 Finished 1137

Volume purged 0.8 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1147

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1120	1125	1137
Well Volume Purged (gal.)	0.27	0.54	0.81
pH (units)	6.34	6.53	6.72
Conductivity (µmho)	15.4	15.5	15.5
Turbidity	28	3	2
Water Temperature (°C)	22.3	22.8	23.0
Salinity	0.90	0.90	0.91
Odor	None	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: GDKWCL101

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/17/97

WELL NO.: GDKCL1 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 55 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukes J Hemes

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 4.77

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1055 Finished 1107

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1112

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1058	1100	1102	1104	1106	1107
Well Volume Purged (gal.)	.25	.50	.75	1.0	1.25	1.50
pH (units)	5.93	6.17	6.31	6.40	6.47	6.53
Conductivity (µmho)	11.6	12.0	12.2	12.1	12.2	12.3
Turbidity	0	0	0	0	0	0
Water Temperature (°C)	16.3	16.6	16.6	16.7	16.7	16.8
Salinity	0.65	0.68	0.69	0.69	0.69	0.69
Odor	None	None	None	None	None	None
Depth to water (ft.)	4.90	5.34	5.35	5.37	5.37	5.37

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: GDKGWCL104

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/16/98

WELL NO.: GDKCL1 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: 66 DEG

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukes M Litchfield A Huneycutt

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.10

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1114 Finished 1131

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1118	1121	1123	1126	1128	1131
Well Volume Purged (gal.)	.25	.50	.75	1.0	1.25	1.50
pH (units)	5.85	6.30	6.44	6.56	6.65	6.72
Conductivity (µmho)	5.57	6.17	6.30	6.33	6.39	6.42
Turbidity	43	8	3	0	0	0
Water Temperature (°C)	17.6	16.4	16.2	16.1	16.1	16.1
Salinity	0.29	0.32	0.33	0.33	0.33	0.34
Odor	None	None	None	None	None	None
Depth to water (ft.)	5.52	5.46	5.42	5.41	5.40	5.40

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: GDKGWCL105

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 1-13-99

WELL NO.: GDKCL1 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Pcldy 65 deg

REVIEWED BY: Peter Bayley | PERSONNEL: A Wertz

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694007

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694007

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.67

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1155 Finished 1231

Volume purged 0.8 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1233

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1155	1207	1216	1225	1231
Well Volume Purged (gal.)	0.1	0.25	0.5	0.75	0.82
pH (units)	6.47	6.99	7.13	7.16	7.22
Conductivity (μmho)	13.7	13.7	13.7	13.6	13.6
Turbidity	106	74	11	7	5
DO	9.43	9.27	9.29	9.30	9.29
Water Temperature (°C)	17.3	17.8	17.8	17.8	17.8
Salinity	0.78	0.79	0.78	0.78	0.78
Depth to water (ft.)	6.20	6.44	6.45	6.42	6.43

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00201

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/16/97

WELL NO.: 694002 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 75 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple D Bradford

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694003

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694003

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.2 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 9.66

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1223 Finished 1229

Volume purged 1.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1235

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1223	1225	1226	1227	1229
Well Volume Purged (gal.)	0.25	0.50	0.75	1.00	1.25
pH (units)	6.92	6.89	6.87	6.87	6.87
Conductivity (μmho)	13.7	13.7	13.7	13.6	13.6
Turbidity	86	45	27	30	19
Water Temperature (°C)	20.5	20.0	19.9	19.8	19.6
Salinity	0.47	0.42	0.43	0.44	0.45
Depth to water (ft.)	10.24	10.30	10.31	10.32	10.32

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling

Sample ID: 694GW00202

PROJECT NAME: Clouter Island JOB NO: 2911-001-08-400-000 DATE: 7/17/97

WELL NO.: 694002 LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley PERSONNEL: T Temple D Mc Connell

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694003

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694003

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.2 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 9.66

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1445 Finished 1501

Volume purged 2.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1505

Finish

Well Purge Parameters

Reading:	1	2
Time	1458	1500
Well Volume Purged (gal.)	1.75	2.25
pH (units)	6.66	6.59
Conductivity (μmho)	10.2	8.93
Turbidity	0	1
Water Temperature (°C)	23.2	22.5
Salinity	0.56	0.48
Odor	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00203

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/17/97

WELL NO.: 694002 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 58 deg

REVIEWED BY: Peter Bayley | PERSONNEL: A Huneycutt J Dukes

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.2 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 8.51

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1134 Finished 1202

Volume purged 2.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1240

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1139	1144	1149	1154	1158	1202
Well Volume Purged (gal.)	.375	.75	1.125	1.5	1.875	2.25
pH (units)	6.22	6.56	6.73	6.65	6.71	6.75
Conductivity (µmho)	6.71	7.02	7.00	7.00	7.06	7.04
Turbidity	0	0	0	0	0	0
Water Temperature (°C)	18.1	18.5	18.6	18.6	18.6	18.7
Salinity	0.35	0.37	0.37	0.37	0.38	0.37
Odor	None	None	None	None	None	None
Depth to water (ft.)	8.81	8.82	8.82	8.82	8.82	8.82

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00204

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/16/98

WELL NO.: 694002 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: 68 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukes A Huneycutt M Litchfield

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? GDKCL1

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? GDKCL1

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 8.71

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1229 Finished 1259

Volume purged 2.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1304

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1233	1238	1243	1248	1254	1259
Well Volume Purged (gal.)	.375	.75	1.125	1.5	1.875	2.25
pH (units)	6.55	6.87	6.93	6.95	6.98	7.00
Conductivity (µmho)	5.65	5.16	5.30	5.40	5.43	5.42
Turbidity	0	0	0	0	0	0
Water Temperature (°C)	19.4	18.7	18.3	18.3	18.4	18.4
Salinity	0.29	0.26	0.27	0.28	0.28	0.28
Odor	None	None	None	None	None	None
Depth to water (ft.)	9.01	9.02	9.02	9.02	9.02	9.02

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00301

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/16/97

WELL NO.: 694003 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 70 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple D Bradford

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? GDKCL1

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? GDKCL1

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 9.92

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1053 Finished 1103

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1140

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1053	1056	1100	1103
Well Volume Purged (gal.)	0.4	10.2	10.3	10.3
pH (units)	6.66	6.86	6.92	6.90
Conductivity (μmho)	11.8	12.0	12.1	12.1
Turbidity	25	8	4	3
Water Temperature (°C)	19.0	18.9	18.2	18.7
Salinity	0.67	0.68	0.69	0.69
Depth to water (ft.)	10.1	10.2	10.3	10.3

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00302

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 7/17/97

WELL NO.: 694003 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple D Mc Connell

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694007

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694007

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 9.81

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1435 Finished 1445

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1445

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1449	1452	1454
Well Volume Purged (gal.)	1.0	1.25	1.5
pH (units)	6.71	6.69	6.68
Conductivity (μmho)	12.9	12.8	13.0
Turbidity	1	1	1
Water Temperature (°C)	23.8	22.5	22.1
Salinity	0.74	0.72	0.73
Odor	None	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00303

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/17/97

WELL NO.: 694003 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 68 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Hemes J Dukes

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694002

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694002

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 8.63

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1340 Finished 1357

Volume purged 2.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1402

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1343	1345	1348	1351	1354	1357
Well Volume Purged (gal.)	.375	.75	1.125	1.5	1.875	2.25
pH (units)	6.97	6.90	6.91	6.90	6.91	6.91
Conductivity (μmho)	12.8	12.9	12.9	13.0	13.2	13.2
Turbidity	89	0	0	0	0	0
Water Temperature (°C)	19.5	20.0	20.2	20.3	20.4	20.4
Salinity	0.73	0.74	0.74	0.74	0.75	0.76
Odor	None	None	None	None	None	None
Depth to water (ft.)	8.90	8.91	8.91	8.91	8.91	8.91

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00304

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/17/98

WELL NO.: 694003 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Overcast 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: M Litchfield A Huneycutt

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694004

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694004

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 8.76

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1125 Finished 1150

Volume purged 2.25 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1155

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1128	1132	1136	1140	1145	1150
Well Volume Purged (gal.)	.375	.75	1.125	1.5	1.875	2.25
pH (units)	6.47	6.70	6.76	6.80	6.86	6.84
Conductivity (μmho)	9.1	9.4	9.7	9.9	10.0	10.1
Turbidity	36	0	0	0	0	0
Water Temperature (°C)	15.9	16.1	16.1	16.0	16.3	16.1
Salinity	0.50	0.52	0.54	0.55	0.55	0.56
Odor	None	None	None	None	None	None
Depth to water (ft.)	8.98	8.95	8.95	8.95	8.95	8.95

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00401

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/15/97

WELL NO.: 694004 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 75 deg

REVIEWED BY: Peter Bayley | PERSONNEL: B Dotson D Bradford T Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694007

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694007

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 3.80

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1120 Finished 1134

Volume purged 2.75 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 4.70

Completion Above Ground type

Additional Comments

Sample Collected: Start 1155

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1120	1125	1130	1134
Well Volume Purged (gal.)	0.25	1.00	2.00	2.75
pH (units)	7.01	6.86	6.79	6.78
Conductivity (μmho)	1.84	1.35	1.37	1.40
Turbidity	16	26	4	4
Water Temperature (°C)	21.8	21.6	21.4	21.4
Salinity	0.08	0.06	0.06	0.06
Depth to water (ft.)	4.30	4.60	4.70	4.70

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00402

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 7/22/97

WELL NO.: 694004 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 90 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple T Mc Cord

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 4.58

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1145 Finished 1155

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1200

Finish

Well Purge Parameters

Reading:	1	2
Time	1147	1153
Well Volume Purged (gal.)	0.5	1.5
pH (units)	6.09	6.24
Conductivity (μmho)	1.89	2.61
Turbidity	1	5
Water Temperature (°C)	27.2	26.8
Salinity	0.09	0.11
Odor	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00403

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 1/12/98

WELL NO.: 694004 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Cloudy 65 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukas, M Litchfield, A huneycuut

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694006

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694006

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 1.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.78

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1343 Finished 1408

Volume purged 3.75 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 2.83

Completion Above Ground type

Additional Comments

Sample Collected: Start 1413

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1347	1351	1355	1400	1404	1408
Well Volume Purged (gal.)	.625	1.25	1.875	2.5	3.125	3.75
pH (units)	5.86	6.33	6.54	6.63	6.70	6.74
Conductivity (μmho)	1.74	1.90	1.91	1.89	1.91	1.91
Turbidity	13	0	0	0	0	0
Water Temperature (°C)	15.8	15.3	15.1	15.0	14.9	14.8
Salinity	0.08	0.08	0.09	0.08	0.08	0.08
Odor	None	None	None	None	None	None
Depth to water (ft.)	2.63	2.68	2.75	2.78	2.82	2.83

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00404

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-00 | DATE: 3/17/98

WELL NO.: 694004 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Cloudy 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: M Litchfield A Huneycutt

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694002

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694002

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 1.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 2.03

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 0937 Finished 1009

Volume purged 3.75 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1015

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	0940	0945	0950	0955	1000	1006
Well Volume Purged (gal.)	.625	1.25	1.875	2.5	3.125	3.75
pH (units)	5.97	6.22	6.33	6.42	6.47	6.51
Conductivity (μmho)	1.90	1.99	1.98	1.98	1.98	1.98
Turbidity	1	0	0	0	0	0
Water Temperature (°C)	13.9	13.8	13.8	13.7	13.6	13.6
Salinity	0.08	0.09	0.09	0.09	0.09	0.09
Odor	None	None	None	None	None	None
Depth to water (ft.)	2.71	2.75	2.81	2.81	2.81	2.82

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00501

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/14/97

WELL NO.: 694005 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 75 deg

REVIEWED BY: Peter Bayley | PERSONNEL: B Dotson D Bradford T Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694004

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.00

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1245 Finished 1310

Volume purged 0.54 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 0940 5/15/97

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1245	1257	1310
Well Volume Purged (gal.)	0.4	0.5	0.54
pH (units)	6.35	7.25	7.48
Conductivity (µmho)	9.16	9.84	13.7
Turbidity	49	32	7
Water Temperature (°C)	18.5	18.6	18.5
Salinity	0.50	0.54	0.54
Depth to water (ft.)	Dry	Dry	Dry

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00502

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 7/16/97

WELL NO.: 694005 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley | PERSONNEL: J Watson D McConnell T Temple J Mayfield

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694002

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694002

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.29

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1447 Finished 1455

Volume purged 0.7 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 0915 7/17/97

Finish

Well Purge Parameters Reading: 1

Time	1455
Well Volume Purged (gal.)	0.70
pH (units)	6.78
Conductivity (μmho)	11.7
Turbidity	16
Water Temperature (°C)	24.3
Salinity	0.66
Depth to water (ft.)	N/A

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00503

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/17/97

WELL NO.: 694005 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 70 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukas A Huneycutt

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694002

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694002

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.) _____

Depth to water surface from TOC (ft.) 5.00

Length of water (ft.) _____

Volume of water (ft.) _____

(gal.) _____

Amount of sediment at bottom of well (ft.) _____

3 Volumes of water (gal.) _____

PURGING

Time started 1417 Finished 1427

Volume purged 0.25 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.) _____

Completion Above Ground type

Additional Comments _____

Sample Collected: Start 1028 12/18/97

Finish _____

Well Purge Parameters

Reading:	1	2
Time	1422	1023
Well Volume Purged (gal.)	.25	NA
pH (units)	6.55	6.02
Conductivity (μmho)	11.2	14.7
Turbidity	75	0
Water Temperature (°C)	18.1	16.6
Salinity	0.63	0.85
Odor	None	None
Depth to water (ft.)	6.95	3.91

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00504

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/18/98

WELL NO.: 694005 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Cloudy 68 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukas M Litchfield A Huneycutt

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.) _____

Depth to water surface from TOC (ft.) 2.99

Length of water (ft.) _____

Volume of water (ft.) _____

(gal.) _____

Amount of sediment at bottom of well (ft.) _____

3 Volumes of water (gal.) _____

PURGING

Time started 1149 Finished 1153

Volume purged .75 GALLONS

Comments on Well Recovery Goes Dry

Depth to water at end of purge (ft.) _____

Completion Above Ground type

Additional Comments _____

Sample Collected: Start 1048 3/19/98

Finish _____

Well Purge Parameters

Reading:	1	2	3
Time	1151	1153	1042
Well Volume Purged (gal.)	3.75	.75	n/a
pH (units)	7.07	7.13	5.76
Conductivity (μmho)	9.3	9.5	7.44
Turbidity	0	95	0
Water Temperature (°C)	15.3	15.4	17.3
Salinity	0.51	0.52	0.40
Odor	None	None	None
Depth to water (ft.)	5.96	7.21	1.52

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00505

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 1/11/99

WELL NO.: 694005 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: 60 deg.

REVIEWED BY: Peter Bayley | PERSONNEL: T Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 4.35

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1452 Finished 1727

Volume purged 0.6 GALLONS

Comments on Well Recovery Goes Dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1115 1/13/99

Finish

Well Purge Parameters Reading: 1

Time	1727
Well Volume Purged (gal.)	0.60
pH (units)	7.19
Conductivity (μmho)	8.34
Turbidity	23
Water Temperature (°C)	18.9
Salinity	0.45
Depth to water (ft.)	5.57

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00601

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/14/97

WELL NO.: 694006 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 75 deg

REVIEWED BY: Peter Bayley | PERSONNEL: B. Dotson D. Bradford T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694005

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694005

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.1 ft

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 5.06

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1325 Finished 1327

Volume purged 0.5 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1257 5/15/97

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1325	1326	1327
Well Volume Purged (gal.)	0.10	0.25	0.50
pH (units)	7.18	7.21	7.26
Conductivity (μmho)	17.7	17.5	17.5
Turbidity	19.2	18.8	18.8
Water Temperature (°C)	19.2	18.8	18.8
Salinity	1.05	1.04	1.03
Depth to water (ft.)	5.15	5.90	6.65

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00602

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 7/17/97

WELL NO.: 694006 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple D. McConnell

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694005

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694005

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.1 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.70

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1142 Finished

Volume purged 0.25 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1100 7/18/97

Finish

Well Purge Parameters Reading: 1

Time	1142
Well Volume Purged (gal.)	0.25
pH (units)	6.65
Conductivity (μmho)	21.3
Turbidity	4
Water Temperature (°C)	23.1
Salinity	1.29
Odor	H2S

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00603

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/18/97

WELL NO.: 694006 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J. Dukas J. Herron

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694007

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694007

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.1 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.83

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1029 Finished 1037

Volume purged 1.0 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 0925 12/19/97

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1034	1037	0925
Well Volume Purged (gal.)	0.5	1.0	n/a
pH (units)	6.51	6.60	6.15
Conductivity (μmho)	19.0	19.0	19.0
Turbidity	0	0	0
Water Temperature (°C)	16.0	16.9	15.3
Salinity	1.12	1.12	1.00
Odor	Sulfur	Sulfur	None
Depth to water (ft.)	4.95	6.90	1.05

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00604

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/18/98

WELL NO.: 694006 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Cloudy 68 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J. Dukas M. Litchfield

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694007

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694007

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.1 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 0.68

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1126 Finished 1135

Volume purged 1.25 GALLONS

Comments on Well Recovery Goes dry

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1052 3/19/98

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1130	1135	1052
Well Volume Purged (gal.)	0.625	1.25	n/a
pH (units)	6.66	6.85	6.51
Conductivity (μmho)	17.0	17.0	12.8
Turbidity	0	0	24
Water Temperature (°C)	15.6	15.7	18.4
Salinity	1.00	1.00	0.73
Odor	Sulfur	Sulfur	Sulfur
Depth to water (ft.)	4.16	7.31	0.1

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00605

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 1/11/99

WELL NO.: 694006 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 65 deg

REVIEWED BY: Peter Bayley | PERSONNEL: A. Wertz

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? GDKCL1

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? GDKCL1

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.1 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.33

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1453 Finished 1630

Volume purged 3.0 GALLONS

Comments on Well Recovery VERY SLOW

Depth to water at end of purge (ft.) 5.78

Completion Above Ground type

Additional Comments

Sample Collected: Start 1115 1/12/99

Finish

Well Purge Parameters

Reading:	1	2	3
Time	1453	1545	1615
Well Volume Purged (gal.)	0.5	2.0	3.0
pH (units)	7.08	7.46	7.35
Conductivity (μmho)	11.9	11.4	11.3
Turbidity	0	2	0
Water Temperature (°C)	11.7	11.4	11.3
Salinity	0.67	0.64	0.64
Odor	Sulfur	Sulfur	Sulfur
Depth to water (ft.)	3.63	5.61	5.78

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.

Turbidity choices: clear, turbid, opaque

Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00701

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 5/14/97

WELL NO.: 694007 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 75 Deg

REVIEWED BY: Peter Bayley | PERSONNEL: B. Dotson D. Bradford T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694005

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694005

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.89

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1358 Finished 1414

Volume purged 2.75 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 2.50

Completion Above Ground type

Additional Comments

Sample Collected: Start 1450

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1358	1400	1404	1408	1414
Well Volume Purged (gal.)	0.1	0.5	1.0	1.75	2.75
pH (units)	7.68	7.44	7.25	7.23	7.29
Conductivity (μmho)	15.7	14.4	14.7	14.8	14.9
Turbidity	64	12	0	0	1
Water Temperature (°C)	18.3	17.8	17.5	17.4	17.5
Salinity	0.92	0.83	0.85	0.85	0.86
Depth to water (ft.)	2.2	2.4	2.5	2.5	2.5

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00702

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 7/17/97

WELL NO.: 694007 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Overcast 90 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple D. McConnell

PURGING DEVICE

Type device? Peristaltic Pump

How was the device deconteminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 2.42

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1200 Finished 1220

Volume purged 2.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments

Sample Collected: Start 1225

Finish 1245

Well Purge Parameters

Reading:	1	2	3
Time	1205	1210	1220
Well Volume Purged (gal.)	0.5	1.5	2.5
pH (units)	6.74	6.67	6.64
Conductivity (μmho)	17.8	18.1	18.4
Turbidity	0	1	2
Water Temperature (°C)	21.8	21.6	21.8
Salinity	1.06	1.08	1.09
Odor	None	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.

Turbidity choices: clear, turbid, opaque

Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00703

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 12/18/97

WELL NO.: 694007 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS:

REVIEWED BY: Peter Bayley | PERSONNEL: J Dukas J Hemes

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 6.98

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 0904 Finished 0929

Volume purged 3.0 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 1.89

Completion Above Ground type

Additional Comments

Sample Collected: Start 0934

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	0908	0912	0917	0921	0925	0929
Well Volume Purged (gal.)	.50	1.0	1.5	2.0	2.5	3.0
pH (units)	5.74	6.27	6.50	6.61	6.65	6.68
Conductivity (μmho)	13.5	15.2	15.6	15.7	15.8	15.7
Turbidity	216	0	0	0	0	0
Water Temperature (°C)	15.0	16.1	16.3	16.4	16.4	16.5
Salinity	0.77	0.88	0.91	0.91	0.92	0.91
Odor	None	None	None	None	None	None
Depth to water (ft.)	1.85	1.85	1.87	1.87	1.87	1.89

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00704

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 3/18/98

WELL NO.: 694007 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Cloudy 65 deg

REVIEWED BY: Peter Bayley | PERSONNEL: J. Dukas M. Litchfield

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.17

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 0955 Finished 1026

Volume purged 1.62 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 1.62

Completion Above Ground type

Additional Comments

Sample Collected: Start 1031

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1000	1004	1009	1015	1020	1026
Well Volume Purged (gal.)	.625	1.25	1.875	2.5	3.125	3.75
pH (units)	5.97	6.35	6.62	6.75	6.83	6.88
Conductivity (μmho)	11.8	13.4	14.1	14.3	14.3	14.4
Turbidity	42	17	4	0	0	0
Water Temperature (°C)	15.2	15.1	15.1	15.0	15.0	15.0
Salinity	0.66	0.76	0.81	0.82	0.82	0.82
Odor	None	None	None	Sulfur	Sulfur	Sulfur
Depth to water (ft.)	1.61	1.61	1.61	1.61	1.62	1.62

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00705

PROJECT NAME: Clouter Island | JOB NO: 2911-001-08-400-000 | DATE: 1/13/99

WELL NO.: 694007 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 65 deg

REVIEWED BY: Peter Bayley | PERSONNEL: A. Wertz

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 0.5 feet

Depth to bottom of well from TOC (ft.)

Depth to water surface from TOC (ft.) 1.71

Length of water (ft.)

Volume of water (ft.)

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1452 Finished 1516

Volume purged 2.74 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 2.09

Completion Above Ground type

Additional Comments

Sample Collected: Start 1518

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1452	1458	1504	1508	1516
Well Volume Purged (gal.)	0.5	1.0	1.50	2.0	2.74
pH (units)	6.30	7.15	7.16	7.14	7.11
Conductivity (μmho)	9.6	10.0	10.3	10.3	10.3
Turbidity	2	4	1	1	2
DO	8.75	10.25	10.10	9.74	9.84
Water Temperature (°C)	15.7	16.0	16.3	16.4	16.4
Salinity	0.53	0.55	0.57	0.57	0.58
Depth to water (ft.)	2.07	2.06	2.08	2.07	2.09

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling

Sample ID: 694GW00801

PROJECT NAME: Clouter Island JOB NO: 0158-001-08-200-000 DATE: 12/10/99

WELL NO.: 694008 LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy 60's

REVIEWED BY: Peter Bayley PERSONNEL: T. Temple B. Herrick P. Shaw T. Nesbitt B. Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694011

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694011

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.)

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1150 Finished 1215

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 13.10

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1220

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1150	1200	1205	1210	1215
Well Volume Purged (gal.)	0.5	0.6	0.7	0.8	0.9
pH (units)	5.52	5.63	5.65	5.64	5.62
Conductivity (μmho)	12.2	12.4	12.4	12.4	12.4
Turbidity	254	26	23	5	6
Water Temperature (°C)	20.3	20.5	20.5	20.4	20.5
Depth to water (ft.)	12.64	13.05	13.1	13.06	13.1

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00802

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 1/13/00

WELL NO.: 694008 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny 60's

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694011

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694011

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 10.56

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1040 Finished 1115

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 10.76

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1120

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1100	1105	1110	1115
Well Volume Purged (gal.)	.25	.75	1.2	1.5
pH (units)	6.75	6.76	6.74	6.73
Conductivity (μmho)	13.6	13.5	13.5	13.5
Turbidity	172	43	46	44
Water Temperature (°C)	19.0	18.8	18.7	18.6
Depth to water (ft.)	10.75	10.76	10.76	10.76

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00901

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 12/10/99

WELL NO.: 694009 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple B. Herrick P. Shaw T. Nesbitt B. Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694013

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694013

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.)

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1150 Finished 1225

Volume purged 0.9 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 11.58

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1230

Finish

Well Purge Parameters	Reading: 1	2	3	4	5	6	7	8
Time	1150	1155	1200	1205	1210	1215	1220	1225
Well Volume Purged (gal.)	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
pH (units)	6.63	6.63	6.63	6.63	6.63	6.64	6.64	6.64
Conductivity (μmho)	12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.2
Turbidity	87	62	54	46	43	42	36	34
Water Temperature (°C)	22.0	22.1	22.1	22.0	22.0	22.0	22.0	22.0
Salinity	0.70	0.70	0.69	0.69	0.69	0.69	0.70	0.70
Depth to water (ft.)	11.54	11.55	11.56	11.57	11.58	11.56	11.57	11.58

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00902

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 1/13/00

WELL NO.: 694009 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy 60's

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694012

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694012

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 11.17

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1050 Finished 1110

Volume purged 1.0 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 11.52

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1115

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1055	1100	1105	1110
Well Volume Purged (gal.)	.25	.50	.75	1.0
pH (units)	7.14	7.22	7.09	7.05
Conductivity (mS/cm)	12.1	12.3	12.4	12.3
Turbidity (NTU)	1	2	2	0
Water Temperature (°C)	19.3	18.9	19.1	19.1
Salinity (%)	.72	.71	.71	.71
Depth to Water	11.52	11.52	11.51	11.52
DO	9.50	9.33	9.15	9.02

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW00903

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 4/19/02

WELL NO.: 694009 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson Peter Bayley

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694015

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694015

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 11.55

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1345 Finished 1410

Volume purged 0.9 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1410

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1354	1356	1401	1405	1410
Well Volume Purged (gal.)	0.1	0.2	0.5	0.7	0.9
pH (units)	6.88	6.87	6.89	6.90	6.90
Conductivity (mS/cm)	12.1	12.3	12.4	12.3	12.3
Turbidity (NTU)	269	274	24	0	0
Water Temperature (°C)	23.4	24.1	23.5	23.8	23.7
Salinity (%)	.69	.70	.70	.70	.70

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01101

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 12/10/99

WELL NO.: 694011 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy, 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple B. Herrick P. Shaw T. Nesbitt B. Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694009

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694009

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.)

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1300 Finished 1320

Volume purged 2.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 2.55

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1325

Finish

Well Purge Parameters

Reading:	1	2	3	4	5
Time	1300	1305	1310	1315	1320
Well Volume Purged (gal.)	0.4	1.0	1.5	2.0	2.5
pH (units)	6.52	6.64	6.67	6.68	6.68
Conductivity (μmho)	17.4	19.6	19.6	19.6	19.7
Turbidity	79	28	16	8	7
Water Temperature (°C)	19.5	19.3	19.3	19.3	19.2
Depth to water (ft.)	2.55	2.55	2.55	2.55	2.55
Salinity	1.17	1.17	1.17	1.17	1.17

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01102

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 01/13/00

WELL NO.: 694011 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Sunny, 60's

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 2.05

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 0905 Finished 0925

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 2.36

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 0930

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	0910	0915	0920	0925
Well Volume Purged (gal.)	0.25	0.75	1.0	1.5
pH (units)	6.82	6.94	7.00	6.99
Conductivity (μmho)	21.4	21.6	21.6	21.8
Turbidity	26	12	8	5
Water Temperature (°C)	16.8	16.7	16.7	16.7
Depth to water (ft.)	2.41	2.37	2.36	2.36
Salinity	1.29	1.29	1.29	1.29
Odor	None	None	None	None

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01201

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 12/10/99

WELL NO.: 694012 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS:

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple B. Herrick P. Shaw T. Nesbitt B. Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694011

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694011

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.)

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1310 Finished 1335

Volume purged 0.6 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 4.63

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1340

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6
Time	1310	1315	1320	1325	1330	1335
Well Volume Purged (gal.)	0.1	0.2	0.3	0.4	0.5	0.6
pH (units)	6.57	6.52	6.48	6.48	6.45	6.51
Conductivity (μmho)	20.6	20.9	20.8	21.1	21.1	20.2
Turbidity	77	59	51	18	17	9
Water Temperature (°C)	19.6	22.9	19.5	19.5	19.5	19.2
Depth to water (ft.)	4.64	4.65	4.61	4.65	4.66	4.63

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01202

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 1/13/00

WELL NO.: 694012 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Overcast, windy, 60 deg

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson T. Temple

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694014

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694014

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 3.07

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 0915 Finished 0940

Volume purged 1.0 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 4.19

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 0945

Finish 0955

Well Purge Parameters

Reading:	1	2	3	4
Time	0925	0930	0935	0940
Well Volume Purged (gal.)	.25	.50	.75	1.0
pH (units)	6.51	6.65	6.68	6.70
Conductivity (µmho)	26.8	27.1	27.2	27.2
Turbidity	15	12	11	10
Water Temperature (°C)	16.4	16.6	16.6	16.6
Depth to water (ft.)	4.24	4.13	4.15	4.19
DO	10.01	9.84	9.88	9.85
Salinity	1.65	1.67	1.67	1.67

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01301

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 12/10/99

WELL NO.: 694013 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy, 60's

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple B Herrick P Shaw T Nesbitt B Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694014

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694014

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) _____

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.) _____

Amount of sediment at bottom of well (ft.) _____

3 Volumes of water (gal.) _____

PURGING

Time started 1135 Finished 1150

Volume purged 0.4 GALLONS

Comments on Well Recovery _____

Depth to water at end of purge (ft.) 4.56

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1155

Finish _____

Well Purge Parameters

Reading:	1	2	3	4
Time	1135	1140	1145	1150
Well Volume Purged (gal.)	0.1	0.2	0.3	0.4
pH (units)	6.65	6.61	6.60	6.60
Conductivity (μmho)	23.0	23.0	22.9	22.9
Turbidity	52	24	18	7
Water Temperature (°C)	20.6	20.7	20.9	21.0
Depth to Water (DTW)	4.56	4.56	4.57	4.57

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01303

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 4/22/02

WELL NO.: 694013 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Hot

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson Peter Bayley

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694009

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694009

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 8.23

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1112 Finished 1138

Volume purged 1.5 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1140

Finish

Well Purge Parameters	Reading: 1	2	3	4
Time	1117	1122	1128	1138
Well Volume Purged (gal.)	0.2	0.5	1.0	1.5
pH (units)	6.71	6.70	6.69	6.72
Conductivity (mS/cm)	19.7	19.6	19.7	19.7
Turbidity (NTU)	0	0	0	0
Water Temperature (°C)	21.9	22.0	22.1	22.9
Salinity (%)	1.18	1.17	1.18	1.18

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW014 01

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 12/10/99

WELL NO.: 594014 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy, 60 degrees F

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple B Herrick P Shaw T Nesbitt B Murray

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.)

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1055 Finished 1110

Volume purged 0.4 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1112

Finish

Well Purge Parameters

Reading:	1	2	3	4	5	6	7
Time	1055	1100	1105	1110			
Well Volume Purged (gal.)	0.1	0.2	0.3	0.4			
pH (units)	6.84	6.88	6.90	6.90			
Conductivity (mS/cm)	21.6	21.6	21.6	21.6			
Turbidity (NTU)	15	7	3	2			
Water Temperature (°C)	19.2	19.2	19.3	19.3			
Depth to water (ft.)	3.16	3.16	3.16	3.16			

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW014 02

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 01/13/00

WELL NO.: 594014 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: Windy, 60 degrees F

REVIEWED BY: Peter Bayley | PERSONNEL: T. Temple J. Watson

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694008

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694008

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 3.71

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1135 Finished 1155

Volume purged 0.7 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.) 3.89

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1200

Finish 1205

Well Purge Parameters

Reading:	1	2	3	4	5	6	7
Time	1140	1145	1150	1155			
Well Volume Purged (gal.)	0.2	0.3	0.5	0.7			
pH (units)	7.01	7.00	6.98	6.98			
Conductivity (mS/cm)	21.0	21.2	21.1	21.0			
Turbidity (NTU)	10	3	0	12			
Water Temperature (°C)	16.9	17.1	17.2	17.2			
Depth to water (ft.)	3.89	3.89	3.89	3.89			

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01501

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 04/19/02

WELL NO.: 694015 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: HOT

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson Peter Bayley

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? 694016

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? 694016

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 6.69

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1138 Finished 1208

Volume purged 0.8 GALLONS

Comments on Well Recovery SLOW

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1210

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1145	1155	1200	1208
Well Volume Purged (gal.)	0.2	0.4	0.6	0.8
pH (units)	7.31	7.42	7.44	7.42
Conductivity (mS/cm)	6.73	6.63	6.68	6.65
Turbidity (NTU)	282	32	15	10
Water Temperature (°C)	22.6	22.8	23.1	23.3
Salinity (%)	.36	.35	.36	.34

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

CNC CLOUTER ISLAND
Groundwater Sampling Form

Groundwater Sampling | Sample ID: 694GW01601

PROJECT NAME: Clouter Island | JOB NO: 0158-001-08-200-000 | DATE: 04/19/02

WELL NO.: 694016 | LOCATION: Charleston Naval Complex Charleston, SC

WEATHER CONDITIONS: HOT

REVIEWED BY: Peter Bayley | PERSONNEL: James Watson Peter Bayley

PURGING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? In Accordance With CSAP

How was the line decontaminated? In Accordance With CSAP

Which well was previously purged? NONE

SAMPLING DEVICE

Type device? Peristaltic Pump

How was the device decontaminated? IAW CSAP

How was the line decontaminated? IAW CSAP

Which well was previously sampled? NONE

INITIAL WELL VOLUME

Well diameter (in.) One - inch (Internal Diameter)

Stickup (ft.) 2.5 feet

Depth to bottom of well from TOC (ft.) NA

Depth to water surface from TOC (ft.) 6.95

Length of water (ft.) NA

Volume of water (ft.) NA

(gal.)

Amount of sediment at bottom of well (ft.)

3 Volumes of water (gal.)

PURGING

Time started 1035 Finished 1108

Volume purged 1.3 GALLONS

Comments on Well Recovery

Depth to water at end of purge (ft.)

Completion Above Ground type

Additional Comments LOW-FLOW PURGE

Sample Collected: Start 1110

Finish

Well Purge Parameters

Reading:	1	2	3	4
Time	1040	1052	1100	1108
Well Volume Purged (gal.)	0.2	0.4	0.6	1.3
pH (units)	7.06	7.13	7.15	7.14
Conductivity (mS/cm)	14.9	14.7	14.6	14.7
Turbidity (NTU)	75	8	7	7
Water Temperature (°C)	21.0	20.3	20.5	20.7
Salinity (%)	.86	.86	.86	.86

NOTES: 1 ft. length of 4" = 0.087 ft^3 or 0.65 gal. 1 ft. length 2" = 0.022 ft^3 or 0.16 gal.
Turbidity choices: clear, turbid, opaque
Revision Date: 9/00

Analytical Reports for Groundwater

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

P9 VOA													
	SAMPLE ID ------->	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE ANALYZED --->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
74-87-3	Chloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-09-2	Methylene chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-64-1	Acetone	10.	U	10.	U	10.	U	120.	U	10.	U	10.	U
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
80-62-6	Methyl methacrylate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
591-78-6	2-Hexanone	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
9000-76-0	XYLENE (META/PARA)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-71-8	Dichlorodifluoromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-69-4	Trichlorofluoromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
74-88-4	Methyl iodide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

P9 VOA	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE ANALYZED --->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
107-05-1	3-Chloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-12-0	Propionitrile	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR
75-05-8	Acetonitrile	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR
107-02-8	Acrolein	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR
126-99-8	Chloroprene	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
107-13-1	Acrylonitrile	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR
123-91-1	1,4-Dioxane	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR	50.	UR
126-98-7	Methacrylonitrile	50.	U	50.	U	50.	U	50.	U	50.	U	50.	U
74-95-3	Methylene bromide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-83-1	Isobutyl alcohol	500.	UR	500.	UR	500.	UR	500.	UR	500.	UR	500.	UR
106-93-4	1, 2-Dibromoethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
630-20-6	1,1,1,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
95-47-6	o-Xylene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
96-18-4	1,2,3-Trichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
110-57-6	trans-1,4-Dichloro-2-butene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
97-63-2	Ethyl methacrylate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
76-01-7	Pentachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

P9 VOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE ANALYZED --->	05/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone (MEK)	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon tetrachloride	5.	U
108-05-4	Vinyl acetate	10.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
80-62-6	Methyl methacrylate	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
9000-76-0	XYLENE (META/PARA)	5.	U
75-71-8	Dichlorodifluoromethane	5.	U
75-69-4	Trichlorofluoromethane	5.	U
74-88-4	Methyl iodide	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

P9 VOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE ANALYZED --->	05/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
107-05-1	3-Chloropropene	5.	U
107-12-0	Propionitrile	50.	UR
75-05-8	Acetonitrile	50.	UR
107-02-8	Acrolein	50.	UR
126-99-8	Chloroprene	10.	U
107-13-1	Acrylonitrile	50.	UR
123-91-1	1,4-Dioxane	50.	UR
126-98-7	Methacrylonitrile	50.	U
74-95-3	Methylene bromide	5.	U
78-83-1	Isobutyl alcohol	500.	UR
106-93-4	1, 2-Dibromoethane	5.	U
630-20-6	1,1,1,2-Tetrachloroethane	5.	U
95-47-6	o-Xylene	5.	U
96-18-4	1,2,3-Trichloropropane	5.	U
110-57-6	trans-1,4-Dichloro-2-butene	5.	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U
97-63-2	Ethyl methacrylate	5.	U
76-01-7	Pentachloroethane	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

APX9 SVOA	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	DATE ANALYZED --->	05/28/97		06/12/97		05/28/97		05/28/97		06/12/97		05/28/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
108-95-2	Phenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
95-57-8	2-Chlorophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
100-51-6	Benzyl alcohol	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
106-44-5	4-Methylphenol (p-Cresol)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
67-72-1	Hexachloroethane	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
98-95-3	Nitrobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
78-59-1	Isophorone	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
88-75-5	2-Nitrophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
105-67-9	2,4-Dimethylphenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
120-83-2	2,4-Dichlorophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
91-20-3	Naphthalene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
106-47-8	4-Chloroaniline	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
87-68-3	Hexachlorobutadiene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
91-57-6	2-Methylnaphthalene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	25.	U	25.	U	25.	U	25.	U	25.	U	25.	U
91-58-7	2-Chloronaphthalene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
88-74-4	2-Nitroaniline	25.	U	25.	U	25.	UJ	25.	UR	25.	U	25.	UJ
131-11-3	Dimethyl phthalate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
208-96-8	Acenaphthylene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
99-09-2	3-Nitroaniline	25.	U	25.	U	25.	UJ	25.	UR	25.	U	25.	UJ
83-32-9	Acenaphthene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
51-28-5	2,4-Dinitrophenol	25.	UJ	25.	UJ	25.	U	25.	U	25.	UJ	25.	UJ
100-02-7	4-Nitrophenol	25.	U	25.	U	25.	U	25.	U	25.	U	25.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	DATE ANALYZED --->	05/28/97		06/12/97		05/28/97		05/28/97		06/12/97		05/28/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
132-64-9	Dibenzofuran	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
84-66-2	Diethylphthalate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
86-73-7	Fluorene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
100-01-6	4-Nitroaniline	25.	UJ	25.	UJ	25.	UJ	25.	UR	25.	UJ	25.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	25.	UJ	25.	UJ	25.	UJ	25.	U	25.	UJ	25.	UJ
86-30-6	N-Nitrosodiphenylamine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
118-74-1	Hexachlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
87-86-5	Pentachlorophenol	25.	U	25.	UJ	25.	U	25.	U	25.	UJ	25.	U
85-01-8	Phenanthrene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
120-12-7	Anthracene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
84-74-2	Di-n-butylphthalate	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
206-44-0	Fluoranthene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
129-00-0	Pyrene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
85-68-7	Butylbenzylphthalate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
91-94-1	3,3'-Dichlorobenzidine	10.	UJ	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
56-55-3	Benzo(a)anthracene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
218-01-9	Chrysene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	10.	U	10.	UJ	10.	UR	10.	UJ	10.	UJ
117-84-0	Di-n-octyl phthalate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
50-32-8	Benzo(a)pyrene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
110-86-1	Pyridine	10.	U	10.	UJ	10.	UJ	10.	UR	10.	U	10.	UJ
62-75-9	N-Nitrosodimethylamine	10.	U	10.	U	10.	UJ	10.	UR	10.	UJ	10.	UJ
109-06-8	2-Picoline	25.	U	25.	U	25.	UJ	25.	UR	25.	U	25.	UJ
10595-95-6	N-Nitrosomethylethylamine	25.	U	25.	U	25.	UJ	25.	UR	25.	U	25.	UJ
66-27-3	Methyl methanesulfonate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
55-18-5	N-Nitrosodiethylamine	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
62-50-0	Ethyl methanesulfonate	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
62-53-3	Aniline	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

APX9 SVOA	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	DATE ANALYZED --->	05/28/97		06/12/97		05/28/97		05/28/97		06/12/97		05/28/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
930-55-2	N-Nitrosopyrrolidine	40.	U	40.	U	40.	UJ	40.	UR	40.	U	40.	UJ
98-86-2	Acetophenone	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
59-89-2	N-Nitrosomorpholine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
95-53-4	o-Toluidine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
100-75-4	N-Nitrosopiperidine	20.	UJ	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
126-68-1	O,O,O-Triethylphosphorothioate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
122-09-8	a,a-Dimethylphenethylamine	40.	U	40.	U	40.	UJ	40.	UR	40.	U	40.	UJ
87-65-0	2,6-Dichlorophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
1888-71-7	Hexachloropropene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
106-50-3	p-Phenylenediamine	100.	U	100.	U	100.	UJ	100.	UR	100.	U	100.	UJ
924-16-3	N-Nitroso-di-n-butylamine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
94-59-7	Safrole	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
95-94-3	1,2,4,5-Tetrachlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
120-58-1	Isosafrole	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
130-15-4	1,4-Naphthoquinone	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
99-65-0	1,3-Dinitrobenzene	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
608-93-5	Pentachlorobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
134-32-7	1-Naphthylamine	10.	UJ	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
91-59-8	2-Naphthylamine	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
99-55-8	5-Nitro-o-toluidine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
122-39-4	Diphenylamine	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
465-73-6	Isodrin	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
99-35-4	1,3,5-Trinitrobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
62-44-2	Phenacetin	20.	U	20.	UJ	20.	UJ	20.	UR	20.	UJ	20.	UJ
297-97-2	Thionazin	20.	U	20.	UJ	20.	UJ	20.	UR	20.	UJ	20.	UJ
92-67-1	4-Aminobiphenyl	20.	UJ	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
82-68-8	Pentachloronitrobenzene	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
23950-58-5	Pronamide	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
88-85-7	Dinoseb	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
56-57-5	4-Nitroquinoline 1-oxide	40.	U	40.	UR	40.	UJ	40.	UR	40.	UR	40.	UJ
91-80-5	Methapyrilene	100.	UJ	100.	U	100.	UJ	100.	UR	100.	U	100.	UJ
140-57-8	Aramite	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
60-11-7	p-(Dimethylamino)azobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
119-93-7	3,3-Dimethylbenzidine	20.	UJ	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
52-85-7	Famphur	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/14/97		05/14/97		05/14/97		05/14/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	DATE ANALYZED --->	05/28/97		06/12/97		05/28/97		05/28/97		06/12/97		05/28/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
53-96-3	Acetamidofluorene	20.	U	20.	U	20.	UJ	20.	UR	20.	U	20.	UJ
57-97-6	7,12-Dimethylbenz(a)anthracene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
56-49-5	3-Methyl cholanthrene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
70-30-4	Hexachlorophene	100.	UR	100.	UR	100.	UR	100.	UR	100.	UR	100.	UR
143-50-0	Kepone	200.	UJ	200.	UJ	200.	UJ	200.	UR	200.	UJ	200.	UJ
86-74-8	Carbazole	10.	UJ	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
510-15-6	Chlorobenzilate	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
60-51-5	Dimethoate	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
56-38-2	Parathion	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
298-00-0	Methyl parathion	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
298-02-2	Phorate	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
298-04-4	Disulfoton	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
3689-24-5	Sulfotep	10.	U	10.	UJ	10.	UJ	10.	UR	10.	UJ	10.	UJ
2303-16-4	Diallate	10.	UJ	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ
65-85-0	Benzoic acid	50.	UJ	50.	U	50.	UJ	50.	U	50.	U	50.	UJ
103-33-3	Azobenzene	10.	U	10.	U	10.	UJ	10.	UR	10.	U	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

APX9 SVOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/28/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	UJ
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	UJ
106-46-7	1,4-Dichlorobenzene	10.	UJ
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	UJ
95-48-7	2-Methylphenol (o-Cresol)	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	UJ
106-44-5	4-Methylphenol (p-Cresol)	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	UJ
67-72-1	Hexachloroethane	10.	UJ
98-95-3	Nitrobenzene	10.	UJ
78-59-1	Isophorone	10.	UJ
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	UJ
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	UJ
91-20-3	Naphthalene	10.	UJ
106-47-8	4-Chloroaniline	10.	UJ
87-68-3	Hexachlorobutadiene	10.	UJ
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	UJ
77-47-4	Hexachlorocyclopentadiene	10.	UJ
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	25.	U
91-58-7	2-Chloronaphthalene	10.	UJ
88-74-4	2-Nitroaniline	25.	UJ
131-11-3	Dimethyl phthalate	10.	UJ
208-96-8	Acenaphthylene	10.	UJ
606-20-2	2,6-Dinitrotoluene	10.	UJ
99-09-2	3-Nitroaniline	25.	UJ
83-32-9	Acenaphthene	10.	UJ
51-28-5	2,4-Dinitrophenol	25.	UJ
100-02-7	4-Nitrophenol	25.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PX9 SVOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/28/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
132-64-9	Dibenzofuran	10.	UJ
121-14-2	2,4-Dinitrotoluene	10.	UJ
84-66-2	Diethylphthalate	10.	UJ
7005-72-3	4-Chlorophenylphenylether	10.	UJ
86-73-7	Fluorene	10.	UJ
100-01-6	4-Nitroaniline	25.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	25.	UJ
86-30-6	N-Nitrosodiphenylamine	10.	UJ
101-55-3	4-Bromophenyl-phenylether	10.	UJ
118-74-1	Hexachlorobenzene	10.	UJ
87-86-5	Pentachlorophenol	25.	U
85-01-8	Phenanthrene	10.	UJ
120-12-7	Anthracene	10.	UJ
84-74-2	Di-n-butylphthalate	10.	UJ
206-44-0	Fluoranthene	10.	UJ
129-00-0	Pyrene	10.	UJ
85-68-7	Butylbenzylphthalate	10.	UJ
91-94-1	3,3'-Dichlorobenzidine	10.	UJ
56-55-3	Benzo(a)anthracene	10.	UJ
218-01-9	Chrysene	10.	UJ
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	UJ
117-84-0	Di-n-octyl phthalate	10.	UJ
205-99-2	Benzo(b)fluoranthene	10.	UJ
207-08-9	Benzo(k)fluoranthene	10.	UJ
50-32-8	Benzo(a)pyrene	10.	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	10.	UJ
53-70-3	Dibenz(a,h)anthracene	10.	UJ
191-24-2	Benzo(g,h,i)perylene	10.	UJ
110-86-1	Pyridine	10.	UJ
62-75-9	N-Nitrosodimethylamine	10.	UJ
109-06-8	2-Picoline	25.	UJ
0595-95-6	N-Nitrosomethylethylamine	25.	UJ
66-27-3	Methyl methanesulfonate	10.	UJ
55-18-5	N-Nitrosodiethylamine	20.	UJ
62-50-0	Ethyl methanesulfonate	20.	UJ
62-53-3	Aniline	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PX9 SVOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/28/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	7669	VAL
930-55-2	N-Nitrosopyrrolidine	40.	UJ
98-86-2	Acetophenone	10.	UJ
59-89-2	N-Nitrosomorpholine	10.	UJ
95-53-4	o-Toluidine	10.	UJ
100-75-4	N-Nitrosopiperidine	20.	UJ
126-68-1	O,O,O-Triethylphosphorothioate	10.	UJ
122-09-8	a,a-Dimethylphenethylamine	40.	UJ
87-65-0	2,6-Dichlorophenol	10.	U
1888-71-7	Hexachloropropene	10.	UJ
106-50-3	p-Phenylenediamine	100.	UJ
924-16-3	N-Nitroso-di-n-butylamine	10.	UJ
94-59-7	Safrole	10.	UJ
95-94-3	1,2,4,5-Tetrachlorobenzene	10.	UJ
120-58-1	Isosafrole	10.	UJ
130-15-4	1,4-Naphthoquinone	10.	UJ
99-65-0	1,3-Dinitrobenzene	20.	UJ
608-93-5	Pentachlorobenzene	10.	UJ
134-32-7	1-Naphthylamine	10.	UJ
91-59-8	2-Naphthylamine	10.	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	10.	U
99-55-8	5-Nitro-o-toluidine	10.	UJ
122-39-4	Diphenylamine	10.	UJ
465-73-6	Isodrin	10.	UJ
99-35-4	1,3,5-Trinitrobenzene	10.	UJ
62-44-2	Phenacetin	20.	UJ
297-97-2	Thionazin	20.	UJ
92-67-1	4-Aminobiphenyl	20.	UJ
82-68-8	Pentachloronitrobenzene	20.	UJ
23950-58-5	Pronamide	10.	UJ
88-85-7	Dinoseb	20.	UJ
56-57-5	4-Nitroquinoline 1-oxide	40.	UJ
91-80-5	Methapyrilene	100.	UJ
140-57-8	Aramite	20.	UJ
60-11-7	p-(Dimethylamino)azobenzene	10.	UJ
119-93-7	3,3-Dimethylbenzidine	20.	UJ
52-85-7	Famphur	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

LPX9 SVOA

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/28/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
53-96-3	Acetamidofluorene	20.	UJ
57-97-6	7,12-Dimethylbenz(a)anthracene	10.	UJ
56-49-5	3-Methyl cholanthrene	10.	UJ
70-30-4	Hexachlorophene	100.	UR
143-50-0	Kepone	200.	UJ
86-74-8	Carbazole	10.	UJ
510-15-6	Chlorobenzilate	10.	UJ
60-51-5	Dimethoate	10.	UJ
56-38-2	Parathion	10.	UJ
298-00-0	Methyl parathion	10.	UJ
298-02-2	Phorate	10.	UJ
298-04-4	Disulfoton	10.	UJ
3689-24-5	Sulfotep	10.	UJ
2303-16-4	Diallate	10.	UJ
65-85-0	Benzoic acid	50.	UJ
103-33-3	Azobenzene	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

YANIDE

	SAMPLE ID ------->	694-G-W002-01	694-G-W002-02	694-G-W002-03	694-G-W002-04	694-G-W003-01	694-G-W003-02
	ORIGINAL ID ----->	694GW00201	694GW00202	694GW00203	694GW00204	694GW00301	694GW00302
	LAB SAMPLE ID --->	7681-03	7942-05	32259.02	33177.02	7681-02	7942-04
	ID FROM REPORT -->	694GW00201	694GW00202	694GW00203	694GW00204	694GW00301	694GW00302
	SAMPLE DATE ----->	05/16/97	07/17/97	12/17/97	03/16/98	05/16/97	07/17/97
	DATE EXTRACTED -->	05/29/97	08/11/97	12/22/97	03/19/98	05/23/97	08/11/97
	DATE ANALYZED --->	05/29/97	08/11/97	12/31/97	03/20/98	05/27/97	08/11/97
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL	7669	VAL	7942	VAL
57-12-5	Cyanide (CN)	2.	U	10.	U	2.	U	2.	UJ	2.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

ANIDE

SAMPLE ID ------->	694-G-W003-03	694-G-W003-04	694-G-W004-01	694-G-W004-02	694-G-W004-03	694-G-W004-04
ORIGINAL ID ----->	694GW00303	694GW00304	694GW00401	694GW00402	694GW00403	694GW00404
LAB SAMPLE ID --->	32259.06	33219.02	7676-02	7947-01	32413.01	33219.01
ID FROM REPORT -->	694GW00303	694GW00304	694GW00401	694GW00402	694GW00403	694GW00404
SAMPLE DATE ----->	12/17/97	03/17/98	05/15/97	07/21/97	01/12/98	03/17/98
DATE EXTRACTED -->	12/22/97	03/20/98	05/23/97	08/11/97	01/14/98	03/20/98
DATE ANALYZED --->	12/31/97	03/20/98	05/27/97	08/11/97	01/15/98	03/20/98
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	32259	VAL	33177	VAL	7669	VAL	7942	VAL	32413	VAL	33177	VAL
57-12-5	Cyanide (CN)	2.	U	2.	UJ	2.	U	10.	U	3.4	U	2.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

YANIDE

	SAMPLE ID ------>	694-G-W005-01	694-G-W005-02	694-G-W005-03	694-G-W005-04	694-G-W006-01	694-G-W006-02
	ORIGINAL ID ----->	694GW00501	694GW00502	694GW00503	694GW00504	694GW00601	694GW00602
	LAB SAMPLE ID --->	7676-01	7942-01	32276.03	33253.01	7676-03	7942-06
	ID FROM REPORT -->	694GW00501	694GW00502	694GW00503	694GW00504	694GW00601	694GW00602
	SAMPLE DATE ----->	05/15/97	07/17/97	12/18/97	03/19/98	05/15/97	07/18/97
	DATE EXTRACTED -->	05/29/97	08/11/97	12/22/97	03/21/98	05/23/97	08/11/97
	DATE ANALYZED --->	05/29/97	08/11/97	12/31/97	03/23/98	05/27/97	08/14/97
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL	7669	VAL	7942	VAL
57-12-5	Cyanide (CN)	2.		10.	U	2.	U	2.	UJ	2.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

ANIDE

	SAMPLE ID ------>	694-G-W006-03		694-G-W006-04		694-G-W007-01		694-H-W007-01		694-G-W007-02		694-H-W007-02	
	ORIGINAL ID ----->	694GW00603		694GW00604		694GW00701		694HW00701		694GW00702		694HW00702	
	LAB SAMPLE ID --->	32289.01		33253.02		7669-01		7669-02		7942-02		7942-03	
	ID FROM REPORT -->	694GW00603		694GW00604		694GW00701		694HW00701		694GW00702		694HW00702	
	SAMPLE DATE ----->	12/19/97		03/19/98		05/14/97		05/14/97		07/17/97		07/17/97	
	DATE EXTRACTED -->	12/22/97		03/21/98		05/23/97		05/29/97		08/11/97		08/11/97	
	DATE ANALYZED --->	12/31/97		03/23/98		05/27/97		05/29/97		08/11/97		08/11/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	7669	VAL	7669	VAL	7942	VAL	7942	VAL
57-12-5	Cyanide (CN)	2.	U	2.	UJ	2.	U	2.	U	10.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

YANIDE									
	SAMPLE ID ------>	694-G-W007-03		694-H-W007-03		694-G-W007-04		694-H-W007-04			
	ORIGINAL ID ----->	694GW00703		694HW00703		694GW00704		694HW00704			
	LAB SAMPLE ID --->	32276.01		32276.02		33223.01		33223.02			
	ID FROM REPORT -->	694GW00703		694HW00703		694GW00704		694HW00704			
	SAMPLE DATE ----->	12/18/97		12/18/97		03/18/98		03/18/98			
	DATE EXTRACTED -->	12/22/97		12/22/97		03/20/98		03/20/98			
	DATE ANALYZED --->	12/31/97		12/31/97		03/20/98		03/20/98			
	MATRIX ---------->	Water		Water		Water		Water			
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L			
CAS #	Parameter	32259	VAL	32259	VAL	33177	VAL	33177	VAL		
57-12-5	Cyanide (CN)	2.	U	2.	U	2.	UJ	2.	UJ		

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

ERB						
SAMPLE ID ------->	694-G-W002-01	694-G-W003-01	694-G-W004-01	694-G-W005-01	694-G-W006-01	694-G-W007-01
ORIGINAL ID ----->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
LAB SAMPLE ID --->	7681-03	7681-02	7676-02	7676-01	7676-03	7669-01
ID FROM REPORT -->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
SAMPLE DATE ----->	05/16/97	05/16/97	05/15/97	05/14/97	05/15/97	05/16/97
DATE EXTRACTED -->	05/20/97	05/20/97	05/20/97	05/20/97	05/20/97	05/20/97
DATE ANALYZED --->	05/23/97	05/23/97	05/23/97	05/23/97	05/23/97	05/23/97
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
94-75-7	2,4-D	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
93-76-5	2,4,5-T	0.49	U	0.49	U	0.49	U	0.49	U	0.49	U	0.49	U
93-72-1	2,4,5-TP (Silvex)	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
88-85-7	Dinoseb	0.62	U	0.62	U	0.62	U	0.62	U	0.62	U	0.62	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

HERB

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/20/97
DATE ANALYZED --->	05/23/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
94-75-7	2,4-D	1.6	U
93-76-5	2,4,5-T	0.49	U
93-72-1	2,4,5-TP (Silvex)	0.31	U
88-85-7	Dinoseb	0.62	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

EXACHROME	SAMPLE ID ------->>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->>	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->>	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->>	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->>	05/16/97		05/16/97		05/15/97		05/15/97		05/15/97		05/14/97	
	DATE ANALYZED --->>	05/17/97		05/17/97		05/16/97		05/16/97		05/16/97		05/15/97	
	MATRIX ---------->>	Water		Water		Water		Water		Water		Water	
	UNITS ----------->>	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
18540-29-9	Chromium (Hexavalent)	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

EXACHROME							
	SAMPLE ID ------>	694-H-W007-01					
	ORIGINAL ID ----->	694HW00701					
	LAB SAMPLE ID --->	7669-02					
	ID FROM REPORT -->	694HW00701					
	SAMPLE DATE ----->	05/14/97					
	DATE ANALYZED --->	05/15/97					
	MATRIX ---------->	Water					
	UNITS ----------->	UG/L					
CAS #	Parameter	7669 VAL					
18540-29-9	Chromium (Hexavalent)	0.02 U					

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W-SVOA	SAMPLE ID ------->	694-G-W002-03	694-G-W002-04 RE	694-G-W003-03	694-G-W003-04 RE	694-G-W004-03	694-G-W004-04
	ORIGINAL ID ----->	694GW00203	694GW00204	694GW00303	694GW00304	694GW00403	694GW00404
	LAB SAMPLE ID --->	32259.02	33177.02	32259.06	33219.02	32413.01	33219.01
	ID FROM REPORT -->	694GW00203	694GW00204	694GW00303	694GW00304	694GW00403	694GW00404
	SAMPLE DATE ----->	12/17/97	03/16/98	12/17/97	03/17/98	01/12/98	03/17/98
	DATE EXTRACTED -->	12/19/97	03/30/98	12/19/97	03/30/98	01/13/98	03/19/98
	DATE ANALYZED --->	12/24/97	04/01/98	12/25/97	03/31/98	01/16/98	03/28/98
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32413	VAL	33177	VAL
108-95-2	Phenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
95-57-8	2-Chlorophenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
541-73-1	1,3-Dichlorobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
106-46-7	1,4-Dichlorobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
100-51-6	Benzyl alcohol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
95-50-1	1,2-Dichlorobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
106-44-5	4-Methylphenol (p-Cresol)	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
67-72-1	Hexachloroethane	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
98-95-3	Nitrobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
78-59-1	Isophorone	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
88-75-5	2-Nitrophenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
105-67-9	2,4-Dimethylphenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
65-85-0	Benzoic acid	50.	U	71.	U	6.	J	56.	U	50.	U	59.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
120-83-2	2,4-Dichlorophenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
91-20-3	Naphthalene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
106-47-8	4-Chloroaniline	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
87-68-3	Hexachlorobutadiene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
59-50-7	4-Chloro-3-methylphenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
91-57-6	2-Methylnaphthalene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
77-47-4	Hexachlorocyclopentadiene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
88-06-2	2,4,6-Trichlorophenol	10.	U	14.	U	10.	U	11.	U	10.	U	12.	U
95-95-4	2,4,5-Trichlorophenol	50.	U	71.	U	50.	U	56.	U	50.	U	59.	U
91-58-7	2-Chloronaphthalene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
88-74-4	2-Nitroaniline	50.	U	71.	U	50.	UJ	56.	U	50.	U	59.	U
131-11-3	Dimethyl phthalate	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
208-96-8	Acenaphthylene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
606-20-2	2,6-Dinitrotoluene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
99-09-2	3-Nitroaniline	50.	U	71.	U	50.	UJ	56.	U	50.	U	59.	U
83-32-9	Acenaphthene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
51-28-5	2,4-Dinitrophenol	50.	U	71.	U	50.	U	56.	U	50.	U	59.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W-SVOA	SAMPLE ID ------>	694-G-W002-03		694-G-W002-04 RE		694-G-W003-03		694-G-W003-04 RE		694-G-W004-03		694-G-W004-04	
	ORIGINAL ID ----->	694GW00203		694GW00204		694GW00303		694GW00304		694GW00403		694GW00404	
	LAB SAMPLE ID --->	32259.02		33177.02		32259.06		33219.02		32413.01		33219.01	
	ID FROM REPORT -->	694GW00203		694GW00204		694GW00303		694GW00304		694GW00403		694GW00404	
	SAMPLE DATE ----->	12/17/97		03/16/98		12/17/97		03/17/98		01/12/98		03/17/98	
	DATE EXTRACTED -->	12/19/97		03/30/98		12/19/97		03/30/98		01/13/98		03/19/98	
	DATE ANALYZED --->	12/24/97		04/01/98		12/25/97		03/31/98		01/16/98		03/28/98	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32413	VAL	33177	VAL
100-02-7	4-Nitrophenol	50.	U	71.	U	50.	U	56.	U	50.	U	59.	U
132-64-9	Dibenzofuran	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
121-14-2	2,4-Dinitrotoluene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
84-66-2	Diethylphthalate	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
7005-72-3	4-Chlorophenylphenylether	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
86-73-7	Fluorene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
100-01-6	4-Nitroaniline	50.	U	71.	U	50.	UJ	56.	U	50.	U	59.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	71.	U	50.	U	56.	U	50.	U	59.	U
86-30-6	N-Nitrosodiphenylamine	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
101-55-3	4-Bromophenyl-phenylether	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
118-74-1	Hexachlorobenzene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
87-86-5	Pentachlorophenol	50.	U	71.	U	50.	U	56.	U	50.	U	59.	U
85-01-8	Phenanthrene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
120-12-7	Anthracene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
84-74-2	Di-n-butylphthalate	10.	U	14.	U	2.	UJ	11.	U	10.	U	12.	U
206-44-0	Fluoranthene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
129-00-0	Pyrene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
85-68-7	Butylbenzylphthalate	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U	28.	U	20.	UJ	22.	U	20.	U	24.	U
56-55-3	Benzo(a)anthracene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
218-01-9	Chrysene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
117-84-0	Di-n-octyl phthalate	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
205-99-2	Benzo(b)fluoranthene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
207-08-9	Benzo(k)fluoranthene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
50-32-8	Benzo(a)pyrene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
53-70-3	Dibenz(a,h)anthracene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U
191-24-2	Benzo(g,h,i)perylene	10.	U	14.	U	10.	UJ	11.	U	10.	U	12.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

GW-SVOA	SAMPLE ID ------->	694-G-W005-03		694-G-W005-04		694-G-W006-03		694-G-W006-04		694-G-W007-03		694-H-W007-03	
	ORIGINAL ID ----->	694GW00503		694GW00504		694GW00603		694GW00604		694GW00703		694HW00703	
	LAB SAMPLE ID --->	32276.03		33253.01		32289.01		33253.02		32276.01		32276.02	
	ID FROM REPORT -->	694GW00503		694GW00504		694GW00603		694GW00604		694GW00703		694HW00703	
	SAMPLE DATE ----->	12/18/97		03/19/98		12/19/97		03/19/98		12/18/97		12/18/97	
	DATE EXTRACTED -->	12/20/97		03/21/98		12/22/97		03/21/98		12/20/97		12/20/97	
	DATE ANALYZED --->	12/24/97		03/28/98		12/31/97		03/28/98		12/24/97		12/24/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32259	VAL	32259	VAL
108-95-2	Phenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
95-57-8	2-Chlorophenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
100-51-6	Benzyl alcohol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
106-44-5	4-Methylphenol (p-Cresol)	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
67-72-1	Hexachloroethane	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
98-95-3	Nitrobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
78-59-1	Isophorone	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
88-75-5	2-Nitrophenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
105-67-9	2,4-Dimethylphenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
65-85-0	Benzoic acid	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
120-83-2	2,4-Dichlorophenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
91-20-3	Naphthalene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
106-47-8	4-Chloroaniline	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
87-68-3	Hexachlorobutadiene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
91-57-6	2-Methylnaphthalene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
91-58-7	2-Chloronaphthalene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
88-74-4	2-Nitroaniline	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
131-11-3	Dimethyl phthalate	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
208-96-8	Acenaphthylene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
99-09-2	3-Nitroaniline	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
83-32-9	Acenaphthene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
51-28-5	2,4-Dinitrophenol	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

GW-SVOA

SAMPLE ID ------>	694-G-W005-03	694-G-W005-04	694-G-W006-03	694-G-W006-04	694-G-W007-03	694-H-W007-03
ORIGINAL ID ----->	694GW00503	694GW00504	694GW00603	694GW00604	694GW00703	694HW00703
LAB SAMPLE ID --->	32276.03	33253.01	32289.01	33253.02	32276.01	32276.02
ID FROM REPORT -->	694GW00503	694GW00504	694GW00603	694GW00604	694GW00703	694HW00703
SAMPLE DATE ----->	12/18/97	03/19/98	12/19/97	03/19/98	12/18/97	12/18/97
DATE EXTRACTED -->	12/20/97	03/21/98	12/22/97	03/21/98	12/20/97	12/20/97
DATE ANALYZED --->	12/24/97	03/28/98	12/31/97	03/28/98	12/24/97	12/24/97
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32259	VAL	32259	VAL
100-02-7	4-Nitrophenol	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
132-64-9	Dibenzofuran	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
84-66-2	Diethylphthalate	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
86-73-7	Fluorene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
100-01-6	4-Nitroaniline	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
86-30-6	N-Nitrosodiphenylamine	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
118-74-1	Hexachlorobenzene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
87-86-5	Pentachlorophenol	50.	U	50.	U	50.	U	50.	U	56.	U	50.	U
85-01-8	Phenanthrene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
120-12-7	Anthracene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
84-74-2	Di-n-butylphthalate	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
206-44-0	Fluoranthene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
129-00-0	Pyrene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
85-68-7	Butylbenzylphthalate	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
91-94-1	3,3'-Dichlorobenzidine	20.	U	20.	U	20.	U	20.	U	22.	U	20.	U
56-55-3	Benzo(a)anthracene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
218-01-9	Chrysene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
117-84-0	Di-n-octyl phthalate	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
50-32-8	Benzo(a)pyrene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U	10.	U	10.	U	11.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W-SVOA

SAMPLE ID ------->	694-G-W007-04	694-H-W007-04
ORIGINAL ID ----->	694GW00704	694HW00704
LAB SAMPLE ID --->	33223.01	33223.02
ID FROM REPORT -->	694GW00704	694HW00704
SAMPLE DATE ----->	03/18/98	03/18/98
DATE EXTRACTED -->	03/19/98	03/19/98
DATE ANALYZED --->	03/28/98	03/28/98
MATRIX ---------->	Water	Water
UNITS ---------->	UG/L	UG/L

CAS #	Parameter	33177	VAL	33177	VAL
108-95-2	Phenol	12.	U	11.	U
111-44-4	bis(2-Chloroethyl)ether	12.	U	11.	U
95-57-8	2-Chlorophenol	12.	U	11.	U
541-73-1	1,3-Dichlorobenzene	12.	U	11.	U
106-46-7	1,4-Dichlorobenzene	12.	U	11.	U
100-51-6	Benzyl alcohol	12.	U	11.	U
95-50-1	1,2-Dichlorobenzene	12.	U	11.	U
95-48-7	2-Methylphenol (o-Cresol)	12.	U	11.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	12.	U	11.	U
106-44-5	4-Methylphenol (p-Cresol)	12.	U	11.	U
621-64-7	N-Nitroso-di-n-propylamine	12.	U	11.	U
67-72-1	Hexachloroethane	12.	U	11.	U
98-95-3	Nitrobenzene	12.	U	11.	U
78-59-1	Isophorone	12.	U	11.	U
88-75-5	2-Nitrophenol	12.	U	11.	U
105-67-9	2,4-Dimethylphenol	12.	U	11.	U
65-85-0	Benzoic acid	59.	U	57.	U
111-91-1	bis(2-Chloroethoxy)methane	12.	U	11.	U
120-83-2	2,4-Dichlorophenol	12.	U	11.	U
120-82-1	1,2,4-Trichlorobenzene	12.	U	11.	U
91-20-3	Naphthalene	12.	U	7.	J
106-47-8	4-Chloroaniline	12.	U	11.	U
87-68-3	Hexachlorobutadiene	12.	U	11.	U
59-50-7	4-Chloro-3-methylphenol	12.	U	11.	U
91-57-6	2-Methylnaphthalene	12.	U	11.	U
77-47-4	Hexachlorocyclopentadiene	12.	U	11.	U
88-06-2	2,4,6-Trichlorophenol	12.	U	11.	U
95-95-4	2,4,5-Trichlorophenol	59.	U	57.	U
91-58-7	2-Chloronaphthalene	12.	U	11.	U
88-74-4	2-Nitroaniline	59.	U	57.	U
131-11-3	Dimethyl phthalate	12.	U	11.	U
208-96-8	Acenaphthylene	12.	U	11.	U
606-20-2	2,6-Dinitrotoluene	12.	U	11.	U
99-09-2	3-Nitroaniline	59.	U	57.	U
83-32-9	Acenaphthene	12.	U	11.	U
51-28-5	2,4-Dinitrophenol	59.	U	57.	U

*** Validation Complete ***

W-SVOA									
	SAMPLE ID ------>	694-G-W007-04		694-H-W007-04					
	ORIGINAL ID ----->	694GW00704		694HW00704					
	LAB SAMPLE ID --->	33223.01		33223.02					
	ID FROM REPORT -->	694GW00704		694HW00704					
	SAMPLE DATE ----->	03/18/98		03/18/98					
	DATE EXTRACTED -->	03/19/98		03/19/98					
	DATE ANALYZED --->	03/28/98		03/28/98					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	33177	VAL	33177	VAL				
100-02-7	4-Nitrophenol	59.	U	57.	U				
132-64-9	Dibenzofuran	12.	U	11.	U				
121-14-2	2,4-Dinitrotoluene	12.	U	11.	U				
84-66-2	Diethylphthalate	12.	U	11.	U				
7005-72-3	4-Chlorophenylphenylether	12.	U	11.	U				
86-73-7	Fluorene	12.	U	11.	U				
100-01-6	4-Nitroaniline	59.	U	57.	U				
534-52-1	2-Methyl-4,6-Dinitrophenol	59.	U	57.	U				
86-30-6	N-Nitrosodiphenylamine	12.	U	11.	U				
101-55-3	4-Bromophenyl-phenylether	12.	U	11.	U				
118-74-1	Hexachlorobenzene	12.	U	11.	U				
87-86-5	Pentachlorophenol	59.	U	57.	U				
85-01-8	Phenanthrene	12.	U	11.	U				
120-12-7	Anthracene	12.	U	11.	U				
84-74-2	Di-n-butylphthalate	12.	U	11.	U				
206-44-0	Fluoranthene	12.	U	11.	U				
129-00-0	Pyrene	12.	U	11.	U				
85-68-7	Butylbenzylphthalate	12.	U	11.	U				
91-94-1	3,3'-Dichlorobenzidine	24.	U	23.	U				
56-55-3	Benzo(a)anthracene	12.	U	11.	U				
218-01-9	Chrysene	12.	U	11.	U				
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	12.	U	11.	U				
117-84-0	Di-n-octyl phthalate	12.	U	11.	U				
205-99-2	Benzo(b)fluoranthene	12.	U	11.	U				
207-08-9	Benzo(k)fluoranthene	12.	U	11.	U				
50-32-8	Benzo(a)pyrene	12.	U	11.	U				
193-39-5	Indeno(1,2,3-cd)pyrene	12.	U	11.	U				
53-70-3	Dibenz(a,h)anthracene	12.	U	11.	U				
191-24-2	Benzo(g,h,i)perylene	12.	U	11.	U				

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W-VOA

SAMPLE ID ------->	694-G-W002-02	694-G-W003-02	694-G-W004-02	694-G-W005-02	694-G-W006-02	694-G-W007-02
ORIGINAL ID ----->	694GW00202	694GW00302	694GW00402	694GW00502	694GW00602	694GW00702
LAB SAMPLE ID --->	7942-05	7942-04	7947-01	7942-01	7942-06	7942-02
ID FROM REPORT -->	694GW00202	694GW00302	694GW00402	694GW00502	694GW00602	694GW00702
SAMPLE DATE ----->	07/17/97	07/17/97	07/21/97	07/17/97	07/18/97	07/17/97
DATE ANALYZED --->	07/21/97	07/21/97	07/22/97	07/21/97	07/21/97	07/21/97
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL
74-87-3	Chloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-64-1	Acetone	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-09-2	Methylene chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
156-59-2	cis-1,2-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
110-75-8	2-Chloroethyl vinyl ether	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
591-78-6	2-Hexanone	10.	U	10.	U	10.	U	10.	U	10.	U	10.	U
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
1330-20-7	Xylene (Total)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
540-59-0	1,2-Dichloroethene (total)	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W-VOA

SAMPLE ID ------->	694-H-W007-02
ORIGINAL ID ----->	694HW00702
LAB SAMPLE ID --->	7942-03
ID FROM REPORT -->	694HW00702
SAMPLE DATE ----->	07/17/97
DATE ANALYZED --->	07/21/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7942	VAL
74-87-3	Chloromethane	5.	U
75-01-4	Vinyl chloride	5.	U
74-83-9	Bromomethane	5.	U
75-00-3	Chloroethane	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-09-2	Methylene chloride	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-59-2	cis-1,2-Dichloroethene	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U
67-66-3	Chloroform	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
110-75-8	2-Chloroethyl vinyl ether	5.	U
78-93-3	2-Butanone (MEK)	10.	U
56-23-5	Carbon tetrachloride	5.	U
108-05-4	Vinyl acetate	10.	U
107-06-2	1,2-Dichloroethane	5.	U
71-43-2	Benzene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
75-27-4	Bromodichloromethane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
108-88-3	Toluene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
108-90-7	Chlorobenzene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (Total)	5.	U
540-59-0	1,2-Dichloroethene (total)	NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W846-D1OX	SAMPLE ID ------>	694-G-W002-01	694-G-W002-02	694-G-W002-03 RE	694-G-W002-04	694-G-W003-01	694-G-W003-02
	ORIGINAL ID ----->	694GW00201	694GW00202	694GW00203	694GW00204	694GW00301	694GW00302
	LAB SAMPLE ID --->	29401.03	30186.05	32259.02	33177.02	29401.02	30186.04
	ID FROM REPORT -->	694GW00201	694GW00202	694GW00203	694GW00204	694GW00301	694GW00302
	SAMPLE DATE ----->	05/16/97	07/17/97	12/17/97	03/16/98	05/16/97	07/17/97
	DATE EXTRACTED -->	05/19/97	07/25/97	01/08/98	03/18/98	05/19/97	07/25/97
	DATE ANALYZED --->	05/27/97	08/05/97	01/14/98	03/30/98	05/27/97	08/04/97
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	PG/L	PG/L	PG/L	PG/L	PG/L	PG/L

CAS #	Parameter	29387	VAL	30186	VAL	32259	VAL	33177	VAL	29387	VAL	30186	VAL
1746-01-6	2378-TCDD	3.31	U	1.61	U	3.35	U	3.72	U	2.51	U	6.31	U
40321-76-4	12378-PeCDD	4.45	U	1.21	U	3.73	UJ	5.76	U	2.53	U	8.91	U
39227-28-6	123478-HxCDD	3.37	U	0.842	U	3.82	U	4.56	U	3.04	U	8.1	U
57653-85-7	123678-HxCDD	2.57	U	0.641	U	2.91	U	3.42	U	2.32	U	6.34	U
19408-74-3	123789-HxCDD	2.76	U	0.689	U	3.12	U	3.58	U	2.49	U	7.12	U
35822-46-9	1234678-HpCDD	3.02	U	3.74		2.09	U	2.47	U	2.8	U	7.85	U
3268-87-9	OCDD	4.59	U	14.3		31.8	EMPC	25.8	U	8.99	EMPC	12.4	
51207-31-9	2378-TCDF	2.61	U	1.36	U	7.34	UJ	4.38	U	2.33	U	4.84	U
57117-41-6	12378-PeCDF	2.86	U	0.813	U	4.37	UJ	3.92	U	2.17	U	6.4	U
57117-31-4	23478-PeCDF	2.74	U	0.78	U	4.19	UJ	3.79	U	2.08	U	6.07	U
70648-26-9	123478-HxCDF	2.18	U	1.05	U	2.84	U	2.92	U	1.4	U	4.54	U
57117-44-9	123678-HxCDF	1.88	U	0.905	U	2.45	U	2.53	U	1.2	U	4.17	U
72918-21-9	123789-HxCDF	2.35	U	1.13	U	3.07	U	3.33	U	1.5	U	5.61	U
60851-34-5	234678-HxCDF	2.17	U	1.04	U	2.82	U	3.21	U	1.39	U	5.04	U
67562-39-4	1234678-HpCDF	4.44	EMPC	1.28	EMPC	1.54	U	1.58	U	1.5	U	5.36	U
55673-89-7	1234789-HpCDF	2.	U	0.715	U	1.76	U	1.86	U	1.71	U	6.35	U
39001-02-0	OCDF	3.66	U	2.39	U	3.18	U	2.08	U	1.72	U	4.92	U
41903-57-5	Total Tetra-Dioxins	3.31	U	1.61	U	3.35	U	3.72	U	2.51	U	6.31	U
36088-22-9	Total Penta-Dioxins	4.45	U	1.21	U	3.73	U	5.76	U	2.53	U	8.91	U
34465-46-8	Total Hexa-Dioxins	2.57	U	0.641	U	2.91	U	3.42	U	2.32	U	6.34	U
37871-00-4	Total Hepta-Dioxins	3.02	U	3.74		2.09	U	2.47	U	2.8	U	7.85	U
55722-27-5	Total Tetra-Furans	2.61	U	1.36	U	7.34	U	4.38	U	2.33	U	4.84	U
30602-15-4	Total Penta-Furans	2.74	U	0.78	U	4.19	U	3.79	U	2.08	U	6.07	U
55684-94-1	Total Hexa-Furans	1.88	U	0.905	U	2.45	U	2.53	U	1.2	U	4.17	U
38998-75-3	Total Hepta-Furans	1.75	U	0.624	U	1.54	U	1.58	U	1.5	U	5.36	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W846-DIOX	SAMPLE ID ------->	694-G-W003-03	694-G-W003-04	694-G-W004-01	694-G-W004-02	694-G-W004-03	694-G-W004-04
	ORIGINAL ID ----->	694GW00303	694GW00304	694GW00401	694GW00402	694GW00403	694GW00404
	LAB SAMPLE ID --->	32259.06	33219.02	29387.02	30211.01	32413.01	33219.01
	ID FROM REPORT -->	694GW00303	694GW00304	694GW00401	694GW00402	694GW00403	694GW00404
	SAMPLE DATE ----->	12/17/97	03/17/98	05/15/97	07/21/97	01/12/98	03/17/98
	DATE EXTRACTED -->	12/19/97	03/19/98	05/19/97	07/22/97	01/30/98	03/19/98
	DATE ANALYZED --->	01/02/98	03/30/98	05/27/97	07/25/97	02/05/98	03/30/98
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	PG/L	PG/L	PG/L	PG/L	PG/L	PG/L

CAS #	Parameter	32259	VAL	33177	VAL	29387	VAL	30186	VAL	32413	VAL	33177	VAL
1746-01-6	2378-TCDD	10.4	U	1.83	U	3.05	U	9.51	U	0.976	U	4.02	U
40321-76-4	12378-PeCDD	18.4	U	2.42	U	3.32	U	11.8	U	1.77	U	4.08	U
39227-28-6	123478-HxCDD	32.8	U	2.15	U	4.16	U	12.4	U	1.76	U	5.05	U
57653-85-7	123678-HxCDD	24.9	U	1.62	U	3.16	U	9.7	U	1.38	U	3.79	U
19408-74-3	123789-HxCDD	26.8	U	1.7	U	3.4	U	10.9	U	1.55	U	3.97	U
35822-46-9	1234678-HpCDD	30.1	U	1.23	U	5.42	EMPC	9.95	U	1.51	U	3.38	U
3268-87-9	OCDD	58.1	EMPC	17.8	U	51.8	J	82.1		2.62	EMPC	33.	U
51207-31-9	2378-TCDF	9.88	U	1.88	U	3.35	U	8.62	U	1.11	U	3.39	U
57117-41-6	12378-PeCDF	22.4	U	1.39	U	2.94	U	6.88	U	1.42	U	2.54	U
57117-31-4	23478-PeCDF	21.5	U	1.34	U	2.81	U	6.52	U	1.35	U	2.45	U
70648-26-9	123478-HxCDF	18.	U	1.52	U	2.33	U	8.05	U	1.48	U	2.61	U
57117-44-9	123678-HxCDF	15.5	U	1.31	U	2.	U	7.38	U	1.36	U	2.26	U
72918-21-9	123789-HxCDF	19.4	U	1.73	U	2.51	U	9.94	U	1.83	U	2.97	U
60851-34-5	234678-HxCDF	17.9	U	1.67	U	2.31	U	8.94	U	1.65	U	2.86	U
67562-39-4	1234678-HpCDF	14.3	U	0.827	U	2.62	U	6.67	U	0.853	U	2.9	U
55673-89-7	1234789-HpCDF	16.4	U	0.972	U	3.	U	7.91	U	1.01	U	3.41	U
39001-02-0	OCDF	32.9	U	1.53	U	2.38	U	10.1		1.84	U	3.	U
41903-57-5	Total Tetra-Dioxins	10.4	U	1.83	U	3.05	U	9.51	U	0.976	U	4.02	U
36088-22-9	Total Penta-Dioxins	18.4	U	2.42	U	3.32	U	11.8	U	1.77	U	4.08	U
34465-46-8	Total Hexa-Dioxins	24.9	U	1.62	U	3.16	U	9.7	U	1.38	U	3.79	U
37871-00-4	Total Hepta-Dioxins	30.1	U	1.23	U	2.73	U	9.95	U	1.51	U	3.38	U
55722-27-5	Total Tetra-Furans	9.88	U	1.88	U	3.35	U	8.62	U	1.11	U	3.39	U
30602-15-4	Total Penta-Furans	21.5	U	1.34	U	2.81	U	6.52	U	1.35	U	2.45	U
55684-94-1	Total Hexa-Furans	15.5	U	1.31	U	2.	U	7.38	U	1.36	U	2.26	U
38998-75-3	Total Hepta-Furans	14.3	U	0.827	U	2.62	U	6.67	U	0.853	U	2.9	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

8846-D10X	SAMPLE ID ------->	694-G-W005-01	694-G-W005-02	694-G-W005-03	694-G-W005-04	694-G-W005-F5	694-G-W005-U5
	ORIGINAL ID ----->	694GW00501	694GW00502	694GW00503	694GW00504	694GW005F5	694GW005U5
	LAB SAMPLE ID --->	29387.01	30186.01	32276.03	33253.01	37084.06	37084.05
	ID FROM REPORT -->	694GW00501	694GW00502	694GW00503	694GW00504	694GW005F5	694GW005U5
	SAMPLE DATE ----->	05/15/97	07/17/97	12/18/97	03/19/98	01/13/99	01/13/99
	DATE EXTRACTED -->	05/19/97	07/25/97	12/19/97	03/26/98	01/14/99	01/14/99
	DATE ANALYZED --->	05/27/97	08/04/97	01/05/98	04/03/98	01/22/99	01/22/99
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	PG/L	PG/L	PG/L	PG/L	PG/L	PG/L

CAS #	Parameter	29387	VAL	30186	VAL	32259	VAL	33177	VAL	37084	VAL	37084	VAL
1746-01-6	2378-TCDD	3.43	U	8.81	U	4.26	U	4.51	U	3.731	U	1.952	U
0321-76-4	12378-PeCDD	3.08	U	11.4	U	4.69	U	8.91	U	3.079	U	2.803	U
9227-28-6	123478-HxCDD	2.62	U	7.39	U	4.18	U	6.6	U	3.428	U	4.067	U
7653-85-7	123678-HxCDD	2.	U	5.79	U	3.18	U	4.95	U	1.915	U	2.271	U
9408-74-3	123789-HxCDD	2.15	U	6.5	U	3.41	U	5.19	U	2.274	U	2.698	U
5822-46-9	1234678-HpCDD	2.13	U	7.47	U	1.52	U	3.48	U	2.281	U	2.2	U
3268-87-9	OCDD	7.52	EMPC	57.		13.1	EMPC	4.05	U	7.278	U	2.474	U
1207-31-9	2378-TCDF	2.29	U	5.64	U	2.73	U	4.3	U	2.747	U	2.145	U
7117-41-6	12378-PeCDF	2.38	U	7.47	U	3.44	U	4.96	U	2.602	U	1.75	U
7117-31-4	23478-PeCDF	2.28	U	7.08	U	3.3	U	4.8	U	2.717	U	1.828	U
0648-26-9	123478-HxCDF	1.44	U	4.5	U	3.06	U	3.35	U	2.221	U	1.823	U
7117-44-9	123678-HxCDF	1.24	U	4.12	U	2.63	U	2.89	U	1.48	U	1.215	U
2918-21-9	123789-HxCDF	1.56	U	5.55	U	3.3	U	3.81	U	2.416	U	1.982	U
0851-34-5	234678-HxCDF	1.43	U	4.99	U	3.04	U	3.67	U	2.168	U	1.779	U
7562-39-4	1234678-HpCDF	1.95	U	4.81	U	1.29	U	2.28	U	1.909	U	0.669	U
5673-89-7	1234789-HpCDF	2.23	U	5.71	U	1.48	U	2.68	U	2.549	U	0.893	U
9001-02-0	OCDF	2.22	U	6.55	U	1.66	U	4.04	U	2.488	U	2.34	U
1903-57-5	Total Tetra-Dioxins	3.43	U	8.81	U	4.26	U	4.51	U	3.731	U	1.952	U
6088-22-9	Total Penta-Dioxins	3.08	U	11.4	U	4.69	U	8.91	U	3.079	U	2.803	U
4465-46-8	Total Hexa-Dioxins	2.	U	5.79	U	3.18	U	4.95	U	1.915	U	2.271	U
7871-00-4	Total Hepta-Dioxins	2.13	U	7.47	U	1.52	U	3.48	U	2.281	U	2.2	U
5722-27-5	Total Tetra-Furans	2.29	U	5.64	U	2.73	U	4.3	U	2.747	U	2.145	U
0602-15-4	Total Penta-Furans	2.28	U	7.08	U	3.3	U	4.8	U	2.717	U	1.828	U
5684-94-1	Total Hexa-Furans	1.24	U	4.12	U	2.63	U	2.89	U	1.48	U	1.215	U
8998-75-3	Total Hepta-Furans	1.95	U	4.81	U	1.29	U	2.28	U	1.909	U	0.669	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-DIOX						
SAMPLE ID ------>	694-G-W006-01	694-G-W006-02	694-G-W006-03	694-G-W006-04	694-G-W006-F5	694-G-W006-U5
ORIGINAL ID ----->	694GW00601	694GW00602	694GW00603	694GW00604	694GW006F5	694GW006U5
LAB SAMPLE ID --->	29387.03	30186.06	32289.01	33253.02	37084.03	37084.02
ID FROM REPORT -->	694GW00601	694GW00602	694GW00603	694GW00604	694GW006F5	694GW006U5
SAMPLE DATE ----->	05/15/97	07/17/97	12/19/97	03/19/98	01/13/99	01/13/99
DATE EXTRACTED -->	05/19/97	07/25/97	12/22/97	03/26/98	01/14/99	01/14/99
DATE ANALYZED --->	05/27/97	08/05/97	01/14/98	04/03/98	01/22/99	01/22/99
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	PG/L	PG/L	PG/L	PG/L	PG/L	PG/L

CAS #	Parameter	29387	VAL	30186	VAL	32259	VAL	33177	VAL	37084	VAL	37084	VAL
1746-01-6	2378-TCDD	2.12	U	1.39	U	1.49	U	4.68	U	2.891	U	3.991	U
0321-76-4	12378-PeCDD	5.36	U	0.843	U	2.75	U	8.25	U	3.379	U	3.14	U
9227-28-6	123478-HxCDD	3.65	U	1.08	U	2.1	U	6.76	U	3.89	U	2.929	U
7653-85-7	123678-HxCDD	2.78	U	0.82	U	1.6	U	5.07	U	2.173	U	1.636	U
9408-74-3	123789-HxCDD	2.99	U	0.881	U	1.72	U	5.32	U	2.581	U	1.943	U
5822-46-9	1234678-HpCDD	3.16	U	8.7		2.07	U	5.16	U	2.133	U	1.505	U
3268-87-9	OCDD	9.49	EMPC	51.5		5.17	EMPC	2.92	U	2.614	U	2.478	U
1207-31-9	2378-TCDF	2.51	U	1.31	U	1.72	U	4.36	U	2.476	U	2.899	U
7117-41-6	12378-PeCDF	3.2	U	0.884	U	1.99	U	5.78	U	1.512	U	2.11	U
7117-31-4	23478-PeCDF	3.06	U	0.848	U	1.91	U	5.59	U	1.579	U	2.203	U
0648-26-9	123478-HxCDF	1.95	U	0.8	U	1.26	U	4.01	U	1.722	U	1.427	U
7117-44-9	123678-HxCDF	1.68	U	0.689	U	1.08	U	3.47	U	1.148	U	0.951	U
2918-21-9	123789-HxCDF	2.1	U	0.863	U	1.36	U	4.57	U	1.873	U	1.552	U
0851-34-5	234678-HxCDF	1.94	U	0.794	U	1.25	U	4.4	U	1.681	U	1.393	U
7562-39-4	1234678-HpCDF	2.15	U	2.61	EMPC	1.44	U	3.92	U	0.964	U	1.444	U
5673-89-7	1234789-HpCDF	2.47	U	0.834	U	1.65	U	4.61	U	1.287	U	1.928	U
9001-02-0	OCDF	2.02	U	4.46		1.48	U	3.77	U	2.886	U	2.323	U
1903-57-5	Total Tetra-Dioxins	2.12	U	1.39	U	1.49	U	4.68	U	2.891	U	3.991	U
6088-22-9	Total Penta-Dioxins	5.36	U	0.843	U	2.75	U	8.25	U	3.379	U	3.14	U
4465-46-8	Total Hexa-Dioxins	2.78	U	0.82	U	1.6	U	5.07	U	2.173	U	1.636	U
7871-00-4	Total Hepta-Dioxins	3.16	U	16.7		2.07	U	5.16	U	2.133	U	1.505	U
5722-27-5	Total Tetra-Furans	2.51	U	1.31	U	1.72	U	4.36	U	2.476	U	2.899	U
0602-15-4	Total Penta-Furans	3.06	U	0.848	U	1.91	U	5.59	U	1.579	U	2.203	U
5684-94-1	Total Hexa-Furans	1.68	U	0.689	U	1.08	U	3.47	U	1.148	U	0.951	U
8998-75-3	Total Hepta-Furans	2.15	U	0.728	U	1.44	U	3.92	U	0.964	U	1.444	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-DIOX	SAMPLE ID ------>	694-G-W007-01		694-H-W007-01		694-G-W007-02		694-H-W007-02		694-G-W007-03		694-H-W007-03	
	ORIGINAL ID ----->	694GW00701		694HW00701		694GW00702		694HW00702		694GW00703		694HW00703	
	LAB SAMPLE ID --->	29387.04		29387.05		30186.02		30186.03		32276.01		32276.02	
	ID FROM REPORT -->	694GW00701		694HW00701		694GW00702		694HW00702		694GW00703		694HW00703	
	SAMPLE DATE ----->	05/15/97		05/15/97		07/17/97		07/17/97		12/18/97		12/18/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		07/25/97		07/25/97		12/19/97		12/19/97	
	DATE ANALYZED --->	05/27/97		05/27/97		08/04/97		08/04/97		01/05/98		01/05/98	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ----------->	PG/L		PG/L		PG/L		PG/L		PG/L		PG/L	
CAS #	Parameter	29387	VAL	29387	VAL	30186	VAL	30186	VAL	32259	VAL	32259	VAL
1746-01-6	2378-TCDD	2.56	U	2.28	U	9.38	U	7.19	U	4.87	U	2.26	U
0321-76-4	12378-PeCDD	3.5	U	3.96	U	13.2	U	10.8	U	4.21	U	2.11	U
9227-28-6	123478-HxCDD	3.8	U	3.21	U	9.49	U	9.25	U	4.5	U	2.37	U
7653-85-7	123678-HxCDD	2.89	U	2.44	U	7.42	U	7.24	U	3.42	U	1.8	U
9408-74-3	123789-HxCDD	3.11	U	2.62	U	8.34	U	8.13	U	3.67	U	1.94	U
5822-46-9	1234678-HpCDD	3.47	U	1.73	U	9.32	U	9.46	U	1.79	U	3.06	EMPC
3268-87-9	OCDD	8.41	EMPC	6.31	EMPC	15.3	J	37.4	J	12.7	EMPC	12.	EMPC
1207-31-9	2378-TCDF	1.76	U	2.61	U	5.56	U	5.14	U	2.86	U	1.15	U
7117-41-6	12378-PeCDF	2.37	U	2.36	U	6.91	U	5.94	U	2.77	U	1.4	U
7117-31-4	23478-PeCDF	2.27	U	2.27	U	6.55	U	5.63	U	2.65	U	1.34	U
0648-26-9	123478-HxCDF	2.34	U	1.37	U	5.61	U	4.92	U	2.28	U	1.58	U
7117-44-9	123678-HxCDF	2.01	U	1.18	U	5.15	U	4.51	U	1.97	U	1.36	U
2918-21-9	123789-HxCDF	2.52	U	1.48	U	6.94	U	6.08	U	2.46	U	1.7	U
0851-34-5	234678-HxCDF	2.32	U	1.36	U	6.24	U	5.46	U	2.27	U	1.57	U
7562-39-4	1234678-HpCDF	2.02	U	1.22	U	5.6	U	4.4	U	1.26	U	1.07	U
5673-89-7	1234789-HpCDF	2.32	U	1.39	U	6.64	U	5.22	U	1.44	U	1.23	U
9001-02-0	OCDF	3.51	U	2.61	U	7.09	U	6.6	U	3.78	U	1.65	U
1903-57-5	Total Tetra-Dioxins	2.56	U	2.28	U	9.38	U	7.19	U	4.87	U	2.26	U
6088-22-9	Total Penta-Dioxins	3.5	U	3.96	U	13.2	U	10.8	U	4.21	U	2.11	U
4465-46-8	Total Hexa-Dioxins	2.89	U	2.44	U	7.42	U	7.24	U	3.42	U	1.8	U
7871-00-4	Total Hepta-Dioxins	3.47	U	1.73	U	9.32	U	9.46	U	1.79	U	1.81	U
5722-27-5	Total Tetra-Furans	1.76	U	2.61	U	5.56	U	5.14	U	2.86	U	1.15	U
0602-15-4	Total Penta-Furans	2.27	U	2.27	U	6.55	U	5.63	U	2.65	U	1.34	U
5684-94-1	Total Hexa-Furans	2.01	U	1.18	U	5.15	U	4.51	U	1.97	U	1.36	U
8998-75-3	Total Hepta-Furans	2.02	U	1.22	U	5.6	U	4.4	U	1.26	U	1.07	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-DIOX	SAMPLE ID ------->	694-G-W007-04		694-H-W007-04		694-G-W007-F5		694-G-W007-U5			
	ORIGINAL ID ----->	694GW00704		694HW00704		694GW007F5		694GW007U5			
	LAB SAMPLE ID --->	33223.01		33223.02		37063.03		37063.02			
	ID FROM REPORT -->	694GW00704		694HW00704		694GW007F5		694GW007U5			
	SAMPLE DATE ----->	03/18/98		03/18/98		01/11/99		01/11/99			
	DATE EXTRACTED -->	03/31/98		03/19/98		01/14/99		01/14/99			
	DATE ANALYZED --->	04/06/98		03/30/98		01/22/99		01/22/99			
	MATRIX ---------->	Water		Water		Water		Water			
	UNITS ---------->	PG/L		PG/L		PG/L		PG/L			
CAS #	Parameter	33177	VAL	33177	VAL	37063	VAL	37063	VAL		
1746-01-6	2378-TCDD	31.3	U	5.06	U	2.866	U	2.516	U		
0321-76-4	12378-PeCDD	32.2	U	5.92	U	3.117	U	2.006	U		
9227-28-6	123478-HxCDD	39.4	U	6.	U	4.234	U	3.103	U		
7653-85-7	123678-HxCDD	29.5	U	4.5	U	2.365	U	1.733	U		
9408-74-3	123789-HxCDD	31.	U	4.72	U	2.809	U	2.059	U		
5822-46-9	1234678-HpCDD	20.2	U	3.76	U	1.711	U	3.237	U		
3268-87-9	OCDD	26.6	U	225.	U	8.243	U	2.022	U		
1207-31-9	2378-TCDF	30.5	U	4.37	U	1.927	U	2.001	U		
7117-41-6	12378-PeCDF	23.6	U	4.16	U	2.338	U	1.693	U		
7117-31-4	23478-PeCDF	22.9	U	4.03	U	2.441	U	1.768	U		
0648-26-9	123478-HxCDF	20.7	U	3.69	U	2.391	U	2.278	U		
7117-44-9	123678-HxCDF	17.9	U	3.18	U	1.593	U	1.519	U		
2918-21-9	123789-HxCDF	23.6	U	4.2	U	2.6	U	2.478	U		
0851-34-5	234678-HxCDF	22.7	U	4.04	U	2.334	U	2.224	U		
7562-39-4	1234678-HpCDF	18.	U	1.75	U	1.101	U	1.045	U		
5673-89-7	1234789-HpCDF	21.2	U	2.06	U	1.47	U	1.395	U		
9001-02-0	OCDF	21.	U	5.76	U	1.963	U	2.299	U		
1903-57-5	Total Tetra-Dioxins	31.3	U	5.06	U	2.866	U	2.516	U		
6088-22-9	Total Penta-Dioxins	32.2	U	5.92	U	3.117	U	2.006	U		
4465-46-8	Total Hexa-Dioxins	29.5	U	4.5	U	2.365	U	1.733	U		
7871-00-4	Total Hepta-Dioxins	20.2	U	3.76	U	1.711	U	3.237	U		
5722-27-5	Total Tetra-Furans	30.5	U	4.37	U	1.927	U	2.001	U		
0602-15-4	Total Penta-Furans	22.9	U	4.03	U	2.441	U	1.768	U		
5684-94-1	Total Hexa-Furans	17.9	U	3.18	U	1.593	U	1.519	U		
8998-75-3	Total Hepta-Furans	18.	U	1.75	U	1.101	U	1.045	U		

