PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
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PL I.D. **009160**

December 29, 2000

NMED HWB
2044 A Galisteo Street
Santa Fe, NM 87505

Project Name/Number: RAFT TRIP SEDS HWB-WRC-2000-CGF

Attention: John Young

On **09/29/00**, Pinnacle Laboratories Inc., (ADHS License No. AZ0592 pending), received a request to analyze **sediment** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

This report is being issued to include Isotopic Americium, Chlorinated Herbicides and Dioxin. This report is now complete.

Sample volume has been reserved to perform particle size analysis when a method is prescribed.

Uranium was analyzed by ICP-MS. Due to the low levels present, Enviro-Test believed there would be no benefit in providing Isotopic Uranium data. A letter that explains the Uranium protocol is attached.

All analyses were performed by Enviro-Test Laboratories, LLC., Casper, WY and Edmonton, Canada.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:jt

Enclosure

HSWA RHWK 6/19/2000 OCC-Site

TL

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PINNACLE LABORATORIES

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CLIENT	: NMED DOE OB	DATE RECEIVED	: 09/29/00
PROJECT #	: HWB-WRC-2000-CG		
PROJECT NAME	: RAFT TRIP SEDS	REPORT DATE	: 12/29/00

PL ID: 009160

	PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	009160-01	PA/ASH-01A	SEDIMENT	09/25/00
02	009160-02	PA/ASH-02A	SEDIMENT	09/25/00
03	009160-03	PA/ASH-0.1	SEDIMENT	09/26/00
04	009160-04	PA/ASH-0.1D	SEDIMENT	09/26/00
05	009160-05	PA/ASH-01	SEDIMENT	09/25/00
06	009160-06	PA/ASH-02	SEDIMENT	09/25/00
07	009160-07	WATER/ASH-0.1	SEDIMENT	09/26/00
08	009160-08	WATER/ASH-0.1A	SEDIMENT	09/26/00

---TOTALS---

MATRIX	#SAMPLES
SEDIMENT	8

Enviro-Test Laboratories LLC.

Chemical Analysis Report

PINNACLE LABORATORIES, INC
Attn: PROJECT MANAGER
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107

Date: 27 DEC 2000

Lab Work Order #: L1961
Project P.O. #: PLI ID #009160
Project Reference:
Comments:

Date Received: 03 OCT 2000

APPROVED BY: Debra Gillabaum for
Dave Demorest
Project Manager

ETL Enviro • Test
LABORATORIES LLC.
420 West Street Casper, Wyoming 8260
Phone: (307) 235-5741 Fax:(307) 266-1676
Toll Free 1(800)666-030

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 2 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-01 PA/ASH-01A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-1
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	274	mg/kg	5		11-OCT-00	MGB
Americium-241	0.03 +/- 0.02	pCi/g	0.005	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<2.5	mg/kg	2.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	274	mg/L	2		11-OCT-00	MGB
Bromide	<20	mg/kg	20		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	7	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	1.8	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.3 +/- 0.2	pCi/g	0.3	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	12.2	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	0.4	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	0.7	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	280000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	46.0	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	156	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	1000	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	35000	mg/kg	100			ETLSK
Uranium (U)	1.61	mg/kg	0.0005		27-OCT-00	GC
pH	7.66	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	11300	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0337	mg/kg	0.001			GC
Arsenic (As)-Total	1.90	mg/kg	0.006			GC
Barium (Ba)-Total	134	mg/kg	0.01			GC
Beryllium (Be)-Total	0.784	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.139	mg/kg	0.02			GC
Calcium (Ca)-Total	7710	mg/kg	2			GC
Chromium (Cr)-Total	12.2	mg/kg	0.01			GC
Cobalt (Co)-Total	4.20	mg/kg	0.006			GC
Copper (Cu)-Total	12.2	mg/kg	0.01			GC
Iron (Fe)-Total	9910	mg/kg	1			GC
Lead (Pb)-Total	13.9	mg/kg	0.009			GC
Magnesium (Mg)-Total	2370	mg/kg	0.1			GC

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 3 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-01 PA/ASH-01A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-1
Matrix: SOLID SAMPLE