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

B46-META													
	SAMPLE ID ------>	694-G-W002-01		694-G-W002-02		694-G-W002-03		694-G-W002-04		694-G-W003-01		694-G-W003-02	
	ORIGINAL ID ----->	694GW00201		694GW00202		694GW00203		694GW00204		694GW00301		694GW00302	
	LAB SAMPLE ID --->	7681-03		7942-05		32259.02		33177.02		7681-02		7942-04	
	ID FROM REPORT -->	694GW00201		694GW00202		694GW00203		694GW00204		694GW00301		694GW00302	
	SAMPLE DATE ----->	05/16/97		07/17/97		12/17/97		03/16/98		05/16/97		07/17/97	
	DATE EXTRACTED -->	05/23/97		08/11/97		12/27/97		03/26/98		05/23/97		08/11/97	
	DATE ANALYZED --->	05/27/97		08/11/97		12/31/97		04/01/98		05/27/97		08/11/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL	7669	VAL	7942	VAL
7429-90-5	Aluminum (Al)	134.	U	231.	U	8.	U	44.7	UJ	10.3	U	23.1	U
7440-36-0	Antimony (Sb)	2.2	U	20.	U	2.9	U	1.8	U	2.6	U	2.	U
7440-38-2	Arsenic (As)	66.9		63.3	J	57.7		51.2		43.2		48.8	
7440-39-3	Barium (Ba)	71.	J	71.	J	61.4	J	55.2	J	61.2	J	55.7	J
7440-41-7	Beryllium (Be)	0.11	U	4.9	J	0.2	U	0.2	U	0.11	U	0.22	U
7440-43-9	Cadmium (Cd)	0.81	U	2.2	U	0.3	U	0.3	U	0.43	U	0.56	J
7440-70-2	Calcium (Ca)	320000.	J	342000.		284000.	J	267000.		223000.	J	196000.	
7440-47-3	Chromium (Cr)	2.9	J	42.3	J	2.2	U	1.7	J	1.6	J	2.9	UJ
7440-48-4	Cobalt (Co)	0.89	UJ	18.9	J	0.8	U	0.8	U	0.89	UJ	0.67	UJ
7440-50-8	Copper (Cu)	1.1	UJ	24.8	J	1.4	U	1.4	U	1.1	UJ	1.	UJ
7439-89-6	Iron (Fe)	24800.	J	25200.		20100.	J	19800.		11100.	J	10400.	
7439-92-1	Lead (Pb)	1.3	U	16.7	U	0.9	UJ	0.98	J	1.3	U	1.7	U
7439-95-4	Magnesium (Mg)	182000.		171000.		139000.	J	119000.		223000.		182000.	
7439-96-5	Manganese (Mn)	2600.	J	2670.		2020.	J	1830.		1570.	J	1280.	
7439-97-6	Mercury (Hg)	0.08	U	1.6		0.1	U	3.7	UJ	0.08	U	0.2	U
7440-02-0	Nickel (Ni)	0.89	UJ	19.3	J	0.73	J	1.8	U	0.89	UJ	0.67	UJ
7440-09-7	Potassium (K)	69400.		66800.		53300.	J	50100.	J	80000.		74200.	
7782-49-2	Selenium (Se)	4.6	U	34.4	U	3.4	U	3.4	U	3.7	U	3.4	U
7440-22-4	Silver (Ag)	3.2	U	35.3	J	1.	U	1.	U	3.2	U	0.89	UJ
7440-23-5	Sodium (Na)	1440000.		1440000.		1070000.	J	895000.		2260000.		2210000.	
7440-28-0	Thallium (Tl)	26.1	U	38.9	U	5.	U	5.	U	52.2	U	3.9	U
7440-62-2	Vanadium (V)	4.6	J	6.2	J	3.4	J	3.8	J	5.4	J	5.	J
7440-66-6	Zinc (Zn)	23.7	U	76.7	U	5.8	U	18.1	U	18.3	U	26.4	U
7440-31-5	Tin (Sn)	38.2	U	30.8	U	14.	U	14.	U	38.2	U	30.8	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-META	SAMPLE ID ------>	694-G-W003-03		694-G-W003-04		694-G-W004-01		694-G-W004-02		694-G-W004-03		694-G-W004-04	
	ORIGINAL ID ----->	694GW00303		694GW00304		694GW00401		694GW00402		694GW00403		694GW00404	
	LAB SAMPLE ID --->	32259.06		33219.02		7676-02		7947-01		32413.01		33219.01	
	ID FROM REPORT -->	694GW00303		694GW00304		694GW00401		694GW00402		694GW00403		694GW00404	
	SAMPLE DATE ----->	12/17/97		03/17/98		05/15/97		07/21/97		01/12/98		03/17/98	
	DATE EXTRACTED -->	12/30/97		03/26/98		05/23/97		08/11/97		01/14/98		03/26/98	
	DATE ANALYZED --->	01/02/98		04/01/98		05/27/97		08/11/97		01/15/98		04/01/98	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	7669	VAL	7942	VAL	32413	VAL	33177	VAL
7429-90-5	Aluminum (Al)	25.5	U	8.	UJ	274.	U	23.1	U	8.	UJ	8.	UJ
7440-36-0	Antimony (Sb)	2.3	U	1.9	U	6.7	U	6.8	U	1.6	U	3.6	U
7440-38-2	Arsenic (As)	38.9		47.6		3.	U	2.8	UJ	7.6	U	2.1	UJ
7440-39-3	Barium (Ba)	58.5	J	61.1	J	17.4	J	30.3	J	20.1	U	19.8	J
7440-41-7	Beryllium (Be)	0.2	U	0.22	U	0.11	U	0.22	U	0.2	U	0.3	U
7440-43-9	Cadmium (Cd)	0.3	U	0.3	U	2.1	J	0.4	J	0.3	U	0.3	U
7440-70-2	Calcium (Ca)	193000.	J	218000.		198000.	J	355000.		371000.		445000.	
7440-47-3	Chromium (Cr)	2.1	U	1.7	J	3.	J	1.5	UJ	1.	U	1.	U
7440-48-4	Cobalt (Co)	0.8	U	0.8	U	0.89	UJ	0.67	UJ	3.2		2.5	J
7440-50-8	Copper (Cu)	1.4	U	1.4	U	24.9	J	24.6	J	14.9	U	12.	J
7439-89-6	Iron (Fe)	8160.	J	11200.		722.	J	266.		74.9	U	459.	U
7439-92-1	Lead (Pb)	0.9	UJ	0.9	U	2.7	J	1.7	U	0.9	UJ	0.9	U
7439-95-4	Magnesium (Mg)	183000.	J	193000.		69300.		111000.		71700.		71000.	
7439-96-5	Manganese (Mn)	1280.	J	1350.		75.9	J	873.		1250.		1200.	
7439-97-6	Mercury (Hg)	0.1	U	7.6	J	0.08	U	0.2	U	0.1	U	0.1	UJ
7440-02-0	Nickel (Ni)	2.	J	0.92	U	2.8	J	9.2	J	10.5	U	8.3	J
7440-09-7	Potassium (K)	64700.		72500.	J	39300.		49500.		21900.		21200.	J
7782-49-2	Selenium (Se)	4.	J	3.4	U	5.6	U	3.4	U	3.4	U	3.4	U
7440-22-4	Silver (Ag)	1.	U	1.	U	3.2	U	0.89	UJ	1.	U	1.	U
7440-23-5	Sodium (Na)	2720000.	J	1810000.		63300.		66700.		38600.		26900.	
7440-28-0	Thallium (Tl)	5.	U	5.	U	5.2	U	3.9	U	5.	U	5.	U
7440-62-2	Vanadium (V)	5.2	J	4.9	J	5.5	J	3.8	J	1.4	U	1.1	U
7440-66-6	Zinc (Zn)	5.8	U	5.8	U	67.	U	77.6	U	41.4	U	33.6	
7440-31-5	Tin (Sn)	14.	U	14.	U	38.2	U	30.8	U	14.	U	14.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-META													
	SAMPLE ID ------>	694-G-W005-01		694-G-W005-02		694-G-W005-03		694-G-W005-04		694-G-W006-01		694-G-W006-02	
	ORIGINAL ID ----->	694GW00501		694GW00502		694GW00503		694GW00504		694GW00601		694GW00602	
	LAB SAMPLE ID --->	7676-01		7942-01		32276.03		33253.01		7676-03		7942-06	
	ID FROM REPORT -->	694GW00501		694GW00502		694GW00503		694GW00504		694GW00601		694GW00602	
	SAMPLE DATE ----->	05/15/97		07/17/97		12/18/97		03/19/98		05/15/97		07/18/97	
	DATE EXTRACTED -->	05/23/97		08/11/97		12/30/97		03/26/98		05/23/97		08/11/97	
	DATE ANALYZED --->	05/27/97		08/11/97		01/02/98		04/01/98		05/27/97		08/14/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL	7669	VAL	7942	VAL
7429-90-5	Aluminum (Al)	10.3	U	307.		29.7	U	8.	UJ	10.3	U	262.	J
7440-36-0	Antimony (Sb)	2.2	U	2.	U	1.6	U	2.5	U	2.3	U	20.	U
7440-38-2	Arsenic (As)	3.	U	3.2	J	2.1	U	2.4	J	3.4	J	27.8	UJ
7440-39-3	Barium (Ba)	28.2	J	33.9	J	31.5	J	22.9	J	39.3	J	42.3	J
7440-41-7	Beryllium (Be)	0.26	U	0.22	U	0.23		0.24	U	0.62	U	2.2	U
7440-43-9	Cadmium (Cd)	0.22	U	0.22	U	0.3	U	0.3	U	5.9		2.2	U
7440-70-2	Calcium (Ca)	207000.	J	199000.		189000.	J	143000.		281000.	J	273000.	
7440-47-3	Chromium (Cr)	0.89	UJ	4.4	UJ	3.8	U	1.	U	0.89	UJ	28.3	J
7440-48-4	Cobalt (Co)	0.89	UJ	0.67	UJ	0.8	U	0.8	U	0.89	UJ	6.7	UJ
7440-50-8	Copper (Cu)	1.1	UJ	5.2	UJ	1.4	U	1.4	U	1.1	UJ	54.7	J
7439-89-6	Iron (Fe)	1720.	J	2840.		2070.	J	1470.		3180.	J	5240.	
7439-92-1	Lead (Pb)	1.3	U	2.7	J	0.9	UJ	0.9	U	1.3	U	16.7	U
7439-95-4	Magnesium (Mg)	222000.		198000.		200000.	J	138000.		402000.		357000.	
7439-96-5	Manganese (Mn)	254.	J	270.		307.	J	218.		1610.	J	1660.	
7439-97-6	Mercury (Hg)	0.08	U	0.2	U	0.1	U	1.4	UJ	0.08	U	0.2	U
7440-02-0	Nickel (Ni)	0.89	UJ	0.67	UJ	6.3	J	2.2	U	0.89	UJ	6.7	UJ
7440-09-7	Potassium (K)	81200.		77200.		70000.		55100.	J	122000.		114000.	
7782-49-2	Selenium (Se)	3.	U	3.4	U	3.4	U	3.4	U	3.	U	34.4	U
7440-22-4	Silver (Ag)	3.2	U	0.89	UJ	1.	U	1.	U	3.2	U	8.9	UJ
7440-23-5	Sodium (Na)	2030000.		2010000.		2070000.	J	1350000.		3360000.		3470000.	
7440-28-0	Thallium (Tl)	26.1	U	3.9	U	5.	U	5.	U	52.2	U	194.	U
7440-62-2	Vanadium (V)	1.6	J	1.3	J	1.2	J	1.3	J	1.6	J	5.6	U
7440-66-6	Zinc (Zn)	19.8	U	40.9	U	9.1	U	18.3	U	28.1	U	99.2	U
7440-31-5	Tin (Sn)	38.2	U	30.8	U	14.	U	14.	U	38.2	U	30.8	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W846-META	SAMPLE ID ------>	694-G-W006-03		694-G-W006-04		694-G-W007-01		694-H-W007-01		694-G-W007-02		694-H-W007-02	
	ORIGINAL ID ----->	694GW00603		694GW00604		694GW00701		694HW00701		694GW00702		694HW00702	
	LAB SAMPLE ID --->	32289.01		33253.02		7669-01		7669-02		7942-02		7942-03	
	ID FROM REPORT -->	694GW00603		694GW00604		694GW00701		694HW00701		694GW00702		694HW00702	
	SAMPLE DATE ----->	12/19/97		03/19/98		05/14/97		05/14/97		07/17/97		07/17/97	
	DATE EXTRACTED -->	12/30/97		03/26/98		05/23/97		05/23/97		08/11/97		08/11/97	
	DATE ANALYZED --->	01/02/98		04/01/98		05/27/97		05/27/97		08/11/97		08/11/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	7669	VAL	7669	VAL	7942	VAL	7942	VAL
7429-90-5	Aluminum (Al)	25.2	U	8.	UJ	10.3	U	10.3	U	231.	U	23.1	U
7440-36-0	Antimony (Sb)	2.4	U	1.6	U	2.9	U	2.9	U	20.	U	2.	U
7440-38-2	Arsenic (As)	2.1	U	2.1	UJ	3.	U	3.	U	27.8	UJ	3.	J
7440-39-3	Barium (Ba)	37.1	J	25.1	J	32.5	J	34.	J	40.7	J	34.6	J
7440-41-7	Beryllium (Be)	0.4	J	0.31	U	0.99	U	0.7	U	2.2	U	0.51	U
7440-43-9	Cadmium (Cd)	0.3	U	0.3	U	0.22	U	0.22	U	2.2	U	19.3	
7440-70-2	Calcium (Ca)	242000.	J	188000.		254000.	J	258000.	J	280000.		246000.	
7440-47-3	Chromium (Cr)	4.7	U	1.	U	0.89	UJ	0.89	UJ	15.7	J	0.67	UJ
7440-48-4	Cobalt (Co)	0.8	U	0.8	U	0.89	UJ	0.89	UJ	6.7	UJ	0.67	UJ
7440-50-8	Copper (Cu)	1.4	U	1.4	U	1.1	UJ	1.1	UJ	10.	UJ	1.	UJ
7439-89-6	Iron (Fe)	3360.	J	1990.		3630.	J	4650.	J	5400.		4660.	
7439-92-1	Lead (Pb)	0.9	UJ	0.9	U	1.3	U	1.3	U	16.7	U	1.7	U
7439-95-4	Magnesium (Mg)	337000.	J	233000.		357000.		358000.		346000.		307000.	
7439-96-5	Manganese (Mn)	1360.	J	936.		1320.	J	1340.	J	1460.		1290.	
7439-97-6	Mercury (Hg)	0.1	U	0.1	UJ	0.08	U	0.08	U	0.2	U	1.1	
7440-02-0	Nickel (Ni)	3.9	J	0.98	U	0.89	UJ	0.89	UJ	6.7	UJ	0.67	UJ
7440-09-7	Potassium (K)	107000.		78500.	J	110000.		110000.		1730000.	J	109000.	J
7782-49-2	Selenium (Se)	3.4	U	3.4	U	5.6	U	5.	U	34.4	U	3.4	U
7440-22-4	Silver (Ag)	1.	U	1.	U	3.2	U	3.2	U	8.9	UJ	0.89	UJ
7440-23-5	Sodium (Na)	4710000.	J	2100000.		2960000.		2990000.		3340000.		3300000.	
7440-28-0	Thallium (Tl)	5.	U	5.	U	52.2	U	52.2	U	38.9	U	3.9	U
7440-62-2	Vanadium (V)	1.5	J	1.9	J	0.97	J	1.3	J	5.6	U	1.3	J
7440-66-6	Zinc (Zn)	5.8	U	5.8	U	21.3	U	14.8	U	79.7	U	25.9	U
7440-31-5	Tin (Sn)	14.	U	14.	U	38.2	U	38.2	U	367.		30.8	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

346-META													
	SAMPLE ID ------>	694-G-W007-03		694-H-W007-03		694-G-W007-04		694-H-W007-04		694-G-W008-02		694-G-W009-02	
	ORIGINAL ID ----->	694GW00703		694HW00703		694GW00704		694HW00704		694GW00802		694GW00902	
	LAB SAMPLE ID --->	32276.01		32276.02		33223.01		33223.02		41748.03		41748.04	
	ID FROM REPORT -->	694GW00703		694HW00703		694GW00704		694HW00704		694GW00802		694GW00902	
	SAMPLE DATE ----->	12/18/97		12/18/97		03/18/98		03/18/98		01/13/00		01/13/00	
	DATE EXTRACTED -->	12/27/97		12/27/97		03/26/98		03/26/98		01/20/00		01/20/00	
	DATE ANALYZED --->	12/31/97		12/31/97		04/01/98		04/01/98		01/21/00		01/21/00	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	32259	VAL	33177	VAL	33177	VAL	41748	VAL	41748	VAL
7429-90-5	Aluminum (Al)	8.	U	8.	U	8.	UJ	8.	UJ	835.		32.1	U
7440-36-0	Antimony (Sb)	3.4	U	1.9	U	1.6	U	1.6	U	5.	U	5.	U
7440-38-2	Arsenic (As)	2.1	U	2.1	U	2.1	UJ	2.5	J	3.3	UJ	74.7	
7440-39-3	Barium (Ba)	27.8	J	28.2	J	29.8	J	30.1	J	34.9		104.	
7440-41-7	Beryllium (Be)	0.2	U	0.2	U	0.28	U	0.3	U	0.5	J	0.37	J
7440-43-9	Cadmium (Cd)	0.3	U	0.6	J	0.3	U	0.3	U	1.4	U	1.1	U
7440-70-2	Calcium (Ca)	185000.	J	188000.	J	237000.		240000.		295000.		231000.	
7440-47-3	Chromium (Cr)	1.	U	1.	U	1.	U	1.	U	2.8	J	0.5	J
7440-48-4	Cobalt (Co)	0.8	U	0.8	U	0.8	U	0.8	U	1.7	U	1.7	U
7440-50-8	Copper (Cu)	1.4	U	1.4	U	1.4	U	1.4	U	42.5	J	1.	U
7439-89-6	Iron (Fe)	3180.	J	3270.	J	3520.		3480.		804.		19000.	
7439-92-1	Lead (Pb)	0.9	UJ	0.9	UJ	1.2	J	0.9	U	2.1	U	2.1	U
7439-95-4	Magnesium (Mg)	244000.	J	246000.	J	276000.		279000.		211000.		200000.	
7439-96-5	Manganese (Mn)	948.	J	959.	J	1090.		1100.		118.		2980.	
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	UJ	0.1	UJ	0.1	U	0.1	U
7440-02-0	Nickel (Ni)	0.7	U	0.7	U	0.7	U	1.1	U	18.6	J	1.1	U
7440-09-7	Potassium (K)	85600.	J	88600.	J	86400.	J	86700.	J	83900.		82000.	
7782-49-2	Selenium (Se)	3.4	U	3.4	U	3.4	U	3.4	U	3.	J	2.9	U
7440-22-4	Silver (Ag)	1.	U	1.	U	1.	U	1.	U	2.	U	2.	U
7440-23-5	Sodium (Na)	2750000.	J	2920000.	J	2430000.		2390000.		2370000.		1950000.	
7440-28-0	Thallium (Tl)	5.	U	5.	U	5.	U	5.	U	2.3	U	2.3	U
7440-62-2	Vanadium (V)	1.8	J	1.1	J	1.4	J	1.2	J	14.9	J	2.8	J
7440-66-6	Zinc (Zn)	5.8	U	5.8	U	5.8	U	5.8	U	861.		4.9	U
7440-31-5	Tin (Sn)	14.	U	14.	U	14.	U	14.	U	29.5	U	29.5	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-META															
	SAMPLE ID ------>	694-H-W009-02		694-G-W011-02		694-G-W012-02		694-G-W013-02		694-G-W014-02					
	ORIGINAL ID ----->	694HW00902		694GW01102		694GW01202		694GW01302		694GW01402					
	LAB SAMPLE ID --->	41748.06		41748.02		41748.01		41748.07		41748.08					
	ID FROM REPORT -->	694HW00902		694GW01102		694GW01202		694GW01302		694GW01402					
	SAMPLE DATE ----->	01/13/00		01/13/00		01/13/00		01/13/00		01/13/00					
	DATE EXTRACTED -->	01/20/00		01/20/00		01/20/00		01/20/00		01/20/00					
	DATE ANALYZED --->	01/21/00		01/21/00		01/21/00		01/21/00		01/21/00					
	MATRIX ---------->	Water		Water		Water		Water		Water					
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L					
CAS #	Parameter	41748	VAL	41748	VAL	41748	VAL	41748	VAL	41748	VAL				
7429-90-5	Aluminum (Al)	48.4	J	32.1	J	53.6	J	201.		32.1	U				
7440-36-0	Antimony (Sb)	5.	U	5.	U	5.	U	5.	U	5.	U				
7440-38-2	Arsenic (As)	74.9		3.3	UJ	3.3	UJ	3.3	UJ	3.8	J				
7440-39-3	Barium (Ba)	104.		44.		53.2		65.8		69.					
7440-41-7	Beryllium (Be)	0.3	U	0.6	J	0.64	J	0.67	J	0.73	J				
7440-43-9	Cadmium (Cd)	1.	U	1.1	U	0.3	U	0.41	U	0.53	U				
7440-70-2	Calcium (Ca)	231000.		287000.		279000.		192000.		375000.					
7440-47-3	Chromium (Cr)	4.3	J	0.5	U	0.5	U	1.4	J	0.5	U				
7440-48-4	Cobalt (Co)	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U				
7440-50-8	Copper (Cu)	1.	U	1.	U	1.	U	1.	U	1.	U				
7439-89-6	Iron (Fe)	18900.		11600.		1250.		8720.		9940.					
7439-92-1	Lead (Pb)	2.1	U	2.1	U	2.1	U	2.1	U	2.1	U				
7439-95-4	Magnesium (Mg)	198000.		402000.		450000.		534000.		374000.					
7439-96-5	Manganese (Mn)	2950.		1700.		1420.		1160.		1290.					
7439-97-6	Mercury (Hg)	0.1	J	0.2	J	0.11	J	0.1	U	0.1	U				
7440-02-0	Nickel (Ni)	3.7	U	0.8	U	1.3	U	1.5	U	1.2	U				
7440-09-7	Potassium (K)	83700.		120000.		138000.		159000.		118000.					
7782-49-2	Selenium (Se)	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U				
7440-22-4	Silver (Ag)	2.	U	2.	U	2.	U	2.	U	2.	U				
7440-23-5	Sodium (Na)	1920000.		3850000.		4300000.		4870000.		3560000.					
7440-28-0	Thallium (Tl)	2.3	U	2.3	U	2.3	U	2.3	U	2.3	U				
7440-62-2	Vanadium (V)	3.	J	2.1	J	1.6	J	3.2	J	3.7	J				
7440-66-6	Zinc (Zn)	7.1	U	5.	U	5.6	U	5.	U	9.2	U				
7440-31-5	Tin (Sn)	29.5	U	29.5	U	29.5	U	29.5	U	29.5	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-OP P

	SAMPLE ID ------>	694-G-W002-01	694-G-W003-01	694-G-W004-01	694-G-W005-01	694-G-W006-01	694-G-W007-01
	ORIGINAL ID ----->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
	LAB SAMPLE ID --->	7681-03	7681-02	7676-02	7676-01	7676-03	7669-01
	ID FROM REPORT -->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
	SAMPLE DATE ----->	05/16/97	05/16/97	05/15/97	05/15/97	05/15/97	05/14/97
	DATE EXTRACTED -->	05/19/97	05/19/97	05/19/97	05/19/97	05/19/97	05/19/97
	DATE ANALYZED --->	05/21/97	05/21/97	05/21/97	05/21/97	05/21/97	05/21/97
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
298-04-4	Disulfoton	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ
298-00-0	Methyl parathion	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ
298-02-2	Phorate	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-OP P							
	SAMPLE ID ------>	694-H-W007-01					
	ORIGINAL ID ----->	694HW00701					
	LAB SAMPLE ID --->	7669-02					
	ID FROM REPORT -->	694HW00701					
	SAMPLE DATE ----->	05/14/97					
	DATE EXTRACTED -->	05/19/97					
	DATE ANALYZED --->	05/21/97					
	MATRIX ---------->	Water					
	UNITS ---------->	UG/L					
CAS #	Parameter	7669	VAL				
298-04-4	Disulfoton	1.	UJ				
298-00-0	Methyl parathion	1.	UJ				
298-02-2	Phorate	1.	UJ				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-PEST						
SAMPLE ID ------->	694-G-W002-01	694-G-W003-01 RE	694-G-W004-01	694-G-W005-01	694-G-W006-01	694-G-W007-01
ORIGINAL ID ----->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
LAB SAMPLE ID --->	7681-03	7681-02RX	7676-02	7676-01	7676-03	7669-01
ID FROM REPORT -->	694GW00201	694GW00301	694GW00401	694GW00501	694GW00601	694GW00701
SAMPLE DATE ----->	05/16/97	05/16/97	05/15/97	05/15/97	05/15/97	05/14/97
DATE EXTRACTED -->	05/19/97	05/22/97	05/22/97	05/19/97	05/19/97	05/19/97
DATE ANALYZED --->	05/22/97	05/29/97	05/29/97	05/22/97	05/22/97	05/22/97
MATRIX ---------->	Water	Water	Water	Water	Water	Water
UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
319-84-6	alpha-BHC	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
319-85-7	beta-BHC	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
319-86-8	delta-BHC	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
58-89-9	gamma-BHC (Lindane)	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
76-44-8	Heptachlor	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
309-00-2	Aldrin	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
024-57-3	Heptachlor epoxide	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
959-98-8	Endosulfan I	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
60-57-1	Dieldrin	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
72-55-9	4,4'-DDE	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
72-20-8	Endrin	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
213-65-9	Endosulfan II	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
72-54-8	4,4'-DDD	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
031-07-8	Endosulfan sulfate	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
50-29-3	4,4'-DDT	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
72-43-5	Methoxychlor	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ
494-70-5	Endrin ketone	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
421-93-4	Endrin aldehyde	0.1	U	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ	0.1	UJ
103-71-9	alpha-Chlordane	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
103-74-2	gamma-Chlordane	0.05	U	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ	0.05	UJ
001-35-2	Toxaphene	5.	U	5.	UJ	5.	U	5.	UJ	5.	UJ	5.	UJ
574-11-2	Aroclor-1016	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
104-28-2	Aroclor-1221	2.	U	2.	UJ	2.	U	2.	UJ	2.	UJ	2.	UJ
141-16-5	Aroclor-1232	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
469-21-9	Aroclor-1242	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
572-29-6	Aroclor-1248	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
097-69-1	Aroclor-1254	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
096-82-5	Aroclor-1260	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ
57-74-9	Chlordane	1.	U	1.	UJ	1.	U	1.	UJ	1.	UJ	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

8846-PEST

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/22/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
319-84-6	alpha-BHC	0.05	UJ
319-85-7	beta-BHC	0.05	UJ
319-86-8	delta-BHC	0.05	UJ
58-89-9	gamma-BHC (Lindane)	0.05	UJ
76-44-8	Heptachlor	0.05	UJ
309-00-2	Aldrin	0.05	UJ
1024-57-3	Heptachlor epoxide	0.05	UJ
959-98-8	Endosulfan I	0.05	UJ
60-57-1	Dieldrin	0.1	UJ
72-55-9	4,4'-DDE	0.1	UJ
72-20-8	Endrin	0.1	UJ
3213-65-9	Endosulfan II	0.1	UJ
72-54-8	4,4'-DDD	0.1	UJ
1031-07-8	Endosulfan sulfate	0.1	UJ
50-29-3	4,4'-DDT	0.1	UJ
72-43-5	Methoxychlor	0.5	UJ
3494-70-5	Endrin ketone	0.1	UJ
7421-93-4	Endrin aldehyde	0.1	UJ
5103-71-9	alpha-Chlordane	0.05	UJ
5103-74-2	gamma-Chlordane	0.05	UJ
8001-35-2	Toxaphene	5.	UJ
2674-11-2	Aroclor-1016	1.	UJ
1104-28-2	Aroclor-1221	2.	UJ
1141-16-5	Aroclor-1232	1.	UJ
3469-21-9	Aroclor-1242	1.	UJ
2672-29-6	Aroclor-1248	1.	UJ
1097-69-1	Aroclor-1254	1.	UJ
1096-82-5	Aroclor-1260	1.	UJ
57-74-9	Chlordane	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-SVOA													
	SAMPLE ID ------>	694-G-W002-02		694-G-W003-02		694-G-W004-02		694-G-W005-02		694-G-W006-02		694-G-W007-02	
	ORIGINAL ID ------>	694GW00202		694GW00302		694GW00402		694GW00502		694GW00602		694GW00702	
	LAB SAMPLE ID --->	7942-05		7942-04		7947-01		7942-01		7942-06		7942-02	
	ID FROM REPORT -->	694GW00202		694GW00302		694GW00402		694GW00502		694GW00602		694GW00702	
	SAMPLE DATE ----->	07/17/97		07/17/97		07/21/97		07/17/97		07/18/97		07/17/97	
	DATE EXTRACTED -->	07/21/97		07/21/97		07/22/97		07/21/97		07/21/97		07/21/97	
	DATE ANALYZED --->	08/19/97		07/31/97		07/31/97		07/31/97		07/31/97		07/31/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL
110-86-1	Pyridine	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
108-95-2	Phenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
111-44-4	bis(2-Chloroethyl)ether	11.	U	11.	U	10.	U	11.	U	11.	UJ	11.	U
95-57-8	2-Chlorophenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
541-73-1	1,3-Dichlorobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
106-46-7	1,4-Dichlorobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
100-51-6	Benzyl alcohol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
95-50-1	1,2-Dichlorobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
95-48-7	2-Methylphenol (o-Cresol)	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
106-44-5	4-Methylphenol (p-Cresol)	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
621-64-7	N-Nitroso-di-n-propylamine	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
67-72-1	Hexachloroethane	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
98-95-3	Nitrobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
78-59-1	Isophorone	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
88-75-5	2-Nitrophenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
105-67-9	2,4-Dimethylphenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
65-85-0	Benzoic acid	53.	U	53.	U	50.	U	53.	U	53.	U	53.	U
111-91-1	bis(2-Chloroethoxy)methane	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
120-83-2	2,4-Dichlorophenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
120-82-1	1,2,4-Trichlorobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
91-20-3	Naphthalene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
106-47-8	4-Chloroaniline	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
87-68-3	Hexachlorobutadiene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
59-50-7	4-Chloro-3-methylphenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
91-57-6	2-Methylnaphthalene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
77-47-4	Hexachlorocyclopentadiene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
88-06-2	2,4,6-Trichlorophenol	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
95-95-4	2,4,5-Trichlorophenol	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
91-58-7	2-Chloronaphthalene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
88-74-4	2-Nitroaniline	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
131-11-3	Dimethyl phthalate	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
208-96-8	Acenaphthylene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
606-20-2	2,6-Dinitrotoluene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
99-09-2	3-Nitroaniline	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
83-32-9	Acenaphthene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846-SVOA													
	SAMPLE ID ------>	694-G-W002-02		694-G-W003-02		694-G-W004-02		694-G-W005-02		694-G-W006-02		694-G-W007-02	
	ORIGINAL ID ----->	694GW00202		694GW00302		694GW00402		694GW00502		694GW00602		694GW00702	
	LAB SAMPLE ID --->	7942-05		7942-04		7947-01		7942-01		7942-06		7942-02	
	ID FROM REPORT -->	694GW00202		694GW00302		694GW00402		694GW00502		694GW00602		694GW00702	
	SAMPLE DATE ----->	07/17/97		07/17/97		07/21/97		07/17/97		07/18/97		07/17/97	
	DATE EXTRACTED -->	07/21/97		07/21/97		07/22/97		07/21/97		07/21/97		07/21/97	
	DATE ANALYZED --->	08/19/97		07/31/97		07/31/97		07/31/97		07/31/97		07/31/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ----------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL	7942	VAL
51-28-5	2,4-Dinitrophenol	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
100-02-7	4-Nitrophenol	26.	UJ	26.	U	25.	U	26.	U	26.	U	26.	U
132-64-9	Dibenzofuran	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
121-14-2	2,4-Dinitrotoluene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
84-66-2	Diethylphthalate	11.	U	11.	U	50.	U	11.	U	11.	U	11.	U
7005-72-3	4-Chlorophenylphenylether	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
86-73-7	Fluorene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
100-01-6	4-Nitroaniline	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
86-30-6	N-Nitrosodiphenylamine	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
103-33-3	Azobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
101-55-3	4-Bromophenyl-phenylether	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
118-74-1	Hexachlorobenzene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
87-86-5	Pentachlorophenol	26.	U	26.	U	25.	U	26.	U	26.	U	26.	U
85-01-8	Phenanthrene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
120-12-7	Anthracene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
86-74-8	Carbazole	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
84-74-2	Di-n-butylphthalate	11.	UJ	11.	U	10.	U	27.	U	11.	U	11.	U
206-44-0	Fluoranthene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
129-00-0	Pyrene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
85-68-7	Butylbenzylphthalate	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
91-94-1	3,3'-Dichlorobenzidine	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
56-55-3	Benzo(a)anthracene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
218-01-9	Chrysene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	11.	U	11.	U	10.	U	11.	U	17.	U	11.	U
117-84-0	Di-n-octyl phthalate	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
205-99-2	Benzo(b)fluoranthene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
207-08-9	Benzo(k)fluoranthene	11.	U	11.	U	10.	U	11.	U	11.	UJ	11.	U
50-32-8	Benzo(a)pyrene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
53-70-3	Dibenz(a,h)anthracene	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
191-24-2	Benzo(g,h,i)perylene	11.	UJ	11.	U	10.	U	11.	U	11.	U	11.	U
62-53-3	Aniline	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
62-75-9	N-Nitrosodimethylamine	11.	U	11.	U	10.	U	11.	U	11.	U	11.	U
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR		NR		NR		NR	
122-39-4	Diphenylamine	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-SVOA											
	SAMPLE ID ------>	694-H-W007-02		694-G-W011-02		694-G-W012-02		694-G-W014-02		694-H-W014-02	
	ORIGINAL ID ----->	694HW00702		694GW01102		694GW01202		694GW01402		694HW01402	
	LAB SAMPLE ID --->	7942-03		41748.02		41748.01		41748.08		41748.09	
	ID FROM REPORT -->	694HW00702		694GW01102		694GW01202		694GW01402		694HW01402	
	SAMPLE DATE ----->	07/17/97		01/13/00		01/13/00		01/13/00		01/13/00	
	DATE EXTRACTED -->	07/21/97		01/14/00		01/14/00		01/14/00		01/14/00	
	DATE ANALYZED --->	07/31/97		01/20/00		01/17/00		01/20/00		01/20/00	
	MATRIX ---------->	Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7942	VAL	41748	VAL	41748	VAL	41748	VAL	41748	VAL
110-86-1	Pyridine	11.	U	NR		NR		NR		NR	
108-95-2	Phenol	11.	U	10.	U	10.	U	10.	U	10.	U
111-44-4	bis(2-Chloroethyl)ether	11.	U	10.	U	10.	U	10.	U	10.	U
95-57-8	2-Chlorophenol	11.	U	10.	U	10.	U	10.	U	10.	U
541-73-1	1,3-Dichlorobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
106-46-7	1,4-Dichlorobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
100-51-6	Benzyl alcohol	11.	U	10.	U	10.	U	10.	U	10.	U
95-50-1	1,2-Dichlorobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
95-48-7	2-Methylphenol (o-Cresol)	11.	U	10.	U	10.	U	10.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11.	U	10.	U	10.	U	10.	U	10.	U
106-44-5	4-Methylphenol (p-Cresol)	11.	U	10.	U	10.	U	10.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	11.	U	10.	U	10.	U	10.	U	10.	U
67-72-1	Hexachloroethane	11.	U	10.	U	10.	U	10.	U	10.	U
98-95-3	Nitrobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
78-59-1	Isophorone	11.	U	10.	U	10.	U	10.	U	10.	U
88-75-5	2-Nitrophenol	11.	U	10.	U	10.	U	10.	U	10.	U
105-67-9	2,4-Dimethylphenol	11.	U	10.	U	10.	U	10.	U	10.	U
65-85-0	Benzoic acid	53.	U	1.	J	1.	J	1.	J	1.	J
111-91-1	bis(2-Chloroethoxy)methane	11.	U	10.	U	10.	U	10.	U	10.	U
120-83-2	2,4-Dichlorophenol	11.	U	10.	U	10.	U	10.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
91-20-3	Naphthalene	11.	U	10.	U	10.	U	10.	U	10.	U
106-47-8	4-Chloroaniline	11.	U	10.	U	10.	U	10.	U	10.	U
87-68-3	Hexachlorobutadiene	11.	U	10.	U	10.	U	10.	U	10.	U
59-50-7	4-Chloro-3-methylphenol	11.	U	10.	U	10.	U	10.	U	10.	U
91-57-6	2-Methylnaphthalene	11.	U	10.	U	10.	U	10.	U	10.	U
77-47-4	Hexachlorocyclopentadiene	11.	U	10.	U	10.	U	10.	U	10.	U
88-06-2	2,4,6-Trichlorophenol	11.	U	10.	U	10.	U	10.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	26.	U	25.	U	25.	U	25.	U	26.	U
91-58-7	2-Chloronaphthalene	11.	U	10.	U	10.	U	10.	U	10.	U
88-74-4	2-Nitroaniline	26.	U	25.	U	25.	U	25.	U	26.	U
131-11-3	Dimethyl phthalate	11.	U	10.	U	10.	U	10.	U	10.	U
208-96-8	Acenaphthylene	11.	U	10.	U	10.	U	10.	U	10.	U
606-20-2	2,6-Dinitrotoluene	11.	U	10.	U	10.	U	10.	U	10.	U
99-09-2	3-Nitroaniline	26.	U	25.	U	25.	U	25.	U	26.	U
83-32-9	Acenaphthene	11.	U	10.	U	10.	U	10.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

W846-SVOA	SAMPLE ID ------>	694-H-W007-02		694-G-W011-02		694-G-W012-02		694-G-W014-02		694-H-W014-02	
	ORIGINAL ID ----->	694HW00702		694GW01102		694GW01202		694GW01402		694HW01402	
	LAB SAMPLE ID --->	7942-03		41748.02		41748.01		41748.08		41748.09	
	ID FROM REPORT -->	694HW00702		694GW01102		694GW01202		694GW01402		694HW01402	
	SAMPLE DATE ----->	07/17/97		01/13/00		01/13/00		01/13/00		01/13/00	
	DATE EXTRACTED -->	07/21/97		01/14/00		01/14/00		01/14/00		01/14/00	
	DATE ANALYZED --->	07/31/97		01/20/00		01/17/00		01/20/00		01/20/00	
	MATRIX ---------->	Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7942	VAL	41748	VAL	41748	VAL	41748	VAL	41748	VAL
51-28-5	2,4-Dinitrophenol	26.	U	25.	U	25.	U	25.	U	26.	U
100-02-7	4-Nitrophenol	26.	U	25.	U	25.	U	25.	U	26.	U
132-64-9	Dibenzofuran	11.	U	10.	U	10.	U	10.	U	10.	U
121-14-2	2,4-Dinitrotoluene	11.	U	10.	U	10.	U	10.	U	10.	U
84-66-2	Diethylphthalate	11.	U	10.	U	10.	U	10.	U	10.	U
7005-72-3	4-Chlorophenylphenylether	11.	U	10.	U	10.	U	10.	U	10.	U
86-73-7	Fluorene	11.	U	10.	U	10.	U	10.	U	10.	U
100-01-6	4-Nitroaniline	26.	U	25.	U	25.	U	25.	U	26.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	26.	U	25.	U	25.	U	25.	U	26.	U
86-30-6	N-Nitrosodiphenylamine	11.	U	10.	U	10.	U	10.	U	10.	U
103-33-3	Azobenzene	11.	U	NR		NR		NR		NR	
101-55-3	4-Bromophenyl-phenylether	11.	U	10.	U	10.	U	10.	U	10.	U
118-74-1	Hexachlorobenzene	11.	U	10.	U	10.	U	10.	U	10.	U
87-86-5	Pentachlorophenol	26.	U	25.	U	25.	U	25.	U	26.	U
85-01-8	Phenanthrene	11.	U	10.	U	10.	U	10.	U	10.	U
120-12-7	Anthracene	11.	U	10.	U	10.	U	10.	U	10.	U
86-74-8	Carbazole	11.	U	NR		NR		NR		NR	
84-74-2	Di-n-butylphthalate	11.	U	10.	U	10.	U	10.	U	10.	U
206-44-0	Fluoranthene	11.	U	10.	U	10.	U	10.	U	10.	U
129-00-0	Pyrene	11.	U	10.	U	10.	U	10.	U	10.	U
85-68-7	Butylbenzylphthalate	11.	U	10.	U	10.	U	10.	U	10.	U
91-94-1	3,3'-Dichlorobenzidine	11.	U	10.	U	10.	U	10.	U	10.	U
56-55-3	Benzo(a)anthracene	11.	U	10.	U	10.	U	10.	U	10.	U
218-01-9	Chrysene	11.	U	10.	U	10.	U	10.	U	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	11.	U	14.	U	10.	U	10.	U	10.	U
117-84-0	Di-n-octyl phthalate	11.	U	10.	U	10.	U	10.	U	10.	U
205-99-2	Benzo(b)fluoranthene	11.	U	10.	U	10.	U	10.	U	10.	U
207-08-9	Benzo(k)fluoranthene	11.	U	10.	U	10.	U	10.	U	10.	U
50-32-8	Benzo(a)pyrene	11.	U	10.	U	10.	U	10.	U	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.	U	10.	U	10.	U	10.	U	10.	U
53-70-3	Dibenz(a,h)anthracene	11.	U	10.	U	10.	U	10.	U	10.	U
191-24-2	Benzo(g,h,i)perylene	11.	U	10.	U	10.	U	10.	U	10.	U
62-53-3	Aniline	11.	U	NR		NR		NR		NR	
62-75-9	N-Nitrosodimethylamine	11.	U	NR		NR		NR		NR	
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR		NR		NR	
122-39-4	Diphenylamine	NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

8260-VOA													
	SAMPLE ID ------>	694-G-W002-03		694-G-W002-04		694-G-W003-03		694-G-W003-04		694-G-W004-03		694-G-W004-04	
	ORIGINAL ID ----->	694GW00203		694GW00204		694GW00303		694GW00304		694GW00403		694GW00404	
	LAB SAMPLE ID --->	32259.02		33177.02		32259.06		33219.02		32413.01		33219.01	
	ID FROM REPORT -->	694GW00203		694GW00204		694GW00303		694GW00304		694GW00403		694GW00404	
	SAMPLE DATE ----->	12/17/97		03/16/98		12/17/97		03/17/98		01/12/98		03/17/98	
	DATE ANALYZED --->	12/22/97		03/25/98		12/22/97		03/25/98		01/13/98		03/25/98	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32413	VAL	33177	VAL
74-87-3	Chloromethane	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ
74-83-9	Bromomethane	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	UJ
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	UJ
75-09-2	Methylene chloride	7.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-64-1	Acetone	5.	U	5.	UR	6.	U	5.	UR	5.	UR	5.	UR
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	2.	J	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ
79-00-5	1,1,2-Trichloroethane	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	UJ	5.	U	5.	UJ	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	UJ
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
1330-20-7	Xylene (Total)	5.	UJ	5.	U	5.	UJ	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	UJ
110-75-8	2-Chloroethyl vinyl ether	5.	U	5.	UJ	5.	U	5.	UJ	5.	UR	5.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-VOA	SAMPLE ID ------>	694-G-W005-03	694-G-W005-04	694-G-W006-03	694-G-W006-04	694-G-W007-03	694-H-W007-03
	ORIGINAL ID ----->	694GW00503	694GW00504	694GW00603	694GW00604	694GW00703	694HW00703
	LAB SAMPLE ID --->	32276.03	33253.01	32289.01	33253.02	32276.01	32276.02
	ID FROM REPORT -->	694GW00503	694GW00504	694GW00603	694GW00604	694GW00703	694HW00703
	SAMPLE DATE ----->	12/18/97	03/19/98	12/19/97	03/19/98	12/18/97	12/18/97
	DATE ANALYZED --->	12/22/97	03/26/98	12/31/97	03/26/98	12/22/97	12/22/97
	MATRIX ---------->	Water	Water	Water	Water	Water	Water
	UNITS ---------->	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

CAS #	Parameter	32259	VAL	33177	VAL	32259	VAL	33177	VAL	32259	VAL	32259	VAL
74-87-3	Chloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ	5.	UJ
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ	5.	UJ
75-09-2	Methylene chloride	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	U
67-64-1	Acetone	5.	UJ	5.	UJ	14.	U	5.	UJ	5.	UJ	3.	J
75-15-0	Carbon disulfide	5.	U	5.	U	2.	J	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	5.	UJ	5.	U	5.	UJ	5.	U	5.	UJ	5.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	UJ	5.	U	5.	UJ	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	UJ	5.	UJ	10.	J	5.	UJ	5.	UJ	5.	UJ
591-78-6	2-Hexanone	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	UJ	5.	UJ
127-18-4	Tetrachloroethene	5.	U	5.	UJ	5.	UJ	5.	UJ	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
1330-20-7	Xylene (Total)	5.	UJ	5.	U	5.	U	5.	U	5.	UJ	5.	UJ
108-05-4	Vinyl acetate	5.	UJ	5.	UJ	5.	U	5.	UJ	5.	UJ	5.	UJ
110-75-8	2-Chloroethyl vinyl ether	5.	U	5.	UJ	5.	UR	5.	UJ	5.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46-VOA													
	SAMPLE ID ------>	694-G-W007-04		694-H-W007-04		694-G-W008-02		694-H-W008-02		694-G-W009-02		694-G-W013-02	
	ORIGINAL ID ----->	694GW00704		694HW00704		694GW00802		694HW00802		694GW00902		694GW01302	
	LAB SAMPLE ID --->	33223.01		33223.02		41748.03		41748.05		41748.04		41748.07	
	ID FROM REPORT -->	694GW00704		694HW00704		694GW00802		694HW00802		694GW00902		694GW01302	
	SAMPLE DATE ----->	03/18/98		03/18/98		01/13/00		01/13/00		01/13/00		01/13/00	
	DATE ANALYZED --->	03/25/98		03/25/98		01/17/00		01/17/00		01/17/00		01/17/00	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	33177	VAL	33177	VAL	41748	VAL	41748	VAL	41748	VAL	41748	VAL
74-87-3	Chloromethane	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
75-09-2	Methylene chloride	5.	U	5.	U	9.	UJ	10.	UJ	9.	UJ	9.	UJ
67-64-1	Acetone	5.	UR	5.	UR	5.	U	5.	U	5.	U	5.	U
75-15-0	Carbon disulfide	5.	U	5.	U	5.	UJ	5.	UJ	5.	UJ	5.	UJ
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
591-78-6	2-Hexanone	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
330-20-7	Xylene (Total)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	U
110-75-8	2-Chloroethyl vinyl ether	5.	UJ	5.	UJ	5.	U	5.	U	5.	U	5.	UR

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

346META													
	SAMPLE ID ------->	694-G-W008-01		694-G-W009-01		694-G-W011-01		694-G-W012-01		694-G-W013-01		694-H-W013-01	
	ORIGINAL ID ----->	694GW00801		694GW00901		694GW01101		694GW01201		694GW01301		694HW01301	
	LAB SAMPLE ID --->	S918402*5		S918402*7		S918402*2		S918402*3		S918402*4		S918402*6	
	ID FROM REPORT -->	694GW00801		694GW00901		694GW01101		694GW01201		694GW01301		694HW01301	
	SAMPLE DATE ----->	12/10/99		12/10/99		12/10/99		12/10/99		12/10/99		12/10/99	
	DATE EXTRACTED -->	12/17/99		12/17/99		12/17/99		12/17/99		12/17/99		12/17/99	
	DATE ANALYZED --->	12/21/99		12/21/99		12/21/99		12/21/99		12/21/99		12/21/99	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL
7439-97-6	Mercury (Hg)	0.1	UJ	0.1	UJ	0.1	UJ	0.12	J	0.1	UJ	0.1	UJ
7440-31-5	Tin (Sn)	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	3.5	J
7429-90-5	Aluminum (Al)	176.	J	48.8	U	154.	J	591.		177.	J	143.	J
7440-36-0	Antimony (Sb)	3.8	J	5.9	J	2.4	U	2.4	U	2.4	U	2.4	U
7440-38-2	Arsenic (As)	12.6		49.3		5.	J	3.3	U	3.3	U	3.3	U
7440-39-3	Barium (Ba)	53.4		92.2		51.3		64.7		82.8		80.7	
7440-41-7	Beryllium (Be)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7440-43-9	Cadmium (Cd)	0.81	J	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
7440-70-2	Calcium (Ca)	317000.		241000.		332000.		344000.		284000.		299000.	
7440-47-3	Chromium (Cr)	0.5	U	0.5	U	1.	U	4.3	U	0.97	U	1.7	U
7440-48-4	Cobalt (Co)	4.4	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
7440-50-8	Copper (Cu)	24.6		0.8	U	1.9	J	1.5	J	0.8	U	0.8	U
7439-89-6	Iron (Fe)	2660.		15700.		12700.		2310.		9230.		9670.	
7439-92-1	Lead (Pb)	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
7439-95-4	Magnesium (Mg)	213000.		300000.		468000.		548000.		616000.		618000.	
7439-96-5	Manganese (Mn)	518.		3570.		2010.		1840.		1460.		1460.	
7440-02-0	Nickel (Ni)	10.4	J	2.3	J	1.2	U	1.6	J	1.2	U	2.1	J
7440-09-7	Potassium (K)	85800.		99500.		116000.		152000.		169000.		166000.	
7782-49-2	Selenium (Se)	5.6	J	8.3	J	3.6	U	3.6	U	3.6	U	4.4	J
7440-22-4	Silver (Ag)	0.7	U	1.4	J	0.7	U	0.7	U	0.7	U	0.81	J
7440-23-5	Sodium (Na)	2120000.		2570000.		3660000.		4500000.		4770000.		4730000.	
7440-28-0	Thallium (Tl)	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U
7440-62-2	Vanadium (V)	13.1		10.3		3.4	J	4.6	J	4.1	J	7.6	J
7440-66-6	Zinc (Zn)	13.4	J	0.7	U	3.6	J	14.2	J	3.4	J	0.7	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846META	SAMPLE ID ------->	694-G-W014-01					
	ORIGINAL ID ----->	694GW01401					
	LAB SAMPLE ID --->	S918402*1					
	ID FROM REPORT -->	694GW01401					
	SAMPLE DATE ----->	12/10/99					
	DATE EXTRACTED -->	12/17/99					
	DATE ANALYZED --->	12/21/99					
	MATRIX ---------->	Water					
	UNITS ----------->	UG/L					
CAS #	Parameter	NBCK13	VAL				
7439-97-6	Mercury (Hg)	0.1	UJ				
7440-31-5	Tin (Sn)	2.9	U				
7429-90-5	Aluminum (Al)	70.3	J				
7440-36-0	Antimony (Sb)	2.4	U				
7440-38-2	Arsenic (As)	3.3	U				
7440-39-3	Barium (Ba)	88.8					
7440-41-7	Beryllium (Be)	0.1	U				
7440-43-9	Cadmium (Cd)	0.4	U				
7440-70-2	Calcium (Ca)	497000.					
7440-47-3	Chromium (Cr)	1.9	U				
7440-48-4	Cobalt (Co)	0.58	J				
7440-50-8	Copper (Cu)	4.2	J				
7439-89-6	Iron (Fe)	5730.					
7439-92-1	Lead (Pb)	1.3	U				
7439-95-4	Magnesium (Mg)	471000.					
7439-96-5	Manganese (Mn)	1800.					
7440-02-0	Nickel (Ni)	1.9	J				
7440-09-7	Potassium (K)	137000.					
7782-49-2	Selenium (Se)	3.6	U				
7440-22-4	Silver (Ag)	0.7	U				
7440-23-5	Sodium (Na)	3570000.					
7440-28-0	Thallium (Tl)	3.2	U				
7440-62-2	Vanadium (V)	3.	J				
7440-66-6	Zinc (Zn)	3.8	J				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46METAL												
	SAMPLE ID ------>	694-G-W005-F5		694-G-W005-U5		694-G-W006-F5		694-G-W006-U5		694-G-W007-F5		694-G-W007-U5	
	ORIGINAL ID ----->	694GW005F5		694GW005U5		694GW006F5		694GW006U5		694GW007F5		694GW007U5	
	LAB SAMPLE ID --->	37084.06		37084.05		37084.03		37084.02		37063.03		37063.02	
	ID FROM REPORT -->	694GW005F5		694GW005U5		694GW006F5		694GW006U5		694GW007F5		694GW007U5	
	SAMPLE DATE ----->	01/13/99		01/13/99		01/13/99		01/13/99		01/11/99		01/11/99	
	DATE EXTRACTED -->	01/20/99		01/20/99		01/20/99		01/20/99		01/20/99		01/20/99	
	DATE ANALYZED --->	01/20/99		01/20/99		01/20/99		01/20/99		01/21/99		01/21/99	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	37084	VAL	37084	VAL	37084	VAL	37084	VAL	37063	VAL	37063	VAL
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7440-36-0	Antimony (Sb)	2.7	U	2.7	U	2.7	U	2.7	U	2.7	U	2.7	U
7440-38-2	Arsenic (As)	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U	2.9	U
7440-41-7	Beryllium (Be)	0.1	U	0.1	U	0.11	J	0.12	J	0.1	U	0.1	U
7440-47-3	Chromium (Cr)	0.7	U	0.7	U	0.92	J	0.72	J	0.7	U	0.7	U
7439-92-1	Lead (Pb)	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
7440-28-0	Thallium (Tl)	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

46SVOA												
	SAMPLE ID ------->	694-G-W011-01		694-H-W011-01		694-G-W012-01		694-G-W014-01				
	ORIGINAL ID ----->	694GW01101		694HW01101		694GW01201		694GW01401				
	LAB SAMPLE ID --->	S918402*2		S918402*8		S918402*3		S918402*1				
	ID FROM REPORT -->	694GW01101		694HW01101		694GW01201		694GW01401				
	SAMPLE DATE ----->	12/10/99		12/10/99		12/10/99		12/10/99				
	DATE EXTRACTED -->	12/16/99		12/16/99		12/16/99		12/16/99				
	DATE ANALYZED --->	12/20/99		12/20/99		12/20/99		12/20/99				
	MATRIX ---------->	Water		Water		Water		Water				
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L				
CAS #	Parameter	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL			
108-95-2	Phenol	10.	U	10.	U	10.	U	10.	U			
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U	10.	U	10.	U			
95-57-8	2-Chlorophenol	10.	U	10.	U	10.	U	10.	U			
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U			
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U			
100-51-6	Benzyl alcohol	10.	U	10.	U	10.	U	10.	U			
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U	10.	U	10.	U			
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U	10.	U	10.	U			
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U	10.	U	10.	U			
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U	10.	U	10.	U			
108-39-4	3-Methylphenol (m-Cresol)	10.	U	10.	U	10.	U	10.	U			
67-72-1	Hexachloroethane	10.	U	10.	U	10.	U	10.	U			
98-95-3	Nitrobenzene	10.	U	10.	U	10.	U	10.	U			
78-59-1	Isophorone	10.	U	10.	U	10.	U	10.	U			
88-75-5	2-Nitrophenol	10.	U	10.	U	10.	U	10.	U			
105-67-9	2,4-Dimethylphenol	10.	U	10.	U	10.	U	10.	U			
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U	10.	U	10.	U			
65-85-0	Benzoic acid	50.	U	50.	U	50.	U	50.	U			
120-83-2	2,4-Dichlorophenol	10.	U	10.	U	10.	U	10.	U			
120-82-1	1,2,4-Trichlorobenzene	10.	U	10.	U	10.	U	10.	U			
91-20-3	Naphthalene	10.	U	10.	U	10.	U	10.	U			
106-47-8	4-Chloroaniline	20.	U	20.	U	20.	U	20.	U			
87-68-3	Hexachlorobutadiene	10.	U	10.	U	10.	U	10.	U			
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U	10.	U	10.	U			
91-57-6	2-Methylnaphthalene	10.	U	10.	U	10.	U	10.	U			
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U	10.	U	10.	U			
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U	10.	U	10.	U			
95-95-4	2,4,5-Trichlorophenol	10.	U	10.	U	10.	U	10.	U			
91-58-7	2-Chloronaphthalene	10.	U	10.	U	10.	U	10.	U			
88-74-4	2-Nitroaniline	50.	U	50.	U	50.	U	50.	U			
208-96-8	Acenaphthylene	10.	U	10.	U	10.	U	10.	U			
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U	10.	U	10.	U			
99-09-2	3-Nitroaniline	50.	U	50.	U	50.	U	50.	U			
83-32-9	Acenaphthene	10.	U	10.	U	10.	U	10.	U			
51-28-5	2,4-Dinitrophenol	50.	U	50.	U	50.	U	50.	U			
132-64-9	Dibenzofuran	10.	U	10.	U	10.	U	10.	U			

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846SVOA											
	SAMPLE ID ------->	694-G-W011-01		694-H-W011-01		694-G-W012-01		694-G-W014-01			
	ORIGINAL ID ----->	694GW01101		694HW01101		694GW01201		694GW01401			
	LAB SAMPLE ID --->	S918402*2		S918402*8		S918402*3		S918402*1			
	ID FROM REPORT -->	694GW01101		694HW01101		694GW01201		694GW01401			
	SAMPLE DATE ----->	12/10/99		12/10/99		12/10/99		12/10/99			
	DATE EXTRACTED -->	12/16/99		12/16/99		12/16/99		12/16/99			
	DATE ANALYZED --->	12/20/99		12/20/99		12/20/99		12/20/99			
	MATRIX ---------->	Water		Water		Water		Water			
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L			
CAS #	Parameter	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL		
100-02-7	4-Nitrophenol	50.	U	50.	U	50.	U	50.	U		
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U	10.	U	10.	U		
86-73-7	Fluorene	10.	U	10.	U	10.	U	10.	U		
131-11-3	Dimethyl phthalate	10.	U	10.	U	10.	U	10.	U		
84-66-2	Diethylphthalate	10.	U	10.	U	10.	U	10.	U		
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U	10.	U	10.	U		
100-01-6	4-Nitroaniline	50.	U	50.	U	50.	U	50.	U		
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	50.	U	50.	U	50.	U		
122-39-4	Diphenylamine	10.	U	10.	U	10.	U	10.	U		
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U	10.	U	10.	U		
118-74-1	Hexachlorobenzene	10.	U	10.	U	10.	U	10.	U		
87-86-5	Pentachlorophenol	50.	U	50.	U	50.	U	50.	U		
85-01-8	Phenanthrene	10.	U	10.	U	10.	U	0.42	J		
120-12-7	Anthracene	10.	U	10.	U	10.	U	10.	U		
84-74-2	Di-n-butylphthalate	10.	U	10.	U	10.	U	10.	U		
206-44-0	Fluoranthene	10.	U	10.	U	10.	U	1.3	J		
129-00-0	Pyrene	10.	U	10.	U	10.	U	0.82	J		
85-68-7	Butylbenzylphthalate	10.	U	10.	U	10.	U	10.	U		
56-55-3	Benzo(a)anthracene	10.	U	10.	U	10.	U	10.	U		
91-94-1	3,3'-Dichlorobenzidine	20.	U	20.	U	20.	U	20.	U		
218-01-9	Chrysene	10.	U	10.	U	10.	U	10.	U		
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	10.	U	10.	U	10.	U		
117-84-0	Di-n-octyl phthalate	10.	U	10.	U	10.	U	10.	U		
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U	10.	U	10.	U		
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U	10.	U	10.	U		
50-32-8	Benzo(a)pyrene	10.	U	10.	U	10.	U	10.	U		
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U	10.	U	10.	U		
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U	10.	U	10.	U		
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U	10.	U	0.63	J		
62-75-9	N-Nitrosodimethylamine	10.	U	10.	U	10.	U	10.	U		

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

SW846VOA											
	SAMPLE ID ------->	694-G-W008-01		694-G-W013-01		694-H-W013-01					
	ORIGINAL ID ----->	694GW00801		694GW01301		694HW01301					
	LAB SAMPLE ID --->	S918402*5		S918402*4		S918402*6					
	ID FROM REPORT -->	694GW00801		694GW01301		694HW01301					
	SAMPLE DATE ----->	12/10/99		12/10/99		12/10/99					
	DATE ANALYZED --->	12/22/99		12/21/99		12/21/99					
	MATRIX ---------->	Water		Water		Water					
	UNITS ---------->	UG/L		UG/L		UG/L					
CAS #	Parameter	NBCK13	VAL	NBCK13	VAL	NBCK13	VAL				
74-87-3	Chloromethane	10.	U	8.	J	10.	U				
75-01-4	Vinyl chloride	10.	U	10.	U	10.	U				
74-83-9	Bromomethane	10.	U	10.	U	10.	U				
75-00-3	Chloroethane	10.	U	10.	U	10.	U				
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U				
75-09-2	Methylene chloride	5.	U	5.	U	5.	U				
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U				
67-66-3	Chloroform	5.	U	5.	U	5.	U				
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U				
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U				
71-43-2	Benzene	5.	U	5.	U	5.	U				
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U				
79-01-6	Trichloroethene	5.	U	5.	U	5.	U				
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U				
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U				
108-88-3	Toluene	5.	U	5.	U	5.	U				
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U				
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U				
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U				
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U				
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U				
100-42-5	Styrene	5.	U	5.	U	5.	U				
75-25-2	Bromoform	5.	U	5.	U	5.	U				
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U				
67-64-1	Acetone	50.	U	50.	U	50.	U				
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U				
108-05-4	Vinyl acetate	10.	U	10.	U	10.	U				
78-93-3	2-Butanone (MEK)	25.	U	25.	U	25.	U				
110-75-8	2-Chloroethyl vinyl ether	50.	U	50.	U	50.	U				
108-10-1	4-Methyl-2-Pentanone (MIBK)	25.	U	25.	U	25.	U				
10061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U				
10061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U				
591-78-6	2-Hexanone	25.	U	25.	U	25.	U				
1330-20-7	Xylene (Total)	10.	U	10.	U	10.	U				
540-59-0	1,2-Dichloroethene (total)	5.	U	5.	U	5.	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

846_META													
	SAMPLE ID ------>	694-G-W009-03		694-G-W009-F3		694-G-W013-03		694-H-W013-03		694-G-W013-F3		694-H-W013-F3	
	ORIGINAL ID ------>	694GW00903		694GW009F3		694GW01303		694HW01303		694GW013F3		694HW013F3	
	LAB SAMPLE ID --->	49453.07		49453.06		49453.10		49453.11		49453.08		49453.09	
	ID FROM REPORT -->	694GW00903		694GW009F3		694GW01303		694HW01303		694GW013F3		694HW013F3	
	SAMPLE DATE ------>	04/19/02		04/19/02		04/22/02		04/22/02		04/22/02		04/22/02	
	DATE EXTRACTED -->	04/29/02		04/29/02		04/29/02		04/29/02		04/29/02		04/29/02	
	DATE ANALYZED --->	04/30/02		04/30/02		04/30/02		04/30/02		04/30/02		04/30/02	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	49453		49453		49453		49453		49453		49453	
7429-90-5	Aluminum (Al)	46.1	U	46.1	U	46.1	U	46.1	U	46.1	U	46.1	U
7440-36-0	Antimony (Sb)	5.7	U	6.3	J	5.7	U	5.7	U	5.7	U	5.7	U
7440-38-2	Arsenic (As)	45.4		45.6		6.3	U	8.5	U	8.2	U	7.7	U
7440-39-3	Barium (Ba)	142.		141.		67.1		67.7		67.2		68.1	
7440-41-7	Beryllium (Be)	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
7440-43-9	Cadmium (Cd)	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
7440-70-2	Calcium (Ca)	325000.	J	325000.	J	279000.	J	280000.	J	274000.	J	280000.	J
7440-47-3	Chromium (Cr)	0.9	U	0.9	U	0.9	U	0.9	U	1.	J	0.9	U
7440-48-4	Cobalt (Co)	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
7440-50-8	Copper (Cu)	8.5	J	7.1	J	5.8	J	4.7	J	8.5	J	7.2	J
7439-89-6	Iron (Fe)	23200.		22800.		1520.		1460.		1360.		1360.	
7439-92-1	Lead (Pb)	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U	3.1	U
7439-95-4	Magnesium (Mg)	289000.		286000.		427000.		434000.		432000.		439000.	
7439-96-5	Manganese (Mn)	4020.	J	4000.	J	536.	J	554.	J	573.	J	548.	J
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7440-02-0	Nickel (Ni)	4.	U	4.	U	4.	U	4.	U	4.	U	4.	U
7440-09-7	Potassium (K)	109000.	J	108000.	J	142000.	J	147000.	J	146000.	J	145000.	J
7782-49-2	Selenium (Se)	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ
7440-22-4	Silver (Ag)	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
7440-23-5	Sodium (Na)	2290000.		2330000.		3760000.		3920000.		3710000.		3670000.	
7440-28-0	Thallium (Tl)	9.9	J	9.2	J	4.8	U	7.3	J	5.3	J	7.8	J
7440-62-2	Vanadium (V)	2.2	J	1.5	J	2.5	J	2.4	J	2.5	J	2.9	J
7440-66-6	Zinc (Zn)	7.1	U	7.1	U	7.1	U	7.1	U	7.1	U	7.1	U

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

8846_META													
		SAMPLE ID ------>	694-G-W015-01		694-G-W015-F1		694-G-W016-01		694-G-W016-F1				
		ORIGINAL ID ----->	694GW01501		694GW015F1		694GW01601		694GW016F1				
		LAB SAMPLE ID --->	49453.05		49453.04		49453.02		49453.03				
		ID FROM REPORT -->	694GW01501		694GW015F1		694GW01601		694GW016F1				
		SAMPLE DATE ----->	04/19/02		04/19/02		04/19/02		04/19/02				
		DATE EXTRACTED -->	04/29/02		04/29/02		04/29/02		04/29/02				
		DATE ANALYZED --->	04/30/02		04/30/02		04/30/02		04/30/02				
		MATRIX ---------->	Water		Water		Water		Water				
		UNITS ---------->	UG/L		UG/L		UG/L		UG/L				
CAS #	Parameter		49453		49453		49453		49453				
7429-90-5	Aluminum (Al)		940.		46.1	U	257.		46.1	U			
7440-36-0	Antimony (Sb)		5.7	U	5.7	U	5.7	U	5.7	U			
7440-38-2	Arsenic (As)		14.6	U	15.7		9.	U	11.	U			
7440-39-3	Barium (Ba)		46.5		43.4		96.3		94.5				
7440-41-7	Beryllium (Be)		0.4	U	0.4	U	0.4	U	0.4	U			
7440-43-9	Cadmium (Cd)		0.8	U	0.8	U	0.8	U	0.8	U			
7440-70-2	Calcium (Ca)		78400.	J	88200.	J	233000.	J	231000.	J			
7440-47-3	Chromium (Cr)		4.5	J	2.1	J	0.9	U	0.9	U			
7440-48-4	Cobalt (Co)		0.8	U	0.8	U	0.8	U	0.8	U			
7440-50-8	Copper (Cu)		7.8	J	8.8	J	15.4		23.7				
7439-89-6	Iron (Fe)		1730.		694.		1560.		521.				
7439-92-1	Lead (Pb)		3.1	U	3.1	U	3.1	U	3.1	U			
7439-95-4	Magnesium (Mg)		87500.		92000.		350000.		346000.				
7439-96-5	Manganese (Mn)		834.	J	924.	J	231.	J	217.	J			
7439-97-6	Mercury (Hg)		0.1	U	0.1	U	0.1	U	0.1	U			
7440-02-0	Nickel (Ni)		4.	U	4.	U	4.	U	4.	U			
7440-09-7	Potassium (K)		71000.	J	68100.	J	119000.	J	115000.	J			
7782-49-2	Selenium (Se)		3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ			
7440-22-4	Silver (Ag)		1.2	U	1.2	U	2.1	J	1.2	U			
7440-23-5	Sodium (Na)		1220000.		1210000.		2750000.		2580000.				
7440-28-0	Thallium (Tl)		4.9	J	4.8	U	7.	J	7.5	J			
7440-62-2	Vanadium (V)		7.3		4.9	J	1.5	J	1.	U			
7440-66-6	Zinc (Zn)		7.1	U	7.1	U	7.1	U	7.1	U			

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

H-DIESEL													
	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ------>	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/15/97		05/15/97		05/15/97		05/14/97	
	DATE EXTRACTED -->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	DATE ANALYZED --->	05/15/97		05/15/97		05/15/97		05/15/97		05/15/97		05/15/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
8334-30-5	Diesel	500.	U	500.	U	500.	U	500.	U	500.	U	500.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PH-DIESEL

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/15/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
68334-30-5	Diesel	500.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

TPH-GRO													
	SAMPLE ID ------>	694-G-W002-01		694-G-W003-01		694-G-W004-01		694-G-W005-01		694-G-W006-01		694-G-W007-01	
	ORIGINAL ID ----->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	LAB SAMPLE ID --->	7681-03		7681-02		7676-02		7676-01		7676-03		7669-01	
	ID FROM REPORT -->	694GW00201		694GW00301		694GW00401		694GW00501		694GW00601		694GW00701	
	SAMPLE DATE ----->	05/16/97		05/16/97		05/15/97		05/15/97		05/15/97		05/14/97	
	DATE ANALYZED --->	05/19/97		05/19/97		05/19/97		05/19/97		05/19/97		05/19/97	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL	7669	VAL
86290-81-5	Gasoline	50.	U	50.	U	50.	U	50.	U	50.	U	50.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

PH-GRO

SAMPLE ID ------->	694-H-W007-01
ORIGINAL ID ----->	694HW00701
LAB SAMPLE ID --->	7669-02
ID FROM REPORT -->	694HW00701
SAMPLE DATE ----->	05/14/97
DATE ANALYZED --->	05/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
86290-81-5	Gasoline	50.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
AOC 694 GROUNDWATER SAMPLES

S								
	SAMPLE ID ------>	694-G-W005-05		694-G-W006-05		694-G-W007-05				
	ORIGINAL ID ----->	694GW00505		694GW00605		694GW00705				
	LAB SAMPLE ID --->	37084.04		37084.01		37063.01				
	ID FROM REPORT -->	694GW00505		694GW00605		694GW00705				
	SAMPLE DATE ----->	01/13/99		01/13/99		01/11/99				
	DATE ANALYZED --->	01/25/99		01/25/99		01/25/99				
	MATRIX ---------->	Water		Water		Water				
	UNITS ----------->	MG/L		MG/L		MG/L				
CAS #	Parameter	37084	VAL	37084	VAL	37063	VAL			
9900-03-7	Total Suspended Solids (TSS)	4.	U	4.	U	4.	U			

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

9 VOA

SAMPLE ID ------>	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE ANALYZED --->	05/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone (MEK)	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon tetrachloride	5.	U
108-05-4	Vinyl acetate	10.	U
78-87-5	1,2-Dichloropropane	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
80-62-6	Methyl methacrylate	5.	U
71-43-2	Benzene	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
000-76-0	XYLENE (META/PARA)	5.	U
75-71-8	Dichlorodifluoromethane	5.	U
75-69-4	Trichlorofluoromethane	5.	U
74-88-4	Methyl iodide	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

9 VOA							
	SAMPLE ID ------->	GDK-G-WCL1-01					
	ORIGINAL ID ----->	GDKGWCL101					
	LAB SAMPLE ID --->	7681-01					
	ID FROM REPORT -->	GDKGWCL101					
	SAMPLE DATE ----->	05/16/97					
	DATE ANALYZED --->	05/19/97					
	MATRIX ---------->	Water					
	UNITS ----------->	UG/L					
CAS #	Parameter	7669	VAL				
107-05-1	3-Chloropropene	5.	U				
107-12-0	Propionitrile	50.	UR				
75-05-8	Acetonitrile	50.	UR				
107-02-8	Acrolein	50.	UR				
126-99-8	Chloroprene	10.	U				
107-13-1	Acrylonitrile	50.	UR				
123-91-1	1,4-Dioxane	50.	UR				
126-98-7	Methacrylonitrile	50.	U				
74-95-3	Methylene bromide	5.	U				
78-83-1	Isobutyl alcohol	500.	UR				
106-93-4	1, 2-Dibromoethane	5.	U				
630-20-6	1,1,1,2-Tetrachloroethane	5.	U				
95-47-6	o-Xylene	5.	U				
96-18-4	1,2,3-Trichloropropane	5.	U				
110-57-6	trans-1,4-Dichloro-2-butene	5.	U				
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U				
97-63-2	Ethyl methacrylate	5.	U				
76-01-7	Pentachloroethane	5.	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

PX9 SVOA

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	06/12/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	7669	VAL
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	UJ
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol (p-Cresol)	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	25.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	25.	U
131-11-3	Dimethyl phthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	25.	U
83-32-9	Acenaphthene	10.	U
51-28-5	2,4-Dinitrophenol	25.	UJ
100-02-7	4-Nitrophenol	25.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

X9 SVOA

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	06/12/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenylphenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	25.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	25.	UJ
86-30-6	N-Nitrosodiphenylamine	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	25.	UJ
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-butylphthalate	10.	UJ
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	10.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U
117-84-0	Di-n-octyl phthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U
110-86-1	Pyridine	10.	UJ
62-75-9	N-Nitrosodimethylamine	10.	U
109-06-8	2-Picoline	25.	U
1595-95-6	N-Nitrosomethylethylamine	25.	U
66-27-3	Methyl methanesulfonate	10.	U
55-18-5	N-Nitrosodiethylamine	20.	U
62-50-0	Ethyl methanesulfonate	20.	U
62-53-3	Aniline	10.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

APX9 SVOA							
	SAMPLE ID ------>	GDK-G-WCL1-01					
	ORIGINAL ID ----->	GDKGWCL101					
	LAB SAMPLE ID --->	7681-01					
	ID FROM REPORT -->	GDKGWCL101					
	SAMPLE DATE ----->	05/16/97					
	DATE EXTRACTED -->	05/19/97					
	DATE ANALYZED --->	06/12/97					
	MATRIX ---------->	Water					
	UNITS ----------->	UG/L					
CAS #	Parameter	7669	VAL				
930-55-2	N-Nitrosopyrrolidine	40.	U				
98-86-2	Acetophenone	10.	U				
59-89-2	N-Nitrosomorpholine	10.	U				
95-53-4	o-Toluidine	10.	U				
100-75-4	N-Nitrosopiperidine	20.	U				
126-68-1	O,O,O-Triethylphosphorothioate	10.	U				
122-09-8	a,a-Dimethylphenethylamine	40.	U				
87-65-0	2,6-Dichlorophenol	10.	U				
1888-71-7	Hexachloropropene	10.	U				
106-50-3	p-Phenylenediamine	100.	U				
924-16-3	N-Nitroso-di-n-butylamine	10.	U				
94-59-7	Safrole	10.	U				
95-94-3	1,2,4,5-Tetrachlorobenzene	10.	U				
120-58-1	Isosafrole	10.	U				
130-15-4	1,4-Naphthoquinone	10.	UJ				
99-65-0	1,3-Dinitrobenzene	20.	U				
608-93-5	Pentachlorobenzene	10.	U				
134-32-7	1-Naphthylamine	10.	UJ				
91-59-8	2-Naphthylamine	10.	UJ				
58-90-2	2,3,4,6-Tetrachlorophenol	10.	U				
99-55-8	5-Nitro-o-toluidine	10.	U				
122-39-4	Diphenylamine	10.	U				
465-73-6	Isodrin	10.	U				
99-35-4	1,3,5-Trinitrobenzene	10.	U				
62-44-2	Phenacetin	20.	UJ				
297-97-2	Thionazin	20.	UJ				
92-67-1	4-Aminobiphenyl	20.	U				
82-68-8	Pentachloronitrobenzene	20.	U				
23950-58-5	Pronamide	10.	U				
88-85-7	Dinoseb	20.	U				
56-57-5	4-Nitroquinoline 1-oxide	40.	UR				
91-80-5	Methapyrilene	100.	U				
140-57-8	Aramite	20.	U				
60-11-7	p-(Dimethylamino)azobenzene	10.	U				
119-93-7	3,3-Dimethylbenzidine	20.	U				
52-85-7	Famphur	10.	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

X9 SVOA

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	06/12/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
53-96-3	Acetamidofluorene	20.	U
57-97-6	7,12-Dimethylbenz(a)anthracene	10.	U
56-49-5	3-Methyl cholanthrene	10.	U
70-30-4	Hexachlorophene	100.	UR
143-50-0	Kepone	200.	UJ
86-74-8	Carbazole	10.	U
510-15-6	Chlorobenzilate	10.	U
60-51-5	Dimethoate	10.	UJ
56-38-2	Parathion	10.	UJ
298-00-0	Methyl parathion	10.	UJ
298-02-2	Phorate	10.	UJ
298-04-4	Disulfoton	10.	U
3689-24-5	Sulfotep	10.	UJ
2303-16-4	Diallate	10.	U
65-85-0	Benzoic acid	50.	U
103-33-3	Azobenzene	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

ANIDE

SAMPLE ID ------>	GDK-G-WCL1-01	GDK-G-WCL1-02	GDK-G-WCL1-03	GDK-G-WCL1-04		
ORIGINAL ID ----->	GDKGWCL101	GDKGWCL102	GDKGWCL103	GDKGWCL104		
LAB SAMPLE ID --->	7681-01	7942-07	32259.01	33177.01		
ID FROM REPORT -->	GDKGWCL101	GDKGWCL102	GDKGWCL103	GDKGWCL104		
SAMPLE DATE ----->	05/16/97	07/18/97	12/17/97	03/16/98		
DATE EXTRACTED -->	05/23/97	08/11/97	12/22/97	03/19/98		
DATE ANALYZED --->	05/27/97	08/11/97	12/31/97	03/20/98		
MATRIX ---------->	Water	Water	Water	Water		
UNITS ---------->	UG/L	UG/L	UG/L	UG/L		

CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL		
57-12-5	Cyanide (CN)	2.	U	10.	U	2.	U	2.	UJ		

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

RB

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/20/97
DATE ANALYZED --->	05/23/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
94-75-7	2,4-D	1.6	U
93-76-5	2,4,5-T	0.49	U
93-72-1	2,4,5-TP (Silvex)	0.31	U
88-85-7	Dinoseb	0.62	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

EXACHROME

SAMPLE ID ------>	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE ANALYZED --->	05/17/97
MATRIX ---------->	Water
UNITS ---------->	UG/L

CAS #	Parameter	7669	VAL
8540-29-9	Chromium (Hexavalent)	0.02	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

I-SVOA									
	SAMPLE ID ------->	GDK-G-WCL1-03		GDK-G-WCL1-04					
	ORIGINAL ID ----->	GDKGWCL103		GDKGWCL104					
	LAB SAMPLE ID --->	32259.01		33177.01					
	ID FROM REPORT -->	GDKGWCL103		GDKGWCL104					
	SAMPLE DATE ----->	12/17/97		03/16/98					
	DATE EXTRACTED -->	12/19/97		03/18/98					
	DATE ANALYZED --->	12/24/97		03/27/98					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	32259	VAL	33177	VAL				
108-95-2	Phenol	10.	U	10.	U				
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U				
95-57-8	2-Chlorophenol	10.	U	10.	U				
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U				
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U				
100-51-6	Benzyl alcohol	10.	U	10.	U				
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U				
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U				
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U				
106-44-5	4-Methylphenol (p-Cresol)	10.	U	10.	U				
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U				
67-72-1	Hexachloroethane	10.	U	10.	U				
98-95-3	Nitrobenzene	10.	U	10.	U				
78-59-1	Isophorone	10.	U	10.	U				
88-75-5	2-Nitrophenol	10.	U	10.	U				
105-67-9	2,4-Dimethylphenol	10.	U	10.	U				
65-85-0	Benzoic acid	50.	U	50.	U				
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U				
120-83-2	2,4-Dichlorophenol	10.	U	10.	U				
120-82-1	1,2,4-Trichlorobenzene	10.	U	10.	U				
91-20-3	Naphthalene	10.	U	10.	U				
106-47-8	4-Chloroaniline	10.	U	10.	U				
87-68-3	Hexachlorobutadiene	10.	U	10.	U				
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U				
91-57-6	2-Methylnaphthalene	10.	U	10.	U				
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U				
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U				
95-95-4	2,4,5-Trichlorophenol	50.	U	50.	U				
91-58-7	2-Chloronaphthalene	10.	U	10.	U				
88-74-4	2-Nitroaniline	50.	U	50.	U				
131-11-3	Dimethyl phthalate	10.	U	10.	U				
208-96-8	Acenaphthylene	10.	U	10.	U				
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U				
99-09-2	3-Nitroaniline	50.	U	50.	U				
83-32-9	Acenaphthene	10.	U	10.	U				
51-28-5	2,4-Dinitrophenol	50.	U	50.	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

W-SVOA									
	SAMPLE ID ------->	GDK-G-WCL1-03		GDK-G-WCL1-04					
	ORIGINAL ID ----->	GDKGWCL103		GDKGWCL104					
	LAB SAMPLE ID --->	32259.01		33177.01					
	ID FROM REPORT -->	GDKGWCL103		GDKGWCL104					
	SAMPLE DATE ----->	12/17/97		03/16/98					
	DATE EXTRACTED -->	12/19/97		03/18/98					
	DATE ANALYZED --->	12/24/97		03/27/98					
	MATRIX ---------->	Water		Water					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	32259	VAL	33177	VAL				
100-02-7	4-Nitrophenol	50.	U	50.	U				
132-64-9	Dibenzofuran	10.	U	10.	U				
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U				
84-66-2	Diethylphthalate	10.	U	10.	U				
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U				
86-73-7	Fluorene	10.	U	10.	U				
100-01-6	4-Nitroaniline	50.	U	50.	U				
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	50.	U				
86-30-6	N-Nitrosodiphenylamine	10.	U	10.	U				
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U				
118-74-1	Hexachlorobenzene	10.	U	10.	U				
87-86-5	Pentachlorophenol	50.	U	50.	U				
85-01-8	Phenanthrene	10.	U	10.	U				
120-12-7	Anthracene	10.	U	10.	U				
84-74-2	Di-n-butylphthalate	10.	U	10.	U				
206-44-0	Fluoranthene	10.	U	10.	U				
129-00-0	Pyrene	10.	U	10.	U				
85-68-7	Butylbenzylphthalate	10.	U	10.	U				
91-94-1	3,3'-Dichlorobenzidine	20.	U	20.	U				
56-55-3	Benzo(a)anthracene	10.	U	10.	U				
218-01-9	Chrysene	10.	U	10.	U				
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	36.	U	10.	U				
117-84-0	Di-n-octyl phthalate	10.	U	10.	U				
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U				
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U				
50-32-8	Benzo(a)pyrene	10.	U	10.	U				
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U				
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U				
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U				

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

I-VOA

SAMPLE ID ------->	GDK-G-WCL1-02
ORIGINAL ID ----->	GDKGWCL102
LAB SAMPLE ID --->	7942-07
ID FROM REPORT -->	GDKGWCL102
SAMPLE DATE ----->	07/18/97
DATE ANALYZED --->	07/21/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7942	VAL
74-87-3	Chloromethane	5.	U
75-01-4	Vinyl chloride	5.	U
74-83-9	Bromomethane	5.	U
75-00-3	Chloroethane	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-09-2	Methylene chloride	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-59-2	cis-1,2-Dichloroethene	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U
67-66-3	Chloroform	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
110-75-8	2-Chloroethyl vinyl ether	5.	U
78-93-3	2-Butanone (MEK)	10.	U
56-23-5	Carbon tetrachloride	5.	U
108-05-4	Vinyl acetate	10.	U
107-06-2	1,2-Dichloroethane	5.	U
71-43-2	Benzene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
75-27-4	Bromodichloromethane	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U
108-88-3	Toluene	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
108-90-7	Chlorobenzene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (Total)	5.	U
540-59-0	1,2-Dichloroethene (total)	NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

W846-DIOX													
	SAMPLE ID ------>	GDK-G-WCL1-01		GDK-G-WCL1-02		GDK-G-WCL1-03		GDK-G-WCL1-04		GDK-G-WCL1-F5		GDK-G-WCL1-U5	
	ORIGINAL ID ----->	GDKGWCL101		GDKGWCL102		GDKGWCL103		GDKGWCL104		GDKGWCL1F5		GDKGWCL1U5	
	LAB SAMPLE ID --->	29401.01		30186.07		32259.01		33177.01		37084.09		37084.08	
	ID FROM REPORT -->	GDKGWCL101		GDKGWCL102		GDKGWCL103		GDKGWCL104		GDKGWCL1F5		GDKGWCL1U5	
	SAMPLE DATE ----->	05/16/97		07/17/97		12/17/97		03/16/98		01/13/99		01/13/99	
	DATE EXTRACTED -->	05/19/97		07/25/97		12/19/97		03/18/98		01/14/99		01/14/99	
	DATE ANALYZED --->	05/27/97		08/05/97		01/02/98		03/30/98		01/25/99		01/25/99	
	MATRIX ---------->	Water		Water		Water		Water		Water		Water	
	UNITS ---------->	PG/L		PG/L		PG/L		PG/L		PG/L		PG/L	
CAS #	Parameter	29387	VAL	30186	VAL	32259	VAL	33177	VAL	37084	VAL	37084	VAL
1746-01-6	2378-TCDD	1.87	U	1.25	U	10.2	U	3.67	U	3.989	U	7.423	U
40321-76-4	12378-PeCDD	3.74	U	0.911	U	12.8	U	6.79	U	5.33	U	6.469	U
39227-28-6	123478-HxCDD	3.04	U	0.954	U	10.9	U	5.12	U	7.434	U	6.51	U
57653-85-7	123678-HxCDD	2.31	U	0.725	U	8.28	U	3.84	U	4.152	U	3.636	U
19408-74-3	123789-HxCDD	2.48	U	0.779	U	8.9	U	4.03	U	4.932	U	4.318	U
35822-46-9	1234678-HpCDD	2.52	U	3.74		17.5	U	3.13	U	3.662	U	3.889	U
3268-87-9	OCDD	8.86	EMPC	21.8		113.	EMPC	13.4	U	3.939	U	3.945	U
51207-31-9	2378-TCDF	2.16	U	1.3	U	9.18	U	4.49	U	3.391	U	5.938	UJ
57117-41-6	12378-PeCDF	2.26	U	0.825	U	7.26	U	5.37	U	4.231	U	5.31	UJ
57117-31-4	23478-PeCDF	2.16	U	0.791	U	6.96	U	5.19	U	4.419	U	5.546	UJ
70648-26-9	123478-HxCDF	1.24	U	0.978	U	7.01	U	2.79	U	1.995	U	4.341	U
57117-44-9	123678-HxCDF	1.07	U	0.843	U	6.04	U	2.41	U	1.329	U	2.893	U
72918-21-9	123789-HxCDF	1.34	U	1.05	U	7.56	U	3.18	U	2.17	U	4.721	U
60851-34-5	234678-HxCDF	1.24	U	0.971	U	6.95	U	3.06	U	1.947	U	4.238	U
67562-39-4	1234678-HpCDF	1.88	U	1.41	EMPC	6.91	U	1.71	U	1.577	U	2.841	U
55673-89-7	1234789-HpCDF	2.15	U	0.648	U	7.91	U	2.01	U	2.106	U	3.793	U
39001-02-0	OCDF	2.33	U	3.05		25.5	U	3.	U	4.192	U	2.41	U
41903-57-5	Total Tetra-Dioxins	1.87	U	1.25	U	10.2	U	3.67	U	3.989	U	7.423	U
36088-22-9	Total Penta-Dioxins	3.74	U	0.911	U	12.8	U	6.79	U	5.33	U	6.469	U
34465-46-8	Total Hexa-Dioxins	2.31	U	0.725	U	8.28	U	3.84	U	4.152	U	3.636	U
37871-00-4	Total Hepta-Dioxins	2.52	U	6.77		17.5	U	3.13	U	3.662	U	3.889	U
55722-27-5	Total Tetra-Furans	2.16	U	1.3	U	9.18	U	4.49	U	3.391	U	5.938	U
30602-15-4	Total Penta-Furans	2.16	U	0.791	U	9.96	U	5.19	U	4.419	U	5.546	U
55684-94-1	Total Hexa-Furans	1.07	U	0.843	U	6.04	U	2.41	U	1.329	U	2.893	U
38998-75-3	Total Hepta-Furans	1.88	U	0.566	U	6.91	U	1.71	U	1.577	U	2.841	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

846-META											
	SAMPLE ID ------>	GDK-G-WCL1-01		GDK-G-WCL1-02		GDK-G-WCL1-03		GDK-G-WCL1-04			
	ORIGINAL ID ----->	GDKGWCL101		GDKGWCL102		GDKGWCL103		GDKGWCL104			
	LAB SAMPLE ID --->	7681-01		7942-07		32259.01		33177.01			
	ID FROM REPORT -->	GDKGWCL101		GDKGWCL102		GDKGWCL103		GDKGWCL104			
	SAMPLE DATE ----->	05/16/97		07/18/97		12/17/97		03/16/98			
	DATE EXTRACTED -->	05/23/97		08/11/97		12/27/97		03/26/98			
	DATE ANALYZED --->	05/27/97		08/11/97		12/31/97		04/01/98			
	MATRIX ---------->	Water		Water		Water		Water			
	UNITS ----------->	UG/L		UG/L		UG/L		UG/L			
CAS #	Parameter	7669	VAL	7942	VAL	32259	VAL	33177	VAL		
7429-90-5	Aluminum (Al)	17.8	U	23.1	U	74.1	U	9.5	UJ		
7440-36-0	Antimony (Sb)	2.2	U	2.	U	1.7	U	2.2	U		
7440-38-2	Arsenic (As)	9.4	J	5.8	J	6.8	J	8.1	J		
7440-39-3	Barium (Ba)	61.9	J	54.7	J	46.1	J	29.1	J		
7440-41-7	Beryllium (Be)	0.11	U	0.56	U	0.2	U	0.2	U		
7440-43-9	Cadmium (Cd)	0.29	U	0.36	J	0.3	U	0.3	U		
7440-70-2	Calcium (Ca)	485000.	J	455000.		420000.	J	332000.			
7440-47-3	Chromium (Cr)	0.89	UJ	0.67	UJ	4.2	U	1.	U		
7440-48-4	Cobalt (Co)	0.89	UJ	0.67	UJ	0.8	U	0.8	U		
7440-50-8	Copper (Cu)	1.1	UJ	1.	U	5.9	J	4.6	J		
7439-89-6	Iron (Fe)	6250.	J	4710.		2580.	J	4800.			
7439-92-1	Lead (Pb)	1.3	U	1.7	U	0.9	UJ	0.9	U		
7439-95-4	Magnesium (Mg)	327000.		305000.		265000.	J	163000.			
7439-96-5	Manganese (Mn)	976.	J	820.		311.	J	322.			
7439-97-6	Mercury (Hg)	0.08	U	0.2	U	0.1	U	0.1	UJ		
7440-02-0	Nickel (Ni)	0.89	UJ	0.67	UJ	3.5	J	2.8	U		
7440-09-7	Potassium (K)	95300.		99900.		74400.	J	55800.	J		
7782-49-2	Selenium (Se)	3.	U	3.4	U	3.4	U	3.4	U		
7440-22-4	Silver (Ag)	3.2	U	0.89	UJ	1.	U	1.	U		
7440-23-5	Sodium (Na)	2300000.		2390000.		1910000.	J	1100000.			
7440-28-0	Thallium (Tl)	52.2	U	3.9	U	5.	U	5.	U		
7440-62-2	Vanadium (V)	5.9	J	5.	J	4.	J	3.3	J		
7440-66-6	Zinc (Zn)	23.	U	25.5	U	5.8	U	8.2	U		
7440-31-5	Tin (Sn)	39.8	J	30.8	U	14.	U	14.	U		

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

8846-OP P

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/21/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
298-04-4	Disulfoton	1.	UJ
298-00-0	Methyl parathion	1.	UJ
298-02-2	Phorate	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

8846-PEST

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/22/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.1	U
72-55-9	4,4'-DDE	0.1	U
72-20-8	Endrin	0.1	U
33213-65-9	Endosulfan II	0.1	U
72-54-8	4,4'-DDD	0.1	U
1031-07-8	Endosulfan sulfate	0.1	U
50-29-3	4,4'-DDT	0.1	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.1	U
7421-93-4	Endrin aldehyde	0.1	U
5103-71-9	alpha-Chlordane	0.05	U
5103-74-2	gamma-Chlordane	0.05	U
8001-35-2	Toxaphene	5.	U
12674-11-2	Aroclor-1016	1.	U
11104-28-2	Aroclor-1221	2.	U
11141-16-5	Aroclor-1232	1.	U
53469-21-9	Aroclor-1242	1.	U
12672-29-6	Aroclor-1248	1.	U
11097-69-1	Aroclor-1254	1.	U
11096-82-5	Aroclor-1260	1.	U
57-74-9	Chlordane	1.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

8846-SVOA

SAMPLE ID ------->	GDK-G-WCL1-02
ORIGINAL ID ----->	GDKGWCL102
LAB SAMPLE ID --->	7942-07
ID FROM REPORT -->	GDKGWCL102
SAMPLE DATE ----->	07/18/97
DATE EXTRACTED -->	07/21/97
DATE ANALYZED --->	08/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7942	VAL
110-86-1	Pyridine	10.	U
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
100-51-6	Benzyl alcohol	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol (p-Cresol)	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	25.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	25.	U
131-11-3	Dimethyl phthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	25.	U
83-32-9	Acenaphthene	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

8270-SVOA

SAMPLE ID ------->	GDK-G-WCL1-02
ORIGINAL ID ----->	GDKGWCL102
LAB SAMPLE ID --->	7942-07
ID FROM REPORT -->	GDKGWCL102
SAMPLE DATE ----->	07/18/97
DATE EXTRACTED -->	07/21/97
DATE ANALYZED --->	08/19/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7942	VAL
51-28-5	2,4-Dinitrophenol	25.	U
100-02-7	4-Nitrophenol	25.	UJ
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenylphenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	25.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	25.	U
86-30-6	N-Nitrosodiphenylamine	10.	U
103-33-3	Azobenzene	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	25.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
86-74-8	Carbazole	10.	U
84-74-2	Di-n-butylphthalate	10.	UJ
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	10.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	NR	
117-84-0	Di-n-octyl phthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U
62-53-3	Aniline	10.	UJ
62-75-9	N-Nitrosodimethylamine	10.	U
108-39-4	3-Methylphenol (m-Cresol)	NR	
122-39-4	Diphenylamine	NR	

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

846-VOA	SAMPLE ID ------->	GDK-G-WCL1-03		GDK-G-WCL1-04	
	ORIGINAL ID ----->	GDKGWCL103		GDKGWCL104	
	LAB SAMPLE ID --->	32259.01		33177.01	
	ID FROM REPORT -->	GDKGWCL103		GDKGWCL104	
	SAMPLE DATE ----->	12/17/97		03/16/98	
	DATE ANALYZED --->	12/22/97		03/25/98	
	MATRIX ---------->	Water		Water	
	UNITS ---------->	UG/L		UG/L	
CAS #	Parameter	32259	VAL	33177	VAL
74-87-3	Chloromethane	5.	U	5.	UJ
74-83-9	Bromomethane	5.	UJ	5.	UJ
75-01-4	Vinyl chloride	5.	U	5.	U
75-00-3	Chloroethane	5.	UJ	5.	UJ
75-09-2	Methylene chloride	5.	U	5.	U
67-64-1	Acetone	5.	UJ	5.	UR
75-15-0	Carbon disulfide	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U
78-93-3	2-Butanone (MEK)	5.	UJ	5.	UJ
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U
75-27-4	Bromodichloromethane	5.	U	5.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	UJ
79-00-5	1,1,2-Trichloroethane	5.	U	5.	UJ
71-43-2	Benzene	5.	U	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	UJ
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.	UJ	5.	U
591-78-6	2-Hexanone	5.	UJ	5.	UJ
127-18-4	Tetrachloroethene	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U
1330-20-7	Xylene (Total)	5.	UJ	5.	U
108-05-4	Vinyl acetate	5.	UJ	5.	UJ
110-75-8	2-Chloroethyl vinyl ether	5.	U	5.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

B46METAL

	SAMPLE ID ------>	GDK-G-WCL1-F5		GDK-G-WCL1-U5							
	ORIGINAL ID ----->	GDKGWCL1F5		GDKGWCL1U5							
	LAB SAMPLE ID --->	37084.09		37084.08							
	ID FROM REPORT -->	GDKGWCL1F5		GDKGWCL1U5							
	SAMPLE DATE ----->	01/13/99		01/13/99							
	DATE EXTRACTED -->	01/20/99		01/20/99							
	DATE ANALYZED --->	01/20/99		01/20/99							
	MATRIX ---------->	Water		Water							
	UNITS ----------->	UG/L		UG/L							
CAS #	Parameter	37084	VAL	37084	VAL						
7439-97-6	Mercury (Hg)	0.1	U	0.1	U						
7440-36-0	Antimony (Sb)	2.7	U	2.7	U						
7440-38-2	Arsenic (As)	4.6	J	5.7	J						
7440-41-7	Beryllium (Be)	0.2	J	0.19	J						
7440-47-3	Chromium (Cr)	0.7	U	2.2	J						
7439-92-1	Lead (Pb)	1.5	U	1.5	U						
7440-28-0	Thallium (Tl)	3.1	U	3.1	U						

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

PH-DIESEL

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE EXTRACTED -->	05/19/97
DATE ANALYZED --->	05/15/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
68334-30-5	Diesel	500.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

PH-GRO

SAMPLE ID ------->	GDK-G-WCL1-01
ORIGINAL ID ----->	GDKGWCL101
LAB SAMPLE ID --->	7681-01
ID FROM REPORT -->	GDKGWCL101
SAMPLE DATE ----->	05/16/97
DATE ANALYZED --->	05/20/97
MATRIX ---------->	Water
UNITS ----------->	UG/L

CAS #	Parameter	7669	VAL
86290-81-5	Gasoline	50.	U

*** Validation Complete ***

CHARLESTON - ZONE K GROUNDWATER
CHARLESTON ZONE K
GDK GROUNDWATER SAMPLES

S							
	SAMPLE ID ------->	GDK-G-WCL1-05					
	ORIGINAL ID ----->	GDKGWCL105					
	LAB SAMPLE ID --->	37084.07					
	ID FROM REPORT -->	GDKGWCL105					
	SAMPLE DATE ----->	01/13/99					
	DATE ANALYZED --->	01/25/99					
	MATRIX ---------->	Water					
	UNITS ----------->	MG/L					
CAS #	Parameter	37084 VAL					
9900-03-7	Total Suspended Solids (TSS)	11.					

*** Validation Complete ***

Analytical Reports for Soil

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

APX9 SVOA													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/16/97		01/16/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/31/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
108-95-2	Phenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
111-44-4	bis(2-Chloroethyl)ether	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
95-57-8	2-Chlorophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
541-73-1	1,3-Dichlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
106-46-7	1,4-Dichlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
100-51-6	Benzyl alcohol	480.	U	480.	U	460.	U	490.	UJ	450.	U	420.	U
95-50-1	1,2-Dichlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
95-48-7	2-Methylphenol (o-Cresol)	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
106-44-5	4-Methylphenol (p-Cresol)	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
621-64-7	N-Nitroso-di-n-propylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
67-72-1	Hexachloroethane	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
98-95-3	Nitrobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
78-59-1	Isophorone	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
88-75-5	2-Nitrophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
105-67-9	2,4-Dimethylphenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
111-91-1	bis(2-Chloroethoxy)methane	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
120-83-2	2,4-Dichlorophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
120-82-1	1,2,4-Trichlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
91-20-3	Naphthalene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
106-47-8	4-Chloroaniline	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
87-68-3	Hexachlorobutadiene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
59-50-7	4-Chloro-3-methylphenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
91-57-6	2-Methylnaphthalene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
77-47-4	Hexachlorocyclopentadiene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
88-06-2	2,4,6-Trichlorophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
91-58-7	2-Chloronaphthalene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
88-74-4	2-Nitroaniline	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
131-11-3	Dimethyl phthalate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
208-96-8	Acenaphthylene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
606-20-2	2,6-Dinitrotoluene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
99-09-2	3-Nitroaniline	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
83-32-9	Acenaphthene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
51-28-5	2,4-Dinitrophenol	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
100-02-7	4-Nitrophenol	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

PX9 SVOA													
	SAMPLE ID ------->	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/16/97		01/16/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/31/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
132-64-9	Dibenzofuran	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
121-14-2	2,4-Dinitrotoluene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
84-66-2	Diethylphthalate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
7005-72-3	4-Chlorophenylphenylether	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
86-73-7	Fluorene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
100-01-6	4-Nitroaniline	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
86-30-6	N-Nitrosodiphenylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
101-55-3	4-Bromophenyl-phenylether	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
118-74-1	Hexachlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
87-86-5	Pentachlorophenol	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
85-01-8	Phenanthrene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
120-12-7	Anthracene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
84-74-2	Di-n-butylphthalate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
206-44-0	Fluoranthene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
129-00-0	Pyrene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
85-68-7	Butylbenzylphthalate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
91-94-1	3,3'-Dichlorobenzidine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
56-55-3	Benzo(a)anthracene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
218-01-9	Chrysene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
117-84-0	Di-n-octyl phthalate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
205-99-2	Benzo(b)fluoranthene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
207-08-9	Benzo(k)fluoranthene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
50-32-8	Benzo(a)pyrene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
193-39-5	Indeno(1,2,3-cd)pyrene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
53-70-3	Dibenz(a,h)anthracene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
191-24-2	Benzo(g,h,i)perylene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
110-86-1	Pyridine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
62-75-9	N-Nitrosodimethylamine	480.	U	480.	U	460.	U	490.	UJ	450.	U	420.	U
109-06-8	2-Picoline	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
0595-95-6	N-Nitrosomethylethylamine	1200.	U	1200.	U	1100.	U	1200.	U	1100.	U	1000.	U
66-27-3	Methyl methanesulfonate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
55-18-5	N-Nitrosodiethylamine	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
62-50-0	Ethyl methanesulfonate	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
62-53-3	Aniline	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

7X9 SVOA													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/16/97		01/16/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/31/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
930-55-2	N-Nitrosopyrrolidine	1900.	U	1900.	U	1800.	U	1900.	U	1800.	U	1700.	U
98-86-2	Acetophenone	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
59-89-2	N-Nitrosomorpholine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
95-53-4	o-Toluidine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
100-75-4	N-Nitrosopiperidine	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
126-68-1	O,O,O-Triethylphosphorothioate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
122-09-8	a,a-Dimethylphenethylamine	1900.	U	1900.	U	1800.	U	1900.	U	1800.	U	1700.	U
87-65-0	2,6-Dichlorophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
1888-71-7	Hexachloropropene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
106-50-3	p-Phenylenediamine	4800.	U	4800.	U	4600.	U	4900.	U	4500.	U	4200.	U
924-16-3	N-Nitroso-di-n-butylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
94-59-7	Safrole	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
120-58-1	Isosafrole	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
130-15-4	1,4-Naphthoquinone	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
99-65-0	1,3-Dinitrobenzene	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
608-93-5	Pentachlorobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
134-32-7	1-Naphthylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
91-59-8	2-Naphthylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
58-90-2	2,3,4,6-Tetrachlorophenol	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
99-55-8	5-Nitro-o-toluidine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
122-39-4	Diphenylamine	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
465-73-6	Isodrin	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
99-35-4	1,3,5-Trinitrobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
62-44-2	Phenacetin	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
297-97-2	Thionazin	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
92-67-1	4-Aminobiphenyl	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
82-68-8	Pentachloronitrobenzene	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
3950-58-5	Pronamide	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
88-85-7	Dinoseb	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
56-57-5	4-Nitroquinoline 1-oxide	1900.	U	1900.	U	1800.	U	1900.	U	1800.	U	1700.	U
91-80-5	Methapyrilene	4800.	U	4800.	UJ	4600.	U	4900.	UJ	4500.	U	4200.	U
140-57-8	Aramite	960.	UR	960.	UR	910.	UR	990.	UR	910.	UR	850.	UR
60-11-7	p-(Dimethylamino)azobenzene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
119-93-7	3,3-Dimethylbenzidine	480.	U	480.	U	460.	U	490.	UJ	450.	U	420.	U
52-85-7	Famphur	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

7X9 SVOA													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/16/97		01/16/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/31/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
53-96-3	Acetamidofluorene	960.	U	960.	U	910.	U	990.	U	910.	U	850.	U
57-97-6	7,12-Dimethylbenz(a)anthracene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
56-49-5	3-Methyl cholanthrene	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
70-30-4	Hexachlorophene	4800.	U	4800.	U	4600.	U	4900.	UR	4500.	U	4200.	U
143-50-0	Kepone	9600.	U	9600.	U	9100.	U	9900.	U	9100.	U	8500.	U
86-74-8	Carbazole	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
510-15-6	Chlorobenzilate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
60-51-5	Dimethoate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
56-38-2	Parathion	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
298-00-0	Methyl parathion	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
298-02-2	Phorate	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
298-04-4	Disulfoton	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
3689-24-5	Sulfotep	480.	U	480.	U	460.	U	490.	U	450.	U	420.	U
2303-16-4	Diallate	480.	UJ	480.	UJ	460.	UJ	490.	UJ	450.	UJ	420.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

X9 VOA						
SAMPLE ID ------>	693-S-B001-01	693-C-B001-01	693-S-B001-02	693-S-B002-01	693-S-B003-01	693-S-B004-01
ORIGINAL ID ----->	693SB00101	693CB00101	693SB00102	693SB0020	693SB00301	693SB00401
LAB SAMPLE ID --->	7074-02	7074-03	7074-04	7060-01	7060-02	7074-01
ID FROM REPORT -->	693SB00101	693CB00101	693SB00102	693SB00201	693SB00301	693SB00401
SAMPLE DATE ----->	01/15/97	01/15/97	01/15/97	01/14/97	01/14/97	01/15/97
DATE ANALYZED --->	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
74-87-3	Chloromethane	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
74-83-9	Bromomethane	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
75-01-4	Vinyl chloride	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-00-3	Chloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-09-2	Methylene chloride	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
67-64-1	Acetone	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
75-15-0	Carbon disulfide	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-35-4	1,1-Dichloroethene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-34-3	1,1-Dichloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
156-60-5	trans-1,2-Dichloroethene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
67-66-3	Chloroform	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
107-06-2	1,2-Dichloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
78-93-3	2-Butanone (MEK)	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
71-55-6	1,1,1-Trichloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
56-23-5	Carbon tetrachloride	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
108-05-4	Vinyl acetate	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
78-87-5	1,2-Dichloropropane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
0061-01-5	cis-1,3-Dichloropropene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
79-01-6	Trichloroethene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
124-48-1	Dibromochloromethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
79-00-5	1,1,2-Trichloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
80-62-6	Methyl methacrylate	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
71-43-2	Benzene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
0061-02-6	trans-1,3-Dichloropropene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-25-2	Bromoform	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
591-78-6	2-Hexanone	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
127-18-4	Tetrachloroethene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
108-88-3	Toluene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
108-90-7	Chlorobenzene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
100-41-4	Ethylbenzene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
100-42-5	Styrene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-71-8	Dichlorodifluoromethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
75-69-4	Trichlorofluoromethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
74-88-4	Methyl iodide	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
107-05-1	3-Chloropropene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

X9 VOA						
SAMPLE ID ------>	693-S-B001-01	693-C-B001-01	693-S-B001-02	693-S-B002-01	693-S-B003-01	693-S-B004-01
ORIGINAL ID ------>	693SB00101	693CB00101	693SB00102	693SB0020	693SB00301	693SB00401
LAB SAMPLE ID --->	7074-02	7074-03	7074-04	7060-01	7060-02	7074-01
ID FROM REPORT -->	693SB00101	693CB00101	693SB00102	693SB00201	693SB00301	693SB00401
SAMPLE DATE ----->	01/15/97	01/15/97	01/15/97	01/14/97	01/14/97	01/15/97
DATE ANALYZED --->	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
107-12-0	Propionitrile	72.	UR	72.	UR	69.	UR	75.	UR	68.	UR	64.	UR
75-05-8	Acetonitrile	72.	UR	72.	UR	69.	UR	75.	UR	68.	UR	64.	UR
107-02-8	Acrolein	72.	UR	72.	UR	69.	UR	75.	UR	68.	UR	64.	UR
126-99-8	Chloroprene	14.	U	14.	U	14.	U	15.	U	14.	U	13.	U
107-13-1	Acrylonitrile	72.	UR	72.	UR	69.	UR	75.	UR	68.	UR	64.	UR
123-91-1	1,4-Dioxane	72.	UR	72.	UR	69.	UR	75.	UR	68.	UR	64.	UR
126-98-7	Methacrylonitrile	72.	U	72.	U	69.	U	75.	U	68.	U	64.	U
74-95-3	Methylene bromide	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
78-83-1	Isobutyl alcohol	720.	UR	720.	UR	690.	UR	750.	UR	680.	UR	640.	UR
106-93-4	1, 2-Dibromoethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
630-20-6	1,1,1,2-Tetrachloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
95-47-6	o-Xylene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
96-18-4	1,2,3-Trichloropropane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
110-57-6	trans-1,4-Dichloro-2-butene	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
96-12-8	1,2-Dibromo-3-Chloropropane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
97-63-2	Ethyl methacrylate	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
76-01-7	Pentachloroethane	7.	U	7.	U	7.	U	7.	U	7.	U	6.	U
9000-76-0	XYLENE (META/PARA)	7.	U	7.	UR	7.	U	7.	U	7.	U	6.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

PLOSIVES

SAMPLE ID ------->	693-S-B001-01	693-C-B001-01	693-S-B001-02	693-S-B002-01	693-S-B003-01	693-S-B004-01
ORIGINAL ID ----->	693SB00101	693CB00101	693SB00102	693SB0020	693SB00301	693SB00401
LAB SAMPLE ID --->	7074-02	7074-03	7074-04	7060-01	7060-02	7074-01
ID FROM REPORT -->	693SB00101	693CB00101	693SB00102	693SB00201	693SB00301	693SB00401
SAMPLE DATE ----->	01/15/97	01/15/97	01/15/97	01/15/97	01/14/97	01/15/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE ANALYZED --->	01/29/97	01/29/97	01/29/97	01/29/97	01/29/97	01/29/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
121-14-2	2,4-Dinitrotoluene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
121-82-4	RDX (Cyclonite)	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
5377-32-6	1,3,5-Trinitrobenzene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
2691-41-0	HMX	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
6572-78-2	2-Am-DNT	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
479-45-8	Tetryl	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
606-20-2	2,6-Dinitrotoluene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
88-72-2	o-Nitrotoluene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
98-95-3	Nitrobenzene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
99-08-1	m-Nitrotoluene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
99-65-0	1,3-Dinitrobenzene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
99-99-0	p-Nitrotoluene	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
9406-51-0	4-AM-DNT	730.	U	729.	U	692.	U	750.	U	689.	U	644.	U
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

RB													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97				01/14/97		01/15/97	
	DATE EXTRACTED -->	01/16/97		01/16/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE ANALYZED --->	01/29/97		01/29/97		01/29/97		01/29/97		01/29/97		01/29/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
94-75-7	2,4-D	102.	UJ	102.	UJ	96.3	UJ	104.	UJ	96.	UJ	89.7	UJ
93-76-5	2,4,5-T	24.7	U	24.6	U	23.4	U	25.3	U	23.3	U	21.8	U
93-72-1	2,4,5-TP (Silvex)	21.6	U	21.6	U	20.5	U	22.2	U	20.4	U	19.	U
88-85-7	Dinoseb	57.2	U	57.1	U	54.2	U	58.7	U	54.	U	50.5	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

XACHROME													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/14/97		01/14/97		01/15/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/23/97		01/23/97		01/23/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
8540-29-9	Chromium (Hexavalent)	0.29	UJ	0.29	UJ	0.28	UJ	0.3	U	0.28	U	0.26	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

8846-DIOX						
SAMPLE ID ------->	693-S-B001-01	693-C-B001-01	693-S-B001-02	693-S-B002-01	693-S-B003-01	693-S-B004-01
ORIGINAL ID ----->	693SB00101	693CB00101	693SB00102	693SB00201	693SB00301	693SB00401
LAB SAMPLE ID --->	28177.02	28178.01	28177.03	28165.01	28165.02	28177.01
ID FROM REPORT -->	693SB00101	693CB00101	693SB00102	693SB00201	693SB00301	693SB00401
SAMPLE DATE ----->	01/15/97	01/15/97	01/15/97	01/14/97	01/14/97	01/15/97
DATE EXTRACTED -->	01/17/97	01/17/97	01/17/97	01/17/97	01/17/97	01/17/97
DATE ANALYZED --->	01/21/97	01/21/97	01/23/97	01/21/97	01/21/97	01/21/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG

CAS #	Parameter	28083	VAL	28083	VAL	28083	VAL	28083	VAL	28083	VAL	28083	VAL
1746-01-6	2378-TCDD	0.48	U	0.487	U	0.374	U	0.322	U	0.54	U	0.432	U
0321-76-4	12378-PeCDD	0.82	U	2.2	U	0.858	U	0.529	U	0.677	U	1.1	U
9227-28-6	123478-HxCDD	0.554	U	0.782	U	1.13	U	0.593	U	0.831	U	0.529	U
7653-85-7	123678-HxCDD	5.21		4.46		0.73	U	1.95		0.693	EMPC	0.989	
9408-74-3	123789-HxCDD	2.56		2.8		0.795	U	1.77		0.583	U	1.23	EMPC
5822-46-9	1234678-HpCDD	61.4		50.2		1.48	U	31.8		11.8		30.1	
3268-87-9	OCDD	425.		293.		3.04	EMPC	239.		118.		234.	
1207-31-9	2378-TCDF	0.685	U	0.668	U	0.374	U	0.373	U	0.611	U	0.313	U
7117-41-6	12378-PeCDF	0.365	U	0.347	U	0.64	U	0.213	U	0.334	U	0.246	U
7117-31-4	23478-PeCDF	0.366	U	0.348	U	0.641	U	0.213	U	0.335	U	0.247	U
0648-26-9	123478-HxCDF	3.03	EMPC	3.71	EMPC	0.668	U	1.93	EMPC	0.446	EMPC	1.2	EMPC
7117-44-9	123678-HxCDF	0.354	U	0.52	U	0.524	U	0.284	U	0.274	U	0.39	U
2918-21-9	123789-HxCDF	0.511	U	0.752	U	0.757	U	0.41	U	0.396	U	0.563	U
0851-34-5	234678-HxCDF	0.462	U	0.68	U	0.685	U	0.371	U	0.385	U	0.51	U
7562-39-4	1234678-HpCDF	6.6		5.89		0.839	U	3.98		1.74		3.14	
5673-89-7	1234789-HpCDF	1.05	U	0.667	U	1.	U	0.477	U	0.311	U	0.38	U
9001-02-0	OCDF	15.8		10.3		1.49	U	10.5		4.26		6.99	
1903-57-5	Total Tetra-Dioxins	2.15		1.95		0.374	U	2.11		0.54	U	1.38	
6088-22-9	Total Penta-Dioxins	0.82	U	2.2	U	0.858	U	1.13		0.677	U	1.1	U
4465-46-8	Total Hexa-Dioxins	8.67		8.23		0.73	U	22.2		11.3		9.33	
7871-00-4	Total Hepta-Dioxins	149.		124.		1.48	U	88.5		34.7		89.	
5722-27-5	Total Tetra-Furans	0.685	U	0.668	U	0.374	U	0.373	U	0.611	U	0.313	U
0602-15-4	Total Penta-Furans	5.21		4.58		0.641	U	2.83		0.335	U	1.57	
5684-94-1	Total Hexa-Furans	12.2		10.7		0.524	U	3.87		2.		4.56	
8998-75-3	Total Hepta-Furans	6.6		5.89		0.839	U	3.98		1.74		3.14	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

4846-META	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/24/97		01/24/97		01/24/97		01/24/97		01/24/97		01/24/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/23/97		01/23/97		01/23/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
7429-90-5	Aluminum (Al)	24800.		20700.		4460.		39000.		39100.		11700.	
7440-36-0	Antimony (Sb)	0.58	J	0.4	UJ	0.38	UJ	0.74	J	0.37	UJ	0.35	UJ
7440-38-2	Arsenic (As)	18.1		16.9		8.1		21.9		17.9		11.2	
7440-39-3	Barium (Ba)	42.9	J	40.7	J	8.7	J	48.6	J	44.5	J	27.4	J
7440-41-7	Beryllium (Be)	1.3	J	1.2	J	0.36	J	1.6		1.6		0.74	J
7440-43-9	Cadmium (Cd)	0.34	J	0.42	J	0.36	J	0.26	U	0.32	J	0.23	J
7440-70-2	Calcium (Ca)	23700.		29800.		230000.		7840.		7470.		10700.	
7440-47-3	Chromium (Cr)	59.6		54.6		40.		67.2		75.		29.4	
7440-48-4	Cobalt (Co)	6.	J	5.4	J	1.2	J	7.6	J	7.7	J	3.4	J
7440-50-8	Copper (Cu)	40.8		36.		11.4		34.4		36.1		21.5	
7439-89-6	Iron (Fe)	31400.		28900.		4770.		43200.		37200.		17900.	
7439-92-1	Lead (Pb)	48.4		46.4		3.2		36.3		39.3		33.	
7439-95-4	Magnesium (Mg)	5010.		4900.		5700.		5290.		5560.		2480.	
7439-96-5	Manganese (Mn)	539.		534.		283.		536.		415.		315.	
7439-97-6	Mercury (Hg)	0.18		0.21		0.06	U	0.21		0.24		0.25	
7440-02-0	Nickel (Ni)	17.9		16.8		11.7		19.3		22.		8.5	J
7440-09-7	Potassium (K)	2670.		2440.		1370.		2990.		3080.		1100.	J
7782-49-2	Selenium (Se)	1.2	U	0.72	U	1.3	U	1.5	U	1.5	U	0.48	U
7440-22-4	Silver (Ag)	0.71	J	0.73	J	0.33	U	0.66	J	0.73	J	0.5	J
7440-23-5	Sodium (Na)	342.	J	303.	J	2210.	J	1350.	J	1290.	J	167.	J
7440-28-0	Thallium (Tl)	1.6	U	1.6	U	1.5	U	1.6	U	1.4	U	1.4	U
7440-62-2	Vanadium (V)	71.2		65.8		23.4		87.8		86.3		39.3	
7440-66-6	Zinc (Zn)	161.		157.		63.1		139.		139.		105.	
7440-31-5	Tin (Sn)	13.9	U	16.		13.1	U	13.9	U	12.9	U	12.1	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

8846-OP P													
	SAMPLE ID ------>	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB00201		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/14/97		01/15/97	
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		01/16/97		01/16/97		01/21/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/30/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
298-04-4	Disulfoton	48.6	U	48.5	UJ	46.	UJ	49.9	U	45.8	U	42.9	U
298-00-0	Methyl parathion	48.6	U	48.5	UJ	46.	UJ	49.9	U	45.8	U	42.9	U
298-02-2	Phorate	48.6	U	48.5	UJ	46.	UJ	49.9	U	45.8	U	42.9	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 693 SOIL BORING SAMPLES

8846-PEST													
	SAMPLE ID ------->	693-S-B001-01		693-C-B001-01		693-S-B001-02		693-S-B002-01		693-S-B003-01		693-S-B004-01	
	ORIGINAL ID ----->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	LAB SAMPLE ID --->	7074-02		7074-03		7074-04		7060-01		7060-02		7074-01	
	ID FROM REPORT -->	693SB00101		693CB00101		693SB00102		693SB0020		693SB00301		693SB00401	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97				01/14/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/16/97		01/16/97		01/20/97	
	DATE ANALYZED --->	02/05/97		01/29/97		01/29/97		01/21/97		01/21/97		01/29/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7060	VAL
319-84-6	alpha-BHC	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
319-85-7	beta-BHC	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
319-86-8	delta-BHC	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
58-89-9	gamma-BHC (Lindane)	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
76-44-8	Heptachlor	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
309-00-2	Aldrin	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
1024-57-3	Heptachlor epoxide	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
959-98-8	Endosulfan I	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
60-57-1	Dieldrin	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
72-55-9	4,4'-DDE	24.	U	14.		4.5	U	4.9	U	4.5	U	4.2	U
72-20-8	Endrin	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
33213-65-9	Endosulfan II	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
72-54-8	4,4'-DDD	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
1031-07-8	Endosulfan sulfate	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
50-29-3	4,4'-DDT	84.		56.		4.5	U	4.9	U	4.5	U	4.2	U
72-43-5	Methoxychlor	120.	U	25.	U	23.	U	25.	U	23.	U	22.	U
53494-70-5	Endrin ketone	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
7421-93-4	Endrin aldehyde	24.	U	4.8	U	4.5	U	4.9	U	4.5	U	4.2	U
5103-71-9	alpha-Chlordane	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
5103-74-2	gamma-Chlordane	12.	U	2.5	U	2.3	U	2.5	U	2.3	U	2.2	U
8001-35-2	Toxaphene	1200.	U	250.	U	230.	U	250.	U	230.	U	220.	U
12674-11-2	Aroclor-1016	240.	U	48.	U	45.	U	49.	U	45.	U	42.	U
11104-28-2	Aroclor-1221	490.	U	97.	U	92.	U	100.	U	92.	U	86.	U
11141-16-5	Aroclor-1232	240.	U	48.	U	45.	U	49.	U	45.	U	42.	U
53469-21-9	Aroclor-1242	240.	U	48.	U	45.	U	49.	U	45.	U	42.	U
12672-29-6	Aroclor-1248	240.	U	48.	U	45.	U	49.	U	45.	U	42.	U
11097-69-1	Aroclor-1254	240.	U	48.	U	45.	U	49.	U	45.	U	42.	U
11096-82-5	Aroclor-1260	240.	U	110.		45.	U	40.	J	52.		48.	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01 RE		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01RX		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		02/05/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/07/97		01/31/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
108-95-2	Phenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
111-44-4	bis(2-Chloroethyl)ether	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
95-57-8	2-Chlorophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
541-73-1	1,3-Dichlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
106-46-7	1,4-Dichlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
100-51-6	Benzyl alcohol	380.	UJ	440.	UJ	460.	UJ	460.	UJ	480.	U	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
95-48-7	2-Methylphenol (o-Cresol)	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
106-44-5	4-Methylphenol (p-Cresol)	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
621-64-7	N-Nitroso-di-n-propylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
67-72-1	Hexachloroethane	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
98-95-3	Nitrobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
78-59-1	Isophorone	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
88-75-5	2-Nitrophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
105-67-9	2,4-Dimethylphenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
111-91-1	bis(2-Chloroethoxy)methane	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
120-83-2	2,4-Dichlorophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
120-82-1	1,2,4-Trichlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
91-20-3	Naphthalene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
106-47-8	4-Chloroaniline	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
87-68-3	Hexachlorobutadiene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
59-50-7	4-Chloro-3-methylphenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
91-57-6	2-Methylnaphthalene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
77-47-4	Hexachlorocyclopentadiene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
88-06-2	2,4,6-Trichlorophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
95-95-4	2,4,5-Trichlorophenol	920.	U	1100.	U	1100.	UJ	1100.	U	1200.	U	910.	U
91-58-7	2-Chloronaphthalene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
88-74-4	2-Nitroaniline	920.	U	1100.	U	1100.	UJ	1100.	UJ	1200.	U	910.	U
131-11-3	Dimethyl phthalate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
208-96-8	Acenaphthylene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
606-20-2	2,6-Dinitrotoluene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
99-09-2	3-Nitroaniline	920.	U	1100.	U	1100.	UJ	1100.	UJ	1200.	U	910.	U
83-32-9	Acenaphthene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
51-28-5	2,4-Dinitrophenol	920.	U	1100.	U	1100.	UJ	1100.	U	1200.	U	910.	U
100-02-7	4-Nitrophenol	920.	U	1100.	U	1100.	UJ	1100.	U	1200.	U	910.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA													
	SAMPLE ID ------->	694-S-B001-01		694-S-B002-01		694-S-B003-01 RE		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01RX		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		02/05/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/07/97		01/31/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
132-64-9	Dibenzofuran	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
121-14-2	2,4-Dinitrotoluene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
84-66-2	Diethylphthalate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
7005-72-3	4-Chlorophenylphenylether	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
86-73-7	Fluorene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
100-01-6	4-Nitroaniline	920.	U	1100.	U	1100.	UJ	1100.	UJ	1200.	U	910.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	920.	U	1100.	U	1100.	UJ	1100.	U	1200.	U	910.	U
86-30-6	N-Nitrosodiphenylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
101-55-3	4-Bromophenyl-phenylether	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
118-74-1	Hexachlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
87-86-5	Pentachlorophenol	920.	U	1100.	U	1100.	UJ	1100.	U	1200.	U	910.	U
85-01-8	Phenanthrene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
120-12-7	Anthracene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
84-74-2	Di-n-butylphthalate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
206-44-0	Fluoranthene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
129-00-0	Pyrene	380.	U	440.	U	110.	J	460.	UJ	480.	U	380.	U
85-68-7	Butylbenzylphthalate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
91-94-1	3,3'-Dichlorobenzidine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
56-55-3	Benzo(a)anthracene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
218-01-9	Chrysene	380.	U	440.	U	130.	J	460.	UJ	480.	U	380.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
117-84-0	Di-n-octyl phthalate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
205-99-2	Benzo(b)fluoranthene	380.	U	440.	U	200.	J	460.	UJ	480.	U	380.	U
207-08-9	Benzo(k)fluoranthene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
50-32-8	Benzo(a)pyrene	380.	U	440.	U	100.	J	460.	UJ	480.	U	380.	U
193-39-5	Indeno(1,2,3-cd)pyrene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
53-70-3	Dibenz(a,h)anthracene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
191-24-2	Benzo(g,h,i)perylene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
110-86-1	Pyridine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
62-75-9	N-Nitrosodimethylamine	380.	UJ	440.	UJ	460.	UJ	460.	UJ	480.	UJ	380.	U
109-06-8	2-Picoline	920.	U	1100.	U	1100.	UJ	1100.	UJ	1200.	U	910.	U
0595-95-6	N-Nitrosomethylethylamine	920.	U	1100.	U	1100.	UJ	1100.	UJ	1200.	U	910.	U
66-27-3	Methyl methanesulfonate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
55-18-5	N-Nitrosodiethylamine	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
62-50-0	Ethyl methanesulfonate	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
62-53-3	Aniline	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 SVOA													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01 RE		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01RX		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		02/05/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/07/97		01/31/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
930-55-2	N-Nitrosopyrrolidine	1500.	U	1700.	U	1800.	UJ	1800.	UJ	1900.	U	1500.	U
98-86-2	Acetophenone	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
59-89-2	N-Nitrosomorpholine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
95-53-4	o-Toluidine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
100-75-4	N-Nitrosopiperidine	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
126-68-1	O,O,O-Triethylphosphorothioate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
122-09-8	a,a-Dimethylphenethylamine	1500.	U	1700.	U	1800.	UJ	1800.	UJ	1900.	U	1500.	U
87-65-0	2,6-Dichlorophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
1888-71-7	Hexachloropropene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
106-50-3	p-Phenylenediamine	3800.	U	4400.	U	4600.	UJ	4600.	UJ	4800.	U	3800.	U
924-16-3	N-Nitroso-di-n-butylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
94-59-7	Safrole	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
120-58-1	Isosafrole	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
130-15-4	1,4-Naphthoquinone	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
99-65-0	1,3-Dinitrobenzene	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
608-93-5	Pentachlorobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
134-32-7	1-Naphthylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
91-59-8	2-Naphthylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
58-90-2	2,3,4,6-Tetrachlorophenol	380.	U	440.	U	460.	UJ	460.	U	480.	U	380.	U
99-55-8	5-Nitro-o-toluidine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
122-39-4	Diphenylamine	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
465-73-6	Isodrin	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
99-35-4	1,3,5-Trinitrobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
62-44-2	Phenacetin	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
297-97-2	Thionazin	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
92-67-1	4-Aminobiphenyl	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
82-68-8	Pentachloronitrobenzene	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
3950-58-5	Pronamide	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
88-85-7	Dinoseb	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
56-57-5	4-Nitroquinoline 1-oxide	1500.	U	1700.	U	1800.	UJ	1800.	UJ	1900.	U	1500.	U
91-80-5	Methapyrilene	3800.	UJ	4400.	UJ	4600.	UJ	4600.	UJ	4800.	U	3800.	U
140-57-8	Aramite	760.	UR	880.	UR	930.	UR	930.	UR	960.	UR	750.	UR
60-11-7	p-(Dimethylamino)azobenzene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
119-93-7	3,3-Dimethylbenzidine	380.	UJ	440.	UJ	460.	UJ	460.	UJ	480.	U	380.	U
52-85-7	Famphur	380.	U	440.	U	460.	UJ	460.	UJ	480.	UJ	380.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 SVOA													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01 RE		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01RX		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		02/05/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/07/97		01/31/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
53-96-3	Acetamidofluorene	760.	U	880.	U	930.	UJ	930.	UJ	960.	U	750.	U
57-97-6	7,12-Dimethylbenz(a)anthracene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
56-49-5	3-Methyl cholanthrene	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
70-30-4	Hexachlorophene	3800.	UR	4400.	UR	4600.	UJ	4600.	UR	4800.	UJ	3800.	U
143-50-0	Kepone	7600.	U	8800.	U	9300.	UJ	9300.	UJ	9600.	U	7500.	U
86-74-8	Carbazole	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
510-15-6	Chlorobenzilate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
60-51-5	Dimethoate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
56-38-2	Parathion	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
298-00-0	Methyl parathion	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
298-02-2	Phorate	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
298-04-4	Disulfoton	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
3689-24-5	Sulfotep	380.	U	440.	U	460.	UJ	460.	UJ	480.	U	380.	U
2303-16-4	Diallate	380.	UJ	440.	UJ	460.	UJ	460.	UJ	480.	UJ	380.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		02/03/97		02/03/97		02/03/97		02/03/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
108-95-2	Phenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
111-44-4	bis(2-Chloroethyl)ether	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-57-8	2-Chlorophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
541-73-1	1,3-Dichlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
106-46-7	1,4-Dichlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
100-51-6	Benzyl alcohol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-50-1	1,2-Dichlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-48-7	2-Methylphenol (o-Cresol)	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	470.	U	470.	UJ	510.	UJ	420.	UJ	440.	U
106-44-5	4-Methylphenol (p-Cresol)	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
621-64-7	N-Nitroso-di-n-propylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
67-72-1	Hexachloroethane	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
98-95-3	Nitrobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
78-59-1	Isophorone	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
88-75-5	2-Nitrophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
105-67-9	2,4-Dimethylphenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
111-91-1	bis(2-Chloroethoxy)methane	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
120-83-2	2,4-Dichlorophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
120-82-1	1,2,4-Trichlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
91-20-3	Naphthalene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
106-47-8	4-Chloroaniline	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
87-68-3	Hexachlorobutadiene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
59-50-7	4-Chloro-3-methylphenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
91-57-6	2-Methylnaphthalene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
77-47-4	Hexachlorocyclopentadiene	430.	U	470.	U	470.	UJ	510.	UJ	420.	UJ	440.	UJ
88-06-2	2,4,6-Trichlorophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-95-4	2,4,5-Trichlorophenol	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
91-58-7	2-Chloronaphthalene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
88-74-4	2-Nitroaniline	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
131-11-3	Dimethyl phthalate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
208-96-8	Acenaphthylene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
606-20-2	2,6-Dinitrotoluene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
99-09-2	3-Nitroaniline	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
83-32-9	Acenaphthene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
51-28-5	2,4-Dinitrophenol	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
100-02-7	4-Nitrophenol	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 SVOA

SAMPLE ID ------->	694-S-B007-01	694-S-B007-02	694-S-B008-01	694-S-B008-02	694-S-B009-01	694-S-B009-02
ORIGINAL ID ----->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
LAB SAMPLE ID --->	7074-05	7074-06	7085-12	7085-13	7085-03	7085-04
ID FROM REPORT -->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/16/97	01/16/97
DATE EXTRACTED -->	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97	01/20/97
DATE ANALYZED --->	01/30/97	01/30/97	02/03/97	02/03/97	02/03/97	02/03/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
132-64-9	Dibenzofuran	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
121-14-2	2,4-Dinitrotoluene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
84-66-2	Diethylphthalate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
7005-72-3	4-Chlorophenylphenylether	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
86-73-7	Fluorene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
100-01-6	4-Nitroaniline	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
86-30-6	N-Nitrosodiphenylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
101-55-3	4-Bromophenyl-phenylether	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
118-74-1	Hexachlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
87-86-5	Pentachlorophenol	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
85-01-8	Phenanthrene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
120-12-7	Anthracene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
84-74-2	Di-n-butylphthalate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
206-44-0	Fluoranthene	430.	U	470.	U	470.	U	510.	U	230.	J	440.	U
129-00-0	Pyrene	430.	U	470.	U	470.	U	510.	U	330.	J	440.	U
85-68-7	Butylbenzylphthalate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
91-94-1	3,3'-Dichlorobenzidine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
56-55-3	Benzo(a)anthracene	430.	U	470.	U	470.	U	510.	U	250.	J	440.	U
218-01-9	Chrysene	430.	U	470.	U	470.	U	510.	U	300.	J	440.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	430.	U	470.	U	470.	U	510.	U	420.	U	490.	
117-84-0	Di-n-octyl phthalate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
205-99-2	Benzo(b)fluoranthene	430.	U	470.	U	470.	U	510.	U	390.	J	440.	U
207-08-9	Benzo(k)fluoranthene	430.	U	470.	U	470.	U	510.	U	150.	J	440.	U
50-32-8	Benzo(a)pyrene	430.	U	470.	U	470.	U	510.	U	280.	J	440.	U
193-39-5	Indeno(1,2,3-cd)pyrene	430.	U	470.	U	470.	U	510.	U	130.	J	440.	U
53-70-3	Dibenz(a,h)anthracene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
191-24-2	Benzo(g,h,i)perylene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
110-86-1	Pyridine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
62-75-9	N-Nitrosodimethylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
109-06-8	2-Picoline	1000.	U	1100.	U	1100.	U	1200.	U	1000.	U	1100.	U
0595-95-6	N-Nitrosomethylethylamine	1000.	U	1100.	U	1100.	UJ	1200.	UJ	1000.	UJ	1100.	U
66-27-3	Methyl methanesulfonate	430.	U	470.	U	470.	UJ	510.	UJ	420.	UJ	440.	U
55-18-5	N-Nitrosodiethylamine	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
62-50-0	Ethyl methanesulfonate	860.	U	940.	U	940.	UJ	1000.	UJ	850.	UJ	880.	U
62-53-3	Aniline	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA													
	SAMPLE ID ------>	694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		02/03/97		02/03/97		02/03/97		02/03/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
930-55-2	N-Nitrosopyrrolidine	1700.	U	1800.	U	1800.	U	2000.	U	1700.	U	1700.	U
98-86-2	Acetophenone	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
59-89-2	N-Nitrosomorpholine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-53-4	o-Toluidine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
100-75-4	N-Nitrosopiperidine	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
126-68-1	O,O,O-Triethylphosphorothioate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
122-09-8	a,a-Dimethylphenethylamine	1700.	U	1800.	U	1800.	U	2000.	U	1700.	U	1700.	U
87-65-0	2,6-Dichlorophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
1888-71-7	Hexachloropropene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
106-50-3	p-Phenylenediamine	4300.	U	4700.	U	4700.	U	5100.	U	4200.	U	4400.	U
924-16-3	N-Nitroso-di-n-butylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
94-59-7	Safrole	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
120-58-1	Isosafrole	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
130-15-4	1,4-Naphthoquinone	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
99-65-0	1,3-Dinitrobenzene	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
608-93-5	Pentachlorobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
134-32-7	1-Naphthylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
91-59-8	2-Naphthylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
58-90-2	2,3,4,6-Tetrachlorophenol	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
99-55-8	5-Nitro-o-toluidine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
122-39-4	Diphenylamine	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
465-73-6	Isodrin	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
99-35-4	1,3,5-Trinitrobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
62-44-2	Phenacetin	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
297-97-2	Thionazin	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
92-67-1	4-Aminobiphenyl	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
82-68-8	Pentachloronitrobenzene	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
950-58-5	Pronamide	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
88-85-7	Dinoseb	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
56-57-5	4-Nitroquinoline 1-oxide	1700.	U	1800.	U	1800.	U	2000.	U	1700.	U	1700.	U
91-80-5	Methapyrilene	4300.	U	4700.	U	4700.	U	5100.	U	4200.	U	4400.	U
140-57-8	Aramite	860.	UR	940.	UR	940.	UR	1000.	UR	850.	UR	880.	UR
60-11-7	p-(Dimethylamino)azobenzene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
119-93-7	3,3-Dimethylbenzidine	430.	U	470.	U	470.	UJ	510.	UJ	420.	UJ	440.	UJ
52-85-7	Famphur	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

7X9 SVOA													
	SAMPLE ID ------>	694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		02/03/97		02/03/97		02/03/97		02/03/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
53-96-3	Acetamidofluorene	860.	U	940.	U	940.	U	1000.	U	850.	U	880.	U
57-97-6	7,12-Dimethylbenz(a)anthracene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
56-49-5	3-Methyl cholanthrene	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
70-30-4	Hexachlorophene	4300.	U	4700.	U	4700.	U	5100.	U	4200.	U	4400.	U
143-50-0	Kepone	8600.	U	9400.	U	9400.	U	10000.	U	8500.	U	8800.	UJ
86-74-8	Carbazole	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
510-15-6	Chlorobenzilate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
60-51-5	Dimethoate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
56-38-2	Parathion	430.	U	470.	U	470.	UJ	510.	UJ	420.	UJ	440.	U
298-00-0	Methyl parathion	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
298-02-2	Phorate	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
298-04-4	Disulfoton	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
3689-24-5	Sulfotep	430.	U	470.	U	470.	U	510.	U	420.	U	440.	U
2303-16-4	Diallate	430.	UJ	470.	UJ	470.	U	510.	U	420.	U	440.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01 RE	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07RX	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		02/05/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/03/97		02/03/97		02/03/97		02/07/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
108-95-2	Phenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
111-44-4	bis(2-Chloroethyl)ether	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-57-8	2-Chlorophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
541-73-1	1,3-Dichlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
106-46-7	1,4-Dichlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
100-51-6	Benzyl alcohol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-50-1	1,2-Dichlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-48-7	2-Methylphenol (o-Cresol)	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
108-60-1	2,2'-oxybis(1-Chloropropane)	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
106-44-5	4-Methylphenol (p-Cresol)	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
621-64-7	N-Nitroso-di-n-propylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
67-72-1	Hexachloroethane	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
98-95-3	Nitrobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
78-59-1	Isophorone	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
88-75-5	2-Nitrophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
105-67-9	2,4-Dimethylphenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
111-91-1	bis(2-Chloroethoxy)methane	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
120-83-2	2,4-Dichlorophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
120-82-1	1,2,4-Trichlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
91-20-3	Naphthalene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
106-47-8	4-Chloroaniline	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
87-68-3	Hexachlorobutadiene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
59-50-7	4-Chloro-3-methylphenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
91-57-6	2-Methylnaphthalene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
77-47-4	Hexachlorocyclopentadiene	510.	U	420.	UJ	410.	UJ	380.	UJ	410.	U	480.	UJ
88-06-2	2,4,6-Trichlorophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-95-4	2,4,5-Trichlorophenol	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
91-58-7	2-Chloronaphthalene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
88-74-4	2-Nitroaniline	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
131-11-3	Dimethyl phthalate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
208-96-8	Acenaphthylene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
606-20-2	2,6-Dinitrotoluene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
99-09-2	3-Nitroaniline	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
83-32-9	Acenaphthene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
51-28-5	2,4-Dinitrophenol	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
100-02-7	4-Nitrophenol	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 SVOA													
	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01 RE	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07RX	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		02/05/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/03/97		02/03/97		02/03/97		02/07/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
132-64-9	Dibenzofuran	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
121-14-2	2,4-Dinitrotoluene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
84-66-2	Diethylphthalate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
7005-72-3	4-Chlorophenylphenylether	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
86-73-7	Fluorene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
100-01-6	4-Nitroaniline	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
534-52-1	2-Methyl-4,6-Dinitrophenol	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
86-30-6	N-Nitrosodiphenylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
101-55-3	4-Bromophenyl-phenylether	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
118-74-1	Hexachlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
87-86-5	Pentachlorophenol	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
85-01-8	Phenanthrene	510.	U	420.	U	410.	U	380.	U	410.	U	750.	J
120-12-7	Anthracene	510.	U	420.	U	410.	U	380.	U	410.	U	110.	J
84-74-2	Di-n-butylphthalate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
206-44-0	Fluoranthene	510.	U	420.	U	230.	J	380.	U	410.	U	710.	J
129-00-0	Pyrene	510.	U	420.	U	300.	J	380.	U	100.	J	1100.	J
85-68-7	Butylbenzylphthalate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
91-94-1	3,3'-Dichlorobenzidine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
56-55-3	Benzo(a)anthracene	510.	U	420.	U	170.	J	380.	U	410.	U	480.	J
218-01-9	Chrysene	510.	U	420.	U	240.	J	380.	U	88.	J	660.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
117-84-0	Di-n-octyl phthalate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
205-99-2	Benzo(b)fluoranthene	510.	U	420.	U	590.		380.	U	120.	J	450.	J
207-08-9	Benzo(k)fluoranthene	510.	U	420.	U	140.	J	380.	U	410.	U	180.	J
50-32-8	Benzo(a)pyrene	510.	U	420.	U	410.		380.	U	87.	J	440.	J
193-39-5	Indeno(1,2,3-cd)pyrene	510.	U	420.	U	260.	J	380.	U	410.	U	480.	UJ
53-70-3	Dibenz(a,h)anthracene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
191-24-2	Benzo(g,h,i)perylene	510.	U	420.	U	280.	J	380.	U	410.	U	480.	UJ
110-86-1	Pyridine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
62-75-9	N-Nitrosodimethylamine	510.	U	420.	U	410.	U	380.	U	410.	UJ	480.	UJ
109-06-8	2-Picoline	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
0595-95-6	N-Nitrosomethylethylamine	1200.	U	1000.	U	1000.	U	930.	U	990.	U	1200.	UJ
66-27-3	Methyl methanesulfonate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
55-18-5	N-Nitrosodiethylamine	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
62-50-0	Ethyl methanesulfonate	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
62-53-3	Aniline	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01 RE	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07RX	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		02/05/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/03/97		02/03/97		02/03/97		02/07/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
930-55-2	N-Nitrosopyrrolidine	2000.	U	1600.	U	1600.	U	1500.	U	1600.	U	1900.	UJ
98-86-2	Acetophenone	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
59-89-2	N-Nitrosomorpholine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-53-4	o-Toluidine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
100-75-4	N-Nitrosopiperidine	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
126-68-1	O,O,O-Triethylphosphorothioate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
122-09-8	a,a-Dimethylphenethylamine	2000.	U	1600.	U	1600.	U	1500.	U	1600.	U	1900.	UJ
87-65-0	2,6-Dichlorophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
1888-71-7	Hexachloropropene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
106-50-3	p-Phenylenediamine	5100.	U	4200.	U	4100.	U	3800.	U	4100.	U	4800.	UJ
924-16-3	N-Nitroso-di-n-butylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
94-59-7	Safrole	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
95-94-3	1,2,4,5-Tetrachlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
120-58-1	Isosafrole	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
130-15-4	1,4-Naphthoquinone	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
99-65-0	1,3-Dinitrobenzene	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
608-93-5	Pentachlorobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
134-32-7	1-Naphthylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
91-59-8	2-Naphthylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
58-90-2	2,3,4,6-Tetrachlorophenol	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
99-55-8	5-Nitro-o-toluidine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
122-39-4	Diphenylamine	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
465-73-6	Isodrin	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
99-35-4	1,3,5-Trinitrobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
62-44-2	Phenacetin	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
297-97-2	Thionazin	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
92-67-1	4-Aminobiphenyl	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
82-68-8	Pentachloronitrobenzene	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
950-58-5	Pronamide	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
88-85-7	Dinoseb	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
56-57-5	4-Nitroquinoline 1-oxide	2000.	U	1600.	U	1600.	U	1500.	U	1600.	U	1900.	UJ
91-80-5	Methapyrilene	5100.	U	4200.	U	4100.	U	3800.	U	4100.	U	4800.	UJ
140-57-8	Aramite	1000.	UR	840.	UR	830.	UR	770.	UR	820.	UR	970.	UR
60-11-7	p-(Dimethylamino)azobenzene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
119-93-7	3,3-Dimethylbenzidine	510.	U	420.	UJ	410.	UJ	380.	UJ	410.	U	480.	UJ
52-85-7	Famphur	510.	U	420.	U	410.	U	380.	UJ	410.	UJ	480.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01 RE	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07RX	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		02/05/97	
	DATE ANALYZED --->	01/31/97		02/03/97		02/03/97		02/03/97		02/03/97		02/07/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
53-96-3	Acetamidofluorene	1000.	U	840.	U	830.	U	770.	U	820.	U	970.	UJ
57-97-6	7,12-Dimethylbenz(a)anthracene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
56-49-5	3-Methyl cholanthrene	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
70-30-4	Hexachlorophene	5100.	U	4200.	U	4100.	U	3800.	U	4100.	UJ	4800.	UJ
143-50-0	Kepone	10000.	U	8400.	UJ	8300.	UJ	7700.	UJ	8200.	U	9700.	UJ
86-74-8	Carbazole	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
510-15-6	Chlorobenzilate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
60-51-5	Dimethoate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
56-38-2	Parathion	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
298-00-0	Methyl parathion	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
298-02-2	Phorate	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
298-04-4	Disulfoton	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
3689-24-5	Sulfotep	510.	U	420.	U	410.	U	380.	U	410.	U	480.	UJ
2303-16-4	Diallate	510.	U	420.	U	410.	U	380.	U	410.	UJ	480.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

'9 SVOA

SAMPLE ID ------->	694-S-B014-01	694-S-B015-01	694-S-B015-02	694-S-B016-01 RE	694-S-B016-02	694-S-B017-01
ORIGINAL ID ----->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
LAB SAMPLE ID --->	7090-07	7090-02	7090-03	7085-08RX	7085-09	7090-04
ID FROM REPORT -->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
SAMPLE DATE ----->	01/17/97	01/17/97	01/17/97	01/16/97	01/16/97	01/17/97
DATE EXTRACTED -->	01/20/97	01/20/97	01/20/97	02/05/97	01/20/97	01/20/97
DATE ANALYZED --->	01/31/97	01/31/97	01/31/97	02/07/97	02/03/97	01/31/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
108-95-2	Phenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
111-44-4	bis(2-Chloroethyl)ether	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-57-8	2-Chlorophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
541-73-1	1,3-Dichlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
106-46-7	1,4-Dichlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
100-51-6	Benzyl alcohol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-50-1	1,2-Dichlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-48-7	2-Methylphenol (o-Cresol)	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
106-44-5	4-Methylphenol (p-Cresol)	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
621-64-7	N-Nitroso-di-n-propylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
67-72-1	Hexachloroethane	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
98-95-3	Nitrobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
78-59-1	Isophorone	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
88-75-5	2-Nitrophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
105-67-9	2,4-Dimethylphenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
111-91-1	bis(2-Chloroethoxy)methane	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
120-83-2	2,4-Dichlorophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
120-82-1	1,2,4-Trichlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
91-20-3	Naphthalene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
106-47-8	4-Chloroaniline	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
87-68-3	Hexachlorobutadiene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
59-50-7	4-Chloro-3-methylphenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
91-57-6	2-Methylnaphthalene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
77-47-4	Hexachlorocyclopentadiene	400.	U	380.	U	410.	U	390.	UJ	430.	UJ	400.	U
88-06-2	2,4,6-Trichlorophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-95-4	2,4,5-Trichlorophenol	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
91-58-7	2-Chloronaphthalene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
88-74-4	2-Nitroaniline	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
131-11-3	Dimethyl phthalate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
208-96-8	Acenaphthylene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
606-20-2	2,6-Dinitrotoluene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
99-09-2	3-Nitroaniline	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
83-32-9	Acenaphthene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
51-28-5	2,4-Dinitrophenol	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
100-02-7	4-Nitrophenol	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 SVOA													
	SAMPLE ID ------>	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01 RE		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08RX		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		02/05/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97		02/07/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
132-64-9	Dibenzofuran	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
121-14-2	2,4-Dinitrotoluene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
84-66-2	Diethylphthalate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
7005-72-3	4-Chlorophenylphenylether	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
86-73-7	Fluorene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
100-01-6	4-Nitroaniline	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
86-30-6	N-Nitrosodiphenylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
101-55-3	4-Bromophenyl-phenylether	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
118-74-1	Hexachlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
87-86-5	Pentachlorophenol	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
85-01-8	Phenanthrene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
120-12-7	Anthracene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
84-74-2	Di-n-butylphthalate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
206-44-0	Fluoranthene	400.	U	380.	U	410.	U	87.	J	430.	U	400.	U
129-00-0	Pyrene	400.	U	380.	U	410.	U	110.	J	430.	U	400.	U
85-68-7	Butylbenzylphthalate	680.		380.	U	410.	U	390.	UJ	430.	U	400.	U
91-94-1	3,3'-Dichlorobenzidine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
56-55-3	Benzo(a)anthracene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
218-01-9	Chrysene	400.	U	380.	U	410.	U	99.	J	430.	U	400.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	620.		380.	U	410.	U	390.	UJ	430.	U	400.	U
117-84-0	Di-n-octyl phthalate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
205-99-2	Benzo(b)fluoranthene	400.	U	380.	U	410.	U	140.	J	430.	U	400.	U
207-08-9	Benzo(k)fluoranthene	400.	U	380.	U	410.	U	170.	J	430.	U	400.	U
50-32-8	Benzo(a)pyrene	400.	U	380.	U	410.	U	89.	J	430.	U	400.	U
193-39-5	Indeno(1,2,3-cd)pyrene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
53-70-3	Dibenz(a,h)anthracene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
191-24-2	Benzo(g,h,i)perylene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
110-86-1	Pyridine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
62-75-9	N-Nitrosodimethylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
109-06-8	2-Picoline	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
0595-95-6	N-Nitrosomethylethylamine	970.	U	920.	U	1000.	U	940.	UJ	1000.	U	970.	U
66-27-3	Methyl methanesulfonate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
55-18-5	N-Nitrosodiethylamine	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
62-50-0	Ethyl methanesulfonate	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
62-53-3	Aniline	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 SVOA	SAMPLE ID ------->	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01 RE		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08RX		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		02/05/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97		02/07/97		02/03/97		01/31/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
930-55-2	N-Nitrosopyrrolidine	1600.	U	1500.	U	1600.	U	1500.	UJ	1700.	U	1600.	U
98-86-2	Acetophenone	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
59-89-2	N-Nitrosomorpholine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-53-4	o-Toluidine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
100-75-4	N-Nitrosopiperidine	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
126-68-1	O,O,O-Triethylphosphorothioate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
122-09-8	a,a-Dimethylphenethylamine	1600.	U	1500.	U	1600.	U	1500.	UJ	1700.	U	1600.	U
87-65-0	2,6-Dichlorophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
1888-71-7	Hexachloropropene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
106-50-3	p-Phenylenediamine	4000.	U	3800.	U	4100.	U	3900.	UJ	4300.	U	4000.	U
924-16-3	N-Nitroso-di-n-butylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
94-59-7	Safrole	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
120-58-1	Isosafrole	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
130-15-4	1,4-Naphthoquinone	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
99-65-0	1,3-Dinitrobenzene	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
608-93-5	Pentachlorobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
134-32-7	1-Naphthylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
91-59-8	2-Naphthylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
58-90-2	2,3,4,6-Tetrachlorophenol	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
99-55-8	5-Nitro-o-toluidine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
122-39-4	Diphenylamine	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
465-73-6	Isodrin	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
99-35-4	1,3,5-Trinitrobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
62-44-2	Phenacetin	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
297-97-2	Thionazin	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
92-67-1	4-Aminobiphenyl	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
82-68-8	Pentachloronitrobenzene	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
950-58-5	Pronamide	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
88-85-7	Dinoseb	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
56-57-5	4-Nitroquinoline 1-oxide	1600.	U	1500.	U	1600.	U	1500.	UJ	1700.	U	1600.	U
91-80-5	Methapyrilene	4000.	U	3800.	U	4100.	U	3900.	UJ	4300.	U	4000.	U
140-57-8	Aramite	800.	UR	760.	UR	830.	UR	770.	UR	860.	UR	800.	UR
60-11-7	p-(Dimethylamino)azobenzene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
119-93-7	3,3-Dimethylbenzidine	400.	U	380.	U	410.	U	390.	UJ	430.	UJ	400.	U
52-85-7	Famphur	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA						
SAMPLE ID ------>	694-S-B014-01	694-S-B015-01	694-S-B015-02	694-S-B016-01 RE	694-S-B016-02	694-S-B017-01
ORIGINAL ID ----->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
LAB SAMPLE ID --->	7090-07	7090-02	7090-03	7085-08RX	7085-09	7090-04
ID FROM REPORT -->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
SAMPLE DATE ----->	01/17/97	01/17/97	01/17/97	01/16/97	01/16/97	01/17/97
DATE EXTRACTED -->	01/20/97	01/20/97	01/20/97	02/05/97	01/20/97	01/20/97
DATE ANALYZED --->	01/31/97	01/31/97	01/31/97	02/07/97	02/03/97	01/31/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
53-96-3	Acetamidofluorene	800.	U	760.	U	830.	U	770.	UJ	860.	U	800.	U
57-97-6	7,12-Dimethylbenz(a)anthracene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
56-49-5	3-Methyl cholanthrene	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
70-30-4	Hexachlorophene	4000.	U	3800.	U	4100.	U	3900.	UJ	4300.	U	4000.	U
143-50-0	Kepone	8000.	U	7600.	U	8300.	U	7700.	UJ	8600.	UJ	8000.	U
86-74-8	Carbazole	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
510-15-6	Chlorobenzilate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
60-51-5	Dimethoate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
56-38-2	Parathion	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
298-00-0	Methyl parathion	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
298-02-2	Phorate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
298-04-4	Disulfoton	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
3689-24-5	Sulfotep	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U
2303-16-4	Diallate	400.	U	380.	U	410.	U	390.	UJ	430.	U	400.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

9 SVOA											
	SAMPLE ID ------->	694-S-B017-02		694-S-B018-01		694-S-B019-01					
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901					
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08					
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901					
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97					
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97					
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL				
108-95-2	Phenol	360.	U	390.	U	370.	U				
111-44-4	bis(2-Chloroethyl)ether	360.	U	390.	U	370.	U				
95-57-8	2-Chlorophenol	360.	U	390.	U	370.	U				
541-73-1	1,3-Dichlorobenzene	360.	U	390.	U	370.	U				
106-46-7	1,4-Dichlorobenzene	360.	U	390.	U	370.	U				
100-51-6	Benzyl alcohol	360.	U	390.	U	370.	U				
95-50-1	1,2-Dichlorobenzene	360.	U	390.	U	370.	U				
95-48-7	2-Methylphenol (o-Cresol)	360.	U	390.	U	370.	U				
108-60-1	2,2'-oxybis(1-Chloropropane)	360.	U	390.	U	370.	U				
106-44-5	4-Methylphenol (p-Cresol)	360.	U	390.	U	370.	U				
621-64-7	N-Nitroso-di-n-propylamine	360.	U	390.	U	370.	U				
67-72-1	Hexachloroethane	360.	U	390.	U	370.	U				
98-95-3	Nitrobenzene	360.	U	390.	U	370.	U				
78-59-1	Isophorone	360.	U	390.	U	370.	U				
88-75-5	2-Nitrophenol	360.	U	390.	U	370.	U				
105-67-9	2,4-Dimethylphenol	360.	U	390.	U	370.	U				
111-91-1	bis(2-Chloroethoxy)methane	360.	U	390.	U	370.	U				
120-83-2	2,4-Dichlorophenol	360.	U	390.	U	370.	U				
120-82-1	1,2,4-Trichlorobenzene	360.	U	390.	U	370.	U				
91-20-3	Naphthalene	360.	U	390.	U	370.	U				
106-47-8	4-Chloroaniline	360.	U	390.	U	370.	U				
87-68-3	Hexachlorobutadiene	360.	U	390.	U	370.	U				
59-50-7	4-Chloro-3-methylphenol	360.	U	390.	U	370.	U				
91-57-6	2-Methylnaphthalene	360.	U	390.	U	370.	U				
77-47-4	Hexachlorocyclopentadiene	360.	U	390.	U	370.	U				
88-06-2	2,4,6-Trichlorophenol	360.	U	390.	U	370.	U				
95-95-4	2,4,5-Trichlorophenol	880.	U	940.	U	890.	U				
91-58-7	2-Chloronaphthalene	360.	U	390.	U	370.	U				
88-74-4	2-Nitroaniline	880.	U	940.	U	890.	U				
131-11-3	Dimethyl phthalate	360.	U	390.	U	370.	U				
208-96-8	Acenaphthylene	360.	U	390.	U	370.	U				
606-20-2	2,6-Dinitrotoluene	360.	U	390.	U	370.	U				
99-09-2	3-Nitroaniline	880.	U	940.	U	890.	U				
83-32-9	Acenaphthene	360.	U	390.	U	370.	U				
51-28-5	2,4-Dinitrophenol	880.	U	940.	U	890.	U				
100-02-7	4-Nitrophenol	880.	U	940.	U	890.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

K9 SVOA									
	SAMPLE ID ------->	694-S-B017-02		694-S-B018-01		694-S-B019-01				
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901				
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08				
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901				
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97				
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97				
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97				
	MATRIX ---------->	Soil		Soil		Soil				
	UNITS ---------->	UG/KG		UG/KG		UG/KG				
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL			
132-64-9	Dibenzofuran	360.	U	390.	U	370.	U			
121-14-2	2,4-Dinitrotoluene	360.	U	390.	U	370.	U			
84-66-2	Diethylphthalate	360.	U	390.	U	370.	U			
7005-72-3	4-Chlorophenylphenylether	360.	U	390.	U	370.	U			
86-73-7	Fluorene	360.	U	390.	U	370.	U			
100-01-6	4-Nitroaniline	880.	U	940.	U	890.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	880.	U	940.	U	890.	U			
86-30-6	N-Nitrosodiphenylamine	360.	U	390.	U	370.	U			
101-55-3	4-Bromophenyl-phenylether	360.	U	390.	U	370.	U			
118-74-1	Hexachlorobenzene	360.	U	390.	U	370.	U			
87-86-5	Pentachlorophenol	880.	U	940.	U	890.	U			
85-01-8	Phenanthrene	360.	U	140.	J	370.	U			
120-12-7	Anthracene	360.	U	390.	U	370.	U			
84-74-2	Di-n-butylphthalate	360.	U	390.	U	370.	U			
206-44-0	Fluoranthene	360.	U	460.		100.	J			
129-00-0	Pyrene	360.	U	430.		91.	J			
85-68-7	Butylbenzylphthalate	360.	U	390.	U	370.	U			
91-94-1	3,3'-Dichlorobenzidine	360.	U	390.	U	370.	U			
56-55-3	Benzo(a)anthracene	360.	U	240.	J	87.	J			
218-01-9	Chrysene	360.	U	270.	J	100.	J			
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	360.	U	390.	U	420.				
117-84-0	Di-n-octyl phthalate	360.	U	390.	U	370.	U			
205-99-2	Benzo(b)fluoranthene	360.	U	350.	J	100.	J			
207-08-9	Benzo(k)fluoranthene	360.	U	130.	J	370.	U			
50-32-8	Benzo(a)pyrene	360.	U	260.	J	370.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U	160.	J	370.	U			
53-70-3	Dibenz(a,h)anthracene	360.	U	390.	U	370.	U			
191-24-2	Benzo(g,h,i)perylene	360.	U	180.	J	370.	U			
110-86-1	Pyridine	360.	U	390.	U	370.	U			
62-75-9	N-Nitrosodimethylamine	360.	U	390.	U	370.	U			
109-06-8	2-Picoline	880.	U	940.	U	890.	U			
0595-95-6	N-Nitrosomethylethylamine	880.	U	940.	U	890.	U			
66-27-3	Methyl methanesulfonate	360.	U	390.	U	370.	U			
55-18-5	N-Nitrosodiethylamine	720.	U	780.	U	730.	U			
62-50-0	Ethyl methanesulfonate	720.	U	780.	U	730.	U			
62-53-3	Aniline	360.	U	390.	U	370.	U			

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

9 SVOA

SAMPLE ID ------->	694-S-B017-02	694-S-B018-01	694-S-B019-01
ORIGINAL ID ----->	694SB01702	694SB01801	694SB01901
LAB SAMPLE ID --->	7090-05	7090-06	7090-08
ID FROM REPORT -->	694SB01702	694SB01801	694SB01901
SAMPLE DATE ----->	01/17/97	01/17/97	01/17/97
DATE EXTRACTED -->	01/20/97	01/20/97	01/20/97
DATE ANALYZED --->	01/31/97	01/31/97	01/31/97
MATRIX ---------->	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL
930-55-2	N-Nitrosopyrrolidine	1400.	U	1500.	U	1400.	U
98-86-2	Acetophenone	360.	U	390.	U	370.	U
59-89-2	N-Nitrosomorpholine	360.	U	390.	U	370.	U
95-53-4	o-Toluidine	360.	U	390.	U	370.	U
100-75-4	N-Nitrosopiperidine	720.	U	780.	U	730.	U
126-68-1	O,O,O-Triethylphosphorothioate	360.	U	390.	U	370.	U
122-09-8	a,a-Dimethylphenethylamine	1400.	U	1500.	U	1400.	U
87-65-0	2,6-Dichlorophenol	360.	U	390.	U	370.	U
888-71-7	Hexachloropropene	360.	U	390.	U	370.	U
106-50-3	p-Phenylenediamine	3600.	U	3900.	U	3700.	U
924-16-3	N-Nitroso-di-n-butylamine	360.	U	390.	U	370.	U
94-59-7	Safrole	360.	U	390.	U	370.	U
95-94-3	1,2,4,5-Tetrachlorobenzene	360.	U	390.	U	370.	U
120-58-1	Isosafrole	360.	U	390.	U	370.	U
130-15-4	1,4-Naphthoquinone	360.	U	390.	U	370.	U
99-65-0	1,3-Dinitrobenzene	720.	U	780.	U	730.	U
608-93-5	Pentachlorobenzene	360.	U	390.	U	370.	U
134-32-7	1-Naphthylamine	360.	U	390.	U	370.	U
91-59-8	2-Naphthylamine	360.	U	390.	U	370.	U
58-90-2	2,3,4,6-Tetrachlorophenol	360.	U	390.	U	370.	U
99-55-8	5-Nitro-o-toluidine	360.	U	390.	U	370.	U
122-39-4	Diphenylamine	360.	U	390.	U	370.	U
465-73-6	Isodrin	360.	U	390.	U	370.	U
99-35-4	1,3,5-Trinitrobenzene	360.	U	390.	U	370.	U
62-44-2	Phenacetin	720.	U	780.	U	730.	U
297-97-2	Thionazin	720.	U	780.	U	730.	U
92-67-1	4-Aminobiphenyl	720.	U	780.	U	730.	U
82-68-8	Pentachloronitrobenzene	720.	U	780.	U	730.	U
950-58-5	Pronamide	360.	U	390.	U	370.	U
88-85-7	Dinoseb	720.	U	780.	U	730.	U
56-57-5	4-Nitroquinoline 1-oxide	1400.	U	1500.	U	1400.	U
91-80-5	Methapyrilene	3600.	U	3900.	U	3700.	U
140-57-8	Aramite	720.	UR	780.	UR	730.	UR
60-11-7	p-(Dimethylamino)azobenzene	360.	U	390.	U	370.	U
119-93-7	3,3-Dimethylbenzidine	360.	U	390.	U	370.	U
52-85-7	Famphur	360.	U	390.	U	370.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

'X9 SVOA											
	SAMPLE ID ------->	694-S-B017-02		694-S-B018-01		694-S-B019-01					
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901					
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08					
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901					
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97					
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97					
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL				
53-96-3	Acetamidofluorene	720.	U	780.	U	730.	U				
57-97-6	7,12-Dimethylbenz(a)anthracene	360.	U	390.	U	370.	U				
56-49-5	3-Methyl cholanthrene	360.	U	390.	U	370.	U				
70-30-4	Hexachlorophene	3600.	U	3900.	U	3700.	U				
143-50-0	Kepone	7200.	U	7800.	U	7300.	U				
86-74-8	Carbazole	360.	U	390.	U	370.	U				
510-15-6	Chlorobenzilate	360.	U	390.	U	370.	U				
60-51-5	Dimethoate	360.	U	390.	U	370.	U				
56-38-2	Parathion	360.	U	390.	U	370.	U				
298-00-0	Methyl parathion	360.	U	390.	U	370.	U				
298-02-2	Phorate	360.	U	390.	U	370.	U				
298-04-4	Disulfoton	360.	U	390.	U	370.	U				
3689-24-5	Sulfotep	360.	U	390.	U	370.	U				
2303-16-4	Diallate	360.	U	390.	U	370.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

9 VOA	SAMPLE ID ------->	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE ANALYZED --->	01/20/97		01/20/97		01/21/97		01/21/97		01/20/97		01/20/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
74-87-3	Chloromethane	11.	U	13.	U	5.	U	5.	U	14.	U	11.	U
74-83-9	Bromomethane	11.	U	13.	U	5.	U	5.	U	14.	U	11.	U
75-01-4	Vinyl chloride	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-00-3	Chloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-09-2	Methylene chloride	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
67-64-1	Acetone	11.	U	13.	U	10.	U	10.	U	14.	U	11.	U
75-15-0	Carbon disulfide	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-35-4	1,1-Dichloroethene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-34-3	1,1-Dichloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
156-60-5	trans-1,2-Dichloroethene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
67-66-3	Chloroform	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
107-06-2	1,2-Dichloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
78-93-3	2-Butanone (MEK)	11.	U	13.	U	11.	U	11.	U	14.	U	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
56-23-5	Carbon tetrachloride	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
108-05-4	Vinyl acetate	6.	U	7.	U	11.	U	11.	U	7.	U	6.	U
78-87-5	1,2-Dichloropropane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
061-01-5	cis-1,3-Dichloropropene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
79-01-6	Trichloroethene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
124-48-1	Dibromochloromethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
80-62-6	Methyl methacrylate	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
71-43-2	Benzene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
061-02-6	trans-1,3-Dichloropropene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-25-2	Bromoform	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	11.	U	13.	U	11.	U	11.	U	14.	U	11.	U
591-78-6	2-Hexanone	11.	U	13.	U	11.	U	11.	U	14.	U	11.	U
127-18-4	Tetrachloroethene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
108-88-3	Toluene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
108-90-7	Chlorobenzene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
100-41-4	Ethylbenzene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
100-42-5	Styrene	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
75-71-8	Dichlorodifluoromethane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
75-69-4	Trichlorofluoromethane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
74-88-4	Methyl iodide	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
107-05-1	3-Chloropropene	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 VOA													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE ANALYZED --->	01/20/97		01/20/97		01/21/97		01/21/97		01/20/97		01/20/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
107-12-0	Propionitrile	57.	UR	67.	UR	55.	UR	54.	UR	72.	UR	57.	UR
75-05-8	Acetonitrile	57.	UR	67.	UR	55.	UR	54.	UR	72.	UR	57.	UR
107-02-8	Acrolein	57.	UR	67.	UR	55.	UR	54.	UR	72.	UR	57.	UR
126-99-8	Chloroprene	11.	U	13.	UJ	11.	U	11.	U	14.	U	11.	U
107-13-1	Acrylonitrile	57.	UR	67.	UR	55.	UR	54.	UR	72.	UR	57.	UR
123-91-1	1,4-Dioxane	57.	UR	67.	UR	55.	UR	54.	UR	72.	UR	57.	UR
126-98-7	Methacrylonitrile	57.	U	67.	UJ	55.	U	54.	U	72.	U	57.	U
74-95-3	Methylene bromide	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
78-83-1	Isobutyl alcohol	570.	UR	670.	UR	550.	UR	540.	UR	720.	UR	570.	UR
106-93-4	1, 2-Dibromoethane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
630-20-6	1,1,1,2-Tetrachloroethane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
95-47-6	o-Xylene	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
96-18-4	1,2,3-Trichloropropane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
110-57-6	trans-1,4-Dichloro-2-butene	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
96-12-8	1,2-Dibromo-3-Chloropropane	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
97-63-2	Ethyl methacrylate	6.	U	7.	UJ	5.	U	5.	U	7.	U	6.	U
76-01-7	Pentachloroethane	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U
9000-76-0	XYLENE (META/PARA)	6.	U	7.	U	5.	U	5.	U	7.	U	6.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 VOA													
	SAMPLE ID ------>	694-S-B007-01 RE		694-S-B007-02 RE		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02 RE	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE ANALYZED --->	01/20/97		01/20/97		01/22/97		01/21/97		01/21/97		01/22/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
74-87-3	Chloromethane	13.	U	14.	U	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	13.	U	14.	U	5.	U	5.	U	5.	U	5.	U
75-01-4	Vinyl chloride	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-09-2	Methylene chloride	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
67-64-1	Acetone	13.	U	14.	U	2.	J	10.	U	10.	U	10.	U
75-15-0	Carbon disulfide	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
156-60-5	trans-1,2-Dichloroethene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	13.	U	14.	U	11.	U	11.	U	11.	U	11.	U
71-55-6	1,1,1-Trichloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	7.	U	7.	U	11.	U	11.	U	11.	U	11.	U
78-87-5	1,2-Dichloropropane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
0061-01-5	cis-1,3-Dichloropropene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
80-62-6	Methyl methacrylate	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
0061-02-6	trans-1,3-Dichloropropene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	13.	U	14.	U	11.	U	11.	U	11.	U	11.	U
591-78-6	2-Hexanone	13.	U	14.	U	11.	U	11.	U	11.	U	11.	U
127-18-4	Tetrachloroethene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	7.	U	7.	U	5.	U	5.	U	5.	U	5.	U
75-71-8	Dichlorodifluoromethane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
75-69-4	Trichlorofluoromethane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
74-88-4	Methyl iodide	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
107-05-1	3-Chloropropene	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

'X9 VOA													
	SAMPLE ID ------>	694-S-B007-01 RE		694-S-B007-02 RE		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02 RE	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE ANALYZED --->	01/20/97		01/20/97		01/22/97		01/21/97		01/21/97		01/22/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
107-12-0	Propionitrile	66.	UR	70.	UR	54.	UR	54.	UR	54.	UR	54.	UR
75-05-8	Acetonitrile	66.	UR	70.	UR	54.	UR	54.	UR	54.	UR	54.	UR
107-02-8	Acrolein	66.	UR	70.	UR	54.	UR	54.	UR	54.	UR	54.	UR
126-99-8	Chloroprene	13.	U	14.	UJ	11.	U	11.	U	11.	U	11.	U
107-13-1	Acrylonitrile	66.	UR	70.	UR	54.	UR	54.	UR	54.	UR	54.	UR
123-91-1	1,4-Dioxane	66.	UR	70.	UR	54.	UR	54.	UR	54.	UR	54.	UR
126-98-7	Methacrylonitrile	66.	U	70.	UJ	54.	U	54.	U	54.	U	54.	U
74-95-3	Methylene bromide	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
78-83-1	Isobutyl alcohol	660.	UR	700.	UR	540.	UR	540.	UR	540.	UR	540.	UR
106-93-4	1, 2-Dibromoethane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
630-20-6	1,1,1,2-Tetrachloroethane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
95-47-6	o-Xylene	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
96-18-4	1,2,3-Trichloropropane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
110-57-6	trans-1,4-Dichloro-2-butene	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
96-12-8	1,2-Dibromo-3-Chloropropane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
97-63-2	Ethyl methacrylate	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
76-01-7	Pentachloroethane	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U
9000-76-0	XYLENE (META/PARA)	7.	U	7.	UJ	5.	U	5.	U	5.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 VOA																							
	SAMPLE ID ------>	694-S-B010-01			694-S-B011-01			694-S-B011-02 RE			694-S-B012-01			694-S-B012-02 RE			694-S-B013-01 RE		
	ORIGINAL ID ----->	694SB01001			694SB01101			694SB01102			694SB01201			694SB01202			694SB01301		
	LAB SAMPLE ID --->	7090-01			7085-05			7085-06			7090-09			7090-10			7085-07		
	ID FROM REPORT -->	694SB01001			694SB01101			694SB01102			694SB01201			694SB01202			694SB01301		
	SAMPLE DATE ----->	01/17/97			01/16/97			01/16/97			01/17/97			01/17/97			01/16/97		
	DATE ANALYZED --->	01/23/97			01/22/97			01/22/97			01/23/97			01/23/97			01/22/97		
	MATRIX ---------->	Soil			Soil			Soil			Soil			Soil			Soil		
	UNITS ---------->	UG/KG			UG/KG			UG/KG			UG/KG			UG/KG			UG/KG		
CAS #	Parameter	7090		VAL	7085		VAL	7085		VAL	7090		VAL	7090		VAL	7085		VAL
74-87-3	Chloromethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
74-83-9	Bromomethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
75-01-4	Vinyl chloride	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
75-00-3	Chloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
75-09-2	Methylene chloride	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
67-64-1	Acetone	10.		U	10.		U	10.		U	11.		U	10.		U	10.		U
75-15-0	Carbon disulfide	4.		J	5.		U	5.		U	5.		U	5.		U	5.		U
75-35-4	1,1-Dichloroethene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
75-34-3	1,1-Dichloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
156-60-5	trans-1,2-Dichloroethene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
67-66-3	Chloroform	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
107-06-2	1,2-Dichloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
78-93-3	2-Butanone (MEK)	10.		U	11.		U	11.		U	11.		U	11.		U	10.		U
71-55-6	1,1,1-Trichloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
56-23-5	Carbon tetrachloride	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
108-05-4	Vinyl acetate	10.		U	11.		U	11.		U	11.		U	11.		U	10.		U
78-87-5	1,2-Dichloropropane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
0061-01-5	cis-1,3-Dichloropropene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
79-01-6	Trichloroethene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
124-48-1	Dibromochloromethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
79-00-5	1,1,2-Trichloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
80-62-6	Methyl methacrylate	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
71-43-2	Benzene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
0061-02-6	trans-1,3-Dichloropropene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
75-25-2	Bromoform	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
108-10-1	4-Methyl-2-Pentanone (MIBK)	10.		U	11.		U	11.		U	11.		U	11.		U	10.		U
591-78-6	2-Hexanone	10.		U	11.		U	11.		U	11.		U	11.		U	10.		U
127-18-4	Tetrachloroethene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
79-34-5	1,1,2,2-Tetrachloroethane	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
108-88-3	Toluene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
108-90-7	Chlorobenzene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
100-41-4	Ethylbenzene	5.		U	5.		U	5.		U	5.		U	5.		U	5.		U
100-42-5	Styrene	5.		U	5.		U	5.		U	5.		U	5.		UJ	5.		U
75-71-8	Dichlorodifluoromethane	5.		U	5.		U	5.		U	5.		U	5.		UJ	5.		U
75-69-4	Trichlorofluoromethane	5.		U	5.		U	5.		U	5.		U	5.		UJ	5.		U
74-88-4	Methyl Iodide	5.		U	5.		U	5.		U	5.		U	5.		UJ	5.		U
107-05-1	3-Chloropropene	5.		U	5.		U	5.		U	5.		U	5.		UJ	5.		U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PX9 VOA

SAMPLE ID ------->	694-S-B010-01		694-S-B011-01		694-S-B011-02 RE		694-S-B012-01		694-S-B012-02 RE		694-S-B013-01 RE	
ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07	
ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
DATE ANALYZED --->	01/23/97		01/22/97		01/22/97		01/23/97		01/23/97		01/22/97	
MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS # Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
107-12-0 Propionitrile	52.	UR	54.	UR	54.	UR	54.	UR	54.	UR	52.	UR
75-05-8 Acetonitrile	52.	UR	54.	UR	54.	UR	54.	UR	54.	UR	52.	UR
107-02-8 Acrolein	52.	UR	54.	UR	54.	UR	54.	UR	54.	UR	52.	UR
126-99-8 Chloroprene	10.	U	11.	U	11.	U	11.	U	11.	UJ	10.	U
107-13-1 Acrylonitrile	52.	UR	54.	UR	54.	UR	54.	UR	54.	UR	52.	UR
123-91-1 1,4-Dioxane	52.	UR	54.	UR	54.	UR	54.	UR	54.	UR	52.	UR
126-98-7 Methacrylonitrile	52.	U	54.	U	54.	U	54.	U	54.	UJ	52.	U
74-95-3 Methylene bromide	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
78-83-1 Isobutyl alcohol	520.	UR	540.	UR	540.	UR	540.	UR	540.	UR	520.	UR
106-93-4 1, 2-Dibromoethane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
630-20-6 1,1,1,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
95-47-6 o-Xylene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
96-18-4 1,2,3-Trichloropropane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
110-57-6 trans-1,4-Dichloro-2-butene	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
96-12-8 1,2-Dibromo-3-Chloropropane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
97-63-2 Ethyl methacrylate	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
76-01-7 Pentachloroethane	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U
99000-76-0 XYLENE (META/PARA)	5.	U	5.	U	5.	U	5.	U	5.	UJ	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

'X9 VOA													
	SAMPLE ID ------->	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01		694-S-B016-02		694-S-B017-01 RE	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/23/97		01/22/97		01/21/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
74-87-3	Chloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
74-83-9	Bromomethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-00-3	Chloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-09-2	Methylene chloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-64-1	Acetone	11.	U	11.	U	29.	U	10.	U	11.	U	11.	U
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
156-60-5	trans-1,2-Dichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
67-66-3	Chloroform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
78-93-3	2-Butanone (MEK)	11.	U	11.	U	7.	J	11.	U	11.	U	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-05-4	Vinyl acetate	11.	U	11.	U	11.	U	11.	U	11.	U	11.	U
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
0061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-01-6	Trichloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
80-62-6	Methyl methacrylate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
71-43-2	Benzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
0061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
75-25-2	Bromoform	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	11.	U	11.	U	11.	U	11.	U	11.	U	11.	U
591-78-6	2-Hexanone	11.	U	11.	U	11.	U	11.	U	11.	U	11.	U
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-88-3	Toluene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	U
100-42-5	Styrene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
75-71-8	Dichlorodifluoromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
75-69-4	Trichlorofluoromethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
74-88-4	Methyl iodide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
107-05-1	3-Chloropropene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

)PX9 VOA													
	SAMPLE ID ------>	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01		694-S-B016-02		694-S-B017-01 RE	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/23/97		01/22/97		01/21/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
107-12-0	Propionitrile	54.	UR	53.	UR	54.	UR	54.	UR	54.	UR	54.	UR
75-05-8	Acetonitrile	54.	UR	53.	UR	54.	UR	54.	UR	54.	UR	54.	UR
107-02-8	Acrolein	54.	UR	53.	UR	54.	UR	54.	UR	54.	UR	54.	UR
126-99-8	Chloroprene	11.	U	11.	U	11.	U	11.	U	11.	U	11.	UJ
107-13-1	Acrylonitrile	54.	UR	53.	UR	54.	UR	54.	UR	54.	UR	54.	UR
123-91-1	1,4-Dioxane	54.	UR	53.	UR	54.	UR	54.	UR	54.	UR	54.	UR
126-98-7	Methacrylonitrile	54.	U	53.	U	54.	U	54.	U	54.	U	54.	UJ
74-95-3	Methylene bromide	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
78-83-1	Isobutyl alcohol	540.	UR	530.	UR	540.	UR	540.	UR	540.	UR	540.	UR
106-93-4	1, 2-Dibromoethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
630-20-6	1,1,1,2-Tetrachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
95-47-6	o-Xylene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
96-18-4	1,2,3-Trichloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
110-57-6	trans-1,4-Dichloro-2-butene	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
97-63-2	Ethyl methacrylate	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
76-01-7	Pentachloroethane	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ
99000-76-0	XYLENE (META/PARA)	5.	U	5.	U	5.	U	5.	U	5.	U	5.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 VOA								
SAMPLE ID ------->	694-S-B017-02		694-S-B018-01		694-S-B019-01			
ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901			
LAB SAMPLE ID --->	7090-05		7090-06		7090-08			
ID FROM REPORT -->	694SB01702		694SB01801		694SB01901			
SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97			
DATE ANALYZED --->	01/23/97		01/23/97		01/23/97			
MATRIX ---------->	Soil		Soil		Soil			
UNITS ---------->	UG/KG		UG/KG		UG/KG			
CAS # Parameter	7090	VAL	7090	VAL	7090	VAL		
74-87-3 Chloromethane	5.	U	5.	U	5.	U		
74-83-9 Bromomethane	5.	U	5.	U	5.	U		
75-01-4 Vinyl chloride	5.	U	5.	U	5.	U		
75-00-3 Chloroethane	5.	U	5.	U	5.	U		
75-09-2 Methylene chloride	5.	U	5.	U	5.	U		
67-64-1 Acetone	11.	U	11.	U	11.	U		
75-15-0 Carbon disulfide	5.	U	5.	U	5.	U		
75-35-4 1,1-Dichloroethene	5.	U	5.	U	5.	U		
75-34-3 1,1-Dichloroethane	5.	U	5.	U	5.	U		
156-60-5 trans-1,2-Dichloroethene	5.	U	5.	U	5.	U		
67-66-3 Chloroform	5.	U	5.	U	5.	U		
107-06-2 1,2-Dichloroethane	5.	U	5.	U	5.	U		
78-93-3 2-Butanone (MEK)	11.	U	11.	U	11.	U		
71-55-6 1,1,1-Trichloroethane	5.	U	5.	U	5.	U		
56-23-5 Carbon tetrachloride	5.	U	5.	U	5.	U		
108-05-4 Vinyl acetate	11.	U	11.	U	11.	U		
78-87-5 1,2-Dichloropropane	5.	U	5.	U	5.	U		
10061-01-5 cis-1,3-Dichloropropene	5.	U	5.	U	5.	U		
79-01-6 Trichloroethene	5.	U	5.	U	5.	U		
124-48-1 Dibromochloromethane	5.	U	5.	U	5.	U		
79-00-5 1,1,2-Trichloroethane	5.	U	5.	U	5.	U		
80-62-6 Methyl methacrylate	5.	U	5.	U	5.	U		
71-43-2 Benzene	5.	U	5.	U	5.	U		
10061-02-6 trans-1,3-Dichloropropene	5.	U	5.	U	5.	U		
75-25-2 Bromoform	5.	U	5.	U	5.	U		
108-10-1 4-Methyl-2-Pentanone (MIBK)	11.	U	11.	U	11.	U		
591-78-6 2-Hexanone	11.	U	11.	U	11.	U		
127-18-4 Tetrachloroethene	5.	U	5.	U	5.	U		
79-34-5 1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U		
108-88-3 Toluene	5.	U	5.	U	5.	U		
108-90-7 Chlorobenzene	5.	U	5.	U	5.	U		
100-41-4 Ethylbenzene	5.	U	5.	U	5.	U		
100-42-5 Styrene	5.	U	5.	U	5.	U		
75-71-8 Dichlorodifluoromethane	5.	U	5.	U	5.	U		
75-69-4 Trichlorofluoromethane	5.	U	5.	U	5.	U		
74-88-4 Methyl Iodide	5.	U	5.	U	5.	U		
107-05-1 3-Chloropropene	5.	U	5.	U	5.	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

X9 VOA									
	SAMPLE ID ------>	694-S-B017-02		694-S-B018-01		694-S-B019-01			
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901			
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08			
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901			
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97			
	DATE ANALYZED --->	01/23/97		01/23/97		01/23/97			
	MATRIX ---------->	Soil		Soil		Soil			
	UNITS ----------->	UG/KG		UG/KG		UG/KG			
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL		
107-12-0	Propionitrile	54.	UR	54.	UR	54.	UR		
75-05-8	Acetonitrile	54.	UR	54.	UR	54.	UR		
107-02-8	Acrolein	54.	UR	54.	UR	54.	UR		
126-99-8	Chloroprene	11.	U	11.	U	11.	U		
107-13-1	Acrylonitrile	54.	UR	54.	UR	54.	UR		
123-91-1	1,4-Dioxane	54.	UR	54.	UR	54.	UR		
126-98-7	Methacrylonitrile	54.	U	54.	U	54.	U		
74-95-3	Methylene bromide	5.	U	5.	U	5.	U		
78-83-1	Isobutyl alcohol	540.	UR	540.	UR	540.	UR		
106-93-4	1, 2-Dibromoethane	5.	U	5.	U	5.	U		
630-20-6	1,1,1,2-Tetrachloroethane	5.	U	5.	U	5.	U		
95-47-6	o-Xylene	5.	U	5.	U	5.	U		
96-18-4	1,2,3-Trichloropropane	5.	U	5.	U	5.	U		
110-57-6	trans-1,4-Dichloro-2-butene	5.	U	5.	U	5.	U		
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U	5.	U	5.	U		
97-63-2	Ethyl methacrylate	5.	U	5.	U	5.	U		
76-01-7	Pentachloroethane	5.	U	5.	U	5.	U		
9000-76-0	XYLENE (META/PARA)	5.	U	5.	U	5.	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

ANIDE													
	SAMPLE ID ------>	694-S-B003-01		694-S-B004-01		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02	
	ORIGINAL ID ----->	694SB00301		694SB00401		694SB00401		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7085-01		7085-02		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00301		694SB00401		694SB00401		694SB00802		697SB00901		694SB00902	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/21/97		01/21/97		01/21/97		01/21/97		01/21/97		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
57-12-5	Cyanide (CN)	0.14	U	0.7	U	0.68	U	0.76	U	0.65	U	0.67	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

YANIDE										
	SAMPLE ID ------>	694-S-B011-01		694-S-B012-01		694-S-B013-01		694-S-B016-01		694-S-B016-02	
	ORIGINAL ID ----->	694SB01101		694SB01201		694SB01301		694SB01601		694SB01602	
	LAB SAMPLE ID --->	7085-05		7085-06		7085-07		7085-08		7085-09	
	ID FROM REPORT -->	694SB01101		694SB01201		694SB01301		694SB01601		694SB01602	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/21/97		01/21/97		01/21/97		01/21/97		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
57-12-5	Cyanide (CN)	0.12	U	0.12	U	0.74	U	0.56	U	0.13	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EXPLOSIVES

SAMPLE ID ------->	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B005-01		694-S-B006-01	
ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		7074-09		7074-07	
ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		01/21/97		01/21/97		01/21/97	
DATE ANALYZED --->	01/29/97		01/29/97		01/29/97		01/29/97		01/29/97		01/29/97	
MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS # Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
118-96-7 Trinitrotoluene, 2,4,6- (TNT)	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
121-14-2 2,4-Dinitrotoluene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
121-82-4 RDX (Cyclonite)	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
5377-32-6 1,3,5-Trinitrobenzene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
2691-41-0 HMX	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
5572-78-2 2-Am-DNT	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
479-45-8 Tetryl	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
606-20-2 2,6-Dinitrotoluene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
88-72-2 o-Nitrotoluene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
98-95-3 Nitrobenzene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
99-08-1 m-Nitrotoluene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
99-65-0 1,3-Dinitrobenzene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
99-99-0 p-Nitrotoluene	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
9406-51-0 4-AM-DNT	577.	U	668.	U	702.	U	704.	U	726.	U	569.	U
99-35-4 1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0 4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PLOSIVES

SAMPLE ID ------->	694-S-B007-01	694-S-B007-02	694-S-B008-01	694-S-B008-02	694-S-B009-01	694-S-B009-02
ORIGINAL ID ----->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
LAB SAMPLE ID --->	7074-05	7074-06	7085-12	7085-13	7085-03	7085-04
ID FROM REPORT -->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/16/97	01/16/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE ANALYZED --->	01/29/97	01/29/97	01/29/97	01/29/97	01/29/97	01/29/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
121-14-2	2,4-Dinitrotoluene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
121-82-4	RDX (Cyclonite)	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
5377-32-6	1,3,5-Trinitrobenzene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
2691-41-0	HMX	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
5572-78-2	2-Am-DNT	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
479-45-8	Tetryl	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
606-20-2	2,6-Dinitrotoluene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
88-72-2	o-Nitrotoluene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
98-95-3	Nitrobenzene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
99-08-1	m-Nitrotoluene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
99-65-0	1,3-Dinitrobenzene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
99-99-0	p-Nitrotoluene	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
9406-51-0	4-AM-DNT	654.	U	709.	U	711.	U	772.	U	645.	U	669.	U
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

XPLOSIVES													
	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE ANALYZED --->	01/29/97		01/29/97		01/29/97		01/30/97		01/30/97		01/29/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
121-14-2	2,4-Dinitrotoluene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
121-82-4	RDX (Cyclonite)	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
25377-32-6	1,3,5-Trinitrobenzene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
2691-41-0	HMX	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
35572-78-2	2-Am-DNT	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
479-45-8	Tetryl	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
606-20-2	2,6-Dinitrotoluene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
88-72-2	o-Nitrotoluene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
98-95-3	Nitrobenzene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
99-08-1	m-Nitrotoluene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
99-65-0	1,3-Dinitrobenzene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
99-99-0	p-Nitrotoluene	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
19406-51-0	4-AM-DNT	500.	U	634.	U	627.	U	500.	U	500.	U	735.	U
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

KPLOSIVES													
	SAMPLE ID ------->	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE ANALYZED ---->	01/29/97		01/29/97		01/29/97		01/29/97		01/29/97		01/29/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
121-14-2	2,4-Dinitrotoluene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
121-82-4	RDX (Cyclonite)	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
25377-32-6	1,3,5-Trinitrobenzene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
2691-41-0	HMX	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
35572-78-2	2-Am-DNT	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
479-45-8	Tetryl	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
606-20-2	2,6-Dinitrotoluene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
88-72-2	o-Nitrotoluene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
98-95-3	Nitrobenzene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
99-08-1	m-Nitrotoluene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
99-65-0	1,3-Dinitrobenzene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
99-99-0	p-Nitrotoluene	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
19406-51-0	4-AM-DNT	500.	U	500.	U	500.	U	588.	U	655.	U	500.	U
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

XPLOSIVES													
	SAMPLE ID ------>	694-S-B017-02		694-S-B018-01		694-S-B019-01		694-S-B040-01		694-S-B041-01		694-S-B041-02	
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901		694SB04001		694SB04101		694SB04102	
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08		41664.03		41664.01		41664.02	
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901		694SB04001		694SB04101		694SB04102	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		12/21/99		12/21/99		12/21/99	
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		01/07/00		01/07/00		01/07/00	
	DATE ANALYZED --->	01/29/97		01/29/97		01/30/97		01/09/00		01/09/00		01/09/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	41664	VAL	41664	VAL	41664	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
121-14-2	2,4-Dinitrotoluene	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
121-82-4	RDX (Cyclonite)	500.	U	500.	U	500.	U	1000.	U	952.	U	1000.	U
25377-32-6	1,3,5-Trinitrobenzene	500.	U	500.	U	500.	U	NR		NR		NR	
2691-41-0	HMX	500.	U	500.	U	500.	U	2200.	U	2100.	U	2200.	U
35572-78-2	2-Am-DNT	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
479-45-8	Tetryl	500.	U	500.	U	500.	U	650.	U	619.	U	650.	U
606-20-2	2,6-Dinitrotoluene	500.	U	500.	U	500.	U	260.	U	248.	U	260.	U
88-72-2	o-Nitrotoluene	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
98-95-3	Nitrobenzene	500.	U	500.	U	500.	U	260.	U	248.	U	260.	U
99-08-1	m-Nitrotoluene	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
99-65-0	1,3-Dinitrobenzene	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
99-99-0	p-Nitrotoluene	500.	U	500.	U	500.	U	250.	U	238.	U	250.	U
19406-51-0	4-AM-DNT	500.	U	500.	U	500.	U	NR		NR		NR	
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		250.	U	238.	U	250.	U
1946-51-0	4-AM-DNT	NR		NR		NR		250.	U	238.	U	250.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EXPLOSIVES													
	SAMPLE ID ------>	694-S-B043-01		694-S-B043-02		694-S-B044-01		694-S-B044-02		694-S-B045-01		694-S-B045-02	
	ORIGINAL ID ----->	694SB04301		694SB04302		694SB04401		694SB04402		694SB04501		694SB04502	
	LAB SAMPLE ID --->	41664.04		41664.05		41664.06		41664.07		41664.08		41664.09	
	ID FROM REPORT -->	694SB04301		694SB04302		694SB04401		694SB04402		694SB04501		694SB04502	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE EXTRACTED -->	01/07/00		01/07/00		01/07/00		01/07/00		01/07/00		01/07/00	
	DATE ANALYZED --->	01/09/00		01/09/00		01/09/00		01/09/00		01/08/00		01/08/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41664	VAL	41664	VAL	41664	VAL	41664	VAL	41664	VAL	41664	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
121-14-2	2,4-Dinitrotoluene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
121-82-4	RDX (Cyclonite)	1000.	U	1000.	U	952.	U	1000.	U	1000.	U	1000.	U
25377-32-6	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
2691-41-0	HMX	2200.	U	2200.	U	2100.	U	2200.	U	2200.	U	2200.	U
35572-78-2	2-Am-DNT	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
479-45-8	Tetryl	650.	U	650.	U	619.	U	650.	U	650.	U	650.	U
606-20-2	2,6-Dinitrotoluene	260.	U	260.	U	248.	U	260.	U	260.	U	260.	U
88-72-2	o-Nitrotoluene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
98-95-3	Nitrobenzene	260.	U	260.	U	248.	U	260.	U	260.	U	260.	U
99-08-1	m-Nitrotoluene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
99-65-0	1,3-Dinitrobenzene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
99-99-0	p-Nitrotoluene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
19406-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	
99-35-4	1,3,5-Trinitrobenzene	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U
1946-51-0	4-AM-DNT	250.	U	250.	U	238.	U	250.	U	250.	U	250.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

XPLOSIVES

SAMPLE ID ------->	694-S-B046-01
ORIGINAL ID ----->	694SB04601
LAB SAMPLE ID --->	41664.10
ID FROM REPORT -->	694SB04601
SAMPLE DATE ----->	12/20/99
DATE EXTRACTED -->	01/07/00
DATE ANALYZED --->	01/08/00
MATRIX ---------->	Soil
UNITS ---------->	UG/KG

CAS #	Parameter	41664	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	250.	U
121-14-2	2,4-Dinitrotoluene	250.	U
121-82-4	RDX (Cyclonite)	1000.	U
25377-32-6	1,3,5-Trinitrobenzene	NR	
2691-41-0	HMX	2200.	U
35572-78-2	2-Am-DNT	250.	U
479-45-8	Tetryl	650.	U
606-20-2	2,6-Dinitrotoluene	260.	U
88-72-2	o-Nitrotoluene	250.	U
98-95-3	Nitrobenzene	260.	U
99-08-1	m-Nitrotoluene	250.	U
99-65-0	1,3-Dinitrobenzene	250.	U
99-99-0	p-Nitrotoluene	250.	U
19406-51-0	4-AM-DNT	NR	
99-35-4	1,3,5-Trinitrobenzene	250.	U
1946-51-0	4-AM-DNT	250.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

HERB

SAMPLE ID ------->	694-S-B001-01	694-S-B002-01	694-S-B003-01	694-S-B004-01	694-S-B005-01	694-S-B006-01
ORIGINAL ID ----->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
LAB SAMPLE ID --->	7074-08	7074-10	7085-01	7085-02	7074-09	7074-07
ID FROM REPORT -->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/15/97	01/15/97
DATE EXTRACTED -->	01/16/97	01/16/97	01/30/97	01/30/97	01/16/97	01/16/97
DATE ANALYZED --->	01/30/97	01/30/97	02/06/97	02/07/97	01/30/97	01/30/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
94-75-7	2,4-D	80.4	UJ	93.1	UJ	97.8	U	98.1	U	101.	UJ	79.4	UJ
93-76-5	2,4,5-T	19.5	U	22.6	U	23.7	U	23.8	UJ	24.5	U	19.2	U
93-72-1	2,4,5-TP (Silvex)	17.1	U	19.8	U	20.8	U	20.8	U	21.5	U	16.8	U
88-85-7	Dinoseb	45.2	U	52.4	U	55.	U	55.2	U	56.9	U	44.6	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

HERB

SAMPLE ID ------>	694-S-B007-01	694-S-B007-02	694-S-B008-01	694-S-B008-02	694-S-B009-01	694-S-B009-02
ORIGINAL ID ----->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
LAB SAMPLE ID --->	7074-05	7074-06	7085-12	7085-13	7085-03	7085-04
ID FROM REPORT -->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/16/97	01/16/97
DATE EXTRACTED -->	01/16/97	01/16/97	01/30/97	01/30/97	01/30/97	01/30/97
DATE ANALYZED --->	01/29/97	01/29/97	02/19/97	02/18/97	02/07/97	02/19/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
94-75-7	2,4-D	91.2	UJ	98.8	UJ	99.1	U	107.	U	89.8	U	93.3	U
93-76-5	2,4,5-T	22.1	U	24.	U	24.	U	26.1	U	21.8	UJ	22.6	U
93-72-1	2,4,5-TP (Silvex)	19.4	U	21.	U	21.	U	22.8	U	19.1	U	19.8	U
88-85-7	Dinoseb	51.3	U	55.6	U	55.7	U	60.5	U	50.5	U	52.5	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

HERB													
	SAMPLE ID ------->	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	7090-01		7085-05		7085-06		7090-09		7090-10		7085-07	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/30/97		01/30/97		01/30/97		01/30/97		01/30/97		01/30/97	
	DATE ANALYZED --->	02/18/97		02/19/97		02/19/97		02/11/97		02/11/97		02/19/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
94-75-7	2,4-D	108.	U	88.3	U	87.3	U	81.2	U	86.7	U	102.	U
93-76-5	2,4,5-T	26.3	U	21.4	U	21.2	U	19.7	U	21.	U	24.8	U
93-72-1	2,4,5-TP (Silvex)	23.	U	18.8	U	18.5	U	17.2	U	18.4	U	21.8	U
88-85-7	Dinoseb	61.	U	49.7	U	49.1	U	45.7	U	48.7	U	57.6	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

HERB						
SAMPLE ID ------>	694-S-B014-01	694-S-B015-01	694-S-B015-02	694-S-B016-01	694-S-B016-02	694-S-B017-01
ORIGINAL ID ----->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
LAB SAMPLE ID --->	7090-07	7090-02	7090-03	7085-08	7085-09	7090-04
ID FROM REPORT -->	694SB01401	694SB01501	694SB01502	694SB01601	694SB01602	694SB01701
SAMPLE DATE ----->	01/17/97	01/17/97	01/17/97	01/16/97	01/16/97	01/17/97
DATE EXTRACTED -->	01/30/97	01/30/97	01/30/97	01/30/97	01/30/97	01/30/97
DATE ANALYZED --->	02/19/97	02/18/97	02/18/97	02/19/97	02/19/97	02/18/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
94-75-7	2,4-D	84.3	U	79.9	U	87.6	U	81.8	U	91.3	U	84.7	U
93-76-5	2,4,5-T	20.4	U	19.4	U	21.2	U	19.8	U	22.1	U	20.5	U
93-72-1	2,4,5-TP (Silvex)	17.9	U	17.	U	18.6	U	17.4	U	19.4	U	18.	U
88-85-7	Dinoseb	47.4	U	45.	U	49.3	U	46.	U	51.4	U	47.7	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

ERB

SAMPLE ID ------->	694-S-B017-02	694-S-B018-01	694-S-B019-01
ORIGINAL ID ----->	694SB01702	694SB01801	694SB01901
LAB SAMPLE ID --->	7090-05	7090-06	7090-08
ID FROM REPORT -->	694SB01702	694SB01801	694SB01901
SAMPLE DATE ----->	01/17/97	01/17/97	01/17/97
DATE EXTRACTED -->	01/30/97	01/30/97	01/30/97
DATE ANALYZED --->	02/18/97	02/18/97	02/19/97
MATRIX ---------->	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL
94-75-7	2,4-D	76.5	U	82.1	U	77.2	U
93-76-5	2,4,5-T	18.5	U	19.9	U	18.7	U
93-72-1	2,4,5-TP (Silvex)	16.2	U	17.4	U	16.4	U
88-85-7	Dinoseb	43.	U	46.2	U	43.4	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

XACHROME													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B005-01		694-S-B006-01	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		7074-09		7074-07	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB00601	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		01/15/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/29/97		01/29/97		01/23/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
8540-29-9	Chromium (Hexavalent)	0.23	UJ	0.27	UJ	0.28	UJ	0.28	UJ	0.29	UJ	0.23	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EXACHROME													
	SAMPLE ID ------>	694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02		694-S-B009-01		694-S-B009-02	
	ORIGINAL ID ----->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	LAB SAMPLE ID --->	7074-05		7074-06		7085-12		7085-13		7085-03		7085-04	
	ID FROM REPORT -->	694SB00701		694SB00702		694SB00801		694SB00802		694SB00901		694SB00902	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/16/97		01/16/97	
	DATE ANALYZED --->	01/23/97		01/23/97		01/29/97		01/29/97		01/29/97		01/29/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
18540-29-9	Chromium (Hexavalent)	0.26	UJ	0.28	UJ	0.28	UJ	0.31	UJ	0.26	UJ	0.27	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EXACHROME							
SAMPLE ID ------>	694-S-B010-01	694-S-B011-01	694-S-B011-02	694-S-B012-01	694-S-B012-02	694-S-B013-01
ORIGINAL ID ----->	694SB01001	694SB01101	694SB01102	694SB01201	694SB01202	694SB01301
LAB SAMPLE ID --->	7090-01	7085-05	7085-06	7090-09	7090-10	7085-07
ID FROM REPORT -->	694SB01001	694SB01101	694SB01102	694SB01201	694SB01202	694SB01301
SAMPLE DATE ----->	01/17/97	01/16/97	01/16/97	01/17/97	01/17/97	01/16/97
DATE ANALYZED --->	02/03/97	01/29/97	01/29/97	02/03/97	02/03/97	01/29/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
18540-29-9	Chromium (Hexavalent)	0.31	UJ	0.25	UJ	0.25	UJ	0.23	UJ	0.25	UJ	0.29	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

XACHROME													
	SAMPLE ID ------>	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE ANALYZED --->	02/03/97		02/03/97		02/03/97		01/29/97		01/29/97		02/03/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
8540-29-9	Chromium (Hexavalent)	0.24	UJ	0.24	UJ	0.25	UJ	0.24	UJ	0.26	UJ	0.24	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EXACHROME								
	SAMPLE ID ------>	694-S-B017-02		694-S-B018-01		694-S-B019-01		
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901		
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08		
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901		
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		
	DATE ANALYZED --->	02/03/97		02/03/97		02/03/97		
	MATRIX ---------->	Soil		Soil		Soil		
	UNITS ----------->	MG/KG		MG/KG		MG/KG		
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	
18540-29-9	Chromium (Hexavalent)	0.22	UJ	0.24	UJ	0.22	UJ	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EAD(PB)												
	SAMPLE ID ------>	694-S-B053-01		694-S-B053-02		694-S-B054-01		694-C-B054-01		694-S-B054-02		694-C-B054-02
	ORIGINAL ID ----->	694SB05301		694SB05302		694SB05401		694CB05401		694SB05402		694CB05402
	LAB SAMPLE ID --->	49435.01		49435.02		49435.09		49435.10		49435.11		49435.12
	ID FROM REPORT -->	694SB05301		694SB05302		694SB05401		694CB05401		694SB05402		694CB05402
	SAMPLE DATE ----->	04/18/02		04/18/02		04/18/02		04/18/02		04/18/02		04/18/02
	DATE EXTRACTED -->	04/24/02		04/24/02		04/24/02		04/24/02		04/24/02		04/24/02
	DATE ANALYZED --->	04/25/02		04/25/02		04/25/02		04/25/02		04/25/02		04/25/02
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil
	UNITS ----------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG
CAS #	Parameter	49435	NV	49435	NV	49435	NV	49435	NV	49435	NV	49435	NV
7439-92-1	Lead (Pb)	253.		362.		349.		207.		60.6		91.	

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EAD(PB)							
	SAMPLE ID ------->	694-S-B055-01	694-S-B055-02	694-S-B056-01	694-S-B056-02	694-S-B057-01	694-S-B057-02
	ORIGINAL ID ----->	694SB05501	694SB05502	694SB05601	694SB05602	694SB05701	694SB05702
	LAB SAMPLE ID --->	49435.19	49435.20	49435.07	49435.08	49435.05	49435.06
	ID FROM REPORT -->	694SB05501	694SB05502	694SB05601	694SB05602	694SB05701	694SB05702
	SAMPLE DATE ----->	04/18/02	04/18/02	04/18/02	04/18/02	04/18/02	04/18/02
	DATE EXTRACTED -->	04/24/02	04/24/02	04/24/02	04/24/02	04/24/02	04/24/02
	DATE ANALYZED --->	04/25/02	04/25/02	04/25/02	04/25/02	04/25/02	04/25/02
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CAS #	Parameter	49435 NV	49435 NV	49435 NV	49435 NV	49435 NV	49435 NV
7439-92-1	Lead (Pb)	31.1	74.9	71.5	40.7	94.5	19.7

*** Unvalidated Data - Do NOT Cite ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EAD(PB)												
	SAMPLE ID ------->	694-S-B058-01		694-S-B058-02		694-S-B059-01		694-S-B059-02		694-S-B060-01		694-S-B060-02
	ORIGINAL ID ----->	694SB05801		694SB05802		694SB05901		694SB05902		694SB06001		694SB06002
	LAB SAMPLE ID --->	49435.17		49435.18		49435.15		49435.16		49435.13		49435.14
	ID FROM REPORT -->	694SB05801		694SB05802		694SB05901		694SB05902		694SB06001		694SB06002
	SAMPLE DATE ----->	04/18/02		04/18/02		04/18/02		04/18/02		04/18/02		04/18/02
	DATE EXTRACTED -->	04/24/02		04/24/02		04/24/02		04/24/02		04/24/02		04/24/02
	DATE ANALYZED --->	04/25/02		04/25/02		04/25/02		04/25/02		04/25/02		04/25/02
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil
	UNITS ----------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG
CAS #	Parameter	49435	NV	49435	NV	49435	NV	49435	NV	49435	NV	49435 NV
7439-92-1	Lead (Pb)	542.		178.		116.		38.4		8.2		11.1

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EAD(PB)

SAMPLE ID ------->	694-S-B061-01	694-S-B061-02	694-S-B062-01	694-S-B062-02	694-S-B063-01	694-S-B063-02
ORIGINAL ID ----->	694SB06101	694SB06102	694SB06201	694SB06202	694SB06301	694SB06302
LAB SAMPLE ID --->	49435.03	49435.04	49809.01	49809.02	49809.03	49809.04
ID FROM REPORT -->	694SB06101	694SB06102	694SB06201	694SB06202	694SB06301	694SB06302
SAMPLE DATE ----->	04/18/02	04/18/02	05/22/02	05/22/02	05/22/02	05/22/02
DATE EXTRACTED -->	04/24/02	04/24/02	05/24/02	05/24/02	05/24/02	05/24/02
DATE ANALYZED --->	04/25/02	04/25/02	05/29/02	05/29/02	05/29/02	05/29/02
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CAS # Parameter	49435 NV	49435 NV	49809	49809	49809	49809
7439-92-1 Lead (Pb)	12.6	18.2	76.5	7.2	45.7	86.5

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

EAD(PB)							
	SAMPLE ID ------->	694-S-B064-01	694-S-B064-02	694-S-B065-01	694-S-B065-02	694-S-B41A-01	694-S-B41A-02
	ORIGINAL ID ----->	694SB06401	694SB06402	694SB06501	694SB06502	694SB41A01	694SB41A02
	LAB SAMPLE ID --->	49809.05	49809.06	49809.07	49809.08	49435.21	49435.22
	ID FROM REPORT -->	694SB06401	694SB06402	694SB06501	694SB06502	694SB41A01	694SB41A02
	SAMPLE DATE ----->	05/22/02	05/22/02	05/22/02	05/22/02	04/18/02	04/18/02
	DATE EXTRACTED -->	05/24/02	05/24/02	05/24/02	05/24/02	04/24/02	04/24/02
	DATE ANALYZED --->	05/29/02	05/29/02	05/29/02	05/29/02	04/25/02	04/25/02
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CAS #	Parameter	49809	49809	49809	49809	49435 NV	49435 NV
7439-92-1	Lead (Pb)	90.3	84.3	75.3	87.8	17.3	125.