Test Description		Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	516	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	9.58	mg/kg	0.01			GC
	Potassium (K)-Total	2110	mg/kg	0.5			GC
	Selenium (Se)-Total	0.271	mg/kg	0.03			GC
	Silver (Ag)-Total	0.277	mg/kg	0.01			GC
	Sodium (Na)-Total	458	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.156	mg/kg	0.01			GC
	Vanadium (V)-Total	19.1	mg/kg	0.006			GC
	Zinc (Zn)-Total	64.2	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<1.6 +/- 0.7	pCi/g	1.6	18-OCT-00	02-NOV-00	SLT/P LJ
	Strontium-89	<1.6 +/- 0.7	pCi/g	1.6	18-OCT-00	02-NOV-00	SLT/P LJ
Modified 8270 SIMS							
	Naphthalene	73	ug/kg	3	09-OCT-00	12-OCT-00	PR
	2-methylnaphthalene	26	ug/kg	3	09-OCT-00	12-OCT-00	PR
	1-Methylnaphthalene	22	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthylene	4.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluorene	7.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Phenanthrene	40	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Anthracene	3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluoranthene	10	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Pyrene	9.3	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)anthracene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Chrysene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(b)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(k)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(ghi)perylene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	79	%	51.1-137.9	09-OCT-00	12-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	110	%	70.31-145	09-OCT-00	12-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	117	%	75.29-129.04	09-OCT-00	12-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 4 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-01PA/ASH-01A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-1
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.31 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.18 +/- 0.04	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.31 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.042 +/- 0.015	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.040 +/- 0.014	pCi/g	0.006	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
2,4-DB	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
Dalapon	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
Dicamba	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
Dinoseb	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
MCPA	<14500	ug/kg	14500	28-NOV-00	08-DEC-00	GPL
MCPP	<14500	ug/kg	14500	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<145	ug/kg	145	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	31.1 +/- 10.4	pCi/g	3.1	16-OCT-00	27-OCT-00	NRF
Gross Beta	48.7 +/- 3.6	pCi/g	3.2	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.74 +/- 0.12	pCi/g	0.15		17-OCT-00	DMF
Silver-110m	-0.23 +/- 0.60	pCi/g	1		17-OCT-00	DMF
Americium-241	0.09 +/- 0.09	pCi/g	0.14		17-OCT-00	DMF
Beryllium-7	1.18 +/- 0.62	pCi/g	0.48		17-OCT-00	DMF
Bismuth-212	1.59 +/- 0.07	pCi/g	0.61		17-OCT-00	DMF
Bismuth-214	1.86 +/- 0.12	pCi/g	0.09		17-OCT-00	DMF
Cerium-139	-0.007 +/- 0.02	pCi/g	0.04		17-OCT-00	DMF
Cerium-144	-0.001 +/- 0.16	pCi/g	0.25		17-OCT-00	DMF
Cobalt-56	-0.02 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cobalt-57	-0.007 +/- 0.02	pCi/g	0.03		17-OCT-00	DMF
Cobalt-58	0.004 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cobalt-60	0.01 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Chromium-51	0.02 +/- 0.04	pCi/g	0.67		17-OCT-00	DMF
Cesium-134	-0.003 +/- 0.03	pCi/g	0.04		17-OCT-00	DMF
Cesium-137	1.42 +/- 0.07	pCi/g	0.05		17-OCT-00	DMF
Europium-152	0.09 +/- 0.14	pCi/g	0.24		17-OCT-00	DMF
Europium-154	-0.009 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 5 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-01 PA/ASH-01A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-1
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.47 +/- 0.07	pCi/g	0.08		17-OCT-00	DMF
Iron-59	0.02 +/- 0.08	pCi/g	0.13		17-OCT-00	DMF
Iodine-131	0.06 +/- 0.27	pCi/g	0.46		17-OCT-00	DMF
Potassium-40	33.9 +/- 1.09	pCi/g	0.42		17-OCT-00	DMF
Manganese-54	-0.003 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Sodium-22	-0.01 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Niobium-94	-0.01 +/- 0.03	pCi/g	0.04		17-OCT-00	DMF
Niobium-95	0.01 +/- 0.06	pCi/g	0.08		17-OCT-00	DMF
Protactinium-234m	16.2 +/- 7.77	pCi/g	6.46		17-OCT-00	DMF
Lead-212	1.59 +/- 0.07	pCi/g	0.07		17-OCT-00	DMF
Lead-214	1.86 +/- 0.12	pCi/g	0.09		17-OCT-00	DMF
Ruthenium-106	2.51 +/- 0.27	pCi/g	0.19		17-OCT-00	DMF
Antimony-124	-0.03 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Antimony-125	-0.007 +/- 0.07	pCi/g	0.12		17-OCT-00	DMF
Scandium-46	0.41 +/- 0.07	pCi/g	0.06		17-OCT-00	DMF
Strontium-85	0.07 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Thorium-227	0.03 +/- 0.20	pCi/g	0.29		17-OCT-00	DMF
Thorium-234	4.87 +/- 1.02	pCi/g	0.49		17-OCT-00	DMF
Thallium-208	0.50 +/- 0.05	pCi/g	0.04		17-OCT-00	DMF
Uranium-235	0.38 +/- 0.06	pCi/g	0.27		17-OCT-00	DMF
Zinc-65	-0.01 +/- 0.08	pCi/g	0.11		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00