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

PLP-METAL													
	SAMPLE ID ------>	694-S-B005-S1		694-S-B005-S2		694-S-B009-S1		694-S-B009-S2		694-S-B012-S1		694-S-B012-S2	
	ORIGINAL ID ----->	694SB005S1		694SB005S2		694SB009S1		694SB009S2		694SB012S1		694SB012S2	
	LAB SAMPLE ID --->	S916905*3		S916905*4		S916905*1		S916905*2		S916905*5		S916905*6	
	ID FROM REPORT -->	694SB005S1		694SB005S2		694SB009S1		694SB009S2		694SB012S1		694SB012S2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/21/99		10/21/99		10/21/99		10/21/99		10/21/99		10/21/99	
	DATE ANALYZED --->	10/22/99		10/22/99		10/22/99		10/22/99		10/22/99		10/22/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7429-90-5	Aluminum (Al)	17700.	J	8110.	J	10400.	J	2020.	J	189.	J	1690.	J
7440-36-0	Antimony (Sb)	1.8	U	1.8	U	4.5	J	3.6	J	1.8	U	12.9	J
7440-38-2	Arsenic (As)	11.		6.4	J	7.8	J	9.6	J	3.6	U	3.6	U
7440-39-3	Barium (Ba)	29.7		15.		19.7		5.8	J	5.4	J	11.1	
7440-41-7	Beryllium (Be)	0.21	J	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7440-43-9	Cadmium (Cd)	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
7440-70-2	Calcium (Ca)	13200.		7170.		12400.		12500.		146000.		15800.	
7440-47-3	Chromium (Cr)	30.		16.7		16.6		4.1	J	0.8	U	3.9	J
7440-48-4	Cobalt (Co)	1.5	J	0.92	J	1.1	J	0.7	U	0.7	U	0.7	U
7440-50-8	Copper (Cu)	14.3	J	8.4	J	21.4		11.5	J	1.1	J	3.5	J
7439-89-6	Iron (Fe)	13800.	J	7140.	J	7240.	J	1060.	J	109.	J	1510.	J
7439-92-1	Lead (Pb)	11.2		4.7	J	13.1		2.	U	2.	U	2.1	J
7439-95-4	Magnesium (Mg)	4240.		3220.		3420.		5920.		17700.		6820.	
7439-96-5	Manganese (Mn)	60.7		33.3		23.5		5.5	J	0.4	U	7.7	J
7440-02-0	Nickel (Ni)	7.4	J	3.4	J	5.6	J	2.1	J	1.2	U	2.2	J
7440-09-7	Potassium (K)	2220.		1310.		1400.		7080.		9900.		6960.	
7782-49-2	Selenium (Se)	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ
7440-22-4	Silver (Ag)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
7440-23-5	Sodium (Na)	10700.		21600.		9340.		73000.		19400.		46300.	
7440-28-0	Thallium (Tl)	3.2	UJ	3.2	UJ	3.2	UJ	4.8	J	3.2	UJ	3.2	UJ
7440-31-5	Tin (Sn)	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
7440-62-2	Vanadium (V)	43.3		22.6		25.1		13.		2.4	J	6.9	J
7440-66-6	Zinc (Zn)	53.3		37.		42.4		18.1	U	3.7	U	12.2	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SPLP-METAL

SAMPLE ID ------>	694-S-B014-S1		694-S-B014-S2		694-S-B019-S1		694-C-B019-S1		694-S-B019-S2		
ORIGINAL ID ----->	694SB014S1		694SB014S2		694SB019S1		694CB019S1		694SB019S2		
LAB SAMPLE ID --->	S916905*7		S916905*8		S916905*9		S916905*11		S916905*10		
ID FROM REPORT -->	694SB014S1		694SB014S2		694SB019S1		694CB019S1		694SB019S2		
SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99		
DATE EXTRACTED -->	10/21/99		10/21/99		10/21/99		10/21/99		10/21/99		
DATE ANALYZED --->	10/22/99		10/22/99		10/22/99		10/22/99		10/22/99		
MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		
UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L		
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7429-90-5	Aluminum (Al)	1970.	J	5000.	J	1140.	J	754.	J	123.	U
7440-36-0	Antimony (Sb)	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
7440-38-2	Arsenic (As)	6.2	J	3.8	J	5.	J	3.6	U	3.6	U
7440-39-3	Barium (Ba)	10.6		12.2		4.	J	2.3	J	6.9	J
7440-41-7	Beryllium (Be)	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7440-43-9	Cadmium (Cd)	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
7440-70-2	Calcium (Ca)	23400.		20700.		32900.	J	55900.	J	72600.	
7440-47-3	Chromium (Cr)	4.3	J	9.6	J	3.2	J	1.9	J	0.8	U
7440-48-4	Cobalt (Co)	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
7440-50-8	Copper (Cu)	7.7	J	6.7	J	6.4	J	4.5	J	3.2	J
7439-89-6	Iron (Fe)	1390.	J	3590.	J	679.	J	415.	J	54.2	J
7439-92-1	Lead (Pb)	3.1	J	4.1	J	2.	U	2.	U	2.	U
7439-95-4	Magnesium (Mg)	2950.		2400.		4850.		6420.		12900.	
7439-96-5	Manganese (Mn)	7.6	J	17.9		3.7	J	1.9	J	0.4	U
7440-02-0	Nickel (Ni)	1.6	J	2.9	J	1.2	U	1.2	U	1.2	U
7440-09-7	Potassium (K)	2130.		1420.		5990.		6030.		11100.	
7782-49-2	Selenium (Se)	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ
7440-22-4	Silver (Ag)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
7440-23-5	Sodium (Na)	5620.		8050.		7790.		5270.		29700.	
7440-28-0	Thallium (Tl)	3.2	UJ	3.2	UJ	3.2	UJ	3.2	UJ	3.2	UJ
7440-31-5	Tin (Sn)	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
7440-62-2	Vanadium (V)	14.5		13.6		12.		10.2		5.8	J
7440-66-6	Zinc (Zn)	10.1	U	19.	U	10.7	U	5.1	U	5.7	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SPLP-PEST									
	SAMPLE ID ------>	694-S-B004-S1		694-C-B004-S1		694-S-B018-S1		694-S-B018-S2	
	ORIGINAL ID ----->	694SB004S1		694CB004S1		694SB018S1		694SB018S2	
	LAB SAMPLE ID --->	S916905*23		S916905*24		S916905*25		S916905*26	
	ID FROM REPORT -->	694SB004S1		694CB004S1		694SB018S1		694SB018S2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/18/99		10/18/99		10/18/99		10/18/99	
	DATE ANALYZED --->	10/29/99		10/29/99		10/29/99		10/29/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
319-84-6	alpha-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-85-7	beta-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-86-8	delta-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
58-89-9	gamma-BHC (Lindane)	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
76-44-8	Heptachlor	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
309-00-2	Aldrin	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
959-98-8	Endosulfan I	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
60-57-1	Dieldrin	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-55-9	4,4'-DDE	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-20-8	Endrin	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
33213-65-9	Endosulfan II	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-54-8	4,4'-DDD	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
50-29-3	4,4'-DDT	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-43-5	Methoxychlor	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
53494-70-5	Endrin ketone	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7421-93-4	Endrin aldehyde	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
5103-71-9	alpha-Chlordane	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
5103-74-2	gamma-Chlordane	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
8001-35-2	Toxaphene	5.	UJ	5.	UJ	5.	UJ	5.	UJ
12674-11-2	Aroclor-1016	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11104-28-2	Aroclor-1221	2.	UJ	2.	UJ	2.	UJ	2.	UJ
11141-16-5	Aroclor-1232	1.	UJ	1.	UJ	1.	UJ	1.	UJ
53469-21-9	Aroclor-1242	1.	UJ	1.	UJ	1.	UJ	1.	UJ
12672-29-6	Aroclor-1248	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11097-69-1	Aroclor-1254	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11096-82-5	Aroclor-1260	1.	UJ	1.	UJ	1.	UJ	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SPLP-SVOA									
	SAMPLE ID ------->	694-S-B013-S1		694-S-B013-S2					
	ORIGINAL ID ----->	694SB013S1		694SB013S2					
	LAB SAMPLE ID --->	S916905*31		S916905*32					
	ID FROM REPORT -->	694SB013S1		694SB013S2					
	SAMPLE DATE ----->	10/13/99		10/13/99					
	DATE EXTRACTED -->	10/19/99		10/22/99					
	DATE ANALYZED --->	10/21/99		10/25/99					
	MATRIX ---------->	Soil		Soil					
	UNITS ---------->	UG/L		UG/L					
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL				
108-95-2	Phenol	10.	U	10.	U				
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U				
95-57-8	2-Chlorophenol	10.	U	10.	U				
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U				
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U				
100-51-6	Benzyl alcohol	10.	U	10.	U				
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U				
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U				
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U				
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U				
108-39-4	3-Methylphenol (m-Cresol)	10.	U	10.	U				
67-72-1	Hexachloroethane	10.	U	10.	U				
98-95-3	Nitrobenzene	10.	U	10.	U				
78-59-1	Isophorone	10.	U	10.	U				
88-75-5	2-Nitrophenol	10.	U	10.	U				
105-67-9	2,4-Dimethylphenol	10.	U	10.	U				
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U				
65-85-0	Benzoic acid	50.	U	50.	U				
120-83-2	2,4-Dichlorophenol	10.	U	10.	U				
120-82-1	1,2,4-Trichlorobenzene	1.4	J	10.	U				
91-20-3	Naphthalene	10.	U	10.	U				
106-47-8	4-Chloroaniline	20.	U	20.	U				
87-68-3	Hexachlorobutadiene	10.	U	10.	U				
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U				
91-57-6	2-Methylnaphthalene	10.	U	10.	U				
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U				
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U				
95-95-4	2,4,5-Trichlorophenol	10.	U	10.	U				
91-58-7	2-Chloronaphthalene	10.	U	10.	U				
88-74-4	2-Nitroaniline	50.	U	50.	U				
208-96-8	Acenaphthylene	10.	U	10.	U				
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U				
99-09-2	3-Nitroaniline	50.	U	50.	U				
83-32-9	Acenaphthene	10.	U	10.	U				
51-28-5	2,4-Dinitrophenol	50.	U	50.	U				
132-64-9	Dibenzofuran	10.	U	10.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SPLP-SVOA								
	SAMPLE ID ------->	694-S-B013-S1		694-S-B013-S2				
	ORIGINAL ID ----->	694SB013S1		694SB013S2				
	LAB SAMPLE ID --->	S916905*31		S916905*32				
	ID FROM REPORT -->	694SB013S1		694SB013S2				
	SAMPLE DATE ----->	10/13/99		10/13/99				
	DATE EXTRACTED -->	10/19/99		10/22/99				
	DATE ANALYZED --->	10/21/99		10/25/99				
	MATRIX ---------->	Soil		Soil				
	UNITS ---------->	UG/L		UG/L				
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL			
100-02-7	4-Nitrophenol	50.	U	50.	U			
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U			
86-73-7	Fluorene	10.	U	10.	U			
84-66-2	Diethylphthalate	10.	U	10.	U			
131-11-3	Dimethyl phthalate	10.	U	10.	U			
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U			
100-01-6	4-Nitroaniline	50.	U	50.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	50.	U			
122-39-4	Diphenylamine	10.	U	10.	U			
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U			
118-74-1	Hexachlorobenzene	10.	U	10.	U			
87-86-5	Pentachlorophenol	50.	U	50.	U			
85-01-8	Phenanthrene	10.	U	10.	U			
120-12-7	Anthracene	10.	U	10.	U			
84-74-2	Di-n-butylphthalate	10.	U	10.	U			
206-44-0	Fluoranthene	10.	U	10.	U			
129-00-0	Pyrene	10.	U	10.	U			
85-68-7	Butylbenzylphthalate	10.	U	10.	U			
56-55-3	Benzo(a)anthracene	10.	U	10.	U			
91-94-1	3,3'-Dichlorobenzidine	20.	U	20.	U			
218-01-9	Chrysene	10.	U	10.	U			
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	10.	U			
117-84-0	Di-n-octyl phthalate	10.	U	10.	U			
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U			
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U			
50-32-8	Benzo(a)pyrene	10.	U	10.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U			
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U			
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U			
62-75-9	N-Nitrosodimethylamine	10.	U	10.	U			

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-DIOX

SAMPLE ID ------->	694-S-B001-01	694-S-B002-01	694-S-B003-01	694-S-B004-01	694-S-B005-01	694-S-B006-01
ORIGINAL ID ----->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
LAB SAMPLE ID --->	28177.07	28177.09	28195.01	28195.02	28177.08	28177.06
ID FROM REPORT -->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/15/97	01/15/97
DATE EXTRACTED -->	01/17/97	01/17/97	01/20/97	01/20/97	01/17/97	01/17/97
DATE ANALYZED --->	01/23/97	01/23/97	01/23/97	01/23/97	01/23/97	01/23/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG

CAS #	Parameter	28083	VAL	28083	VAL	28195	VAL	28195	VAL	28083	VAL	28083	VAL
1746-01-6	2378-TCDD	0.359	U	0.264	U	0.422	U	0.302	U	0.843	U	0.279	U
40321-76-4	12378-PeCDD	0.754	U	1.47	U	0.645	U	0.73	U	2.14	U	0.776	U
39227-28-6	123478-HxCDD	0.926	U	1.63	U	0.617	U	0.803	U	0.912	U	1.17	U
57653-85-7	123678-HxCDD	0.596	U	0.749	U	0.397	U	1.49		0.588	U	0.75	U
19408-74-3	123789-HxCDD	0.649	U	0.815	U	0.433	U	0.563	U	0.64	U	0.817	U
35822-46-9	1234678-HpCDD	0.981	U	9.37		10.		17.2		23.2		2.26	EMPC
3268-87-9	OCDD	5.76	EMPC	74.2		85.		117.		166.		10.6	
51207-31-9	2378-TCDF	0.266	U	0.322	U	0.309	U	0.286	U	0.686	U	0.306	U
57117-41-6	12378-PeCDF	0.458	U	0.444	U	0.443	U	0.29	U	1.19	U	0.353	U
57117-31-4	23478-PeCDF	0.46	U	0.445	U	0.444	U	0.291	U	1.19	U	0.354	U
70648-26-9	123478-HxCDF	0.535	U	0.52	U	0.59		0.687	EMPC	1.31	U	0.861	U
57117-44-9	123678-HxCDF	0.419	U	0.408	U	0.166	U	0.363	U	1.03	U	0.674	U
72918-21-9	123789-HxCDF	0.606	U	0.589	U	0.241	U	0.525	U	1.49	U	0.975	U
60851-34-5	234678-HxCDF	0.548	U	0.533	U	0.218	U	0.475	U	1.34	U	0.882	U
67562-39-4	1234678-HpCDF	0.866	U	1.92		1.87		2.51	EMPC	2.61	EMPC	0.793	U
55673-89-7	1234789-HpCDF	1.03	U	0.838	U	0.36	U	0.666	U	1.43	U	0.947	U
39001-02-0	OCDF	1.12	U	1.85	EMPC	3.13		5.91		4.02		1.09	U
41903-57-5	Total Tetra-Dioxins	0.359	U	0.264	U	0.422	U	0.302	U	2.23		1.01	
36088-22-9	Total Penta-Dioxins	0.754	U	1.47	U	0.645	U	0.73	U	2.14	U	0.776	U
34465-46-8	Total Hexa-Dioxins	0.596	U	12.6		5.81		1.75		20.		0.75	U
37871-00-4	Total Hepta-Dioxins	0.981	U	26.3		25.4		44.6		65.3		4.58	
55722-27-5	Total Tetra-Furans	0.266	U	0.322	U	0.309	U	1.28		0.686	U	0.306	U
30602-15-4	Total Penta-Furans	0.46	U	0.445	U	0.444	U	1.67		1.19	U	0.354	U
55684-94-1	Total Hexa-Furans	0.419	U	0.408	U	2.13		4.02		1.03	U	0.674	U
38998-75-3	Total Hepta-Furans	0.866	U	1.92		1.87		0.558	U	1.2	U	0.793	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-DIOX

SAMPLE ID ------->	694-S-B007-01	694-S-B007-02	694-S-B008-01	694-S-B008-02	694-S-B009-01	694-S-B009-02
ORIGINAL ID ----->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
LAB SAMPLE ID --->	28177.04	28177.05	28195.12	28195.13	28195.03	28195.04
ID FROM REPORT -->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/16/97	01/16/97
DATE EXTRACTED -->	01/17/97	01/17/97	01/20/97	01/20/97	01/20/97	01/20/97
DATE ANALYZED --->	01/23/97	01/23/97	01/24/97	01/24/97	01/23/97	01/23/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG	NG/KG

CAS #	Parameter	28083	VAL	28083	VAL	28195	VAL	28195	VAL	28195	VAL	28195	VAL
1746-01-6	2378-TCDD	0.603	U	0.326	U	0.411	U	0.318	U	0.361	U	0.417	U
0321-76-4	12378-PeCDD	2.65	U	0.896	U	2.06	U	1.64	U	2.19	U	1.58	U
9227-28-6	123478-HxCDD	1.49	U	1.33	U	1.72		0.774	U	0.521	U	0.888	U
7653-85-7	123678-HxCDD	3.73		0.858	U	7.91		0.877	EMPC	1.9		0.572	U
9408-74-3	123789-HxCDD	1.04	U	0.934	U	3.56		0.542	U	2.16		0.623	U
5822-46-9	1234678-HpCDD	44.		10.		77.7		11.8		42.7		3.36	
3268-87-9	OCDD	235.		65.8		492.		96.		314.		27.8	
1207-31-9	2378-TCDF	0.643	U	0.335	U	0.516	U	0.254	U	2.37	EMPC	0.392	U
7117-41-6	12378-PeCDF	0.995	U	0.358	U	1.11	EMPC	0.243	U	0.203	U	0.361	U
7117-31-4	23478-PeCDF	0.998	U	0.359	U	0.23	U	0.244	U	0.204	U	0.362	U
0648-26-9	123478-HxCDF	1.16	U	0.955	U	3.84	EMPC	1.4	EMPC	1.77	EMPC	1.39	EMPC
7117-44-9	123678-HxCDF	0.911	U	0.748	U	0.699	U	0.65	U	0.469	U	0.337	U
2918-21-9	123789-HxCDF	1.32	U	1.08	U	1.01	U	0.94	U	0.679	U	0.487	U
0851-34-5	234678-HxCDF	1.19	U	0.978	U	0.913	U	0.85	U	0.614	U	0.441	U
7562-39-4	1234678-HpCDF	6.31		0.968	EMPC	15.1		5.68		9.24		1.4	
5673-89-7	1234789-HpCDF	2.67	U	0.703	U	1.23	U	0.319	U	1.59	U	0.491	U
9001-02-0	OCDF	8.24		1.5	EMPC	27.3		6.55		19.3		1.7	
1903-57-5	Total Tetra-Dioxins	1.97		0.782		2.55		2.11		2.88		0.797	
6088-22-9	Total Penta-Dioxins	2.65	U	0.896	U	2.06	U	1.64	U	2.19	U	1.58	U
4465-46-8	Total Hexa-Dioxins	4.37		7.33		75.6		0.498	U	5.74		0.572	U
7871-00-4	Total Hepta-Dioxins	120.		30.2		197.		31.		112.		9.88	
5722-27-5	Total Tetra-Furans	0.643	U	0.335	U	2.67		0.254	U	6.87		0.392	U
0602-15-4	Total Penta-Furans	4.07		0.359	U	10.6		3.25		10.2		1.42	
5684-94-1	Total Hexa-Furans	4.33		0.748	U	23.8		3.85		8.42		0.637	
8998-75-3	Total Hepta-Furans	6.31		0.588	U	15.1		5.68		9.24		2.85	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-DIOX													
	SAMPLE ID ------>	694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B013-01	
	ORIGINAL ID ----->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	LAB SAMPLE ID --->	28212.01		28195.05		28195.06		28212.09		28212.10		28195.07	
	ID FROM REPORT -->	694SB01001		694SB01101		694SB01102		694SB01201		694SB01202		694SB01301	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/16/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/24/97		01/23/97		01/23/97		01/24/97		01/24/97		01/23/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	NG/KG		NG/KG		NG/KG		NG/KG		NG/KG		NG/KG	
CAS #	Parameter	28195	VAL	28195	VAL	28195	VAL	28195	VAL	28195	VAL	28195	VAL
1746-01-6	2378-TCDD	0.368	U	0.353	U	0.406	U	0.28	U	0.577	U	0.647	U
0321-76-4	12378-PeCDD	0.592	U	3.22	U	0.947	U	0.662	U	0.616	U	1.17	U
9227-28-6	123478-HxCDD	0.889		1.14	U	0.687	U	0.991	U	2.17	U	0.635	U
7653-85-7	123678-HxCDD	0.773	EMPC	3.2		1.79	EMPC	1.93	EMPC	5.76		0.409	U
9408-74-3	123789-HxCDD	1.98		2.13		1.8		1.46		3.38		1.12	EMPC
5822-46-9	1234678-HpCDD	20.7		44.7		48.8		39.2		61.6		19.4	
3268-87-9	OCDD	183.		396.		257.		325.		554.	J	159.	
1207-31-9	2378-TCDF	0.27	U	0.418	U	0.387	U	0.546	U	0.415	U	0.483	U
7117-41-6	12378-PeCDF	0.362	U	1.65		0.292	U	0.392	U	0.44	U	0.597	U
7117-31-4	23478-PeCDF	0.363	U	0.36	U	0.293	U	0.393	U	0.441	U	0.599	U
0648-26-9	123478-HxCDF	0.287	U	0.906	U	0.898	EMPC	1.5	EMPC	3.81	EMPC	0.775	U
7117-44-9	123678-HxCDF	0.225	U	0.71	U	0.388	U	0.485	U	1.07	U	0.607	U
2918-21-9	123789-HxCDF	0.325	U	1.03	U	0.561	U	0.701	U	1.55	U	0.878	U
0851-34-5	234678-HxCDF	0.294	U	0.928	U	0.507	U	0.634	U	1.4	U	0.794	U
7562-39-4	1234678-HpCDF	0.402	EMPC	6.11		3.62		4.54		10.3		0.532	EMPC
5673-89-7	1234789-HpCDF	0.225	U	0.967	U	0.958	U	0.775	U	0.79		0.519	U
9001-02-0	OCDF	0.396	EMPC	14.6		12.8		13.1		25.		0.978	EMPC
1903-57-5	Total Tetra-Dioxins	6.42		2.53		1.9		0.28	U	2.99		7.57	
6088-22-9	Total Penta-Dioxins	8.43		3.22	U	0.947	U	0.662	U	6.32		11.9	
4465-46-8	Total Hexa-Dioxins	69.8		52.8		43.6		1.57		49.2		77.2	
7871-00-4	Total Hepta-Dioxins	75.9		143.		221.		180.		193.		73.2	
5722-27-5	Total Tetra-Furans	0.27	U	1.39		0.708		1.84		0.415	U	0.483	U
0602-15-4	Total Penta-Furans	0.363	U	8.89		1.24		1.12		8.58		0.599	U
5684-94-1	Total Hexa-Furans	0.225	U	10.1		4.3		3.1		15.5		0.607	U
8998-75-3	Total Hepta-Furans	0.467		6.11		3.62		4.54		11.		1.38	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-DIOX													
	SAMPLE ID ------>	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	28212.07		28212.02		28212.03		28195.08		28195.09		28212.04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/24/97		01/24/97		01/24/97		01/23/97		01/24/97		01/24/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	NG/KG		NG/KG		NG/KG		NG/KG		NG/KG		NG/KG	
CAS #	Parameter	28195	VAL	28195	VAL	28195	VAL	28195	VAL	28195	VAL	28195	VAL
1746-01-6	2378-TCDD	0.602	U	0.277	U	0.327	U	0.434	U	0.258	U	0.317	U
0321-76-4	12378-PeCDD	1.66	U	1.15	U	1.44	U	2.86	U	2.12	U	0.562	U
9227-28-6	123478-HxCDD	1.5	U	0.649	U	0.713	U	1.17	U	1.05	U	0.508	U
7653-85-7	123678-HxCDD	3.44		0.814	EMPC	1.07		5.33		0.674	U	3.	EMPC
9408-74-3	123789-HxCDD	2.88		2.01		0.5	U	3.91		0.734	U	2.05	EMPC
5822-46-9	1234678-HpCDD	167.		47.9		23.4		72.		10.5		55.6	
3268-87-9	OCDD	1030.		376.		197.		543.		73.5		410.	
1207-31-9	2378-TCDF	0.881	U	0.319	U	0.287	U	0.286	U	0.216	U	0.226	U
7117-41-6	12378-PeCDF	0.477	U	0.189	U	0.328	U	0.262	U	0.347	U	0.211	U
7117-31-4	23478-PeCDF	0.478	U	0.19	U	0.329	U	0.263	U	0.348	U	0.212	U
0648-26-9	123478-HxCDF	4.	EMPC	1.46	EMPC	1.16	EMPC	2.9	EMPC	0.677	EMPC	2.22	EMPC
7117-44-9	123678-HxCDF	0.955	U	0.446	U	0.134	U	0.548	U	0.58	U	0.28	U
2918-21-9	123789-HxCDF	1.38	U	0.644	U	0.194	U	0.792	U	0.838	U	0.405	U
0851-34-5	234678-HxCDF	1.25	U	0.583	U	0.175	U	0.716	U	0.758	U	0.367	U
7562-39-4	1234678-HpCDF	7.71		4.29	EMPC	3.34		10.2		4.37		6.77	
5673-89-7	1234789-HpCDF	1.03	EMPC	1.23	U	0.473	U	1.49	U	0.451	U	1.31	U
9001-02-0	OCDF	34.6		10.3		8.32		23.5		5.92		16.2	
1903-57-5	Total Tetra-Dioxins	0.602	U	0.277	U	1.39		3.17		1.22		1.77	
5088-22-9	Total Penta-Dioxins	1.66	U	1.15	U	1.44	U	2.85		2.12	U	0.562	U
4465-46-8	Total Hexa-Dioxins	32.7		28.4		13.6		59.4		0.674	U	0.327	U
7871-00-4	Total Hepta-Dioxins	670.		199.		75.8		214.		33.		185.	
5722-27-5	Total Tetra-Furans	5.96		0.319	U	0.287	U	1.77		0.216	U	0.226	U
0602-15-4	Total Penta-Furans	2.56		2.64		1.06		8.77		1.1		3.87	
5684-94-1	Total Hexa-Furans	8.32		7.69		4.75		16.3		2.81		9.57	
8998-75-3	Total Hepta-Furans	7.71		1.03	U	3.34		10.2		4.37		6.77	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

346-DIOX	SAMPLE ID ------>	694-S-B017-02		694-S-B018-01		694-S-B019-01		694-S-B024-01		694-S-B024-02		694-S-B025-01	
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901		694SB02401		694SB02402		694SB02501	
	LAB SAMPLE ID --->	28212.05		28212.06		28212.08		37084.10		37084.11		37084.12	
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901		694SB02401		694SB02402		694SB02501	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/13/99		01/13/99		01/13/99	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/15/99		01/15/99		01/15/99	
	DATE ANALYZED --->	01/24/97		01/24/97		01/24/97		01/22/99		01/21/99		01/21/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	NG/KG		NG/KG		NG/KG		NG/KG		NG/KG		NG/KG	
CAS #	Parameter	28195	VAL	28195	VAL	28195	VAL	37084	VAL	37084	VAL	37084	VAL
1746-01-6	2378-TCDD	0.293	U	0.293	U	0.239	U	0.303	U	0.464	U	0.387	U
0321-76-4	12378-PeCDD	0.994	U	0.939	U	0.73	U	1.59	U	0.441	U	0.918	U
9227-28-6	123478-HxCDD	0.746	U	0.936	U	0.346	U	2.948	U	0.539	U	7.82	U
7653-85-7	123678-HxCDD	3.6		0.603	U	1.44		7.002		0.301	U	7.651	
9408-74-3	123789-HxCDD	2.5		0.656	U	1.38		3.852	J	0.358	U	9.308	
5822-46-9	1234678-HpCDD	50.9		10.6		37.		197.731	J	3.44		254.127	
3268-87-9	OCDD	467.		114.		230.		2280.477		49.623		2983.754	
1207-31-9	2378-TCDF	0.325	U	0.323	U	0.333	U	0.965		0.294	U	0.77	
7117-41-6	12378-PeCDF	0.382	U	0.297	U	0.358	U	1.62	J	0.214	U	0.585	J
7117-31-4	23478-PeCDF	0.383	U	0.298	U	0.359	U	0.477	U	0.224	U	0.223	U
0648-26-9	123478-HxCDF	2.54	EMPC	0.657	EMPC	1.22	EMPC	8.791	J	0.245	U	6.747	J
7117-44-9	123678-HxCDF	0.663	U	0.512	U	0.31	U	5.669	J	0.163	U	2.004	J
2918-21-9	123789-HxCDF	0.959	U	0.74	U	0.448	U	1.418	U	0.267	U	1.416	U
0851-34-5	234678-HxCDF	0.867	U	0.67	U	0.405	U	1.272	U	0.239	U	1.271	U
7562-39-4	1234678-HpCDF	7.38		7.73		3.82		26.333		0.49		27.641	
6673-89-7	1234789-HpCDF	2.17		0.66	U	0.636	U	8.523	U	0.358	U	11.738	U
9001-02-0	OCDF	18.5		7.35		10.		84.394		1.515		139.893	
1903-57-5	Total Tetra-Dioxins	0.293	U	0.293	U	0.931		1.231		0.464	U	9.751	
0088-22-9	Total Penta-Dioxins	0.994	U	0.939	U	0.73	U	1.59	U	0.441	U	8.693	
1465-46-8	Total Hexa-Dioxins	6.29		7.47		14.9		125.781		3.842		162.99	
7871-00-4	Total Hepta-Dioxins	160.		10.6		160.		2.796	U	11.727		1265.757	
0722-27-5	Total Tetra-Furans	1.53		0.323	U	1.07		1.066		0.294	U	0.97	
1602-15-4	Total Penta-Furans	2.1		3.99		2.65		9.663		0.224	U	6.905	
1684-94-1	Total Hexa-Furans	10.5		4.47		5.06		23.875		0.163	U	39.372	
0998-75-3	Total Hepta-Furans	7.38		7.73		3.82		26.333		1.699		27.641	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-DIOX	SAMPLE ID ------->	694-S-B026-01	694-S-B026-02	694-S-B027-01	694-S-B027-02		
	ORIGINAL ID ----->	694SB02601RE	694SB02602	694SB02701RE	694SB02702		
	LAB SAMPLE ID --->	37084.13	37084.14	37084.15	37084.16		
	ID FROM REPORT -->	694SB02601RE	694SB02602	694SB02701RE	694SB02702		
	SAMPLE DATE ----->	01/13/99	01/13/99	01/13/99	01/13/99		
	DATE EXTRACTED -->	01/15/99	01/15/99	01/15/99	01/15/99		
	DATE ANALYZED --->	02/02/99	01/21/99	02/02/99	01/21/99		
	MATRIX ---------->	Soil	Soil	Soil	Soil		
	UNITS ---------->	NG/KG	NG/KG	NG/KG	NG/KG		
CAS #	Parameter	37084 VAL	37084 VAL	37084 VAL	37084 VAL		
1746-01-6	2378-TCDD	0.174	0.356 U	0.25 U	0.539 U		
40321-76-4	12378-PeCDD	0.547 U	0.317 U	0.306 U	0.568 U		
39227-28-6	123478-HxCDD	1.209 J	0.835 U	0.258 U	0.409 U		
57653-85-7	123678-HxCDD	7.596	0.467 U	0.239 U	0.967		
19408-74-3	123789-HxCDD	8.825	0.554 U	0.818 J	0.272 U		
35822-46-9	1234678-HpCDD	298.988	14.716	26.06	31.986		
3268-87-9	OCDD	3312.714	204.774	232.053	407.549		
51207-31-9	2378-TCDF	1.125 U	0.372 U	0.8	0.414 U		
57117-41-6	12378-PeCDF	1.716 J	0.212 U	0.252 U	0.333 U		
57117-31-4	23478-PeCDF	0.609 U	0.221 U	0.257 U	0.347 U		
70648-26-9	123478-HxCDF	9.103 J	0.647 J	1.837 U	0.36 U		
57117-44-9	123678-HxCDF	0.674 U	0.165 U	0.712 U	0.24 U		
72918-21-9	123789-HxCDF	0.847 U	0.269 U	0.212 U	0.391 U		
60851-34-5	234678-HxCDF	0.759 U	0.242 U	0.19 U	0.351 U		
67562-39-4	1234678-HpCDF	14.177	2.268	2.562 U	2.332 J		
55673-89-7	1234789-HpCDF	0.976 U	0.634 U	0.292 U	0.543 U		
39001-02-0	OCDF	78.612	8.539	6.944	7.794		
41903-57-5	Total Tetra-Dioxins	8.203	1.111	0.25 U	1.776		
36088-22-9	Total Penta-Dioxins	0.547 U	0.317 U	0.306 U	1.509		
34465-46-8	Total Hexa-Dioxins	254.078	0.467 U	18.618	42.182		
37871-00-4	Total Hepta-Dioxins	2026.65	55.322	145.407	142.187		
55722-27-5	Total Tetra-Furans	4.038	0.372 U	2.182	0.414 U		
30602-15-4	Total Penta-Furans	9.226	0.221 U	1.55	0.425		
55684-94-1	Total Hexa-Furans	18.772	1.225	4.554	1.2		
38998-75-3	Total Hepta-Furans	14.177	2.268	4.223	0.407 U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-META													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B005-01		694-S-B005-T1	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB005T1	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		7074-09		S916905*14	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB00501		694SB005T1	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		01/15/97		10/13/99	
	DATE EXTRACTED -->	01/24/97		01/24/97		01/20/97		01/20/97		01/24/97		10/19/99	
	DATE ANALYZED --->	01/23/97		01/23/97		01/21/97		01/21/97		01/23/97		10/20/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	NBCK02	VAL
7429-90-5	Aluminum (Al)	1370.		30100.		33100.		28200.		44700.		35200.	
7440-36-0	Antimony (Sb)	0.56	J	2.5	J	0.64	J	1.	J	3.3	J	0.36	J
7440-38-2	Arsenic (As)	4.5	U	14.7		16.3		12.5		25.8		16.5	
7440-39-3	Barium (Ba)	4.9	J	37.6	J	41.2	J	35.6	J	51.	J	46.8	
7440-41-7	Beryllium (Be)	0.1	J	0.97	J	1.3	J	1.	J	1.6		1.4	J
7440-43-9	Cadmium (Cd)	0.2	U	0.32	J	0.25	J	0.39	J	0.28	J	0.51	J
7440-70-2	Calcium (Ca)	6220.		39000.		7530.		33800.		8770.		10900.	
7440-47-3	Chromium (Cr)	4.8		51.9		63.		53.2		77.3		65.7	
7440-48-4	Cobalt (Co)	0.97	J	5.1	J	6.9	J	5.8	J	10.1	J	7.2	
7440-50-8	Copper (Cu)	4.3	J	32.1		33.8	J	82.6	J	39.6		37.2	J
7439-89-6	Iron (Fe)	2170.		21500.		31300.	J	25100.	J	40700.		34700.	J
7439-92-1	Lead (Pb)	5.3		48.9		49.6		65.3		46.		45.4	J
7439-95-4	Magnesium (Mg)	355.	J	3610.		5170.		5550.		5570.		5090.	
7439-96-5	Manganese (Mn)	125.		439.		587.	J	476.	J	703.		544.	J
7439-97-6	Mercury (Hg)	0.05	U	0.27		0.19	J	0.37	J	0.29		0.29	
7440-02-0	Nickel (Ni)	1.7	J	17.7		19.7		18.2		24.4		19.6	J
7440-09-7	Potassium (K)	172.	J	2000.		2750.		2690.		3340.		2590.	
7782-49-2	Selenium (Se)	2.7	U	2.9	U	1.3	U	1.7	U	4.7		0.34	UJ
7440-22-4	Silver (Ag)	0.31	J	0.74	J	0.51	J	0.47	J	1.2	J	0.06	U
7440-23-5	Sodium (Na)	546.	J	784.	J	1610.	J	3160.	J	337.	J	322.	
7440-28-0	Thallium (Tl)	1.2	U	1.4	U	1.5	U	1.5	U	1.6	U	1.4	
7440-62-2	Vanadium (V)	4.3	J	51.		70.7		55.8		92.2		79.	
7440-66-6	Zinc (Zn)	13.	U	122.		165.	J	204.	J	139.		125.	J
7440-31-5	Tin (Sn)	10.7	U	12.9	U	22.4		18.6		13.9	U	4.3	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W846-META	SAMPLE ID ------>	694-S-B005-T2		694-S-B006-01		694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02	
	ORIGINAL ID ----->	694SB005T2		694SB00601		694SB00701		694SB00702		694SB00801		694SB00802	
	LAB SAMPLE ID --->	S916905*15		7074-07		7074-05		7074-06		7085-12		7085-13	
	ID FROM REPORT -->	694SB005T2		694SB00601		694SB00701		694SB00702		694SB00801		694SB00802	
	SAMPLE DATE ----->	10/13/99		01/15/97		01/15/97		01/15/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	10/19/99		01/24/97		01/24/97		01/24/97		01/20/97		01/20/97	
	DATE ANALYZED --->	10/20/99		01/23/97		01/23/97		01/23/97		01/21/97		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	7060	VAL	7060	VAL	7060	VAL	7085	VAL	7085	VAL
7429-90-5	Aluminum (Al)	2500.		5160.		17100.		6580.		33200.		27600.	
7440-36-0	Antimony (Sb)	0.19	UJ	0.3	UJ	0.81	J	0.38	UJ	0.67	J	2.2	J
7440-38-2	Arsenic (As)	2.		4.5	U	11.7		5.3		16.5		16.2	
7440-39-3	Barium (Ba)	5.6		10.7	J	30.3	J	14.8	J	40.7	J	37.2	J
7440-41-7	Beryllium (Be)	0.14	U	0.41	J	0.83	J	0.38	J	1.2	J	0.96	J
7440-43-9	Cadmium (Cd)	0.04	UJ	0.22	J	0.26	J	0.48	J	0.33	J	1.1	J
7440-70-2	Calcium (Ca)	12800.		50500.		27800.		239000.		57200.		144000.	
7440-47-3	Chromium (Cr)	6.5		16.7		38.1		49.3		59.7		63.8	
7440-48-4	Cobalt (Co)	0.49	J	1.4	J	4.1	J	0.32	U	5.7	J	3.6	J
7440-50-8	Copper (Cu)	2.6	J	30.2		55.2		10.9		48.6	J	110.	J
7439-89-6	Iron (Fe)	3020.	J	5440.		18600.		5230.		29700.	J	22500.	J
7439-92-1	Lead (Pb)	3.1	J	34.7		72.4		11.2		53.1		87.4	
7439-95-4	Magnesium (Mg)	645.		1180.		2940.		6170.		5290.		7650.	
7439-96-5	Manganese (Mn)	26.4	J	83.5		322.		93.1		573.	J	567.	J
7439-97-6	Mercury (Hg)	0.06		0.13		0.44		0.07	J	0.49	J	1.4	J
7440-02-0	Nickel (Ni)	1.7	J	9.7		13.2		19.4		21.5		22.5	
7440-09-7	Potassium (K)	281.		477.	J	1280.		1590.		3180.		2370.	
7782-49-2	Selenium (Se)	0.28	UJ	0.9	U	0.49	U	1.1	U	1.2	U	1.4	U
7440-22-4	Silver (Ag)	0.05	U	0.26	U	0.41	J	0.32	U	0.33	U	0.37	U
7440-23-5	Sodium (Na)	597.		475.	J	414.	J	2250.	J	566.	J	2010.	J
7440-28-0	Thallium (Tl)	0.34	U	1.2	U	1.4	U	1.5	U	1.5	U	1.7	U
7440-62-2	Vanadium (V)	5.8		11.8		41.2		29.5		66.1		55.2	
7440-66-6	Zinc (Zn)	14.6	J	101.		224.		57.7		157.	J	341.	J
7440-31-5	Tin (Sn)	1.5	U	10.4	U	12.4	U	13.	U	29.3		18.7	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-META													
	SAMPLE ID ------->	694-S-B009-01		694-S-B009-02		694-S-B009-T1		694-S-B009-T2		694-S-B010-01		694-S-B011-01	
	ORIGINAL ID ----->	694SB00901		694SB00902		694SB009T1		694SB009T2		694SB01001		694SB01101	
	LAB SAMPLE ID --->	7085-03		7085-04		S916905*12		S916905*13		7090-01		7085-05	
	ID FROM REPORT -->	694SB00901		694SB00902		694SB009T1		694SB009T2		694SB01001		694SB01101	
	SAMPLE DATE ----->	01/16/97		01/16/97		10/13/99		10/13/99		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		10/19/99		10/19/99		01/24/97		01/20/97	
	DATE ANALYZED --->	01/21/97		01/21/97		10/21/99		10/21/99		01/27/97		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	NBCK02	VAL	NBCK02	VAL	7090	VAL	7085	VAL
7429-90-5	Aluminum (Al)	14100.		8080.		22500.		11800.		21400.		17000.	
7440-36-0	Antimony (Sb)	3.7	J	1.4	J	2.1	J	2.4	J	0.4	UJ	0.89	J
7440-38-2	Arsenic (As)	10.6		7.2		11.8		7.5		21.5	J	12.1	
7440-39-3	Barium (Ba)	131.		35.4	J	58.		24.8		28.7	J	26.8	J
7440-41-7	Beryllium (Be)	0.98	J	0.47	J	0.85	J	0.47	J	0.8	J	0.87	J
7440-43-9	Cadmium (Cd)	1.1	J	0.58	J	0.49	J	0.42	J	0.26	U	0.27	J
7440-70-2	Calcium (Ca)	26000.		168000.		12900.		63100.		4470.		53400.	
7440-47-3	Chromium (Cr)	69.5		48.7		46.1		34.4		48.7		55.7	
7440-48-4	Cobalt (Co)	7.8	J	1.	J	4.9		2.7		3.7	J	3.9	J
7440-50-8	Copper (Cu)	260.	J	126.	J	72.7	J	43.7	J	11.2		60.8	J
7439-89-6	Iron (Fe)	25100.	J	10300.	J	23000.	J	9870.	J	33700.		19300.	J
7439-92-1	Lead (Pb)	481.		106.		112.	J	39.3	J	18.2		98.6	
7439-95-4	Magnesium (Mg)	3080.		4630.		3420.		2980.		4790.		3830.	
7439-96-5	Manganese (Mn)	426.	J	90.6	J	437.	J	226.	J	140.	J	333.	J
7439-97-6	Mercury (Hg)	0.57	J	0.53	J	0.34		0.39		0.07	UJ	0.46	J
7440-02-0	Nickel (Ni)	37.1		18.1		16.3	J	11.9	J	9.3	J	15.3	
7440-09-7	Potassium (K)	1220.	J	1380.		1520.		1080.		5800.		1700.	
7782-49-2	Selenium (Se)	1.1	U	1.1	U	0.33	UJ	0.32	UJ	2.2	J	1.5	U
7440-22-4	Silver (Ag)	0.43	J	0.31	U	0.06	U	0.06	U	0.34	UJ	0.3	U
7440-23-5	Sodium (Na)	423.	J	2040.	J	304.		1760.		4440.	J	477.	J
7440-28-0	Thallium (Tl)	1.4	U	1.4	U	1.	J	0.39	U	1.5	U	1.4	U
7440-62-2	Vanadium (V)	57.		25.9		54.5		25.7		54.6		41.9	
7440-66-6	Zinc (Zn)	792.	J	213.	J	161.	J	232.	J	38.9		169.	J
7440-31-5	Tin (Sn)	31.3		12.4	U	4.5	U	2.4	U	13.8	U	12.1	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

w846-META													
	SAMPLE ID ------>	694-S-B011-02		694-S-B012-01		694-S-B012-02		694-S-B012-T1		694-S-B012-T2		694-S-B013-01	
	ORIGINAL ID ----->	694SB01102		694SB01201		694SB01202		694SB012T1		694SB012T2		694SB01301	
	LAB SAMPLE ID --->	7085-06		7090-09		7090-10		S916905*16		S916905*17		7085-07	
	ID FROM REPORT -->	694SB01102		694SB01201		694SB01202		694SB012T1		694SB012T2		694SB01301	
	SAMPLE DATE ----->	01/16/97		01/17/97		01/17/97		10/13/99		10/13/99		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/24/97		01/24/97		10/19/99		10/19/99		01/20/97	
	DATE ANALYZED --->	01/21/97		01/27/97		01/27/97		10/21/99		10/20/99		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7090	VAL	7090	VAL	NBCK02	VAL	NBCK02	VAL	7085	VAL
7429-90-5	Aluminum (Al)	9070.		7150.		13100.		12500.		13100.		17900.	
7440-36-0	Antimony (Sb)	1.9	J	27.9	J	0.36	J	0.24	UJ	1.3	J	0.4	UJ
7440-38-2	Arsenic (As)	8.6		7.2	J	10.	J	6.6		7.2		17.4	
7440-39-3	Barium (Ba)	16.3	J	18.7	J	21.	J	22.2		34.9		33.4	J
7440-41-7	Beryllium (Be)	0.53	J	0.39	J	0.57	J	0.46	J	0.67	J	0.99	J
7440-43-9	Cadmium (Cd)	0.63	J	0.57	J	0.3	J	0.09	J	0.32	J	0.26	U
7440-70-2	Calcium (Ca)	195000.		100000.		89500.		58200.		89100.		9260.	
7440-47-3	Chromium (Cr)	46.7		43.3		38.4		23.		36.9		41.2	
7440-48-4	Cobalt (Co)	1.2	J	1.5	J	2.4	J	3.2		2.7		5.3	J
7440-50-8	Copper (Cu)	64.9	J	77.4		47.9		24.9	J	122.	J	14.8	J
7439-89-6	Iron (Fe)	9310.	J	10800.		17000.		11800.	J	13200.	J	27600.	J
7439-92-1	Lead (Pb)	47.1		105.		43.2		21.7	J	79.3	J	30.7	
7439-95-4	Magnesium (Mg)	4570.		3060.		3870.		2550.		3680.		3440.	
7439-96-5	Manganese (Mn)	246.	J	156.	J	271.	J	317.	J	196.	J	240.	J
7439-97-6	Mercury (Hg)	0.35	J	0.29	J	0.28	J	1.1		0.3		0.26	J
7440-02-0	Nickel (Ni)	18.9		19.2		16.7		7.8	J	20.1	J	10.1	J
7440-09-7	Potassium (K)	1360.		990.	J	1310.		1190.		1410.		3030.	
7782-49-2	Selenium (Se)	1.3	U	0.85	J	1.3	J	0.34	UJ	0.33	UJ	0.86	U
7440-22-4	Silver (Ag)	0.3	U	0.26	UJ	0.29	UJ	0.07	U	0.08	J	0.35	U
7440-23-5	Sodium (Na)	1450.	J	614.	J	655.	J	892.		1900.		384.	J
7440-28-0	Thallium (Tl)	1.3	U	1.2	U	1.3	U	0.42	U	0.41	U	1.6	U
7440-62-2	Vanadium (V)	30.3		20.5		33.3		24.2		27.6		48.	
7440-66-6	Zinc (Zn)	243.	J	350.		105.		41.4	J	219.	J	67.9	J
7440-31-5	Tin (Sn)	12.	U	10.6	U	73.3		3.	U	4.4	U	13.9	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-META													
	SAMPLE ID ------>	694-S-B014-01		694-S-B014-T1		694-S-B014-T2		694-S-B015-01		694-S-B015-02		694-S-B016-01	
	ORIGINAL ID ----->	694SB01401		694SB014T1		694SB014T2		694SB01501		694SB01502		694SB01601	
	LAB SAMPLE ID --->	7090-07		S916905*18		S916905*19		7090-02		7090-03		7085-08	
	ID FROM REPORT -->	694SB01401		694SB014T1		694SB014T2		694SB01501		694SB01502		694SB01601	
	SAMPLE DATE ----->	01/17/97		10/13/99		10/13/99		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/24/97		10/19/99		10/19/99		01/24/97		01/24/97		01/20/97	
	DATE ANALYZED --->	01/27/97		10/20/99		10/20/99		01/27/97		01/27/97		01/21/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7090	VAL	NBCK02	VAL	NBCK02	VAL	7090	VAL	7090	VAL	7085	VAL
7429-90-5	Aluminum (Al)	6720.		22800.		12300.		12400.		7170.		16100.	
7440-36-0	Antimony (Sb)	5.6	J	0.51	J	0.42	J	0.34	UJ	0.7	J	0.83	J
7440-38-2	Arsenic (As)	12.1	J	12.8		7.5		8.	J	8.3	J	8.6	
7440-39-3	Barium (Ba)	27.6	J	28.4		18.9		23.9	J	19.7	J	33.9	J
7440-41-7	Beryllium (Be)	0.54	J	0.86	J	0.49	J	0.55	J	0.55	J	0.73	J
7440-43-9	Cadmium (Cd)	1.5		0.31	J	0.34	J	0.28	J	0.25	J	0.24	J
7440-70-2	Calcium (Ca)	72400.		37700.		41400.		57400.		52400.		45700.	
7440-47-3	Chromium (Cr)	63.9		43.1		25.6		29.		22.9		33.2	
7440-48-4	Cobalt (Co)	5.3	J	6.1		2.8		2.6	J	1.7	J	3.5	J
7440-50-8	Copper (Cu)	1020.		29.4	J	15.8	J	41.1		42.6		50.	J
7439-89-6	Iron (Fe)	28100.		20800.	J	11900.	J	13300.		10900.		15400.	J
7439-92-1	Lead (Pb)	391.		56.	J	18.3	J	51.6		47.5		81.3	
7439-95-4	Magnesium (Mg)	2370.		4280.		2580.		3160.		2450.		3040.	
7439-96-5	Manganese (Mn)	403.	J	381.	J	230.	J	230.	J	273.	J	251.	J
7439-97-6	Mercury (Hg)	0.96	J	0.12		0.1		0.27	J	0.19	J	0.27	J
7440-02-0	Nickel (Ni)	35.8		16.3	J	9.7	J	12.6		9.5	J	13.1	
7440-09-7	Potassium (K)	759.	J	1670.		954.		1270.		894.	J	1460.	
7782-49-2	Selenium (Se)	1.5	J	0.29	UJ	0.32	UJ	0.69	J	0.82	J	0.72	U
7440-22-4	Silver (Ag)	0.44	J	0.06	U	0.06	U	0.29	UJ	0.33	J	0.32	J
7440-23-5	Sodium (Na)	803.	J	404.		369.		2080.	J	1800.	J	471.	J
7440-28-0	Thallium (Tl)	1.2	U	0.57	J	0.47	J	1.3	U	1.3	U	1.2	U
7440-62-2	Vanadium (V)	23.7		45.9		27.7		29.6		21.9		33.9	
7440-66-6	Zinc (Zn)	702.		87.7	J	45.5	J	128.		151.		218.	J
7440-31-5	Tin (Sn)	284.		2.9	U	2.3	U	36.		12.	U	11.1	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-META													
	SAMPLE ID ------>	694-S-B016-02		694-S-B017-01		694-S-B017-02		694-S-B018-01		694-S-B019-01		694-S-B019-T1	
	ORIGINAL ID ----->	694SB01602		694SB01701		694SB01702		694SB01801		694SB01901		694SB019T1	
	LAB SAMPLE ID --->	7085-09		7090-04		7090-05		7090-06		7090-08		S916905*20	
	ID FROM REPORT -->	694SB01602		694SB01701		694SB01702		694SB01801		694SB01901		694SB019T1	
	SAMPLE DATE ----->	01/16/97		01/17/97		01/17/97		01/17/97		01/17/97		10/13/99	
	DATE EXTRACTED -->	01/20/97		01/24/97		01/24/97		01/24/97		01/24/97		10/19/99	
	DATE ANALYZED --->	01/21/97		01/27/97		01/27/97		01/27/97		01/27/97		10/20/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL	NBCK02	VAL
7429-90-5	Aluminum (Al)	11000.		12300.		5230.		12300.		6510.		25500.	
7440-36-0	Antimony (Sb)	1.1	J	1.1	J	0.3	UJ	2.2	J	5.1	J	0.77	J
7440-38-2	Arsenic (As)	8.2		9.7	J	6.	J	7.4	J	9.	J	13.9	
7440-39-3	Barium (Ba)	19.1	J	25.	J	11.6	J	31.9	J	22.	J	35.7	
7440-41-7	Beryllium (Be)	0.57	J	0.63	J	0.34	J	0.68	J	0.75	J	0.99	J
7440-43-9	Cadmium (Cd)	0.24	U	0.24	J	0.2	U	0.52	J	0.52	J	0.29	J
7440-70-2	Calcium (Ca)	86500.		28100.		22100.		42400.		46300.		31700.	
7440-47-3	Chromium (Cr)	33.5		30.6		14.4		34.4		75.		41.8	
7440-48-4	Cobalt (Co)	3.7	J	3.	J	1.2	J	2.2	J	3.	J	6.5	
7440-50-8	Copper (Cu)	65.4	J	57.7		21.6		99.7		160.		31.8	J
7439-89-6	Iron (Fe)	11500.	J	17900.		8360.		11600.		18600.		22300.	J
7439-92-1	Lead (Pb)	57.		50.9		23.3		133.		177.		28.9	J
7439-95-4	Magnesium (Mg)	3050.		2750.		1390.		2350.		1720.		4530.	
7439-96-5	Manganese (Mn)	194.	J	350.	J	115.	J	194.	J	295.	J	468.	J
7439-97-6	Mercury (Hg)	0.25	J	0.27	J	0.09	J	0.27	J	1.7	J	0.1	
7440-02-0	Nickel (Ni)	20.2		10.5		4.7	J	12.4		20.2		14.1	J
7440-09-7	Potassium (K)	1140.	J	1470.		514.	J	1010.	J	634.	J	2040.	
7782-49-2	Selenium (Se)	0.86	U	0.96	J	0.41	UJ	0.95	J	1.2	J	0.32	UJ
7440-22-4	Silver (Ag)	0.31	U	0.29	UJ	0.26	UJ	0.61	J	1.2	J	0.06	U
7440-23-5	Sodium (Na)	816.	J	317.	J	218.	J	1190.	J	762.	J	455.	
7440-28-0	Thallium (Tl)	1.4	U	1.3	U	1.2	U	1.2	U	1.1	U	0.46	J
7440-62-2	Vanadium (V)	26.5		33.2		17.6		26.5		26.1		49.2	
7440-66-6	Zinc (Zn)	250.	J	103.		48.6		270.		602.		82.5	J
7440-31-5	Tin (Sn)	12.7	U	210.		10.5	U	33.		40.9		2.8	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W846-META													
	SAMPLE ID ------>	694-C-B019-T1		694-S-B019-T2		694-S-B024-01		694-S-B024-02		694-S-B025-01		694-S-B026-01	
	ORIGINAL ID ----->	694CB019T1		694SB019T2		694SB02401		694SB02402		694SB02501		694SB02601	
	LAB SAMPLE ID --->	S916905*22		S916905*21		37084.10		37084.11		37084.12		37084.13	
	ID FROM REPORT -->	694CB019T1		694SB019T2		694SB02401		694SB02402		694SB02501		694SB02601	
	SAMPLE DATE ----->	10/13/99		10/13/99		01/13/99		01/13/99		01/13/99		01/13/99	
	DATE EXTRACTED -->	10/19/99		10/19/99		01/21/99		01/21/99		01/21/99		01/21/99	
	DATE ANALYZED --->	10/20/99		10/21/99		01/21/99		01/21/99		01/21/99		01/21/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	37084	VAL	37084	VAL	37084	VAL	37084	VAL
7429-90-5	Aluminum (Al)	24800.		26300.		24200.		9330.		17000.		20100.	
7440-36-0	Antimony (Sb)	0.22	UJ	1.9	J	1.7	UJ	2.7	UJ	1.2	UJ	1.2	UJ
7440-38-2	Arsenic (As)	12.8		15.7		13.8		6.9		12.4		13.5	
7440-39-3	Barium (Ba)	31.3		48.6		40.3		28.9		27.5		28.1	
7440-41-7	Beryllium (Be)	0.89	J	1.1	J	1.2		0.67		0.86		0.88	
7440-43-9	Cadmium (Cd)	0.28	J	0.74	J	0.56		0.19	J	0.29	J	0.26	J
7440-70-2	Calcium (Ca)	29300.		30300.		92500.		18500.		32300.		36800.	
7440-47-3	Chromium (Cr)	42.		61.1		60.5	J	24.7	J	35.8	J	38.6	J
7440-48-4	Cobalt (Co)	6.5		5.7		5.9		7.2		5.4		6.6	
7440-50-8	Copper (Cu)	35.6	J	102.	J	32.8		111.		28.8		26.7	
7439-89-6	Iron (Fe)	21900.	J	27600.	J	30300.		12300.		20800.		22300.	
7439-92-1	Lead (Pb)	33.8	J	114.	J	35.6	J	90.8	J	28.9	J	31.4	J
7439-95-4	Magnesium (Mg)	4560.		4490.		5810.	J	1940.	J	3850.	J	4310.	J
7439-96-5	Manganese (Mn)	403.	J	661.	J	738.		170.		390.		447.	
7439-97-6	Mercury (Hg)	0.1		1.5		0.23	J	0.09	J	0.12	J	0.11	J
7440-02-0	Nickel (Ni)	14.3	J	19.2	J	24.1		15.		11.7		12.8	
7440-09-7	Potassium (K)	2080.		2130.		2140.	J	935.	J	1690.	J	1900.	J
7782-49-2	Selenium (Se)	0.31	UJ	0.42	UJ	1.2		0.74	U	0.56	U	0.55	U
7440-22-4	Silver (Ag)	0.06	U	0.08	U	0.19	U	0.22	U	0.17	U	0.16	U
7440-23-5	Sodium (Na)	406.		1040.		951.		2650.		719.		774.	
7440-28-0	Thallium (Tl)	0.65	J	0.76	J	0.62	U	0.72	U	0.54	U	0.53	U
7440-62-2	Vanadium (V)	48.		60.1		61.4		20.8		42.7		44.1	
7440-66-6	Zinc (Zn)	109.	J	467.	J	113.		341.		81.9		84.7	
7440-31-5	Tin (Sn)	3.9	U	14.3		7.4		26.8		5.9		6.1	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-META													
	SAMPLE ID ------>	694-S-B026-02		694-S-B027-01		694-S-B027-02		694-S-B029-01		694-S-B029-02		694-S-B030-01	
	ORIGINAL ID ------>	694SB02602		694SB02701		694SB02702		694SB02901		694SB02902		694SB03001	
	LAB SAMPLE ID --->	37084.14		37084.15		37084.16		S917851A*1		S917851A*2		S917851*3	
	ID FROM REPORT -->	694SB02602		694SB02701		694SB02702		694SB02901		694SB02902		694SB03001	
	SAMPLE DATE ----->	01/13/99		01/13/99		01/13/99		11/18/99		11/18/99		11/18/99	
	DATE EXTRACTED -->	01/21/99		01/21/99		01/21/99		11/24/99		11/24/99		11/24/99	
	DATE ANALYZED --->	01/21/99		01/21/99		01/21/99		11/26/99		11/26/99		11/26/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	37084	VAL	37084	VAL	37084	VAL	NBCK07	VAL	NBCK07	VAL	NBCK06	VAL
7429-90-5	Aluminum (Al)	30900.		28100.		38500.		7100.		26800.		27300.	
7440-36-0	Antimony (Sb)	4.7	J	1.9	UJ	2.	UJ	0.99	U	11.5		0.28	J
7440-38-2	Arsenic (As)	13.2		17.2		21.6		4.5		15.5		16.1	
7440-39-3	Barium (Ba)	44.6		36.1		43.9		13.1		41.8		33.9	
7440-41-7	Beryllium (Be)	1.2		1.2		1.5		0.37	J	1.1		1.1	
7440-43-9	Cadmium (Cd)	0.23	J	0.25	J	0.32	J	0.07	J	0.23	J	0.05	U
7440-70-2	Calcium (Ca)	72400.		66700.		25200.		18100.		69500.		29200.	
7440-47-3	Chromium (Cr)	58.7	J	51.3	J	64.	J	16.6	J	59.7	J	48.7	
7440-48-4	Cobalt (Co)	5.9		9.7		11.7		1.9		5.4		8.	J
7440-50-8	Copper (Cu)	35.1		29.8		33.		11.5		33.8		29.3	
7439-89-6	Iron (Fe)	28400.		29500.		37200.		6630.		26200.		28300.	
7439-92-1	Lead (Pb)	63.6	J	27.6	J	32.8	J	22.9		39.9		29.4	J
7439-95-4	Magnesium (Mg)	6090.	J	6700.	J	9180.	J	1270.	J	5880.	J	5280.	
7439-96-5	Manganese (Mn)	293.		582.		747.		76.6	J	360.	J	521.	
7439-97-6	Mercury (Hg)	0.34	J	0.25	J	0.14	J	0.25		0.26		0.08	
7440-02-0	Nickel (Ni)	21.		16.4		20.		5.6		20.5		15.1	J
7440-09-7	Potassium (K)	2680.	J	2790.	J	4090.	J	605.	J	2290.	J	2280.	
7782-49-2	Selenium (Se)	0.74	U	0.8	U	1.	U	0.29	U	1.2	J	0.67	J
7440-22-4	Silver (Ag)	0.22	U	0.24	U	0.31	U	0.05	U	0.08	U	0.06	U
7440-23-5	Sodium (Na)	4470.		5130.		12200.		242.	J	992.	J	380.	
7440-28-0	Thallium (Tl)	0.72	U	0.78	U	1.	U	0.47	J	1.	J	0.96	J
7440-62-2	Vanadium (V)	67.9		65.2		81.4		16.7		64.8		59.3	
7440-66-6	Zinc (Zn)	164.		93.1		141.		45.1	J	101.	J	80.5	J
7440-31-5	Tin (Sn)	7.5		9.3		11.9		2.5	U	4.6	U	3.6	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-META													
	SAMPLE ID ------>	694-S-B030-02		694-S-B031-01		694-S-B031-02		694-S-B032-01		694-C-B032-01		694-S-B032-02	
	ORIGINAL ID ----->	694SB03002		694SB03101		694SB03102		694SB03201		694CB03201		694SB03202	
	LAB SAMPLE ID --->	S917851*4		S917851*1		S917851*2		S917851A*13		S917851A*14		S917851A*15	
	ID FROM REPORT -->	694SB03002		694SB03101		694SB03102		694SB03201		694CB03201		694SB03202	
	SAMPLE DATE ----->	11/18/99		11/18/99		11/18/99		11/18/99		11/18/99		11/18/99	
	DATE EXTRACTED -->	11/24/99		11/24/99		11/24/99		11/24/99		11/24/99		11/24/99	
	DATE ANALYZED --->	11/26/99		11/26/99		11/26/99		11/26/99		11/26/99		11/26/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK06	VAL	NBCK06	VAL	NBCK06	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL
7429-90-5	Aluminum (Al)	24800.		26700.		25500.		21200.		23500.		25000.	
7440-36-0	Antimony (Sb)	2.9	J	0.61	J	0.34	J	1.9	J	1.9	J	2.	J
7440-38-2	Arsenic (As)	23.9		15.8		13.8		12.		14.4		15.5	
7440-39-3	Barium (Ba)	49.3		32.9		30.4		28.9		35.6		33.7	
7440-41-7	Beryllium (Be)	1.1		1.1		0.96		0.97		1.1		0.97	
7440-43-9	Cadmium (Cd)	0.3	J	0.15	J	0.14	J	0.05	J	0.13	J	0.07	J
7440-70-2	Calcium (Ca)	39000.		41600.		44300.		41500.		58200.		65000.	
7440-47-3	Chromium (Cr)	52.3		48.2		43.5		42.9	J	64.9	J	50.7	J
7440-48-4	Cobalt (Co)	5.7	J	7.9	J	6.5	J	6.3		6.4		5.	
7440-50-8	Copper (Cu)	67.9		27.3		27.4		43.4		47.7		47.9	
7439-89-6	Iron (Fe)	38000.		28500.		24300.		20500.		23000.		23900.	
7439-92-1	Lead (Pb)	61.2	J	28.8	J	29.4	J	46.1		44.7		86.8	
7439-95-4	Magnesium (Mg)	4880.		5210.		4770.		4180.	J	4910.	J	4530.	J
7439-96-5	Manganese (Mn)	578.		535.		452.		349.	J	463.	J	479.	J
7439-97-6	Mercury (Hg)	0.21		0.09		0.08		0.22		0.24		0.32	
7440-02-0	Nickel (Ni)	17.4	J	16.4	J	15.8	J	19.5		17.9		20.1	
7440-09-7	Potassium (K)	1770.		2180.		2170.		1600.	J	1800.	J	1600.	J
7782-49-2	Selenium (Se)	1.3	J	1.1	J	1.	J	0.73	J	0.82	J	1.	J
7440-22-4	Silver (Ag)	0.07	U	0.07	U	0.06	U	0.14	J	0.07	J	0.09	J
7440-23-5	Sodium (Na)	490.		389.		679.		445.	J	589.	J	809.	J
7440-28-0	Thallium (Tl)	1.3	J	0.91	J	0.78	J	0.93	J	1.	J	0.79	J
7440-62-2	Vanadium (V)	67.3		58.1		48.7		46.4		50.8		54.4	
7440-66-6	Zinc (Zn)	118.	J	79.6	J	72.6	J	154.	J	209.	J	116.	J
7440-31-5	Tin (Sn)	4.8	U	3.7	U	2.7	U	6.2	U	4.8	U	4.8	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8346-META	SAMPLE ID ------>	694-S-B033-01		694-S-B033-02		694-S-B034-01		694-S-B034-02		694-S-B035-01		694-S-B036-01	
	ORIGINAL ID ----->	694SB03301		694SB03302		694SB03401		694SB03402		694SB03501		694SB03601	
	LAB SAMPLE ID --->	S917851A*11		S917851A*12		S917851*5		S917851*6		S917851A*3		S917851A*4	
	ID FROM REPORT -->	694SB03301		694SB03302		694SB03401		694SB03402		694SB03501		694SB03601	
	SAMPLE DATE ----->	11/18/99		11/18/99		11/18/99		11/18/99		11/18/99		11/18/99	
	DATE EXTRACTED -->	11/24/99		11/24/99		11/24/99		11/24/99		11/24/99		11/24/99	
	DATE ANALYZED --->	11/26/99		11/26/99		11/26/99		11/26/99		11/26/99		11/26/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK07	VAL	NBCK07	VAL	NBCK06	VAL	NBCK06	VAL	NBCK07	VAL	NBCK07	VAL
7429-90-5	Aluminum (Al)	17700.		19800.		7630.		24700.		20700.		39900.	
7440-36-0	Antimony (Sb)	3.1		36.8		8.2		0.62	J	4.4		0.86	J
7440-38-2	Arsenic (As)	10.5		13.3		7.1		13.7		10.1		20.	
7440-39-3	Barium (Ba)	26.2		29.1		19.2		30.		33.1		52.2	
7440-41-7	Beryllium (Be)	0.75		0.82		0.49		1.		0.81		1.7	
7440-43-9	Cadmium (Cd)	0.31	J	0.11	J	0.57	J	0.12	J	0.24	J	0.07	U
7440-70-2	Calcium (Ca)	82500.		48400.		78200.		36300.		32800.		3680.	
7440-47-3	Chromium (Cr)	44.9	J	54.2	J	44.4		44.1		66.6	J	79.6	J
7440-48-4	Cobalt (Co)	3.7		4.6		2.7	J	7.5	J	4.2		8.9	
7440-50-8	Copper (Cu)	52.3		43.8		104.		28.2		68.5		39.3	
7439-89-6	Iron (Fe)	16400.		19000.		12800.		24800.		18500.		42600.	
7439-92-1	Lead (Pb)	44.3		189.		88.6	J	27.9	J	149.		48.1	
7439-95-4	Magnesium (Mg)	4620.	J	3870.	J	2460.		4950.		3440.	J	7710.	J
7439-96-5	Manganese (Mn)	293.	J	335.	J	174.		489.		440.	J	831.	J
7439-97-6	Mercury (Hg)	0.29		0.22		0.55		0.09		1.1		0.16	
7440-02-0	Nickel (Ni)	20.2		17.1		29.1	J	15.7	J	15.9		23.5	
7440-09-7	Potassium (K)	1430.	J	1540.	J	768.		2340.		1380.	J	3270.	J
7782-49-2	Selenium (Se)	1.6		0.86	J	1.1	J	0.58	J	0.92	J	1.2	J
7440-22-4	Silver (Ag)	0.15	J	0.11	J	0.39	J	0.07	U	0.11	J	0.08	U
7440-23-5	Sodium (Na)	499.	J	592.	J	464.		493.		2140.	J	4330.	J
7440-28-0	Thallium (Tl)	0.66	J	0.79	J	0.66	J	1.2	J	1.	J	1.1	J
7440-62-2	Vanadium (V)	41.2		43.9		22.		52.1		41.2		94.5	
7440-66-6	Zinc (Zn)	116.	J	103.	J	275.	J	84.2	J	338.	J	144.	J
7440-31-5	Tin (Sn)	3.7	U	3.3	U	9.6		3.3	U	4.	U	5.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8046-META													
	SAMPLE ID ------->	694-S-B037-01		694-S-B038-01		694-S-B039-01		694-S-B040-01		694-S-B041-01		694-S-B041-02	
	ORIGINAL ID ----->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	LAB SAMPLE ID --->	41562.07		41562.05		41562.04		41562.03		41562.01		41562.02	
	ID FROM REPORT -->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	SAMPLE DATE ----->	12/21/99		12/21/99		12/21/99		12/21/99		12/21/99		12/21/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	12/28/99		12/28/99		12/28/99		12/28/99		12/28/99		12/28/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL
7429-90-5	Aluminum (Al)	33000.	J	23900.	J	14400.	J	26900.	J	12100.	J	5990.	J
7440-36-0	Antimony (Sb)	1.	J	1.3	J	0.36	UJ	12.4	J	38.7	J	1.5	J
7440-38-2	Arsenic (As)	15.		13.5		8.5		26.4		27.3		8.1	
7440-39-3	Barium (Ba)	40.9		36.		21.3		163.		95.2		20.6	
7440-41-7	Beryllium (Be)	1.3		1.1		0.64	J	1.4		0.79		0.55	J
7440-43-9	Cadmium (Cd)	0.98	J	1.	J	0.55	J	2.	J	3.8	J	0.46	J
7440-70-2	Calcium (Ca)	2700.	J	7030.	J	6260.	J	24200.	J	67200.	J	112000.	J
7440-47-3	Chromium (Cr)	57.		49.3		25.8		116.		78.5		33.2	
7440-48-4	Cobalt (Co)	6.9		6.		3.2	J	13.2		9.4		1.8	J
7440-50-8	Copper (Cu)	31.5		50.9		17.1		309.		1150.		25.3	
7439-89-6	Iron (Fe)	31900.		26900.		14200.		38600.		37700.		7460.	
7439-92-1	Lead (Pb)	34.	J	41.1	J	16.6	J	380.	J	3060.	J	12.6	J
7439-95-4	Magnesium (Mg)	4570.	J	4270.	J	2130.	J	4610.	J	2100.	J	3420.	J
7439-96-5	Manganese (Mn)	465.	J	516.	J	200.	J	829.	J	306.	J	112.	J
7439-97-6	Mercury (Hg)	0.26		0.34		0.1		1.3		0.4		0.03	J
7440-02-0	Nickel (Ni)	16.4		15.		8.4		27.4		19.7		11.1	
7440-09-7	Potassium (K)	1990.		1760.		1040.		1760.		743.		901.	
7782-49-2	Selenium (Se)	1.3		1.1		0.47	J	1.		0.95		0.9	
7440-22-4	Silver (Ag)	0.17	J	0.17	U	0.16	U	0.39	J	0.26	J	0.16	U
7440-23-5	Sodium (Na)	2180.		2770.		1510.		799.		1130.		1800.	
7440-28-0	Thallium (Tl)	1.4		1.1	J	1.1	J	1.1	J	1.3		0.46	U
7440-62-2	Vanadium (V)	70.6		56.8		31.4		70.2		27.5		21.3	
7440-66-6	Zinc (Zn)	108.	J	131.	J	56.	J	799.	J	1050.	J	82.3	J
7440-31-5	Tin (Sn)	5.6	J	6.4	J	5.4	J	34.5		41.3		5.5	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

V846-META													
	SAMPLE ID ------>	694-S-B042-01		694-S-B043-01		694-S-B043-02		694-S-B044-01		694-S-B044-02		694-S-B045-01	
	ORIGINAL ID ----->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	LAB SAMPLE ID --->	41582.12		41582.01		41582.02		41582.03		41582.04		41582.06	
	ID FROM REPORT -->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE EXTRACTED -->	01/10/00		01/10/00		01/10/00		01/10/00		01/10/00		01/10/00	
	DATE ANALYZED --->	01/10/00		01/10/00		01/10/00		01/10/00		01/10/00		01/10/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
7429-90-5	Aluminum (Al)	23900.		13800.		19900.		14500.		8460.		12200.	
7440-36-0	Antimony (Sb)	11.2	J	1.3	J	0.43	UJ	0.65	J	0.67	J	0.65	J
7440-38-2	Arsenic (As)	19.4		7.9		14.2		9.7		8.6		11.2	
7440-39-3	Barium (Ba)	41.6		25.		31.2		23.7		16.3		22.5	
7440-41-7	Beryllium (Be)	1.2		0.86		1.3		0.78		0.62	J	0.86	
7440-43-9	Cadmium (Cd)	0.13	J	0.1	J	0.07	J	0.1	J	0.13	J	0.12	J
7440-70-2	Calcium (Ca)	35000.		45100.		23000.		43500.		54700.		46300.	
7440-47-3	Chromium (Cr)	49.2		30.1		48.5		31.2		24.9		31.4	
7440-48-4	Cobalt (Co)	4.8		3.8		5.7		3.5		2.9	J	3.2	J
7440-50-8	Copper (Cu)	36.		56.5		28.		29.1		36.		40.5	
7439-89-6	Iron (Fe)	28800.		13400.		24800.		14600.		9730.		15900.	
7439-92-1	Lead (Pb)	40.7	J	54.	J	31.9	J	31.4	J	27.2	J	39.9	J
7439-95-4	Magnesium (Mg)	4820.		2720.		4940.		2820.		2550.		3140.	
7439-96-5	Manganese (Mn)	335.	J	186.	J	281.	J	299.	J	156.	J	265.	J
7439-97-6	Mercury (Hg)	0.28	J	0.23	J	0.23	J	0.25	J	0.22	J	0.25	J
7440-02-0	Nickel (Ni)	15.6		15.4		17.1		12.2		11.8		12.	
7440-09-7	Potassium (K)	1980.		1020.		1890.		1180.		842.		1030.	
7782-49-2	Selenium (Se)	0.67	J	0.45	U	0.93		1.		0.6	J	0.71	
7440-22-4	Silver (Ag)	0.18	UJ	0.16	UJ	0.19	UJ	0.15	UJ	0.16	UJ	0.16	UJ
7440-23-5	Sodium (Na)	1520.		944.		1770.		1920.		1730.		655.	
7440-28-0	Thallium (Tl)	1.2	J	0.52	J	1.4	J	0.82	J	0.46	U	0.45	U
7440-62-2	Vanadium (V)	55.6		29.9		59.8		33.4		22.4		34.5	
7440-66-6	Zinc (Zn)	107.	J	201.	J	89.4	J	92.7	J	108.	J	88.8	J
7440-31-5	Tin (Sn)	6.3	U	9.5	U	6.5	U	5.7	U	6.3	U	5.5	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-META

SAMPLE ID ------>	694-S-B045-02	694-S-B046-01	694-S-B049-01	694-S-B049-02	694-S-B050-01	694-S-B050-02
ORIGINAL ID ----->	694SB04502	694SB04601	694SB04901	694SB04902	694SB05001	694SB05002
LAB SAMPLE ID --->	41582.07	41582.05	41582.13	41582.14	41582.15	41582.16
ID FROM REPORT -->	694SB04502	694SB04601	694SB04901	694SB04902	694SB05001	694SB05002
SAMPLE DATE ----->	12/20/99	12/20/99	12/20/99	12/20/99	12/20/99	12/20/99
DATE EXTRACTED -->	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00
DATE ANALYZED --->	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
7429-90-5	Aluminum (Al)	16700.		4120.		17400.		23300.		6390.		12800.	
7440-36-0	Antimony (Sb)	0.43	J	0.33	UJ	1.	J	0.43	J	2.2	J	0.34	UJ
7440-38-2	Arsenic (As)	8.6		3.8		10.2		14.8		6.6		11.3	
7440-39-3	Barium (Ba)	24.6		9.3		24.6		32.2		17.4		19.6	
7440-41-7	Beryllium (Be)	0.83		0.33	J	0.87		1.2		0.52	J	0.83	
7440-43-9	Cadmium (Cd)	0.1	J	0.04	U	0.31	J	0.04	U	0.23	J	0.06	J
7440-70-2	Calcium (Ca)	41700.		3350.		88700.		28600.		56800.		35300.	
7440-47-3	Chromium (Cr)	33.9		11.2		42.4		42.1		30.2		27.8	
7440-48-4	Cobalt (Co)	3.6	J	1.2	J	3.6		6.8		3.6		4.9	
7440-50-8	Copper (Cu)	23.7		10.3		43.9		31.6		111.		21.4	
7439-89-6	Iron (Fe)	16100.		5580.		15100.		23700.		10100.		16400.	
7439-92-1	Lead (Pb)	29.1	J	18.1	J	42.3	J	31.8	J	61.8	J	21.5	J
7439-95-4	Magnesium (Mg)	2960.		1100.		3950.		4580.		1870.		3470.	
7439-96-5	Manganese (Mn)	320.	J	96.8	J	217.	J	483.	J	187.	J	284.	J
7439-97-6	Mercury (Hg)	0.16	J	0.07	U	0.26	J	0.12	J	0.24	J	0.09	U
7440-02-0	Nickel (Ni)	13.1		3.5	J	18.1		14.4		17.3		9.6	
7440-09-7	Potassium (K)	1230.		477.		1470.		1970.		567.		1300.	
7782-49-2	Selenium (Se)	0.74	J	0.41	U	0.79		0.76		0.4	U	0.41	U
7440-22-4	Silver (Ag)	0.18	UJ	0.15	UJ	0.16	UJ	0.17	UJ	0.15	UJ	0.15	UJ
7440-23-5	Sodium (Na)	707.		1930.		784.		732.		844.		926.	
7440-28-0	Thallium (Tl)	0.67	J	0.42	U	0.85	J	1.2	J	0.49	J	0.65	J
7440-62-2	Vanadium (V)	37.6		12.9		38.5		51.5		15.3		33.1	
7440-66-6	Zinc (Zn)	73.4	J	28.4	J	121.	J	95.2	J	226.	J	52.9	J
7440-31-5	Tin (Sn)	5.7	U	4.1	U	5.6	U	5.7	U	9.	U	4.9	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-META			
	SAMPLE ID ------->	694-S-B051-01	694-S-B052-01
	ORIGINAL ID ----->	694SB05101	694SB05201
	LAB SAMPLE ID --->	41562.08	41562.06
	ID FROM REPORT -->	694SB05101	694SB05201
	SAMPLE DATE ----->	12/21/99	12/21/99
	DATE EXTRACTED -->	12/27/99	12/27/99
	DATE ANALYZED --->	12/28/99	12/28/99
	MATRIX ---------->	Soil	Soil
	UNITS ---------->	MG/KG	MG/KG

CAS #	Parameter	41562	VAL	41562	VAL
7429-90-5	Aluminum (Al)	32200.	J	32100.	J
7440-36-0	Antimony (Sb)	1.1	J	0.89	J
7440-38-2	Arsenic (As)	19.		19.6	
7440-39-3	Barium (Ba)	42.2		47.6	
7440-41-7	Beryllium (Be)	1.5		1.6	
7440-43-9	Cadmium (Cd)	1.3	J	1.2	J
7440-70-2	Calcium (Ca)	11400.	J	13100.	J
7440-47-3	Chromium (Cr)	65.3		64.6	
7440-48-4	Cobalt (Co)	7.6		7.9	
7440-50-8	Copper (Cu)	44.8		40.2	
7439-89-6	Iron (Fe)	36100.		38500.	
7439-92-1	Lead (Pb)	44.7	J	47.7	J
7439-95-4	Magnesium (Mg)	6200.	J	7120.	J
7439-96-5	Manganese (Mn)	503.	J	707.	J
7439-97-6	Mercury (Hg)	0.25		0.39	
7440-02-0	Nickel (Ni)	18.		18.8	
7440-09-7	Potassium (K)	2690.		2580.	
7782-49-2	Selenium (Se)	1.4		1.	
7440-22-4	Silver (Ag)	0.26	J	0.2	U
7440-23-5	Sodium (Na)	4190.		3390.	
7440-28-0	Thallium (Tl)	1.2	J	1.5	J
7440-62-2	Vanadium (V)	81.5		80.1	
7440-66-6	Zinc (Zn)	140.	J	136.	J
7440-31-5	Tin (Sn)	8.	J	8.2	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-OP P

SAMPLE ID ------>	694-S-B001-01	694-S-B002-01	694-S-B003-01	694-S-B004-01	694-S-B005-01	694-S-B006-01
ORIGINAL ID ----->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
LAB SAMPLE ID --->	7074-08	7074-10	7085-01	7085-02	7074-09	7074-07
ID FROM REPORT -->	694SB00101	694SB00201	694SB00301	694SB00401	694SB00501	694SB00601
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/15/97	01/15/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE ANALYZED --->	01/30/97	01/30/97	01/31/97	01/31/97	01/30/97	01/30/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7060	VAL	7060	VAL
298-04-4	Disulfoton	38.4	U	44.5	UJ	46.8	U	46.8	U	48.3	U	37.9	UJ
298-00-0	Methyl parathion	38.4	U	44.5	UJ	46.8	U	46.8	U	48.3	U	37.9	UJ
298-02-2	Phorate	38.4	U	44.5	UJ	46.8	U	46.8	U	48.3	U	37.9	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8346-OP P

SAMPLE ID ------->	694-S-B007-01	694-S-B007-02	694-S-B008-01	694-S-B008-02	694-S-B009-01	694-S-B009-02
ORIGINAL ID ----->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
LAB SAMPLE ID --->	7074-05	7074-06	7085-12	7085-13	7085-03	7085-04
ID FROM REPORT -->	694SB00701	694SB00702	694SB00801	694SB00802	694SB00901	694SB00902
SAMPLE DATE ----->	01/15/97	01/15/97	01/16/97	01/16/97	01/16/97	01/16/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE ANALYZED --->	01/30/97	01/30/97	02/06/97	02/06/97	01/31/97	01/31/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ----------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	7085	VAL	7085	VAL
298-04-4	Disulfoton	43.6	U	47.2	U	47.4	U	51.3	U	43.	U	44.5	UJ
298-00-0	Methyl parathion	43.6	U	47.2	U	47.4	U	51.3	U	43.	U	44.5	UJ
298-02-2	Phorate	43.6	U	47.2	U	47.4	U	51.3	U	43.	U	44.5	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8046-OP P

SAMPLE ID ------->	694-S-B010-01	694-S-B011-01	694-S-B011-02	694-S-B012-01	694-S-B012-02	694-S-B013-01
ORIGINAL ID ----->	694SB01001	694SB01101	694SB01102	694SB01201	694SB01202	694SB01301
LAB SAMPLE ID --->	7090-01	7085-05	7085-06	7090-09	7090-10	7085-07
ID FROM REPORT -->	694SB01001	694SB01101	694SB01102	694SB01201	694SB01202	694SB01301
SAMPLE DATE ----->	01/17/97	01/16/97	01/16/97	01/17/97	01/17/97	01/16/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE ANALYZED --->	02/06/97	01/31/97	01/31/97	02/06/97	02/06/97	02/05/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7090	VAL	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7085	VAL
298-04-4	Disulfoton	51.8	U	42.1	U	41.7	U	38.8	U	41.4	U	49.	U
298-00-0	Methyl parathion	51.8	U	42.1	U	41.7	U	38.8	U	41.4	U	49.	U
298-02-2	Phorate	51.8	U	42.1	U	41.7	U	38.8	U	41.4	U	49.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-OP P													
	SAMPLE ID ------>	694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01 RE		694-S-B016-02		694-S-B017-01	
	ORIGINAL ID ----->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	LAB SAMPLE ID --->	7090-07		7090-02		7090-03		7085-08RX		7085-09		7090-04	
	ID FROM REPORT -->	694SB01401		694SB01501		694SB01502		694SB01601		694SB01602		694SB01701	
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		02/12/97		01/21/97		01/21/97	
	DATE ANALYZED --->	02/06/97		02/06/97		02/06/97		02/19/97		02/05/97		02/06/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
298-04-4	Disulfoton	40.3	U	38.2	U	41.9	U	39.1	UJ	43.6	U	40.5	U
298-00-0	Methyl parathion	40.3	U	38.2	U	41.9	U	39.1	UJ	43.6	U	40.5	U
298-02-2	Phorate	40.3	U	38.2	U	41.9	U	39.1	UJ	43.6	U	40.5	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W846-OP P								
	SAMPLE ID ------>	694-S-B017-02		694-S-B018-01		694-S-B019-01		
	ORIGINAL ID ----->	694SB01702		694SB01801		694SB01901		
	LAB SAMPLE ID --->	7090-05		7090-06		7090-08		
	ID FROM REPORT -->	694SB01702		694SB01801		694SB01901		
	SAMPLE DATE ----->	01/17/97		01/17/97		01/17/97		
	DATE EXTRACTED -->	01/21/97		01/21/97		01/21/97		
	DATE ANALYZED --->	02/06/97		02/06/97		02/06/97		
	MATRIX ---------->	Soil		Soil		Soil		
	UNITS ----------->	UG/KG		UG/KG		UG/KG		
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL	
298-04-4	Disulfoton	36.5	U	39.2	U	36.9	U	
298-00-0	Methyl parathion	36.5	U	39.2	U	36.9	U	
298-02-2	Phorate	36.5	U	39.2	U	36.9	U	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W846-PCB												
	SAMPLE ID ------>	694-S-B032-01		694-C-B032-01		694-S-B032-02		694-S-B033-01		694-S-B033-02		694-S-B037-01	
	ORIGINAL ID ----->	694SB03201		694CB03201		694SB03202		694SB03301		694SB03302		694SB03701	
	LAB SAMPLE ID --->	S917851A*13		S917851A*14		S917851A*15		S917851A*11		S917851A*12		41562.07	
	ID FROM REPORT -->	694SB03201		694CB03201		694SB03202		694SB03301		694SB03302		694SB03701	
	SAMPLE DATE ----->	11/18/99		11/18/99		11/18/99		11/18/99		11/18/99		12/21/99	
	DATE EXTRACTED -->	11/29/99		11/29/99		11/29/99		11/29/99		11/29/99		12/27/99	
	DATE ANALYZED --->	11/30/99		11/30/99		11/30/99		11/30/99		11/30/99		12/30/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	41562	VAL
12674-11-2	Aroclor-1016	41.	U	41.	U	51.	UJ	43.	U	42.	U	37.	U
11104-28-2	Aroclor-1221	83.	U	83.	U	100.	UJ	87.	U	84.	U	37.	U
11141-16-5	Aroclor-1232	41.	U	41.	U	51.	UJ	43.	U	42.	U	37.	U
53469-21-9	Aroclor-1242	41.	U	41.	U	51.	UJ	43.	U	42.	U	37.	U
12672-29-6	Aroclor-1248	41.	U	41.	U	51.	UJ	43.	U	42.	U	37.	U
11097-69-1	Aroclor-1254	8.7	J	9.2	J	51.	UJ	9.5	J	12.	J	37.	U
11096-82-5	Aroclor-1260	15.	J	18.	J	5.	J	15.	J	15.	J	37.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

U846-PCB	SAMPLE ID ------>	694-S-B038-01		694-S-B039-01		694-S-B040-01		694-S-B041-01		694-S-B041-02		694-S-B042-01	
	ORIGINAL ID ----->	694SB03801		694SB03901		694SB04001		694SB04101		694SB04102		694SB04201	
	LAB SAMPLE ID --->	41562.05		41562.04		41562.03		41562.01		41562.02		41582.12	
	ID FROM REPORT -->	694SB03801		694SB03901		694SB04001		694SB04101		694SB04102		694SB04201	
	SAMPLE DATE ----->	12/21/99		12/21/99		12/21/99		12/21/99		12/21/99		12/20/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	12/30/99		12/30/99		12/29/99		12/29/99		12/29/99		01/04/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41582	VAL
12674-11-2	Aroclor-1016	46.	U	42.	U	50.	U	43.	U	45.	U	48.	U
11104-28-2	Aroclor-1221	46.	U	42.	U	50.	U	43.	U	45.	U	48.	U
11141-16-5	Aroclor-1232	46.	U	42.	U	50.	U	43.	U	45.	U	48.	U
53469-21-9	Aroclor-1242	46.	U	42.	U	50.	U	43.	U	45.	U	48.	U
12672-29-6	Aroclor-1248	46.	U	42.	U	50.	U	160.	U	45.	U	48.	U
11097-69-1	Aroclor-1254	46.	U	42.	U	50.	U	43.	U	45.	U	48.	U
11096-82-5	Aroclor-1260	46.	U	42.	U	350.	J	190.	J	45.	U	120.	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

w846-PCB													
	SAMPLE ID ------>	694-S-B043-01		694-S-B043-02		694-S-B044-01		694-S-B044-02		694-S-B045-01		694-S-B045-02	
	ORIGINAL ID ----->	694SB04301		694SB04302		694SB04401		694SB04402		694SB04501		694SB04502	
	LAB SAMPLE ID --->	41582.01		41582.02		41582.03		41582.04		41582.06		41582.07	
	ID FROM REPORT -->	694SB04301		694SB04302		694SB04401		694SB04402		694SB04501		694SB04502	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/04/00		01/04/00		01/04/00		01/04/00		01/04/00		01/04/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
12674-11-2	Aroclor-1016	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
11104-28-2	Aroclor-1221	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
11141-16-5	Aroclor-1232	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
53469-21-9	Aroclor-1242	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
12672-29-6	Aroclor-1248	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
11097-69-1	Aroclor-1254	43.	U	55.	U	43.	U	43.	U	43.	U	50.	U
11096-82-5	Aroclor-1260	110.	J	170.	J	43.	U	110.		120.		260.	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-PCB

SAMPLE ID ------->	694-S-B046-01
ORIGINAL ID ----->	694SB04601
LAB SAMPLE ID --->	41582.05
ID FROM REPORT -->	694SB04601
SAMPLE DATE ----->	12/20/99
DATE EXTRACTED -->	12/27/99
DATE ANALYZED --->	01/04/00
MATRIX ---------->	Soil
UNITS ----------->	UG/KG

CAS #	Parameter	41582	VAL
12674-11-2	Aroclor-1016	41.	U
11104-28-2	Aroclor-1221	41.	U
11141-16-5	Aroclor-1232	41.	U
53469-21-9	Aroclor-1242	41.	U
12672-29-6	Aroclor-1248	41.	U
11097-69-1	Aroclor-1254	41.	U
11096-82-5	Aroclor-1260	43.	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W846-PEST													
	SAMPLE ID ------>	694-S-B001-01		694-S-B002-01		694-S-B003-01		694-S-B004-01		694-S-B004-T1		694-C-B004-T1	
	ORIGINAL ID ----->	694SB00101		694SB00201		694SB00301		694SB00401		694SB004T1		694CB004T1	
	LAB SAMPLE ID --->	7074-08		7074-10		7085-01		7085-02		S916905*27		S916905*28	
	ID FROM REPORT -->	694SB00101		694SB00201		694SB00301		694SB00401		694SB004T1		694CB004T1	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/16/97		01/16/97		10/13/99		10/13/99	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		10/18/99		10/18/99	
	DATE ANALYZED --->	01/29/97		01/30/97		01/30/97		01/30/97		10/29/99		10/29/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7085	VAL	7085	VAL	NBCK02	VAL	NBCK02	VAL
319-84-6	alpha-BHC	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
319-85-7	beta-BHC	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
319-86-8	delta-BHC	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
58-89-9	gamma-BHC (Lindane)	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
76-44-8	Heptachlor	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
309-00-2	Aldrin	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
1024-57-3	Heptachlor epoxide	7.2	J	2.3	U	2.38	U	54.7		3.8	U	1.5	U
959-98-8	Endosulfan I	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
60-57-1	Dieldrin	4.8	U	4.4	U	4.63	U	4.64	U	4.9	U	4.8	U
72-55-9	4,4'-DDE	4.8	U	4.4	U	4.63	U	4.72		0.26	J	0.53	J
72-20-8	Endrin	4.8	U	4.4	U	4.63	U	4.64	U	4.9	U	4.8	U
33213-65-9	Endosulfan II	4.8	U	4.4	U	4.63	U	4.64	U	4.9	U	4.8	U
72-54-8	4,4'-DDD	4.8	U	4.4	U	4.63	U	54.8		4.9	U	4.8	U
1031-07-8	Endosulfan sulfate	4.8	U	4.4	U	4.63	U	4.64	U	4.9	U	4.8	U
50-29-3	4,4'-DDT	4.8	U	4.4	U	14.3	J	4.64	U	0.55	J	0.37	J
72-43-5	Methoxychlor	25.	U	23.	U	23.8	U	23.9	U	25.	U	2.3	U
53494-70-5	Endrin ketone	4.8	U	4.4	U	4.63	U	4.64	U	0.31	J	0.67	U
7421-93-4	Endrin aldehyde	4.8	U	4.4	U	4.63	U	4.64	U	4.9	U	0.69	J
5103-71-9	alpha-Chlordane	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
5103-74-2	gamma-Chlordane	2.5	U	2.3	U	2.38	U	2.39	U	2.5	U	2.4	U
8001-35-2	Toxaphene	250.	U	230.	U	238.	U	239.	U	250.	U	240.	U
12674-11-2	Aroclor-1016	48.	U	44.	U	46.3	U	46.4	U	49.	U	48.	U
11104-28-2	Aroclor-1221	97.	U	89.	U	94.	U	94.3	U	99.	U	96.	U
11141-16-5	Aroclor-1232	48.	U	44.	U	46.3	U	46.4	U	49.	U	48.	U
53469-21-9	Aroclor-1242	48.	U	44.	U	46.3	U	46.4	U	49.	U	48.	U
12672-29-6	Aroclor-1248	48.	U	44.	U	46.3	U	46.4	U	49.	U	48.	U
11097-69-1	Aroclor-1254	48.	U	44.	U	46.3	U	46.4	U	49.	U	48.	U
11096-82-5	Aroclor-1260	48.	U	44.	U	46.3	U	46.4	U	49.	U	26.	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