PO No.:
WO NO.: L1961

Sample ID: 009160-02 PA/ASH-02A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-2
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	231	mg/kg	5		11-OCT-00	MGB
Americium-241	0.04 +/- 0.02	pCi/g	0.006	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<2.5	mg/kg	2.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	231	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	<5	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	5.3	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.5 +/- 0.3	pCi/g	0.5	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	13.4	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	0.4	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	0.5	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	265000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	61.8	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	49	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	1700	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	43000	mg/kg	100			ETLSK
Uranium (U)	2.10	mg/kg	0.0005		27-OCT-00	GC
pH	7.74	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	13000	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0949	mg/kg	0.001			GC
Arsenic (As)-Total	2.48	mg/kg	0.006			GC
Barium (Ba)-Total	182	mg/kg	0.01			GC
Beryllium (Be)-Total	0.877	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.277	mg/kg	0.02			GC
Calcium (Ca)-Total	10600	mg/kg	2			GC
Chromium (Cr)-Total	12.9	mg/kg	0.01			GC
Cobalt (Co)-Total	5.18	mg/kg	0.006			GC
Copper (Cu)-Total	14.9	mg/kg	0.01			GC
Iron (Fe)-Total	10500	mg/kg	1			GC
Lead (Pb)-Total	23.8	mg/kg	0.009			GC
Magnesium (Mg)-Total	2750	mg/kg	0.1			GC

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2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 7 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-02 PA/ASH-02A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-2
Matrix: SOLID SAMPLE

	Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	812	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	10.0	mg/kg	0.01			GC
	Potassium (K)-Total	2510	mg/kg	0.5			GC
	Selenium (Se)-Total	0.364	mg/kg	0.03			GC
	Silver (Ag)-Total	0.268	mg/kg	0.01			GC
	Sodium (Na)-Total	391	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.192	mg/kg	0.01			GC
	Vanadium (V)-Total	20.7	mg/kg	0.006			GC
	Zinc (Zn)-Total	71.1	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<1.6 +/- 0.7	pCi/g	1.6	18-OCT-00	02-NOV-00	SLT/PLJ
	Strontium-89	<1.6 +/- 0.7	pCi/g	1.6	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS							
	Naphthalene	290	ug/kg	6	09-OCT-00	12-OCT-00	PR
	2-methylnaphthalene	120	ug/kg	6	09-OCT-00	12-OCT-00	PR
	1-Methylnaphthalene	100	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Acenaphthylene	17	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Acenaphthene	6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Fluorene	25	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Phenanthrene	110	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Anthracene	12	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Fluoranthene	24	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Pyrene	20	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Benzo(a)anthracene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Chrysene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Benzo(b)fluoranthene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Benzo(k)fluoranthene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Benzo(a)pyrene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Dibenzo(a,h)Anthracene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
	Benzo(ghi)perylene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	94	%	51.1-137.9	09-OCT-00	12-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	105	%	70.31-145	09-OCT-00	12-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	115	%	75.29-129.04	09-OCT-00	12-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 8 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-02 PA/ASH-02A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-2
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.26 +/- 0.08	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.17 +/- 0.06	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.20 +/- 0.07	pCi/g	0.02	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.042 +/- 0.016	pCi/g	0.006	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.062 +/- 0.020	pCi/g	0.008	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
2,4-DB	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
Dalapon	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
Dicamba	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
Dinoseb	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
MCPA	<15700	ug/kg	15700	28-NOV-00	08-DEC-00	GPL
MCPP	<15700	ug/kg	15700	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<157	ug/kg	157	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	32.5 +/- 12.9	pCi/g	3.5	16-OCT-00	27-OCT-00	NRF
Gross Beta	51.8 +/- 3.9	pCi/g	3.4	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.62 +/- 0.22	pCi/g	0.26		17-OCT-00	DMF
Silver-110m	0.18 +/- 1.08	pCi/g	1.81		17-OCT-00	DMF
Americium-241	0.10 +/- 0.07	pCi/g	0.1		17-OCT-00	DMF
Beryllium-7	0.54 +/- 0.54	pCi/g	0.92		17-OCT-00	DMF
Bismuth-212	2.25 +/- 1.17	pCi/g	1.06		17-OCT-00	DMF
Bismuth-214	2.15 +/- 1.67	pCi/g	0.15		17-OCT-00	DMF
Cerium-139	0.01 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Cerium-144	-0.28 +/- 0.22	pCi/g	0.36		17-OCT-00	DMF
Cobalt-56	0.04 +/- 0.06	pCi/g	0.1		17-OCT-00	DMF
Cobalt-57	-0.02 +/- 0.03	pCi/g	0.04		17-OCT-00	DMF
Cobalt-58	-0.05 +/- 0.06	pCi/g	0.09		17-OCT-00	DMF
Cobalt-60	0.02 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Chromium-51	-0.14 +/- 0.71	pCi/g	1.07		17-OCT-00	DMF
Cesium-134	-0.008 +/- 0.05	pCi/g	0.07		17-OCT-00	DMF
Cesium-137	3.48 +/- 0.14	pCi/g	0.08		17-OCT-00	DMF
Europium-152	0.29 +/- 0.24	pCi/g	0.42		17-OCT-00	DMF
Europium-154	-0.06 +/- 0.05	pCi/g	0.09		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 9 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-02 PA/ASH-02A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-2
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.48 +/- 0.10	pCi/g	0.09		17-OCT-00	DMF
Iron-59	-0.02 +/- 0.15	pCi/g	0.24		17-OCT-00	DMF
Iodine-131	0.22 +/- 0.46	pCi/g	0.76		17-OCT-00	DMF
Potassium-40	33.1 +/- 1.5	pCi/g	0.67		17-OCT-00	DMF
Manganese-54	-0.007 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Sodium-22	-0.05 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Niobium-94	-0.02 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Niobium-95	0.10 +/- 0.09	pCi/g	0.14		17-OCT-00	DMF
Protactinium-234m	14.1 +/- 7.6	pCi/g	13.4		17-OCT-00	DMF
Lead-212	1.80 +/- 0.10	pCi/g	1.06		17-OCT-00	DMF
Lead-214	2.08 +/- 0.14	pCi/g	0.15		17-OCT-00	DMF
Ruthenium-106	2.59 +/- 0.43	pCi/g	0.32		17-OCT-00	DMF
Antimony-124	-0.006 +/- 0.07	pCi/g	0.1		17-OCT-00	DMF
Antimony-125	0.12 +/- 0.13	pCi/g	0.22		17-OCT-00	DMF
Scandium-46	0.53 +/- 0.12	pCi/g	0.11		17-OCT-00	DMF
Strontium-85	0.31 +/- 0.06	pCi/g	0.11		17-OCT-00	DMF
Thorium-227	2.92 +/- 0.35	pCi/g	0.57		17-OCT-00	DMF
Thorium-234	2.60 +/- 0.86	pCi/g	0.6		17-OCT-00	DMF
Thallium-208	0.56 +/- 0.09	pCi/g	0.08		17-OCT-00	DMF
Uranium-235	0.32 +/- 0.07	pCi/g	0.38		17-OCT-00	DMF
Zinc-65	-0.03 +/- 0.14	pCi/g	0.19		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
HMX	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS
Nitrobenzene	<100	ug/kg	95.2	09-OCT-00	20-OCT-00	SS
RDX	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS
Tetryl	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS
o-nitrotoluene	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS
p-nitrotoluene	<200	ug/kg	190	09-OCT-00	20-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 10 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-03 PA/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-3
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	226	mg/kg	5		11-OCT-00	MGB
Americium-241	0.05 +/- 0.03	pCi/g	0.02	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<0.50	mg/kg	0.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	226	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	34	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	6.0	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.6 +/- 0.3	pCi/g	0.6	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	25.3	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	1.86	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	1.7	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	181000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	136	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	25	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	5000	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	119000	mg/kg	100			ETLSK
Uranium (U)	2.74	mg/kg	0.0005		27-OCT-00	GC
pH	7.99	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	35600	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0926	mg/kg	0.001			GC
Arsenic (As)-Total	4.85	mg/kg	0.006			GC
Barium (Ba)-Total	520	mg/kg	0.01			GC
Beryllium (Be)-Total	1.71	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.966	mg/kg	0.02			GC
Calcium (Ca)-Total	22000	mg/kg	2			GC
Chromium (Cr)-Total	33.7	mg/kg	0.01			GC
Cobalt (Co)-Total	10.1	mg/kg	0.006			GC
Copper (Cu)-Total	34.0	mg/kg	0.01			GC
Iron (Fe)-Total	20600	mg/kg	1			GC
Lead (Pb)-Total	39.5	mg/kg	0.009			GC
Magnesium (Mg)-Total	5340	mg/kg	0.1			GC