SW846-PEST													
	SAMPLE ID ------>	694-S-B005-01 RE		694-S-B006-01		694-S-B007-01		694-S-B007-02		694-S-B008-01		694-S-B008-02	
	ORIGINAL ID ----->	694SB00501		694SB00601		694SB00701		694SB00702		694SB00801		694SB00802	
	LAB SAMPLE ID --->	7074-09RX		7074-07		7074-05		7074-06		7085-12		7085-13	
	ID FROM REPORT -->	694SB00501		694SB00601		694SB00701		694SB00702		694SB00801		694SB00802	
	SAMPLE DATE ----->	01/15/97		01/15/97		01/15/97		01/15/97		01/16/97		01/16/97	
	DATE EXTRACTED -->	02/03/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	02/05/97		01/29/97		01/29/97		01/29/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7060	VAL	7060	VAL	7060	VAL	7060	VAL	7085	VAL	7085	VAL
319-84-6	alpha-BHC	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
319-85-7	beta-BHC	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
319-86-8	delta-BHC	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
58-89-9	gamma-BHC (Lindane)	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
76-44-8	Heptachlor	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
309-00-2	Aldrin	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
1024-57-3	Heptachlor epoxide	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
959-98-8	Endosulfan I	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
60-57-1	Dieldrin	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	5.09	U
72-55-9	4,4'-DDE	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	5.09	U
72-20-8	Endrin	4.8	UJ	3.7	U	9.8		4.6	U	4.69	U	5.09	U
33213-65-9	Endosulfan II	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	5.09	U
72-54-8	4,4'-DDD	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	6.43	J
1031-07-8	Endosulfan sulfate	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	5.09	U
50-29-3	4,4'-DDT	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	58.8	J
72-43-5	Methoxychlor	25.	UJ	19.	U	22.	U	24.	U	24.2	U	26.2	U
53494-70-5	Endrin ketone	4.8	UJ	3.7	U	4.3	U	4.6	U	4.69	U	5.09	U
7421-93-4	Endrin aldehyde	4.8	UJ	3.7	U	6.		4.6	U	4.69	U	5.09	U
5103-71-9	alpha-Chlordane	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
5103-74-2	gamma-Chlordane	2.5	UJ	1.9	U	2.2	U	2.4	U	2.42	U	2.62	U
8001-35-2	Toxaphene	250.	UJ	190.	U	220.	U	240.	U	242.	U	262.	U
12674-11-2	Aroclor-1016	48.	UJ	37.	U	43.	U	46.	U	46.9	U	50.9	U
11104-28-2	Aroclor-1221	97.	UJ	76.	U	88.	U	94.	U	95.3	U	103.	U
11141-16-5	Aroclor-1232	48.	UJ	37.	U	43.	U	46.	U	46.9	U	50.9	U
53469-21-9	Aroclor-1242	48.	UJ	37.	U	43.	U	46.	U	46.9	U	50.9	U
12672-29-6	Aroclor-1248	48.	UJ	37.	U	43.	U	46.	U	46.9	U	50.9	U
11097-69-1	Aroclor-1254	48.	UJ	37.	U	43.	U	46.	U	46.9	U	50.9	U
11096-82-5	Aroclor-1260	50.	J	26.	J	170.		110.		46.9	U	80.5	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-PEST													
	SAMPLE ID ------->	694-S-B009-01		694-S-B009-02		694-S-B010-01		694-S-B011-01		694-S-B011-02		694-S-B012-01	
	ORIGINAL ID ----->	694SB00901		694SB00902		694SB01001		694SB01101		694SB01102		694SB01201	
	LAB SAMPLE ID --->	7085-03		7085-04		7090-01		7085-05		7085-06		7090-09	
	ID FROM REPORT -->	694SB00901		694SB00902		694SB01001		694SB01101		694SB01102		694SB01201	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/17/97		01/16/97		01/16/97		01/17/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/30/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7085	VAL	7085	VAL	7090	VAL
319-84-6	alpha-BHC	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
319-85-7	beta-BHC	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
319-86-8	delta-BHC	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
58-89-9	gamma-BHC (Lindane)	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
76-44-8	Heptachlor	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
309-00-2	Aldrin	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	3.03	J
1024-57-3	Heptachlor epoxide	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
959-98-8	Endosulfan I	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
60-57-1	Dieldrin	4.26	U	4.41	U	5.14	UJ	4.18	U	4.82		3.84	U
72-55-9	4,4'-DDE	4.26	U	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
72-20-8	Endrin	4.26	U	4.41	U	5.14	UJ	6.62	R	4.13	U	5.2	
3213-65-9	Endosulfan II	4.26	U	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
72-54-8	4,4'-DDD	4.74		4.41	U	5.14	UJ	5.88	J	4.13	U	3.84	U
1031-07-8	Endosulfan sulfate	4.26	U	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
50-29-3	4,4'-DDT	19.	J	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
72-43-5	Methoxychlor	21.9	U	22.7	U	26.5	UJ	21.5	U	21.3	U	19.8	U
3494-70-5	Endrin ketone	4.26	U	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
7421-93-4	Endrin aldehyde	4.26	U	4.41	U	5.14	UJ	4.18	U	4.13	U	3.84	U
5103-71-9	alpha-Chlordane	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
5103-74-2	gamma-Chlordane	2.19	U	2.27	U	2.65	UJ	2.15	U	2.13	U	1.98	U
8001-35-2	Toxaphene	219.	U	227.	U	265.	UJ	215.	U	213.	U	198.	U
2674-11-2	Aroclor-1016	42.6	U	44.1	U	51.4	UJ	41.8	U	41.3	U	38.4	U
1104-28-2	Aroclor-1221	86.4	U	89.6	U	104.	UJ	84.9	U	83.9	U	78.	U
1141-16-5	Aroclor-1232	42.6	U	44.1	U	51.4	UJ	41.8	U	41.3	U	38.4	U
3469-21-9	Aroclor-1242	42.6	U	44.1	U	51.4	UJ	41.8	U	41.3	U	38.4	U
2672-29-6	Aroclor-1248	42.6	U	44.1	U	51.4	UJ	41.8	U	41.3	U	38.4	U
1097-69-1	Aroclor-1254	42.6	U	44.1	U	51.4	UJ	41.8	U	41.3	U	38.4	U
1096-82-5	Aroclor-1260	100.		44.1	U	51.4	UJ	90.7		41.3	U	65.8	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-PEST													
	SAMPLE ID ------>	694-S-B012-02		694-S-B013-01		694-S-B014-01		694-S-B015-01		694-S-B015-02		694-S-B016-01	
	ORIGINAL ID ----->	694SB01202		694SB01301		694SB01401		694SB01501		694SB01502		694SB01601	
	LAB SAMPLE ID --->	7090-10		7085-07		7090-07		7090-02		7090-03		7085-08	
	ID FROM REPORT -->	694SB01202		694SB01301		694SB01401		694SB01501		694SB01502		694SB01601	
	SAMPLE DATE ----->	01/17/97		01/16/97		01/17/97		01/17/97		01/17/97		01/16/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		01/20/97		01/20/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/30/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7085	VAL
319-84-6	alpha-BHC	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
319-85-7	beta-BHC	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
319-86-8	delta-BHC	2.11	U	2.5	UJ	2.62		1.95	U	2.14	U	2.	U
58-89-9	gamma-BHC (Lindane)	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
76-44-8	Heptachlor	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
309-00-2	Aldrin	2.11	U	2.5	UJ	8.44	J	1.95	U	2.14	U	2.	U
1024-57-3	Heptachlor epoxide	2.11	U	2.5	UJ	6.18	R	1.95	U	2.14	U	19.4	
959-98-8	Endosulfan I	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
60-57-1	Dieldrin	4.1	U	4.85	UJ	8.06	J	3.78	U	4.15	U	3.89	
72-55-9	4,4'-DDE	4.1	U	4.85	UJ	8.36	J	3.78	U	4.15	U	3.87	U
72-20-8	Endrin	4.1	U	4.85	UJ	36.2		5.28		5.02		3.87	U
33213-65-9	Endosulfan II	4.1	U	4.85	UJ	10.9	R	3.78	U	4.15	U	3.87	U
72-54-8	4,4'-DDD	4.1	U	4.85	UJ	3.99	U	3.78	U	4.15	U	3.87	U
1031-07-8	Endosulfan sulfate	4.1	U	4.85	UJ	3.99	U	3.78	U	4.15	U	3.87	U
50-29-3	4,4'-DDT	4.1	U	4.85	UJ	3.99	U	3.78	U	4.15	U	3.87	U
72-43-5	Methoxychlor	21.1	U	25.	UJ	20.6	U	19.5	U	21.4	U	20.	U
53494-70-5	Endrin ketone	4.1	U	4.85	UJ	3.99	U	3.78	U	4.15	U	3.87	U
7421-93-4	Endrin aldehyde	4.1	U	4.85	UJ	20.9		3.78	U	4.15	U	3.87	U
5103-71-9	alpha-Chlordane	2.11	U	2.5	UJ	9.91		1.95	U	2.14	U	2.	U
5103-74-2	gamma-Chlordane	2.11	U	2.5	UJ	2.06	U	1.95	U	2.14	U	2.	U
8001-35-2	Toxaphene	211.	U	250.	UJ	206.	U	195.	U	214.	U	200.	U
12674-11-2	Aroclor-1016	41.	U	48.5	UJ	39.9	U	37.8	U	41.5	U	38.7	U
11104-28-2	Aroclor-1221	83.3	U	98.4	UJ	81.1	U	76.8	U	84.2	U	78.6	U
11141-16-5	Aroclor-1232	41.	U	48.5	UJ	39.9	U	37.8	U	41.5	U	38.7	U
53469-21-9	Aroclor-1242	41.	U	48.5	UJ	39.9	U	37.8	U	41.5	U	38.7	U
12672-29-6	Aroclor-1248	41.	U	48.5	UJ	39.9	U	37.8	U	41.5	U	38.7	U
11097-69-1	Aroclor-1254	41.	U	48.5	UJ	39.9	U	37.8	U	41.5	U	38.7	U
11096-82-5	Aroclor-1260	66.8	J	48.5	UJ	596.		73.3		66.7		71.9	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

w846-PEST													
	SAMPLE ID ------>	694-S-B016-02		694-S-B017-01		694-S-B017-02		694-S-B018-01		694-S-B018-T1		694-S-B018-T2	
	ORIGINAL ID ----->	694SB01602		694SB01701		694SB01702		694SB01801		694SB018T1		694SB018T2	
	LAB SAMPLE ID --->	7085-09		7090-04		7090-05		7090-06		S916905*29		S916905*30	
	ID FROM REPORT -->	694SB01602		694SB01701		694SB01702		694SB01801		694SB018T1		694SB018T2	
	SAMPLE DATE ----->	01/16/97		01/17/97		01/17/97		01/17/97		10/13/99		10/13/99	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97		01/20/97		10/18/99		10/18/99	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/30/97		10/29/99		10/29/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7085	VAL	7090	VAL	7090	VAL	7090	VAL	NBCK02	VAL	NBCK02	VAL
319-84-6	alpha-BHC	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
319-85-7	beta-BHC	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
319-86-8	delta-BHC	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
58-89-9	gamma-BHC (Lindane)	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
76-44-8	Heptachlor	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
309-00-2	Aldrin	2.59		2.07	U	1.86	U	2.	U	2.2	U	3.1	U
1024-57-3	Heptachlor epoxide	2.22	U	2.56	J	2.89		7.76	J	2.2	U	3.1	U
959-98-8	Endosulfan I	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
60-57-1	Dieldrin	4.32	U	4.01	U	3.62	U	9.2	J	4.3	U	6.	U
72-55-9	4,4'-DDE	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	0.38	J
72-20-8	Endrin	12.6		4.01	U	7.61		3.89	U	4.3	U	6.	U
33213-65-9	Endosulfan II	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	6.	U
72-54-8	4,4'-DDD	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	0.89	J
1031-07-8	Endosulfan sulfate	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	6.	U
50-29-3	4,4'-DDT	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	6.	U
72-43-5	Methoxychlor	22.2	U	20.7	U	18.6	U	20.	U	22.	U	31.	U
53494-70-5	Endrin ketone	4.32	U	4.01	U	3.62	U	3.89	U	4.3	U	6.	U
7421-93-4	Endrin aldehyde	4.79		4.01	U	3.62	U	3.89	U	4.3	U	6.	U
5103-71-9	alpha-Chlordane	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
5103-74-2	gamma-Chlordane	2.22	U	2.07	U	1.86	U	2.	U	2.2	U	3.1	U
8001-35-2	Toxaphene	222.	U	207.	U	186.	U	200.	U	220.	U	310.	U
12674-11-2	Aroclor-1016	43.2	U	40.1	U	36.2	U	38.9	U	43.	U	60.	U
11104-28-2	Aroclor-1221	87.7	U	81.4	U	73.5	U	78.9	U	88.	U	120.	U
11141-16-5	Aroclor-1232	43.2	U	40.1	U	36.2	U	38.9	U	43.	U	60.	U
53469-21-9	Aroclor-1242	43.2	U	40.1	U	36.2	U	38.9	U	43.	U	60.	U
12672-29-6	Aroclor-1248	43.2	U	40.1	U	36.2	U	38.9	U	43.	U	60.	U
11097-69-1	Aroclor-1254	43.2	U	40.1	U	36.2	U	38.9	U	43.	U	60.	U
11096-82-5	Aroclor-1260	155.		74.8		89.8		38.9	U	48.		13.	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-PEST													
	SAMPLE ID ------>	694-S-B019-01		694-S-B037-01		694-S-B038-01		694-S-B039-01		694-S-B040-01		694-S-B041-01	
	ORIGINAL ID ----->	694SB01901		694SB03701		694SB03801		694SB03901		694SB04001		694SB04101	
	LAB SAMPLE ID --->	7090-08		41562.07		41562.05		41562.04		41562.03		41562.01	
	ID FROM REPORT -->	694SB01901		694SB03701		694SB03801		694SB03901		694SB04001		694SB04101	
	SAMPLE DATE ----->	01/17/97		12/21/99		12/21/99		12/21/99		12/21/99		12/21/99	
	DATE EXTRACTED -->	01/20/97		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/30/97		01/04/00		01/04/00		01/04/00		01/04/00		01/03/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7090	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL
319-84-6	alpha-BHC	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
319-85-7	beta-BHC	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
319-86-8	delta-BHC	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
58-89-9	gamma-BHC (Lindane)	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
76-44-8	Heptachlor	1.88	U	1.5	U	1.8	U	1.7	U	2.7	U	1.7	U
309-00-2	Aldrin	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	4.1	U
1024-57-3	Heptachlor epoxide	6.97		1.5	U	1.8	U	1.7	U	2.	U	1.7	U
959-98-8	Endosulfan I	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
60-57-1	Dieldrin	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	8.4	U
72-55-9	4,4'-DDE	3.65	U	2.9	U	3.4	U	3.2	U	190.	DJ	21.	J
72-20-8	Endrin	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	37.	J
3213-65-9	Endosulfan II	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	3.2	U
72-54-8	4,4'-DDD	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	14.	U
1031-07-8	Endosulfan sulfate	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	3.2	U
50-29-3	4,4'-DDT	3.65	U	2.9	U	6.6	J	3.2	U	310.	JD	72.	DJ
72-43-5	Methoxychlor	18.8	U	15.	U	18.	U	17.	U	20.	U	17.	U
5494-70-5	Endrin ketone	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	3.2	U
7421-93-4	Endrin aldehyde	3.65	U	2.9	U	3.4	U	3.2	U	3.8	U	3.2	U
5103-71-9	alpha-Chlordane	1.88	U	1.5	U	1.8	U	1.7	U	2.	U	1.7	U
5103-74-2	gamma-Chlordane	1.88	U	1.5	U	1.8	U	1.7	U	18.	U	3.9	U
8001-35-2	Toxaphene	188.	U	98.	U	110.	U	110.	U	120.	U	110.	U
12674-11-2	Aroclor-1016	36.5	U	NR		NR		NR		NR		NR	
11104-28-2	Aroclor-1221	74.1	U	NR		NR		NR		NR		NR	
11141-16-5	Aroclor-1232	36.5	U	NR		NR		NR		NR		NR	
53469-21-9	Aroclor-1242	36.5	U	NR		NR		NR		NR		NR	
12672-29-6	Aroclor-1248	36.5	U	NR		NR		NR		NR		NR	
11097-69-1	Aroclor-1254	36.5	U	NR		NR		NR		NR		NR	
11096-82-5	Aroclor-1260	36.5	U	NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-PEST													
	SAMPLE ID ------->	694-S-B041-02		694-S-B042-01		694-S-B043-01		694-S-B043-02		694-S-B044-01		694-S-B044-02	
	ORIGINAL ID ----->	694SB04102		694SB04201		694SB04301		694SB04302		694SB04401		694SB04402	
	LAB SAMPLE ID --->	41562.02		41582.12		41582.01		41582.02		41582.03		41582.04	
	ID FROM REPORT -->	694SB04102		694SB04201		694SB04301		694SB04302		694SB04401		694SB04402	
	SAMPLE DATE ----->	12/21/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/03/00		01/05/00		01/05/00		01/05/00		01/05/00		01/05/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41562	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
319-84-6	alpha-BHC	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
319-85-7	beta-BHC	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
319-86-8	delta-BHC	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
76-44-8	Heptachlor	1.7	U	2.3	J	1.7	U	2.1	U	1.7	U	1.7	U
309-00-2	Aldrin	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
959-98-8	Endosulfan I	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
60-57-1	Dieldrin	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
72-55-9	4,4'-DDE	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
72-20-8	Endrin	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
1213-65-9	Endosulfan II	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
72-54-8	4,4'-DDD	3.3	U	3.6	U	3.3	U	4.1	U	47.	J	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
50-29-3	4,4'-DDT	3.3	U	21.	U	19.	U	17.	U	52.	D	3.3	U
72-43-5	Methoxychlor	17.	U	19.	U	17.	U	21.	U	17.	U	17.	U
7494-70-5	Endrin ketone	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
7421-93-4	Endrin aldehyde	3.3	U	3.6	U	3.3	U	4.1	U	3.3	U	3.3	U
5103-71-9	alpha-Chlordane	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
5103-74-2	gamma-Chlordane	1.7	U	1.9	U	1.7	U	2.1	U	1.7	U	1.7	U
8001-35-2	Toxaphene	110.	U	120.	U	110.	U	140.	U	110.	U	110.	U
12674-11-2	Aroclor-1016	NR		NR		NR		NR		NR		NR	
11104-28-2	Aroclor-1221	NR		NR		NR		NR		NR		NR	
11141-16-5	Aroclor-1232	NR		NR		NR		NR		NR		NR	
53469-21-9	Aroclor-1242	NR		NR		NR		NR		NR		NR	
11672-29-6	Aroclor-1248	NR		NR		NR		NR		NR		NR	
11097-69-1	Aroclor-1254	NR		NR		NR		NR		NR		NR	
11096-82-5	Aroclor-1260	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-PEST											
	SAMPLE ID ------>	694-S-B045-01		694-S-B045-02		694-S-B046-01					
	ORIGINAL ID ----->	694SB04501		694SB04502		694SB04601					
	LAB SAMPLE ID --->	41582.06		41582.07		41582.05					
	ID FROM REPORT -->	694SB04501		694SB04502		694SB04601					
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99					
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99					
	DATE ANALYZED --->	01/05/00		01/05/00		01/05/00					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL				
319-84-6	alpha-BHC	1.7	U	2.	U	1.6	U				
319-85-7	beta-BHC	1.7	U	2.	U	1.6	U				
319-86-8	delta-BHC	1.7	U	2.	U	1.6	U				
58-89-9	gamma-BHC (Lindane)	1.7	U	2.	U	1.6	U				
76-44-8	Heptachlor	2.6	J	2.3	U	1.6	U				
309-00-2	Aldrin	1.7	U	2.	U	1.6	U				
1024-57-3	Heptachlor epoxide	1.7	U	2.	U	1.6	U				
959-98-8	Endosulfan I	1.7	U	2.	U	1.6	U				
60-57-1	Dieldrin	8.	U	3.8	U	3.	U				
72-55-9	4,4'-DDE	3.3	U	7.3	J	3.	U				
72-20-8	Endrin	3.3	UR	3.8	U	3.	U				
33213-65-9	Endosulfan II	3.3	U	3.8	U	3.	U				
72-54-8	4,4'-DDD	57.	J	3.8	U	3.	U				
1031-07-8	Endosulfan sulfate	3.3	UR	3.8	U	3.	U				
50-29-3	4,4'-DDT	18.	U	23.	J	4.7	J				
72-43-5	Methoxychlor	17.	UR	20.	U	16.	U				
53494-70-5	Endrin ketone	3.3	UR	3.8	U	3.	U				
7421-93-4	Endrin aldehyde	3.3	UR	3.8	U	3.	U				
5103-71-9	alpha-Chlordane	1.7	U	2.	U	1.6	U				
5103-74-2	gamma-Chlordane	2.9	U	9.8	J	1.6	U				
8001-35-2	Toxaphene	110.	U	120.	U	100.	U				
12674-11-2	Aroclor-1016	NR		NR		NR					
11104-28-2	Aroclor-1221	NR		NR		NR					
11141-16-5	Aroclor-1232	NR		NR		NR					
53469-21-9	Aroclor-1242	NR		NR		NR					
12672-29-6	Aroclor-1248	NR		NR		NR					
11097-69-1	Aroclor-1254	NR		NR		NR					
11096-82-5	Aroclor-1260	NR		NR		NR					

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-SVOA													
	SAMPLE ID ------->	694-S-B037-01		694-S-B038-01		694-S-B039-01		694-S-B040-01		694-S-B041-01		694-S-B041-02	
	ORIGINAL ID ----->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	LAB SAMPLE ID --->	41562.07		41562.05		41562.04		41562.03		41562.01		41562.02	
	ID FROM REPORT -->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	SAMPLE DATE ----->	12/21/99		12/21/99		12/21/99		12/21/99		12/21/99		12/21/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/03/00		01/03/00		01/03/00		01/03/00		01/03/00		01/03/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL
110-86-1	Pyridine	NR		NR		NR		NR		NR		NR	
108-95-2	Phenol	400.	U	460.	U	440.	U	130.	J	430.	U	450.	U
111-44-4	bis(2-Chloroethyl)ether	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
95-57-8	2-Chlorophenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
541-73-1	1,3-Dichlorobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
106-46-7	1,4-Dichlorobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
100-51-6	Benzyl alcohol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
95-50-1	1,2-Dichlorobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
95-48-7	2-Methylphenol (o-Cresol)	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
106-44-5	4-Methylphenol (p-Cresol)	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
621-64-7	N-Nitroso-di-n-propylamine	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
67-72-1	Hexachloroethane	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
98-95-3	Nitrobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
78-59-1	Isophorone	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
88-75-5	2-Nitrophenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
105-67-9	2,4-Dimethylphenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
65-85-0	Benzoic acid	400.	U	460.	U	440.	U	61.	J	430.	U	450.	U
111-91-1	bis(2-Chloroethoxy)methane	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
120-83-2	2,4-Dichlorophenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
120-82-1	1,2,4-Trichlorobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
91-20-3	Naphthalene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
106-47-8	4-Chloroaniline	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
87-68-3	Hexachlorobutadiene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
59-50-7	4-Chloro-3-methylphenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
91-57-6	2-Methylnaphthalene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
77-47-4	Hexachlorocyclopentadiene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
88-06-2	2,4,6-Trichlorophenol	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
95-95-4	2,4,5-Trichlorophenol	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
91-58-7	2-Chloronaphthalene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
88-74-4	2-Nitroaniline	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
131-11-3	Dimethyl phthalate	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
208-96-8	Acenaphthylene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
606-20-2	2,6-Dinitrotoluene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
99-09-2	3-Nitroaniline	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
83-32-9	Acenaphthene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-SVOA

SAMPLE ID ------->	694-S-B037-01	694-S-B038-01	694-S-B039-01	694-S-B040-01	694-S-B041-01	694-S-B041-02
ORIGINAL ID ----->	694SB03701	694SB03801	694SB03901	694SB04001	694SB04101	694SB04102
LAB SAMPLE ID --->	41562.07	41562.05	41562.04	41562.03	41562.01	41562.02
ID FROM REPORT -->	694SB03701	694SB03801	694SB03901	694SB04001	694SB04101	694SB04102
SAMPLE DATE ----->	12/21/99	12/21/99	12/21/99	12/21/99	12/21/99	12/21/99
DATE EXTRACTED -->	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99
DATE ANALYZED --->	01/03/00	01/03/00	01/03/00	01/03/00	01/03/00	01/03/00
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL
51-28-5	2,4-Dinitrophenol	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
100-02-7	4-Nitrophenol	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
132-64-9	Dibenzofuran	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
121-14-2	2,4-Dinitrotoluene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
84-66-2	Diethylphthalate	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
7005-72-3	4-Chlorophenylphenylether	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
86-73-7	Fluorene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
100-01-6	4-Nitroaniline	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	990.	U	1100.	U	1100.	U	1300.	U	1100.	U	1100.	U
86-30-6	N-Nitrosodiphenylamine	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
103-33-3	Azobenzene	NR		NR		NR		NR		NR		NR	
101-55-3	4-Bromophenyl-phenylether	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
118-74-1	Hexachlorobenzene	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
87-86-5	Pentachlorophenol	990.	U	1100.	U	1100.	U	1300.	U	30.	J	1100.	U
85-01-8	Phenanthrene	400.	U	460.	U	440.	U	290.	J	110.	J	450.	U
120-12-7	Anthracene	400.	U	460.	U	440.	U	510.	U	32.	J	450.	U
86-74-8	Carbazole	NR		NR		NR		NR		NR		NR	
84-74-2	Di-n-butylphthalate	20.	J	28.	J	26.	J	48.	J	44.	J	450.	U
206-44-0	Fluoranthene	400.	U	32.	J	440.	U	110.	J	300.	J	450.	U
129-00-0	Pyrene	400.	U	27.	J	440.	U	120.	J	340.	J	450.	U
85-68-7	Butylbenzylphthalate	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
91-94-1	3,3'-Dichlorobenzidine	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
56-55-3	Benzo(a)anthracene	400.	U	460.	U	440.	U	95.	J	230.	J	450.	U
218-01-9	Chrysene	400.	U	28.	J	440.	U	3700.		360.	J	450.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	40.	J	50.	J	32.	J	100.	J	94.	J	51.	J
117-84-0	Di-n-octyl phthalate	400.	U	460.	U	440.	U	510.	U	430.	U	450.	U
205-99-2	Benzo(b)fluoranthene	23.	J	43.	J	24.	J	110.	J	260.	J	450.	U
207-08-9	Benzo(k)fluoranthene	400.	U	460.	U	440.	U	90.	J	250.	J	450.	U
50-32-8	Benzo(a)pyrene	400.	U	460.	U	440.	U	110.	J	270.	J	450.	U
193-39-5	Indeno(1,2,3-cd)pyrene	400.	U	460.	U	440.	U	81.	J	200.	J	450.	U
53-70-3	Dibenz(a,h)anthracene	400.	U	460.	U	440.	U	38.	J	94.	J	450.	U
191-24-2	Benzo(g,h,i)perylene	400.	U	460.	U	440.	U	110.	J	240.	J	450.	U
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR		NR		NR		NR	
122-39-4	Diphenylamine	NR		NR		NR		NR		NR		NR	
92-87-5	Benzidine	NR		NR		NR		NR		NR		NR	
62-75-9	N-Nitrosodimethylamine	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8046-SVOA	SAMPLE ID ------>	694-S-B042-01	694-S-B043-01	694-S-B043-02	694-S-B044-01	694-S-B044-02	694-S-B045-01
	ORIGINAL ID ----->	694SB04201	694SB04301	694SB04302	694SB04401	694SB04402	694SB04501
	LAB SAMPLE ID --->	41582.12	41582.01	41582.02	41582.03	41582.04	41582.06
	ID FROM REPORT -->	694SB04201	694SB04301	694SB04302	694SB04401	694SB04402	694SB04501
	SAMPLE DATE ----->	12/20/99	12/20/99	12/20/99	12/20/99	12/20/99	12/20/99
	DATE EXTRACTED -->	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99
	DATE ANALYZED --->	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
110-86-1	Pyridine	NR		NR		NR		NR		NR		NR	
108-95-2	Phenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
111-44-4	bis(2-Chloroethyl)ether	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
95-57-8	2-Chlorophenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
541-73-1	1,3-Dichlorobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
106-46-7	1,4-Dichlorobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
100-51-6	Benzyl alcohol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
95-50-1	1,2-Dichlorobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
95-48-7	2-Methylphenol (o-Cresol)	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
106-44-5	4-Methylphenol (p-Cresol)	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
621-64-7	N-Nitroso-di-n-propylamine	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
67-72-1	Hexachloroethane	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
98-95-3	Nitrobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
78-59-1	Isophorone	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
88-75-5	2-Nitrophenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
105-67-9	2,4-Dimethylphenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
65-85-0	Benzoic acid	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
111-91-1	bis(2-Chloroethoxy)methane	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
120-83-2	2,4-Dichlorophenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
120-82-1	1,2,4-Trichlorobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
91-20-3	Naphthalene	470.	U	1100.		540.	U	440.	U	440.	U	440.	U
106-47-8	4-Chloroaniline	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
87-68-3	Hexachlorobutadiene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
59-50-7	4-Chloro-3-methylphenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
91-57-6	2-Methylnaphthalene	470.	U	120.	J	540.	U	440.	U	440.	U	440.	U
77-47-4	Hexachlorocyclopentadiene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
88-06-2	2,4,6-Trichlorophenol	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
91-58-7	2-Chloronaphthalene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
88-74-4	2-Nitroaniline	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
131-11-3	Dimethyl phthalate	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
208-96-8	Acenaphthylene	470.	U	430.	U	540.	U	440.	U	440.	U	290.	J
606-20-2	2,6-Dinitrotoluene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
99-09-2	3-Nitroaniline	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
83-32-9	Acenaphthene	470.	U	430.	U	540.	U	440.	U	440.	U	36.	J

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8246-SVOA													
	SAMPLE ID ------>	694-S-B042-01		694-S-B043-01		694-S-B043-02		694-S-B044-01		694-S-B044-02		694-S-B045-01	
	ORIGINAL ID ----->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	LAB SAMPLE ID --->	41582.12		41582.01		41582.02		41582.03		41582.04		41582.06	
	ID FROM REPORT -->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/10/00		01/10/00		01/10/00		01/10/00		01/10/00		01/10/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
51-28-5	2,4-Dinitrophenol	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
100-02-7	4-Nitrophenol	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
132-64-9	Dibenzofuran	470.	U	95.	J	540.	U	440.	U	440.	U	440.	U
121-14-2	2,4-Dinitrotoluene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
84-66-2	Diethylphthalate	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
7005-72-3	4-Chlorophenylphenylether	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
86-73-7	Fluorene	470.	U	430.	U	540.	U	440.	U	440.	U	72.	J
100-01-6	4-Nitroaniline	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
86-30-6	N-Nitrosodiphenylamine	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
103-33-3	Azobenzene	NR		NR		NR		NR		NR		NR	
101-55-3	4-Bromophenyl-phenylether	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
118-74-1	Hexachlorobenzene	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
87-86-5	Pentachlorophenol	1200.	U	1100.	U	1400.	U	1100.	U	1100.	U	1100.	U
85-01-8	Phenanthrene	24.	J	81.	J	540.	U	28.	J	440.	U	110.	J
120-12-7	Anthracene	470.	U	430.	U	540.	U	440.	U	440.	U	420.	J
86-74-8	Carbazole	NR		NR		NR		NR		NR		NR	
84-74-2	Di-n-butylphthalate	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
206-44-0	Fluoranthene	77.	J	40.	J	540.	U	110.	J	62.	J	1300.	
129-00-0	Pyrene	67.	J	42.	J	540.	U	100.	J	62.	J	1300.	
85-68-7	Butylbenzylphthalate	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
91-94-1	3,3'-Dichlorobenzidine	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
56-55-3	Benzo(a)anthracene	41.	J	27.	J	34.	J	38.	J	27.	J	1000.	
218-01-9	Chrysene	46.	J	42.	J	42.	J	67.	J	44.	J	2600.	
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	24.	J	35.	J	540.	U	26.	J	24.	J	400.	J
117-84-0	Di-n-octyl phthalate	470.	U	430.	U	540.	U	440.	U	440.	U	440.	U
205-99-2	Benzo(b)fluoranthene	46.	J	74.	J	46.	J	57.	J	46.	J	2000.	
207-08-9	Benzo(k)fluoranthene	37.	J	73.	J	36.	J	62.	J	26.	J	1500.	
50-32-8	Benzo(a)pyrene	37.	J	58.	J	39.	J	54.	J	32.	J	1200.	
193-39-5	Indeno(1,2,3-cd)pyrene	26.	J	42.	J	540.	U	32.	J	440.	U	650.	
53-70-3	Dibenz(a,h)anthracene	470.	U	430.	U	540.	U	440.	U	440.	U	370.	J
191-24-2	Benzo(g,h,i)perylene	27.	J	50.	J	540.	U	34.	J	24.	J	560.	
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR		NR		NR		NR	
122-39-4	Diphenylamine	NR		NR		NR		NR		NR		NR	
92-87-5	Benzidine	NR		NR		NR		NR		NR		NR	
62-75-9	N-Nitrosodimethylamine	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8046-SVOA	SAMPLE ID ------>	694-S-B045-02	694-S-B046-01	694-S-B047-01	694-S-B048-01	694-S-B048-02	694-S-B052-01
	ORIGINAL ID ----->	694SB04502	694SB04601	694SB04701	694SB04801	694SB04802	694SB05201
	LAB SAMPLE ID --->	41582.07	41582.05	41582.08	41582.10	41582.11	41562.06
	ID FROM REPORT -->	694SB04502	694SB04601	694SB04701	694SB04801	694SB04802	694SB05201
	SAMPLE DATE ----->	12/20/99	12/20/99	12/20/99	12/20/99	12/20/99	12/21/99
	DATE EXTRACTED -->	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99	12/27/99
	DATE ANALYZED --->	01/10/00	01/10/00	01/10/00	01/10/00	01/10/00	01/03/00
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41562	VAL
110-86-1	Pyridine	NR		NR		NR		NR		NR		NR	
108-95-2	Phenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
111-44-4	bis(2-Chloroethyl)ether	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
95-57-8	2-Chlorophenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
541-73-1	1,3-Dichlorobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
106-46-7	1,4-Dichlorobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
100-51-6	Benzyl alcohol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
95-50-1	1,2-Dichlorobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
95-48-7	2-Methylphenol (o-Cresol)	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
106-44-5	4-Methylphenol (p-Cresol)	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
621-64-7	N-Nitroso-di-n-propylamine	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
67-72-1	Hexachloroethane	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
98-95-3	Nitrobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
78-59-1	Isophorone	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
88-75-5	2-Nitrophenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
105-67-9	2,4-Dimethylphenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
65-85-0	Benzoic acid	500.	U	390.	U	420.	U	410.	U	470.	U	41.	J
111-91-1	bis(2-Chloroethoxy)methane	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
120-83-2	2,4-Dichlorophenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
120-82-1	1,2,4-Trichlorobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
91-20-3	Naphthalene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
106-47-8	4-Chloroaniline	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
87-68-3	Hexachlorobutadiene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
59-50-7	4-Chloro-3-methylphenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
91-57-6	2-Methylnaphthalene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
77-47-4	Hexachlorocyclopentadiene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
88-06-2	2,4,6-Trichlorophenol	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
91-58-7	2-Chloronaphthalene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
88-74-4	2-Nitroaniline	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
131-11-3	Dimethyl phthalate	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
208-96-8	Acenaphthylene	26.	J	390.	U	420.	U	410.	U	470.	U	550.	U
606-20-2	2,6-Dinitrotoluene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
99-09-2	3-Nitroaniline	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
83-32-9	Acenaphthene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-SVOA	SAMPLE ID ------>	694-S-B045-02		694-S-B046-01		694-S-B047-01		694-S-B048-01		694-S-B048-02		694-S-B052-01	
	ORIGINAL ID ----->	694SB04502		694SB04601		694SB04701		694SB04801		694SB04802		694SB05201	
	LAB SAMPLE ID --->	41582.07		41582.05		41582.08		41582.10		41582.11		41562.06	
	ID FROM REPORT -->	694SB04502		694SB04601		694SB04701		694SB04801		694SB04802		694SB05201	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/21/99	
	DATE EXTRACTED -->	12/27/99		12/27/99		12/27/99		12/27/99		12/27/99		12/27/99	
	DATE ANALYZED --->	01/10/00		01/10/00		01/10/00		01/10/00		01/10/00		01/03/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41562	VAL
51-28-5	2,4-Dinitrophenol	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
100-02-7	4-Nitrophenol	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
132-64-9	Dibenzofuran	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
121-14-2	2,4-Dinitrotoluene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
84-66-2	Diethylphthalate	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
7005-72-3	4-Chlorophenylphenylether	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
86-73-7	Fluorene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
100-01-6	4-Nitroaniline	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
86-30-6	N-Nitrosodiphenylamine	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
103-33-3	Azobenzene	NR		NR		NR		NR		NR		NR	
101-55-3	4-Bromophenyl-phenylether	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
118-74-1	Hexachlorobenzene	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
87-86-5	Pentachlorophenol	1200.	U	980.	U	1100.	U	1000.	U	1200.	U	1400.	U
85-01-8	Phenanthrene	39.	J	390.	U	24.	J	64.	J	470.	U	550.	U
120-12-7	Anthracene	38.	J	390.	U	28.	J	23.	J	470.	U	550.	U
86-74-8	Carbazole	NR		NR		NR		NR		NR		NR	
84-74-2	Di-n-butylphthalate	500.	U	390.	U	420.	U	410.	U	470.	U	28.	J
206-44-0	Fluoranthene	140.	J	390.	U	140.	J	170.	J	33.	J	550.	U
129-00-0	Pyrene	170.	J	390.	U	120.	J	140.	J	28.	J	550.	U
85-68-7	Butylbenzylphthalate	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
91-94-1	3,3'-Dichlorobenzidine	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
56-55-3	Benzo(a)anthracene	120.	J	390.	U	86.	J	82.	J	470.	U	550.	U
218-01-9	Chrysene	410.	J	390.	U	120.	J	100.	J	31.	J	550.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	40.	J	26.	J	48.	J	30.	J	470.	U	41.	J
117-84-0	Di-n-octyl phthalate	500.	U	390.	U	420.	U	410.	U	470.	U	550.	U
205-99-2	Benzo(b)fluoranthene	300.	J	390.	U	120.	J	96.	J	30.	J	28.	J
207-08-9	Benzo(k)fluoranthene	180.	J	390.	U	70.	J	92.	J	30.	J	550.	U
50-32-8	Benzo(a)pyrene	140.	J	390.	U	93.	J	86.	J	26.	J	550.	U
193-39-5	Indeno(1,2,3-cd)pyrene	90.	J	390.	U	57.	J	54.	J	470.	U	550.	U
53-70-3	Dibenz(a,h)anthracene	500.	U	390.	U	29.	J	25.	J	470.	U	550.	U
191-24-2	Benzo(g,h,i)perylene	88.	J	390.	U	63.	J	56.	J	470.	U	550.	U
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR		NR		NR		NR	
122-39-4	Diphenylamine	NR		NR		NR		NR		NR		NR	
92-87-5	Benzidine	NR		NR		NR		NR		NR		NR	
62-75-9	N-Nitrosodimethylamine	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-VOA													
	SAMPLE ID ------>	694-S-B037-01		694-S-B038-01		694-S-B039-01		694-S-B040-01		694-S-B041-01 RE		694-S-B041-02	
	ORIGINAL ID ----->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	LAB SAMPLE ID --->	41562.07		41562.05		41562.04		41562.03		41562.01		41562.02	
	ID FROM REPORT -->	694SB03701		694SB03801		694SB03901		694SB04001		694SB04101		694SB04102	
	SAMPLE DATE ----->	12/21/99		12/21/99		12/21/99		12/21/99		12/21/99		12/21/99	
	DATE ANALYZED --->	01/03/00		12/31/99		01/03/00		12/30/99		12/30/99		12/30/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL	41562	VAL
74-87-3	Chloromethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-01-4	Vinyl chloride	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
74-83-9	Bromomethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-00-3	Chloroethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
67-64-1	Acetone	6.	U	8.	U	3.	J	8.	UJ	7.	U	6.	UJ
75-15-0	Carbon disulfide	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-35-4	1,1-Dichloroethene	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-09-2	Methylene chloride	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-34-3	1,1-Dichloroethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
67-66-3	Chloroform	6.	U	8.	U	1.	J	8.	UJ	7.	U	6.	UJ
71-55-6	1,1,1-Trichloroethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
110-75-8	2-Chloroethyl vinyl ether	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
78-93-3	2-Butanone (MEK)	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
56-23-5	Carbon tetrachloride	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
108-05-4	Vinyl acetate	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
107-06-2	1,2-Dichloroethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
71-43-2	Benzene	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
79-01-6	Trichloroethene	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
124-48-1	Dibromochloromethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
78-87-5	1,2-Dichloropropane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-27-4	Bromodichloromethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
10061-01-5	cis-1,3-Dichloropropene	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
108-88-3	Toluene	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
10061-02-6	trans-1,3-Dichloropropene	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
75-25-2	Bromoform	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
79-00-5	1,1,2-Trichloroethane	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.		8.	U	6.	U	8.	UJ	7.	U	6.	UJ
591-78-6	2-Hexanone	18.	U	8.	U	27.		8.	UJ	7.	U	6.	UJ
127-18-4	Tetrachloroethene	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
108-90-7	Chlorobenzene	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
79-34-5	1,1,2,2-Tetrachloroethane	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
100-41-4	Ethylbenzene	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
100-42-5	Styrene	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
1330-20-7	Xylene (Total)	6.	U	8.	U	6.	U	8.	U	7.	U	6.	UJ
540-59-0	1,2-Dichloroethene (total)	6.	U	8.	U	6.	U	8.	UJ	7.	U	6.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8846-VOA													
	SAMPLE ID ------->	694-S-B042-01		694-S-B043-01 RE		694-S-B043-02 RE		694-S-B044-01 RE		694-S-B044-02		694-S-B045-01 RE	
	ORIGINAL ID ----->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	LAB SAMPLE ID --->	41582.12		41582.01		41582.02		41582.03		41582.04		41582.06	
	ID FROM REPORT -->	694SB04201		694SB04301		694SB04302		694SB04401		694SB04402		694SB04501	
	SAMPLE DATE ----->	12/20/99		12/20/99		12/20/99		12/20/99		12/20/99		12/20/99	
	DATE ANALYZED --->	12/30/99		01/04/00		01/04/00		01/04/00		12/30/99		01/04/00	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL	41582	VAL
74-87-3	Chloromethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-01-4	Vinyl chloride	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
74-83-9	Bromomethane	8.	U	6.	UJ	10.	UJ	6.	UJ	6.	U	6.	UJ
75-00-3	Chloroethane	8.	U	6.	UJ	10.	UJ	6.	UJ	6.	U	6.	UJ
67-64-1	Acetone	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-15-0	Carbon disulfide	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-35-4	1,1-Dichloroethene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-09-2	Methylene chloride	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-34-3	1,1-Dichloroethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
67-66-3	Chloroform	8.	U	6.	U	2.	J	6.	U	6.	U	6.	U
71-55-6	1,1,1-Trichloroethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
110-75-8	2-Chloroethyl vinyl ether	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
78-93-3	2-Butanone (MEK)	8.	U	6.	UJ	10.	UJ	6.	UJ	6.	U	6.	UJ
56-23-5	Carbon tetrachloride	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
108-05-4	Vinyl acetate	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
107-06-2	1,2-Dichloroethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
71-43-2	Benzene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
79-01-6	Trichloroethene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
124-48-1	Dibromochloromethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
78-87-5	1,2-Dichloropropane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-27-4	Bromodichloromethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
0061-01-5	cis-1,3-Dichloropropene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
108-88-3	Toluene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
0061-02-6	trans-1,3-Dichloropropene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
75-25-2	Bromoform	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
79-00-5	1,1,2-Trichloroethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
591-78-6	2-Hexanone	8.	U	6.	UJ	10.	UJ	6.	UJ	6.	U	6.	UJ
127-18-4	Tetrachloroethene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
108-90-7	Chlorobenzene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
100-41-4	Ethylbenzene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
100-42-5	Styrene	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
1330-20-7	Xylene (Total)	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U
540-59-0	1,2-Dichloroethene (total)	8.	U	6.	U	10.	U	6.	U	6.	U	6.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

846-VOA	SAMPLE ID ------->	694-S-B045-02		694-S-B046-01 RE					
	ORIGINAL ID ----->	694SB04502		694SB04601					
	LAB SAMPLE ID --->	41582.07		41582.05					
	ID FROM REPORT -->	694SB04502		694SB04601					
	SAMPLE DATE ----->	12/20/99		12/20/99					
	DATE ANALYZED --->	12/30/99		01/04/00					
	MATRIX ---------->	Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG					
CAS #	Parameter	41582	VAL	41582	VAL				
74-87-3	Chloromethane	7.	U	6.	U				
75-01-4	Vinyl chloride	7.	U	6.	U				
74-83-9	Bromomethane	7.	U	6.	UJ				
75-00-3	Chloroethane	7.	U	6.	UJ				
67-64-1	Acetone	7.	U	6.	U				
75-15-0	Carbon disulfide	7.	U	6.	U				
75-35-4	1,1-Dichloroethene	7.	U	6.	U				
75-09-2	Methylene chloride	7.	U	6.	U				
75-34-3	1,1-Dichloroethane	7.	U	6.	U				
67-66-3	Chloroform	7.	U	6.	U				
71-55-6	1,1,1-Trichloroethane	7.	U	6.	U				
110-75-8	2-Chloroethyl vinyl ether	7.	U	6.	U				
78-93-3	2-Butanone (MEK)	7.	U	6.	UJ				
56-23-5	Carbon tetrachloride	7.	U	6.	U				
108-05-4	Vinyl acetate	7.	U	6.	U				
107-06-2	1,2-Dichloroethane	7.	U	6.	U				
71-43-2	Benzene	7.	U	6.	U				
79-01-6	Trichloroethene	7.	U	6.	U				
124-48-1	Dibromochloromethane	7.	U	6.	U				
78-87-5	1,2-Dichloropropane	7.	U	6.	U				
75-27-4	Bromodichloromethane	7.	U	6.	U				
0061-01-5	cis-1,3-Dichloropropene	7.	U	6.	U				
108-88-3	Toluene	7.	U	6.	U				
0061-02-6	trans-1,3-Dichloropropene	7.	U	6.	U				
75-25-2	Bromoform	7.	U	6.	U				
79-00-5	1,1,2-Trichloroethane	7.	U	6.	U				
108-10-1	4-Methyl-2-Pentanone (MIBK)	7.	U	6.	U				
591-78-6	2-Hexanone	7.	U	6.	UJ				
127-18-4	Tetrachloroethene	7.	U	6.	U				
108-90-7	Chlorobenzene	7.	U	6.	U				
79-34-5	1,1,2,2-Tetrachloroethane	7.	U	6.	U				
100-41-4	Ethylbenzene	7.	U	6.	U				
100-42-5	Styrene	7.	U	6.	U				
1330-20-7	Xylene (Total)	7.	U	6.	U				
540-59-0	1,2-Dichloroethene (total)	7.	U	6.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

w846SVOA													
	SAMPLE ID ------>	694-S-B028-01		694-C-B028-01		694-S-B028-02		694-S-B029-01		694-S-B029-02		694-S-B035-01	
	ORIGINAL ID ----->	694SB02801		694CB02801		694SB02802		694SB02901		694SB02902		694SB03501	
	LAB SAMPLE ID --->	S917851A*16		S917851A*17		S917851A*18		S917851A*1		S917851A*2		S917851A*3	
	ID FROM REPORT -->	694SB02801		694CB02801		694SB02802		694SB02901		694SB02902		694SB03501	
	SAMPLE DATE ----->	11/18/99		11/18/99		11/18/99		11/18/99		11/18/99		11/18/99	
	DATE EXTRACTED -->	11/29/99		11/29/99		11/29/99		11/29/99		11/29/99		11/29/99	
	DATE ANALYZED --->	12/02/99		12/02/99		12/03/99		12/02/99		12/02/99		12/02/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL
108-95-2	Phenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
111-44-4	bis(2-Chloroethyl)ether	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
95-57-8	2-Chlorophenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
541-73-1	1,3-Dichlorobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
106-46-7	1,4-Dichlorobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
100-51-6	Benzyl alcohol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
95-50-1	1,2-Dichlorobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
95-48-7	2-Methylphenol (o-Cresol)	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
621-64-7	N-Nitroso-di-n-propylamine	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
67-72-1	Hexachloroethane	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
98-95-3	Nitrobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
78-59-1	Isophorone	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
88-75-5	2-Nitrophenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
105-67-9	2,4-Dimethylphenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
65-85-0	Benzoic acid	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
111-91-1	bis(2-Chloroethoxy)methane	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
120-83-2	2,4-Dichlorophenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
120-82-1	1,2,4-Trichlorobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
91-20-3	Naphthalene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
106-47-8	4-Chloroaniline	720.	UJ	870.	U	950.	U	720.	U	1000.	U	930.	U
87-68-3	Hexachlorobutadiene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
59-50-7	4-Chloro-3-methylphenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
91-57-6	2-Methylnaphthalene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
77-47-4	Hexachlorocyclopentadiene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
88-06-2	2,4,6-Trichlorophenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
95-95-4	2,4,5-Trichlorophenol	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
91-58-7	2-Chloronaphthalene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
88-74-4	2-Nitroaniline	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
131-11-3	Dimethyl phthalate	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
208-96-8	Acenaphthylene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
606-20-2	2,6-Dinitrotoluene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
99-09-2	3-Nitroaniline	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
83-32-9	Acenaphthene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
51-28-5	2,4-Dinitrophenol	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
100-02-7	4-Nitrophenol	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

WB46SV0A	SAMPLE ID ------>	694-S-B028-01		694-C-B028-01		694-S-B028-02		694-S-B029-01		694-S-B029-02		694-S-B035-01	
	ORIGINAL ID ----->	694SB02801		694CB02801		694SB02802		694SB02901		694SB02902		694SB03501	
	LAB SAMPLE ID --->	S917851A*16		S917851A*17		S917851A*18		S917851A*1		S917851A*2		S917851A*3	
	ID FROM REPORT -->	694SB02801		694CB02801		694SB02802		694SB02901		694SB02902		694SB03501	
	SAMPLE DATE ----->	11/18/99		11/18/99		11/18/99		11/18/99		11/18/99		11/18/99	
	DATE EXTRACTED -->	11/29/99		11/29/99		11/29/99		11/29/99		11/29/99		11/29/99	
	DATE ANALYZED --->	12/02/99		12/02/99		12/03/99		12/02/99		12/02/99		12/02/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL	NBCK07	VAL
132-64-9	Dibenzofuran	46.	J	430.	U	480.	U	360.	U	510.	U	460.	U
121-14-2	2,4-Dinitrotoluene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
84-66-2	Diethylphthalate	57.	J	430.	U	480.	U	27.	J	510.	U	460.	U
7005-72-3	4-Chlorophenylphenylether	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
86-73-7	Fluorene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
100-01-6	4-Nitroaniline	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
101-55-3	4-Bromophenyl-phenylether	26.	J	430.	U	480.	U	360.	U	510.	U	460.	U
118-74-1	Hexachlorobenzene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
87-86-5	Pentachlorophenol	1800.	UJ	2200.	U	2400.	U	1900.	U	2600.	U	2400.	U
85-01-8	Phenanthrene	43.	J	430.	U	480.	U	34.	J	510.	U	460.	U
120-12-7	Anthracene	31.	J	430.	U	480.	U	360.	U	510.	U	460.	U
84-74-2	Di-n-butylphthalate	360.	UJ	430.	U	480.	U	35.	J	510.	U	460.	U
206-44-0	Fluoranthene	62.	J	43.	J	480.	U	69.	J	68.	J	63.	J
129-00-0	Pyrene	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
85-68-7	Butylbenzylphthalate	310.	J	430.	U	480.	U	63.	J	510.	U	460.	U
91-94-1	3,3'-Dichlorobenzidine	1400.	J	870.	U	950.	U	160.	J	1000.	U	930.	U
56-55-3	Benzo(a)anthracene	480.	J	52.	J	480.	U	99.	J	510.	U	65.	J
218-01-9	Chrysene	640.	J	67.	J	480.	U	120.	J	70.	J	160.	J
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	1400.	J	430.	U	480.	U	340.	J	510.	U	120.	J
117-84-0	Di-n-octyl phthalate	1800.	J	430.	U	480.	U	340.	J	510.	U	120.	J
205-99-2	Benzo(b)fluoranthene	1200.	J	65.	J	46.	J	260.	J	86.	J	110.	J
207-08-9	Benzo(k)fluoranthene	1800.	J	53.	J	63.	J	370.		67.	J	97.	J
50-32-8	Benzo(a)pyrene	1600.	J	49.	J	74.	J	360.	J	94.	J	110.	J
193-39-5	Indeno(1,2,3-cd)pyrene	1900.	J	430.	U	120.	J	430.		150.	J	200.	J
53-70-3	Dibenz(a,h)anthracene	1100.	J	430.	U	87.	J	360.	J	140.	J	160.	J
191-24-2	Benzo(g,h,i)perylene	1200.	J	430.	U	98.	J	400.		150.	J	200.	J
108-39-4	3-Methylphenol (m-Cresol)	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U
122-39-4	Diphenylamine	40.	J	430.	U	480.	U	360.	U	510.	U	460.	U
62-75-9	N-Nitrosodimethylamine	360.	UJ	430.	U	480.	U	360.	U	510.	U	460.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8468VOA

SAMPLE ID ------->	694-S-B036-01
ORIGINAL ID ----->	694SB03601
LAB SAMPLE ID --->	S917851A*4
ID FROM REPORT -->	694SB03601
SAMPLE DATE ----->	11/18/99
DATE EXTRACTED -->	11/29/99
DATE ANALYZED --->	12/03/99
MATRIX ---------->	Soil
UNITS ----------->	UG/KG

CAS #	Parameter	NBCK07	VAL
108-95-2	Phenol	550.	U
111-44-4	bis(2-Chloroethyl)ether	550.	U
95-57-8	2-Chlorophenol	550.	U
541-73-1	1,3-Dichlorobenzene	550.	U
106-46-7	1,4-Dichlorobenzene	550.	U
100-51-6	Benzyl alcohol	550.	U
95-50-1	1,2-Dichlorobenzene	550.	U
95-48-7	2-Methylphenol (o-Cresol)	550.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	550.	U
621-64-7	N-Nitroso-di-n-propylamine	550.	U
67-72-1	Hexachloroethane	550.	U
98-95-3	Nitrobenzene	550.	U
78-59-1	Isophorone	550.	U
88-75-5	2-Nitrophenol	550.	U
105-67-9	2,4-Dimethylphenol	550.	U
65-85-0	Benzoic acid	2800.	U
111-91-1	bis(2-Chloroethoxy)methane	550.	U
120-83-2	2,4-Dichlorophenol	550.	U
120-82-1	1,2,4-Trichlorobenzene	550.	U
91-20-3	Naphthalene	550.	U
106-47-8	4-Chloroaniline	1100.	U
87-68-3	Hexachlorobutadiene	550.	U
59-50-7	4-Chloro-3-methylphenol	550.	U
91-57-6	2-Methylnaphthalene	550.	U
77-47-4	Hexachlorocyclopentadiene	550.	U
88-06-2	2,4,6-Trichlorophenol	550.	U
95-95-4	2,4,5-Trichlorophenol	550.	U
91-58-7	2-Chloronaphthalene	550.	U
88-74-4	2-Nitroaniline	2800.	U
131-11-3	Dimethyl phthalate	550.	U
208-96-8	Acenaphthylene	550.	U
606-20-2	2,6-Dinitrotoluene	550.	U
99-09-2	3-Nitroaniline	2800.	U
83-32-9	Acenaphthene	550.	U
51-28-5	2,4-Dinitrophenol	2800.	U
100-02-7	4-Nitrophenol	2800.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

8465VOA

SAMPLE ID ------->	694-S-8036-01
ORIGINAL ID ----->	694S803601
LAB SAMPLE ID --->	S917851A*4
ID FROM REPORT -->	694S803601
SAMPLE DATE ----->	11/18/99
DATE EXTRACTED -->	11/29/99
DATE ANALYZED --->	12/03/99
MATRIX ---------->	Soil
UNITS ----------->	UG/KG

CAS #	Parameter	NBCK07	VAL
132-64-9	Dibenzofuran	550.	U
121-14-2	2,4-Dinitrotoluene	550.	U
84-66-2	Diethylphthalate	550.	U
7005-72-3	4-Chlorophenylphenylether	550.	U
86-73-7	Fluorene	550.	U
100-01-6	4-Nitroaniline	2800.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	2800.	U
101-55-3	4-Bromophenyl-phenylether	550.	U
118-74-1	Hexachlorobenzene	550.	U
87-86-5	Pentachlorophenol	2800.	U
85-01-8	Phenanthrene	550.	U
120-12-7	Anthracene	550.	U
84-74-2	Di-n-butylphthalate	550.	U
206-44-0	Fluoranthene	550.	U
129-00-0	Pyrene	550.	U
85-68-7	Butylbenzylphthalate	550.	U
91-94-1	3,3'-Dichlorobenzidine	1100.	U
56-55-3	Benzo(a)anthracene	550.	U
218-01-9	Chrysene	550.	U
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	550.	U
117-84-0	Di-n-octyl phthalate	550.	U
205-99-2	Benzo(b)fluoranthene	550.	U
207-08-9	Benzo(k)fluoranthene	550.	U
50-32-8	Benzo(a)pyrene	550.	U
193-39-5	Indeno(1,2,3-cd)pyrene	550.	U
53-70-3	Dibenz(a,h)anthracene	550.	U
191-24-2	Benzo(g,h,i)perylene	72.	J
108-39-4	3-Methylphenol (m-Cresol)	550.	U
122-39-4	Diphenylamine	550.	U
62-75-9	N-Nitrosodimethylamine	550.	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

W_SVOA								
	SAMPLE ID ------->	694-S-B013-T1		694-S-B013-T2				
	ORIGINAL ID ----->	694SB013T1		694SB013T2				
	LAB SAMPLE ID --->	S916905*33		S916905*34				
	ID FROM REPORT -->	694SB013T1		694SB013T2				
	SAMPLE DATE ----->	10/13/99		10/13/99				
	DATE EXTRACTED -->	10/18/99		10/18/99				
	DATE ANALYZED --->	10/19/99		10/19/99				
	MATRIX ---------->	Soil		Soil				
	UNITS ---------->	UG/KG		UG/KG				
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL			
108-95-2	Phenol	490.	U	510.	U			
111-44-4	bis(2-Chloroethyl)ether	490.	U	510.	U			
95-57-8	2-Chlorophenol	490.	U	510.	U			
541-73-1	1,3-Dichlorobenzene	490.	U	510.	U			
106-46-7	1,4-Dichlorobenzene	490.	U	510.	U			
100-51-6	Benzyl alcohol	490.	U	510.	U			
95-50-1	1,2-Dichlorobenzene	490.	U	510.	U			
95-48-7	2-Methylphenol (o-Cresol)	490.	U	510.	U			
108-60-1	2,2'-oxybis(1-Chloropropane)	490.	U	510.	U			
621-64-7	N-Nitroso-di-n-propylamine	490.	U	510.	U			
67-72-1	Hexachloroethane	490.	U	510.	U			
98-95-3	Nitrobenzene	490.	U	510.	U			
78-59-1	Isophorone	490.	U	510.	U			
88-75-5	2-Nitrophenol	490.	U	510.	U			
105-67-9	2,4-Dimethylphenol	490.	U	510.	U			
65-85-0	Benzoic acid	2500.	U	2600.	U			
111-91-1	bis(2-Chloroethoxy)methane	490.	U	510.	U			
120-83-2	2,4-Dichlorophenol	490.	U	510.	U			
120-82-1	1,2,4-Trichlorobenzene	490.	U	510.	U			
91-20-3	Naphthalene	490.	U	510.	U			
106-47-8	4-Chloroaniline	980.	U	1000.	U			
87-68-3	Hexachlorobutadiene	490.	U	510.	U			
59-50-7	4-Chloro-3-methylphenol	490.	U	510.	U			
91-57-6	2-Methylnaphthalene	490.	U	510.	U			
77-47-4	Hexachlorocyclopentadiene	490.	U	510.	U			
88-06-2	2,4,6-Trichlorophenol	490.	U	510.	U			
95-95-4	2,4,5-Trichlorophenol	490.	U	510.	U			
91-58-7	2-Chloronaphthalene	490.	U	510.	U			
88-74-4	2-Nitroaniline	2500.	U	2600.	U			
131-11-3	Dimethyl phthalate	490.	U	510.	U			
208-96-8	Acenaphthylene	490.	U	510.	U			
606-20-2	2,6-Dinitrotoluene	490.	U	510.	U			
99-09-2	3-Nitroaniline	2500.	U	2600.	U			
83-32-9	Acenaphthene	490.	U	510.	U			
51-28-5	2,4-Dinitrophenol	2500.	UJ	2600.	UJ			
100-02-7	4-Nitrophenol	2500.	U	2600.	U			

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

_SVOA								
	SAMPLE ID ------>	694-S-B013-T1		694-S-B013-T2				
	ORIGINAL ID ----->	694SB013T1		694SB013T2				
	LAB SAMPLE ID --->	S916905*33		S916905*34				
	ID FROM REPORT -->	694SB013T1		694SB013T2				
	SAMPLE DATE ----->	10/13/99		10/13/99				
	DATE EXTRACTED -->	10/18/99		10/18/99				
	DATE ANALYZED --->	10/19/99		10/19/99				
	MATRIX ---------->	Soil		Soil				
	UNITS ---------->	UG/KG		UG/KG				
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL			
132-64-9	Dibenzofuran	490.	U	510.	U			
121-14-2	2,4-Dinitrotoluene	490.	U	510.	U			
84-66-2	Diethylphthalate	490.	U	510.	U			
7005-72-3	4-Chlorophenylphenylether	490.	U	510.	U			
86-73-7	Fluorene	490.	U	510.	U			
100-01-6	4-Nitroaniline	2500.	U	2600.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	2500.	U	2600.	U			
101-55-3	4-Bromophenyl-phenylether	490.	U	510.	U			
118-74-1	Hexachlorobenzene	490.	U	510.	U			
87-86-5	Pentachlorophenol	2500.	U	2600.	U			
85-01-8	Phenanthrene	490.	U	510.	U			
120-12-7	Anthracene	490.	U	510.	U			
84-74-2	Di-n-butylphthalate	490.	U	510.	U			
206-44-0	Fluoranthene	490.	U	510.	U			
129-00-0	Pyrene	490.	U	510.	U			
85-68-7	Butylbenzylphthalate	490.	U	510.	U			
91-94-1	3,3'-Dichlorobenzidine	980.	U	1000.	U			
56-55-3	Benzo(a)anthracene	490.	U	510.	U			
218-01-9	Chrysene	34.	J	510.	U			
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	110.	J	510.	U			
117-84-0	Di-n-octyl phthalate	490.	U	510.	U			
205-99-2	Benzo(b)fluoranthene	490.	U	510.	U			
207-08-9	Benzo(k)fluoranthene	490.	U	510.	U			
50-32-8	Benzo(a)pyrene	490.	U	510.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	490.	U	510.	U			
53-70-3	Dibenz(a,h)anthracene	490.	U	510.	U			
191-24-2	Benzo(g,h,i)perylene	490.	U	510.	U			
108-39-4	3-Methylphenol (m-Cresol)	490.	U	510.	U			
122-39-4	Diphenylamine	490.	U	510.	U			
92-87-5	Benzidine	4000.	U	4100.	U			
62-75-9	N-Nitrosodimethylamine	490.	U	510.	U			

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

C													
	SAMPLE ID ------>	694-S-B004-T1		694-C-B004-T1		694-S-B005-T1		694-S-B005-T2		694-S-B009-T1		694-S-B009-T2	
	ORIGINAL ID ----->	694SB004T1		694CB004T1		694SB005T1		694SB005T2		694SB009T1		694SB009T2	
	LAB SAMPLE ID --->	S916905*27		S916905*28		S916905*14		S916905*15		S916905*12		S916905*13	
	ID FROM REPORT -->	694SB004T1		694CB004T1		694SB005T1		694SB005T2		694SB009T1		694SB009T2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/20/99		10/20/99		10/20/99		10/20/99		10/20/99		10/20/99	
	DATE ANALYZED --->	10/20/99		10/20/99		10/20/99		10/20/99		10/20/99		10/20/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
9900-01-4	Total Organic Carbon (TOC)	22000.		23000.		33000.		2300.		26000.		8500.	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

C							
	SAMPLE ID ------>	694-S-B012-T1	694-S-B012-T2	694-S-B013-T1	694-S-B013-T2	694-S-B014-T1	694-S-B014-T2
	ORIGINAL ID ----->	694SB012T1	694SB012T2	694SB013T1	694SB013T2	694SB014T1	694SB014T2
	LAB SAMPLE ID --->	S916905*16	S916905*17	S916905*33	S916905*34	S916905*18	S916905*19
	ID FROM REPORT -->	694SB012T1	694SB012T2	694SB013T1	694SB013T2	694SB014T1	694SB014T2
	SAMPLE DATE ----->	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99
	DATE EXTRACTED -->	10/20/99	10/20/99			10/20/99	10/20/99
	DATE ANALYZED --->	10/20/99	10/20/99	11/15/99	11/15/99	10/20/99	10/20/99
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
9900-01-4	Total Organic Carbon (TOC)	10000.		15000.		41000.		11000.		17000.		5700.	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
AOC 694 SOIL BORING SAMPLES

C						
SAMPLE ID ------->	694-S-B018-T1	694-S-B018-T2	694-S-B019-T1	694-C-B019-T1	694-S-B019-T2	
ORIGINAL ID ----->	694SB018T1	694SB018T2	694SB019T1	694CB019T1	694SB019T2	
LAB SAMPLE ID --->	S916905*29	S916905*30	S916905*20	S916905*22	S916905*21	
ID FROM REPORT -->	694SB018T1	694SB018T2	694SB019T1	694CB019T1	694SB019T2	
SAMPLE DATE ----->	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99	
DATE EXTRACTED -->	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99	
DATE ANALYZED --->	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99	
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	
UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	

CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	
9900-01-4	Total Organic Carbon (TOC)	26000.		30000.		20000.		20000.		20000.		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 SVOA									
	SAMPLE ID ------>	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01			
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02			
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	SAMPLE DATE ----->	01/16/97		01/16/97					
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97			
	DATE ANALYZED --->	02/03/97		02/03/97		02/07/97			
	MATRIX ---------->	Soil		Soil		Soil			
	UNITS ---------->	UG/KG		UG/KG		UG/KG			
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL		
108-95-2	Phenol	430.	U	490.	U	370.	U		
111-44-4	bis(2-Chloroethyl)ether	430.	U	490.	U	370.	U		
95-57-8	2-Chlorophenol	430.	U	490.	U	370.	U		
541-73-1	1,3-Dichlorobenzene	430.	U	490.	U	370.	U		
106-46-7	1,4-Dichlorobenzene	430.	U	490.	U	370.	U		
100-51-6	Benzyl alcohol	430.	U	490.	U	370.	U		
95-50-1	1,2-Dichlorobenzene	430.	U	490.	U	370.	U		
95-48-7	2-Methylphenol (o-Cresol)	430.	U	490.	U	370.	U		
108-60-1	2,2'-oxybis(1-Chloropropane)	430.	U	490.	U	370.	U		
106-44-5	4-Methylphenol (p-Cresol)	430.	U	490.	U	370.	U		
621-64-7	N-Nitroso-di-n-propylamine	430.	U	490.	U	370.	U		
67-72-1	Hexachloroethane	430.	U	490.	U	370.	U		
98-95-3	Nitrobenzene	430.	U	490.	U	370.	U		
78-59-1	Isophorone	430.	U	490.	U	370.	U		
88-75-5	2-Nitrophenol	430.	U	490.	U	370.	U		
105-67-9	2,4-Dimethylphenol	430.	U	490.	U	370.	U		
111-91-1	bis(2-Chloroethoxy)methane	430.	U	490.	U	370.	U		
120-83-2	2,4-Dichlorophenol	430.	U	490.	U	370.	U		
120-82-1	1,2,4-Trichlorobenzene	430.	U	490.	U	370.	U		
91-20-3	Naphthalene	430.	U	490.	U	370.	U		
106-47-8	4-Chloroaniline	430.	U	490.	U	370.	U		
87-68-3	Hexachlorobutadiene	430.	U	490.	U	370.	U		
59-50-7	4-Chloro-3-methylphenol	430.	U	490.	U	370.	U		
91-57-6	2-Methylnaphthalene	430.	U	490.	U	370.	U		
77-47-4	Hexachlorocyclopentadiene	430.	UJ	490.	UJ	370.	U		
88-06-2	2,4,6-Trichlorophenol	430.	U	490.	U	370.	U		
95-95-4	2,4,5-Trichlorophenol	1000.	U	1200.	U	890.	U		
91-58-7	2-Chloronaphthalene	430.	U	490.	U	370.	U		
88-74-4	2-Nitroaniline	1000.	U	1200.	U	890.	U		
131-11-3	Dimethyl phthalate	430.	U	490.	U	370.	U		
208-96-8	Acenaphthylene	430.	U	490.	U	370.	U		
606-20-2	2,6-Dinitrotoluene	430.	U	490.	U	370.	U		
99-09-2	3-Nitroaniline	1000.	U	1200.	U	890.	U		
83-32-9	Acenaphthene	430.	U	490.	U	370.	U		
51-28-5	2,4-Dinitrophenol	1000.	U	1200.	U	890.	U		
100-02-7	4-Nitrophenol	1000.	U	1200.	U	890.	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 SVOA									
	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01				
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201				
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02				
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201				
	SAMPLE DATE ----->	01/16/97		01/16/97						
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97				
	DATE ANALYZED --->	02/03/97		02/03/97		02/07/97				
	MATRIX ---------->	Soil		Soil		Soil				
	UNITS ---------->	UG/KG		UG/KG		UG/KG				
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL			
132-64-9	Dibenzofuran	430.	U	490.	U	370.	U			
121-14-2	2,4-Dinitrotoluene	430.	U	490.	U	370.	U			
84-66-2	Diethylphthalate	430.	U	490.	U	370.	U			
7005-72-3	4-Chlorophenylphenylether	430.	U	490.	U	370.	U			
86-73-7	Fluorene	430.	U	490.	U	370.	U			
100-01-6	4-Nitroaniline	1000.	U	1200.	U	890.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	1000.	U	1200.	U	890.	U			
86-30-6	N-Nitrosodiphenylamine	430.	U	490.	U	370.	U			
101-55-3	4-Bromophenyl-phenylether	430.	U	490.	U	370.	U			
118-74-1	Hexachlorobenzene	430.	U	490.	U	370.	U			
87-86-5	Pentachlorophenol	1000.	U	1200.	U	890.	U			
85-01-8	Phenanthrene	430.	U	490.	U	370.	U			
120-12-7	Anthracene	430.	U	490.	U	370.	U			
84-74-2	Di-n-butylphthalate	430.	U	490.	U	370.	U			
206-44-0	Fluoranthene	430.	U	490.	U	370.	U			
129-00-0	Pyrene	430.	U	490.	U	370.	U			
85-68-7	Butylbenzylphthalate	430.	U	490.	U	370.	U			
91-94-1	3,3'-Dichlorobenzidine	430.	U	490.	U	370.	U			
56-55-3	Benzo(a)anthracene	430.	U	490.	U	370.	U			
218-01-9	Chrysene	430.	U	490.	U	370.	U			
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	140.	J	490.	U	370.	U			
117-84-0	Di-n-octyl phthalate	430.	U	490.	U	370.	U			
205-99-2	Benzo(b)fluoranthene	430.	U	490.	U	370.	U			
207-08-9	Benzo(k)fluoranthene	430.	U	490.	U	370.	U			
50-32-8	Benzo(a)pyrene	430.	U	490.	U	370.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	430.	U	490.	U	370.	U			
53-70-3	Dibenz(a,h)anthracene	430.	U	490.	U	370.	U			
191-24-2	Benzo(g,h,i)perylene	430.	U	490.	U	370.	U			
110-86-1	Pyridine	430.	U	490.	U	370.	U			
62-75-9	N-Nitrosodimethylamine	430.	U	490.	U	370.	U			
109-06-8	2-Picoline	1000.	U	1200.	U	890.	U			
0595-95-6	N-Nitrosomethylethylamine	1000.	U	1200.	U	890.	U			
66-27-3	Methyl methanesulfonate	430.	U	490.	U	370.	U			
55-18-5	N-Nitrosodiethylamine	860.	U	980.	U	740.	U			
62-50-0	Ethyl methanesulfonate	860.	U	980.	U	740.	U			
62-53-3	Aniline	430.	U	490.	U	370.	U			

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 SVOA											
	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01					
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201					
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02					
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201					
	SAMPLE DATE ----->	01/16/97		01/16/97							
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97					
	DATE ANALYZED --->	02/03/97		02/03/97		02/07/97					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL				
930-55-2	N-Nitrosopyrrolidine	1700.	U	1900.	U	1400.	U				
98-86-2	Acetophenone	430.	U	490.	U	370.	U				
59-89-2	N-Nitrosomorpholine	430.	U	490.	U	370.	U				
95-53-4	o-Toluidine	430.	U	490.	U	370.	U				
100-75-4	N-Nitrosopiperidine	860.	U	980.	U	740.	U				
126-68-1	O,O,O-Triethylphosphorothioate	430.	U	490.	U	370.	U				
122-09-8	a,a-Dimethylphenethylamine	1700.	U	1900.	U	1400.	U				
87-65-0	2,6-Dichlorophenol	430.	U	490.	U	370.	U				
1888-71-7	Hexachloropropene	430.	U	490.	U	370.	U				
106-50-3	p-Phenylenediamine	4300.	U	4900.	U	3700.	U				
924-16-3	N-Nitroso-di-n-butylamine	430.	U	490.	U	370.	U				
94-59-7	Safrole	430.	U	490.	U	370.	U				
95-94-3	1,2,4,5-Tetrachlorobenzene	430.	U	490.	U	370.	U				
120-58-1	Isosafrole	430.	U	490.	U	370.	U				
130-15-4	1,4-Naphthoquinone	430.	U	490.	U	370.	U				
99-65-0	1,3-Dinitrobenzene	860.	U	980.	U	740.	U				
608-93-5	Pentachlorobenzene	430.	U	490.	U	370.	U				
134-32-7	1-Naphthylamine	430.	U	490.	U	370.	U				
91-59-8	2-Naphthylamine	430.	U	490.	U	370.	U				
58-90-2	2,3,4,6-Tetrachlorophenol	430.	U	490.	U	370.	U				
99-55-8	5-Nitro-o-toluidine	430.	U	490.	U	370.	U				
122-39-4	Diphenylamine	430.	U	490.	U	370.	U				
465-73-6	Isodrin	430.	U	490.	U	370.	U				
99-35-4	1,3,5-Trinitrobenzene	430.	U	490.	U	370.	U				
62-44-2	Phenacetin	860.	U	980.	U	740.	U				
297-97-2	Thionazin	860.	U	980.	U	740.	U				
92-67-1	4-Aminobiphenyl	860.	U	980.	U	740.	U				
82-68-8	Pentachloronitrobenzene	860.	U	980.	U	740.	U				
5950-58-5	Pronamide	430.	U	490.	U	370.	U				
88-85-7	Dinoseb	860.	U	980.	U	740.	U				
56-57-5	4-Nitroquinoline 1-oxide	1700.	U	1900.	U	1400.	U				
91-80-5	Methapyrilene	4300.	U	4900.	U	3700.	U				
140-57-8	Aramite	860.	UR	980.	UR	740.	UR				
60-11-7	p-(Dimethylamino)azobenzene	430.	U	490.	U	370.	U				
119-93-7	3,3-Dimethylbenzidine	430.	UJ	490.	UJ	370.	U				
52-85-7	Famphur	430.	U	490.	U	370.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 SVOA									
	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01			
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02			
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	SAMPLE DATE ----->	01/16/97		01/16/97					
	DATE EXTRACTED -->	01/20/97		01/20/97		01/20/97			
	DATE ANALYZED --->	02/03/97		02/03/97		02/07/97			
	MATRIX ---------->	Soil		Soil		Soil			
	UNITS ----------->	UG/KG		UG/KG		UG/KG			
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL		
53-96-3	Acetamidofluorene	860.	U	980.	U	740.	U		
57-97-6	7,12-Dimethylbenz(a)anthracene	430.	U	490.	U	370.	U		
56-49-5	3-Methyl cholanthrene	430.	U	490.	U	370.	U		
70-30-4	Hexachlorophene	4300.	U	4900.	U	3700.	U		
143-50-0	Kepone	8600.	UJ	9800.	UJ	7400.	U		
86-74-8	Carbazole	430.	U	490.	U	370.	U		
510-15-6	Chlorobenzilate	430.	U	490.	U	370.	U		
60-51-5	Dimethoate	430.	U	490.	U	370.	U		
56-38-2	Parathion	430.	U	490.	U	370.	U		
298-00-0	Methyl parathion	430.	U	490.	U	370.	U		
298-02-2	Phorate	430.	U	490.	U	370.	U		
298-04-4	Disulfoton	430.	U	490.	U	370.	U		
3689-24-5	Sulfotep	430.	U	490.	U	370.	U		
2303-16-4	Diallate	430.	U	490.	U	370.	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 VOA											
	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01					
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201					
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02					
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201					
	SAMPLE DATE ----->	01/16/97		01/16/97							
	DATE ANALYZED --->	01/22/97		01/21/97		02/03/97					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ----------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL				
74-87-3	Chloromethane	5.	U	5.	U	5.	U				
74-83-9	Bromomethane	5.	U	5.	U	5.	U				
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U				
75-00-3	Chloroethane	5.	U	5.	U	5.	U				
75-09-2	Methylene chloride	5.	U	5.	U	5.	U				
67-64-1	Acetone	10.	U	11.	U	10.	U				
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U				
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U				
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U				
156-60-5	trans-1,2-Dichloroethene	5.	U	5.	U	5.	U				
67-66-3	Chloroform	5.	U	5.	U	5.	U				
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U				
78-93-3	2-Butanone (MEK)	11.	U	11.	U	11.	U				
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U				
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U				
108-05-4	Vinyl acetate	11.	U	11.	U	11.	U				
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U				
0061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U				
79-01-6	Trichloroethene	5.	U	5.	U	5.	U				
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U				
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U				
80-62-6	Methyl methacrylate	5.	U	5.	U	5.	U				
71-43-2	Benzene	5.	U	5.	U	5.	U				
0061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U				
75-25-2	Bromoform	5.	U	5.	U	5.	U				
108-10-1	4-Methyl-2-Pentanone (MIBK)	11.	U	11.	U	11.	U				
591-78-6	2-Hexanone	11.	U	11.	U	11.	U				
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U				
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U				
108-88-3	Toluene	5.	U	5.	U	5.	U				
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U				
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U				
100-42-5	Styrene	5.	U	5.	U	5.	U				
75-71-8	Dichlorodifluoromethane	5.	U	5.	U	5.	U				
75-69-4	Trichlorofluoromethane	5.	U	5.	U	5.	UJ				
74-88-4	Methyl iodide	5.	U	5.	U	5.	U				
107-05-1	3-Chloropropene	5.	U	5.	U	5.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

X9 VOA									
	SAMPLE ID ------>	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-C-BCL2-01			
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	LAB SAMPLE ID --->	7085-10		7085-11		7108-02			
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKCBCL201			
	SAMPLE DATE ----->	01/16/97		01/16/97					
	DATE ANALYZED --->	01/22/97		01/21/97		02/03/97			
	MATRIX ---------->	Soil		Soil		Soil			
	UNITS ---------->	UG/KG		UG/KG		UG/KG			
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL		
107-12-0	Propionitrile	54.	UR	54.	UR	55.	UR		
75-05-8	Acetonitrile	54.	UR	54.	UR	55.	UR		
107-02-8	Acrolein	54.	UR	54.	UR	55.	UR		
126-99-8	Chloroprene	11.	U	11.	U	11.	U		
107-13-1	Acrylonitrile	54.	UR	54.	UR	55.	UR		
123-91-1	1,4-Dioxane	54.	UR	54.	UR	55.	UR		
126-98-7	Methacrylonitrile	54.	U	54.	U	55.	U		
74-95-3	Methylene bromide	5.	U	5.	U	5.	U		
78-83-1	Isobutyl alcohol	540.	UR	540.	UR	550.	UR		
106-93-4	1, 2-Dibromoethane	5.	U	5.	U	5.	U		
630-20-6	1,1,1,2-Tetrachloroethane	5.	U	5.	U	5.	U		
95-47-6	o-Xylene	5.	U	5.	U	5.	U		
96-18-4	1,2,3-Trichloropropane	5.	U	5.	U	5.	U		
110-57-6	trans-1,4-Dichloro-2-butene	5.	U	5.	U	5.	U		
96-12-8	1,2-Dibromo-3-Chloropropane	5.	U	5.	U	5.	U		
97-63-2	Ethyl methacrylate	5.	U	5.	U	5.	U		
76-01-7	Pentachloroethane	5.	U	5.	U	5.	U		
9000-76-0	XYLENE (META/PARA)	5.	U	5.	U	5.	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

ANIDE

	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02			
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102			
	LAB SAMPLE ID --->	7085-10		7085-11			
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102			
	SAMPLE DATE ----->	01/16/97		01/16/97			
	DATE EXTRACTED -->	01/20/97		01/20/97			
	DATE ANALYZED --->	01/21/97		01/21/97			
	MATRIX ---------->	Soil		Soil			
	UNITS ---------->	MG/KG		MG/KG			
CAS #	Parameter	7085	VAL	7085	VAL		
57-12-5	Cyanide (CN)	0.66	U	0.15	U		

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

PLOSIVES													
	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-S-BCL2-01		GDK-C-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01	
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	LAB SAMPLE ID --->	7085-10		7085-11		7108-01		7108-02		7108-03		7108-04	
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE EXTRACTED -->	01/21/97		01/21/97		02/03/97		02/03/97		02/03/97		02/03/97	
	DATE ANALYZED --->	01/29/97		01/29/97		02/06/97		02/06/97		02/06/97		02/06/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
118-96-7	Trinitrotoluene, 2,4,6- (TNT)	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
121-14-2	2,4-Dinitrotoluene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
121-82-4	RDX (Cyclonite)	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
5377-32-6	1,3,5-Trinitrobenzene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
2691-41-0	HMX	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
5572-78-2	2-Am-DNT	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
479-45-8	Tetryl	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
606-20-2	2,6-Dinitrotoluene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
88-72-2	o-Nitrotoluene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
98-95-3	Nitrobenzene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
99-08-1	m-Nitrotoluene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
99-65-0	1,3-Dinitrobenzene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
99-99-0	p-Nitrotoluene	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
9406-51-0	4-AM-DNT	650.	U	743.	U	500.	U	500.	U	500.	U	500.	U
99-35-4	1,3,5-Trinitrobenzene	NR		NR		NR		NR		NR		NR	
1946-51-0	4-AM-DNT	NR		NR		NR		NR		NR		NR	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

ERB

SAMPLE ID ------>	GDK-S-BCL1-01	GDK-S-BCL1-02	GDK-S-BCL2-01	GDK-C-BCL2-01	GDK-S-BCL3-01	GDK-S-BCL4-01
ORIGINAL ID ----->	GDKSBCL101	GDKSBCL102	GDKSBCL201	GDKCBCL201	GDKSBCL301	GDKSBCL401
LAB SAMPLE ID --->	7085-10	7085-11	7108-01	7108-02	7108-03	7108-04
ID FROM REPORT -->	GDKSBCL101	GDKSBCL102	GDKSBCL201	GDKCBCL201	GDKSBCL301	GDKSBCL401
SAMPLE DATE ----->	01/16/97	01/16/97	01/21/97	01/21/97	01/21/97	01/21/97
DATE EXTRACTED -->	01/30/97	01/30/97	01/30/97	01/30/97	01/30/97	01/30/97
DATE ANALYZED --->	02/19/97	02/19/97	02/11/97	02/11/97	02/12/97	02/12/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
94-75-7	2,4-D	90.5	U	104.	U	76.3	U	78.	U	93.3	U	93.9	U
93-76-5	2,4,5-T	22.	U	25.1	U	18.5	U	18.9	U	22.6	U	22.8	U
93-72-1	2,4,5-TP (Silvex)	19.2	U	22.	U	16.2	U	16.6	U	19.8	U	19.9	U
88-85-7	Dinoseb	50.9	U	58.2	U	42.9	U	43.9	U	52.5	U	52.8	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

EXACHROME													
	SAMPLE ID ------>	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-S-BCL2-01		GDK-C-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01	
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	LAB SAMPLE ID --->	7085-10		7085-11		7108-01		7108-02		7108-03		7108-04	
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE ANALYZED --->	01/29/97		01/29/97		02/05/97		02/05/97		02/05/97		02/05/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
18540-29-9	Chromium (Hexavalent)	0.26	UJ	0.3	UJ	0.22	UJ	0.22	UJ	0.27	UJ	0.27	UJ

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

-VOA											
	SAMPLE ID ------->	GDK-S-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01					
	ORIGINAL ID ----->	GDKSBCL201		GDKSBCL301		GDKSBCL401					
	LAB SAMPLE ID --->	7108-01		7108-03		7108-04					
	ID FROM REPORT -->	GDKSBCL201		GDKSBCL301		GDKSBCL401					
	SAMPLE DATE ----->	01/21/97		01/21/97		01/21/97					
	DATE ANALYZED --->	01/31/97		01/31/97		01/31/97					
	MATRIX ---------->	Soil		Soil		Soil					
	UNITS ---------->	UG/KG		UG/KG		UG/KG					
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL				
74-87-3	Chloromethane	11.	U	11.	U	11.	U				
75-01-4	Vinyl chloride	5.	U	5.	U	5.	U				
74-83-9	Bromomethane	11.	U	11.	U	11.	U				
75-00-3	Chloroethane	5.	U	5.	U	5.	U				
67-64-1	Acetone	11.	U	11.	U	11.	U				
75-15-0	Carbon disulfide	5.	U	5.	U	5.	U				
75-35-4	1,1-Dichloroethene	5.	U	5.	U	5.	U				
75-09-2	Methylene chloride	5.	U	5.	U	5.	U				
75-34-3	1,1-Dichloroethane	5.	U	5.	U	5.	U				
156-59-2	cis-1,2-Dichloroethene	5.	U	5.	U	5.	U				
156-60-5	trans-1,2-Dichloroethene	5.	U	5.	U	5.	U				
67-66-3	Chloroform	5.	U	5.	U	5.	U				
71-55-6	1,1,1-Trichloroethane	5.	U	5.	U	5.	U				
110-75-8	2-Chloroethyl vinyl ether	5.	U	5.	U	5.	U				
78-93-3	2-Butanone (MEK)	11.	U	11.	U	11.	U				
56-23-5	Carbon tetrachloride	5.	U	5.	U	5.	U				
108-05-4	Vinyl acetate	5.	U	5.	U	5.	U				
107-06-2	1,2-Dichloroethane	5.	U	5.	U	5.	U				
71-43-2	Benzene	5.	U	5.	U	5.	U				
79-01-6	Trichloroethene	5.	U	5.	U	5.	U				
124-48-1	Dibromochloromethane	5.	U	5.	U	5.	U				
78-87-5	1,2-Dichloropropane	5.	U	5.	U	5.	U				
75-27-4	Bromodichloromethane	5.	U	5.	U	5.	U				
0061-01-5	cis-1,3-Dichloropropene	5.	U	5.	U	5.	U				
108-88-3	Toluene	5.	U	5.	U	5.	U				
0061-02-6	trans-1,3-Dichloropropene	5.	U	5.	U	5.	U				
75-25-2	Bromoform	5.	U	5.	U	5.	U				
79-00-5	1,1,2-Trichloroethane	5.	U	5.	U	5.	U				
108-10-1	4-Methyl-2-Pentanone (MIBK)	11.	U	11.	U	11.	U				
591-78-6	2-Hexanone	11.	U	11.	U	11.	U				
127-18-4	Tetrachloroethene	5.	U	5.	U	5.	U				
108-90-7	Chlorobenzene	5.	U	5.	U	5.	U				
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5.	U	5.	U				
100-41-4	Ethylbenzene	5.	U	5.	U	5.	U				
100-42-5	Styrene	5.	U	5.	U	5.	U				
1330-20-7	Xylene (Total)	5.	U	5.	U	5.	U				

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

346-DIOX													
	SAMPLE ID ------>	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-S-BCL2-01		GDK-C-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01	
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	LAB SAMPLE ID --->	28195.10		28195.11		28233.01		28234.01		28233.02		28233.05	
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/23/97		01/23/97		01/23/97		01/23/97	
	DATE ANALYZED --->	01/24/97		01/24/97		01/28/97		01/28/97		01/28/97		01/28/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	NG/KG		NG/KG		NG/KG		NG/KG		NG/KG		NG/KG	
CAS #	Parameter	28195	VAL	28195	VAL	28233	VAL	28233	VAL	28233	VAL	28233	VAL
1746-01-6	2378-TCDD	0.451	U	0.46	U	0.329	U	0.535	U	0.273	U	0.495	U
0321-76-4	12378-PeCDD	2.98	U	0.433	U	0.489	U	0.538	U	0.611	U	0.633	U
9227-28-6	123478-HxCDD	1.9	U	0.499	U	0.358	U	0.584	U	0.664	U	0.62	U
7653-85-7	123678-HxCDD	6.8		0.321	U	0.231	U	0.376	U	0.428	U	0.399	U
9408-74-3	123789-HxCDD	5.46		0.35	U	0.251	U	0.409	U	0.466	U	0.435	U
5822-46-9	1234678-HpCDD	88.		1.27		16.2		12.		1.2		2.2	
3268-87-9	OCDD	613.		9.37		148.		116.		13.6		24.6	
1207-31-9	2378-TCDF	0.339	U	0.404	U	0.292	U	0.443	U	0.27	U	0.345	U
7117-41-6	12378-PeCDF	0.421	U	0.226	U	0.322	U	0.251	U	0.215	U	0.407	U
7117-31-4	23478-PeCDF	0.422	U	0.226	U	0.323	U	0.251	U	0.216	UJ	0.408	U
0648-26-9	123478-HxCDF	3.62	EMPC	0.338	U	0.23	U	0.476	U	0.29	U	0.326	U
7117-44-9	123678-HxCDF	1.22	U	0.265	U	0.181	U	0.373	U	0.227	U	0.255	U
2918-21-9	123789-HxCDF	1.76	U	0.383	U	0.261	U	0.539	U	0.329	U	0.369	U
0851-34-5	234678-HxCDF	1.59	U	0.346	U	0.236	U	0.487	U	0.297	U	0.334	U
7562-39-4	1234678-HpCDF	11.7		0.346	U	1.52		1.1	EMPC	1.72	EMPC	0.683	
5673-89-7	1234789-HpCDF	1.63	U	0.413	U	0.593	U	0.496	U	0.381		0.494	U
9001-02-0	OCDF	25.1		0.265	U	2.99		1.93	EMPC	1.25		0.524	U
1903-57-5	Total Tetra-Dioxins	4.18		0.46	U	1.97		2.05		0.273	U	0.495	U
5088-22-9	Total Penta-Dioxins	5.16		0.433	U	2.21		2.34		0.611	U	0.633	U
4465-46-8	Total Hexa-Dioxins	107.		1.24		31.5		18.3		0.428	U	1.47	
7871-00-4	Total Hepta-Dioxins	254.		3.38		69.5		50.3		3.19		2.2	
5722-27-5	Total Tetra-Furans	3.66		0.404	U	0.292	U	0.443	U	0.27	U	0.345	U
0602-15-4	Total Penta-Furans	9.02		0.226	U	0.323	U	0.251	U	0.216	U	0.408	U
5684-94-1	Total Hexa-Furans	19.8		0.265	U	1.55		0.373	U	0.227	U	0.255	U
8998-75-3	Total Hepta-Furans	11.7		0.346	U	1.52		0.415	U	0.319	U	1.36	

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

8046-META	SAMPLE ID ------->	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-S-BCL2-01		GDK-C-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01	
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	LAB SAMPLE ID --->	7085-10		7085-11		7108-01		7108-02		7108-03		7108-04	
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/21/97		01/21/97		01/21/97		01/21/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/24/97		01/24/97		01/24/97		01/24/97	
	DATE ANALYZED --->	01/21/97		01/21/97		01/27/97		01/27/97		01/27/97		01/27/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
7429-90-5	Aluminum (Al)	24700.		14200.		10400.		9610.		5020.		18500.	
7440-36-0	Antimony (Sb)	0.57	J	0.4	UJ	0.3	UJ	0.3	UJ	0.48	J	2.2	J
7440-38-2	Arsenic (As)	13.5		13.7		7.7	J	6.7	J	7.2	J	13.8	J
7440-39-3	Barium (Ba)	32.9	J	24.1	J	17.1	J	17.	J	16.5	J	51.3	J
7440-41-7	Beryllium (Be)	0.99	J	0.62	J	0.55	J	0.53	J	0.31	J	0.73	J
7440-43-9	Cadmium (Cd)	0.23	U	0.26	U	0.19	U	0.2	U	0.29	J	0.42	J
7440-70-2	Calcium (Ca)	45700.		18200.		8100.		9350.		59000.		47000.	
7440-47-3	Chromium (Cr)	45.9		25.7		20.9		19.6		21.3		36.5	
7440-48-4	Cobalt (Co)	4.5	J	3.1	J	3.	J	2.7	J	0.35	J	3.7	
7440-50-8	Copper (Cu)	39.8	J	22.2	J	11.3		10.5		44.2		94.5	
7439-89-6	Iron (Fe)	23400.	J	17200.	J	13500.		12600.		10400.		19000.	
7439-92-1	Lead (Pb)	37.7		18.2		15.8		12.8		38.9		70.8	
7439-95-4	Magnesium (Mg)	4240.		2960.		2110.		1990.		3140.		3010.	
7439-96-5	Manganese (Mn)	396.	J	355.	J	229.	J	247.		368.	J	1050.	J
7439-97-6	Mercury (Hg)	0.26	J	0.2	J	0.05	UJ	0.07	J	0.17	J	0.52	J
7440-02-0	Nickel (Ni)	16.1		7.2	J	6.3	J	5.9	J	4.6	J	16.	
7440-09-7	Potassium (K)	2010.		1430.		969.	J	929.	J	859.	J	1320.	
7782-49-2	Selenium (Se)	0.49	U	0.61	U	0.46	J	0.41	U	0.51	J	1.1	J
7440-22-4	Silver (Ag)	0.31	J	0.34	U	0.25	UJ	0.26	UJ	0.3	UJ	0.31	UJ
7440-23-5	Sodium (Na)	551.	J	2430.	J	150.	J	153.	J	2170.	J	2530.	J
7440-28-0	Thallium (Tl)	1.4	U	1.5	U	1.1	U	1.2	U	1.4	U	1.4	U
7440-62-2	Vanadium (V)	51.2		29.		26.3		24.4		18.8		43.9	
7440-66-6	Zinc (Zn)	124.	J	57.5	J	37.		37.2		84.4		145.	
7440-31-5	Tin (Sn)	12.6	U	13.8	U	10.3	U	76.4		46.		12.7	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

8046-OP P						
SAMPLE ID ------->	GDK-S-BCL1-01	GDK-S-BCL1-02	GDK-S-BCL2-01	GDK-C-BCL2-01	GDK-S-BCL3-01	GDK-S-BCL4-01
ORIGINAL ID ----->	GDKSBCL101	GDKSBCL102	GDKSBCL201	GDKCBCL201	GDKSBCL301	GDKSBCL401
LAB SAMPLE ID --->	7085-10	7085-11	7108-01	7108-02	7108-03	7108-04
ID FROM REPORT -->	GDKSBCL101	GDKSBCL102	GDKSBCL201	GDKCBCL201	GDKSBCL301	GDKSBCL401
SAMPLE DATE ----->	01/16/97	01/16/97	01/21/97		01/21/97	01/21/97
DATE EXTRACTED -->	01/21/97	01/21/97	01/23/97	01/23/97	01/23/97	01/23/97
DATE ANALYZED --->	02/05/97	02/06/97	02/06/97	02/01/97	02/01/97	02/01/97
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
298-04-4	Disulfoton	43.3	U	49.4	U	36.4	U	37.2	U	44.6	U	44.9	U
298-00-0	Methyl parathion	43.3	U	49.4	U	36.4	U	37.2	U	44.6	U	44.9	U
298-02-2	Phorate	43.3	U	49.4	U	36.4	U	37.2	U	44.6	U	44.9	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

8846-PEST																					
	SAMPLE ID ------>	GDK-S-BCL1-01		GDK-S-BCL1-02		GDK-S-BCL2-01		GDK-C-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01	
	ORIGINAL ID ----->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	LAB SAMPLE ID --->	7085-10		7085-11		7108-01		7108-02		7108-03		7108-04	
	ID FROM REPORT -->	GDKSBCL101		GDKSBCL102		GDKSBCL201		GDKCBCL201		GDKSBCL301		GDKSBCL401	
	SAMPLE DATE ----->	01/16/97		01/16/97		01/21/97				01/21/97		01/21/97	
	DATE EXTRACTED -->	01/20/97		01/20/97		01/23/97		01/23/97		01/23/97		01/23/97	
	DATE ANALYZED --->	01/30/97		01/30/97		01/30/97		01/30/97		01/30/97		01/30/97	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/KG		UG/KG		UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	7085	VAL	7085	VAL	7090	VAL	7090	VAL	7090	VAL	7090	VAL
319-84-6	alpha-BHC	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
319-85-7	beta-BHC	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
319-86-8	delta-BHC	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
58-89-9	gamma-BHC (Lindane)	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
76-44-8	Heptachlor	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
309-00-2	Aldrin	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
1024-57-3	Heptachlor epoxide	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	24.	
959-98-8	Endosulfan I	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
60-57-1	Dieldrin	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
72-55-9	4,4'-DDE	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
72-20-8	Endrin	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
3213-65-9	Endosulfan II	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
72-54-8	4,4'-DDD	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
1031-07-8	Endosulfan sulfate	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
50-29-3	4,4'-DDT	4.29	U	4.9	U	3.61	U	3.69	U	33.2		4.45	U
72-43-5	Methoxychlor	22.1	U	25.2	U	18.6	U	19.	U	22.7	U	22.9	U
3494-70-5	Endrin ketone	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
7421-93-4	Endrin aldehyde	4.29	U	4.9	U	3.61	U	3.69	U	4.42	U	4.45	U
5103-71-9	alpha-Chlordane	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
5103-74-2	gamma-Chlordane	2.21	U	2.52	U	1.86	U	1.9	U	2.27	U	2.29	U
8001-35-2	Toxaphene	221.	U	252.	U	186.	U	190.	U	227.	U	229.	U
12674-11-2	Aroclor-1016	42.9	U	49.	U	36.1	U	36.9	U	44.2	U	44.5	U
11104-28-2	Aroclor-1221	87.1	U	99.4	U	73.3	U	74.9	U	89.7	U	90.3	U
11141-16-5	Aroclor-1232	42.9	U	49.	U	36.1	U	36.9	U	44.2	U	44.5	U
53469-21-9	Aroclor-1242	42.9	U	49.	U	36.1	U	36.9	U	44.2	U	44.5	U
12672-29-6	Aroclor-1248	42.9	U	49.	U	36.1	U	36.9	U	44.2	U	44.5	U
11097-69-1	Aroclor-1254	42.9	U	49.	U	36.1	U	36.9	U	44.2	U	44.5	U
11096-82-5	Aroclor-1260	64.3		49.	U	36.1	U	36.9	U	44.2	U	44.5	U

*** Validation Complete ***

CHARLESTON - ZONE K SOIL
CHARLESTON ZONE K SOIL
GDK SOIL BORING SAMPLES

8846-SVOA									
	SAMPLE ID ------->	GDK-S-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01			
	ORIGINAL ID ----->	GDKSBCL201		GDKSBCL301		GDKSBCL401			
	LAB SAMPLE ID --->	7108-01		7108-03		7108-04			
	ID FROM REPORT -->	GDKSBCL201		GDKSBCL301		GDKSBCL401			
	SAMPLE DATE ----->	01/21/97		01/21/97		01/21/97			
	DATE EXTRACTED -->	01/23/97		01/23/97		01/23/97			
	DATE ANALYZED --->	02/12/97		02/07/97		02/07/97			
	MATRIX ---------->	Soil		Soil		Soil			
	UNITS ---------->	UG/KG		UG/KG		UG/KG			
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL		
110-86-1	Pyridine	360.	U	440.	U	450.	U		
108-95-2	Phenol	360.	U	440.	U	450.	U		
111-44-4	bis(2-Chloroethyl)ether	360.	U	440.	U	450.	U		
95-57-8	2-Chlorophenol	360.	U	440.	U	450.	U		
541-73-1	1,3-Dichlorobenzene	360.	U	440.	U	450.	U		
106-46-7	1,4-Dichlorobenzene	360.	U	440.	U	450.	U		
100-51-6	Benzyl alcohol	360.	U	440.	U	450.	U		
95-50-1	1,2-Dichlorobenzene	360.	U	440.	U	450.	U		
95-48-7	2-Methylphenol (o-Cresol)	360.	U	440.	U	450.	U		
108-60-1	2,2'-oxybis(1-Chloropropane)	360.	U	440.	U	450.	U		
106-44-5	4-Methylphenol (p-Cresol)	360.	U	440.	U	450.	U		
621-64-7	N-Nitroso-di-n-propylamine	360.	U	440.	UJ	450.	U		
67-72-1	Hexachloroethane	360.	U	440.	U	450.	U		
98-95-3	Nitrobenzene	360.	U	440.	U	450.	U		
78-59-1	Isophorone	360.	U	440.	U	450.	U		
88-75-5	2-Nitrophenol	360.	U	440.	U	450.	U		
105-67-9	2,4-Dimethylphenol	360.	U	440.	U	450.	U		
65-85-0	Benzoic acid	1900.	U	2300.	U	2300.	U		
111-91-1	bis(2-Chloroethoxy)methane	360.	U	440.	U	450.	U		
120-83-2	2,4-Dichlorophenol	360.	U	440.	U	450.	U		
120-82-1	1,2,4-Trichlorobenzene	360.	U	440.	U	450.	U		
91-20-3	Naphthalene	360.	U	440.	U	450.	U		
106-47-8	4-Chloroaniline	360.	U	440.	U	450.	U		
87-68-3	Hexachlorobutadiene	360.	U	440.	U	450.	U		
59-50-7	4-Chloro-3-methylphenol	360.	U	440.	U	450.	U		
91-57-6	2-Methylnaphthalene	360.	U	440.	U	450.	U		
77-47-4	Hexachlorocyclopentadiene	360.	U	440.	U	450.	U		
88-06-2	2,4,6-Trichlorophenol	360.	U	440.	U	450.	U		
95-95-4	2,4,5-Trichlorophenol	880.	U	1100.	U	1100.	U		
91-58-7	2-Chloronaphthalene	360.	U	440.	U	450.	U		
88-74-4	2-Nitroaniline	880.	U	1100.	U	1100.	U		
131-11-3	Dimethyl phthalate	360.	U	440.	U	450.	U		
208-96-8	Acenaphthylene	360.	U	440.	U	450.	U		
606-20-2	2,6-Dinitrotoluene	360.	U	440.	U	450.	U		
99-09-2	3-Nitroaniline	880.	U	1100.	U	1100.	U		
83-32-9	Acenaphthene	360.	U	440.	UJ	450.	U		

*** Validation Complete ***

846-SVOA	SAMPLE ID ------->	GDK-S-BCL2-01		GDK-S-BCL3-01		GDK-S-BCL4-01				
	ORIGINAL ID ----->	GDKSBCL201		GDKSBCL301		GDKSBCL401				
	LAB SAMPLE ID --->	7108-01		7108-03		7108-04				
	ID FROM REPORT -->	GDKSBCL201		GDKSBCL301		GDKSBCL401				
	SAMPLE DATE ----->	01/21/97		01/21/97		01/21/97				
	DATE EXTRACTED -->	01/23/97		01/23/97		01/23/97				
	DATE ANALYZED --->	02/12/97		02/07/97		02/07/97				
	MATRIX ---------->	Soil		Soil		Soil				
	UNITS ---------->	UG/KG		UG/KG		UG/KG				
CAS #	Parameter	7090	VAL	7090	VAL	7090	VAL			
51-28-5	2,4-Dinitrophenol	880.	U	1100.	U	1100.	U			
100-02-7	4-Nitrophenol	880.	U	1100.	U	1100.	U			
132-64-9	Dibenzofuran	360.	U	440.	U	450.	U			
121-14-2	2,4-Dinitrotoluene	360.	U	440.	U	450.	U			
84-66-2	Diethylphthalate	360.	U	440.	U	450.	U			
7005-72-3	4-Chlorophenylphenylether	360.	U	440.	U	450.	U			
86-73-7	Fluorene	360.	U	440.	U	450.	U			
100-01-6	4-Nitroaniline	880.	U	1100.	U	1100.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	880.	U	1100.	U	1100.	U			
86-30-6	N-Nitrosodiphenylamine	360.	U	440.	U	450.	U			
103-33-3	Azobenzene	360.	U	440.	U	450.	U			
101-55-3	4-Bromophenyl-phenylether	360.	U	440.	U	450.	U			
118-74-1	Hexachlorobenzene	360.	U	440.	U	450.	U			
87-86-5	Pentachlorophenol	880.	U	1100.	U	1100.	U			
85-01-8	Phenanthrene	360.	U	440.	U	450.	U			
120-12-7	Anthracene	360.	U	440.	U	450.	U			
86-74-8	Carbazole	360.	U	440.	U	450.	U			
84-74-2	Di-n-butylphthalate	360.	U	440.	U	450.	U			
206-44-0	Fluoranthene	360.	U	240.	J	450.	U			
129-00-0	Pyrene	360.	U	160.	J	450.	U			
85-68-7	Butylbenzylphthalate	360.	U	440.	U	450.	U			
91-94-1	3,3'-Dichlorobenzidine	360.	U	440.	U	450.	U			
56-55-3	Benzo(a)anthracene	360.	U	110.	J	450.	U			
218-01-9	Chrysene	360.	U	96.	J	450.	U			
117-81-7	bis(2-Ethylhexyl)phthalate (BEHP)	360.	U	440.	U	450.	U			
117-84-0	Di-n-octyl phthalate	360.	U	440.	U	450.	U			
205-99-2	Benzo(b)fluoranthene	360.	U	440.	U	450.	U			
207-08-9	Benzo(k)fluoranthene	360.	U	200.	J	450.	U			
50-32-8	Benzo(a)pyrene	360.	U	440.	U	450.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	360.	U	440.	U	450.	U			
53-70-3	Dibenz(a,h)anthracene	360.	U	440.	U	450.	U			
191-24-2	Benzo(g,h,i)perylene	360.	U	440.	U	450.	U			
108-39-4	3-Methylphenol (m-Cresol)	NR		NR		NR				
122-39-4	Diphenylamine	NR		NR		NR				
92-87-5	Benzidine	NR		NR		NR				
62-75-9	N-Nitrosodimethylamine	NR		NR		NR				

*** Validation Complete ***

Chains of Custody for Groundwater

Amended 5-20-97

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 3 REL. 9

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE) Tom Blyth

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA, Pest/PCB	Metals, CN, Cr+6	Herbs, OP Pest	TPH (Gas + Diesel)		REMARKS
NBCK\694GW0070\1	5-14-97	1450	H_2O	40 mL, 1L Amber, 40z Amber 1L Poly, 160z Poly		*	17	X	X	X	X	X		
NBCK\694GW0070\1						* TBT	17	X	X	X	X	X	TBT	
NBCK\694HW0070\1	5-14-97	1450	H_2O	↓		*	17	X	X	X	X	X		
NBCK\694TW0070\1	5-14-97	—	H_2O	40 mL		*	2	X						

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE Tom Blyth	5/14/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple		PRINTED		PRINTED		PRINTED	
COMPANY ENSAFE	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON Ship to Lab	1800	REASON		REASON		REASON	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 464376985
SPECIAL INSTRUCTION: Shipped to Ceimic

COMMENTS: DQO3 + TICS
Apx 9

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
TPH = HCL
Met = HNO_3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Amended 5-20-97

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: PO 3 REL 9

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA, Pest/PCB	Metals, CN, Cr+6	Herbs, OP Pest	TPH (GRO+DRO)			REMARKS
NBCK\694GW0005\01	5-15-97	0940	H_2O	1L Amber, 4oz Amber 4oz Poly, 1L Poly	4°C	*	13	X	X	X	X	X			limited Volume
NBCK\694GW0004\01	↓	1155	↓	↓	↓	*	17	X	X	X	X	X			
NBCK\694GW0006\01	↓	1257	↓	↓	↓	*	13	X	X	X	X	X			limited Volume
NBCA\694TW0006\01	5-1597	—	H_2O	40 mL VOA	4°C	HCL	2	X							

5-15-97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	5/15/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME 1800	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE		COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 464376916 3
SPECIAL INSTRUCTION: Client

COMMENTS: D003 + TICs
Apx G

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO_3
CN = NaOH
TPH = HCL

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: PO 4 REL 10

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: Dioxin	REMARKS
NBCK\694GW0050101	5-15-97	0940	H_2O	1L Amber	4°C	None	1	X	limited Volume
NBCK\694GW0040101	↓	1155	↓	↓	↓	↓	2	X	
NBCK\694GW0060101		1257					1	X	limited Volume
NBCK\694GW0070101		1330					2	X	
NBCK\694HW0070101	↓	1330	↓	↓	↓	↓	2	X	

5-15-97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	5/15/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple		PRINTED		PRINTED		PRINTED	
COMPANY ENSAFE	TIME 1800	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 090403664 1
SPECIAL INSTRUCTION: SWL

COMMENTS: DQO3 + TICs

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Amendment 2d 5-20-97

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: PO 3 REL 9

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 291-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Verroy
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA, Pest/PCB	Metals, CN, Cr6	Herbs, OP Pest	TPH (GRO+DRO)	REMARKS
NBCK\694GW0001	5-16-97	1032	H_2O	40mL VOA, 1L Amber 1L Poly, 40z Poly, 40z Amber	4°C	*	13	X	X	X	X	X	Limited Volume
NBCK\694GW0003		1140				*	17	X	X	X	X	X	
NBCK\694GW0026		1235				*	17	X	X	X	X	X	
NBCK\694FW0002		1330		↓	↓	*	17	X	X	X	X	X	
NBCK\694TW0002	↓	—	↓	40mL Vial	4°C	HCL	2	X					

5-16-97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	5/16/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B Temple	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE	1700	COMPANY		COMPANY		COMPANY	
REASON ship folab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 464 376 9174
SPECIAL INSTRUCTION: Shipped to Chemic

COMMENTS: DQO3 + TICS
Apx 9

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☒ DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO_3
CN = NaOH
TPH = HCL

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: PO 4 REL 10

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Verney
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: DIOXIN	REMARKS
NBCKV694GW0001	5-16-97	1032	H_2O	1L Amber	4°C	None	1	X	
NBCKV694GW0003		1140					2	X	
NBCKV694GW0002		1235					2	X	
NBCKV694FW0002	↓	1330	↓	↓	↓	↓	2	X	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	5/16/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd P. Temple	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE	1700	COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 0904036744
SPECIAL INSTRUCTION: SWL

COMMENTS: D9037TICS

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☒ DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK: 2911-08440
COC #:
BPA/SO: PO 3 REL 9 Ceimic

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Verney
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA	Metals	CN				REMARKS
NBCK\694GW00502	7-17-97	0915	H_2O	1L Amber, 1L Poly 40z Poly, 40mL	4°C	VOA = HCl Met = HNO_3 CN = NaOH	6	X	X	X	X				
NBCK\694GW00702	7-17-97	1225					6	X	X	X	X				
NBCK\694HW00702	7-17-97	1225					6	X	X	X	X				
NBCK\694GW00302	7-17-97	1445					6	X	X	X	X				
NBCK\694GW00202	7-17-97	1505					6	X	X	X	X				
NBCK\694GW00602	7-18-97	1100					6	X	X	X	X				
NBCK\694GW00102	7-18-97	1147					6	X	X	X	X				
NBCK\694TW00102	7-18-97	—	↓	40mL VOA	↓	↓	2	X							

7-18-97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	7/18/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME 1700	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE		COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 566364673
SPECIAL INSTRUCTION: Ceimic

COMMENTS: D&O3 + TICS

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK: 2911-08440
COC #:
BPA/SO: P04 Rel 10

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. 803-884-0024
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: Dioxin	REMARKS
NBCK\694GW00502	7-17-97	0915	H_2O	1 Liter Amber	4°C	None	2	X	
NBCK\694GW00702	7-17-97	1225					2	X	
NBCK\694HW00702	7-17-97	1225					2	X	
NBCK\694GW00302	7-17-97	1445					2	X	
NBCK\694GW00202	7-17-97	1505					2	X	
NBCK\694GW00602	7-18-97	1100					2	X	
NBCK\694GW00102	7-18-97	1147					2	X	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	7/18/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME 1700	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE		COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 4849149605
SPECIAL INSTRUCTION: SWL

COMMENTS: DQ03 +TICs

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK: 2911-08440
COC #:
BPA/SO: PO 3 REL 9

CLIENT: Naval Base Charleston
PROJECT MANAGER: Charlie Vernoy
ADDRESS: Zone K
TELEPHONE NO.: 803-884-0029
PROJECT NAME/NUMBER: 2911-08440
FAX. NO.: 803-856-0107
SAMPLERS: (SIGNATURE) [signature]

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA	Metals	CN				REMARKS
NBCK\694GW00402	7-21-97	1200	H_2O	1 amber, 1L Poly 40mL VOA, 4oz Poly	4°C	VOA=HCL Met=HNO3 CN=NaOH	6	X	X	X	X				
NBCK\694TW00402	7-21-97	—	H_2O	40mL Voa	4°C	HCL	2	X							

[signature] 7-21-97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE [signature]	7/21/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE	1700	COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO.: 5663647662
SPECIAL INSTRUCTION: Cermic

COMMENTS: DQ03 FTICS

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCDCR1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK: 2911-08440
COC #:
BPA/SO: PO3 Rel 16

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Verroy
TELEPHONE NO. 803-884-0029
FAX. NO. 803-856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: Dioxin	REMARKS
NBCK694GW00402	7-21-97	1200	H2O	1L Amber	4°C	None	2	X	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	7/21/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME 1700	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE		COMPANY		COMPANY		COMPANY	
REASON Shipping Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 484 9149594
SPECIAL INSTRUCTION: SWL

COMMENTS: DQO3 FTCS

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN

ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O.4 REL.37

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-0844P
SAMPLERS: (SIGNATURE) J.A. Hunnycutt

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA	Dioxin	Metals	Cyanide	REMARKS
NBCK\GDKGWCL103	12/17/97	1112	H_2O	40ml vial, 1L Poly, 1L Amber	4°C	*	8	2	2	2	1	1	
NBCK\694GW00203		1240					8	2	2	2	1	1	
NBCK\694DW00203		0837					8	2	2	2	1	1	
NBCK\694EW00203		0851					8	2	2	2	1	1	
NBCK\694FW00203		1225					8	2	2	2	1	1	
NBCK\694GW00303		1402					8	2	2	2	1	1	
NBCK\694TW00303		—		40ml vial			2	2					

J.A. Hunnycutt

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE J.A. Hunnycutt	12/17/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J.A. Hunnycutt	TIME 1630	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY DET		COMPANY		COMPANY		COMPANY	
REASON proptor ship		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 484915085 4
SPECIAL INSTRUCTION: South West

COMMENTS: All samples are DQ03

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☒ DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO_3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

NAVY CLEAN

ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK:
COC #:
BPA/SO: P.O.4 Rel.37

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE) J.D. Hunegnaw

PROJECT MANAGER Charlie Vernay
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA	Dioxin	Metals	Cyanide			REMARKS
NBCK1694GW00703	12/18/97	0934	H_2O	40ml vial, 1LPoly 1LAMBER	4°C	*	8	2	2	2	1	1			
NBCK1694HW00703		0954					8	2	2	2	1	1			
NBCK1694GW00503		1028					7	2	2	1⊕	1	1			⊕Limited quantity
NBCK1694TW00703		—		40ml vial			2	2							

J.D. Hunegnaw

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE J.D. Hunegnaw	12/18/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J.D. Hunegnaw	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY Def	1600	COMPANY		COMPANY		COMPANY	
REASON prep for ship		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 484915 0843
SPECIAL INSTRUCTION: SouthWest

COMMENTS: All samples are D&O3

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 4 Rel. 37

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE) [signature]

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA	Dioxin	Metals	Cyanide			REMARKS
NBCK\694GW00603	12/19/97	0930	H_2O	40ml vial, 1L Poly 1L AMBER	4°C	*	8	2	2	2	1	1			
NBCK\694TW00603	↓	—	↓	40ml vial	↓	↓	2	2							

[signature]

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE [signature]	12/19/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J. Altuneycutt		PRINTED		PRINTED		PRINTED	
COMPANY Def	TIME 1330	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON prep for ship		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 4849150832
SPECIAL INSTRUCTION: Southwest

COMMENTS: All samples are DQ03

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O.4 Rel.37

CLIENT: Naval Base Charleston
ADDRESS: Zone K
PROJECT NAME/NUMBER: 2911-08440
SAMPLERS: (SIGNATURE) [signature]

PROJECT MANAGER: Charlie Vernoy
TELEPHONE NO.: (803) 884-0029
FAX. NO.: (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA	Dioxin	Metals	Cyanide			REMARKS
NBCK\694GW00403	01/12/98	1413	H_2O	40ml vial, 1L Poly 1L Amber	4°C	*	8	2	2	2	1	1			
NBCK\694TW00403	↓	—	↓	40ml vial	↓	↓	2	2							

[signature]

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE [signature]	01/12/98	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J.A. Hunneycutt		PRINTED		PRINTED		PRINTED	
COMPANY DET	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON prep for ship	1615	REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO.: 4849150821
SPECIAL INSTRUCTION: South West

COMMENTS: All samples are DQ03

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCDCR1

PAGE 1 OF 1

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(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O.4 Rel.49

CLIENT Naval Base Charleston PROJECT MANAGER Charlie Vernoy
ADDRESS Zone IC TELEPHONE NO. (803) 884-0029
PROJECT NAME/NUMBER 3911-0844P FAX. NO. (803) 856-0107
SAMPLERS: (SIGNATURE) JA Honeycutt

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA	Dioxin	Metals	Cyanide				REMARKS
NBCK|GDKGWC|043	3/16/98	1136	H_2O	40ml vial, 1L AMB, 1L poly, 500ml poly	4°C	*	9	2	2	2	2	1				
NBCK|694GW00204		1304					9	2	2	2	2	1				
NBCK|694DW00204		0940					9	2	2	2	2	1				
NBCK|694EW00204		0935					9	2	2	2	2	1				
NBCK|694FW00204		1245					9	2	2	2	2	1				
NBCK|694TW00204		—		40ml vial			2	2								

JA Honeycutt

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE JA Honeycutt	3/16/98	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED JA Honeycutt	TIME 1515	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY DET		COMPANY		COMPANY		COMPANY	
REASON Prep for ship		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 484915 0740
SPECIAL INSTRUCTION: Southwest

COMMENTS: All samples are DQ03

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
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(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O.4 Rel.99

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE) J.B. Huarycuit

PROJECT MANAGER Charlie Vernay
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	ANALYSIS REQUIRED: NO. OF CONTAINERS	VOA	SVOA	Dioxin	Metals	Cyanide			REMARKS
NBCK\694GW00404	3/17/98	1015	H_2O	40ml vial/1L Poly x-500ml poly	4°C	*	9	2	2	2	2	1			
NBCK\694GW00504	↓	1155	↓	↓ ↓	↓	↓	9	2	2	2	2	1			
NBCK\694TW00304	↓	—	↓	40ml vial	↓	↓	2	2							

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE J.B. Huarycuit	3/17/98	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J.B. Huarycuit	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY DET	1510	COMPANY		COMPANY		COMPANY	
REASON prep for ship		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 4849150736
SPECIAL INSTRUCTION: Southwest

COMMENTS: All samples are DRO3

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O.4 Rel.49

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE) J.A. Hunnycutt

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0107

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA	Dioxin	Metals	Cyanide			REMARKS
NBCK\694GW00704	3/18/98	1031	H_2O	40ml vial, 1L Amber 1L poly, 500ml poly	4°C	*	9	2	2	2	2	1			
NBCK\694HW00704	↓	1031	↓	↓ ↓	↓	↓	9	2	2	2	2	1			
NBCK\694TW00704	↓	—	↓	40ml vial	↓	↓	2	2							

J.A. Hunnycutt

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE J.A. Hunnycutt	3/18/98	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED J.A. Hunnycutt	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY DET	1510	COMPANY		COMPANY		COMPANY	
REASON pump Sampling		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fedex
SHIPMENT NO. 484915 0723
SPECIAL INSTRUCTION: Southwest

COMMENTS: All samples are DQO3

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCL
Met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK:
COC #:
BPA/SO: P.O. 4 Rel. 49

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08440
SAMPLERS: (SIGNATURE)

PROJECT MANAGER Charlie Vernon
TELEPHONE NO. (803) 884-0029
FAX. NO. (803) 856-0104

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA	Dioxin	Metals	Cyanide	REMARKS
NBCK1694GW00504	3-19-98	1048	H_2O	40ml vial, 1LAMBER 1LPoly, 500ml poly	4°C	*	8	2	2	1 (*)	2	1	(*) Limited quantity
NBCK1694GW00604	↓	1056	↓	↓ ↓	↓	↓	9	2	2	2	2	1	
NBCK1694TW00604	↓	—	↓	40ml vial	↓	↓	2	2					

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	3/19/98	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY DET		COMPANY		COMPANY		COMPANY	
REASON prep for shipment	1510	REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEX
SHIPMENT NO. 4849150714
SPECIAL INSTRUCTION: Southwest

COMMENTS: All samples are DQO3

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

* VOA = HCl
Met = HNO3
CN = NaOH

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

ENSAFE

800-528-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

Amended 1-13-98 QP

PAGE 1 OF —

PROJECT/JOB NO: 2908-00, 2-014-00

COC NO: 08(OK)QP

PO NO: 4

REL NO: 77

LAB NAME: Southwest

CLIENT Naval Base Charleston

PROJECT MANAGER CHARLIE VERNOY

LOCATION ZONE K

TELE/FAX NO. (843) 884-0029 / 856-0107

SAMPLERS: (SIGNATURE) Andrew C. West

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TSS	METALS*	DIOXINS	REMARKS
NBCK\694GW007OK5 QP	1-11-99	1518	Water	500 mL poly	4°C	None	1	X			
NBCK\694GW007UK5 QP	1-11-99	1518	"	1 L Ambers poly QP	4°C	HNO_3	1		X	X	
NBCK\694GW007FK5 QP	1-11-99	1518	↓	1 L Ambers poly QP	4°C	HNO_3	1		X	X	

Andrew C. West 1-12-99

RELINQUISHER:	DATE	TIME	RECEIVER:	DATE	TIME	RELINQUISHER:	DATE	TIME	RECEIVER:	DATE	TIME
PRINTED: ANDREW C. WERTZ	1-12-99	1830	PRINTED:			PRINTED:			PRINTED:		
COMPANY: ENSAFE			COMPANY:			COMPANY:			COMPANY:		

METHOD OF SHIPMENT: FedEx

SHIPMENT NO. 808625947300

SEND RESULTS TO:

COMMENTS: * METALS= Sb, As, Be, Cr, Pb, Hg, and Tl

DQO TII

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2

ENSAFE

800-886-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

Revised 1-21-99

PAGE 1 OF 1

PROJECT/JOB NO: 2988-c 02-014-00

COC NO: 08

PO NO: 4

REL NO: 77

LAB NAME: Southwest

CLIENT Naval Base Charleston PROJECT MANAGER Charlie Vernoy

LOCATION Zone K TELE/FAX NO. 843-884-0029 / 856-0107

SAMPLERS: (SIGNATURE)

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TSS	Metals *	Dioxin	Metals	REMARKS
NBCK\694GW00605	1-13-99	1115	W	500mL Poly	4°C	—	1	X				
NBCK\694GW006U5		1115	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\694GW006F5		1115	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\694GW00505		1155	W	500mL Poly	4°C	—	1	X				
NBCK\694GW005U5		1115	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\694GW005F5		1115	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\GDK 694 CLI GW00105		1233	W	500 mL Poly	4°C	—	1	X				
NBCK\GDK 694 CLI GW001U5		1233	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\GDK 694 CLI GW001F5		1233	W	1L Poly/Glass	4°C	Metals-HNO_3	2		X	X		
NBCK\6945B02401		1335	S	9oz glass	4°C	—	2			X	X	
NBCK\6945B02402		1340	S		4°C	—	2			X	X	
NBCK\6945B02501		1350	S		4°C	—	2			X	X	
NBCK\6945B02601		1415	S		4°C	—	2			X	X	
NBCK\6945B02602		1430	S		4°C	—	2			X	X	
NBCK\6945B02701		1450	S		4°C	—	2			X	X	
NBCK\6945B02702		1500	S		4°C	—	2			X	X	

RELINQUISHER:	DATE	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: Todd B. Temple	TIME 1700	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: ENSAFE		COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: FedEx

SHIPMENT NO. 808625448311

SEND RESULTS TO:

COMMENTS: * Metals = Sb, As, Be, Cr, Pb, Hg, and Tl except soils

DQOIII

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2

ENSAFE

800-588-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUS. JDY RECORD

PROJECT/JOB NO: 2911-a 9-000-00
COC NO:
PO NO: 2
REL NO: 82
LAB NAME: Sav.