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Chemical Analysis Report

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2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 11 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-03 PA/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-3
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Target Analyte List of Metals						
Manganese (Mn)-Total	1960	mg/kg	0.02			GC
Mercury (Hg)-Total	0.219	mg/kg	0.02			GC
Nickel (Ni)-Total	25.8	mg/kg	0.01			GC
Potassium (K)-Total	5030	mg/kg	0.5			GC
Selenium (Se)-Total	1.18	mg/kg	0.03			GC
Silver (Ag)-Total	0.909	mg/kg	0.01			GC
Sodium (Na)-Total	384	mg/kg	0.07			GC
Thallium (Tl)-Total	0.406	mg/kg	0.01			GC
Vanadium (V)-Total	42.4	mg/kg	0.006			GC
Zinc (Zn)-Total	121	mg/kg	0.04			GC
Strontium-89/90						
Strontium-90	2.5 +/- 1	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Strontium-89	<2 +/- 1	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS						
Naphthalene	480	ug/kg	6	09-OCT-00	14-OCT-00	PR
2-methylnaphthalene	200	ug/kg	6	09-OCT-00	14-OCT-00	PR
1-Methylnaphthalene	130	ug/kg	6	09-OCT-00	14-OCT-00	PR
Acenaphthylene	23	ug/kg	6	09-OCT-00	14-OCT-00	PR
Acenaphthene	17	ug/kg	6	09-OCT-00	14-OCT-00	PR
Fluorene	45	ug/kg	6	09-OCT-00	14-OCT-00	PR
Phenanthrene	320	ug/kg	6	09-OCT-00	14-OCT-00	PR
Anthracene	52	ug/kg	6	09-OCT-00	14-OCT-00	PR
Fluoranthene	56	ug/kg	6	09-OCT-00	14-OCT-00	PR
Pyrene	78	ug/kg	6	09-OCT-00	14-OCT-00	PR
Benzo(a)anthracene	37	ug/kg	6	09-OCT-00	14-OCT-00	PR
Chrysene	33	ug/kg	6	09-OCT-00	14-OCT-00	PR
Benzo(b)fluoranthene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Benzo(k)fluoranthene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Benzo(a)pyrene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Indeno(1,2,3-c,d)pyrene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Dibenzo(a,h)Anthracene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Benzo(ghi)perylene	<6.0	ug/kg	6	09-OCT-00	14-OCT-00	PR
Surrogate: Nitrobenzene d5(Surr.)	100	%	51.1-137.9	09-OCT-00	14-OCT-00	PR
Surrogate: 2-Fluorobiphenyl (surr)	104	%	70.31-145	09-OCT-00	14-OCT-00	PR
Surrogate: P-Terphenyl D14 (Surr)	115	%	75.29-129.04	09-OCT-00	14-OCT-00	PR
Isotopic Thorium 227/8/30/2						