CLIENT Navy Base Chas. PROJECT MANAGER Charlie Verno
LOCATION Zone K. (Clouster Island) TELE/FAX NO. 843-884-0029/856-0107
SAMPLERS: (SIGNATURE)

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOC	Metals	SVOC	REMARKS
√BCK\694GW01401	12/10/99	1112		40 ml, 500ml plas, 1L Amber	4°C	VOA-HCL Met-HNO_3	3		X	X	
694GW01301		1155					4	X	X		
694GW00801		1220					4	X	X		
694GW00901		1230					1		X		
694GW01101		1325					2		X	X	
694GW01201		1340					3		X	X	
694HW01301		1155					4	X	X		
694HWD1101		1325					1			X	
694TW01101	↓	—		↓	↓	↓	3	X			

12-10-99

RELINQUISHER:	DATE	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: Todd B. Temple	TIME 1600	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: ENSAFE	12/10/99	COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 814795422680
SEND RESULTS TO:

COMMENTS: DQO III

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2
REV. 05/98

ENSAFE

800-588-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

Amended CoPC ABC 1/18/00

PAGE 1 OF 1

PROJECT/JOB NO: 291 J01-~~08440~~ 09400

COC NO:

PO NO: 4

REL NO: 138

LAB NAME: SWL

CLIENT: NAVY

PROJECT MANAGER: Charlie Vernon

LOCATION: Zone K (Clouter Island)

TELE/FAX NO.: 843-884-0029 / 843-856-0107

SAMPLERS: (SIGNATURE) [signature]

ANALYSIS REQUIRED

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOC	SVOC	Metals							REMARKS
NBCK\694GW01202	01-13-00	0945	W	2-1 Liter Amber 1-1 Liter Poly	4°C	None / HNO3	3		X	X							
\694GW01102		0930		↓		↓	3		X	X							
\694GW00802		1120		2-40 ml Vials 1-Liter Poly		HCL / HNO3	3	X		X							
\694GW00902		1115		↓		↓	3	X		X							
\694HW00802		1120		2-40 ml vial		HCL	2	X									
\694HW00902		1115		1-1 Liter Poly		HNO3	1			X							
\694GW01302		1215		2-40 ml Vials 1-1 Liter Poly		HCL / HNO3	3	X		X							
\694GW01402		1200		2-1 Liter Amber 1-1 Liter Poly		None / HNO3	3		X	X							
\694HW01402		1200		2-1 Liter Amber		None	2		X								
\694HW01302		1730		2-40 ml Vials		HCL	2	X									

[signature] 01-13-00

RELINQUISHER: [signature]	DATE 01-13-00	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: J. Watson Sr	TIME 1830	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: EnSafe		COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: Fedex

SHIPMENT NO. 4849147925

SEND RESULTS TO:

COMMENTS:

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2

Chains of Custody for Soil

[redacted]
800-888-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

PROJECT/JOB NO: 2411- -07000-00
COC NO:
PO NO: 1840 4
REL NO: 12 136
LAB NAME: ~~Enviro~~ SWL

CLIENT: Navy
LOCATION: Zone K
SAMPLERS: (SIGNATURE)
PROJECT MANAGER: Charlie Vernoy
TELE/FAX NO.: 843-884-0029

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOC	SVOC	Pest/PCB	Metals	Explosives	REMARKS
(NBCK) 6945B04101	12/21/99	1110	S	4oz. Glass, 2oz Glass ENCORE			6	X	X	X	X	X	
6945B04102	"	1120	S	"			6	X	X	X	X	X	
6945B04001		1130	S	"			6	X	X	X	X	X	
6945B03901		1145	S	"			6	X	X	X	X		
6945B03801		1150	S	"			6	X	X	X	X		
6945B05201		1215	S	4oz glass			2		X		X		
6945B03701		1220	S	4oz glass, 2oz Glass ENCORE			6	X	X	X	X		
6945B05101		1230	S	4oz glass			1				X		
6947B03701	↓	—	W	40mL vial			3	X					

RELINQUISHER:	DATE	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: Todd B. Temple	TIME 1730	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: ENSAFE		COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 484914796 2
SEND RESULTS TO:

COMMENTS:

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2
REV. 05/98

ENSAFE

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MEMPHIS, TENNESSEE
CHARLESTON, SC; CINCINNATI, OH; DALLAS, TX; JACKSON, TN; KNOXVILLE, TN; LANCASTER, PA; NASHVILLE, TN; NORFOLK, VA; PADUCAH, KY; PENSACOLA, FL; RALEIGH, NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

Amended COC AEL

PAGE 1 OF 1

PROJECT/JOB NO: 2911-c 29000-00

COC NO:

PO NO: 1840 4

REL NO: #2 131 AEL

LAB NAME: Lancaster Labs

CLIENT: Navy

LOCATION: Zone K

SAMPLERS: (SIGNATURE)

PROJECT MANAGER: Charlie Vernoy

TELE/FAX NO.: 843-884-0029

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOC	SVOC	Pest/PCB	Metals	Explosives	REMARKS
NBCK 694SB04301	12/20/99	1240	S	4oz glass, 2oz glass ENCORE	4°C	None	6	X	X	X	X	X	
694SB04302		1300	S				6	X	X	X	X	X	
694SB04401		1245	S				6	X	X	X	X	X	
694SB04402		1255	S				6	X	X	X	X	X	
694SB04601		1315	S				6	X	X	X	X	X	
694SB04501		1320	S				6	X	X	X	X	X	
694SB04502		1330	S				6	X	X	X	X	X	
694SB04701		1340	S	4oz glass			1		X				
~~694SB04301-TB~~ ~~694SB04702~~		—	W	40mL Vial		HCL	3	X					
694SB04801		1350	S	4oz glass		None	1		X				
694SB04802		1400	S	4oz glass			1		X				
694SB04201		1415	S	4oz glass, 2oz glass ENCORE			6	X	X	X	X		
694SB04901		1415	S	4oz glass			1				X		
694SB04902		1420	S				1				X		
694SB05001		1425	S				1				X		
694SB05002		1430	S				1				X		

RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: Todd B Temple	12/20/99	PRINTED:	
COMPANY: ENSAFE	TIME 1730	COMPANY:	TIME

RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED:		PRINTED:	
COMPANY:	TIME	COMPANY:	TIME

METHOD OF SHIPMENT: FedEx

SHIPMENT NO. 809609669220

SEND RESULTS TO:

COMMENTS:

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2
REV. 05/98

PAGE 1 OF 1

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CHAIN OF CUSTODY RECORD

CTO-TASK: 2911-08420
COC #:
BPA/SO: P.O. 0004 REL 10

CLIENT Naval Base Charleston
PROJECT MANAGER Charlie Vernay
ADDRESS Zone K
TELEPHONE NO. 803-884-0029
PROJECT NAME/NUMBER 2911-08420
FAX. NO. 803-856-0107
SAMPLERS: (SIGNATURE)

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	Dioxin	REMARKS
NBCK\6945B02101	1/21/97	1110	Soil	8oz	4°C	None	1	X	
NBCK\6946B02101	1/21/97	1110	Soil	8oz			1	X	DQ04
NBCK\6945B02201	1/21/97	1138	Soil	~~4oz~~, 8oz			~~1~~ 2	X	MS/MSD (Limited Volume
NBCK\6945B02301	1/21/97	1135	Soil	8oz			1	X	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE	1/21/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Temple	TIME 1515	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE		COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fedex
SHIPMENT NO. 090403997 2
SPECIAL INSTRUCTION:

COMMENTS: All samples are DQ03 + Tics unless otherwise stated in the remarks as DQ04 All DQ04 samples are to be analyzed for APP IB Parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

AMEND. "D"

1/23/97

PAGE 1 OF 1

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CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SOP.O. 0003 REL. 9

Amended 1/23/97

CLIENT Naval Base Charleston
PROJECT MANAGER Charlie Vernon
ADDRESS Zone K
TELEPHONE NO. 803-884-0029
PROJECT NAME/NUMBER ~~JBCP~~ 2911-08420
FAX NO. 803-856-0107
SAMPLERS: (SIGNATURE) Todd B. Tarpley

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA, Pest/PCB	Metals, CN, Cr+6	Herbs, OP Pest	Explosives			REMARKS
NBCK\694SB02101	1/21/97	1110	Soil	4oz, 8oz	4°C	None	4	X	X	X	X	X			
NBCK\694CB02101	1/21/97	1110	Soil				4	X	X	X	X	X			DQ04
NBCK\694SB02201	1/21/97	1138	Soil				16	X	X	X	X	X			MS/MSD (Limited Volume)
NBCK\694SB02301	1/21/97	1135	Soil				4	X	X	X	X	X			
NBCK\694TB02101	1/21/97	—	H_2O	40mL VOA		HCL	2	X							

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE Todd B. Tarpley	1/21/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Todd B. Tarpley	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY ENSAFE	1515	COMPANY		COMPANY		COMPANY	
REASON Ship to Lab		REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 300252460
SPECIAL INSTRUCTION:

COMMENTS: All samples are DQ03 ttics unless otherwise stated in the remarks as DQ04. All DQ04 samples are AP2S parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Annend 1/17/97

NAVY CLEAN
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CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK:
COC #:
BPA/SO: PO.0004 REL#10

CLIENT NAVAL BASE CHAS
ADDRESS ZONE K
PROJECT NAME/NUMBER 2911-08420
SAMPLERS: (SIGNATURE) RK Brewer / RS Dawson

PROJECT MANAGER Charlie Denney
TELEPHONE NO. (803) 884-0029
FAX. NO.

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: DIOXIN	REMARKS
NBCK694SB01001	1/17/97	1045	Soil	RK 1/17/97 8oz	4°C	NONE	1	1	
SB01501		1055					1	1	
SB01502		1105					1	1	
SB01701		1112					1	1	
SB01707		1120					1	1	
SB01801		1145					1	1	
SB01401		1155					1	1	
SB01901		1215					1	1	
SB01201		1227					1	1	
SB01202	↓	1255	↓	↓	↓	↓	1	1	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/17/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED R.K. Brewer	TIME 1530	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY CEERD		COMPANY		COMPANY		COMPANY	
REASON Analysis		REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 061623918 6
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQO3 UNLESS NOTED IN REMARKS. All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- (X) DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Ammended 1/17/97

NAVY CLEAN
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CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

CTO-TASK:
COC #:
BPA/SO: P.O. 0003 REP#9

CLIENT: NAVAL BASE CHAS
ADDRESS: ZONE K.
PROJECT NAME/NUMBER: 2911-08420
SAMPLERS: (SIGNATURE) RK [signature] RS [signature]

PROJECT MANAGER: Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO.

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA, PEST, PCB, TAL MZTAL, CN	EXPLOSIVE, HGRB, O.P. PEST, CR+6					REMARKS
NBCK/694-TB 1702 RKB 1/17/97	1/17/97	—	Soil	20y 80y RKB 1/17/97	4°C	NONE	1	1							

RK [signature] 1/17/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK [signature]	1/17/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer		PRINTED		PRINTED		PRINTED	
COMPANY CEERD	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON ANALYSIS	1530	REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 3002522294
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 UNLESS NOTED IN REMARKS. All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Ammended 1/17/97

PAGE 1 OF 2

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(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 0003 REL #9

CLIENT: NAVAL BASE Chas
ADDRESS: ZONE K
PROJECT NAME/NUMBER: 2911-08420
SAMPLERS: (SIGNATURE) RK Brewer

PROJECT MANAGER: Charlie Vernoy
TELEPHONE NO.: (803) 884-0029
FAX. NO.: RS Hanson

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA, PEST, PCB, TALMETAL, CN	EXPLOSIVE, HERB, OP PEST, CR+6					REMARKS
NBCK\694SB01001	1/17/97	1045	Soil	2oz, 8oz	4°C	None	4	2	1	1					
SB01501		1055					4	2	1	1					
SB01502		1105					4	2	1	1					
SB01701		1112					4	2	1	1					
SB01702		1120					4	2	1	1					
SB01801		1145					4	2	1	1					
SB01401		1155					4	2	1	1					
SB01901		1215					4	2	1	1					
SB01201		1227					4	2	1	1					
SB01202		1255					4	2	1	1					

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/17/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer		PRINTED		PRINTED		PRINTED	
COMPANY CEERD	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON Analysis	1530	REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 3002522294
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 UNLESS NOTED IN REMARKS. All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 2 OF 2

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CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 0004 REL #10

CLIENT NAVAL BASE CHAS
ADDRESS ZONE K
PROJECT NAME/NUMBER 2911-08420
SAMPLERS: (SIGNATURE) RK Brewer

PROJECT MANAGER Charlie Demory
TELEPHONE NO. (803) 884-0029
FAX. NO.
RS Davis

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	DIOXIN	ANALYSIS REQUIRED	REMARKS
NBCK694SB02002	1/16/97	1252	Soil	8oz	4°C	None	1	1		
00801	↓	1325	↓	↓	↓	↓	1	1		
00802	↓	1330	↓	↓	↓	↓	1	1		

RK Brewer 1/16/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/16/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY CEERD	1530	COMPANY		COMPANY		COMPANY	
REASON Analysis		REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 061623899 1
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 UNLESS NOTED IN REMARKS
All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCRI

NAVY CLEAN
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(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

CTO-TASK:
COC #:
BPA/SO: P.O.0004 REL#10

CLIENT NAVAL BASE Chas PROJECT MANAGER Charlie Demory
ADDRESS ZONE K TELEPHONE NO. (803) 884-0029
PROJECT NAME/NUMBER 2911-08420 FAX. NO.
SAMPLERS: (SIGNATURE) RK Brewer RS Dawson

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: DIOXIN	REMARKS
NRCK694SB00301	1/14/97	1000	Soil	8oz	4°C	NONE	1	1	
00401		1005					1	1	
00901		1046					1	1	
00902		1051					1	1	
01101		1120					1	1	
01102		1125 Equip Blank					1	1	
01301		1144					1	1	
01601		1203					1	1	
01602		1227					1	1	
02001		1244					1	1	

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/14/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer	TIME 1530	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY CEERD		COMPANY		COMPANY		COMPANY	
REASON ANALYSIS		REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 0611238991
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 UNLESS OTHERWISE NOTED. All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 2 OF 2

NAVY CLEAN
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CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 0003 REL #9

CLIENT NAVAL BASE CHAS PROJECT MANAGER Charlie Dawson
ADDRESS ZONE K TELEPHONE NO. (803) 884-0029
PROJECT NAME/NUMBER 2911-08420 FAX. NO.
SAMPLERS: (SIGNATURE) RK Brewer RS Dawson

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOA	SVOA, PEST, PCB, TAL METALS, CN	EXPLOSIVES, HERB, OP PEST, CRT+6	REMARKS
NBCK694SB02002	1/16/97	1252	Soil	2oz, 8oz	4°C	None	4	2	1	1	
00801		1325					4	2	1	1	
00802		1330		2oz, 4oz, 8oz			3	1	1	1	
NBCK694SB00802	1/16/97		Soil	2oz	4°C	None	1	1			

RK Brewer 1/16/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/16/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY CERCLA	1530	COMPANY		COMPANY		COMPANY	
REASON Analysis		REASON		REASON		REASON	

METHOD OF SHIPMENT: FEDEX
SHIPMENT NO. 300252224
SPECIAL INSTRUCTION: None

COMMENTS: ALL SAMPLES ARE DQO3 UNLESS NOTED IN REMARKS
All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 2

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: P.O. 0003 REL #9

CLIENT: NAVAL BASE CHAS
PROJECT MANAGER: Charlie Vernon
ADDRESS: ZONE K.
TELEPHONE NO.: (803) 884-0029
PROJECT NAME/NUMBER: 2911-08420
FAX. NO.:
SAMPLERS: (SIGNATURE) RK Brewer RS Hanson

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA, PEST, PCB, TAL METAL, CN	EXPLOSIVE, HERB, DP PEST, CR+6					REMARKS
NBCK 6945B00301	1/16/97	1000	Soil	20y, 80y	4°C	NONE	4	2	1	1					
00401		1005					4	2	1	1					
00901		1046					4	2	1	1					
00902		1051					4	2	1	1					
01101		1120					4	2	1	1					
01102		1125					4	2	1	1					
01301		1144					4	2	1	1					
01601		1203					4	2	1	1					
01602		1227					4	2	1	1					
02001		1244					4	2	1	1					

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE: RK Brewer		SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED: RK Brewer		PRINTED:		PRINTED:		PRINTED:	
COMPANY: CEERD	TIME	COMPANY:	TIME	COMPANY:	TIME	COMPANY:	TIME
REASON: ANALYSIS		REASON:		REASON:		REASON:	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO.: 3002527246
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 UNLESS NOTED IN REMARKS. All samples are to be analyzed for Appendix IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

Ammended 1/16/~~90~~ 97

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CTO-TASK:
COC #:
BPA/SO: ~~0345/96~~ ~~P.O. 4 / REL #7~~
P.O. #0004, Rel #10

CLIENT: NAVAL BASE Chas
ADDRESS: ZONE K
PROJECT NAME/NUMBER: 2911-08420
SAMPLERS: (SIGNATURE) RK [signature] RS Dawson

PROJECT MANAGER: Charlie Vernon
TELEPHONE NO.: (803) 884-0029
FAX. NO.:

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: Dioxin							REMARKS
NBCK\693SB00401	1/15/97	0955	Soil	8oz	4°C	NONE	1	1							
SB00101		1003					1	1							
CB00101		1003					1	1							DQ04
SB00102		1016					1	1							
NBCK\694SB00701		1030					1	1							
SB00702		1040					1	1							
SB00601		1058					1	1							
SB00101		1250					1	1							
SB00501		1300					1	1							
SB00201		1312					1	1							

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME	RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
SIGNATURE: RK [signature]	1/15/97	SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED: RK BREWER		PRINTED:		PRINTED:		PRINTED:	
COMPANY: CEERD		COMPANY:		COMPANY:		COMPANY:	
REASON: ANALYSIS	1500	REASON:		REASON:		REASON:	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO.: 0904035042
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 AND TIC UNLESS OTHERWISE NOTED. All samples are to be analyzed for Appdx IX parameters.

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCDCR1

Ammended 1/16/97

PAGE 1 OF ~~1~~ 2

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: ~~0345/96~~
MAI 1-16-97 ~~P.O. 4/REL #7~~
P.O. #0003, Rel #9

CLIENT NAVAL BASE CHAS
ADDRESS ZONE K
PROJECT NAME/NUMBER 2911-08420
SAMPLERS: (SIGNATURE) RK Brewer

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO.
RS Dawson

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA							REMARKS
NBCK/694TB00401	1/15/97		Soil	Zoy	4°C	NONE	1	1							

RK Brewer 1/15/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE RK Brewer	1/15/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED RK Brewer		PRINTED		PRINTED		PRINTED	
COMPANY CEERD	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON ANALYSIS	1500	REASON		REASON		REASON	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO. 1931206900
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE PQ03 AND TLC UNLESS OTHERWISE NOTED. All Samples are to be analyzed for Appdx IX parameters.

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☒ DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCDCR1

Ammended 1/16/97

PAGE 1 OF ~~1~~ 2

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: ~~0345/96~~
MAB 1-16-97 ~~RO4 / REL#7~~
P.O. 0003 Rel #9

CLIENT: NAVAL BASE CHAS
ADDRESS: ZONE K
PROJECT NAME/NUMBER: 2911-08420
SAMPLERS: (SIGNATURE) RK [signature] R S [signature]

PROJECT MANAGER: Charlie Dernoy
TELEPHONE NO.: (803) 884-0029
FAX. NO.:

ANALYSIS REQUIRED

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	VOA	SVOA, PEST, PCB, TAL, METALS, CN	EXPLOSIVE, HERB, OP PEST, CR+6					REMARKS
NBCK/693SB00401	1/15/97	0955	Soil	20y & 80y	4°C	None	4	2	1	1					
SB00101		1003					4	2	1	1					
CB00101		1003					4	2	1	1					DQ04
SB00102		1016					4	2	1	1					
NBCK/694SB00701		1030					4	2	1	1					
SB00702		1040					4	2	1	1					
SB00601		1058					4	2	1	1					
SB00101		1250					4	2	1	1					
SB00501		1300					4	2	1	1					
SB00201		1312					4	2	1	1					

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME	RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
SIGNATURE: RK [signature]		SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED: RK Brewer		PRINTED:		PRINTED:		PRINTED:	
COMPANY: CEERD		COMPANY:		COMPANY:		COMPANY:	
REASON: ANALYSIS		REASON:		REASON:		REASON:	

METHOD OF SHIPMENT: FED EX
SHIPMENT NO.: 1931206900
SPECIAL INSTRUCTION: NONE

COMMENTS: ALL SAMPLES ARE DQ03 AND TLC UNLESS OTHERWISE NOTED. All samples are to be analyzed for Appdx. IX parameters

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [X] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK: P.O.0004 REL. 1(
COC #:
BPA/SO: ~~034 [illegible] P.O. 0003 REL. 9~~ ~~P.O. [illegible] Rel. 7~~

Amend 1/15/

CLIENT Naval Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08420
SAMPLERS: (SIGNATURE) R.B. [illegible]

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803) 884-0029
FAX. NO.

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	Dioxin						REMARKS
NBCK/693SB00201	1/14/97	1415	Soil	1-8oz	4°C	None	1	X						~~DQ04~~ DQ03
NBCK/693SB00301	↓	1400	↓	↓	↓	↓	1	X						~~DQ04~~ DQ03

Amend 1/15/97

R.B. [illegible] 1/14/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE [illegible]	1/14/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Robert B. [illegible]		PRINTED		PRINTED		PRINTED	
COMPANY EnSafe	TIME	COMPANY	TIME	COMPANY	TIME	COMPANY	TIME
REASON Analysis	1700	REASON		REASON		REASON	

METHOD OF SHIPMENT: FedEx
SHIPMENT NO. 3002522235
SPECIAL INSTRUCTION: None

COMMENTS: All samples are DQ04 with App IX parameters.

AFTER ANALYSIS, SAMPLES ARE TO BE:
- [x] DISPOSED OF
- [ ] STORED (90 DAYS MAX)
- [ ] STORED OVER 90 DAYS
- [ ] RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCDCR1

PAGE 1 OF 1

NAVY CLEAN
ENSAFE/ALLEN&HOSHALL
(901) 383-9115

CHAIN OF CUSTODY RECORD

CTO-TASK:
COC #:
BPA/SO: ~~0345796~~ P.O. 0003 REL ~~7.8.4~~ Rel. 7

Amended 1/15/97

CLIENT Navy Base Charleston
ADDRESS Zone K
PROJECT NAME/NUMBER 2911-08420
SAMPLERS: (SIGNATURE) R.B. Bryan Jr.

PROJECT MANAGER Charlie Vernoy
TELEPHONE NO. (803)884-0029
FAX. NO.

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	ANALYSIS REQUIRED: VOC	SVOC (BNA+ PCB Tentatively ID's)	Explosives, C+N	Herbs, OP Pest				REMARKS
NBCK693SB00201	1/14/97	1415	Soil	2oz, 8oz	4°C	None	5	X	X	X	X				~~DQ04~~ DQ03
NBCK693SB00301	↓	1400	Soil	↓	↓	↓	5	X	X	X	X				~~DQ04~~ DQ03
NBCK693TB00201	↓	—	~~Soil~~	~~1-125 mL Bo~~	↓	↓	1	X							DQ03

Robert B. Bryan Jr.
1/14/97

Amended 1/15/97

RELINQUISHED BY:	DATE	RECEIVED BY:	DATE	RELINQUISHED BY:	DATE	RECEIVED BY:	DATE
SIGNATURE Robert B. Bryan Jr.	1/14/97	SIGNATURE		SIGNATURE		SIGNATURE	
PRINTED Robert B. Bryan Jr.	TIME	PRINTED	TIME	PRINTED	TIME	PRINTED	TIME
COMPANY EnSafe	1700	COMPANY		COMPANY		COMPANY	
REASON Analysis		REASON		REASON		REASON	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 816239153
SPECIAL INSTRUCTION: Down

COMMENTS: All Samples are DQ04 unless otherwise noted. DQ04 are to be analyzed for App IX parameters. DQ03 (DQ03 + TICs only)

AFTER ANALYSIS, SAMPLES ARE TO BE:
- ☒ DISPOSED OF
- ☐ STORED (90 DAYS MAX)
- ☐ STORED OVER 90 DAYS
- ☐ RETURNED TO CUSTOMER

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

CLNCOCR1

ENSAFE

800-588-7962
MEMPHIS, TENNESSEE
CHARLESTON,SC; CINCINNATI,OH; DALLAS,TX; JACKSON,TN; KNOXVILLE,TN; LANCASTER,PA; NASHVILLE,TN; NORFOLK,VA; PADUCAH,KY; PENSACOLA,FL; RALEIGH,NC; COLOGNE, GERMANY

CHAIN OF CUSTODY RECORD

Revised 1-21-99

PAGE 1 OF 9 (Y) 0
PROJECT/JOB NO: 2908-08-014-00
COC NO: 08
PO NO: 4
REL NO: 77
LAB NAME: Southwest

CLIENT: Naval Base Charleston
PROJECT MANAGER: Charlie Vernoy
LOCATION: Zone K
TELE/FAX NO.: 843-884-0029 / 856-0107
SAMPLERS: (SIGNATURE) [signature]

ANALYSIS REQUIRED

FIELD SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	TYPE/SIZE OF CONTAINER	PRESERVATION TEMP.	PRESERVATION CHEMICAL	NO. OF CONTAINERS	TSS	Metals *	Dioxin	Metals							REMARKS
NBCK\694GW00605	1-13-99	1115	W	500mL Poly	4°C	—	1	X										
NBCK\694GW006U5		1115	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\694GW006F5		1115	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\694GW00505		1115	W	500mL Poly	4°C	—	1	X										
NBCK\694GW005U5		1115	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\694GW005F5		1115	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\~~694~~ GDK GW ~~001~~ CLI 05		1233	W	500 mL Poly	4°C	—	1	X										
NBCK\~~694~~ GDK GW ~~001~~ CLI U5		1233	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\~~694~~ GDK GW ~~001~~ CLI F5		1233	W	1L Poly/Glass	4°C	Metals-HNO3	2		X	X								
NBCK\694SB02401		1335	S	9oz glass	4°C	—	2			X	X							
NBCK\694SB02402		1340	S		4°C	—	2			X	X							
NBCK\694SB02501		1350	S		4°C	—	2			X	X							
NBCK\694SB02601		1415	S		4°C	—	2			X	X							
NBCK\694SB02602		1430	S		4°C	—	2			X	X							
NBCK\694SB02701		1450	S		4°C	—	2			X	X							
NBCK\694SB02702		1500	S		4°C	—	2			X	X							

RELINQUISHER: [signature]	DATE 1-13-99	RECEIVER:	DATE	RELINQUISHER:	DATE	RECEIVER:	DATE
PRINTED: Todd B. Temple	TIME 1700	PRINTED:	TIME	PRINTED:	TIME	PRINTED:	TIME
COMPANY: ENSAFE		COMPANY:		COMPANY:		COMPANY:	

METHOD OF SHIPMENT: Fed Ex
SHIPMENT NO. 808625948311
SEND RESULTS TO:

COMMENTS: * Metals = Sb, As, Be, Cr, Pb, Hg, and Tl except soils

DQOIII

ANALYTICAL DATA RECEIVED BY (INITIALS/DATE)

ENSCOC2

Appendix C
Validation Reports

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0200
CONTRACTED LAB:	CEIMIC, Inc.
QA/QC LEVELS:	EPA Level III / IV
EPA METHODS:	EPA SOW 3-90 / SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review,* 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review,* 1994
SAMPLE MATRIX:	Soil
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Pesticides/PCB's, Organophosphorus Pesticides, Chlorinated Herbicides, Total Metals, Cyanide, Hexavalent Chromium (HexCr), Explosives
SDG NUMBERS:	7060A (Level IV) 7060B (Level III)

SAMPLES:

SDG 7060A (Level IV):

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB	Organophos. Pesticides
693CB00101*	7074.03	Soil	X	X	X	X
693CB00101RE	7074.03	Soil	+			

Client Sample #	Lab Sample #	Matrix	Chlorinated Herbicides	Total Metals	Cyanide
693CB00101*	7074.03	Soil	X	X	X
693CB00101MS	7074.03MS	Soil		+	
693CB00101MD	7074.03MD	Soil		+	

Client Sample #	Lab Sample #	Matrix	HexCr	Explosives
693CB00101*	7074.03	Soil	X	X

+ = Non-billable analysis
* = Corresponding sample 693SB00101 was analyzed in SDG 7060B.

CB = FIELD DUPLICATE, MD = MATRIX DUPLICATE, MS = MATRIX SPIKE,
RE = REANALYSIS

SDG 7060B (Level III):

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi volatiles	Pesticides/ PCB	Organophos. Pesticides
693SB00101*	7074.02	Soil	X	X	X	X
693SB00101RE	7074.02RE	Soil	+			
693SB00102	7074.04	Soil	X	X	X	X
693SB00201	7060.01	Soil	X	X	X	X
693SB00201RE	7060.01RE	Soil				+
693SB00301	7060.02	Soil	X	X	X	X
693SB00301RE	7060.02RE	Soil				+
693SB00401	7074.01	Soil	X	X	X	X
694SB00101	7074.08	Soil	X	X	X	X
694SB00201	7074.10	Soil	X	X	X	X
694SB00201RE	7074.10RE	Soil	+			
694SB00501	7074.09	Soil	X	X	X	X
694SB00501RE	7074.09RE	Soil	+		+	
694SB00601	7074.07	Soil	X	X	X	X
694SB00601RE	7074.07RE	Soil	+			
694SB00701	7074.05	Soil	+	X	X	X
694SB00701RE	7074.05RE	Soil	X			
694SB00702	7074.06	Soil	+	X	X	X
694SB00702RE	7074.06RE	Soil	X			
693TB00201	7060.03	Soil	X			
694TB00401	7074.11	Soil	X			

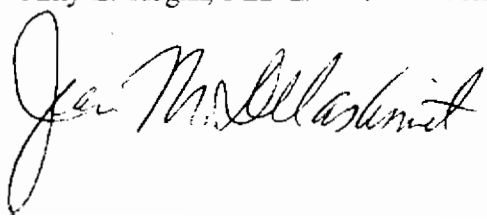
Client Sample #	Lab Sample #	Matrix	Chlorinated Herbicides	Total Metals	Cyanide	HexCr
693SB00101*	7074.02	Soil	X	X	X	X
693SB00102	7074.04	Soil	X	X	X	X
693SB00201	7060.01	Soil	X	X	X	X
693SB00301	7060.02	Soil	X	X	X	X
693SB00401	7074.01	Soil	X	X	X	X
694SB00101	7074.08	Soil	X	X	X	X
694SB00201	7074.10	Soil	X	X	X	X
694SB00501	7074.09	Soil	X	X	X	X
694SB00601	7074.07	Soil	X	X	X	X
694SB00701	7074.05	Soil	X	X	X	X
694SB00702	7074.06	Soil	X	X	X	X
693SB00301MS	7060.02MS	Soil				+
693SB00301MD	7060.02MD	Soil				+
694SB00101MS	7074.08MS	Soil				+
694SB00101MD	7074.08MD	Soil				+

Client Sample #	Lab Sample #	Matrix	Explosives
693SB00101*	7074.02	Soil	X
693SB00102	7074.04	Soil	X
693SB00201	7060.01	Soil	X
693SB00301	7060.02	Soil	X
693SB00401	7074.01	Soil	X
694SB00101	7074.08	Soil	X
694SB00201	7074.10	Soil	X
694SB00501	7074.09	Soil	X
694SB00601	7074.07	Soil	X
694SB00701	7074.05	Soil	X
694SB00702	7074.06	Soil	X

+ = Non-billable analysis
* = Corresponding field duplicate sample 693CB00101 was analyzed in SDG 7090A.

MD = MATRIX DUPLICATE, MS = MATRIX SPIKE, RE = REANALYSIS, T = TRIP BLANK

DATA REVIEWER(S): Amy L. Hogan, Marvin L. Smith. Jean M. Delashmit

RELEASE SIGNATURE: 

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

CEIMIC. Inc. - 7060A Appendix IX Organics and Inorganics

SAMPLES: 693CB00101, 693CB00101RE, 693CB00101MS, 693CB00101MD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met, so no action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met, so no action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/20/97 on instrument HP6 for the following compounds:

acrolein	0.009
acrylonitrile	0.025
propionitrile	0.009
acetonitrile	0.011
isobutyl alcohol	0.008
1,4-dioxane	0.003

The results for these compounds in associated sample 693CB00101, which consisted entirely of non-detects, were rejected (R).

Continuing Calibration:

The Relative Response Factors (RRF's) for the standards analyzed on 1/21/97 at 09:59 on instrument N were below the 0.005 QC limit for the following compounds:

acrolein	0.009
acrylonitrile	0.025
propionitrile	0.009
acetonitrile	0.010
isobutyl alcohol	0.008
1,4-dioxane	0.003

The results for these compounds in the associated sample were previously rejected based on low RRF's in the initial calibration. No further action was required.

IV.) Blanks:

Method Blank:

Acetone was detected at 4.0 ug/kg in method blank VBS0120A. The positive result for this compound in associated sample 693CB00101, which was less than 10X the blank amount, was flagged as undetected (U) with the analytical result below the CRQL being raised to the CRQL.

Trip Blank:

Acetone was detected at 5.0 ug/kg in trip blank 693TB00201, which was analyzed in SDG 7060B. The result for this compound in the associated sample was previously flagged based on the method blank. No further action was required.

TIC's:

There were no TIC's detected in the method or trip blanks. No action was required.

V.) Surrogate Recoveries:

The Percent Recovery (%R) of toluene-d8 was 124% for sample 693CB00101, which exceeded the 81-117% QC limits. Since there were no positive results in this sample, no action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required.

VII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met, so no action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The original analysis of sample 693CB00101 was considered by the validator to be of preferable data quality to the reanalysis because of better internal standards performance and holding time.

The non-detect results for acrolein, acrylonitrile, propionitrile, acetonitrile, isobutyl alcohol and 1,4-dioxane were rejected in sample 693CB00101 because of low RRF's in the initial calibration. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met, so no action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met, so no action was required.

III.) Calibration:

Initial Calibration:

The Average Relative Response Factor (RRF) was below the 0.050 QC limit for aramite (0.036) in the standards analyzed on 1/30/97 on instrument HP5. The non-detect result for this compound in associated sample 693CB00101 was rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 1/30/97 on instrument HP5 for the following compounds:

pyridine	34.1%
n-nitrosodimethylamine	37.6%
hexachlorocyclopentadiene	34.5%
diallate	35.1%
3,3'-dimethylbenzidine	71.9%

kepone	31.5%
famphur	37.1%

These compounds were not detected in the associated sample. No action was required.

Continuing Calibration:

The Relative Response Factor (RRF) was below the 0.050 QC limit for aramite (0.039) in the standard analyzed on 1/30/97 on instrument HP5. The non-detect result for this compound in the associated sample was previously rejected based on a low RRF in the initial calibration. No further action was required.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 1/30/97 on instrument HP5 for the following compounds:

diallate	41.4%
methapyrilene	64.3%

The results for these compounds in associated sample 693CB00101, which were both non-detects, were flagged as estimated (UJ).

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

TIC's:

There were no TIC's detected in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed for this fraction of the SDG. No action was taken.

VII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met, so no action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect result for aramite in sample 693CB00101 was rejected because of a very low relative response factor in the initial calibration. All other laboratory data were acceptable with qualifications.

PESTICIDES/PCB's

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required.

VII.) TCL Compound Identification:

Pesticide/PCB Identification Summary (PIS):

All PIS Identification criteria were met. No action was required.

VIII.) Field Duplicates:

The Relative Percent Difference (RPD) was 40% for 4,4'-DDT in field duplicate samples 693CB00101 and 693SB00101 (analyzed in SDG 7060B). The RPD for this compound was within the 60% QC limit for soil samples, so no action was required.

IX.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All criteria were met, so no action was taken.

Gel Permeation Chromatography (GPC):

All GPC criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

ORGANOPHOSPHORUS PESTICIDES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met, so no action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

The Percent Recovery (%R) of triphenylphosphate was 64.1% for sample 693CB00101, which was below the 65-135% QC limits. All results for this sample, which consisted entirely of non-detects, were flagged as estimated (UJ).

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was taken.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

CHLORINATED HERBICIDES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Herbicide Instrument Performance criteria were met, so no action was taken.

III.) Calibration:

Initial Calibration:

The Percent Relative Standard Deviation (%RSD) of 2,4-D was 59.3% on the secondary column for the standards analyzed on 1/28/97, which exceeded the 20% QC limit. The non-detect result for this compound in associated sample 693CB00101 was flagged as estimated (UJ), since the %RSD also exceeded the 30% QC limit.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met, so no action was taken.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. One Percent Recovery (%R) exceeded the QC limits. Data validation action based on LCS recoveries was not required. so no action was necessary.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction in this SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable with one qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met, so no action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the sample and were used for data qualification:

Blank Type/ID#	Analyte	Max. Conc.	Action Level
PBS	aluminum	3.29 mg/kg	16.5 mg/kg
CCB3	arsenic	5.10 ug/L	5.10 mg/kg
PBS	barium	0.19 mg/kg	0.95 mg/kg
PBS	calcium	14.1 mg/kg	70.5 mg/kg
PBS	copper	0.31 mg/kg	1.55 mg/kg
PBS	magnesium	0.87 mg/kg	4.35 mg/kg
CCB3	selenium	3.10 ug/L	3.10 mg/kg
PBS	sodium	5.35 mg/kg	26.8 mg/kg
PBS	zinc	4.55 mg/kg	22.8 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

All results greater than the IDL but less than 5X the blank amounts (Action Level, mg/kg for soil samples) for which the contaminated blank was an associated calibration or preparation blank were flagged as undetected (U).

The following analyte had a negative result with an absolute value greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB2	antimony	-4.00 ug/L	4.00 mg/kg

CCB = Continuing Calibration Blank

The associated non-detect result for antimony was flagged as estimated (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

arsenic	3 ug/L
cadmium	1 ug/L
manganese	6 ug/L
vanadium	2 ug/L
zinc	9 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the sample at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

barium	-3 ug/L
chromium	-4 ug/L
cobalt	-6 ug/L
lead	-3 ug/L
nickel	-6 ug/L
selenium	-6 ug/L
silver	-5 ug/L
sodium	-10 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the sample at a concentration comparable to or greater than the amount in Solution A. no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Difference (%D) for sodium was 15.9% for the serial dilution analysis in this SDG, which exceeded the 10% QC limit. The positive result for this analyte in associated sample 693CB00101 was flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The Percent Recovery (%R) of antimony was 63.6% for the soil LCS, which was below the 80-120% QC limits. The non-detect result for antimony was rejected based on a very low MS Recovery. No further action was taken.

VII.) Duplicate Sample Analysis:

All Duplicate Sample Analysis criteria were met. No action was required.

VIII.) Matrix Spike Recoveries (MS):

The Percent Recovery (%R) of antimony was 21.8% for spiked sample 693CB00101MS, which was below the 75-125% QC limits. The result for this analyte in associated sample 693CB00101 was rejected (R) since the %R was less than 30%.

IX.) Field Duplicates:

Field duplicate samples 693CB00101 and 693SB00101 (analyzed in SDG 7060B) were analyzed by the laboratory. The calculable Relative Percent Differences (RPD's) were:

Analyte	693SB00101, mg/kg	693CB00101, mg/kg	RPD, %
aluminum	24800	20700	18.0
arsenic	18.1	16.9	6.9
barium	42.9	40.7	5.3
calcium	23700	29800	22.8
chromium	59.6	54.6	8.8
copper	40.8	36.0	12.5
iron	31400	28900	8.3
magnesium	5010	4900	2.2

Analyte	693SB00101, mg/kg	693CB00101, mg/kg	RPD, %
manganese	539	534	0.9
potassium	2670	2440	9.0
vanadium	71.2	65.8	7.9
zinc	161	157	2.5

None of the Relative Percent Differences (RPD's) exceeded the 60% QC limit for soil samples, so no action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was taken.

XI.) Sample Result. Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

The non-detect result for antimony was rejected in sample 693CB00101 because of a low MS Recovery (less than 30%). All other laboratory data were acceptable with qualifications.

HEXAVALENT CHROMIUM

I.) Holding Times:

The holding time to analysis was 7 days for sample 693CB00101, which exceeded the 24 hour QC limit. The non-detect result for this sample was flagged as estimated (UJ).

II.) Calibration:

All Initial and Continuing Calibration criteria were met. Data qualification was not necessary.

III.) Blank:

Hexavalent chromium was not detected in the method blank. No action was required.

IV.) Laboratory Check Samples (LCS):

There were no LCS's analyzed with this SDG. No action was taken.

V.) Laboratory Duplicates (MD):

MD analysis was not performed in this fraction of the SDG. No action was necessary.

VI.) Matrix Spike Recovery (MS):

MS analysis was not performed in this fraction of the SDG. No action was required.

VII.) Field Duplicates:

The Relative Percent Difference (RPD) for hexavalent chromium was not calculable for the set of field duplicate samples associated with this SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualification.

EXPLOSIVES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All HPLC Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

No MS / MSD analyses were performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples for this SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualifications.

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma, Inc. - 7060B CLP Organics and Inorganics

SAMPLES: 693SB00101, 693SB00101RE, 693SB00102, 693SB00201, 693SB00201RE, 693SB00301, 693SB00301RE, 693SB00401, 694SB00101, 694SB00201, 694SB00201RE, 694SB00501, 694SB00501RE, 694SB00601, 694SB00601RE, 694SB00701, 694SB00701RE, 694SB00702, 694SB00702RE, 693TB00201, 694TB00401, 693SB00301MS, 693SB00301MD, 694SB00101MS, 694SB00101MD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met, so no action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met, so no action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/20/97 on instrument HP6 for the following compounds:

acrolein	0.009
acrylonitrile	0.025
propionitrile	0.009
acetonitrile	0.011
isobutyl alcohol	0.008
1,4-dioxane	0.003

All results for these compounds in the associated samples, which consisted entirely of non-detects, were rejected (R). The associated samples were 693SB00201, 693SB00301, 693SB00401, 694SB00201, 693SB00101, 693SB00102, 694SB00701RE, 694SB00702RE, 694SB00601, 694SB00101 and 694SB00501.

Continuing Calibration:

The Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/20/97 at 11:16 on instrument HP6 for the following compounds:

acrolein	0.009
acrylonitrile	0.025
propionitrile	0.009
acetonitrile	0.010
isobutyl alcohol	0.008
1,4-dioxane	0.003

All results for these compounds in the associated samples, which consisted entirely of non-detects. were previously rejected based on low RRF's in the initial calibration. so no further action was required.

IV.) Blanks:

Method Blanks:

Acetone was detected at 4.0 ug/kg in method blank VBS0120A. All positive results for this compound in the associated samples, less than 10X the blank amount, were flagged as undetected (U) with the results below the CRQL being raised to the CRQL. The associated samples were 693SB00201, 693SB00301, 693SB00401, 693SB00101, 693SB00102, 694SB00701RE, 694SB00702RE, 694SB00601, 694SB00101, 694SB00201 and 694SB00501.

Trip Blanks:

Acetone was detected at 5.0 ug/kg in both trip blanks 693TB00201 and 694TB00401. The results for this compound in the associated samples were previously flagged based on the method blank, so no action was required.

TIC's:

There were no TIC's detected in the method or trip blanks. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of toluene-d8 exceeded the 81-117% QC limits for the following samples:

Client Sample #	Toluene-d8 %R
693SB00101	118
694SB00201	128
694SB00501	123
694SB00601	120
694SB00701RE	120
694SB00702RE	130

Since there were no positive results for these samples, no action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required

VII.) Laboratory Control Samples (LCS):

Four LCS's were analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG, so no action was required.

IX.) Internal Standards Performance (ISTD):

The Percent Recoveries (%R's) of 1,4-dichlorobenzene-d4 in samples 694SB00201 and 694SB00702RE were 42.9% and 43.0%, respectively, which were below the 50-200% QC limits. The results for compounds quantitated on this ISTD, which consisted entirely of non-detects, were flagged as estimated (UJ), unless previously rejected.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The original analyses of samples 693SB00101, 694SB00201, 694SB00501 and 694SB00601 were considered by the validator to be of preferable data quality as compared to the reanalyses because of better holding times and internal standard performances.

The reanalyses of samples 694SB00701 and 694SB00702 were considered by the validator to be of preferable data quality as compared to the original analyses because of improved ISTD recoveries.

The non-detect results for acrolein, acrylonitrile, propionitrile, acetonitrile, 1,4-dioxane and isobutyl alcohol were rejected in samples 693SB00201, 693SB00301, 693SB00401, 693SB00101, 693SB00102, 694SB00701RE, 694SB00702RE, 694SB00601, 694SB00101, 694SB00201 and 694SB00501 because

of low RRFs in the initial and continuing calibrations. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met, so no action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factor (RRF) was below the 0.050 QC limit for aramite (0.036) in the standards analyzed on 1/30/97 on instrument HP5. The non-detect results for this compound in the samples in this SDG were rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 1/30/97 on instrument HP5 for the following compounds:

pyridine	34.1%
n-nitrosodimethylamine	37.6%
hexachlorocyclopentadiene	34.5%
diallate	35.1%
3,3'-dimethylbenzidine	71.9%
kepone	31.5%
famphur	37.1%

These compounds were not detected in the associated samples. No action was taken.

Continuing Calibration:

The Relative Response Factor (RRF) was below the 0.050 QC limit for aramite (0.039) in the standard analyzed on 1/30/97 at 13:27 on instrument HP5. The results for this compound in the associated samples were previously rejected based on a low RRF in the initial calibration. No further action was required.

The Percent Difference (%D) exceeded the 25% QC limit for diallate (41.4%) in the standards analyzed on 1/30/97 at 13:27 on instrument HP5. The results for this compound in the associated samples, which consisted entirely of non-detects, were flagged as estimated (UJ). The associated samples were 693SB00301, 693SB00401, 693SB00101, 693SB00102, 694SB00701, 694SB00702 and 694SB00601.

The Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/31/97 at 08:19 on instrument HP5 for aramite (0.044) and hexachlorophene (0.035). The results for aramite in the associated samples were previously rejected because of low RRF's in the initial and continuing calibrations. The results for hexachlorophene in associated samples 693SB00201, 694SB00101 and 694SB00201, which consisted entirely of non-detects, were rejected (R).

The Percent Differences (%D) exceeded the 25% QC limit for the standards analyzed on 1/31/97 at 08:19 on instrument HP5 for the following compounds:

hexachlorophene	49.5%
n-nitrosodimethylamine	51.1%
benzyl alcohol	27.9%
diallate	30.0%
methapyrilene	63.7%
3,3'-dimethylbenzidine	27.4%

The results for hexachlorophene in associated samples 693SB00201, 694SB00101 and 694SB00201 were previously rejected because of a low RRF in this calibration. The results for the other compounds in the associated samples, which consisted entirely of non-detects, were flagged as estimated (UJ).

The Relative Response Factor (RRF) was below the 0.050 QC limit for the standard analyzed on 2/03/97 at 12:56 on instrument HP5 for aramite (0.046). The results for this compound in the associated samples were previously rejected because of low RRF's in the initial calibration, so no action was required.

The Percent Differences (%D) exceeded the 25% QC limit for the standards analyzed on 2/03/97 at 12:56 on instrument HP5 for the following compounds:

n-nitrosodimethylamine	44.7%
diallate	27.1%
famphur	33.4%
hexachlorophene	28.2%

The results for these compounds in associated sample 694SB00501, which consisted entirely of non-detects, were flagged as estimated (UJ).

IV.) Blanks:

There were no positive detections in the method blanks. No action was required.

TIC's:

There were no TIC's detected in the method blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required.

VII.) Laboratory Control Samples (LCS):

Three LCS's were analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction in this SDG, so no action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met, so no action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for aramite in all samples in this SDG were rejected based on low RRF's in the initial calibration. The non-detect results for hexachlorophene in samples 693SB00201, 694SB00101 and 694SB00201 were rejected because of a low RRF in the associated continuing calibration. All other laboratory data were acceptable with qualifications.

PESTICIDES/PCB's

I.) Holding Times:

The holding time from sample date to reanalysis was 19 days for sample 694SB00501RE, which exceeded the 14 day QC limit for pesticides in soil samples. All positive and non-detect results for this sample were flagged as estimated (J) and (UJ).

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

IV.) Blanks:

There were no positive detections in the method blanks. No action was required.

V.) Surrogate Recoveries:

The following Surrogate Percent Recoveries (%R's) of tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were below the 30-150 QC limits and below the 10% rejection limit in sample 694SB00501:

TCX		DCB	
Column 1	Column 2	Column 1	Column 2
9%	0%	6%	4%

All Surrogate Recovery Criteria were met for the reanalysis of this sample. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD Analyses were not performed in this fraction of the SDG. No action was required.

VII.) TCL Compound Identification:

Pesticide/PCB Identification Summary (PIS):

The Percent Difference (%D) for heptachlor epoxide was 87.6% in sample 694SB00101, which exceeded the 70% QC limit. The positive result for this compound in this sample was flagged as estimated (J).

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction in the SDG. No action was necessary.

IX.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All criteria were met, so no action was taken.

Gel Permeation Chromatography (GPC):

All GPC criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

The reanalysis of sample 694SB00501 was considered by the validator to be of preferable data quality as compared to the original analysis because of improved surrogate recoveries.

All laboratory data were acceptable with qualifications.

ORGANOPHOSPHORUS PESTICIDES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met, so no action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of triphenylphosphate were below the 65-135% QC limits for the following samples:

Client Sample #	%R
693SB00102	62.2%
694SB00601	58.4%
694SB00201	48.0%

All results for these samples, which consisted entirely of non-detects, were flagged as estimated (UJ).

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was taken.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was necessary.

X.) Overall Assessment of Data/General:

The original analyses of samples 693SB00301 and 693SB00201 were considered by the validator to be of preferable data quality as compared to the reanalyses because of better holding times. All laboratory data were acceptable with qualifications.

CHLORINATED HERBICIDES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Herbicide Instrument Performance criteria were met, so no action was taken.

III.) Calibration:

Initial Calibration:

The Percent Relative Standard Deviation (%RSD) of 2,4-D was 59.3% on the secondary column for the standards analyzed on 1/28/97, which exceeded the 20% QC limit. Since the %RSD also exceeded the 30% QC limit, all associated results for 2,4-D, which consisted entirely of non-detects, were flagged as estimated (UJ).

Continuing Calibration:

All Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met, so no action was taken.

VI.) Laboratory Control Samples (LCS):

Two LCS's were analyzed with this SDG. One LCS Recovery exceeded the QC limits. Data validation action based on LCS recoveries was not required. No action was necessary.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met, so no action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met, so no action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank ID	Analyte	Max. Conc.	Action Level
PBS	aluminum	3.29 mg/kg	16.5 mg/kg
CCB3	arsenic	5.10 ug/L	5.10 mg/kg
PBS	barium	0.19 mg/kg	0.95 mg/kg
PBS	calcium	14.1 mg/kg	70.5 mg/kg
PBS	copper	0.31 mg/kg	1.55 mg/kg

Blank Type/ID#	Analyte	Max. Conc.	Action Level
PBS	magnesium	0.87 mg/kg	4.35 mg/kg
CCB3	selenium	3.10 ug/L	3.10 mg/kg
PBS	sodium	5.35 mg/kg	26.8 mg/kg
PBS	zinc	4.55 mg/kg	22.8 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

All results greater than the IDL but less than 5X the blank amounts (Action Level, mg/kg for soil samples) for which the contaminated blank was an associated calibration or preparation blank were flagged as undetected (U).

The following analyte had a negative result with an absolute value greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB2	antimony	-4.00 ug/L	4.00 mg/kg

CCB = Continuing Calibration Blank

All associated positive sample results less than 5X the absolute value of the negative blank result and all non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

arsenic	3 ug/L
cadmium	1 ug/L
manganese	6 ug/L
vanadium	2 ug/L
zinc	9 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

barium	-3 ug/L
chromium	-4 ug/L
cobalt	-6 ug/L
lead	-3 ug/L
nickel	-6 ug/L

selenium	-6 ug/L
silver	-5 ug/L
sodium	-10 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Difference (%D) for sodium was 15.9% in the serial dilution analysis for this SDG, which exceeded the 10% QC limit. The positive results for this analyte in the associated soil samples were flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The Percent Recovery (%R) of antimony was 63.6% for the soil LCS, which was below the 80-120% QC limits. All positive and non-detect results for antimony in the associated samples were flagged as estimated (J) and (UJ).

VII.) Duplicate Sample Analysis:

All Duplicate Sample Analysis criteria were met. No action was required.

VIII.) Matrix Spike Recoveries:

The Percent Recovery (%R) of antimony was 21.8% for spiked sample 693CB00101MS, which was below the 75-125% QC limit. The positive results for this analyte in the associated samples were flagged as estimated (J) and all non-detects were rejected (R) since the %R was less than 30%.

IX.) Field Duplicates:

One set of field duplicate samples, 693CB00101 (analyzed in SDG 7060A) and 693SB00101, were analyzed by the laboratory. The calculable Relative Percent Differences (RPD's) were:

Analyte	693SB00101, mg/kg	693CB00101, mg/kg	RPD
aluminum	24800	20700	18.0
arsenic	18.1	16.9	6.9
barium	42.9	40.7	5.3
calcium	23700	29800	22.8
chromium	59.6	54.6	8.8
copper	40.8	36.0	12.5
iron	31400	28900	8.3
magnesium	5010	4900	2.2
manganese	539	534	0.9
potassium	2670	2440	9.0
vanadium	71.2	65.8	7.9
zinc	161	157	2.5

None of the Relative Percent Differences (RPD's) exceeded the 60% QC limit for soil samples, so no action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was taken.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

All non-detect results for antimony were rejected in six associated soil samples because of a low %R in the MS sample. All other laboratory data were acceptable with qualifications.

HEXAVALENT CHROMIUM

I.) Holding Times:

The holding times to analyses were 7 days for all samples except 693SB00201 and 693SB00301, which were 8 days. These holding times exceeded the 24 hour QC limit. The non-detect results for the associated samples were flagged as estimated (UJ).

II.) Calibration:

All Initial and Continuing Calibration criteria were met. Data qualification was not necessary.

III.) Blanks:

There were no positive detections in the method blanks, so no action was required.

IV.) Laboratory Check Samples (LCS):

There were no LCS's analyzed with this SDG. No action was taken.

V.) Laboratory Duplicates (MD):

All MD criteria were met. No action was necessary.

VI.) Matrix Spike Recovery (MS):

All MS criteria were met. No action was required.

VII.) Field Duplicates:

The Relative Percent Difference (RPD) for hexavalent chromium was not calculable for the set of field duplicate samples in this SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

EXPLOSIVES

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All HPLC Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

No MS / MSD analyses were performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY
REPORT

COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0210
CONTRACTED LAB:	Ceimic Corporation
QA/QC LEVELS:	EPA Level III / IV
EPA METHODS:	EPA SOW 3-90 / SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review*, 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRICES:	Soil and Water
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Pesticides/PCB's, Organophosphorus Pesticides, Chlorinated Herbicides, Total Metals, Cyanide, Hexavalent Chromium (HexaCr), Explosives
SDG NUMBERS:	7090A (Appendix IX, Level IV) 7090B (Level III)

SAMPLES:

SDG 7090A (Level IV):

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB's	Organophos. Pesticides
694CB02101	7108.02	Soil	X	X	X	X

Client Sample #	Lab Sample #	Matrix	Herbicides	Total Metals	Cyanide	HexaCr
694CB02101	7108.02	Soil	X	X	X	X

Client Sample #	Lab Sample #	Matrix	Explosives
694CB02101	7108.02	Soil	X

CB = FIELD DUPLICATE (Corresponding sample 694SB02101 was analyzed in SDG 7090B.)

SDG 7090B (Level III):

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB's	Organophos. Pesticide
694SB01001	7090.01	Soil	X	X	X	X
694SB01001RE	7090.01RE	Soil			+	
694SB01201	7090.09	Soil	X	X	X	X
694SB01202	7090.10	Soil	+	X	X	X
694SB01202RE	7090.10RE	Soil	X			
694SB01401	7090.07	Soil	X	X	X	X
694SB01401DL	7090.07DL	Soil			+	
694SB01501	7090.02	Soil	X	X	X	X
694SB01502	7090.03	Soil	X	X	X	X
694SB01701	7090.04	Soil	+	X	X	X
694SB01701RE	7090.04RE	Soil	X			
694SB01702	7090.05	Soil	X	X	X	X
694SB01801	7090.06	Soil	X	X	X	X
694SB01901	7090.08	Soil	X	X	X	X
694SB02101*	7108.01	Soil	X	X	X	X
694SB02201	7108.03	Soil	X	X	X	X
694SB02301	7108.04	Soil	X	X	X	X
694TB01702	7090.11	Soil	X			
694TB02101	7108.05	Water	X			
694SB02201MS	7108.03MS	Soil	+	+	+	+
694SB02201MSD	7108.03MSD	Soil	+	+	+	+

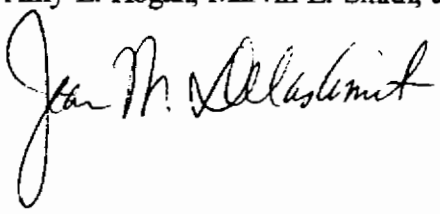
Client Sample #	Lab Sample #	Matrix	Herbicides	Total Metals	Cyanide	HexaCr
694SB01001	7090.01	Soil	X	X	X	X
694SB01201	7090.09	Soil	X	X	X	X
694SB01202	7090.10	Soil	X	X	X	X
694SB01401	7090.07	Soil	X	X	X	X
694SB01501	7090.02	Soil	X	X	X	X
694SB01502	7090.03	Soil	X	X	X	X
694SB01701	7090.04	Soil	X	X	X	X
694SB01702	7090.05	Soil	X	X	X	X
694SB01801	7090.06	Soil	X	X	X	X
694SB01901	7090.08	Soil	X	X	X	X
694SB02101*	7108.01	Soil	X	X	X	X
694SB02201	7108.03	Soil	X	X	X	X
694SB02301	7108.04	Soil	X	X	X	X
694SB01801MS	7090.06MS	Soil				+
694SB01801MD	7090.06MD	Soil				+
694SB02201MS	7108.03MS	Soil	+	+		
694SB02201MSD	7108.03MSD	Soil	+	+		

Client Sample #	Lab Sample #	Matrix	Explosives
694SB01001	7090.01	Soil	X
694SB01201	7090.09	Soil	X
694SB01202	7090.10	Soil	X
694SB01401	7090.07	Soil	X
694SB01501	7090.02	Soil	X
694SB01502	7090.03	Soil	X
694SB01701	7090.04	Soil	X
694SB01702	7090.05	Soil	X
694SB01801	7090.06	Soil	X
694SB01901	7090.08	Soil	X
694SB02101*	7108.01	Soil	X
694SB02201	7108.03	Soil	X
694SB02301	7108.04	Soil	X
694SB02201MS	7108.03MS	Soil	+
694SB02201MSD	7108.03MSD	Soil	+

* = Corresponding duplicate sample 694CB02101 was analyzed in SDG 7090A.
+ = Non-billable analysis

DL = DILUTION, MD = MATRIX DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS, T = TRIP BLANK

DATA REVIEWER(S): Amy L. Hogan, Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: 

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Ceimic Corporation - 7090 Appendix IX Organics & Inorganics

SAMPLE: 694CB02101

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 2/02/97 on instrument HP2 for the following compounds:

acrolein	0.025
propionitrile	0.011
acetonitrile	0.013
isobutyl alcohol	0.012
1,4-dioxane	0.004

The results for these compounds in associated sample 694CB02101, which consisted entirely of non-detects, were rejected (R).

Continuing Calibration:

The Relative Response Factors (RRF's) for the standards analyzed on 2/02/97 at 23:47 on instrument HP2 were below the 0.005 QC limit for the following compounds:

acrolein	0.027
propionitrile	0.011
acetonitrile	0.013
isobutyl alcohol	0.012
1,4-dioxane	0.004

The results for these compounds in the associated sample were previously rejected based on the initial

calibration. No further action was required.

The Percent Difference (%D) exceeded the 25% QC limit for the standards analyzed on 2/02/97 at 23:47 on instrument HP2 for trichlorofluoromethane (32.3%). The non-detect result for this compound in associated sample 694CB02101 was flagged as estimated (UJ).

IV.) Blanks:

Method Blank:

Acetonitrile, propionitrile, isobutyl alcohol and 1,4-dioxane were detected at 4 ug/kg, 2 ug/kg, 5 ug/kg and 10 ug/kg, respectively, in method blank VBS0202A. There were no positive results for these compounds in the associated sample. No action was required.

Trip Blanks:

Acetone was detected at 2.0 ug/L in trip blank 694TB02101, which was analyzed in SDG 7090B. The positive result for this compound in associated sample 694CB02101, which was less than 10X the blank amount, was flagged as undetected (U) with the analytical result below the CRQL being raised to the CRQL.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method or trip blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required.

VII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for acrolein, propionitrile, acetonitrile, isobutyl alcohol and 1,4-dioxane were rejected in sample 694CB02101 because of low RRF's in the initial calibration. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The Average Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 2/07/97 on instrument HP5 for aramite (0.042). The non-detect result for this compound in associated sample 694CB02101 was rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 2/07/97 on instrument HP5 for the following compounds:

hexachlorocyclopentadiene	46.9%
methapyrilene	73.1%
3,3'-dimethylbenzidine	79.3%
kepone	43.2%

These compounds were not detected in the associated sample. No action was required.

Continuing Calibration:

All Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

N-nitroso-di-n-propylamine was detected at 170 ug/kg in method blank EBS0123HP5. This compound was not detected in the associated sample. No action was required.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect result for aramite in sample 694CB02101 was rejected (R) because of a low RRF in the initial calibration. All other laboratory data were acceptable without qualifications.

PESTICIDES/PCB's

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was required.

VII.) TCL Compound Identification:

Pesticide/PCB Identification Summary (PIS):

All PIS Identification criteria were met. No action was required.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences for the field duplicate samples in this SDG. No action was required.

IX.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All criteria were met. No action was taken.

Gel Permeation Chromatography (GPC):

All GPC criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

ORGANOPHOSPHORUS PESTICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed in this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was taken.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

CHLORINATED HERBICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Herbicide Instrument Performance criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was taken.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was required.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the sample:

Blank Type/ID#	Analyte	Max. Conc.	Action Level
CCB1	magnesium	3.90 ug/L	3.90 mg/kg
PBS	zinc	3.00 mg/kg	15.0 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

All associated sample results were greater than 5X the blank amounts (Action Level, mg/kg for soil samples). No action was required.

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB3	antimony	-2.30 ug/L	2.30 mg/kg
CCB3	arsenic	-5.10 ug/L	5.10 mg/kg
CCB3	calcium	-27.0 ug/L	27.0 mg/kg
CCB3	chromium	-2.00 ug/L	2.00 mg/kg
CCB3	cobalt	-2.10 ug/L	2.10 mg/kg

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB3	nickel	-1.50 ug/L	1.50 mg/kg
CCB3	silver	-2.50 ug/L	2.50 mg/kg
CCB3	sodium	-5.60 ug/L	5.60 mg/kg

CCB = Continuing Calibration Blank

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met. No action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	3 ug/L
cadmium	1 ug/L
manganese	6 ug/L
vanadium	3 ug/L
zinc	10 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the sample at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

arsenic	-5 ug/L
barium	-2 ug/L
chromium	-5 ug/L
cobalt	-8 ug/L
lead	-1 ug/L
nickel	-7 ug/L
selenium	-4 ug/L
silver	-7 ug/L
sodium	-17 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the sample at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Difference (%D) for sodium was 17.8% for the serial dilution analysis in this SDG, which exceeded the 10% QC limit. The positive result for this analyte in associated sample 694CB02101 was flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The Percent Recovery (%R) of antimony was 57.3% for the soil LCS, which was below the 80-120% QC limits. The non-detect result for antimony in the associated sample was flagged as estimated (UJ).

VII.) Duplicate Sample Analysis:

Duplicate Sample Analysis was not performed in this fraction of the SDG. No action was required.

VIII.) Matrix Spike Recoveries:

Matrix Spike analysis was not performed in this SDG. No action was required.

IX.) Field Duplicates:

One set of field duplicate samples, 694CB02101 / 694SB02101 (analyzed in SDG 7090B), was analyzed by the laboratory. The calculable Relative Percent Differences (RPD's) were:

Analyte	694SB02101, mg/kg	694CB02101, mg/kg	RPD
aluminum	10400	9610	7.9%
calcium	8100	9250	14%
iron	13500	12600	6.9%
zinc	37	37.2	0.5%

None of the Relative Percent Differences (RPD's) exceeded the 60% QC limit for soil samples. No action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was taken.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met. No action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

HEXAVALENT CHROMIUM

I.) Holding Times:

The holding time to analysis was 17 days for sample 694CB02101, which exceeded the 24 hour QC limit. The non-detect result for this sample was flagged as estimated (UJ).

II.) Calibration:

All Initial and Continuing Calibration criteria were met. Data qualification was not necessary.

III.) Blanks:

There were no detections in the method blanks. No action was required.

IV.) Laboratory Check Samples (LCS):

There were no LCS's analyzed in this SDG. No action was taken.

V.) Laboratory Duplicates (MD):

MD analysis was not performed in this fraction of the SDG. No action was necessary.

VI.) Matrix Spike Recovery (MS):

MS analysis was not performed in this fraction of the SDG. No action was required.

VII.) Field Duplicates:

The Relative Percent Difference (RPD) for hexavalent chromium was not calculable for the set of field duplicate samples associated with this SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with one qualification.

EXPLOSIVES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All HPLC Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma, Inc. - 7090 CLP Organics and Inorganics

SAMPLES: 694SB01001, 694SB01001RE, 694SB01201, 694SB01202, 694SB01202RE, 694SB01401, 694SB01401DL, 694SB01501, 694SB01502, 694SB01701, 694SB01701RE, 694SB01702, 694SB01801, 694SB01901, 694SB02101, 694SB02201, 694SB002301, 694TB01702, 694TB02101, 694SB02201MS, 694SB02201MSD, 694SB01801MS, 694SB01801MD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/21/97 on instrument HP6 for the following compounds:

acrolein	0.009
acrylonitrile	0.025
propionitrile	0.010
acetonitrile	0.011
isobutyl alcohol	0.005
1,4-dioxane	0.003

The results for these compounds in the associated samples, which consisted entirely of non-detects, were rejected (R). The associated samples were 694SB01001, 694SB01501, 694SB01502, 694SB01701RE, 694SB01901, 694SB01201, 694SB01202RE, 694TB01702, 694SB01702, 694SB01401 and 694SB01801.

Continuing Calibration:

The Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 1/23/97 at 08:42 on instrument HP6 for the following compounds:

acrolein	0.008
acrylonitrile	0.025
propionitrile	0.009
acetonitrile	0.011
isobutyl alcohol	0.002
1,4-dioxane	0.003

The results for these compounds in the associated samples, which consisted entirely of non-detects, were previously rejected based on the initial calibration. No further action was required.

The Percent Difference (%D) exceeded the 25% QC limit for the standards analyzed on 1/23/97 at 08:42 on instrument HP6 for isobutyl alcohol (52.6%). The results for this compound in the associated samples were previously rejected. No action was required.

IV.) Blanks:

Method Blanks:

There were no detections in the method blanks. No action was required.

Trip Blanks:

2-Hexanone was detected at 3 ug/kg in trip blank 694TB01702. There were no positive results for this compound in the associated samples. No action was required.

Acetone was detected at 2 ug/L in trip blank 694TB02101. All positive results for this compound in associated samples 694SB02101, 694SB02201 and 694SB02301 less than 10X the blank amount were flagged as undetected (U) with the analytical results below the CRQL being raised to the CRQL.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method or trip blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required

VII.) Laboratory Control Samples (LCS):

Three LCS's were analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this

fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

The Percent Recoveries (%R's) of 1,4-dichlorobenzene-d4 in samples 694SB01202RE and 694SB01701RE were 42.3% and 49.8%, respectively, which were below the 50-200% QC limits. The results for the compounds quantitated using this internal standard, which consisted entirely of non-detects for both samples, were flagged as estimated (UJ).

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The reanalysis of sample 694SB01701 was considered by the validator to be of preferable data quality to the original analysis based on improved internal standards performance. The reanalysis of sample 694SB01201 was considered by the validator to be of preferable data quality to the original analysis based on improved surrogate recovery and internal standards performance.

The non-detect results for acrolein, acrylonitrile, propionitrile, acetonitrile, 1,4-dioxane and isobutyl alcohol in samples 694SB01001, 694SB01501, 694SB01502, 694SB01701RE, 694SB01901, 694SB01201, 694SB01202RE, 694TB01702, 694SB01702, 694SB01401 and 694SB01801 were rejected because of low RRF's in the initial and continuing calibrations. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 1/30/97 on instrument HP5 for aramite (0.042). The non-detect result for this compound in associated sample 694SB01202 was rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 1/30/97 on instrument HP5 for the following compounds:

pyridine	34.1%
n-nitrosodimethylamine	37.6%
hexachlorocyclopentadiene	34.5%
diallate	35.1%
methapyrilene	56.5%
3,3'-dimethylbenzidine	71.9%
kepone	31.5%
famphur	37.1%

These compounds were not detected in the associated samples. No action was required.

The Average Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 1/31/97 on instrument HP7 for aramite (0.047). The non-detect results for this compound in the associated samples were rejected (R). The associated samples were 694SB01001, 694SB01201, 694SB01501, 694SB01502, 694SB01701, 694SB01702, 694SB01801, 694SB01401 and 694SB01901.

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 1/31/97 on instrument HP7 for the following compounds:

hexachlorocyclopentadiene	32.1%
methapyrilene	40.2%
3,3'-dimethylbenzidine	80.2%
kepone	37.4%
famphur	59.4%

These compounds were not detected in the associated samples. No action was required.

Continuing Calibration:

The Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 2/03/97 at 12:56 on instrument HP5 for aramite (0.046). The results for this compound in the associated samples were previously rejected. No further action was required.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 2/03/97 at 12:56 on instrument HP5 for the following compounds:

n-nitrosodimethylamine	44.7%
diallate	27.1%
famphur	33.4%
hexachlorophene	28.2%

The results for these compounds in associated sample 694SB01202, which consisted entirely of non-detects, were flagged as estimated (UJ).

The Percent Differences (%D) exceeded the 25% QC limit for the standards analyzed on 2/03/97 at 11:56 on instrument HP7 for the following compounds:

hexachlorocyclopentadiene	27.9%
3,3'-dimethylbenzidine	78.3%
kepone	32.0%
famphur	36.2%

The results for these compounds in associated sample 694SB01201, which consisted entirely of non-detects, were flagged as estimated (UJ).

IV.) Blanks:

There were no positive detections in the method blanks for this SDG. No action was required.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

The Relative Percent Difference (RPD) was 20% for acenaphthene in spiked samples 694SB02201MS and 694SB02201MSD, which exceeded the 19% QC limit. The non-detect result for this compound in unspiked sample 694SB02201 was flagged as estimated (UJ). In addition, the RPD for pyrene was 58% for spiked samples 694SB02201MS and 694SB02201MSD, which exceeded the 36% QC limit. The positive result for this compound in associated unspiked sample 694SB02201 was flagged as estimated (J).

The Percent Recovery (%R) of n-nitroso-di-n-propylamine was 40% for spiked sample 694SB02201MS, which was below the 41-126% QC limits. The non-detect result for this compound in unspiked sample 694SB02201 was flagged as estimated (UJ).

VII.) Laboratory Control Samples (LCS):

Three LCS's were analyzed for this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction in this SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for aramite in all samples in this SDG were rejected because of low RRF's in the initial calibration. All other laboratory data were acceptable with qualifications.

PESTICIDES/PCB's

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blanks. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were outside the 30-150% QC limits for the following samples:

Client Sample #	TCX, %R Column 1	TCX, %R Column 2	DCB, %R Column 1	DCB, %R Column 2
694SB01001	28.4		28.8	
694SB01401DL			300	
694SB01202			152	

All results for 694SB01001, which consisted entirely of non-detects, were flagged as estimated (UJ). The positive results for sample 694SB01202 were flagged as estimated (J).

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required.

VII.) TCL Compound Identification:

Pesticide/PCB Identification Summary (PIS):

The Percent Differences (%D's) between columns 1 and 2 exceeded the 70% QC limit for the following samples:

Sample	Compound	%D
694SB01701	heptachlor epoxide	93
694SB01801	heptachlor epoxide	168
	dieldrin	106
694SB01201	aldrin	94
694SB01401	aldrin	125
	heptachlor epoxide	353
	dieldrin	209
	4,4'-DDE	71
	endosulfan II	362

The detections of heptachlor epoxide and endosulfan II in sample 694SB01401 were rejected because the %D's exceeded 300%. The positive results for the other compounds in the associated samples were flagged as estimated (J).

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was necessary.

IX.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All criteria were met. No action was taken.

Gel Permeation Chromatography (GPC):

All GPC criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

The original analysis of sample 694SB00101 was considered by the validator to be of preferable data quality to the reanalysis because of better holding time.

There were no compound results exceeding the linear standard calibration range in the original analysis of sample 694SB01401. The dilution sample was not required. No action was taken.

The detections of heptachlor epoxide and endosulfan II were rejected in sample 694SB01401 because of high column %D's (greater than 300%). All other laboratory data were acceptable with qualifications.

ORGANOPHOSPHORUS PESTICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Laboratory Control Samples (LCS):

Three LCS's were analyzed with this SDG. All Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was taken.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

CHLORINATED HERBICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Herbicide Instrument Performance criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

There were no positive detections in the method blank. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of DCAA exceeded the 25-150% QC limits for the following samples:

Client Sample #	Column 1, %R	Column 2, %R
694SB01702	325	274
694SB01801	182	155
694SB01901	161	171
694SB01201	167	
694SB02101	153	
694SB02201	157	177
694SB02301	156	

Since there were no positive results in these samples, no action was required.

VI.) Laboratory Control Samples (LCS):

Three LCS's were analyzed in this SDG. All LCS Recovery criteria were met. No action was necessary.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples:

Blank Type/ID#	Analyte	Max. Conc.	Action Level
CCB1	magnesium	3.90 ug/L	3.90 mg/kg
PBS	zinc	3.00 mg/kg	15.0 mg/kg

CCB = Continuing Calibration Blank, PBS = Preparation Blank (Soil)

All associated sample results were greater than 5X the blank amounts (Action Level, mg/kg for soil samples). No action was required.

The following analytes had negative results with absolute values greater than the IDL:

Blank ID	Analyte	Neg. Conc.	5X Conc.
CCB3	antimony	-2.30 ug/L	2.30 mg/kg
CCB3	arsenic	-5.10 ug/L	5.10 mg/kg
CCB3	calcium	-27.0 ug/L	27.0 mg/kg
CCB3	chromium	-2.00 ug/L	2.00 mg/kg
CCB3	cobalt	-2.10 ug/L	2.10 mg/kg
CCB3	nickel	-1.50 ug/L	1.50 mg/kg
CCB3	silver	-2.50 ug/L	2.50 mg/kg
CCB3	sodium	-5.60 ug/L	5.60 mg/kg

CCB = Continuing Calibration Blank

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met. No action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	3 ug/L
cadmium	1 ug/L
manganese	6 ug/L
vanadium	3 ug/L
zinc	10 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

arsenic	-5 ug/L
barium	-2 ug/L
chromium	-5 ug/L
cobalt	-8 ug/L
lead	-1 ug/L
nickel	-7 ug/L
selenium	-4 ug/L
silver	-7 ug/L
sodium	-17 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Difference (%D) for sodium was 17.8% for the serial dilution analysis in this SDG, which exceeded the 10% QC limit. The positive results for this analyte in the associated samples were flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

The Percent Recovery (%R) of antimony was 57.3% for the soil LCS, which was below the 80-120% QC limits. The positive and non-detect results for antimony in the associated samples were flagged as estimated (J) and (UJ).

VII.) Duplicate Sample Analysis:

All Duplicate Sample Analysis criteria were met. No action was required.

VIII.) Matrix Spike Recoveries:

The Percent Recoveries (%R's) were below the 75-125% QC limits for antimony (53.7%), arsenic (70.3%), manganese (60.4%), mercury (51.2%) and selenium (65.6%). All positive and non-detect results for these analytes in the associated samples were flagged as estimated (J) and (UJ).

IX.) Field Duplicates:

Field duplicate samples 694CB02101 (analyzed in SDG 7090A) and 694SB02101 were analyzed by the laboratory. The calculable Relative Percent Differences (RPD's) were:

Analyte	694SB02101, mg/kg	694CB02101, mg/kg	RPD
aluminum	10400	9610	7.9%
calcium	8100	9250	14%
iron	13500	12600	6.9%
zinc	37	37.2	0.5%

None of the Relative Percent Differences (RPD's) exceeded the 60% QC limit for soil samples. No action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was taken.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met. No action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

HEXAVALENT CHROMIUM

I.) Holding Times:

The holding times from sampling to analyses were 17 days for all samples in this SDG, which exceeded the 24 hour QC limit. The non-detect results for these samples were flagged as estimated (UJ).

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No data qualification was necessary.

III.) Blanks:

There were no positive detections in the blanks. No action was required.

IV.) Laboratory Check Samples (LCS):

There were no LCS's analyzed in this SDG. No action was taken.

V.) Laboratory Duplicates (MD):

All MD criteria were met. No action was necessary.

VI.) Matrix Spike Recovery (MS):

All MS criteria were met. No action was required.

VII.) Field Duplicates:

The Relative Percent Difference (RPD) for hexavalent chromium was not calculable for the set of field duplicate samples in this SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

EXPLOSIVES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All HPLC Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no positive detections in the method blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

Three LCS's were analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

VALIDATA

Chemical Services, Inc.

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DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0236
CONTRACTED LAB:	CEIMIC, Inc.
QA/QC LEVEL:	EPA Level III, Appendix IX
EPA METHODS:	EPA SOW 3-90, SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review*, 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRICES:	Soil and Water
TYPES OF ANALYSES:	Volatile Organic Compounds, Semivolatile Organic Compounds, Pesticides / PCB's, Organophosphorus Pesticides, Chlorinated Herbicides, Total Recoverable Petroleum Hydrocarbons - Diesel Range Organics (TRPH-DRO), Total Recoverable Petroleum Hydrocarbons - Gasoline Range Organics (TRPH-GRO), Total Metals, Cyanide, Hexavalent Chromium
SDG NUMBER:	7669 (Level III)

Client Sample #	Lab Sample #	Volatile Matrix	Semi-Organics	Pesticides/ volatiles	Organophos. PCB's	Chlorinated Pesticides	Herbicides
1664010D01	7669.04	Soil	X	X	X		
1664010D01RE	7669.04RE	Soil			+		
694GW00101	7681.01	Water	X	X	X	X	X
694GW00201	7681.03	Water	X	X	X	X	X
694GW00201RE	7681.03RE	Water		+			
694GW00301	7681.02	Water	X	X	+	X	X
694GW00301RE	7681.02RE	Water		+	X		
694GW00401	7676.02	Water	X	X	X	X	X
694GW00401RE	7676.02RE	Water		+			
694GW00501	7676.01	Water	X	X	X	X	X
694GW00601	7676.03	Water	X	X	X	X	X
694GW00701	7669.01	Water	X	X	X	X	X
694GW00701RE	7669.01RE	Water		+	+		
694HW00701	7669.02	Water	X	X	X	X	X
694HW00701RE	7669.02RE	Water		+	+		
694FW00201	7681.04	Water	X	X	X	X	X
694FW00201RE	7681.04RE	Water		+			

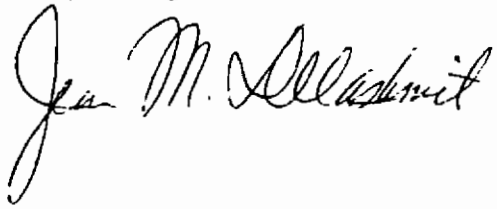
Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB's	Organophos. Pesticides	Chlorinated Herbicides
694TW00201	7681.05	Water	X				
694TW00601	7676.04	Water	X				
694TW00701	7669.03	Water	X				
1664010D01MS	7669.04MS	Soil	+				
1664010D01MSD	7669.04MSD	Soil	+				
694GW00701MS	7669.01MS	Water	+				
694GW00701MSD	7669.01MSD	Water	+				

Client Sample #	Lab Sample #	Matrix	TRPH-DRO	TRPH-GRO	Total Metals	Cyanide	Hexavalent Chromium
1664010D01	7669.04	Soil	X	X	X	X	
694GW00101	7681.01	Water	X	X	X	X	X
694GW00201	7681.03	Water	X	X	X	X	X
694GW00301	7681.02	Water	X	X	X	X	X
694GW00401	7676.02	Water	X	X	X	X	X
694GW00501	7676.01	Water	X	X	X	X	X
694GW00601	7676.03	Water	X	X	X	X	X
694GW00701	7669.01	Water	X	X	X	X	X
694HW00701	7669.02	Water	X	X	X	X	X
694FW00201	7681.04	Water	X	X	X	X	X
694FW00201MS	7681.04MS	Water	+				+
694FW00201MD	7681.04MD	Water					+
694FW00201MSD	7681.04MSD	Water	+				
694GW00101MS	7681.01MS	Water		+			
694GW00101MSD	7681.01MSD	Water		+			
694GW00501MS	7676.01MS	Water					+
694GW00501MD	7676.01MD	Water					+
694HW00701MS	7669.02MS	Water					+
694HW00701MD	7669.02MD	Water					+

MATRIX CODES (4th Digit of Client Sample #):
F = FIELD BLANK, H = FIELD DUPLICATE, T = TRIP BLANK, 4 = GROUT BLANK

SUFFIX CODES:
MD = MATRIX DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

DATA REVIEWER(S): Amy L. Hogan, Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: 

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

CEIMIC, Inc. - 7669 CLP Organics and Inorganics

SAMPLES: 1664010D01, 1664010D01RE, 694GW00101, 694GW00201, 694GW00201RE, 694GW00301, 694GW00301RE, 694GW00401, 694GW00401RE, 694GW00501, 694GW00601, 694GW00701, 694GW00701RE, 694HW00701, 694HW00701RE, 694FW00201, 694FW00201RE, 694TW00201, 694TW00601, 694TW00701, 1664010D01MS, 1664010D01MSD, 694GW00701MS, 694GW00701MSD, 694FW00201MS, 694FW00201MD, 694FW00201MSD, 694GW00101MS, 694GW00101MSD, 694GW00501MS, 694GW00501MD, 694HW00701MS, 694HW00701MD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The Average Relative Response Factors were below the 0.050 QC limit for the standards analyzed on 5/19/97 on instrument HP6 for the following compounds:

acrolein	0.012
acrylonitrile	0.033
propionitrile	0.012
acetonitrile	0.015
1,4-dioxane	0.003
isobutyl alcohol	0.010

The results for these compounds in the associated samples, trip blanks and field blank, which consisted entirely of non-detects, were rejected (R). The associated samples and blanks were 694TW00701, 694GW00701, 694HW00701, 694TW00601, 694GW00501, 694GW00401, 694GW00601, 694TW00201, 694GW00301, 694GW00201, 694FW00201 and 694GW00101.

The Percent Relative Standard Deviation (%RSD) exceeded the 30% QC limit for the standards analyzed on 5/19/97 on instrument HP6 for acetone (50.9%). All positive results for this compound in the

associated samples were flagged as estimated (J). The associated samples were 694GW00701, 694HW00701, 694GW00501, 694GW00401, 694GW00601, 694GW00301, 694GW00201 and 694GW00101.

The Average Relative Response Factors were below the 0.050 QC limit for the standards analyzed on 5/20/97 on instrument HP6 for the following compounds:

acrolein	0.012
acrylonitrile	0.041
propionitrile	0.016
acetonitrile	0.019
1,4-dioxane	0.004
isobutyl alcohol	0.014

The results for these compounds in associated grout blank 1664010D01, which consisted entirely of non-detects, were rejected (R).

The Percent Relative Standard Deviation (%RSD) exceeded the 30% QC limit for the standards analyzed on 5/20/97 on instrument HP6 for acetone (30.2%). The positive result for this compound in associated blank 1664010D01 was not flagged since this was a blank.

Continuing Calibration:

All Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

There were no positive detections in the method blanks. No action was required.

Field Blank:

Acetone and 2-butanone were detected at 10 ug/L and 3 ug/L, respectively, in field blank 694FW00201. There were no positive results for 2-butanone in the associated samples. All positive results for acetone in the associated samples were flagged based on the trip blanks. No further action was taken.

Trip Blanks:

Acetone was detected at 3 ug/L in trip blank 694TW00201. The positive results for this compound in associated samples 694GW00101, 694GW00201 and 694GW00301, which were less than 10X the blank amount, were flagged as undetected (U), with analytical result less than the CRQL being replaced with the CRQL.

Acetone was detected at 2 ug/L in trip blank 694TW00601. The positive results for this compound in the associated samples, which were less than 10X the blank amount, were flagged as undetected (U), with analytical result less than the CRQL being replaced with the CRQL. The associated samples were 694GW00401, 694GW00501, 694GW00601, 694GW00701 and 694HW00701.

TIC's:

There were no TIC's detected in the method, field or trip blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required

VII.) Laboratory Control Samples (LCS):

Two LCS's were analyzed for this SDG. Several LCS Recoveries exceeded the QC limits. Data validation action based on LCS criteria was not required. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for field duplicate samples 694GW00701 and 694HW00701. No action was required.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The results for grout blank 1664010D01 were reported on the spreadsheets and on the Form I's as a water sample (ug/L). The MS/MSD set for this sample was also reported on the Form I's as a water sample. The Chain-of-Custody form and all other fractions of the data package identified this sample as a soil matrix (grout blank). The matrix and concentration units were corrected by the validator

to be "soil" and "ug/kg". The laboratory should verify the quantification limits for non-detect results.

All non-detect results for acrolein, acrylonitrile, propionitrile, acetonitrile, 1,4-dioxane and isobutyl alcohol in the samples in this SDG were rejected because of low relative response factors in the initial calibrations. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The Average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 6/11/97 on instrument HP1 for the following compounds:

4-nitroquinoline-1-oxide	0.045
hexachlorophene	0.027

The non-detect results for these compounds in associated samples 694GW00601, 694GW00101 and 694GW00301 were rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 6/11/97 on instrument HP1 for the following compounds:

4-nitroquinoline-1-oxide	48.3%
hexachlorophene	56.8%

The results for these compounds in the associated samples were previously rejected. No further action was required.

The Average Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 6/10/97 on instrument HP5 for the following compounds:

pentachloronitrobenzene	0.040
kepone	0.029
hexachlorophene	0.028

The non-detect results for these compounds in associated blank 1664010D01 were rejected (R).

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 6/10/97 on instrument HP5 for the following compounds:

hexachlorophene	59.9%
3,3'-dimethylbenzidine	34.4%
methapyrilene	39.4%

There were no positive results for these compounds in the associated samples. No action was required.

The Average Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 5/21/97 on instrument HP7 for hexachlorophene (0.004). The non-detect result for this compound in the associated field blank 694FW00201 was rejected.

The Percent Relative Standard Deviations (%RSD's) exceeded the 30% QC limit for the standards analyzed on 5/21/97 on instrument HP7 for the following compounds:

2,4-dinitrophenol	36.0%
hexachlorophene	77.6%
3,3'-dimethylbenzidine	36.5%

No action was required, since the associated sample was a field blank.

Continuing Calibration:

The Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 6/12/97 at 10:42 on instrument HP1 for 4-nitroquinoline-1-oxide (0.048). The non-detect results for this compound in the associated samples were previously rejected. No further action was required.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 6/12/97 at 10:42 on instrument HP1 for the following compounds:

pyridine	25.4%
aniline	70.6%
benzyl alcohol	33.9%
2,4-dinitrophenol	26.5%
4-nitroaniline	29.2%
4,6-dinitro-2-methylphenol	25.6%
pentachlorophenol	26.3%
di-n-butylphthalate	25.1%
1-naphthylamine	45.4%
2-naphthylamine	38.3%
thionazin	43.0%
phorate	32.5%
sulfotepp	29.2%
phenacetin	31.4%
dimethoate	39.1%
methyl parathion	47.2%
parathion	32.1%

kepone	32.0%
1,4-naphthoquinone	32.0%

All positive and non-detect results for these compounds in the associated samples were flagged as estimated (J) and (UJ). The associated samples were 694GW00601, 694GW00101 and 694GW00301.

The Relative Response Factors (RRF's) were below the 0.050 QC limit for the standards analyzed on 6/11/97 at 03:24 on instrument HP5 for the following compounds:

pentachloronitrobenzene	0.042
kepone	0.025
hexachlorophene	0.023

The results for these compounds in the associated sample were previously rejected. No further action was required.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 6/11/97 at 03:24 on instrument HP5 for the following compounds:

pyridine	25.6%
azobenzene	28.0%
3,3'-dimethylbenzidine	27.5%

No action was taken since the only associated sample was grout blank 1664010D01.

The Relative Response Factor (RRF) was below the 0.050 QC limit for the standards analyzed on 5/28/97 at 12:19 on instrument HP7 for hexachlorophene (0.003). The results for this compound in the associated samples, which consisted entirely of non-detects, were rejected (R). The associated samples were 694GW00501, 694GW00401, 694GW00701, 694HW00701 and 694GW00201.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 5/28/97 at 12:19 on instrument HP7 for the following compounds:

benzoic acid	42.9%
2,4-dinitrophenol	71.7%
4-nitroaniline	28.6%
4,6-dinitro-2-methylphenol	40.8%
carbazole	34.9%
3,3'-dimethylbenzidine	38.1%
3,3'-dichlorobenzidine	33.2%
n-nitrosopiperidine	49.8%
1-naphthylamine	27.4%
diallate	49.0%
4-aminobiphenyl	30.1%
methapyrilene	33.8%
kepone	26.2%

The results for these compounds in the associated samples, which consisted entirely of non-detects, were

flagged as estimated (UJ). The associated samples were 694GW00501, 694GW00401, 694GW00701, 694HW00701 and 694GW00201.

IV.) Blanks:

Method Blanks:

Benzoic acid was detected at 10 ug/L in method blank EBS0528. There were no positive results for this compound in the associated samples. No action was required.

Field Blank:

There were no positive detections in the field blank. No action was required.

TIC's:

There were no TIC's detected in the method or field blanks. No action was required.

V.) Surrogate Recoveries:

The Percent Recovery (%R) was 39% for 2-fluorobiphenyl in sample 694GW00101, which was below the 43-116% QC limits. Since only one surrogate was outside the QC limits in the base/neutral fraction, no action was required.

The Percent Recovery (%R) was 27% for terphenyl-d14 for sample 694GW00601, which was below the 33-141% QC limits. Since only one surrogate was outside the QC limits in the base/neutral fraction, no action was required.

The Percent Recoveries (%R's) were below their respective QC limits for sample 694GW00501 for the following surrogate compounds:

Surrogate	%R	QC Limits
nitrobenzene-d5	0%	34-114%
2-fluorobiphenyl	8%	43-116%
terphenyl-d14	27%	33-141%
1,2-dichlorobenzene-d4	0%	16-110%

All base/neutral compound results for this sample, which consisted entirely of non-detects, were rejected (R), since three %R's were less than 10%. This sample was not re-analyzed by the laboratory.

The Percent Recoveries (%R's) were below their QC limits for sample 694FW00201 for the following surrogate compounds:

Surrogate	%R	QC Limits
nitrobenzene-d5	20%	34-114%
2-fluorobiphenyl	18%	43-116%
terphenyl-d14	15%	33-141%
phenol-d5	0%	10-94%

Surrogate	%R	QC Limits
2-fluorophenol	0%	21-100%
2,4,6-tribromophenol	0%	10-123%
2-chlorophenol-d4	0%	33-110%

All acid compound results for this sample, which consisted entirely of non-detects, were rejected (R), since all four surrogate %R's were less than 10%. No further action was taken, since the sample is a field blank.

The Percent Recoveries (%R's) were below their QC limits for sample 694GW00401 for the following surrogate compounds:

Surrogate	%R	QC Limits
nitrobenzene-d5	22%	35-114%
2-flurobiphenyl	26%	43-116%
terphenyl-d14	27%	33-141%

All positive and non-detect results for the base-neutral fraction of this sample were flagged as estimated (J) and (UJ).

The Percent Recoveries (%R's) were below their QC limits for sample 694GW00701 for the following surrogate compounds:

Surrogate	%R	QC Limits
2-fluorobiphenyl	34%	43-116%
terphenyl-d14	30%	33-141%

All positive and non-detect results for the base-neutral fraction of this sample were flagged as estimated (J) and (UJ).

The Percent Recoveries (%R's) were below their QC limits for sample 694HW00701 for the following surrogate compounds:

Surrogate	%R	QC Limits
2-fluorobiphenyl	34%	43-116%
terphenyl-d14	32%	33-141%

All positive and non-detect results for the base-neutral fraction of this sample were flagged as estimated (J) and (UJ).

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VII.) Laboratory Control Samples (LCS):

Three LCS's were analyzed for this SDG. Several LCS Recoveries were outside the QC limits. Data validation action based on LCS criteria was not required. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The original analyses of samples 694GW00201, 694GW00301, 694GW00401, 694GW00701, 694HW00701 and field blank 694FW00201 were considered by the validator to be of preferable data quality as compared to the reanalyses because of better surrogate recoveries and holding times.

The non-detect results for hexachlorophene were rejected in all samples and blanks in this SDG based on low Relative Response Factors in the initial and continuing calibrations. The non-detect results for 4-nitroquinoline-1-oxide were rejected in samples 694GW00101, 694GW00301 and 694GW00601 because of a low Relative Response Factor in the initial calibration. The non-detect results for pentachloronitrobenzene and kepone were rejected in blank 1664010D01 because of low Relative Response Factors in the initial calibration. All other laboratory data were acceptable with qualifications.

PESTICIDES/PCB's

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

There were no positive detections in the method blanks. No action was required.

Field Blank:

There were no positive detections in the field blank. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of the dicachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogates were below the 30-150% QC limits for the following samples and blank:

Client Sample #	TCX, %R Column 1	TCX, %R Column 2	DCB, %R Column 1	DCB, %R Column 2
694GW00701			22.5	26.6
694HW00701			29.8	
694GW00501			27.4	
694GW00601			25.0	
694GW00301RE			23.8	
1664010D01	28.6	27.9		

All positive and non-detect results for the five samples were flagged as estimated (J) and (UJ). No action was required for grout blank 1664010D01.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed for this fraction of the SDG. No action was required.

VII.) TCL Compound Identification:

Pesticide/PCB Identification Summary (PIS):

All PIS criteria were met. No action was required.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences for the field duplicate samples in this fraction of the SDG. No action was necessary.

IX.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All criteria were met. No action was taken.

Gel Permeation Chromatography (GPC):

All GPC criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

The original analyses of blank 1664010D01 and samples 694GW00701 and 694HW00701 were considered by the validator to be of preferable data quality as compared to the reanalyses because of better holding times. The reanalysis of sample 694GW00301 was considered by the validator to be of preferable data quality because of improved surrogate recoveries. All laboratory data were acceptable with qualifications.

ORGANOPHOSPHORUS PESTICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Instrument Performance criteria were met. No action was taken.

III.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No action was necessary.

Continuing Calibration:

The Percent Differences (%D's) exceeded the 25% QC limit for standard run CCALA4X01 on the secondary column on 5/21/97 for the following compounds:

phorate	27.1%
disulfoton	28.2%
m-parathion	39.0%

The results for these compounds in all samples in this SDG, which consisted entirely of non-detects, were flagged as estimated (UJ).

The Percent Differences (%D's) exceeded the 25% QC limit for standard run CCALA4X02 on the

secondary column on 5/21/97 for the following compounds:

phorate	30.1%
disulfoton	31.2%
m-parathion	41.9%

The results for these compounds in all samples in this SDG were previously flagged based on the standard run CCALA4X01. No further action was required.

IV.) Blanks:

Method Blank:

There were no detections in the method blank. No action was required.

Field Blank:

There were no detections in the field blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. no action was required.

VI.) Laboratory Control Samples (LCS):

One LCS was analyzed with this SDG. All LCS Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed in this fraction of the SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was taken.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

CHLORINATED HERBICIDES

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) Instrument Performance:

All Herbicide Instrument Performance criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blank:

There were no detections in the method blank. No action was required.

Field Blank:

There were no detections in the field blank. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was taken.

VI.) Laboratory Control Samples (LCS):

Two LCS's were analyzed with this SDG. All LCS Recovery criteria were met. No action was necessary.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were not performed for this fraction in this SDG. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was necessary.

X.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS - DIESEL RANGE ORGANICS (TRPH-DRO)

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was taken.

III.) Blanks:

Method Blanks:

There were no positive detections in the method blanks. No action was necessary.

Field Blank:

There were no positive detections in the field blank. No action was necessary.

IV.) Surrogates:

All Surrogate Recovery criteria were met. No action was required.

V.) Laboratory Check Samples (LCS):

All LCS Recovery criteria were met. No action was necessary.

VI.) Matrix Spike / Matrix Spike Duplicates (MS / MSD):

All MS / MSD criteria were met. No action was required.

VII.) Field Duplicates:

There were no calculable Relative Percent Differences for the field duplicate samples in this fraction of the SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS (TRPH-GRO)

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

III.) Blanks:

Method Blanks:

There were no detections in the method blanks. No action was necessary.

Field Blank:

There were no detections in the field blank. No action was necessary.

IV.) Surrogates:

All Surrogate Recovery criteria were met. No action was required.

V.) Laboratory Check Samples (LCS):

All LCS Recovery criteria were met. No action was necessary.

VI.) Matrix Spike / Matrix Spike Duplicates (MS / MSD):

All MS / MSD criteria were met. No action was required.

VII.) Field Duplicates:

There were no calculable Relative Percent Differences for the field duplicate samples in this fraction of the SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max. Conc.	Action Levels ug/L	Action Levels mg/kg
694FW0201	aluminum	137 ug/L	685	137
CCB3	antimony	2.40 ug/L	12.0	2.40
694FW00201	barium	1.40 ug/L	7.00	1.40
PBW	beryllium	0.55 ug/L	2.75	0.55
CCB3	cadmium	0.30 ug/L	1.50	0.30
694FW00201	calcium	109 ug/L	545	109
694FW00201	iron	105 ug/L	525	105
694FW00201	magnesium	72.3 ug/L	362	72.3
694FW00201	manganese	8.60 ug/L	43.0	8.60
PBW	potassium	16.5 ug/L	82.5	16.5
CCB3	selenium	4.40 ug/L	22.0	4.40
CCB2	sodium	295 ug/L	1475	295
694FW00201	zinc	23.0 ug/L	115	23.0

CCB = Continuing Calibration Blank, FW = Field Blank, PBW= Preparation Blank (Water)

All sample results greater than the IDL but less than 5X the blank amounts (Action Level, ug/L for water samples, mg/kg for soil samples) for which the contaminated blank was an associated calibration, preparation or field blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc. ug/L	5X Conc. mg/kg
CCB3	chromium	-1.90 ug/L	9.50	1.90
CCB3	cobalt	-2.40 ug/L	12.0	2.40
PBW	copper	-2.27 ug/L	11.3	2.27
CCB3	nickel	-2.00 ug/L	10.0	2.00

CCB = Continuing Calibration Blank, PBW = Preparation Blank (Water)

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met. No action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	4 ug/L
arsenic	5 ug/L
beryllium	1 ug/L
cadmium	3 ug/L
lead	3 ug/L
manganese	7 ug/L
sodium	1150 ug/L
tin	37 ug/L
zinc	2 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

barium	-2 ug/L
chromium	-4 ug/L
cobalt	-6 ug/L
copper	-8 ug/L
nickel	-10 ug/L
potassium	-97 ug/L
selenium	-3 ug/L
silver	-6 ug/L
vanadium	-1 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Differences (%D's) for calcium (12.5%), iron (14.7%) and manganese (11.1%) in serial dilution sample 694GW00701L exceeded the 10% QC limit. All positive results for these analytes in the associated water samples were flagged as estimated (J).

The Percent Differences (%D's) for beryllium (27.4%), potassium (26.0%) and zinc (17.0%) in serial dilution sample 1664010D01L exceeded the 10% QC limit. No action was taken since the only associated soil sample was the grout blank.

VI.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No action was required.

VII.) Duplicate Sample Analysis:

Duplicate Sample Analysis was not performed in this fraction of the SDG. No action was required.

VIII.) Matrix Spike Recoveries:

Matrix Spike Analysis was not performed in this fraction of the SDG. No action was required.

IX.) Field Duplicates:

One set of field duplicate samples was analyzed in this SDG. The calculable Relative Percent Differences (RPD's) were:

Analyte	694GW00701, ug/L	694HW00701, ug/L	RPD
barium	32.5	34.0	4.5%
calcium	254000	258000	1.6%
iron	3630	4650	25%
magnesium	357000	358000	0.3%
manganese	1320	1340	1.5%
potassium	110000	110000	0%
selenium	5.6	5.0	11%
sodium	2960000	2990000	1.0%
vanadium	0.97	1.3	29%

Since all of the RPD's were within the 30% QC limit for water samples, no action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was necessary.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met. No action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

HEXAVALENT CHROMIUM

I.) Holding Times:

All holding Time criteria were met. No action was required.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No data qualification was necessary.

III.) Blanks:

Method Blanks:

There were no detections in the method blanks. No action was required.

Field Blank:

There were no detections in the field blank. No action was required.

IV.) Laboratory Check Samples (LCS):

There were no LCS's analyzed with this SDG. No action was taken.

V.) Laboratory Duplicate Analysis (MD):

All MD criteria were met. No action was necessary.

VI.) Matrix Spike Recovery (MS):

All MS criteria were met. No action was required.

VII.) Field Duplicates:

The Relative Percent Difference (RPD) for hexavalent chromium was not calculable for the pair of field duplicate samples in this SDG. No action was required.

VIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualification.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0255
CONTRACTED LAB:	Ceimic Corporation
QA/QC LEVEL:	EPA Level III
EPA METHODS:	EPA SOW 3-90 / SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review,* 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review,* 1994
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Pesticides/PCB's, Total Metals, Cyanide
SDG NUMBER:	7942 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB's	Total Metals	Cyanide
166GW00103	7962-01	Water	X	X	X	X	X
694GW00102	7942-07	Water	X	X		X	X
694GW00202	7942-05	Water	X	X		X	X
694GW00302	7942-04	Water	X	X		X	X
694GW00402	7947-01	Water	X	X		X	X
694GW00502	7942-01	Water	X	X		X	X
694GW00602	7942-06	Water	X	X		X	X
694GW00702	7942-02	Water	X	X		X	X
694HW00702	7942-03	Water	X	X		X	X
166DW00103	7962-02	Water	X	X	X	X	X
166EW00103	7962-03	Water	X	X	X	X	X
166FW00103	7962-04	Water	X	X	X	X	X
166TW00103	7962-05	Water	X				
694TW00102	7942-08	Water	X				
694TW00402	7947-02	Water	X				
694GW00502MS	7942-01MS	Water	+				
694GW00502MSD	7942-01MSD	Water	+				
694GW00402MS	7947-01MS	Water	+				

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Pesticides/ PCB's	Total Metals	Cyanide
694GW00402MSD	7947-01MSD	Water	+				
166DW00103MD	7962-02MD	Water				+	+
166DW00103MS	7962-02MS	Water				+	+
166FW00103MD	7962-04MD	Water				+	+
166FW00103MS	7962-04MS	Water				+	+

+ = Non-billable analysis

DW = DEIONIZED WATER BLANK, EW = EQUIPMENT RINSATE BLANK,
FW = FIELD BLANK, HW = FIELD DUPLICATE, MD = MATRIX DUPLICATE,
MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE, TW = TRIP BLANK

DATA REVIEWER(S): Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: Jean M. Delashmit

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Ceimic Corporation - 7942 CLP Organics and Inorganics

SAMPLES: 166GW00103, 694GW00102, 694GW00202, 694GW00302, 694GW00402, 694GW00502, 694GW00602, 694GW00702, 694HW00702, 166DW00103, 166EW00103, 166FW00103, 166TW00103, 694TW00102, 694TW00402, 694GW00502MS, 694GW00502MSD, 694GW00402MS, 694GW00402MSD, 166DW00103MS, 166DW00103MD, 166FW00103MS, 166FW00103MD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was taken.

IV.) Blanks:

Method Blanks:

Acetone was detected at 2 ug/L in water method blank VBW0731A. Since the only associated samples were field blanks, no action was required.

Field Blanks:

Chloroform was detected at 9 ug/L, 8 ug/L and 8 ug/L, respectively, in deionized water blank 166DW00103, equipment rinsate blank 166EW00103 and field blank 166FW00103. Chloroform was not detected in the SDG samples. No action was required. In addition, acetone was detected at 3 ug/L in the field blank. All detections of this compound in the associated SDG samples, which were less than 10X the blank amount, were flagged as undetected (U) with the analytical results below the CRQL being replaced with the CRQL.

Trip Blank:

There were no detections in the three trip blanks. No action was necessary.

Tentatively Identified Compounds (TIC):

TIC's were not detected in any SDG sample. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

Four LCS's were analyzed by the laboratory. All Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required.

VIII.) Field Duplicates:

One pair of field duplicate samples (694GW00702 / 694HW00702) was analyzed in this SDG. There were no calculable Relative Percent Differences (RPD's) for this pair. No action was necessary.

IX.) Internal Standards Performance (ISTD):

All Internal Standards Performance criteria were met. No action was necessary.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was taken.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was necessary.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was taken.

III.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No action was necessary.

Continuing Calibration:

The Percent Differences (%D's) were 33.0% and 29.9%, respectively, for bis(2-chloroethyl)ether and benzo(k)fluoranthene in the standard analyzed on 7/31/97 at 18:27 on instrument HP7, which exceeded the 25% QC limit. The non-detect results for these two compounds in associated sample 694GW00602 were flagged as estimated (UJ).

The Percent Difference (%D) was 26.9% for pyridine in the standard analyzed on 8/1/97 at 19:20 on instrument HP7, which exceeded the 25% QC limit. The non-detect result for this compound in associated sample 166GW00103 was flagged as estimated (UJ).

The Percent Differences (%D's) were 27.6%, 27.7% and 25.8%, respectively, for 4-nitrophenol, di-n-butylphthalate and benzo(g,h,i)perylene in the standard analyzed on 8/18/97 at 20:06 on instrument HP5, which exceeded the 25% QC limit. The non-detect results for these three compounds in associated samples 694GW00102 and 694GW00202 were flagged as estimated (UJ).

IV.) Blanks:

Method Blanks:

Diethylphthalate was detected at 35 ug/L in method blank SBLKAA. The detection of this compound in associated sample 694GW00402, which was less than 10X the blank amount, was flagged as undetected (U) with the detection limit being raised to the amount of contamination in the sample.

Field Blanks:

Benzoic acid was detected at 1 ug/L in field blank 166FW00103. 2,4,6-Trichlorophenol was detected at 1 ug/L each in deionized water blank 166DW00103 and field blank 166FW00103. Since there were no detections of these compounds in the SDG samples, no action was required.

Di-n-butylphthalate was detected at 1 ug/L in equipment rinsate blank 166EW00103. The detections of this compound in associated samples 694GW00202, 694GW00402 and 694GW00602, which were less

than 10X the blank amount, were flagged as undetected (U) with the analytical results below the CRQL being raised to the CRQL. The detections of this compound in samples 694GW00502 and 694HW00702 were greater than 10X the blank amount. No further action was taken.

Tentatively Identified Compounds (TIC):

4-Hydroxy-4-methyl-2-pentanone was detected in method blank VBLKAC at a sufficient concentration to eliminate, by applying the 5X Action Limit Rule, the detection in sample 166GW00103. Since data validation action based on blank TIC's was not required, no action was taken.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

Six LCS's were analyzed by the laboratory. Five LCS recoveries were outside the QC limits. Data validation action based on LCS Recovery criteria was not required. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD samples were not analyzed in this fraction of the SDG. No action was necessary.

VIII.) Field Duplicates:

One pair of field duplicate samples (694GW00702 / 694HW00702) was analyzed in this SDG. There were no calculable Relative Percent Differences (RPD's) for this pair. No action was necessary.

IX.) Internal Standards Performance:

All Internal Standards Performance criteria were met. No action was taken.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was required.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was taken.

XII.) Tentatively Identified Compounds (TIC's):

All TIC criteria were met. No action was necessary.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

PESTICIDES/PCB's

I.) Holding Times:

All Holding Time criteria were met, so no action was required.

II.) Instrument Performance:

All Pesticides Instrument Performance criteria were met. No action was necessary.

III.) Calibration:

All Initial and Continuing Calibration were met. No action was required.

IV.) Blanks:

There were no positive detections in the method or field blanks. No action was necessary.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was taken.

VI.) Laboratory Control Sample (LCS):

Two LCS's were analyzed by the laboratory. All Recovery criteria were met. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD samples were not analyzed in this fraction of the SDG. No action was necessary.

VIII.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was required.

IX.) Field Duplicates:

No field duplicate samples were associated with this fraction of the SDG. No action was taken.

X.) Pesticide Cleanup Check:

Florisil Cartridge Check:

All Florisil Cartridge Check criteria were met. No action was necessary.

Gel Permeation Chromatography (GPC):

GPC cleanup was not required in this SDG. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All criteria were met. No action was required.

XII.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max. Conc.	5X Action Level
ERB	aluminum	45.6 ug/L	228 ug/L
DWB	antimony	3.00 ug/L	15.0 ug/L
ERB	barium	0.54 ug/L	2.70 ug/L
CCB4	beryllium	0.50 ug/L	2.50 ug/L
CCB4	calcium	131 ug/L	655 ug/L
CCB4	chromium	2.10 ug/L	10.5 ug/L
CCB4	cobalt	1.90 ug/L	9.50 ug/L
CCB4	copper	1.40 ug/L	7.00 ug/L
CCB4	magnesium	8.20 ug/L	41.0 ug/L
CCB4	nickel	1.80 ug/L	9.00 ug/L
CCB4	silver	2.10 ug/L	10.5 ug/L
ERB	sodium	826 ug/L	4130 ug/L
CCB4	thallium	6.40 ug/L	32.0 ug/L
ERB	zinc	31.0 ug/L	155 ug/L

CCB = Continuing Calibration Blank, DWB = Deionized Water Blank (166DW00103),
ERB = Equipment Rinsate Blank (166EW00103)

All results greater than the IDL but less than 5X the blank amount (Action Level, ug/L for water samples) for which the contaminated blank was an associated calibration, deionized water or equipment rinsate blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
PBW	arsenic	-3.18 ug/L	15.9 ug/L
PBW	calcium	-29.5 ug/L	148 ug/L
PBW	chromium	-0.69 ug/L	3.45 ug/L
PBW	cobalt	-1.49 ug/L	7.45 ug/L
PBW	nickel	-1.04 ug/L	5.20 ug/L
CCB8	potassium	-83.4 ug/L	417 ug/L
CCB2	silver	-1.50 ug/L	7.50 ug/L
CCB3	sodium	-26.4 ug/L	132 ug/L

CCB = Continuing Calibration Blank, PBW = Preparation Blank (Water)

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	3 ug/L
arsenic	4 ug/L
cadmium	4 ug/L
manganese	5 ug/L
sodium	135 ug/L
zinc	7 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was detected in the samples at a concentration comparable to or greater than that of ICS Solution A, no action was taken.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

arsenic	-5 ug/L
barium	-2 ug/L
chromium	-4 ug/L
cobalt	-2 ug/L
copper	-6 ug/L
nickel	-6 ug/L

potassium	-124 ug/L
selenium	-9 ug/L
silver	-3 ug/L
thallium	-7 ug/L
tin	-64 ug/L
vanadium	-1 ug/L

Since neither aluminum, calcium, iron nor magnesium was detected in the samples at a concentration comparable to or greater than that of ICS Solution A, no action was taken.

V.) ICP Serial Dilution Analysis:

All Serial Dilution Analysis criteria were met. No action was necessary.

VI.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No action was required.

VII.) Duplicate Sample Analysis:

All Duplicate Sample Analysis criteria were met. No action was taken.

VIII.) Matrix Spike Recoveries (MS):

All MS Recovery criteria were met. No action was necessary.

IX.) Field Duplicates:

One pair of field duplicate samples (694GW00702 / 694HW00702) was analyzed in this SDG. The calculable Relative Percent Differences were:

Compound	694GW00702	694HW00702	RPD
calcium	280000 ug/L	246000 ug/L	13%
iron	5400 ug/L	4660 ug/L	15%
magnesium	346000 ug/L	307000 ug/L	12%
manganese	1460 ug/L	1290 ug/L	12%
potassium	1730000 ug/L	109000 ug/L	45%
sodium	3340000 ug/L	3300000 ug/L	1.2%

The RPD for potassium exceeded the 30% QC limit for water samples. The detections of potassium in the two field duplicate samples were flagged as estimated (J). Since all other RPD's met the 30% QC criterion, no further action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was required.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met, so no action was necessary.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

VALIDATA
Chemical Services, Inc.
P. O. Box 930422, Norcross, GA 30093
(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0194
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRICES:	Soil, Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	28083

SAMPLES:

SDG 28083A (Level IV):

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
161HW00101	28089.01	Water	X
162DW00201	28083.01	Water	X
162EW00201	28083.02	Water	X
693CB00101	28178.01	Soil	X

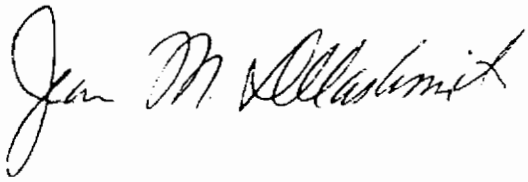
SDG 28083B (Level III):

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
693SB00101	28177.02	Soil	X
693SB00102	28177.03	Soil	X
693SB00201	28165.01	Soil	X
693SB00301	28165.02	Soil	X
693SB00401	28177.01	Soil	X

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694SB00101	28177.07	Soil	X
694SB00201	28177.09	Soil	X
694SB00501	28177.08	Soil	X
694SB00601	28177.06	Soil	X
694SB00701	28177.04	Soil	X
694SB00702	28177.05	Soil	X

C or H = FIELD DUPLICATE SAMPLE, D = DEIONIZED WATER BLANK,
E = EQUIPMENT RINSATE BLANK

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 28083 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 161HW00101, 162DW00201, 162EW00201, 693CB00101, 693SB00101,693SB00102, 693SB00201, 693SB00301, 693SB00401, 694SB00101, 694SB00201, 694SB00501, 694SB00601, 694SB00701, 694SB00702

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

Four 2,3,7,8-substituted PCDD's and PCDF's were detected in method blanks at the following highest concentrations:

Method Blank	Compound	Conc.	Action Level
DFBLK1	1234678-HpCDD	5.5 pg/L	2.8 ng/kg
DFBLK2B	OCDD	1.9 ng/kg	9.5 ng/kg
DFBLK1	1234678-HpCDF	3.7 pg/L	1.9 ng/kg
DFBLK4	OCDF	0.6 ng/kg	3.0 ng/kg

Detections of these compounds in the associated samples below 5X the blank amounts were designated as Estimated Maximum Possible Concentration (EMPC).

Field Blanks:

Deionized water blank 162DW00201 and equipment rinsate blank 162EW00201 collected on 1/2/97 were analyzed. There were no 2,3,7,8-substituted PCDD's and PCDF's detected in the field blanks, so no action was required.

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed. No action was taken.

VII.) Duplicates:

One set of field duplicate samples, 693SB00101 / 693CB00101, was analyzed. The calculable Relative Percent Differences (RPD's) were:

Compound	693SB00101 (ng/kg)	693CB00101 (ng/kg)	RPD (%)
123678-HxCDD	5.21	4.46	15.5
123789-HxCDD	2.56	2.80	9.0
1234678-HpCDD	61.4	50.2	20.1
OCDD	425	293	36.8
1234678-HpCDF	6.60	5.89	11.4
OCDF	15.8	10.3	42.1

All RPD's were within the 60% QC limit, so no action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

All data were acceptable with qualifications. Laboratory "X" and "I" flags meaning "EMPC" were replaced with "EMPC" upon validation.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
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DATA VALIDATION SUMMARY REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0195
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Soil
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	28195B (Level III)

SAMPLES:

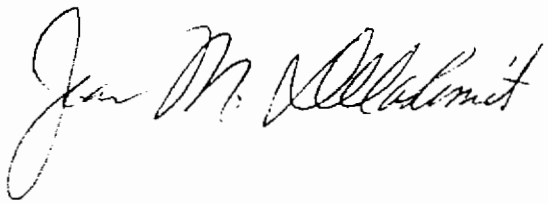
Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694SB00301	28195.01	Soil	X
694SB00401	28195.02	Soil	X
694SB00801	28195.12	Soil	X
694SB00802	28195.13	Soil	X
694SB00901	28195.03	Soil	X
694SB00902	28195.04	Soil	X
694SB01001	28212.01	Soil	X
694SB01101	28195.05	Soil	X
694SB01102	28195.06	Soil	X
694SB01201	28212.09	Soil	X
694SB01202	28212.10	Soil	X
694SB01301	28195.07	Soil	X
694SB01401	28212.07	Soil	X
694SB01501	28212.02	Soil	X
694SB01502	28212.03	Soil	X
694SB01601	28195.08	Soil	X
694SB01602	28195.09	Soil	X
694SB01701	28212.04	Soil	X

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694SB01702	28212.05	Soil	X
694SB01801	28212.06	Soil	X
694SB01901	28212.08	Soil	X
694SB02001	28195.10	Soil	X
694SB02002	28195.11	Soil	X
694SB00802MS	28195.14MS	Soil	+
694SB00802MSD	28195.15MSD	Soil	+
694SB01202MS	28212.11MS	Soil	+
694SB01202MSD	28212.12MSD	Soil	+

+ = Non-billable Analysis

MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 28195B 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694SB00301, 694SB00401, 694SB00801, 694SB00802, 694SB00901, 694SB00902, 694SB01001, 694SB01101, 694SB01102, 694SB01201, 694SB01202, 694SB01301, 694SB01401, 694SB01501, 694SB01502, 694SB01601, 694SB01602, 694SB01701, 694SB01702, 694SB01801, 694SB01901, 694SB02001, 694SB02002, 694SB00802MS, 694SB00802MSD, 694SB01202MS, 694SB01202MSD

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

Two method blanks were analyzed. There were no 2,3,7,8-substituted PCDD's and PCDF's detected in the blanks, so no action was required.

Field Blanks:

Deionized water blank 162DW00201 and equipment rinsate blank 162EW00201 collected on 1/2/97 were analyzed in SDG 28083. There were no 2,3,7,8-substituted PCDD's and PCDF's detected in the field blanks, so no action was required.

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

Two sets of MS/MSD samples (694SB00802MS / 694SB00802MSD and 694SB01202MS / 694SB01202MSD) were analyzed.

All criteria were met for spiked samples 694SB00802MS and 694SB00802MSD, so no action was taken.

The Relative Percent Difference (RPD) was 75% for OCDD in spiked samples 694SB01202MS and 694SB01202MSD, which exceeded the 50% QC limit. Since the positive result for OCDD in unspiked sample 694SB01202 (554 ng/kg) was less than 4X of the amount spike added (160 ng/kg), this sample result was flagged as estimated (J).

VII.) Duplicates:

No field duplicate set was analyzed in this SDG. No action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

All data were acceptable with qualifications. Laboratory "X" and "I" flags meaning "EMPC" were replaced with "EMPC" upon validation.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY
REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0197
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Soil
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's

SDG NUMBER: 28233

SAMPLES:

SDG 28233A (Level IV):

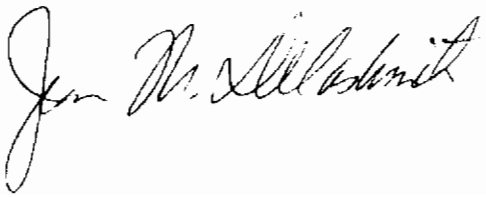
Client Sample #	Lab Sample #	Matrix	PCDD/PCDF
694CB02101	28234.01	Soil	X

SDG 28233B (Level III):

Client Sample #	Lab Sample #	Matrix	PCDD/PCDF
694SB02101	28233.01	Soil	X
694SB02201	28233.02	Soil	X
694SB02301	28233.05	Soil	X
694SB02201MS	28233.03	Soil	+
694SB02201MSD	28233.04	Soil	+

+ = Non-billable Analysis
C = FIELD DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma, Inc. - 28233 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694CB02101, 694SB02101, 694SB02201, 694SB02301, 694SB02201MS, 694SB02201MSD

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

There were no 2,3,7,8-substituted PCDD's and PCDF's detected in method blanks, no action was required.

Field Blanks:

Associated deionized water blank 162DW00201 and equipment rinsate blank 162EW00201 collected on 1/2/97 were analyzed in SDG 28083. There were no 2,3,7,8-substituted PCDD's and PCDF's detected in these blanks, so no action was required.

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

One set of MS/MSD samples (694SB02201MS / 694SB02201MSD) was analyzed. The Relative Percent Difference (RPD) was 142% for 23478-PeCDF in spiked samples 694SB02201MS and 694SB02201MSD, which exceeded the 50% QC limit. The non-detect result for this compound in unspiked sample 694SB02201 was flagged as estimated (UJ).

VII.) Duplicates:

One set of field duplicate samples, 694SB02101 / 694CB02101, was analyzed. The calculable Relative Percent Differences (RPD's) were:

Compound	694SB02101	694CB02101	RPD
1234678-HpCDD	16.2 ng/kg	12.0 ng/kg	14.6%
OCDD	148 ng/kg	116 ng/kg	24.2%

All RPD's were within the 60% QC limit, so no action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

Laboratory "X" and "I" flags meaning "Estimated Maximum Possible Concentration" were replaced with "EMPC" upon validation. All data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

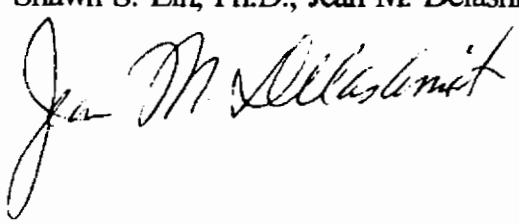
COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0233
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	29387 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694GW00101	29401.01	Water	X
694GW00201	29401.03	Water	X
694GW00301	29401.02	Water	X
694GW00401	29387.02	Water	X
694GW00501	29387.01	Water	X
694GW00601	29387.03	Water	X
694GW00701	29387.04	Water	X
694HW00701	29387.05	Water	X
694FW00201	29401.04	Water	X

F = FIELD BLANK, H = FIELD DUPLICATE

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 29387 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694GW00101, 694GW00201, 694GW00301, 694GW00401, 694GW00501, 694GW00601, 694GW00701, 694HW00701, 694FW00201

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

OCDD was detected in method blank at the following concentration:

Method Blank	Compound	Conc.	5X Action Level
DFBLK1	OCDD	2.5 pg/L	13 pg/L

Detections of this compound in the associated samples below 5X the blank amount were designated as Estimated Maximum Possible Concentration (EMPC).

Field Blanks:

Field blank 694FW00201 collected on 5/16/97 was analyzed in this SDG. Two 2,3,7,8-substituted PCDD's and PCDF's were detected in the blank at the following concentrations:

Field Blank ID	Compound	Conc.	5X Action Level
694FW00201	OCDD	8.9 pg/L	45 pg/L
694FW00201	1234678-HpCDF	1.7 pg/L	8.5 pg/L

Detections of these compound in the associated samples below 5X the blank amounts were designated as Estimated Maximum Possible Concentration (EMPC).

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed in this SDG. No action was taken.

VII.) Duplicates:

Field duplicates set 694GW00701 / 694HW00701 was analyzed by the laboratory. There were no calculable Relative Percent Differences (RPD's) for the set of field duplicate samples, so no action was required.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

All data were acceptable with qualifications. Laboratory "X" flags meaning "EMPC" were replaced with "EMPC" upon validation.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0251
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	30186 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694GW00102	30186.07	Water	X
694GW00202	30186.05	Water	X
694GW00302	30186.04	Water	X
694GW00402	30211.01	Water	X
694GW00502	30186.01	Water	X
694GW00602	30186.06	Water	X
694GW00702	30186.02	Water	X
694HW00702	30186.03	Water	X

H = FIELD DUPLICATE

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE:

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 30186 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694GW00102, 694GW00202, 694GW00302, 694GW00402, 694GW00502, 694GW00602, 694GW00702, 694HW00702

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

There were no 2,3,7,8-substituted PCDD's and PCDF's detected in the method blank for this SDG. No action was required.

Field Blanks:

No field blank was analyzed in this SDG. No action was taken.

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed in this SDG. No action was taken.

VII.) Duplicates:

Field duplicates set 694GW00702 / 694HW00702 was analyzed. The only calculable Relative Percent Difference (RPD) was:

Compound	694GW00702	694HW00702	RPD
OCDD	15.3 pg/L	37.4 pg/L	83.9%

The RPD for OCDD exceeded the 30% QC limit for water samples. The positive results for this compound in the two field duplicate samples were flagged as estimated (J).

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

All data were acceptable with qualifications. Laboratory "X" flags meaning "Estimated Maximum Possible Concentration" were replaced with "EMPC" upon validation.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0278
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	32259 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694GW00203	32259.02	Water	X
694GW00203RE	32259.02	Water	+
694GW00303	32259.06	Water	X
694GW00503	32276.03	Water	X
694GW00603	32289.01	Water	X
694GW00703	32276.01	Water	X
694HW00703	32276.02	Water	X
GDKGWCL103	32259.01	Water	X
694DW00203	32259.03	Water	X
694EW00203	32259.04	Water	X
694FW00203	32259.05	Water	X

+ = Non-billable analysis
D = DEIONIZED WATER BLANK, E = EQUIPMENT RINSATE BLANK,
F = FIELD BLANK, H = FIELD DUPLICATE, RE = RE-EXTRACTION/REANALYSIS

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: Jean M. Delashmit

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 32259 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694GW00203, 694GW00203RE, 694GW00303, 694GW00503, 694GW00603, 694GW00703, 694HW00703, GDKGWCL103, 694DW00203, 694EW00203, 694FW00203

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

Several 2,3,7,8-substituted PCDD's and PCDF's were detected in method blanks at the following highest concentrations:

Method Blank	Compound	Conc.	Action Level
DFBLK2	1234678-HpCDD	2.7 pg/L	14 pg/L
DFBLK1	OCDD	67.9 pg/L	340 pg/L
DFBLK2	1234678-HpCDF	1.5 pg/L	8.5 pg/L

Detections of these compounds in the associated samples below 5X the blank amounts were designated as Estimated Maximum Possible Concentration (EMPC).

Field Blanks:

Deionized water blank 694DW00203, equipment rinsate blank 694EW00203, and field blank 694FW00203 collected on 12/17/97 were analyzed in this SDG. OCDD was detected in the blanks at the following highest concentration:

Field Blank	Compound	Conc.	Action Level
694DW00203	OCDD	50.7 pg/L	254 pg/L

Detections of this compound in the associated samples below 5X the blank amounts were designated as Estimated Maximum Possible Concentration (EMPC).

V.) Internal Standards Performance:

The Percent Recoveries (%R's) of the following internal standards were below the 40-135% QC limits for the samples listed:

Client Sample #	Internal Standard	%R
694GW00203	13C-2378-TCDD	37
	13C-2378-TCDF	28
	13C-12378-PeCDF	34
	13C-123478-HxCDF	36
694GW00203RE	13C-12378-PeCDD	38
	13C-2378-TCDF	37
	13C-12378-PeCDF	36

The associated sample results, which consisted entirely of non-detects, were flagged as estimated (UJ).

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed. No action was taken.

VII.) Duplicates:

Field duplicates set 694GW00703 / 694HW00703 was analyzed. There were no calculable Relative Percent Differences (RPD's). No action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

Sample 694GW00203 was re-extracted due to several internal standard recoveries outside the QC limits. The re-extraction/reanalysis of this sample (694GW00203RE) was considered by the validator to be of preferable data quality to the original analysis due to improved internal standards recoveries.

All laboratory data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

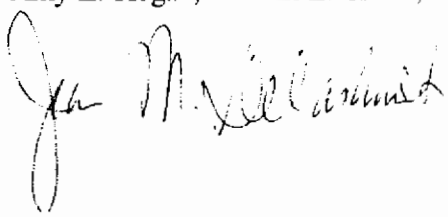
COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0278
CONTRACTED LAB:	Southwest Laboratory of Oklahoma, Inc.
QA/QC LEVEL:	EPA Level III
EPA METHOD:	EPA SOW 3-90 or SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review*, 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Total Metals, Cyanide
SDG NUMBER:	32259 (Level III)

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Total Metals	Cyanide
694GW00203	32259.02	Water	X	X	X	X
694GW00303	32259.06	Water	X	X	X	X
694GW00303RE	32259.06RE	Water		+		
694GW00503	32276.03	Water	X	X	X	X
694GW00503RE	32276.03RE	Water		+		
694GW00603	32289.01	Water	X	X	X	X
694GW00703	32276.01	Water	X	X	X	X
694GW00703RE	32276.01RE	Water		+		
694HW00703	32276.02	Water	X	X	X	X
694HW00703RE	32276.02RE	Water		+		
GDKGWCL103	32259.01	Water	X	X	X	X
694GW00603MS	32289.01MS	Water	+			
694GW00603MSD	32289.01MSD	Water	+			
GDKGWCL103MS	32259.01MS	Water		+		
GDKGWCL103MSD	32259.01MSD	Water		+		
694EW00203	32259.04	Water	X	X	X	X
694FW00203	32259.05	Water	X	X	X	X
694DW00203	32259.03	Water	X	X	X	X
694TW00303	32259.07	Water	X			
694TW00603	32289.02	Water	X			
694TW00703	32276.04	Water	X			

+ = Non-billable analysis

D = DEIONIZED WATER BLANK, E = EQUIPMENT RINSATE BLANK, F = FIELD BLANK,
H = FIELD DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE,
RE = REANALYSIS, T = TRIP BLANK

DATA REVIEWER(S): Amy L. Hogan, Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: 

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Southwest Laboratory of Oklahoma, Inc. - 32259 CLP Organics and Inorganics

SAMPLES: 694GW00203, 694GW00303, 694GW00303RE, 694GW00503, 694GW00503RE, 694GW00603, 694GW00703, 694GW00703RE, 694HW00703, 694HW00703RE, GDKGWCL103, 694DW00203, 694EW00203, 694FW00203, 694TW00303, 694TW00603, 694TW00703, 694GW00603MS, 694GW00603MSD, GDKGWCL103MS, GDKGWCL103MSD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No action was required.

Continuing Calibration:

The Percent Differences (%D's) exceeded the 25% QC limit for the standards analyzed on 12/22/97 at 06:10 on instrument K for the following compounds:

bromomethane	38.2%
chloroethane	31.7%
acetone	34.9%
2-butanone	61.7%
4-methyl-2-pentanone	47.0%
vinyl acetate	25.9%
2-hexanone	55.6%
xylene	156%

All positive and non-detect results for these compounds in the associated samples, were flagged as estimated (J) and (UJ). The associated samples were GDKGWCL103, 694GW00203, 694GW00303, 694GW00703, 694HW00703 and 694GW00503.

The Relative Response Factor (RRF) of 2-chloroethyl vinyl ether was 0.043 for the standard run on 12/31/97 at 05:08 on instrument K, which was below the 0.050 QC limit. The results for this compound in the associated samples, which consisted entirely of non-detects, were rejected (R). The associated samples were 694GW00603 and trip blank 694TW00603.

The Percent Differences (%D's) exceeded the 25% QC limit for the standards run on 12/31/97 at 05:08 on instrument K for the following compounds:

bromomethane	38.3%
chloroethane	31.3%
acetone	28.3%
2-butanone	69.4%
4-methyl-2-pentanone	29.6%
tetrachloroethene	32.4%
2-hexanone	43.3%
2-chloroethyl vinyl ether	40.6%

The results for 2-chloroethyl vinyl ether in the associated samples were previously rejected (R) because of a low RRF in this calibration. The results for the other compounds in associated sample 694GW00603 were flagged as estimated (J) and (UJ).

IV.) Blanks:

Method Blanks:

There were no positive detections in the method blanks. No action was required.

Field Blanks:

Methylene chloride and chloroform were detected at 6 ug/L and 5 ug/L, respectively, in equipment rinsate blank 694EW00203. All positive results for methylene chloride in the associated samples, less than 10X the blank amount, were flagged as undetected (U) with the results less than the CRQL being raised to the CRQL. There were no positive results for chloroform in the associated samples. The associated samples were 694GW00203, 694GW00303, 694GW00503, 694GW00703, 694HW00703 and GDKGWCL103.

Methylene chloride and chloroform were detected at 5 ug/L and 6 ug/L, respectively, in deionized water blank 694DW00203. The results for these compounds in the associated samples were previously flagged based on the equipment rinsate blank. No further action was required.

Methylene chloride and chloroform were detected at 1 ug/L and 6 ug/L, respectively, in field blank 694FW00203. The results for these compounds in the associated samples were previously flagged based on the equipment rinsate blank. No further action was required.

Trip Blanks:

Chloroform was detected at 2 ug/L in trip blank 694TW00303. There were no positive results for this compound in the associated samples. No action was required.

Chloroform was detected at 1 ug/L in trip blank 694TW00603. There were no positive results for this compound in the associated samples. No action was required.

Chloroform and total xylene were detected at 1 ug/L and 8 ug/L, respectively, in trip blank 694TW00703. There were no positive results for these compounds in the associated samples. No action was required.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method, field or trip blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met. No action was required.

VII.) Laboratory Control Samples (LCS):

Two LCS's were analyzed in this SDG. Several LCS Recoveries were outside their respective QC limits. Data validation action based on LCS recoveries was not required. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for 2-chloroethyl vinyl ether in sample 694GW00603 and trip blank 694TW00603 were rejected (R) because of a low RRF in the associated continuing calibration. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was required.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met, so no action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

Bis(2-ethylhexyl)phthalate was detected at 2 ug/L in method blank SBLK1. All results for this compound in the associated samples were flagged based on the field blanks. No further action was required.

Benzoic acid and bis(2-ethylhexyl)phthalate were detected at 5 ug/L and 2 ug/L, respectively, in method blank SBLK2. All results for these compounds in the associated samples were flagged based on the field blanks. No further action was required.

Bis(2-ethylhexyl)phthalate was detected at 3 ug/L in method blank SBLK3. All results for this compound in the associated samples were flagged based on the field blanks. No further action was required.

Benzoic acid and bis(2-ethylhexyl)phthalate were detected at 5 ug/L and 2 ug/L, respectively, in method blank SBLK4. All results for these compounds in the associated samples were flagged based on the field blanks. No further action was required.

Field Blanks:

Benzoic acid and bis(2-ethylhexyl)phthalate were detected at 5 ug/L and 2 ug/L, respectively, in deionized water blank 694DW00203. All positive results for benzoic acid in the associated samples, less than 5X the blank amount, were flagged as undetected (U) with the results less than the CRQL being raised to the CRQL. All positive results for bis(2-ethylhexyl)phthalate in the associated samples, less than 10X the blank amount, were flagged as undetected (U) with the results less than the CRQL

being raised to the CRQL. The associated samples were 694GW00203, 694GW00303, 694GW00503, 694GW00703, 694HW00703 and GDKGWCL103.

Bis(2-ethylhexyl)phthalate was detected at 6 ug/L in equipment rinsate blank 694EW00203. All results for this compound in the associated samples were previously flagged based on the deionized water blank. No further action was required.

Bis(2-ethylhexyl)phthalate was detected at 1 ug/L in field blank 694FW00203. All results for this compound in the associated samples were previously flagged based on the deionized water blank. No further action was required.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method or field blanks. No action was required.

V.) Surrogate Recoveries:

The Percent Recoveries (%R's) of terphenyl-d14 and 2-fluorobiphenyl in sample 694GW00303 were 30% and 42%, respectively, which were below their respective 33-141% and 43-116% QC limits. All positive and non-detect results for the base/neutral fraction of this sample were flagged as estimated (J) and (UJ).

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

All MS / MSD criteria were met in this fraction of the SDG. No action was required.

VII.) Laboratory Control Samples (LCS):

All LCS criteria were met. No action was taken.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) for the field duplicate samples in this fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met, so no action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met, so no action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met, so no action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The original analyses of samples 694GW00303, 694GW00503, 694GW00703 and 694HW00703 were considered by the validator to be of preferable data quality to the reanalyses because of better holding times. All laboratory data were acceptable with qualifications.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max. Conc.	Action Level
694EW00203	aluminum	81 ug/L	405 ug/L
CCB3	antimony	2.70 ug/L	13.5 ug/L
694EW00203	barium	1.10 ug/L	5.50 ug/L
694DW00203	calcium	45.5 ug/L	228 ug/L
694FW00203	chromium	10.2 ug/L	51.0 ug/L
694FW00203	iron	40.0 ug/L	200 ug/L
694FW00203	manganese	0.45 ug/L	2.25 ug/L
694EW00203	sodium	28800 ug/L	144000 ug/L
PBW	zinc	6.85 ug/L	34.2 ug/L
PBW	cyanide	3.23 ug/L	16.2 ug/L

CCB = Continuing Calibration Blank, DW = Deionized Water Blank, FW = Field Blank, EW = Equipment Rinsate Blank, PBW = Preparation Blank (Water)

All results greater than the IDL but less than 5X the blank amounts (Action Level, ug/L for water samples) for which the contaminated blank was an associated calibration, field or preparation blank were flagged as undetected (U).

The following analytes had negative blank results with absolute values greater than the IDL:

Blank ID	Analyte	Neg. Conc.	5X Conc.
CCB	lead	-1.10 ug/L	5.50 ug/L
CCB	magnesium	-74.9 ug/L	375 ug/L

CCB = Continuing Calibration Blank

All associated positive sample results were greater than 5X the absolute value of the negative blank results. All associated non-detects were flagged as estimated (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met. No action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	11 ug/L
chromium	1 ug/L
cobalt	1 ug/L
lead	2 ug/L
selenium	7 ug/L
thallium	9 ug/L
vanadium	4 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

A negative result was observed in ICS Solution A at an absolute concentration greater than the IDL for the following analyte:

barium	-1 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the samples at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Percent Differences (%D's) in sample 694GW00603L exceeded the 10% QC limit for the following analytes:

barium	23.4%
calcium	19.4%
iron	15.1%
magnesium	11.5%
manganese	15.8%
sodium	24.0%

All positive results for these analytes in the associated samples were flagged as estimated (J). The associated samples were 694GW00303, 694GW00503 and 694GW00603.

The Percent Differences (%D's) in sample 694HW00703L exceeded the 10% QC limit for the following analytes:

barium	42.0%
calcium	33.1%
iron	30.8%
magnesium	26.8%
manganese	30.6%
potassium	18.6%
sodium	15.1%

All positive results for these analytes in the associated samples were flagged as estimated (J). The associated samples were 694GW00203, 694GW00703, 694HW00703 and GDKGWCL103.

VI.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No action was required.

VII.) Duplicate Sample Analysis:

Duplicate Sample Analysis was not performed in this fraction of the SDG. No action was required.

VIII.) Matrix Spike Recoveries:

Matrix Spike Analysis was not performed in this fraction of the SDG. No action was required.

IX.) Field Duplicates:

One set of field duplicate samples was analyzed by the laboratory in this SDG. The calculable Relative Percent Differences (RPD's) were:

Compound	694GW00703, ug/L	694HW00703, ug/L	RPD
barium	27.8	28.2	1.4%
calcium	185000	188000	1.6%
iron	3180	3270	2.8%
magnesium	244000	246000	0.8%
manganese	948	959	1.1%
potassium	85600	88600	3.4%
sodium	2750000	2920000	6.0%

Since all RPD's were within the 30% QC limit for water samples, no action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was required.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met. No action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

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DATA VALIDATION SUMMARY REPORT

COMPANY:	Ensafe / Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0283
CONTRACTED LAB:	Southwest Laboratory of Oklahoma, Inc.
QA/QC LEVEL:	EPA Level III
EPA METHODS:	EPA SOW 3-90 / SW-846
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review*, 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review*, 1994
SAMPLE MATRICES	Soil and Water
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Total Metals, Cyanide
SDG NUMBER:	32413 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Total Metals	Cyanide
166GW00303	32470-01	Water	X			
166GW00403	32470-07	Water	X			
166GW00603	32470-08	Water	X			
166GW03D03	32470-05	Water	X			
166GW04D03	32470-09	Water	X			
166GW05D03	32477-01	Water	X			
166HW05D03	32477-02	Water	X			
166GW06D03	32470-10	Water	X			
166GW09D03	32477-03	Water	X			
694GW00403	32413-01	Water	X	X	X	X
1666020D01	32470-11	Soil	X		X	
166DW00303	32470-02	Water	X			
166EW00303	32470-03	Water	X			
166FW00303	32470-04	Water	X			
166DW20D01	32470-14	Water	X			
166EW20D01	32470-12	Water	X		X	
166PW20D01	32470-13	Water	X		X	
166TW00303	32470-06	Water	X		X	
166TW05D03	32477-04	Water	X			
166TW20D01	32470-15	Water	X			
694TW00403	32413-02	Water	X			

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Total Metals	Cyanide
694GW00403MS	32413-01MS	Water		+		
694GW00403MSD	32413-01MSD	Water		+		

+ = Non-billable analysis

4th Digit Codes:
6 = SAND BLANK, D = DEIONIZED WATER BLANK, E = EQUIPMENT RINSATE BLANK, F = FIELD BLANK, H = FIELD DUPLICATE, P = POTABLE WATER BLANK, T = TRIP BLANK

Suffix Codes:
MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: Jean M. Delashmit

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Southwest Laboratory of Oklahoma, Inc. - 32413 Level III CLP Organics and Inorganics

SAMPLES: 1666020D01, 166GW00303, 166GW00403, 166GW00603, 166GW03D03, 166GW04D03, 166GW05D03, 166HW05D03, 166GW06D03, 166GW09D03, 694GW00403, 166DW00303, 166EW00303, 166FW00303, 166DW20D01, 166EW20D01, 166PW20D01, 166TW00303, 166TW05D03, 166TW20D01, 694TW00403, 694GW00403MS, 694GW00403MSD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

The average Relative Response Factors (RRF's) were 0.044 and 0.027, respectively, for acetone and 2-chloroethyl vinyl ether in the standards analyzed on 1/26/98 on instrument R, which were below the 0.050 QC limit. The non-detect results for the two compounds in associated sand blank 1666020D01 were rejected (R).

The average Relative Response Factor (RRF) was 0.041 for acetone in the standards analyzed on 1/9/98 on instrument U, which was below the 0.050 QC limit. The results for acetone in all SDG water samples, field blanks (except 166DW20D01) and trip blanks, which consisted entirely of non-detects, were rejected (R).

Continuing Calibration:

The Relative Response Factors (RRF's) were 0.036 and 0.045, respectively, for acetone and 2-chloroethyl vinyl ether in the standard analyzed on 1/13/98 at 0958 on instrument U, which were below the 0.050 QC limit. The non-detect results for 2-chloroethyl vinyl ether in sample 694GW00403 and trip blank 694TW00403 were rejected (R). Since the results for acetone in the two samples were previously rejected based on the initial calibration, no further action was taken.

The Percent Difference (%D) was 28.6% for 2-chloroethyl vinyl ether in the standard analyzed on 1/13/98 at 0958 on instrument U, which exceeded the 25% QC limit. Since the results for this compound in the associated samples were previously rejected based on a low RRF in this calibration,

no further action was necessary.

The Relative Response Factor (RRF) was 0.035 for acetone in the standard analyzed on 1/19/98 at 13:06 on instrument U, which was below the 0.050 QC limit. All results for acetone in the associated water samples were previously rejected based on a low RRF in the initial calibration. No further action was required.

The Relative Response Factor (RRF) was 0.037 for acetone in the standard analyzed on 1/20/98 at 10:03 on instrument U, which was below the 0.050 QC limit. All results for acetone in the associated water samples were previously rejected based on a low RRF in the initial calibration. No further action was taken.

IV.) Blanks:

Method Blanks:

There were no positive detections in the four method blanks. No action was necessary.

Field Blanks:

Chloroform was detected at 6 ug/L each in deionized water blank 166DW00303, equipment rinsate blank 166EW00303 and field blank 166FW00303. Chloroform was also detected at 30 ug/L in potable water blank 166PW20D01. Since there were no detections of this compound in the associated samples, no action was taken. In addition, bromodichloromethane was detected at 7 ug/L in potable water blank 166PW20D01 and acetone was detected at 3 ug/L in deionized water blank 166DW20D01. These compounds were not detected in the associated samples. No action was required.

Trip Blanks:

Chloroform was detected at 1 ug/L each in trip blanks 166TW00303, 166TW20D01 and 694TW00403. This compound was not detected in the associated samples. No action was taken.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method, field or trip blanks. No action was required.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD samples were not analyzed in this fraction of the SDG. No action was required

VII.) Laboratory Control Samples (LCS):

Eight LCS's were analyzed in this fraction of the SDG. Twenty-four LCS Percent Recoveries (%R's) were outside QC limits. Data validation action based on LCS's was not required. No action was taken.

VIII.) Field Duplicates:

One pair of field duplicate sample, 166GW05D03 / 166HW05D03, was analyzed in this SDG. The only calculable Relative Percent Difference (RPD) was:

Compound	166GW05D03	166HW05D03	RPD
trichloroethene	37 ug/L	37 ug/L	0%

Since the RPD was within the 30% QC limit for water samples, no action was necessary.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for acetone were rejected in all SDG samples and blanks because of low RRF's in the initial calibrations. The non-detect results for 2-chloroethyl vinyl ether were rejected in one sample, one trip blank, and the sand blank because of low RRF's in the associated initial and continuing calibrations. All remaining laboratory data were acceptable without qualification.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

IV.) Blanks:

There were no detections in the method blank. No action was taken.

Tentatively Identified Compounds (TIC's):

There were no TIC's detected in the method blank. No action was necessary.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

The Percent Recoveries (%R's) of 4-nitrophenol were 95% and 92%, respectively, in spiked samples 694GW00403MS and 694GW00403MSD, which exceeded the 10-80% QC limits. Since this compound was not detected in the associatd unspiked sample, no action was necessary.

VII.) Laboratory Control Samples (LCS):

Two LCS's were analyzed by the laboratory in this SDG. All LCS Recovery criteria were met. No action was taken.

VIII.) Field Duplicates:

Field duplicate samples were not analyzed in this fraction of the SDG. No action was required.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

All laboratory data were acceptable without qualification.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was necessary.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank			Action Level	
Type/ID#	Analyte	Max. Conc.	ug/L	mg/kg
PBW	aluminum	157 ug/L	785	157
CCB9	antimony	4.00 ug/L	20.0	4.00
CCB3	arsenic	4.50 ug/L	22.5	4.50
PBW	barium	15.2 ug/L	76.0	15.2
CCB7	beryllium	0.30 ug/L	1.50	0.30
PBW	calcium	26700 ug/L	134000	26700
PBS	chromium	0.08 mg/kg	0.08	0.40
PBS	cobalt	0.14 mg/kg	0.14	0.70
PBW	copper	5.10 ug/L	25.5	5.10
PBW	iron	925 ug/L	4630	925
ERB	lead	16.2 ug/L	81.0	16.2
PBW	magnesium	762 ug/L	3810	762
PBW	manganese	14.9 ug/L	74.5	14.9
PBW	nickel	2.20 ug/L	11.0	2.20
PBW	potassium	1600 ug/L	8000	1600
PBW	sodium	4250 ug/L	21300	4250
PBW	vanadium	1.40 ug/L	7.00	1.40
PBW	zinc	57.5 ug/L	288	57.5
PBW	cyanide	2.47 ug/L	12.4	2.47

CCB = Continuing Calibration Blank, ERB = Equipment Rinsate Blank (166EW20D01), PBW = Preparation Blank (Water), PBS = Preparation Blank (Soil), PBW = Potable Water Blank (166PW20D01)

All results greater than the IDL but less than 5X the blank amounts (Action Level, ug/L for water samples) for which the contaminated blank was an associated calibration, field or preparation blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank			Action Level	
Type/ID#	Analyte	Max. Conc.	ug/L	mg/kg
ICB	aluminum	-13.2 ug/L	66.0	13.2
CCB3	lead	-1.50 ug/L	7.50	1.50
PBW	potassium	-141 ug/L	705	141

CCB = Continuing Calibration Blank, ICB = Initial Calibration Blank, PBW = Preparation Blank (Water)

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

antimony	5 ug/L
arsenic	9 ug/L
barium	5 ug/L
chromium	3 ug/L
cobalt	1 ug/L
lead	5 ug/L
sodium	256 ug/L
thallium	11 ug/L

These analytes should not be present. Additionally, negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

cadmium	-1 ug/L
cobalt	-1 ug/L
lead	-1 ug/L
manganese	-4 ug/L
nickel	-21ug/L
potassium	-546 ug/L
selenium	-3 ug/L
sodium	-54 ug/L
vanadium	-2 ug/L
zinc	-9 ug/L

Since neither aluminum, calcium, iron nor magnesium was present in the sample at a concentration comparable to or greater than the amount in Solution A, no action was required.

V.) ICP Serial Dilution Analysis:

The Serial Dilution Percent Difference (%D) was 222% for zinc in soil dilution sample 1666020D01L, which exceeded the 10% QC limit. Zinc was not detected in associated sand blank, 1666020D01. No action was necessary.

VI.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No action was taken.

VII.) Duplicate Sample Analysis:

Duplicate Sample Analysis was not performed in this fraction of the SDG. No action was necessary.

VIII.) Matrix Spike Recoveries:

Matrix Spike Recovery samples were not analyzed in this fraction of the SDG. No action was required.

IX.) Field Duplicates:

Field duplicate samples were not analyzed in this fraction of the SDG. No action was taken.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was taken.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met. No action was required.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met, so no action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

VALIDATA

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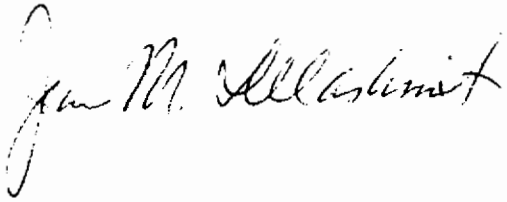
DATA VALIDATION SUMMARY REPORT

COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0283
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	32413 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694GW00403	32413.01	Water	X

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 32413 2,3,7,8-substituted PCDD's and PCDF's

SAMPLE: 694GW00403

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

OCDD was detected in method blank DFBLK1 at 3.5 pg/L. The detection of OCDD in the associated sample below 5X the blank amount (18 pg/L) was flagged as Estimated Maximum Possible Concentration (EMPC).

Field Blanks:

Deionized water blank 694DW00203, equipment rinsate blank 694EW00203 and field blank 694FW00203 collected on 12/17/97 were analyzed in SDG 32259. OCDD was detected in the blanks at the following highest concentration:

Field Blank	Compound	Conc.	Action Level
694DW00203	OCDD	50.7 pg/L	254 pg/L

Detections of OCDD in the associated samples below 5X the blank amount were designated as Estimated Maximum Possible Concentration (EMPC).

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed. No action was taken.

VII.) Duplicates:

No field duplicates set was analyzed. No action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

All data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY REPORT

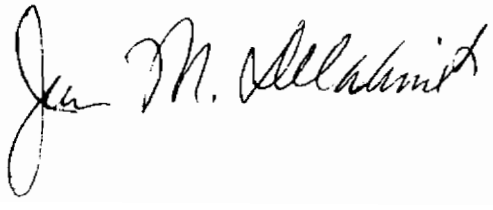
COMPANY:	EnSafe/Allen & Hoshall
SITE NAME:	Charleston Naval Base, Zone K
SERVICE ORDER NUMBER:	0285
CONTRACTED LAB:	Southwest Laboratories of Oklahoma, Inc.
EPA SOW/METHOD:	EPA 8290
VALIDATION GUIDELINES:	EPA 8290, Professional Judgement
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	2,3,7,8-substituted PCDD's and PCDF's
SDG NUMBER:	33177 (Level III)

SAMPLES:

Client Sample #	Lab Sample #	Matrix	PCDD/ PCDF
694GW00204	33177.02	Water	X
694GW00304	33219.02	Water	X
694GW00404	33219.01	Water	X
694GW00504	33253.01	Water	X
694GW00604	33253.02	Water	X
694GW00704	33223.01	Water	X
694HW00704	33223.02	Water	X
GDKGWCL104	33177.01	Water	X
694DW00204	33177.03	Water	X
694EW00204	33177.04	Water	X
694FW00204	33177.05	Water	X

D = DEIONIZED WATER BLANK, E = EQUIPMENT RINSATE BLANK,
F = FIELD BLANK, H = FIELD DUPLICATE

DATA REVIEWER(S): Shawn S. Lin, Ph.D., Jean M. Delashmit

RELEASE SIGNATURE: 

DATA QUALIFICATION SUMMARY

Southwest Laboratories of Oklahoma - 33177 2,3,7,8-substituted PCDD's and PCDF's

SAMPLES: 694GW00204, 694GW00304, 694GW00404, 694GW00504, 694GW00604, 694GW00704, 694HW00704, GDKGWCL104, 694DW00204, 694EW00204, 694FW00204

2,3,7,8-SUBSTITUTED PCDD'S AND PCDF'S

I.) Holding Times:

All criteria were met, so no action was taken.

II.) HRGC/HRMS System Performance:

GC Column Performance:

All criteria were met, so no action was taken.

HRMS Resolution:

All criteria were met, so no action was required.

Mass Verification:

All criteria were met, so no action was taken.

MS Data Acquisition:

All criteria were met, so no action was taken.

III.) Calibration:

Calibration Range:

All criteria were met, so no action was taken.

Initial Calibration:

All criteria were met, so no action was taken.

Calibration Verifications:

All criteria were met, so no action was taken.

IV.) Blanks

Method Blanks:

OCDD was detected in method blanks at the following highest concentration:

Method Blank	Compound	Conc.	Action Level
DFBLK2	OCDD	22.9 pg/L	115 pg/L

Detections of this compound in the associated samples below 5X the blank amount were designated as Estimated Maximum Possible Concentration (EMPC).

Field Blanks:

Deionized water blank 694DW00204, equipment rinsate blank 694EW00204 and field blank 694FW00204 collected on 3/16/98 were analyzed in this SDG. OCDD was detected in the blanks at the following highest concentration:

Field Blank	Compound	Conc.	Action Level
694EW00204	OCDD	52.1 pg/L	261 pg/L

Detections of this compound in the associated samples below 5X the blank amount were designated as Estimated Maximum Possible Concentration (EMPC).

V.) Internal Standards Performance:

All criteria were met, so no action was taken.

VI.) Spike/Spike Duplicates:

No MS/MSD set was analyzed. No action was taken.

VII.) Duplicates:

Field duplicate set, 694GW00704 / 694HW00704, was analyzed. There were no calculable Relative Percent Differences (RPD's), so no action was taken.

VIII.) PCDD/PCDF Identifications:

Retention Times:

All criteria were met, so no action was taken.

Ion Abundance:

All criteria were met, so no action was taken.

S/N Ratio:

All criteria were met, so no action was taken.

PCDPE (Polychlorinated Diphenyl Ether) Interferences:

All criteria were met, so no action was taken.

Second Column Confirmation:

All criteria were met, so no action was taken.

IX.) Overall Assessment of Data/General:

Sample 694GW00704 was re-extract and re-analyzed. No reason was given by the laboratory for the re-extraction.

All data were acceptable with qualifications.

VALIDATA

Chemical Services, Inc.

P. O. Box 930422, Norcross, GA 30093

(770) 923-3890
(770) 923-8769 (Fax)

DATA VALIDATION SUMMARY
REPORT

COMPANY:	Ensafe/Allen & Hoshall
SITE NAME:	Charleston Navel Base, Zone K
SERVICE ORDER NUMBER:	0285
CONTRACTED LAB:	Southwest Laboratory of Oklahoma, Inc.
QA/QC LEVEL:	EPA Level III
EPA METHOD:	EPA SOW 3-90
VALIDATION GUIDELINES:	*USEPA CLP National Functional Guidelines for Organic Data Review,* 1994; *USEPA CLP National Functional Guidelines for Inorganic Data Review,* 1994
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Volatile Organics, Semivolatile Organics, Total Metals, Cyanide
SDG NUMBER:	33177 (Level III)

SAMPLES:

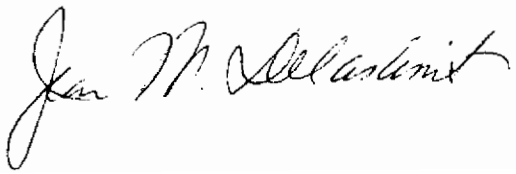
Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Total Metals	Cyanide
694GW00204	33177-02	Water	X	+	X	X
694GW00204RE	33177-02RE	Water		X		
694GW00304	33219-02	Water	X	+	X	X
694GW00304RE	33219-02RE	Water		X		
694GW00404	33219-01	Water	X	X	X	X
694GW00504	33253-01	Water	X	X	X	X
694GW00604	33253-02	Water	X	X	X	X
694GW00704	33223-01	Water	X	X	X	X
694HW00704	33223-01	Water	X	X	X	X
GDKGWCL104	33177-01	Water	X	X	X	X
694DW00204	33177-03	Water	X	X	X	X
694EW00204	33177-04	Water	X	X	X	X
694FW00204	33177-05	Water	X	+	X	X
694FW00204RE	33177-05RE	Water		X		
694TW00204	33177-06	Water	X			
694TW00304	33219-03	Water	X			
694TW00604	33253-03	Water	X			
694TW00704	33223-03	Water	X			
694GW00504S	33253-01S	Water			+	
694GW00504SD	33253-01SD	Water			+	

Client Sample #	Lab Sample #	Matrix	Volatile Organics	Semi-volatiles	Total Metals	Cyanide
694FW00204S*	33177-05S	Water			+	+
694FW00204SD*	33177-05SD	Water			+	+

+ = Non-billable analysis
* = Total metals' S / SD included analysis for mercury only.

DW = DEIONIZED WATER BLANK, EW = EQUIPMENT RINSATE BLANK, FW = FIELD BLANK, HW = FIELD DUPLICATE, S = MATRIX SPIKE, SD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS, TW = TRIP BLANK

DATA REVIEWER(S): Marvin L. Smith, Jean M. Delashmit

RELEASE SIGNATURE: 

Data Qualifier Definitions

J	-	The association numerical value is an estimated quantity.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA QUALIFICATION SUMMARY

Southwest Laboratory of Oklahoma, Inc - 33177 CLP Organic and Inorganics

SAMPLE: 694GW00204, 694GW00204RE, 694GW00304, 694GW00304RE, 694GW00404, 694GW00504, 694GW00604, 694GW00704, 694HW00704, GDKGWCL104, 694DW00204, 694EW00204, 694FW00204, 694FW00204RE, 694TW00204, 694TW00304, 694TW00604, 694GW00704, 694GW00504S, 694GW00504SD, 694FW00204S, 694FW00204SD

VOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was required.

III.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No action was necessary.

Continuing Calibration:

The Relative Response Factor (RRF) was 0.038 for acetone in the standard analyzed on 3/25/98 at 10:21 on instrument I, which was below the 0.050 QC limit. All results for this compound in the associated samples, which consisted entirely of non-detects, were rejected (R). The associated samples were 694GW00204, 694GW00304, 694GW00404, 694GW00704, 694HW00704, GDKGWCL104, 694DW00204, 694EW00204, 694FW00204, 694TW00204, 694TW00304 and 694TW00704.

The Percent Differences (%D's) of the following compounds exceeded the 25% QC limit for the standard analyzed on 3/25/98 at 10:21 on instrument I:

chloromethane	32.9%
bromomethane	42.8%
chloroethane	122%
acetone	33.6%
vinyl acetate	42.0%
2-butanone	26.7%
2-hexanone	27.1%

bromoform	27.1%
1,1,2-trichloroethane	25.6%
dibromochloromethane	32.5%
2-chloroethyl vinyl ether	30.0%

All results for acetone in the associated samples were previously rejected because of a low RRF in the initial calibration. All results for the other compounds in the associated samples, which consisted entirely of non-detects, were flagged as estimated (UJ). The associated samples were 694GW00204, 694GW00304, 694GW00404, 694GW00704, 694HW00704 and GDKGWCL104.

The Percent Differences (%D's) of the following compounds exceeded the 25% QC limit for the standard analyzed on 3/26/98 at 10:23 on instrument I:

acetone	33.6%
methylene chloride	26.5%
vinyl acetate	45.0%
2-hexanone	38.1%
bromoform	43.1%
4-methyl-2-pentanone	30.3%
tetrachloroethene	26.6%
2-chloroethyl vinyl ether	30.0%

All results for these compounds in the associated samples, which consisted entirely of non-detects, were flagged as estimated (UJ). The associated samples were 694GW00504 and 694GW00604.

IV.) Blanks:

Method Blanks:

Methylene chloride was detected at 1 ug/L in method blank VBLK2. Since the field blanks were used for blank qualifications, no action was necessary.

Field Blanks:

Methylene chloride was detected at 5 ug/L each in the deionized water, equipment rinsate and field blanks. All detections of methylene chloride in the SDG samples, which were less than 10X the blank amounts, were flagged as undetected (U) with results below the CRQL being raised to the CRQL. Chloroform was detected at 2 ug/L, 2 ug/L and 1 ug/L, respectively, in the deionized water blank, equipment rinsate blank and field blank. In addition, toluene was detected at 2 ug/L in the field blank. Since these two compounds were not detected in associated samples, no further action was necessary.

Trip Blank:

Methylene chloride was detected at 4 ug/L to 8 ug/L in the four trip blanks. Since the field blanks were used for blank qualifications of this compound, no further action was necessary. In addition, chloroform was detected at 1 ug/L each in three of the four trip blanks. Chloroform was not detected in the SDG samples. No action was required.

Tentatively Identified Compounds (TIC):

There were no TIC's detected in the method, field or trip blanks. No action was necessary.

V.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No action was required.

VI.) Laboratory Control Samples (LCS):

Four LCS's were analyzed by the laboratory. Sixteen LCS recoveries were outside their respective QC limits. Data validation action was not required based on LCS criteria. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD samples were not analyzed in this fraction of the SDG. No action was necessary.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) in the set of field duplicate samples. No action was required.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was taken.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was necessary.

XII.) Tentatively Identified Compounds (TIC's):

All TIC Identification criteria were met. No action was required.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The non-detect results for acetone were rejected in 6 samples, 3 field blanks and 3 trip blanks because of a low RRF in the associated continuing calibration. All other laboratory data were acceptable with qualifications.

SEMIVOLATILE ORGANICS

I.) Holding Times:

All Holding Time criteria were met. No action was necessary.

II.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No action was taken.

III.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

IV.) Blanks:

Method Blanks:

Bis(2-ethylhexyl)phthalate was detected at 3 ug/L in water method blank SBLK3. The detections of this compound in the associated samples were qualified using the deionized water blank. No action was taken.

Field Blanks:

Bis(2-ethylhexyl)phthalate was detected at 3 ug/L in the deionized water blank. All detections of this compound in the associated samples less than 10X the blank amount were flagged as undetected (U) with analytical results below the CRQL being replaced with the CRQL. The associated samples were 694GW00404, 694GW00604 694GW00704, 694HW00704 and GDKGWCL104. In addition, di-n-butylphthalate was detected at 1 ug/L in the deionized water blank. Since there were no detections of this compound in the SDG samples, no further action was necessary.

Tentatively Identified Compounds (TIC):

TIC's were not detected in the method or field blanks. No action was required.

V.) Surrogate Recoveries:

The Surrogate Percent Recoveries (%R's) were 141% for nitrobenzene-d5, 154% for 2-fluorobiphenyl, 184% for terphenyl-d14 and 136% for 2,4,6-tribromophenol in sample 694GW00304RE, which were above their respective QC limits. Since there were no positive results in this reanalyzed sample, or in the original analysis, no action was taken.

VI.) Laboratory Control Samples (LCS):

Seven LCS's were analyzed by the laboratory. Seven LCS recoveries were below the QC limits. Data validation action based on LCS criteria was not required. No action was taken.

VII.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD samples were not analyzed in this fraction of the SDG. No action was necessary.

VIII.) Field Duplicates:

There were no calculable Relative Percent Differences (RPD's) in the set of field duplicate samples. No action was required.

IX.) Internal Standards Performance:

All Internal Standards Performance criteria were met. No action was taken.

X.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No action was required.

XI.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL's):

All CRQL criteria were met. No action was taken.

XII.) Tentatively Identified Compounds (TIC's):

All TIC criteria were met. No action was necessary.

XIII.) System Performance:

All System Performance criteria were met. No action was taken.

XIV.) Overall Assessment of Data/General:

The reanalyses of samples 694GW00204, 694GW00304 and field blank 694FW00204 were considered by the validator to be of preferable data quality as compared to the original analyses because of greatly improved surrogate recoveries. All laboratory data were acceptable with qualifications.

TOTAL METALS AND CYANIDE

I.) Holding Times:

All Holding Time criteria were met. No action was taken.

II.) Calibration:

All Initial and Continuing Calibration criteria were met. No action was required.

III.) Blanks:

The following blank results represent the highest detections associated with the samples and were used for data qualification:

Blank Type/ID#	Analyte	Max. Conc.	5X Action Level
PBW	aluminum	16.1 ug/L	80.5 ug/L
ICB	antimony	2.80 ug/L	14.0 ug/L
ICB	barium	0.40 ug/L	2.00 ug/L
CCB4	beryllium	0.40 ug/L	2.00 ug/L
CCB1	cadmium	0.30 ug/L	1.50 ug/L
CCB3	calcium	83.1 ug/L	416 ug/L
ERB	iron	266 ug/L	1330 ug/L
ERB	manganese	1.50 ug/L	7.50 ug/L
FB	mercury	1.50 ug/L	7.50 ug/L
ERB	nickel	1.10 ug/L	5.50 ug/L
DWB	sodium	515 ug/L	2580 ug/L
ERB	zinc	5.90 ug/L	29.5 ug/L

CCB = Continuing Calibration Blank, PBW = Preparation Blank (Water), DWB = Deionized Water Blank (6944DW00204), ERB = Equipment Rinsate Blank (694EW00204), FB = Field Blank (694FW00204)

All results greater than the IDL but less than 5X the blank amount (Action Level, ug/L for water samples) for which the contaminated blank was an associated calibration, preparation, deionized water, equipment rinsate or field blank were flagged as undetected (U).

The following analytes had negative results with absolute values greater than the IDL:

Blank Type/ID#	Analyte	Neg. Conc.	5X Conc.
CCB4	aluminum	-20.2 ug/L	101 ug/L
CCB3	arsenic	-2.60 ug/L	13.0 ug/L
ICB	cyanide	2.70 ug/L	13.5 ug/L

CCB = Continuing Calibration Blank, ICB = Initial Calibration Blank

All associated positive sample results less than 5X the absolute value of the negative blank results and all associated non-detects were flagged as estimated (J) and (UJ).

IV.) ICP Interference Check Sample Results:

All Percent Recovery criteria were met, so no action was taken.

The following analytes were detected in ICS Solution A at concentrations greater than the IDL:

arsenic	3 ug/L
antimony	7 ug/L
barium	5 ug/L
chromium	1 ug/L
lead	4 ug/L
sodium	118 ug/L
zinc	9 ug/L

These analytes should not be present. Since neither aluminum, calcium, iron nor magnesium was detected in the samples at a concentration comparable to or greater than that of ICS Solution A, no action was taken.

Negative results were observed in ICS Solution A at absolute concentrations greater than the IDL for the following analytes:

cobalt	-1 ug/L
copper	-4 ug/L
manganese	-1 ug/L
nickel	- 1 ug/L
sodium	-51 ug/L

Since neither aluminum, calcium, iron nor magnesium was detected in the samples at a concentration comparable to or greater than that of ICS Solution A, no action was taken.

V.) ICP Serial Dilution Analysis:

The Serial Dilution Percent Difference (%D) was 11.1% for barium in water dilution sample 694GW00504L, which exceeded the 10% QC limit. All detections of barium in the SDG samples were flagged as estimated (J).

VI.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No action was required.

VII.) Duplicate Sample Analysis:

Duplicate Sample Analysis was not performed in this fraction of the SDG. No action was necessary.

VIII.) Matrix Spike Recoveries (MS):

The Percent Recovery (%R) potassium (147%) in spiked sample 694GW00504S exceeded the 75-125% QC limits. All positive results for potassium in the SDG samples were flagged as estimated (J).

The Percent Recoveries (%R's) of mercury were 154% and 0%, respectively, in spiked samples 694FW00204S and 694FW00204SD, which were outside the 75-125% QC limits. Since the spiked sample was the field blank, no rejection due to the very low recovery in the matrix spike duplicate sample was required; however, due to the large difference between the two recoveries, all positive and non-detect results for mercury in the SDG samples were flagged as estimated (J) and (UJ).

IX.) Field Duplicates:

One pair of field duplicate samples, 694GW00704 / 694HW00704, was analyzed in this SDG. The calculable Relative Percent Differences (RPD's) were:

Compound	694GW00704	694HW00704	RPD
barium	29.8 ug/L	30.1 ug/L	1.0%
calcium	237000 ug/L	240000 ug/L	1.3%
iron	3520 ug/L	3480 ug/L	1.1%
magnesium	276000 ug/L	279000 ug/L	1.1%
manganese	1090 ug/L	1100 ug/L	0.9%
potassium	86400 ug/L	86700 ug/L	0.3%
sodium	2430000 ug/L	2390000 ug/L	1.7%

All RPD's were within the 30% QC limit for water samples. No action was required.

X.) Graphite Furnace Atomic Absorption QC (GFAA):

Graphite Furnace analyses were not used for the samples in this SDG. No action was required.

XI.) Sample Result, Calculation/Transcription Verification:

All criteria were met, so no action was necessary.

XII.) Quarterly Verification of Instrumental Parameters:

All criteria were met. No action was taken.

XIII.) Overall Assessment of Data/General:

All laboratory data were acceptable with qualifications.

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	37063
Date:	February 15, 1999
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	January 11, 1999
Number of Samples:	3 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Metals, Dioxin/Furans, Total Suspended Solids

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Safone — 2-15-99

Paul B. Humburg, President — Date

4127 Plaza 94 South • St. Charles, MO 63304
(314) 936-1332 • Fax (314) 936-1335

SDG# 37063

Samples and Fractions Reviewed

Sample Identifications | Analytical Fractions

ENSAFE ID	MATRIX	MET		D/F		TSS	
694GW007F5	WATER	X		X			
694GW007U5	WATER	X		X			
694GW00705	WATER					X	
Total Billable Samples (Water/Soil)		2	0	2	0	1	0

MET= SW846 Metals
D/F= Dioxin/Furans
TSS= Total Suspended Solids

DATA ASSESSMENT AND NARRATIVE

Dioxin/Furans

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard recoveries. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, Method 8290; National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 37063 Level III

A validation was performed on the Dioxin/Furans Data from SDG 37063. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Mass Resolution Checks
*	•	Column Performance
*	•	Calibrations
*	•	Internal Standard Performance
	•	Blanks
NA	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Congener Identification /Quantitation

* - All criteria were met for this parameter

Blanks

The method blank exhibited contamination for OCDD.

Blank ID	Congener	Blk Conc. (Pg/L)	Action Level (pg/L)
BLK0706302	OCDD	8.352	41.8

Sample ID	Congener ID	Action
694-G-W007-F5	OCDD	U

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D= Result value is based on the dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	CONGENER ID	DL	QL
694-G-W007-F5	OCDD	+B	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS AND WET CHEMISTRY

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 Methods; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 37063

A validation was performed on the Metals and wet chemistry Data from SDG 37063. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Chromium	1.1 ug/l	no impact

The calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Beryllium	0.2 ug/l	no impact

The USEPA requires that all sample values below five times the preparation, field or calibration blank contamination be qualified as non-detect, "U".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	37084
Date:	March 12, 1999
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	January 13, 1999
Number of Samples:	9 Aqueous Sample(s) with 0 MS/MSD(s) 7 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Dioxins/Furans, Metals, Total Suspended Solids

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Seaton

Paul B. Humburg, President

3-15-99

Date

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SDG# 37084

Samples and Fractions Reviewed

Sample Identifications Analytical Fractions

ENSAFE ID	MATRIX	D/F		TAL		TSS	
694GW005F5	WATER	X		X			
694GW005U5	WATER	X		X			
694GW006F5	WATER	X		X			
694GW006U5	WATER	X		X			
GDKGWCL1F5	WATER	X		X			
GDKGWCL1U5	WATER	X		X			
694SB02401	SOIL		X		X		
694SB02402	SOIL		X		X		
694SB02501	SOIL		X		X		
694SB02601	SOIL		X		X		
694SB02602	SOIL		X		X		
694SB02701	SOIL		X		X		
694SB02702	SOIL		X		X		
694GW00505	WATER					X	
694GW00605	WATER					X	
GDKGWCL105	WATER					X	
Total Billable Samples (Water/Soil)		6	7	6	7	3	0

D/F= Dioxins/Furans
TAL= SW846 Metals
TSS= Total Suspended Solids

DATA ASSESSMENT AND NARRATIVE

Dioxin/Furans

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard recoveries. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, Method 8290; National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results (Form I's).

SDG # 37084 Level III

A validation was performed on the Dioxin/Furans Data from SDG 37084. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Mass Resolution Checks
*	•	Column Performance
*	•	Calibrations
	•	Internal Standard Performance
	•	Blanks
NA	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
*	•	Congener Identification /Quantitation

* - All criteria were met for this parameter

Blanks

The method blanks exhibited contamination.

Blank ID	Congener	Blk Conc. (Pg/L)	Action Level (pg/L)
DFBLK2	OCDD	9.067	45.34

Sample ID	Congener ID	Action
694-G-W005-F5	OCDD	U

Blanks - continued

Blank ID	Congener	Blk Conc. (Pg/L)	Action Level (ng/Kg)
DFBLK6	1,2,3,4,7,8-HxCDF	0.491	2.46
	1,2,3,6,7,8-HxCDF	0.183	0.92
	1,2,3,4,6,7,8-HpCDF	0.646	3.23

Sample ID	Congener ID	Action
694-S-B027-01RE	1,2,3,4,7,8-HxCDF	U
	1,2,3,6,7,8-HxCDF	
	1,2,3,4,6,7,8-HpCDF	

Internal Standard

Sample ID	ISDT $^{13}C_{12}$	% Rec
GDK-G-WCL1-U5	TCDF	36.2%
	PeCDF	38.4%

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D= Result value is based on the dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	CONGENER ID	DL	QL
694-G-W005-F5	OCDD	+B	U
694-S-B027-01RE	1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF	+B	U
GDK-G-WCL1-U5	TCDF	-	UJ
	PeCDFs	-	UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 Methods; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 37084B

A validation was performed on the Metals Data from SDG 37084B. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Antimony	3.1 ug/l	all soil samples below 3.1 mg/kg
Tin	1.02 mg/kg	no impact

The USEPA requires that all sample values below five times the preparation, field or calibration blank contamination be qualified as non-detect, "U".

Matrix Spike results

The Matrix Spike recoveries for soils for Antimony (37%) and Potassium (71%) were below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The Matrix Spike recoveries for soils for Chromium (144%), Lead (148%) and Magnesium (131%) were above the upper control limits (>125%). All positive results are qualified as estimated, "J".

Matrix Duplicate results

The RPD for soils for Mercury (35.2%) was greater than 35%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 3.1 mg/kg	Sb.	+	U
all soil samples	Sb and K.	+/U	J/UJ
all soil samples	Cr, Pb and Mg.	+	J
all soil samples	Hg.	+	J
all "B" results	all analytes	B	J

DATA ASSESSMENT NARRATIVE
METALS AND TSS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 Methods; the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 37084A

A validation was performed on the Metals and TSS Data from SDG 37084A. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
*	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions

* - All criteria were met for this parameter.

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	41562
Date:	February 10, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	December 21, 1999
Number of Samples:	1 Aqueous Sample(s) with 0 MS/MSD(s) 8 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma, Inc.
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticides PCBs and Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Scafoss

Paul B. Humburg, President

2-10-00

Date

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SDG# 41562

Samples and Fractions Reviewed

Sample Identifications — Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		MET	
694TB03701	WATER	X							
694SB03701	SOIL		X		X		X		X
694SB03801	SOIL		X		X		X		X
694SB03901	SOIL		X		X		X		X
694SB04001	SOIL		X		X		X		X
694SB04101	SOIL		X		X		X		X
694SB04102	SOIL		X		X		X		X
694SB05101	SOIL								X
694SB05201	SOIL				X				X
Total Billable Samples (Water/Soil)		1	6	0	7	0	6	0	8

VOA= Volatiles
SVOA= Semivolatiles
P/P= Pesticides / PCBs
MET= Metals

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8260; the National Functional Guidelines for Organic Data Validation, 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 41562

A validation was performed on the Volatile Data from SDG 41562. The data was evaluated based on the following parameters:

*	• Data Completeness
*	• Holding Times
*	• GC/MS Tuning
*	• Calibration
*	• Blanks
	• Surrogate Recoveries
*	• Matrix Spike/Matrix Spike Duplicates
*	• Field Duplicates
	• Internal Standard Performance
*	• Compound Identification
	• Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

Qualify the associated positive results for the samples below as estimated (J).

Sample ID	DBF	DCE	TOL	BFB
694SB04102	126%	142%		137%
694SB04001	121%	135%		124%
694SB04101RE	126%	125%		

Internal Standards

Two samples exhibited internal standard areas less than the QA/QC limit. For the samples and compounds listed below, qualify the positive and non detect results associated with the non compliant internal standards as estimated (J/UJ).

694SB04102	pentafluorobenzene
	1,4-difluorobenzene
	chlorobenzene-d_5
694SB04001	pentafluorobenzene
	1,4-difluorobenzene

Compound Quantitation

Do not report samples 694SB04101, 694SB04102RE, and 694SB04001RE in favor of 694SB04101RE, 694SB04102, and 694SB04001 due to poor internal standard performance and surrogate recoveries.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB04102 694SB04001 694SB04101RE	all compounds	+	J
694SB04102	all compounds associated with pentafluorobenzene 1,4-difluorobenzene chlorobenzene-d_5	+/-	J/UJ
694SB04001	pentafluorobenzene 1,4-difluorobenzene		
694SB04101 694SB04102RE 694SB04001RE	all compounds	+/-	DNR

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8270; the National Functional Guidelines for Organic Data Validation, 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 41562

A validation was performed on the Semivolatile Data from SDG 41562. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
	•	Blanks
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Internal Standard Performance
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Data Assessment Narrative
Semivolatiles - Page 2

Blanks

Blank ID	Compound	Conc.	Action Limit (5X)
SBLK1	naphthalene	18	90

Sample ID	Compound	Conc.	Qualifier	Assoc. Blank
694SB03701	naphthalene	25	CRQL	SBLK1
694SB03801		28		
694SB03901		24		
694SB04001		32		
694SB04101		25		
694SB05201		29		

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB03701	naphthalene	+BJ	CRQL
694SB03801			
694SB03901			
694SB04001			
694SB04101			
694SB05201			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/PCBs

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA SW846, Method 8081/82; the National Functional Guidelines for Organic Data Review, February 1994, where applicable; and DQO Level III. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG #41562

A validation was performed on the Pesticide/PCB Data from SDG 41562. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
	•	Calibrations
*	•	GC Performance
*	•	Blanks
	•	Surrogate Recoveries
	•	Matrix Spike/Matrix Spike Duplicate
*	•	Field Duplicates
	•	Compound Identification /Quantitation

* - All criteria were met for this parameter

Calibrations

The continuing calibration on DB-1701 on 12/30/99 @1701 exhibited one compound with a %D greater than 15%, but less than 50%. For the samples listed below, qualify the positive results for 4,4'-DDT as estimated (J).

694SB04001DL	4,4'-DDT (47.4%)
694SB04101DL	

Calibrations - continued

The continuing calibration on DB-17 on 12/30/99 @1701 exhibited one compound with a %D greater than 15%, but less than 50%. For the samples listed below, qualify the positive results for 4,4'-DDT as estimated (J).

694SB04001DL 4,4'-DDE (18.6%)

Surrogates

Four samples exhibited elevated surrogate recoveries for the pesticide fraction. For the compounds listed below, qualify the positive results as estimated (J).

Sample ID - Pesticide	DCB1	DCB2	Qual.
694SB04101		361%	J
694SB04001	1007%	699%	J
694SB03901	218%	156%	J
694SB03801	170%	235%	J

Sample ID - Aroclors	DCB1	DCB2	Qual.
694SB04101	214%	229%	J
694SB04102	126%	134%	J
694SB04001	210%	202%	J
694SB03901	127%		J
694SB03801		135%	J
694SB03701		130%	

MS/MSD

The MS/MSD pair for 694SB04102 exhibited a 0% recovery for endrin aldehyde. Reject (UR) the non detect result in the field sample due to the laboratory's inability to recover this compound.

Sample Identification/Quantitation

For the samples found below, report the results as indicated from the dilution in favor of the results in the original analysis and disregard all other results in the diluted samples.

694SB04001DL	4,4'-DDE
	4,4'-DDT
694SB04101DL	4,4'-DDT

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences $<40\%$. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference $>40\%$, but $\leq 100\%$ is qualified as estimated. J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference $>100\%$ and is $<10X$ the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference $>100\%$ and $>10X$ the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference $>100\%$ and $<10X$ the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

Sample Identification/Quantitation - continued

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Qual.	Lab Qual.	HESI Ref. #
694SB04101	aldrin	115	U	P	3
	dieldrin	661	U	P	3
	4,4'-DDD	159	U	P	3
	gamma-chlordane	949	U	P	3
694SB04101DL	4,4'-DDT	29.2	D	DP	1
694SB04001	heptachlor	522	U	P	3
	gamma-chlordane	999	U	P	3
694SB04001DL	4,4'-DDT	741	NJ	DP	4
694SB03801	4,4'-DDT	51.5	J	P	1

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

D= result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that analyte is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the analyte value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

The specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB04001DL 694SB04101DL	4,4'-DDT	+	J
694SB04001DL	4,4'-DDE	+	J
694SB04101 694SB04001 694SB03901 694SB03801	all pesticide compounds	+	J
694SB04101 694SB04102 694SB04001 694SB03901 694SB03801 694SB03701	aroclors	+	J
694SB04102	endrin aldehyde	-	UR
	report these "D" compounds	+D	+D
	all other compounds		DNR
694SB04001DL	4,4'-DDE 4,4'-DDT		
694SB04101DL	4,4'-DDT		
All	All P < 40%	+P	
All	All P > 40% But ≤ 100%	+P	J
All	single component pests All P > 100% And < 10X CRQL	+P	U

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation. February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 41562

A validation was performed on the Metals Data from SDG 41562. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Cadmium	0.05 mg/kg	no impact
Tin	0.81 mg/kg	no impact

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

Matrix Spike Recovery results

The matrix spike recoveries for soils for Antimony (61%), Manganese (54%) and Zinc (74%) were below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The matrix spike recoveries for soils for Lead (165%) and Magnesium (144%) were above the upper control limits (>125%). All positive results are qualified as estimated, "J".

Matrix Duplicate results

The matrix duplicate RPD results for soils for Aluminum (37%) and Calcium (76%) were greater than 35%. All positive results are qualified as estimated, "J". The differences for soils for Iron (27%), Lead (33%) and Magnesium (27%) were not greater than 35% and will not be qualified for soils.

Serial Dilution recovery results

The serial dilution results for soils for Calcium was greater than 10%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples	Sb, Mn and Zn.	+/U	J/UJ
all soil samples	Pb and Mg.	+	J
all soil samples	Al and Ca.	+	J
all soil samples	Ca.	+	J
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	41582
Date:	February 7, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston - Zone K
Date Sampled:	December 20, 1999
Number of Samples:	16 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles, Pesticides / PCBs and Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searfoss — 2-10-00.

Paul B. Humburg, President — Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# 41582

Samples and Fractions Reviewed

Sample Identifications | Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		P/P		MET	
694SB04201	SOIL		X		X		X		X
694SB04301	SOIL		X		X		X		X
694TB04301	SOIL		X						
694SB04302	SOIL		X		X		X		X
694SB04401	SOIL		X		X		X		X
694SB04402	SOIL		X		X		X		X
694SB04501	SOIL		X		X		X		X
694SB04502	SOIL		X		X		X		X
694SB04601	SOIL		X		X		X		X
694SB04701	SOIL				X				
694SB04801	SOIL				X				
694SB04802	SOIL				X				
694SB04901	SOIL								X
694SB04902	SOIL								X
694SB05001	SOIL								X
694SB05002	SOIL								X
Total Billable Samples (Water/Soil)		0	9	0	11	0	8	0	12

VOA= Volatiles
SVOA= Semivolatiles
P/P= Pesticides / PCBs
MET= Metals

DATA ASSESSMENT NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8260B for GC/MS Volatiles; the National Functional Guidelines for Organic Data Validation, 2/94, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 41582

A validation was performed on the Volatile Data from SDG 41582. The data was evaluated based on the following parameters:

*	• Data Completeness
	• Holding Times
*	• GC/MS Tuning
	• Calibration
	• Blanks
*	• Internal Standard Performance
*	• Surrogate Recoveries
*	• Matrix Spike/Matrix Spike Duplicates
*	• Field Duplicates
*	• Compound Identification
	• Compound Quantitation

* - All criteria were met for this parameter.

Holding Times

The following samples were re-extracted one (1) day outside the fourteen day analysis holding time for Volatile soil samples. All reported positive results are qualified as estimated, J.

694SB04302RE

DATA ASSESSMENT NARRATIVE
VOLATILE ORGANICS

Calibrations

The continuing calibration N37865.D exhibited four (4) compounds with %Ds greater than 50% but less than 90%. For the following samples and non-compliant compound. the reported positive and non-detect results are qualified as estimated, J/UJ.

694SB04401RE	bromomethane (52.6%)
694SB04601RE	chloroethane (62.6%)
694SB04501RE	2-butanone (63.4%)
694SB04301RE	2-hexanone (58.0%
694SB04302RE	

Blanks

One (1) of the method blanks associated with the field samples in this SDG exhibited contamination for which qualifications were required. The end user should note that the action levels indicated for the blank analysis may not involve the same weights. volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into considerations when applying the 5X and 10X criteria to field samples.

Associated blank	Compound	Concentration	Action Level
VBLK3	methylene chloride	2 ug/Kg	20 ug/Kg

Samples	Compound	Qualifications
649SB04301RE 649SB04302RE	methylene chloride	CRQL

Compound Quantitation

For the following samples, the reported results are not used in favor of the results reported from the RE analysis of the sample. The RE analyses of the samples exhibited acceptable surrogate recoveries and internal standard area counts. The RE samples were re-analyzed one (1) day outside the holding time. However, there were no positive results greater than the compound CRQLs reported in the samples.

649SB04401
649SB04601
649SB04501
649SB04301
649SB04302

System Performance and Overall Assessment

The data, as reported, required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

L = Result is estimated and biased low.

K = Result is estimated and biased high.

R = Result is rejected and unusable

D = Result value is based on dilution analysis

BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB04302RE	All Compounds	+	J
694SB04401RE 694SB04601RE 694SB04501RE 694SB04301RE 694SB04302RE	bromomethane (52.6%) chloroethane (62.6%) 2-butanone (63.4%) 2-hexanone (58.0%	+/-	J/UJ
649SB04301RE 649SB04302RE	methylene chloride	+B	CRQL
649SB04401 649SB04601 649SB04501 649SB04301 649SB04302	All Compounds	+/-	Do Not Use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8270C for GC/MS Semivolatiles; the National Functional Guidelines for Organic Data Validation, 2/94, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 41582

A validation was performed on the Semivolatile Data from SDG 41582. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
*	•	Blanks
*	•	Internal Standard Performance
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

System Performance and Overall Assessment

The data, as reported, did not require qualifications/rejections.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

L = Result is estimated and biased low.

K = Result is estimated and biased high.

R = Result is rejected and unusable

D = Result value is based on dilution analysis

BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

NO QUALIFICATIONS WERE REQUIRED

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8081A and 8082; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # 41582

A validation was performed on the Pesticide/Aroclor Data from SDG 41582. The data was evaluated based on the following parameters:

*	• Data Completeness
*	• Holding Times
*	• GC Performance
	• Calibration
*	• Blanks
	• Surrogate Recoveries
	• Matrix Spike/Matrix Spike Duplicates
*	• Field Duplicates
*	• Compound Identification
	• Compound Quantitation

* - All criteria were met for this parameter.

Initial Calibrations

The initial calibration analyzed on Instrument HP_02B on 01/03/00 exhibited one (1) compound with a %RSD greater than 20% and required qualifications. For the following samples and non-compliant compound, the positive results are qualified as estimated, J.

694SB04301	Aroclor 1260 (24.4%)
694SB04302	
694SB04502	

Continuing Calibrations

The continuing calibration analyzed on 01/05/00 at 0742 exhibited two (2) compounds with %Ds greater than 15% and less than 50% and required qualifications. For the following samples and non-compliant compounds, the positive results are qualified as estimated, J.

694SB04401	4,4'-DDD (-15.7%)
694SB04501	
694SB04502	4,4'-DDT (28.7%)
694SB04601	

Surrogate Recoveries

The samples listed below exhibited high DCB recoveries during the Pesticide analysis. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
694SB04401	DCB-1	171%
694SB04501	DCB-1/DCB-2	487%/595%
694SB04502	DCB-2	182%
694SB04201	DCB-1	271%

The samples listed below exhibited high DCB recoveries during the PCB analysis. The positive results are qualified as estimated, J.

Sample ID	Surrogate	% Recovery
694SB04301	DCB-1/DCB-2	168%/129%
694SB04302	DCB-1	145%
694SB04402	DCB-1/DCB-2	142%/133%
694SB04501	DCB-1/DCB-2	158%/138%
694SB04502	DCB-1/DCB-2	177%/139%
694SB04201	DCB-1	147%

Matrix Spike/Matrix Spike Duplicates

The MS/MSD pair of sample 694SB04501 exhibited 0% MS and/or MSD recoveries for several compounds. For the following sample and non-compliant compounds, the positive results are qualified as estimated, J, and the non-detect results are rejected, UR.

694SB04501	Endrin
	Endosulfan Sulfate
	Endrin Aldehyde
	Methoxychlor
	Endrin Ketone

Compound Quantitation

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences < 40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10% the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

Compound Quantitation, Continued

The following samples and compounds have been qualified for high column quantitation %Ds. (The laboratory did not correctly flag all results with high column quantitation %Ds with a P flag.)

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
694SB04401DL	4,4'-DDT	39.0%	P		1
694SB04301	4,4'-DDT	315%		U	3
694SB04302	4,4'-DDT	221%		U	3
694SB04401	4,4'-DDD	395%		NJ	4
694SB04601	4,4'-DDT	51.6%	P	J	2
694SB04501	Heptachlor	100%	P	J	2
	Dieldrin	234%	P	U	3
	4,4'-DDD	990%		NJ	4
	4,4'-DDT	118%		U	3
	Gamma-Chlordane	200%	P	U	3
694SB04502	Heptachlor	678%	P	U	3
	4,4'-DDE	57.5%	P	J	2
	4,4'-DDT	57.6%	P	J	2
	Gamma-Chlordane	60.2%	P	J	2
694SB04201	4,4'-DDT	218%		U	3

Sample 694SB04501 exhibited a positive result above the calibration range of the instrument for 4,4'-DDD. 4,4'-DDD was not detected in the dilution analysis. For the following sample and E-flagged compound, the positive result is qualified as estimated, J.

694SB04501 4,4'-DDD

Compound Quantitation, Continued

One (1) sample was diluted to accurately quantitate target compounds. For the following sample, the reported E-flagged results are not used in favor of the corresponding D flagged results reported from the dilution analysis. All other results from the dilution analysis are not used in favor of the results reported from the undiluted analysis.

694SB04401

The dilution analysis of several samples was not required as all results were within the calibration range of the instrument. For the following samples the results reported from the dilution analysis are not used in favor of the results reported from the undiluted analysis.

694SB04201DL	All Pesticides
694SB04301DL	
694SB04302DL	
694SB04402DL	
694SB04501DL	
694SB04502DL	
694SB04601DL	

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB04301 694SB04302 694SB04502	Aroclor 1260	+	J
694SB04401 694SB04501	4,4'-DDD	+	J
694SB04502 694SB04601	4,4'-DDT	+	J
694SB04401 694SB04501 694SB04502 694SB04201	All Pesticides	+	J
694SB04301 694SB04302 694SB04402 694SB04501 694SB04502 694SB04201	All PCBs	+	J
694SB04501	Endrin Endosulfan Sulfate Endrin Aldehyde Methoxychlor Endrin Ketone	+/-	J/UR
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
ALL	multi- component pests All P > 100% And < 10X CRQL	+	NJ
694SB04501	4,4'-DDD	+E	J
694SB04401	All E-flagged	+E	D
694SB04401	All except corresponding D-flagged results	+/-	do not use
694SB04201DL 694SB04301DL 694SB04302DL 694SB04402DL 694SB04501DL 694SB04502DL 694SB04601DL	All Pesticides	+/-	do not use

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 41582

A validation was performed on the Metals for soils Data from SDG 41582. The data was evaluated based on the following parameters.

*	●	Data Completeness
*	●	Holding Times
*	●	Calibrations
	●	Blanks
*	●	Interferences
	●	Matrix Spike Recovery
	●	Matrix Duplicates
*	●	Field Duplicates
*	●	Laboratory Control Samples
*	●	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Copper	0.27 mg/kg	no impact
Manganese	0.08 mg/kg	no impact
Mercury	0.02 mg/kg	all soil samples below 0.1 mg/kg
Zinc	0.63 mg/kg	no impact
Tin	2.34 mg/kg	all soil samples below 11.7 mg/kg

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

The preparation blanks exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Silver	-0.18 mg/kg	all soil samples below 1.8 mg/kg
Vanadium	-0.10 mg/kg	no impact

This reviewer qualifies all samples results below 10 times the absolute value of the negative blank value.

Matrix Spike Recovery results

The matrix spike recovery for soils for Zinc (0%) was below 30%. All positive results are qualified as estimated, "J" and all non-detect results are rejected, "UR".

The matrix spike recoveries for soils for Antimony (58%), Lead (71%) aand Manganese (47%) were below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The matrix spike recoveries for soils for Mercury (306%) and Thallium (2300%) were above the upper control limits (>125%). All positive results are qualified as estimated, "J".

Matrix Duplicate results

The matrix duplicate RPD results for soils for Mercury (61%) was greater than 35%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 0.10 mg/kg	Hg.	+	U
all soil samples below 11.7 mg/kg	Sn.		
all soil samples below 1.8 mg/kg	Ag.	+/U	J/UJ
all soil samples	Zn.	+	J
		U	UR
all soil samples	Sb, Pb and Mn.	+/U	J/UJ
all soil samples	Hg and Tl.	+	J
all soil samples	Hg.	+	J
all soil samples	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	41664
Date:	February 7, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston - Zone K
Date Sampled:	December 20 - 21, 1999
Number of Samples:	10 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Explosives

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Simpson
Paul B. Humburg, President

2-8-00
Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# 41664

Samples and Fractions Reviewed

Sample Identifications Analytical Fraction

ENSAFE ID	MATRIX	EXP	
694SB04001	SOIL		X
694SB04101	SOIL		X
694SB04102	SOIL		X
694SB04301	SOIL		X
694SB04302	SOIL		X
694SB04401	SOIL		X
694SB04402	SOIL		X
694SB04501	SOIL		X
694SB04502	SOIL		X
694SB04601	SOIL		X
Total Billable Samples (Water/Soil)		0	10

EXP= Explosives

DATA ASSESSMENT NARRATIVE

EXPLOSIVES

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, calibration data, blank analysis results, surrogate recoveries and LCS recoveries. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8330; the National Functional Guidelines for Organic Data Review, February 1994, where applicable; and EPA DQO Level III requirements. Please refer the specific findings found in each category to the Summary of Data Qualifications table.

SDG# 41664

A validation was performed on the Explosives data from SDG 41664. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	HPLC Performance
*	•	Calibrations
*	•	Blanks
*	•	Surrogate Recoveries
*	•	LCS Recoveries
*	•	Field Duplicates
*	•	Identification/Quantitation

* - All criteria were met for this parameter.

Overall Performance

The data did not require qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

NO QUALIFICATIONS WERE REQUIRED.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	41748
Date:	February 14, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston - Zone K
Date Sampled:	January 13, 2000
Number of Samples:	10 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles and Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Swyson
for Paul B. Humburg, President

2-14-00.
Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# 41748

Samples and Fractions Reviewed

Sample Identifications Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		MET	
694GW00802	WATER	X				X	
694HW00802	WATER	X					
694GW00902	WATER	X				X	
694HW00902	WATER					X	
694GW01102	WATER			X		X	
694GW01202	WATER			X		X	
694GW01302	WATER	X				X	
694TW01302	WATER	X					
694HW01402	WATER			X			
694GW01402	WATER			X		X	
Total Billable Samples (Water/Soil)		5	0	4	0	7	0

VOA= Volatiles
SVOA= Semivolatiles
MET= Metals

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8260B; the National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # 41748

A validation was performed on the Volatile Data from SDG 41748. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
  Calibrations
* Internal Standard Performance
  Blanks
* Surrogate Recoveries
* Laboratory Control Samples
  Matrix Spike/Matrix Spike duplicate
* Field Duplicates
* Compound Identification/Quantitation

* - All criteria were met for this parameter

Continuing Calibration

The continuing calibration, I54814.D, contained compounds with %Ds greater than 50% and less than 90%. For the samples and non-compliant compounds listed below, qualify all positive results as estimated (J) and non detects as estimated (UJ).

All Samples	carbon disulfide (52.6%)
	methylene chloride (80.9%)

Blank

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into considerations when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
VBLK1	methylene chloride	4 J ug/L	40 ug/L

Samples	Compound	Qualification
694GW00802	methylene chloride	U
694GW00902		
694HW00802		
694GW01302		

Matrix Spike / Matrix Spike Duplicate

The matrix spike and matrix spike duplicate associated with sample 694GW01302 exhibited zero percent recovery for 2-chloroethyl vinyl ether. Qualify the non detect result for 2-chloroethyl vinyl ether in sample 694GW01302 as rejected (UR).

System Performance and Overall Assessment

The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
All Samples	carbon disulfide methylene chloride	+/-	J/UJ
694GW00802 694GW00902 694HW00802 694GW01302	methylene chloride	+	U
694GW01302	2-chloroethyl vinyl ether	-	UR

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8270C; the National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # 41748

A validation was performed on the Semivolatile Data from SDG 41748. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
* Calibrations
* Internal Standard Performance
  Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Matrix Spike/Matrix Spike duplicate
* Field Duplicates
* Compound Identification/Quantitation

* - All criteria were met for this parameter

Blank

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into considerations when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
SBLK1	bis(2-ethylhexyl)phthalate	56 ug/L	560 ug/L
	di-n-butylphthalate	1J	10
SBLK2	bis(2-ethylhexyl)phthalate	2J ug/L	20 ug/L

Samples	Compound	Qualification
694GW01202 694GW01402 694HW01402	bis(2-ethylhexyl)phthalate	CRQL
694GW01102	bis(2-ethylhexyl)phthalate	U
694GW01202	di-n-butylphthalate	CRQL

System Performance and Overall Assessment

The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694GW01202 694GW01402 694HW01402	bis(2-ethylhexyl)phthalate	+	CRQL
694GW01102	bis(2-ethylhexyl)phthalate	+	U
694GW01202	di-n-butylphthalate	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 41748

A validation was performed on the Metals Data from SDG 41748. The data was evaluated based on the following parameters.

*	●	Data Completeness
*	●	Holding Times
*	●	Calibrations
	●	Blanks
*	●	Interferences
*	●	Matrix Spike Recovery
*	●	Matrix Duplicates
*	●	Field Duplicates
*	●	Laboratory Control Samples
*	●	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Cadmium	1.73 ug/l	no impact
Copper	2.76 ug/l	no impact
Iron	62.7 ug/l	no impact
Magnesium	45.7 ug/l	no impact
Nickel	1.6 ug/l	all water samples below 8.0 ug/l
Thallium	2.58 ug/l	no impact
Zinc	12.2 ug/l	all water samples below 61.0 ug/l

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

The preparation blanks exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Arsenic	-3.6 ug/l	all water samples below 36.0 ug/l

This reviewer qualifies all samples results below 10 times the absolute value of the negative blank value.

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all water samples below 8.0 ug/l	Ni.	+	U
all water samples below 61.0 ug/l	Zn.		
all water samples below 36.0 ug/l	As.	+/U	J/UJ
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	49435
Date:	May 23, 2002
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	April 18, 2002
Number of Samples:	23 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma, Inc.
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Lead

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Seafoss for Paul B. Humburg, President — 5.23.02 Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# 49435

Samples and Fractions Reviewed

Sample Identifications Analytical Fraction

ENSAFE ID	MATRIX	Pb	
694SB05301	SOIL		X
694EB05301	SOIL		X
694SB05302	SOIL		X
694SB05401	SOIL		X
694CB05401	SOIL		X
694SB05402	SOIL		X
694CB05402	SOIL		X
694SB05501	SOIL		X
694SB05502	SOIL		X
694SB05601	SOIL		X
694SB05602	SOIL		X
694SB05701	SOIL		X
694SB05702	SOIL		X
694SB05801	SOIL		X
694SB05802	SOIL		X
694SB05901	SOIL		X
694SB05902	SOIL		X
694SB06001	SOIL		X
694SB06002	SOIL		X
694SB06101	SOIL		X
694SB06102	SOIL		X
694SB41A01	SOIL		X
694SB41A02	SOIL		X
Total Billable Samples (Water/Soil)		0	23

Pb= Lead

DATA ASSESSMENT NARRATIVE
LEAD

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 49435

A validation was performed on the lead Data from SDG 49435. The data was evaluated based on the following parameters.

- * Data Completeness
- * Holding Times
- * Calibrations
- * Blanks
- * Interferences
- * Matrix Spike Recovery
- * Matrix Duplicates
- * Field Duplicates
- * Laboratory Control Samples
- * Serial Dilutions

* - All criteria were met for this parameter.

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	49453
Date:	May 23, 2002
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	April 19 & 22, 2002
Number of Samples:	11 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Southwest Laboratory of Oklahoma, Inc.
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Searson

Paul B. Humburg, President

5-23-02

Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# 49453

Samples and Fractions Reviewed

Sample Identifications Analytical Fraction

ENSAFE ID	MATRIX	MET	
694GW00903	WATER	X	
694GW009F3	WATER	X	
694GW01303	WATER	X	
694HW01303	WATER	X	
694GW013F3	WATER	X	
694HW013F3	WATER	X	
694GW01501	WATER	X	
694GW015F1	WATER	X	
694GW01601	WATER	X	
694GW016F1	WATER	X	
694EW016F1	WATER	X	
Total Billable Samples (Water/Soil)		11	0

MET= Metals

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW 846 methods: the Functional Guidelines for Inorganic Data Validation. February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # 49453

A validation was performed on the metals Data from SDG 49453. The data was evaluated based on the following parameters.

*	●	Data Completeness
*	●	Holding Times
*	●	Calibrations
	●	Blanks
*	●	Interferences
	●	Matrix Spike Recovery
*	●	Matrix Duplicates
*	●	Field Duplicates
*	●	Laboratory Control Samples
	●	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Arsenic	2.91 ug/l	all water samples below 15.0 ug/l

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

Matrix Spike Recovery results

The matrix spike recovery results for waters for Selenium (68%) was below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

Serial Dilution results

The serial dilution results for waters for Calcium, Manganese and Potassium were greater than 10%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all water samples below 15.0 ug/l	As.	+	U
all water samples	Se.	+/U	J/UJ
all water samples	Ca, Mn and K.	+	J
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	NBCK02
Date:	November 18, 1999
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	October 13, 1999
Number of Samples:	34 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Semivolatiles, SPLP Semivolatiles, Pesticides/PCBs, SPLP Pesticides/PCBs, Metals, SPLP Metals, and Total Organic Carbon

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Simpson
Paul B. Humburg, President

11-19-99.
Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# NBCK02

Samples and Fractions Reviewed

Sample Identifications

Analytical Fractions

ENSAFE ID	MATRIX	SVOA		SPLP-SV		P/P		SPLP-P/P		MET		SPLP-MET		TOC	
694SB004T1	SOIL						X								X
694CB004T1	SOIL						X								X
694SB004S1	SOIL								X						
694CB004S1	SOIL								X						
694SB005T1	SOIL										X				X
694SB005T2	SOIL										X				X
694SB005S1	SOIL												X		
694SB005S2	SOIL												X		
694SB009T1	SOIL										X				X
694SB009T2	SOIL										X				X
694SB009S1	SOIL												X		
694SB009S2	SOIL												X		
694SB012T1	SOIL										X				X
694SB012T2	SOIL										X				X
694SB012S1	SOIL												X		
694SB012S2	SOIL												X		
694SB013T1	SOIL		X												
694SB013T2	SOIL		X												
694SB013S1	SOIL				X										
694SB013S2	SOIL				X										
694SB014T1	SOIL										X				X
694SB014T2	SOIL										X				X
694SB014S1	SOIL												X		
694SB014S2	SOIL												X		
694SB018T1	SOIL						X								X
694SB018T2	SOIL						X								X
694SB018S1	SOIL								X						
694SB018S2	SOIL								X						
694SB019T1	SOIL										X				X
694CB019T1	SOIL										X				X
694SB019T2	SOIL										X				X
694SB019S1	SOIL												X		
694CB019S1	SOIL												X		
694SB019S2	SOIL												X		
Total Billable Samples (Water/Soil)		0	2	0	2	0	4	0	4	0	11	0	11	0	15

SVOA= Semivolatiles
SPLP-SV= SPLP Semivolatiles
P/P= Pesticides/PCBs
SPLP-P/P= SPLP Pesticides/PCBs
MET= Metals
SPLP-MET= SPLP Metals
TOC= Total Organic Carbon

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8270C for GC/MS Semivolatiles; the National Functional Guidelines for Organic Data Validation, 2/94, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK02

A validation was performed on the Semivolatile Data from SDG NBCK02. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
	•	Calibration
*	•	Blanks
*	•	Internal Standard Performance
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Calibrations

The continuing calibration standard GQ013 exhibited one (1) compound with a D greater than 50% but less than 90%. For the following samples and non-compliant compound, the reported positive and non-detect results are qualified as estimated, J.

694SB013T1	2,4-dinitrophenol (55.0%)
694SB013T2	

System Performance and Overall Assessment

The data, as reported, required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

L = Result is estimated and biased low.

K = Result is estimated and biased high.

R = Result is rejected and unusable

D = Result value is based on dilution analysis

BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB013T1 694SB013T2	2,4-dinitrophenol (55.0%)	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

SPLP SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8270C for GC/MS SPLP Semivolatiles; the National Functional Guidelines for Organic Data Validation, 2/94, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK02

A validation was performed on the SPLP Semivolatile Data from SDG NBCK02. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
*	•	Blanks
*	•	Internal Standard Performance
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

System Performance and Overall Assessment

The data, as reported, did not require qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

L = Result is estimated and biased low.

K = Result is estimated and biased high.

R = Result is rejected and unusable

D = Result value is based on dilution analysis

BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

NO QUALIFICATIONS WERE REQUIRED

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8081/8082; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK02

A validation was performed on the Pesticide/Aroclor Data from SDG NBCK02. The data was evaluated based on the following parameters:

- * Data Completeness
- * Holding Times
- * GC Performance
- * Calibration
- * Blanks
- * Surrogate Recoveries
- * Matrix Spike/Matrix Spike Duplicates
- * Field Duplicates
- * Compound Identification
- Compound Quantitation

* - All criteria were met for this parameter.

Compound Quantitation

Several samples exhibited column quantitation %Ds greater than 40%. The following guidelines were used to qualify the data:

1. No qualifications are required for positive sample results which exhibited column quantitation differences < 40%. The "P" flag is removed from the result.

2. The positive sample result which exhibited a column quantitation difference >40%, but ≤100% is qualified as estimated, J.

3. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and is <10X the respective compound CRQL, is qualified as non-detect, U. (All multi-component results are exempt from this rule.)

4. The positive single component pesticide sample result which exhibited a column quantitation difference >100% and >10X the respective compound CRQL, is qualified as presumptively present at an estimated concentration, NJ. (All multi-component results are exempt from this rule.)

5. The positive multi-component pesticide sample result which exhibited a column quantitation difference >100% and <10% the respective multi-component CRQL is qualified as presumptively present at an estimated concentration, NJ.

The following samples and compounds have been qualified for high column quantitation %Ds.

Sample ID	Compound	%D	Lab Qual.	HESI Qual.	Ref. #
694SB004T1	Heptachlor Epoxide	161.8%	P	U	3
	4,4'-DDT	56.2%	P	J	2
694CB004T1	Heptachlor Epoxide	158.6%	P	U	3
	4,4'-DDT	77.7%	P	J	2
	Methoxychlor	139.9%	P	U	3
	Endrin Ketone	120.5%	P	U	3

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
ALL	All P < 40%	+	
ALL	All P > 40% But ≤ 100%	+	J
ALL	single component pests All P > 100% And < 10X CRQL	+	U
ALL	single component pests All P > 100% And > 10X CRQL	+	NJ
ALL	multi- component pests All P > 100% And < 10X CRQL	+	NJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE

SPLP PESTICIDE/AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8081/8082 modified for the SPLP methodology; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK02

A validation was performed on the Pesticide/Aroclor Data from SDG NBCK02. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC Performance
*	•	Calibration
*	•	Blanks
	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

The samples listed below exhibited low DCB recoveries. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
694SB004S1	DCB-1/DCB-2	14%/15%
694CB004S1	DCB-1/DCB-2	12%/14%
694SB018S1	DCB-1/DCB-2	18%/20%
694SB018S2	DCB-1/DCB-2	19%/20%

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB004S1	ALL	+/-	J/UJ
694CB004S1			
694SB018S1			
694SB018S2			

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS (SOILS AND SPLP) AND TOC

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # NBCK02

A validation was performed on the Metals for soils and SPLP and TOC Data from SDG NBCK02. The data was evaluated based on the following parameters.

*	• Data Completeness
*	• Holding Times
*	• Calibrations
	• Blanks
*	• Interferences
	• Matrix Spike Recovery
	• Matrix Duplicates
*	• Field Duplicates
*	• Laboratory Control Samples
	• Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	8.61 mg/kg	no impact
Barium	0.08 mg/kg	no impact
Calcium	2.30 mg/kg	no impact
Iron	2.3 mg/kg	no impact
Potassium	1.2 mg/kg	no impact
Sodium	28.8 mg/kg	no impact
Tin	1.33 mg/kg	all soil samples below 6.7 mg/kg

Zinc	1.02 mg/kg	no impact
Aluminum	26.6 ug/l	all SPLP samples below 133 ug/l
Calcium	67.8 ug/l	no impact
Magnesium	10.4 ug/l	no impact
Potassium	20.4 ug/l	no impact
Sodium	507 ug/l	no impact
Zinc	4.99 ug/l	all SPLP samples below 25.0 ug/l

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

The preparation blanks exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Beryllium	-0.04 mg/kg	all soil samples below 0.4 mg/kg
Cadmium	-0.10 mg/kg	all soil samples below 1.0 mg/kg
Cobalt	-0.08 mg/kg	all soil samples below 0.8 mg/kg
Manganese	-0.06 mg/kg	no impact
Selenium	-0.70 mg/kg	all soil samples below 7.0 mg/kg
Beryllium	-0.38 ug/l	all SPLP samples below 3.8 ug/l
Cadmium	-0.88 ug/l	all SPLP samples below 8.8 ug/l
Selenium	-7.71 ug/l	all SPLP samples below 77.1 ug/l
Thallium	-3.41 ug/l	all SPLP samples below 34.1 ug/l

This reviewer qualifies all samples results below 10 times the absolute value of the negative blank value.

Matrix Spike Recovery results

The matrix spike recovery for soils for Antimony (35%) was below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The matrix spike recovery for soils for Copper (139%) and for SPLP samples for Aluminum (201%) and Iron (135%) were above the upper control limits (>125%). All positive results are qualified as estimated, "J".

Field Duplicate results

The field duplicate RPD results for SPLP samples for samples 694SB019S1 and 694CB019S1 for Aluminum (40%), Calcium (52%) and Iron (48%) were greater than 35%. All positive and n0n-detect results are qualified as estimated, "J" or "UJ".

Serial Dilution recovery results

The serial dilution results for soils for Beryllium, Iron, Lead, Manganese, Nickel and Zinc were greater than 10%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 6.7 mg/kg	Sn.	+	U
all SPLP samples below 133 ug/l	Al.		
all SPLP samples below 25.0 ug/l	Zn.		
all soil samples below 0.4 mg/kg	Be.	+/U	J/UJ
all soil samples below 1.0 mg/kg	Cd.		
all soil samples below 0.8 mg/kg	Co.		
all soil samples below 7.0 mg/kg	Se.		
all SPLP samples below 3.8 ug/l	Be.		
all SPLP samples below 8.8 ug/l	Cd.		
all SPLP samples below 7.71 ug/l	Se.		
all SPLP samples below 34.1 ug/l	Tl.		
all soil samples	Sb.	+/U	J/UJ
all soil samples	Cu.	+	J
all SPLP samples	Al and Fe.		
694SB019S1 and 694CB019S1 (SPLP)	Al, Ca and Fe.	+/U	J/UJ
all soil samples	Be, Fe, Pb, Mn, Ni and Zn.	+	J
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	NBCK06
Date:	January 6, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	November 18, 1999
Number of Samples:	20 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Erica K. Ketcham
Paul B. Humburg, President

1/7/00
Date

4127 Plaza 94 South • St. Charles, MO 63304
(636) 936-1332 • Fax (636) 936-1335

SDG# NBCK06

Samples and Fractions Reviewed

Sample Identifications Analytical Fraction

ENSAFE ID	MATRIX	MET
163SB01701	SOIL	X
163SB01702	SOIL	X
163SB01801	SOIL	X
163SB01802	SOIL	X
164SB01601	SOIL	X
164SB01602	SOIL	X
164SB01701	SOIL	X
164SB01702	SOIL	X
164SB01801	SOIL	X
164SB01802	SOIL	X
164SB01901	SOIL	X
164SB01902	SOIL	X
164SB02001	SOIL	X
164SB02002	SOIL	X
694SB03001	SOIL	X
694SB03002	SOIL	X
694SB03101	SOIL	X
694SB03102	SOIL	X
694SB03401	SOIL	X
694SB03402	SOIL	X
Total Billable Samples (Water/Soil)		0 20

MET= Metals

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # NBCK06

A validation was performed on the Metals Data from SDG NCBK06. The data was evaluated based on the following parameters.

*	Data Completeness
*	Holding Times
*	Calibrations
	Blanks
*	Interferences
*	Matrix Spike Recovery
*	Matrix Duplicates
*	Field Duplicates
*	Laboratory Control Samples
	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	3.70 mg/kg	no impact
Calcium	1.64 mg/kg	no impact
Potassium	3.44 mg/kg	no impact
Sodium	21.8 mg/kg	all soil samples below 109.0 mg/kg
Tin	1.56 mg/kg	all soil samples below 7.8 mg/kg
Zinc	1.57 mg/kg	all soil samples below 7.9 mg/kg

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

Serial Dilution recovery results

The serial dilution results for soils for Cobalt, Lead, Nickel and Zinc were greater than 10%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 109.0 mg/kg	Na.	+	U
all soil samples below 7.8 mg/kg	Sn.		
all soil samples below 7.9 mg/kg	Zn.		
all soil samples	Co, Pb. Ni and Zn.	+	J
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	NBCK07
Date:	January 6, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	November 18, 1999
Number of Samples:	20 Non-Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Semivolatiles, PCBs and Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms, etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Simpson — 1-11-00

Paul B. Humburg, President — Date

4127 Plaza 94 South • St. Charles, MO 63304
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SDG# NBCK07

Samples and Fractions Reviewed

Sample Identifications Analytical Fractions

ENSAFE ID	MATRIX	SVOA		PCB		MET	
163SB01201	SOIL		X				
163SB01202	SOIL		X				
163SB01301	SOIL		X				X
163CB01301	SOIL		X				X
163SB01302	SOIL		X				X
164SB02101	SOIL		X				X
164CB02101	SOIL		X				X
164SB02102	SOIL		X				X
694SB02801	SOIL		X				
694CB02801	SOIL		X				
694SB02802	SOIL		X				
694SB02901	SOIL		X				X
694SB02902	SOIL		X				X
694SB03201	SOIL				X		X
694CB03201	SOIL				X		X
694SB03202	SOIL				X		X
694SB03301	SOIL				X		X
694SB03302	SOIL				X		X
694SB03501	SOIL		X				X
694SB03601	SOIL		X				X
Total Billable Samples (Water/Soil)		0	15	0	5	0	15

SVOA= Semivolatiles
PCB= PCBs
MET= Metals

DATA ASSESSMENT NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Method 8270C for GC/MS Semivolatiles; the National Functional Guidelines for Organic Data Validation, 2/94, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK07

A validation was performed on the Semivolatile Data from SDG NBCK07. The data was evaluated based on the following parameters:

*	•	Data Completeness
*	•	Holding Times
*	•	GC/MS Tuning
*	•	Calibration
*	•	Blanks
	•	Internal Standard Performance
*	•	Surrogate Recoveries
*	•	Matrix Spike/Matrix Spike Duplicates
*	•	Field Duplicates
*	•	Compound Identification
*	•	Compound Quantitation

* - All criteria were met for this parameter.

DATA ASSESSMENT NARRATIVE
SEMIVOLATILE ORGANICS

Internal Standards

The following sample exhibited non-compliant EICP area recoveries below the QC limits for the noted internal standards. All reported positive and non-detect results are qualified as estimated, J/UJ.

694SB02801	All Internal Standards

The following samples exhibited non-compliant EICP area recoveries above the QC limits for the noted internal standards. All reported positive results are qualified as estimated, J.

694SB02802	perylene-d12
694SB03601	

System Performance and Overall Assessment

The data, as reported, required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported Quantitation limit is qualified as estimated

L = Result is estimated and biased low.

K = Result is estimated and biased high.

R = Result is rejected and unusable

D = Result value is based on dilution analysis

BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X (10X for common laboratory contaminants) the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB02801	*All associated with* All Internal Standards	+/-	J/UJ
694SB02802 694SB03601	*All associated with* perylene-d12	+	J

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE

AROCLORS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC performance, and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW-846 Methods 8082; the National Functional Guidelines for Organic Data Validation, February 1994; and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDG # NBCK07

A validation was performed on the Aroclor Data from SDG NBCK07. The data was evaluated based on the following parameters:

*	• Data Completeness
*	• Holding Times
*	• GC Performance
*	• Calibration
*	• Blanks
	• Surrogate Recoveries
*	• Matrix Spike/Matrix Spike Duplicates
*	• Field Duplicates
*	• Compound Identification
*	• Compound Quantitation

* - All criteria were met for this parameter.

Surrogate Recoveries

The sample listed below exhibited low TCX and DCB recoveries. The positive results are qualified as estimated, J, and the non-detect results are qualified as estimated, UJ.

Sample ID	Surrogate	% Recovery
694SB03202	TCX-2	28%
	DCX-2	29%

System Performance and Overall Assessment

The data required qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

NJ = Result is considered presumptively present at an estimated concentration

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL = The sample result for the blank contaminant is less than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.

U = The sample result for the blank contaminant is greater than the sample CRQL and is less than 5X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.

No Action = The sample result for the blank contaminant is greater than the sample CRQL and is greater than 5X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694SB03202	ALL	+/-	J/UJ

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
\+ in the DL column denotes a positive result
\- in the DL column denotes a non-detect result

DATA ASSESSMENT NARRATIVE
METALS

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # NBCK07

A validation was performed on the Metals for soils Data from SDG BNCK07. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
	•	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	2.91 mg/kg	no impact
Calcium	1.74 mg/kg	no impact
Iron	2.45 mg/kg	no impact
Potassium	2.7 mg/kg	no impact
Sodium	13.6 mg/kg	all soil samples below 68.0 mg/kg
Zinc	0.65 mg/kg	no impact
Tin	1.62 mg/kg	all soil samples below 8.1 mg/kg

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

Matrix Spike Recovery results

The matrix spike recoveries for soils for Chromium (72%), Magnesium (59%), Potassium (74%), Sodium (65%) and Zinc (69%) were below the lower control limits (>30% but <75%). All positive and non-detect results are qualified as estimated, "J" or "UJ".

The matrix spike recovery for soils for Manganese (139%) was above the upper control limits (>125%). All positive results are qualified as estimated, "J".

Matrix Duplicate RPD results

The RPD for Mercury (20%) was not greater than 35%. No qualification is necessary.

Serial Dilution results

The serial dilution results for Zinc was greater than 10%. All positive results are qualified as estimated, "J".

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all soil samples below 68.0 mg/kg	Na.	+	U
all soil samples below 8.1 mg/kg	Sn.		
all soil samples	Cr, Mg, K, Na and Zn.	+/U	J/UJ
all soil samples	Mn.	+	J
all soil samples	Zn.	+	J
all "B" results	all analytes	B	J

HEARTLAND
ENVIRONMENTAL SERVICES, INC.

Data Validation Report

SDG#:	NBCK13
Date:	January 24, 2000
Client Name:	Ensafe
Project/Site Name:	Charleston Zone K
Date Sampled:	December 10, 1999
Number of Samples:	9 Aqueous Sample(s) with 0 MS/MSD(s)
Laboratory:	Savannah Laboratories
Validation Guidance:	National Functional Guidelines for Organic and Inorganic Data, February, 1994
QA/QC Level:	DQO Level III
Method(s) Utilized:	SW846 Third Edition
Analytical Fractions:	Volatiles, Semivolatiles and Metals

Analytical data in this report were screened to determine usability of results and also to determine contractual compliance relative to these requirements and deliverables. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of all laboratory calculations have been verified as part of this validation. All instrument output, i.e. spectra, chromatograms. etc., for each sample have been carefully reviewed. The end-user is urged to review the Specific Findings and associated Data Qualifications presented in this report. Annotated Form 1s or spreadsheets for all samples reviewed are included after the Data Assessment Narratives. Form 1s for MS/MSD samples or spreadsheets are not annotated.

The release of this Data Validation Report is authorized by the following signature:

Craig G. Seaman — 1-25-00.

Paul B. Humburg, President — Date

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SDG# NBCK13

Samples and Fractions Reviewed

Sample Identifications Analytical Fractions

ENSAFE ID	MATRIX	VOA		SVOA		MET	
694GW00801	WATER	X				X	
694GW00901	WATER					X	
694TW01101	WATER	X					
694GW01301	WATER	X				X	
694HW01301	WATER	X				X	
694GW01101	WATER			X		X	
694HW01101	WATER			X			
694GW01201	WATER			X		X	
694GW01401	WATER			X		X	
Total Billable Samples (Water/Soil)		4	0	4	0	7	0

VOA= Volatiles
SVOA= Semivolatiles
MET= Metals

DATA ASSESSMENT AND NARRATIVE

VOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8260B; the National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # NBCK13

A validation was performed on the Volatile Data from SDG NBCK13. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
* Calibrations
* Internal Standard Performance
  Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Matrix Spike/Matrix Spike duplicate
* Field Duplicates
* Compound Identification/Quantitation

* - All criteria were met for this parameter

Blank

The end user should note that the action levels indicated for the blank analysis may not involve the same weights, volumes, dilution factors, or percent moisture as associated samples. These factors must be taken into considerations when applying the 5X and 10X criteria to field samples.

Method Blank

Associated blank	Compound	Concentration	Action Level
1B1222MB	methylene chloride	4.4J ug/L	44 ug/L

Samples	Compound	Qualification
694GW000801	methylene chloride	CRQL

System Performance and Overall Assessment

The data as presented requires qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL
694GW000801	methylene chloride	+	CRQL

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT AND NARRATIVE

SEMIVOLATILE ORGANICS

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 Method 8270C; the National Functional Guidelines for Organic Data Review, and DQO Level III. All comments made within this report should be considered when examining the analytical results.

SDG # NBCK13

A validation was performed on the Semivolatile Data from SDG NBCK13. The data was evaluated based on the following parameters.

* Data Completeness
* Holding Times
* GC/MS Tuning
* Calibrations
* Internal Standard Performance
* Blanks
* Surrogate Recoveries
* Laboratory Control Samples
* Matrix Spike/Matrix Spike duplicate
* Field Duplicates
* Compound Identification/Quantitation

* - All criteria were met for this parameter

System Performance and Overall Assessment

The data as presented requires no qualifications.

GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

UR = Result is rejected and unusable

D = Result value is based on dilution analysis

METHOD BLANK QUALIFICATION CODES

CRQL =	The sample result for the blank contaminant is less than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is rejected and the CRQL for that compound is reported.
U =	The sample result for the blank contaminant is greater than the sample CRQL and is less than 10X the method blank value. The sample result for the blank contaminant is qualified as non detected at the compound value reported.
No Action =	The sample result for the blank contaminant is greater than the sample CRQL and is greater than 10X the method blank value. The sample result for the blank contaminant is not qualified with any blank qualifiers.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	COMPOUND ID	DL	QL

No qualifications required.

* DL denotes the Form I qualifier supplied by the laboratory
QL denotes the qualifier used by the data validation firm
+ in the DL column denotes a positive result
- in the DL column denotes a non detect result

DATA ASSESSMENT NARRATIVE
METALS (SPLP)

General

The inorganic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, matrix spike and LCS recoveries, matrix duplicates and calibration results. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the SW846 methods: the Functional Guidelines for Inorganic Data Validation, February 1994, and DQO Level III requirements. All comments made within this report should be considered when examining the analytical results. Please refer the specific findings found in each category to the Summary of Data Qualification table.

SDGs # NBCK13

A validation was performed on the Metals Data from SDG NBCK13. The data was evaluated based on the following parameters.

*	•	Data Completeness
*	•	Holding Times
*	•	Calibrations
	•	Blanks
*	•	Interferences
*	•	Matrix Spike Recovery
*	•	Matrix Duplicates
*	•	Field Duplicates
*	•	Laboratory Control Samples
*	•	Serial Dilutions

* - All criteria were met for this parameter.

Preparation and Field Blanks

The preparation and calibration blanks exhibited contamination for the following elements.

Elements	Conc.	Samples affected
Aluminum	11.0 ug/l	all water samples below 55.0 ug/l
Calcium	29.3 ug/l	no impact
Chromium	1.40 ug/l	all water samples below 7.0 ug/l

The USEPA requires that all sample values below five times the preparation or calibration blank contamination be qualified as non-detect, "U".

The preparation blanks exhibited negative bias for the following elements.

Elements	Conc.	Samples affected
Mercury	-0.13 ug/l	all water samples below 1.3 ug/l

This reviewer qualifies all samples results below 10 times the absolute value of the negative blank value.

All sample results left with a "B" qualifier after all other qualifications, will be qualified with a "J" qualifier in place of the "B". Value is below the CRDL but greater than the IDL.

SUMMARY OF DATA QUALIFICATIONS

Sample ID	Analyte	DL	QL
all water samples below 55.0 ug/l	Al.	+	U
all water samples below 7.0 ug/l	Cr.		
all water samples below 1.3 ug/l	Hg.	+/U	J/UJ
all "B" results	all analytes	B	J

Appendix D

Site-Specific SSL Calculations Summary

Rationale for Dilution Factors
Used in Calculation of Site Specific SSLs
Clouter Island, CNC Charleston, SC

DAF Calculations:

Well screen intervals coincide primarily w/ a medium grained, gray sand w/ shell hash based on lithologic data from the first 7 temporary shallow wells (694002-694007, and GDKCL1). This lithologic type closely matches the description of shallow Quaternary age sand (Qs) deposits seen across the river at CNC. Therefore, the effective Kh (11 ft/d) and porosity (.45) values for the Qs unit from the Draft Zone E RFI Report were used. The Draft Zone E RFI Report has been the most comprehensive evaluation of these parameters at CNC to date. The default bulk density value of 1.5 kg/L was used.

Aquifer thickness affects dilution and attenuation by providing a greater or lesser vertical interval over which a contaminant may be diluted. Therefore, the less thick an aquifer, the less attenuation dilution is likely to occur than for a thicker aquifer if all other factors are held equal. Since there were no deep wells installed at Clouter Island the actual aquifer thickness is not known. The aquifer thickness for Clouter Island was estimated using the 12/10/99 water level data from wells 694008 through 694014. As a conservative estimate for aquifer thickness the greatest saturated thickness (approx. 8.5 ft) from all the temp wells was used in calculating dilution/attenuation factors. Saturated thickness was used since only the saturated interval is relevant.

The 12/10/99 water level data also provided an estimated gradient of 0.01 for the site. The source length term was an average of the distance across the site to the river and is thus roughly parallel to predominant GW flow direction; this average was 340 ft, or 103 m.

SSL Calculations:

TOC results from Clouter Island soil samples were converted to foc. The arithmetic mean used in SSL calculations was determined after eliminating the highest and lowest TOC detections from the sample population. No undisturbed samples were collected for determining geotechnical parameters. Consequently, the default bulk density value of 1.5 kg/L was used for soils at Clouter Island. The default value of 0.3 was used for water based porosity since there is no site specific porosity data for this parameter.

RECHARGE Estimation

Previous fate and transport evaluations at CNC utilized the recharge rate produced from the calibrated USGS basewide numerical model, which was 0.1 ft/year (1.2 in/yr). Several caveats accompanied this value, the most notable of which were:

1) the predominance of impervious surfaces at CNC in the form of buildings, paving, and concrete, consistent w/ its industrial usage.

2) the prevalence of low permeability deposits (mostly fill materials) in the shallow subsurface that promote storm water runoff and overland flow instead of seepage into

shallow groundwater.

For Clouter Island, only the presence of low permeability fill and dredged spoils overlying the natural deposition is an issue since the island is undeveloped. The USGS recharge rate of 0.1 ft/yr (0.03 m/yr) was applied as a rough estimate of recharge at Clouter Island as a result.

Table B1 below presents dilution factors used in calculating Site Specific SSLs for Clouter Island.

Table B1
Dilution Factors Used to Calculate Clouter Island Site Specific SSLs

	K[1] Hydraulic Conductivity	i* Hydraulic Gradient	da* Aquifer Thickness	L Source Length	I Infiltration Rate	dc[2] Calc. Mixing Zone Depth	d[3] Mixing Zone Depth	DF[4] Dilution Factor
Site	(m/yr)	(–)	(m)	(m)	(m/yr)	(m)	(m)	(–)
694	1220	0.01	2.6	104	0.03	11.25	2.60	11.2

Notes:

1 = Qs Kh (11 ft/d) from Zone E RFI Report (EnSafe, 1997) used.
2 = equation 12; USEPA Soil Screening Guidance: User's Guide (1996)
3 = lesser of dc or da
4 = equation 11; USEPA Soil Screening Guidance: User's Guide (1996)
m = meter
yr = year
(–)= no units
* = 12/10/99 groundwater elevation data used; used greatest measured saturated thickness in shallow wells since da is not available from deep well data.

Table B-1
Calculation of Soil to Groundwater Soil Screening Levels
Charleston Naval Complex, Zone K, AOC 693/694
Charleston, South Carolina

Site-Specific Parameters:		Chemical-Specific Variables					Partitioning Method				SPLP Method			
Fraction Organic Carbon (–):	0.0191								Calculated	Calculated		Calculated	Calculated	
Dilution Factor [DF] (–):	11	Dimension-	Organic						Soil to GW	Site-specific		Soil to GW	Site-specific	USEPA
Dry Soil Bulk Density (kg/L):	1.5	less	Carbon	Water		Acceptable	Target	SSL -	Soil to GW	SSL -		SSL -	Soil to GW	Generic
Water-filled Soil Porosity (–):	0.3	Henry's	Water	Health-		GW	Leachate	Partition	SSL -	Partition	SPLP	SPLP	SSL -	Soil to GW
Air-filled Soil Porosity (–):	0.15	Law	Part	based		Conc	Conc	Method	Partition	Method	Leach	Method	SPLP	SSL
Soil Porosity (–):	0.45	Constant	Coeff	Limit	MCL			[DAF=1]	Method	[DF=1]	Ratio	[DF=1]	Method	[DF=20]
		[H']	[Koc]	[HBL]	MCLG	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(kg/L)	(mg/kg)	(mg/kg)	(mg/kg)
Volatile Organic Compounds														
Acetone (2-propanone)		1.59E-03 a	5.75E-01 a	3.7	NL							ERR	ERR	16
Acetonitrile (methyl cyanide)		1.40E-03 d	4.70E-01 d	NL	NL							ERR	ERR	NL
Acrolein (propenal)		4.90E-03 d	1.00E+00 d	0.73	NL							ERR	ERR	NL
Acrylonitrile (vinyl cyanide) x		4.10E-03 d	1.80E+00 d	0.00016	NL							ERR	ERR	NL
Benzene (coal naphtha) x		2.28E-01 a	5.89E+01 a	0.0029	0.005							ERR	ERR	0.03
Bromodichloromethane x		6.56E-02 a	5.50E+01 a	0.0014	0.1							ERR	ERR	0.6
Bromoform (tribromomethane) x		2.19E-02 a	8.71E+01 a	0.011	0.1							ERR	ERR	0.8
Bromomethane (methylbromide)		2.50E-01 d	1.10E+01 d	0.058	NL							ERR	ERR	0.2
2-Butanone (methyl ethyl ketone; MEK)		2.30E-03 d	1.91E+00 d	22	NL							ERR	ERR	NL
Carbon disulfide		1.24E+00 a	4.57E+01 a	3.7	NL							ERR	ERR	32
Carbon tetrachloride (tetrachloromethane) x		1.25E+00 a	1.74E+02 a	0.00066	0.005							ERR	ERR	0.07
Chlorobenzene (monochlorobenzene)		1.52E-01 a	2.19E+02 a	0.73	0.1							ERR	ERR	1
Chloroethane (ethyl chloride) x		3.60E-01 d	1.60E+01 d	NL	NL							ERR	ERR	NL
2-Chloroethyl vinyl ether		1.00E-02 f	6.60E+00 f	NL	NL							ERR	ERR	NL
Chloroform (trichloromethane) x		1.50E-01 a	3.98E+01 a	0.014	0.1							ERR	ERR	0.6
Chloromethane (methyl chloride) x		3.60E-01 d	6.50E+00 d	0.0066	NL							ERR	ERR	NL
Dibromochloromethane x		3.21E-02 a	6.31E+01 a	0.001	0.06							ERR	ERR	0.4
Dichlorodifluoromethane (Freon 12)		1.40E+01 d	6.00E+01 d	7.3	NL							ERR	ERR	NL
1,1-Dichloroethane		2.30E-01 a	3.16E+01 a	3.7	NL							ERR	ERR	23
1,2-Dichloroethane (ethylene chloride; EDC) x		4.01E-02 a	1.74E+01 a	0.00094	0.005							ERR	ERR	0.02
1,1-Dichloroethene x		1.07E+00 a	5.89E+01 a	0.00014	0.007							ERR	ERR	0.06
cis-1,2-Dichloroethene		1.67E-01 a	3.55E+01 a	0.37	0.07							ERR	ERR	0.4
trans-1,2-Dichloroethene		3.85E-01 a	5.25E+01 a	0.73	0.1							ERR	ERR	0.7
1,2-Dichloroethene (total)		NDA	2.87E+00 c	0.33	NL							ERR	ERR	NL
1,2-Dichloropropane (propylene chloride) x		1.15E-01 a	4.37E+01 a	0.0013	0.005							ERR	ERR	0.03
1,3-Dichloropropene x		7.26E-01 a	4.57E+01 a	0.00047	NL							ERR	ERR	0.004
Ethylbenzene (phenylethane)		3.23E-01 a	3.63E+02 a	3.7	0.7							ERR	ERR	13
2-Hexanone (methyl butyl ketone; MBK)		7.18E-02 f	2.40E+01 d	NL	NL							ERR	ERR	NL
4-Methyl-2-pentanone (MIBK)		5.70E-03 d	1.50E+01 d	2.9	NL							ERR	ERR	NL
Methylene chloride (dichloromethane) x		8.98E-02 a	1.17E+01 a	0.011	0.005							ERR	ERR	0.02
Propionitrile (ethyl cyanide)		NDA	NDA	NL	NL							ERR	ERR	NL
Styrene (vinylbenzene)		1.13E-01 a	7.76E+02 a	7.3	0.1							ERR	ERR	4
1,1,2,2-Tetrachloroethane x		1.41E-02 a	9.33E+01 a	0.00043	NL							ERR	ERR	0.003
Tetrachloroethene (PCE) x		7.54E-01 a	1.55E+02 a	0.0016	0.005							ERR	ERR	0.06
Tetrahydrofuran		9.80E-03 d	2.90E+00 d	NL	NL							ERR	ERR	NL
Toluene (methyl benzene)		2.72E-01 a	1.82E+02 a	7.3	1							ERR	ERR	12
1,1,1-Trichloroethane (methyl chloroform)		7.05E-01 a	1.10E+02 a	7.3	0.2							ERR	ERR	2
1,1,2-Trichloroethane (vinyl trichloride) x		3.74E-02 a	5.01E+01 a	0.0015	0.003							ERR	ERR	0.02
Trichloroethene (TCE) x		4.22E-01 a	1.66E+02 a	0.0077	0.005							ERR	ERR	0.06
Trichlorofluoromethane (CFC-11)		4.00E+00 d	1.20E+02 d	11	NL							ERR	ERR	NL
1,2,3-Trichloropropane x		1.70E-02 d	7.00E+01 d	1.2E-05	NL							ERR	ERR	NL
Trichlorotrifluoroethane (Freon 113)		2.00E+01 d	3.80E+02 d	1100	NL							ERR	ERR	NL
Vinyl acetate		2.10E-02 a	5.25E+00 a	37	NL							ERR	ERR	170
Vinyl chloride (chloroethene) x		1.11E+00 a	1.86E+01 a	4.50E-05	0.002							ERR	ERR	0.01
m-Xylene		3.01E-01 a	4.07E+02 a	73	10							ERR	ERR	210
o-Xylene		2.13E-01 a	3.63E+02 a	73	10							ERR	ERR	190
p-Xylene		3.14E-01 a	3.89E+02 a	NL	10							ERR	ERR	200
Xylene (total)		2.48E-01 g	2.40E+02 g	73	10							ERR	ERR	NL
Semivolatile Organic Compounds														
Acenaphthene		6.36E-03 a	7.08E+03 a	2.2	NL							ERR	ERR	570
Acenaphthylene		4.50E-03 d	3.10E+03 d	0.73	NL							ERR	ERR	NL
Acetophenone		4.50E-04 d	4.10E+01 d	3.7	NL							ERR	ERR	NL
4-Aminobiphenyl		NDA	NDA	NL	NL							ERR	ERR	NL
Aniline (benzenamine) x		7.80E-05 d	9.00E+00 d	0.015	NL							ERR	ERR	NL
Anthracene (paranaphthalene)		2.67E-03 a	2.95E+04 a	11	NL							ERR	ERR	12000
Azobenzene x		2.04E-04 e	2.69E+03 e	0.00077	NL							ERR	ERR	NL
Benzidine x		1.60E-09 d	4.30E+01 d	3.7E-07	NL							ERR	ERR	NL
Benzoic acid (benzoate)		6.31E-05 a	6.00E-01 a	150	NL							ERR	ERR	400
Benzo(g,h,i)perylene		5.70E-06 d	3.90E+06 d	0.73	NL							ERR	ERR	NL
Benzo(a)pyrene equivalents (BEQs) x		NA	NA	1.2E-05	0.0002							ERR	ERR	NL
Benzo(a)anthracene x		1.37E-04 a	3.98E+05 a	0.00012	NL							ERR	ERR	2
Benzo(a)pyrene x		4.63E-05 a	1.02E+06 a	1.2E-05	0.0002							ERR	ERR	8
Benzo(b)fluoranthene x		4.55E-03 a	1.23E+06 a	0.00012	NL							ERR	ERR	5
Benzo(k)fluoranthene x		3.40E-05 a	1.23E+06 a	0.0012	NL							ERR	ERR	49
Chrysene x		3.88E-03 a	3.98E+05 a	0.012	NL							ERR	ERR	160
Dibenzo(a,h)anthracene x		6.03E-07 a	3.80E+06 a	1.2E-05	NL							ERR	ERR	2
Indeno(1,2,3-cd)pyrene x		6.56E-05 a	3.47E+06 a	0.00012	NL							ERR	ERR	14
Benzyl alcohol		1.60E-05 g	1.30E+01 d	11	NL							ERR	ERR	NL
4-Bromophenyl phenyl ether		4.90E-03 d	8.00E+04 d	NL	NL							ERR	ERR	NL
Butylbenzylphthalate		5.17E-05 r	5.75E+04 a	7.3	NL							ERR	ERR	930
Carbazole x		6.26E-07 a	3.39E+03 a	0.0043	NL							ERR	ERR	0.6
4-Chloroaniline		1.36E-05 a	6.61E+01 a	0.15	NL							ERR	ERR	0.7
Chlorobenzilate x		3.70E-06 g	2.00E+04 d	0.00032	NL							ERR	ERR	NL
bis(2-Chloroethyl)ether x		7.34E-04 a	1.55E+01 a	7.7E-05	NL							ERR	ERR	0.0004
4-Chloro-3-methylphenol		1.60E-05 d	1.10E+03 d	NL	NL							ERR	ERR	NL
2-Chlorophenol (2-hydroxychlorobenzene)		1.60E-02 a	3.83E+02 a	0.18	NL							ERR	ERR	4
Dibenz(a,j)acridine		NDA	NDA	NL	NL							ERR	ERR	NL

Dibenzofuran	5.30E-04	d	1.40E+04	d	NL	NL	0.804	0.264	6.422	70.6	ERR	ERR	NL
Di-n-butylphthalate	3.85E-08	e	3.39E+04	a	3.7	NL	3.7	40.7	2396	26361	ERR	ERR	2300
1,2-Dichlorobenzene (o-)	7.79E-02	a	6.17E+02	a	3.3	0.6	0.6	6.6	2.195	79.15	ERR	ERR	17
1,3-Dichlorobenzene (m-)	1.30E-01	d	7.00E+02	d	NL	NL	0.0055	0.0605	0.07471	0.822	ERR	ERR	NL
1,4-Dichlorobenzene (p-) x	9.96E-02	a	6.17E+02	a	0.0035	0.075	0.075	0.825	0.900	9.90	ERR	ERR	2
3,3'-Dichlorobenzidine (o,o-) x	1.64E-07	a	7.24E+02	a	0.00019	NL	0.00019	0.00209	0.002665	0.02932	ERR	ERR	0.007
2,4-Dichlorophenol (4,6-dichlorophenol)	1.30E-04	a	1.47E+02	a	0.11	NL	0.11	1.21	0.331	3.639	ERR	ERR	1
Diethylphthalate	1.85E-05	a	2.88E+02	a	29	NL	29	319	165.3	1819	ERR	ERR	470
7,12-Dimethylbenz(a)anthracene	1.30E-06	d	3.20E+06	d	NL	NL	NA	NA	NA	NA	ERR	ERR	NL
2,4-Dimethylphenol	8.20E-05	a	2.09E+02	a	0.73	NL	0.73	8.03	3.060	33.66	ERR	ERR	9
Dimethylphthalate	4.50E-06	d	3.50E+01	d	370	NL	370	4070	321.3	3535	ERR	ERR	NL
2,4-Dinitrophenol	1.82E-05	a	1.02E-02	b	0.073	NL	0.073	0.803	0.015	0.161	ERR	ERR	0.3
2,4-Dinitrotoluene	3.80E-06	a	9.55E+01	a	NL	NL	NA	NA	NA	NA	ERR	ERR	0.0008
2,4-Dinitrotoluene in dinitrotoluene mix	3.80E-06	a	9.55E+01	a	0.00013	NL	0.00013	0.00143	2.63E-04	0.00289	ERR	ERR	0.0008
2,6-Dinitrotoluene	3.06E-05	a	6.92E+01	a	NL	NL	NA	NA	NA	NA	ERR	ERR	0.0007
2,6-Dinitrotoluene in dinitrotoluene mix	3.06E-05	a	6.92E+01	a	0.00013	NL	0.00013	0.00143	1.98E-04	0.002176	ERR	ERR	0.0007
Di-n-octylphthalate	2.74E-03	a	8.32E+07	a	0.73	NL	0.73	8.03	1160058	1.28E+07	ERR	ERR	10000
Diphenylamine	2.10E-05	d	2.70E+03	d	0.91	NL	0.91	10.01	47.111	518	ERR	ERR	NL
bis(2-Ethylhexyl)phthalate (BEHP) x	4.18E-06	a	1.51E+07	a	0.0061	0.006	0.006	0.066	1730	19035	ERR	ERR	3600
Ethyl methacrylate	3.90E-03	d	3.70E+01	d	3.3	NL	3.3	36.3	3.003	33.04	ERR	ERR	NL
Fluoranthene	6.60E-04	a	1.07E+05	a	1.5	NL	1.5	16.5	3066	33724	ERR	ERR	4300
Fluorene	2.61E-03	a	1.38E+04	a	1.5	NL	1.5	16.5	395.7	4352	ERR	ERR	560
Hexachlorobenzene (perchlorobenzene) x	5.41E-02	a	5.50E+04	a	5.3E-05	0.001	0.001	0.011	1.051	11.56	ERR	ERR	2
Hexachlorobutadiene (perchlorobutadiene) x	3.34E-01	a	5.37E+04	a	0.0011	0.001	0.001	0.011	1.026	11.28	ERR	ERR	2
Hexachlorocyclopentadiene	1.11E+00	a	2.00E+05	a	0.26	0.05	0.05	0.55	191.0	2101	ERR	ERR	400
Hexachloroethane (perchloroethane) x	1.59E-01	a	1.78E+03	a	0.0061	NL	0.0061	0.0671	0.209	2.296	ERR	ERR	0.5
Isodrin	NDA		NDA		NL	NL	NA	NA	NA	NA	ERR	ERR	NL
Isophorone x	2.72E-04	a	4.68E+01	a	0.09	NL	0.09	0.99	0.098	1.083	ERR	ERR	0.5
Methapyrilene	NDA		NDA		NL	NL	NA	NA	NA	NA	ERR	ERR	NL
1-Methylnaphthalene	1.62E-02	g	2.29E+03	g	NL	NL	1.500	16.5	65.911	725	ERR	ERR	NL
2-Methylnaphthalene	2.10E-02	d	7.50E+03	d	NL	NL	0.120	1.32	17.214	189.4	ERR	ERR	NL
2-Methylphenol (o-cresol)	4.92E-05	a	9.12E+01	a	1.8	NL	1.8	19.8	3.495	38.5	ERR	ERR	15
3-Methylphenol (m-cresol)	3.50E-05	d	8.50E+01	d	1.8	NL	1.8	19.8	3.282	36.1	ERR	ERR	NL
4-Methylphenol (p-cresol)	3.20E-05	d	8.50E+01	d	0.18	NL	0.18	1.98	0.328	3.61	ERR	ERR	NL
Naphthalene	1.98E-02	a	2.00E+03	a	0.73	NL	0.73	8.03	28.033	308.4	ERR	ERR	84
3-Nitroaniline	5.70E-06	d	2.20E+01	d	NL	NL	0.110	1.21	0.068	0.750	ERR	ERR	NL
Nitrobenzene	9.84E-04	a	6.46E+01	a	0.018	NL	0.018	0.198	0.02581	0.2839	ERR	ERR	0.1
4-Nitrophenol	1.70E-08	d	4.90E+01	d	NL	NL	0.290	3.19	0.329	3.62	ERR	ERR	NL
N-Nitrosodimethylamine x	4.90E-05	d	2.80E-01	d	1.7E-06	NL	1.7E-06	1.87E-05	3.49E-07	3.84E-06	ERR	ERR	NL
N-Nitrosodiphenylamine x	2.05E-04	a	1.29E+03	a	0.017	NL	0.017	0.187	0.422	4.645	ERR	ERR	1
N-Nitroso-di-n-propylamine x	9.23E-05	a	2.40E+01	a	1.2E-05	NL	1.2E-05	0.000132	7.90E-06	8.69E-05	ERR	ERR	5E-05
N-Nitroso-methylethylamine x	3.65E-05	g	7.50E-01	d	3.9E-06	NL	3.9E-06	4.29E-05	8.36E-07	9.19E-06	ERR	ERR	NL
Pentachlorophenol x	1.00E-06	a	5.92E-02	a	0.00071	0.001	0.001	0.011	0.01151	0.1266	ERR	ERR	0.03
Phenanthrene	9.40E-04	d	3.00E-04	d	1.1	NL	1.1	12.1	630.5	6936	ERR	ERR	NL
Phenol (phenyl alcohol)	1.63E-05	a	2.88E+01	a	22	NL	22	242	16.502	181.5	ERR	ERR	100
Pyrene	4.51E-04	a	1.05E+05	a	1.1	NL	1.1	12.1	2206	24269	ERR	ERR	4200
Safrole	7.50E-04	d	4.10E+02	d	NL	NL	NA	NA	NA	NA	ERR	ERR	NL
1,2,4,5-Tetrachlorobenzene	1.10E-01	d	5.50E+03	d	0.011	NL	0.011	0.121	1.158	12.74	ERR	ERR	NL
2,3,4,6-Tetrachlorophenol	1.80E-04	d	2.80E+02	b	1.1	NL	1.1	12.1	6.103	67.13	ERR	ERR	NL
1,2,4-Trichlorobenzene	5.82E-02	a	1.78E+03	a	0.37	0.07	0.07	0.77	2.394	26.34	ERR	ERR	5
2,4,5-Trichlorophenol (TCP)	1.78E-04	a	1.60E+03	a	3.7	NL	3.7	40.7	113.8	1252	ERR	ERR	270
2,4,6-Trichlorophenol x	3.19E-04	a	3.81E+02	a	0.0077	NL	0.0077	0.0847	0.05757	0.6333	ERR	ERR	0.2
Pesticide/PCB Compounds													
Aldrin x	6.97E-03	a	2.45E+06	a	5.0E-06	NL	5E-06	5.5E-05	0.2340	2.574	ERR	ERR	0.5
Aroclor-1016 x	1.10E-01	d	3.09E+05	a	0.00021	0.0005	0.0005	0.0055	2.951	32.46	ERR	ERR	1y
Aroclor-1248 x	1.10E-01	d	3.09E+05	a	0.00021	0.0005	0.0005	0.0055	2.951	32.46	ERR	ERR	1y
Aroclor-1254 x	1.10E-01	d	3.09E+05	a	0.00021	0.0005	0.0005	0.0055	2.951	32.46	ERR	ERR	1y
Aroclor-1260 x	1.10E-01	d	3.09E+05	a	0.00021	0.0005	0.0005	0.0055	2.951	32.46	ERR	ERR	1y
alpha-BHC (alpha-HCH) x	4.35E-04	a	1.23E+03	a	1.4E-05	NL	1.4E-05	0.000154	3.32E-04	0.003649	ERR	ERR	0.0005
beta-BHC (beta-HCH) x	3.05E-05	a	1.26E+03	a	4.7E-05	NL	4.7E-05	0.000517	0.001141	0.01255	ERR	ERR	0.003
delta-BHC (delta-HCH) x	1.80E-05	d	2.30E+03	d	4.7E-05	NL	4.7E-05	0.000517	0.002074	0.02282	ERR	ERR	NL
gamma-BHC (Lindane) x	5.74E-04	a	1.07E+03	a	6.6E-05	0.0002	0.0002	0.0022	0.004127	0.04540	ERR	ERR	0.009
Chlordane x	1.99E-03	a	1.20E+05	a	0.00024	0.002	0.002	0.022	4.584	50.43	ERR	ERR	10
alpha-Chlordane (cis-chlordane) x	1.99E-03	S	7.80E+04	d	0.00024	0.002	0.002	0.022	2.674	29.42	ERR	ERR	10
gamma-Chlordane (trans-chlordane) x	1.99E-03	S	1.40E+05	d	0.00024	0.002	0.002	0.022	5.348	58.8	ERR	ERR	10
4,4'-DDD x	1.64E-04	a	1.80E+06	a	0.00035	NL	0.00035	0.00385	6.685	73.5	ERR	ERR	16
4,4'-DDE x	6.61E-04	a	4.47E+06	a	0.00025	NL	0.00025	0.00275	21.344	234.8	ERR	ERR	54
4,4'-DDT x	3.32E-04	a	2.63E+06	a	0.00025	NL	0.00025	0.00275	12.558	138.1	ERR	ERR	32
Dieldrin (aldrin epoxide) x	6.19E-04	a	2.14E+04	a	5.3E-06	NL	5.3E-06	5.83E-05	0.002167	0.02384	ERR	ERR	0.004
Dinoseb	1.90E-05	d	1.90E+01	d	0.037	0.007	0.007	0.077	0.00394	0.0433	ERR	ERR	NL
Endosulfan I	4.59E-04	a	2.14E+03	a	0.22	NL	0.22	2.42	9.036	99.40	ERR	ERR	18
Endosulfan II	4.59E-04	a	2.14E+03	a	0.22	NL	0.22	2.42	9.036	99.40	ERR	ERR	18
Endosulfan sulfate	8.60E-02	d	9.50E+02	d	0.22	NL	0.22	2.42	4.038	44.42	ERR	ERR	NL
Endrin	3.08E-04	a	1.23E+04	a	0.011	0.002	0.002	0.022	0.4703	5.173	ERR	ERR	1
Endrin aldehyde	1.58E-05	f	8.50E+03	d	0.011	0.002	0.002	0.022	0.3251	3.576	ERR	ERR	NL
Endrin ketone	NDA		8.50E+03	S	0.011	0.002	0.002	0.022	0.3251	3.576	ERR	ERR	NL
Heptachlor x	6.07E+01	a	1.41E+06	a	1.9E-05	0.0004	0.0004	0.0044	10.775	118.5	ERR	ERR	23
Heptachlor epoxide x	3.90E-04	a	8.32E+04	a	9.4E-06	0.0002	0.0002	0.0022	0.318	3.497	ERR	ERR	0.7
Kepone x	1.80E-06	d	1.60E+05	d	NL	NL	3.7E-06	4.07E-05	0.01131	0.1244	ERR	ERR	NL
Methoxychlor	6.48E-04	a	9.77E+04	a	0.18	0.04	0.04	0.44	74.65	821.2	ERR	ERR	160
Toxaphene x	2.46E-04	a	2.57E+05	a	7.7E-05	0.003	0.003	0.033	14.73	162.0	ERR	ERR	31
Organophosphate Pesticides													
Dimethoate	2.50E-09	d	4.80E+00	d	0.0073	NL	0.0073	0.0803	0.00213	0.0234	ERR	ERR	NL
Disulfoton	1.60E-04	d	8.00E+03	d	0.0015	NL	0.0015	0.0165	0.230	2.525	ERR	ERR	NL
Famphur	NDA		NDA		NL	NL	NA	NA	NA	NA	ERR	ERR	NL
Methyl parathion	4.10E-06	d	7.80E+02	d	0.0091	NL	0.0091	0.1001	0.123	1.358	ERR	ERR	NL
Parathion (ethyl parathion)	2.30E-05	d	6.00E+03	d	0.22	NL	0.22	2.42	25.256	277.8	ERR	ERR	NL
Phorate	4.92E-04	g	5.50E+03	d	0.0073	NL	0.0073	0.0803	0.7683	8.452	ERR	ERR	NL
Sulfotep (tetraethyldithiopyrophosphate)	2.95E-07	e	7.41E+02	g	0.018	NL	0.018	0.198	0.2584	2.842	ERR	ERR	NL
Herbicides													
2,4-D (2,4-dichlorophenoxyacetic acid)	4.10E-07	d	1.70E+02	d	0.37	0.07	0.07	0.77	0.241	2.654	ERR	ERR	NL
2,4-DB (4-(2,4-dichlorophenoxy)butyric acid)	9.80E-07	d	3.80E+03	d	0.29	NL	0.29	3.19	16.675	183.6	ERR	ERR	NL
2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	3.60E-07	d	3.40E+01	d	0.37	NL	0.37	4.07	0.314	3.457	ERR	ERR	NL

2,4,5-TP (Silvex)	3.20E-09	d	5.98E+03	d	0.29	0.05	0.05	0.55	5.263	57.89		ERR	ERR	NL
Dioxin Compounds														
2378-TCDD Equivalents (TEQs) x	NA		NA		5.7E-10	NL	5.7E-10	6.27E-09	NA	NA		ERR	ERR	NL
2378-TCDD x	3.2E-03	d	2.7E+06	d	5.7E-10	3E-08	3E-08	3.3E-07	0.001547	0.01702		ERR	ERR	NL
12378-PeCDD x	1.1E-04	g	3.4E+06	d	1.1E-09	NL	1.1E-09	1.21E-08	7.14E-05	0.0007858		ERR	ERR	NL
123478-HxCDD x	1.8E-03	g	4.6E+07	d	5.7E-09	NL	5.7E-09	6.27E-08	0.005008	0.05509		ERR	ERR	NL
123678-HxCDD x	1.8E-03	S	4.6E+07	S	5.7E-09	NL	5.7E-09	6.27E-08	0.005008	0.05509		ERR	ERR	NL
123789-HxCDD x	1.8E-03	S	4.6E+07	S	5.7E-09	NL	5.7E-09	6.27E-08	0.005008	0.05509		ERR	ERR	NL
1234678-HpCDD x	3.1E-04	g	1.2E+08	d	5.7E-08	NL	5.7E-08	6.27E-07	0.1306	1.437		ERR	ERR	NL
OCDD x	2.8E-04	g	1.2E+07	g	5.7E-07	NL	5.7E-07	6.27E-06	0.1306	1.437		ERR	ERR	NL
2378-TCDF x	6.1E-04	g	2.7E+06	d	5.7E-09	NL	5.7E-09	6.27E-08	2.94E-04	0.003233		ERR	ERR	NL
12378-PeCDF x	2.1E-04	g	4.3E+06	d	1.1E-08	NL	1.1E-08	1.21E-07	9.03E-04	0.009938		ERR	ERR	NL
23478-PeCDF x	2.4E-04	g	6.5E+06	d	1.1E-09	NL	1.1E-09	1.21E-08	1.37E-04	0.001502		ERR	ERR	NL
123478-HxCDF x	5.9E-04	g	2.4E+09	d	5.7E-09	NL	5.7E-09	6.27E-08	0.2613	2.874		ERR	ERR	NL
123678-HxCDF x	2.5E-04	g	2.4E+09	S	5.7E-09	NL	5.7E-09	6.27E-08	0.2613	2.874		ERR	ERR	NL
234678-HxCDF x	3.1E-04	g	2.4E+09	S	5.7E-09	NL	5.7E-09	6.27E-08	0.2613	2.874		ERR	ERR	NL
123789-HxCDF x	2.5E-04	S	2.4E+09	S	5.7E-09	NL	5.7E-09	6.27E-08	0.2613	2.874		ERR	ERR	NL
1234678-HpCDF x	6.2E-03	g	6.0E+07	d	5.7E-08	NL	5.7E-08	6.27E-07	0.06532	0.719		ERR	ERR	NL
1234789-HpCDF x	1.7E-03	g	2.3E+06	g	5.7E-07	NL	5.7E-07	6.27E-07	0.002548	0.02802		ERR	ERR	NL
OCDF x	7.8E-05	g	5.6E+00	g	5.7E-07	NL	5.7E-07	6.27E-06	0.06119	0.673		ERR	ERR	NL
Hydrazine														
Hydrazine (diamine) x	7.09E-06	g	9.00E-03	d	2.8E-05	NL	2.8E-05	0.00308	5.60E-06	6.17E-05				NL
Explosives														
Tetryl (trinitrophenylmethylnitramine)	8.20E-11	g	2.34E+02	g	0.37	NL	0.37	4.07	1.728	19.004				NL
Organotin														
Dibutyltin	NDA		NDA		0.011	NL	0.011	0.121	NA	NA				NL
Monobutyltin	NDA		NDA		0.011	NL	0.011	0.121	NA	NA				NL
Tetrabutyltin	NDA		NDA		0.011	NL	0.011	0.121	NA	NA				NL
Tributyltin	NDA		NDA		0.011	NL	0.011	0.121	NA	NA				NL
Inorganics			***Kd (6.8 pH)***											
Aluminum	NA		1.50E+03	d	NL	NL	37	407	55507	6.11E+05	1.33E-04	2.78E+05	3.06E+06	NL
Antimony	NA		4.50E+01	c	0.615	0.006	0.006	0.066	0.271	2.98	3.16E-03	1.90E+00	2.09E+01	5
Arsenic x	NA		2.90E+01	c	5.7E-09	0.05	0.05	0.55	1.46	16.1	7.68E-04	6.51E+01	7.16E+02	29
Barium	NA		4.10E+01	c	2.8	2	2	22	82.4	906	3.63E-04	5.51E+03	6.06E+04	1600
Beryllium	NA		7.90E+02	c	NL	0.004	0.004	0.044	3.16	34.8	1.50E-04	2.67E+01	2.93E+02	63
Cadmium	NA		7.50E+01	c	0.611	0.005	0.005	0.055	0.376	4.14		ERR	ERR	8
Chromium (total)	NA		1.90E+01	c	0.1	0.1	0.1	1.1	1.92	21.1	2.49E-04	4.02E+02	4.42E+03	38
Chromium (trivalent)	NA		1.80E+06	c	55	NL	55	605	9.90E+07	1.09E+09		ERR	ERR	NL
Chromium (hexavalent)	NA		1.90E+01	c	0.1	0.1	0.1	1.1	1.92	21.1		ERR	ERR	38
Cobalt	NA		4.50E+01	d	NL	NL	2.2	24.2	99.4	1094	4.41E-04	4.95E+03	5.45E+04	NL
Copper	NA		4.30E+02	d	NL	1.3	1.3	14.3	559	6152	1.96E-04	6.63E+03	7.30E+04	NL
Cyanide	NA		9.90E+00	c	0.73	0.2	0.2	2.2	2.02	22.2		ERR	ERR	40
Iron	NA		2.50E+01	d	NL	NL	11	121	277	3049	9.13E-05	1.20E+05	1.33E+06	NL
Lead	NA		9.00E+02	d	NL	0.015	0.015	0.165	13.5	149	1.55E-04	9.68E+01	1.06E+03	400z
Manganese	NA		6.50E+01	d	1.7	NL	1.7	18.7	111	1219	5.53E-05	3.07E+04	3.38E+05	NL
Mercury	4.67E-01	x	5.20E+01	c	0.011	0.002	0.002	0.022	0.104	1.15		ERR	ERR	2
Nickel	NA		6.50E+01	c	0.73	0.1	0.1	1.1	6.52	71.7	2.83E-04	3.53E+02	3.89E+03	130
Selenium	NA		5.00E+00	c	0.18	0.05	0.05	0.55	0.260	2.86		ERR	ERR	5
Silver	NA		8.30E+00	c	0.18	NL	0.18	1.98	1.53	16.8		ERR	ERR	34
Thallium	NA		7.10E+01	c	0.0029	0.0005	0.0005	0.0055	0.0356	0.392		ERR	ERR	0.7
Tin	NA		2.50E+02	h	22	NL	22	242	5504	60548		ERR	ERR	NL
Vanadium	NA		1.00E+03	c	0.26	NL	0.26	2.86	260	2861	3.67E-04	7.08E+02	7.79E+03	6000
Zinc	NA		6.20E+01	c	11	NL	11	121	684	7526	1.55E-04	7.10E+04	7.81E+05	12000

Notes:

Water Health-based Limit - Preliminary Remediation Goal based on the ingestion pathway, residential scenario; obtained from Oak Ridge National Laboratory Risk Assessment Information System (RAIS) website

MCL/MCLG - From USEPA Drinking Water Regulations and Health Advisories, October 1996

Acceptable GW Concentration - MCL/MCLG if available, otherwise Water Health-based Limit; if neither available, then tap water risk-based concentration from April 1999 Region 3 RBC Table

Target Leachate Concentration - Acceptable Groundwater Concentration multiplied by Dilution Factor

Calculated Site-specific Soil to GW SSL - From Equation 10 (partitioning equation) of the USEPA Soil Screening Guidance: User's Guide (1996), using the site-specific parameters shown above

SPLP Leach Ratio - Contaminant concentration in leach sample (mg/L) divided by corresponding concentration in bulk sample (mg/kg)

Calculated Soil to GW SSL - SPLP Method (DAF=1) - Acceptable Groundwater Concentration divided by SPLP Leach Ratio

Calculated Site-specific Soil to GW SSL - SPLP Method - Calculated SPLP SSL multiplied by Dilution Factor

USEPA Generic Soil to GW SSL - From USEPA Soil Screening Guidance, Technical Background Document (1996), Appendix A, Table A-1

Sources of Hf and Kac values:

a = 1996 Soil Screening Guidance: User's Guide, Table C-1
b = 1996 Soil Screening Guidance: User's Guide, Table C-2
c = 1996 Soil Screening Guidance: User's Guide, Table C-4
d = Superfund Chemical Data Matrix (SCDM) - User Version, September 1997
e = Oak Ridge National Laboratory Risk Assessment Information System (RAIS) website
f = Knox, Sabatini, and Canter (1993); Subsurface Transport and Fate Processes
g = Texas Natural Resources Conservation Commission (TNRCC) Risk Reduction Program Concept Document 2, Vol. 1; Appendix VII, Chemical/Physical Properties Table
h = TERRA model (Baes, et al., Oak Ridge National Laboratory, 1984)
S = Surrogate

x - Carcinogen
y - USEPA SSL is a preliminary remediation goal of 1 mg/kg based on separate 1990 guidance for PCBs
z - USEPA SSL of 400 mg/kg based on separate 1994 guidance for lead
GW - Groundwater
SSL - Soil screening level

NA - Not applicable
ND - Not detected
NDA - No data available
NL - Not listed
NS - Not sampled

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SPLP-METAL	SAMPLE ID ------>	694-S-B005-S1		694-S-B005-S2		694-S-B009-S1		694-S-B009-S2		694-S-B012-S1		694-S-B012-S2	
	ORIGINAL ID ----->	694SB005S1		694SB005S2		694SB009S1		694SB009S2		694SB012S1		694SB012S2	
	LAB SAMPLE ID --->	S916905*3		S916905*4		S916905*1		S916905*2		S916905*5		S916905*6	
	ID FROM REPORT -->	694SB005S1		694SB005S2		694SB009S1		694SB009S2		694SB012S1		694SB012S2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/21/99		10/21/99		10/21/99		10/21/99		10/21/99		10/21/99	
	DATE ANALYZED --->	10/22/99		10/22/99		10/22/99		10/22/99		10/22/99		10/22/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7429-90-5	Aluminum (Al)	17700.	J	8110.	J	10400.	J	2020.	J	189.	J	1690.	J
7440-36-0	Antimony (Sb)	1.8	U	1.8	U	4.5	J	3.6	J	1.8	U	12.9	J
7440-38-2	Arsenic (As)	11.		6.4	J	7.8	J	9.6	J	3.6	U	3.6	U
7440-39-3	Barium (Ba)	29.7		15.		19.7		5.8	J	5.4	J	11.1	
7440-41-7	Beryllium (Be)	0.21	J	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7440-43-9	Cadmium (Cd)	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
7440-70-2	Calcium (Ca)	13200.		7170.		12400.		12500.		146000.		15800.	
7440-47-3	Chromium (Cr)	30.		16.7		16.6		4.1	J	0.8	U	3.9	J
7440-48-4	Cobalt (Co)	1.5	J	0.92	J	1.1	J	0.7	U	0.7	U	0.7	U
7440-50-8	Copper (Cu)	14.3	J	8.4	J	21.4		11.5	J	1.1	J	3.5	J
7439-89-6	Iron (Fe)	13800.	J	7140.	J	7240.	J	1060.	J	109.	J	1510.	J
7439-92-1	Lead (Pb)	11.2		4.7	J	13.1		2.	U	2.	U	2.1	J
7439-95-4	Magnesium (Mg)	4240.		3220.		3420.		5920.		17700.		6820.	
7439-96-5	Manganese (Mn)	60.7		33.3		23.5		5.5	J	0.4	U	7.7	J
7440-02-0	Nickel (Ni)	7.4	J	3.4	J	5.6	J	2.1	J	1.2	U	2.2	J
7440-09-7	Potassium (K)	2220.		1310.		1400.		7080.		9900.		6960.	
7782-49-2	Selenium (Se)	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ
7440-22-4	Silver (Ag)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
7440-23-5	Sodium (Na)	10700.		21600.		9340.		73000.		19400.		46300.	
7440-28-0	Thallium (Tl)	3.2	UJ	3.2	UJ	3.2	UJ	4.8	J	3.2	UJ	3.2	UJ
7440-31-5	Tin (Sn)	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
7440-62-2	Vanadium (V)	43.3		22.6		25.1		13.		2.4	J	6.9	J
7440-66-6	Zinc (Zn)	53.3		37.		42.4		18.1	U	3.7	U	12.2	U

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SPLP-METAL											
	SAMPLE ID ------->	694-S-B014-S1		694-S-B014-S2		694-S-B019-S1		694-C-B019-S1		694-S-B019-S2	
	ORIGINAL ID ----->	694SB014S1		694SB014S2		694SB019S1		694CB019S1		694SB019S2	
	LAB SAMPLE ID --->	S916905*7		S916905*8		S916905*9		S916905*11		S916905*10	
	ID FROM REPORT -->	694SB014S1		694SB014S2		694SB019S1		694CB019S1		694SB019S2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/21/99		10/21/99		10/21/99		10/21/99		10/21/99	
	DATE ANALYZED --->	10/22/99		10/22/99		10/22/99		10/22/99		10/22/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7439-97-6	Mercury (Hg)	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7429-90-5	Aluminum (Al)	1970.	J	5000.	J	1140.	J	754.	J	123.	U
7440-36-0	Antimony (Sb)	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
7440-38-2	Arsenic (As)	6.2	J	3.8	J	5.	J	3.6	U	3.6	U
7440-39-3	Barium (Ba)	10.6		12.2		4.	J	2.3	J	6.9	J
7440-41-7	Beryllium (Be)	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7440-43-9	Cadmium (Cd)	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
7440-70-2	Calcium (Ca)	23400.		20700.		32900.	J	55900.	J	72600.	
7440-47-3	Chromium (Cr)	4.3	J	9.6	J	3.2	J	1.9	J	0.8	U
7440-48-4	Cobalt (Co)	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
7440-50-8	Copper (Cu)	7.7	J	6.7	J	6.4	J	4.5	J	3.2	J
7439-89-6	Iron (Fe)	1390.	J	3590.	J	679.	J	415.	J	54.2	J
7439-92-1	Lead (Pb)	3.1	J	4.1	J	2.	U	2.	U	2.	U
7439-95-4	Magnesium (Mg)	2950.		2400.		4850.		6420.		12900.	
7439-96-5	Manganese (Mn)	7.6	J	17.9		3.7	J	1.9	J	0.4	U
7440-02-0	Nickel (Ni)	1.6	J	2.9	J	1.2	U	1.2	U	1.2	U
7440-09-7	Potassium (K)	2130.		1420.		5990.		6030.		11100.	
7782-49-2	Selenium (Se)	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ	2.6	UJ
7440-22-4	Silver (Ag)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
7440-23-5	Sodium (Na)	5620.		8050.		7790.		5270.		29700.	
7440-28-0	Thallium (Tl)	3.2	UJ	3.2	UJ	3.2	UJ	3.2	UJ	3.2	UJ
7440-31-5	Tin (Sn)	2.8	U	2.8	U	2.8	U	2.8	U	2.8	U
7440-62-2	Vanadium (V)	14.5		13.6		12.		10.2		5.8	J
7440-66-6	Zinc (Zn)	10.1	U	19.	U	10.7	U	5.1	U	5.7	U

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SPLP-PEST									
	SAMPLE ID ------>	694-S-B004-S1		694-C-B004-S1		694-S-B018-S1		694-S-B018-S2	
	ORIGINAL ID ----->	694SB004S1		694CB004S1		694SB018S1		694SB018S2	
	LAB SAMPLE ID --->	S916905*23		S916905*24		S916905*25		S916905*26	
	ID FROM REPORT -->	694SB004S1		694CB004S1		694SB018S1		694SB018S2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/18/99		10/18/99		10/18/99		10/18/99	
	DATE ANALYZED --->	10/29/99		10/29/99		10/29/99		10/29/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil	
	UNITS ---------->	UG/L		UG/L		UG/L		UG/L	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
319-84-6	alpha-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-85-7	beta-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-86-8	delta-BHC	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
58-89-9	gamma-BHC (Lindane)	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
76-44-8	Heptachlor	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
309-00-2	Aldrin	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
959-98-8	Endosulfan I	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
60-57-1	Dieldrin	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-55-9	4,4'-DDE	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-20-8	Endrin	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
33213-65-9	Endosulfan II	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-54-8	4,4'-DDD	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
50-29-3	4,4'-DDT	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-43-5	Methoxychlor	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
53494-70-5	Endrin ketone	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7421-93-4	Endrin aldehyde	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
5103-71-9	alpha-Chlordane	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
5103-74-2	gamma-Chlordane	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
8001-35-2	Toxaphene	5.	UJ	5.	UJ	5.	UJ	5.	UJ
12674-11-2	Aroclor-1016	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11104-28-2	Aroclor-1221	2.	UJ	2.	UJ	2.	UJ	2.	UJ
11141-16-5	Aroclor-1232	1.	UJ	1.	UJ	1.	UJ	1.	UJ
53469-21-9	Aroclor-1242	1.	UJ	1.	UJ	1.	UJ	1.	UJ
12672-29-6	Aroclor-1248	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11097-69-1	Aroclor-1254	1.	UJ	1.	UJ	1.	UJ	1.	UJ
11096-82-5	Aroclor-1260	1.	UJ	1.	UJ	1.	UJ	1.	UJ

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SPLP-SVOA	SAMPLE ID ------>	694-S-B013-S1		694-S-B013-S2	
	ORIGINAL ID ----->	694SB013S1		694SB013S2	
	LAB SAMPLE ID --->	S916905*31		S916905*32	
	ID FROM REPORT -->	694SB013S1		694SB013S2	
	SAMPLE DATE ----->	10/13/99		10/13/99	
	DATE EXTRACTED -->	10/19/99		10/22/99	
	DATE ANALYZED --->	10/21/99		10/25/99	
	MATRIX ---------->	Soil		Soil	
	UNITS ----------->	UG/L		UG/L	

CAS #	Parameter	NBCK02	VAL	NBCK02	VAL
108-95-2	Phenol	10.	U	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U	10.	U
95-57-8	2-Chlorophenol	10.	U	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U	10.	U
100-51-6	Benzyl alcohol	10.	U	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U	10.	U
95-48-7	2-Methylphenol (o-Cresol)	10.	U	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U	10.	U
108-39-4	3-Methylphenol (m-Cresol)	10.	U	10.	U
67-72-1	Hexachloroethane	10.	U	10.	U
98-95-3	Nitrobenzene	10.	U	10.	U
78-59-1	Isophorone	10.	U	10.	U
88-75-5	2-Nitrophenol	10.	U	10.	U
105-67-9	2,4-Dimethylphenol	10.	U	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U	10.	U
65-85-0	Benzoic acid	50.	U	50.	U
120-83-2	2,4-Dichlorophenol	10.	U	10.	U
120-82-1	1,2,4-Trichlorobenzene	1.4	J	10.	U
91-20-3	Naphthalene	10.	U	10.	U
106-47-8	4-Chloroaniline	20.	U	20.	U
87-68-3	Hexachlorobutadiene	10.	U	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U	10.	U
91-57-6	2-Methylnaphthalene	10.	U	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U	10.	U
95-95-4	2,4,5-Trichlorophenol	10.	U	10.	U
91-58-7	2-Chloronaphthalene	10.	U	10.	U
88-74-4	2-Nitroaniline	50.	U	50.	U
208-96-8	Acenaphthylene	10.	U	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U	10.	U
99-09-2	3-Nitroaniline	50.	U	50.	U
83-32-9	Acenaphthene	10.	U	10.	U
51-28-5	2,4-Dinitrophenol	50.	U	50.	U
132-64-9	Dibenzofuran	10.	U	10.	U

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SPLP-SVOA								
	SAMPLE ID ------>	694-S-B013-S1		694-S-B013-S2				
	ORIGINAL ID ----->	694SB013S1		694SB013S2				
	LAB SAMPLE ID --->	S916905*31		S916905*32				
	ID FROM REPORT -->	694SB013S1		694SB013S2				
	SAMPLE DATE ----->	10/13/99		10/13/99				
	DATE EXTRACTED -->	10/19/99		10/22/99				
	DATE ANALYZED --->	10/21/99		10/25/99				
	MATRIX ---------->	Soil		Soil				
	UNITS ----------->	UG/L		UG/L				
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL			
100-02-7	4-Nitrophenol	50.	U	50.	U			
121-14-2	2,4-Dinitrotoluene	10.	U	10.	U			
86-73-7	Fluorene	10.	U	10.	U			
84-66-2	Diethylphthalate	10.	U	10.	U			
131-11-3	Dimethyl phthalate	10.	U	10.	U			
7005-72-3	4-Chlorophenylphenylether	10.	U	10.	U			
100-01-6	4-Nitroaniline	50.	U	50.	U			
534-52-1	2-Methyl-4,6-Dinitrophenol	50.	U	50.	U			
122-39-4	Diphenylamine	10.	U	10.	U			
101-55-3	4-Bromophenyl-phenylether	10.	U	10.	U			
118-74-1	Hexachlorobenzene	10.	U	10.	U			
87-86-5	Pentachlorophenol	50.	U	50.	U			
85-01-8	Phenanthrene	10.	U	10.	U			
120-12-7	Anthracene	10.	U	10.	U			
84-74-2	Di-n-butylphthalate	10.	U	10.	U			
206-44-0	Fluoranthene	10.	U	10.	U			
129-00-0	Pyrene	10.	U	10.	U			
85-68-7	Butylbenzylphthalate	10.	U	10.	U			
56-55-3	Benzo(a)anthracene	10.	U	10.	U			
91-94-1	3,3'-Dichlorobenzidine	20.	U	20.	U			
218-01-9	Chrysene	10.	U	10.	U			
117-81-7	Bis(2-Ethylhexyl)phthalate (BEHP)	10.	U	10.	U			
117-84-0	Di-n-octyl phthalate	10.	U	10.	U			
205-99-2	Benzo(b)fluoranthene	10.	U	10.	U			
207-08-9	Benzo(k)fluoranthene	10.	U	10.	U			
50-32-8	Benzo(a)pyrene	10.	U	10.	U			
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U	10.	U			
53-70-3	Dibenz(a,h)anthracene	10.	U	10.	U			
191-24-2	Benzo(g,h,i)perylene	10.	U	10.	U			
62-75-9	N-Nitrosodimethylamine	10.	U	10.	U			

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SW846-META													
	SAMPLE ID ------->	694-S-B005-T1		694-S-B005-T2		694-S-B009-T1		694-S-B009-T2		694-S-B012-T1		694-S-B012-T2	
	ORIGINAL ID ----->	694SB005T1		694SB005T2		694SB009T1		694SB009T2		694SB012T1		694SB012T2	
	LAB SAMPLE ID --->	S916905*14		S916905*15		S916905*12		S916905*13		S916905*16		S916905*17	
	ID FROM REPORT -->	694SB005T1		694SB005T2		694SB009T1		694SB009T2		694SB012T1		694SB012T2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/19/99		10/19/99		10/19/99		10/19/99		10/19/99		10/19/99	
	DATE ANALYZED --->	10/20/99		10/20/99		10/21/99		10/21/99		10/21/99		10/20/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil		Soil	
	UNITS ---------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7429-90-5	Aluminum (Al)	35200.		2500.		22500.		11800.		12500.		13100.	
7440-36-0	Antimony (Sb)	0.36	J	0.19	UJ	2.1	J	2.4	J	0.24	UJ	1.3	J
7440-38-2	Arsenic (As)	16.5		2.		11.8		7.5		6.6		7.2	
7440-39-3	Barium (Ba)	46.8		5.6		58.		24.8		22.2		34.9	
7440-41-7	Beryllium (Be)	1.4	J	0.14	U	0.85	J	0.47	J	0.46	J	0.67	J
7440-43-9	Cadmium (Cd)	0.51	J	0.04	UJ	0.49	J	0.42	J	0.09	J	0.32	J
7440-70-2	Calcium (Ca)	10900.		12800.		12900.		63100.		58200.		89100.	
7440-47-3	Chromium (Cr)	65.7		6.5		46.1		34.4		23.		36.9	
7440-48-4	Cobalt (Co)	7.2		0.49	J	4.9		2.7		3.2		2.7	
7440-50-8	Copper (Cu)	37.2	J	2.6	J	72.7	J	43.7	J	24.9	J	122.	J
7439-89-6	Iron (Fe)	34700.	J	3020.	J	23000.	J	9870.	J	11800.	J	13200.	J
7439-92-1	Lead (Pb)	45.4	J	3.1	J	112.	J	39.3	J	21.7	J	79.3	J
7439-95-4	Magnesium (Mg)	5090.		645.		3420.		2980.		2550.		3680.	
7439-96-5	Manganese (Mn)	544.	J	26.4	J	437.	J	226.	J	317.	J	196.	J
7439-97-6	Mercury (Hg)	0.29		0.06		0.34		0.39		1.1		0.3	
7440-02-0	Nickel (Ni)	19.6	J	1.7	J	16.3	J	11.9	J	7.8	J	20.1	J
7440-09-7	Potassium (K)	2590.		281.		1520.		1080.		1190.		1410.	
7782-49-2	Selenium (Se)	0.34	UJ	0.28	UJ	0.33	UJ	0.32	UJ	0.34	UJ	0.33	UJ
7440-22-4	Silver (Ag)	0.06	U	0.05	U	0.06	U	0.06	U	0.07	U	0.08	J
7440-23-5	Sodium (Na)	322.		597.		304.		1760.		892.		1900.	
7440-28-0	Thallium (Tl)	1.4		0.34	U	1.	J	0.39	U	0.42	U	0.41	U
7440-62-2	Vanadium (V)	79.		5.8		54.5		25.7		24.2		27.6	
7440-66-6	Zinc (Zn)	125.	J	14.6	J	161.	J	232.	J	41.4	J	219.	J
7440-31-5	Tin (Sn)	4.3	U	1.5	U	4.5	U	2.4	U	3.	U	4.4	U

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SW846-META											
	SAMPLE ID ------>	694-S-B014-T1		694-S-B014-T2		694-S-B019-T1		694-C-B019-T1		694-S-B019-T2	
	ORIGINAL ID ----->	694SB014T1		694SB014T2		694SB019T1		694CB019T1		694SB019T2	
	LAB SAMPLE ID --->	S916905*18		S916905*19		S916905*20		S916905*22		S916905*21	
	ID FROM REPORT -->	694SB014T1		694SB014T2		694SB019T1		694CB019T1		694SB019T2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/19/99		10/19/99		10/19/99		10/19/99		10/19/99	
	DATE ANALYZED --->	10/20/99		10/20/99		10/20/99		10/20/99		10/21/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
7429-90-5	Aluminum (Al)	22800.		12300.		25500.		24800.		26300.	
7440-36-0	Antimony (Sb)	0.51	J	0.42	J	0.77	J	0.22	UJ	1.9	J
7440-38-2	Arsenic (As)	12.8		7.5		13.9		12.8		15.7	
7440-39-3	Barium (Ba)	28.4		18.9		35.7		31.3		48.6	
7440-41-7	Beryllium (Be)	0.86	J	0.49	J	0.99	J	0.89	J	1.1	J
7440-43-9	Cadmium (Cd)	0.31	J	0.34	J	0.29	J	0.28	J	0.74	J
7440-70-2	Calcium (Ca)	37700.		41400.		31700.		29300.		30300.	
7440-47-3	Chromium (Cr)	43.1		25.6		41.8		42.		61.1	
7440-48-4	Cobalt (Co)	6.1		2.8		6.5		6.5		5.7	
7440-50-8	Copper (Cu)	29.4	J	15.8	J	31.8	J	35.6	J	102.	J
7439-89-6	Iron (Fe)	20800.	J	11900.	J	22300.	J	21900.	J	27600.	J
7439-92-1	Lead (Pb)	56.	J	18.3	J	28.9	J	33.8	J	114.	J
7439-95-4	Magnesium (Mg)	4280.		2580.		4530.		4560.		4490.	
7439-96-5	Manganese (Mn)	381.	J	230.	J	468.	J	403.	J	661.	J
7439-97-6	Mercury (Hg)	0.12		0.1		0.1		0.1		1.5	
7440-02-0	Nickel (Ni)	16.3	J	9.7	J	14.1	J	14.3	J	19.2	J
7440-09-7	Potassium (K)	1670.		954.		2040.		2080.		2130.	
7782-49-2	Selenium (Se)	0.29	UJ	0.32	UJ	0.32	UJ	0.31	UJ	0.42	UJ
7440-22-4	Silver (Ag)	0.06	U	0.06	U	0.06	U	0.06	U	0.08	U
7440-23-5	Sodium (Na)	404.		369.		455.		406.		1040.	
7440-28-0	Thallium (Tl)	0.57	J	0.47	J	0.46	J	0.65	J	0.76	J
7440-62-2	Vanadium (V)	45.9		27.7		49.2		48.		60.1	
7440-66-6	Zinc (Zn)	87.7	J	45.5	J	82.5	J	109.	J	467.	J
7440-31-5	Tin (Sn)	2.9	U	2.3	U	2.8	U	3.9	U	14.3	

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

8346-PEST	SAMPLE ID ------>	694-S-B004-T1		694-C-B004-T1		694-S-B018-T1		694-S-B018-T2	
	ORIGINAL ID ----->	694SB004T1		694CB004T1		694SB018T1		694SB018T2	
	LAB SAMPLE ID --->	S916905*27		S916905*28		S916905*29		S916905*30	
	ID FROM REPORT -->	694SB004T1		694CB004T1		694SB018T1		694SB018T2	
	SAMPLE DATE ----->	10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED -->	10/18/99		10/18/99		10/18/99		10/18/99	
	DATE ANALYZED --->	10/29/99		10/29/99		10/29/99		10/29/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil	
	UNITS ----------->	UG/KG		UG/KG		UG/KG		UG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
319-84-6	alpha-BHC	2.5	U	2.4	U	2.2	U	3.1	U
319-85-7	beta-BHC	2.5	U	2.4	U	2.2	U	3.1	U
319-86-8	delta-BHC	2.5	U	2.4	U	2.2	U	3.1	U
58-89-9	gamma-BHC (Lindane)	2.5	U	2.4	U	2.2	U	3.1	U
76-44-8	Heptachlor	2.5	U	2.4	U	2.2	U	3.1	U
309-00-2	Aldrin	2.5	U	2.4	U	2.2	U	3.1	U
1024-57-3	Heptachlor epoxide	3.8	U	1.5	U	2.2	U	3.1	U
959-98-8	Endosulfan I	2.5	U	2.4	U	2.2	U	3.1	U
60-57-1	Dieldrin	4.9	U	4.8	U	4.3	U	6.	U
72-55-9	4,4'-DDE	0.26	J	0.53	J	4.3	U	0.38	J
72-20-8	Endrin	4.9	U	4.8	U	4.3	U	6.	U
33213-65-9	Endosulfan II	4.9	U	4.8	U	4.3	U	6.	U
72-54-8	4,4'-DDD	4.9	U	4.8	U	4.3	U	0.89	J
1031-07-8	Endosulfan sulfate	4.9	U	4.8	U	4.3	U	6.	U
50-29-3	4,4'-DDT	0.55	J	0.37	J	4.3	U	6.	U
72-43-5	Methoxychlor	25.	U	2.3	U	22.	U	31.	U
53494-70-5	Endrin ketone	0.31	J	0.67	U	4.3	U	6.	U
7421-93-4	Endrin aldehyde	4.9	U	0.69	J	4.3	U	6.	U
5103-71-9	alpha-Chlordane	2.5	U	2.4	U	2.2	U	3.1	U
5103-74-2	gamma-Chlordane	2.5	U	2.4	U	2.2	U	3.1	U
8001-35-2	Toxaphene	250.	U	240.	U	220.	U	310.	U
12674-11-2	Aroclor-1016	49.	U	48.	U	43.	U	60.	U
11104-28-2	Aroclor-1221	99.	U	96.	U	88.	U	120.	U
11141-16-5	Aroclor-1232	49.	U	48.	U	43.	U	60.	U
53469-21-9	Aroclor-1242	49.	U	48.	U	43.	U	60.	U
12672-29-6	Aroclor-1248	49.	U	48.	U	43.	U	60.	U
11097-69-1	Aroclor-1254	49.	U	48.	U	43.	U	60.	U
11096-82-5	Aroclor-1260	49.	U	26.	J	48.		13.	J

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

CV_SVOA	SAMPLE ID ------>	694-S-B013-T1		694-S-B013-T2				
	ORIGINAL ID ----->	694SB013T1		694SB013T2				
	LAB SAMPLE ID --->	S916905*33		S916905*34				
	ID FROM REPORT -->	694SB013T1		694SB013T2				
	SAMPLE DATE ----->	10/13/99		10/13/99				
	DATE EXTRACTED -->	10/18/99		10/18/99				
	DATE ANALYZED --->	10/19/99		10/19/99				
	MATRIX ---------->	Soil		Soil				
	UNITS ----------->	UG/KG		UG/KG				
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL			
108-95-2	Phenol	490.	U	510.	U			
111-44-4	bis(2-Chloroethyl)ether	490.	U	510.	U			
95-57-8	2-Chlorophenol	490.	U	510.	U			
541-73-1	1,3-Dichlorobenzene	490.	U	510.	U			
106-46-7	1,4-Dichlorobenzene	490.	U	510.	U			
100-51-6	Benzyl alcohol	490.	U	510.	U			
95-50-1	1,2-Dichlorobenzene	490.	U	510.	U			
95-48-7	2-Methylphenol (o-Cresol)	490.	U	510.	U			
108-60-1	2,2'-oxybis(1-Chloropropane)	490.	U	510.	U			
621-64-7	N-Nitroso-di-n-propylamine	490.	U	510.	U			
67-72-1	Hexachloroethane	490.	U	510.	U			
98-95-3	Nitrobenzene	490.	U	510.	U			
78-59-1	Isophorone	490.	U	510.	U			
88-75-5	2-Nitrophenol	490.	U	510.	U			
105-67-9	2,4-Dimethylphenol	490.	U	510.	U			
65-85-0	Benzoic acid	2500.	U	2600.	U			
111-91-1	bis(2-Chloroethoxy)methane	490.	U	510.	U			
120-83-2	2,4-Dichlorophenol	490.	U	510.	U			
120-82-1	1,2,4-Trichlorobenzene	490.	U	510.	U			
91-20-3	Naphthalene	490.	U	510.	U			
106-47-8	4-Chloroaniline	980.	U	1000.	U			
87-68-3	Hexachlorobutadiene	490.	U	510.	U			
59-50-7	4-Chloro-3-methylphenol	490.	U	510.	U			
91-57-6	2-Methylnaphthalene	490.	U	510.	U			
77-47-4	Hexachlorocyclopentadiene	490.	U	510.	U			
88-06-2	2,4,6-Trichlorophenol	490.	U	510.	U			
95-95-4	2,4,5-Trichlorophenol	490.	U	510.	U			
91-58-7	2-Chloronaphthalene	490.	U	510.	U			
88-74-4	2-Nitroaniline	2500.	U	2600.	U			
131-11-3	Dimethyl phthalate	490.	U	510.	U			
208-96-8	Acenaphthylene	490.	U	510.	U			
606-20-2	2,6-Dinitrotoluene	490.	U	510.	U			
99-09-2	3-Nitroaniline	2500.	U	2600.	U			
83-32-9	Acenaphthene	490.	U	510.	U			
51-28-5	2,4-Dinitrophenol	2500.	UJ	2600.	UJ			
100-02-7	4-Nitrophenol	2500.	U	2600.	U			

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

CV_SVOA

SAMPLE ID ------>	694-S-B013-T1	694-S-B013-T2
ORIGINAL ID ---->	694SB013T1	694SB013T2
LAB SAMPLE ID -->	S916905*33	S916905*34
ID FROM REPORT -->	694SB013T1	694SB013T2
SAMPLE DATE ---->	10/13/99	10/13/99
DATE EXTRACTED -->	10/18/99	10/18/99
DATE ANALYZED --->	10/19/99	10/19/99
MATRIX --------->	Soil	Soil
UNITS ---------->	UG/KG	UG/KG

CAS #	Parameter	NBCK02	VAL	NBCK02	VAL
132-64-9	Dibenzofuran	490.	U	510.	U
121-14-2	2,4-Dinitrotoluene	490.	U	510.	U
84-66-2	Diethylphthalate	490.	U	510.	U
7005-72-3	4-Chlorophenylphenylether	490.	U	510.	U
86-73-7	Fluorene	490.	U	510.	U
100-01-6	4-Nitroaniline	2500.	U	2600.	U
534-52-1	2-Methyl-4,6-Dinitrophenol	2500.	U	2600.	U
101-55-3	4-Bromophenyl-phenylether	490.	U	510.	U
118-74-1	Hexachlorobenzene	490.	U	510.	U
87-86-5	Pentachlorophenol	2500.	U	2600.	U
85-01-8	Phenanthrene	490.	U	510.	U
120-12-7	Anthracene	490.	U	510.	U
84-74-2	Di-n-butylphthalate	490.	U	510.	U
206-44-0	Fluoranthene	490.	U	510.	U
129-00-0	Pyrene	490.	U	510.	U
85-68-7	Butylbenzylphthalate	490.	U	510.	U
91-94-1	3,3'-Dichlorobenzidine	980.	U	1000.	U
56-55-3	Benzo(a)anthracene	490.	U	510.	U
218-01-9	Chrysene	34.	J	510.	U
117-81-7	Bis(2-Ethylhexyl)phthalate (BEHP)	110.	J	510.	U
117-84-0	Di-n-octyl phthalate	490.	U	510.	U
205-99-2	Benzo(b)fluoranthene	490.	U	510.	U
207-08-9	Benzo(k)fluoranthene	490.	U	510.	U
50-32-8	Benzo(a)pyrene	490.	U	510.	U
193-39-5	Indeno(1,2,3-cd)pyrene	490.	U	510.	U
53-70-3	Dibenz(a,h)anthracene	490.	U	510.	U
191-24-2	Benzo(g,h,i)perylene	490.	U	510.	U
108-39-4	3-Methylphenol (m-Cresol)	490.	U	510.	U
122-39-4	Diphenylamine	490.	U	510.	U
92-87-5	Benzidine	4000.	U	4100.	U
62-75-9	N-Nitrosodimethylamine	490.	U	510.	U

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

TOC							
	SAMPLE ID ------>	694-S-B004-T1	694-C-B004-T1	694-S-B005-T1	694-S-B005-T2	694-S-B009-T1	694-S-B009-T2
	ORIGINAL ID ----->	694SB004T1	694CB004T1	694SB005T1	694SB005T2	694SB009T1	694SB009T2
	LAB SAMPLE ID --->	S916905*27	S916905*28	S916905*14	S916905*15	S916905*12	S916905*13
	ID FROM REPORT -->	694SB004T1	694CB004T1	694SB005T1	694SB005T2	694SB009T1	694SB009T2
	SAMPLE DATE ----->	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99
	DATE EXTRACTED -->	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99
	DATE ANALYZED --->	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99	10/20/99
	MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
	UNITS ----------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
CAS #	Parameter	NBCK02 VAL	NBCK02 VAL	NBCK02 VAL	NBCK02 VAL	NBCK02 VAL	NBCK02 VAL
9999900-01-4	Total Organic Carbon (TOC)	22000.	23000.	33000.	2300.	26000.	8500.

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

SAMPLE ID ------>	694-S-B012-T1	694-S-B012-T2	694-S-B013-T1	694-S-B013-T2	694-S-B014-T1	694-S-B014-T2
ORIGINAL ID ------>	694SB012T1	694SB012T2	694SB013T1	694SB013T2	694SB014T1	694SB014T2
LAB SAMPLE ID --->	S916905*16	S916905*17	S916905*33	S916905*34	S916905*18	S916905*19
ID FROM REPORT -->	694SB012T1	694SB012T2	694SB013T1	694SB013T2	694SB014T1	694SB014T2
SAMPLE DATE ----->	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99	10/13/99
DATE EXTRACTED -->	10/20/99	10/20/99			10/20/99	10/20/99
DATE ANALYZED --->	10/20/99	10/20/99	11/15/99	11/15/99	10/20/99	10/20/99
MATRIX ---------->	Soil	Soil	Soil	Soil	Soil	Soil
UNITS ---------->	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
9999900-01-4	Total Organic Carbon (TOC)	10000.		15000.		41000.		11000.		17000.		5700.	

*** Validation Complete ***

CHARLESTON - ZONE K
CLOUTER ISLAND SOIL
TOTALS, SPLP & TOC for CALCULATING SSLs

TOC											
	SAMPLE ID --------->	694-S-B018-T1		694-S-B018-T2		694-S-B019-T1		694-C-B019-T1		694-S-B019-T2	
	ORIGINAL ID ------>	694SB018T1		694SB018T2		694SB019T1		694CB019T1		694SB019T2	
	LAB SAMPLE ID ---->	S916905*29		S916905*30		S916905*20		S916905*22		S916905*21	
	ID FROM REPORT --->	694SB018T1		694SB018T2		694SB019T1		694CB019T1		694SB019T2	
	SAMPLE DATE ------>	10/13/99		10/13/99		10/13/99		10/13/99		10/13/99	
	DATE EXTRACTED --->	10/20/99		10/20/99		10/20/99		10/20/99		10/20/99	
	DATE ANALYZED ---->	10/20/99		10/20/99		10/20/99		10/20/99		10/20/99	
	MATRIX ---------->	Soil		Soil		Soil		Soil		Soil	
	UNITS ----------->	MG/KG		MG/KG		MG/KG		MG/KG		MG/KG	
CAS #	Parameter	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL	NBCK02	VAL
9999900-01-4	Total Organic Carbon (TOC)	26000.		30000.		20000.		20000.		20000.	