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 12 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-03 PA/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-3
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.47 +/- 0.15	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.36 +/- 0.12	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.34 +/- 0.11	pCi/g	0.02	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.000 +/- 0.028	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.132 +/- 0.023	pCi/g	0.003	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
2,4-DB	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
Dalapon	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
Dicamba	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
Dinoseb	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
MCPA	<12800	ug/kg	12800	28-NOV-00	08-DEC-00	GPL
MCPP	<12800	ug/kg	12800	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<128	ug/kg	128	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	45.4 +/- 15.5	pCi/g	3.2	16-OCT-00	27-OCT-00	NRF
Gross Beta	67.4 +/- 4.4	pCi/g	3.3	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	2.10 +/- 0.23	pCi/g	0.28		17-OCT-00	DMF
Silver-110m	0.17 +/- 1.23	pCi/g	2.06		17-OCT-00	DMF
Americium-241	0.18 +/- 0.16	pCi/g	0.25		17-OCT-00	DMF
Beryllium-7	1.70 +/- 0.82	pCi/g	1.02		17-OCT-00	DMF
Bismuth-212	2.81 +/- 1.19	pCi/g	1.1		17-OCT-00	DMF
Bismuth-214	1.87 +/- 0.19	pCi/g	0.17		17-OCT-00	DMF
Cerium-139	0.007 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Cerium-144	0.24 +/- 0.30	pCi/g	0.5		17-OCT-00	DMF
Cobalt-56	-0.009 +/- 0.07	pCi/g	0.11		17-OCT-00	DMF
Cobalt-57	0.03 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Cobalt-58	-0.04 +/- 0.06	pCi/g	0.1		17-OCT-00	DMF
Cobalt-60	-0.01 +/- 0.05	pCi/g	0.09		17-OCT-00	DMF
Chromium-51	0.48 +/- 0.08	pCi/g	1.35		17-OCT-00	DMF
Cesium-134	0.003 +/- 0.06	pCi/g	0.08		17-OCT-00	DMF
Cesium-137	5.28 +/- 0.16	pCi/g	0.09		17-OCT-00	DMF
Europium-152	0.27 +/- 0.26	pCi/g	0.45		17-OCT-00	DMF
Europium-154	0.08 +/- 0.07	pCi/g	0.13		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 13 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-03 PA/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-3
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.45 +/- 0.12	pCi/g	0.19		17-OCT-00	DMF
Iron-59	-0.13 +/- 0.15	pCi/g	0.23		17-OCT-00	DMF
Iodine-131	0.02 +/- 0.57	pCi/g	0.95		17-OCT-00	DMF
Potassium-40	38.8 +/- 1.8	pCi/g	0.75		17-OCT-00	DMF
Manganese-54	0.09 +/- 0.06	pCi/g	0.09		17-OCT-00	DMF
Sodium-22	-0.005 +/- 0.06	pCi/g	0.09		17-OCT-00	DMF
Niobium-94	0.01 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Niobium-95	-0.005 +/- 0.10	pCi/g	0.14		17-OCT-00	DMF
Protactinium-234m	17.8 +/- 7.96	pCi/g	14.5		17-OCT-00	DMF
Lead-212	2.30 +/- 0.13	pCi/g	0.14		17-OCT-00	DMF
Lead-214	2.09 +/- 0.18	pCi/g	0.18		17-OCT-00	DMF
Ruthenium-106	5.02 +/- 0.51	pCi/g	0.36		17-OCT-00	DMF
Antimony-124	-0.01 +/- 0.08	pCi/g	0.12		17-OCT-00	DMF
Antimony-125	0.07 +/- 0.15	pCi/g	0.25		17-OCT-00	DMF
Scandium-46	0.37 +/- 0.12	pCi/g	0.17		17-OCT-00	DMF
Strontium-85	0.15 +/- 0.07	pCi/g	0.11		17-OCT-00	DMF
Thorium-227	0.12 +/- 0.39	pCi/g	0.56		17-OCT-00	DMF
Thorium-234	8.69 +/- 2.03	pCi/g	0.94		17-OCT-00	DMF
Thallium-208	0.70 +/- 0.09	pCi/g	0.09		17-OCT-00	DMF
Uranium-235	0.58 +/- 0.11	pCi/g	0.52		17-OCT-00	DMF
Zinc-65	0.02 +/- 0.14	pCi/g	0.2		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 14 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-04 PA/ASH-0.1D
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-4
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	590	mg/kg	5		11-OCT-00	MGB
Americium-241	0.06 +/- 0.03	pCi/g	0.01	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<2.5	mg/kg	2.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	590	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	86	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	4.9	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	1.4	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.6 +/- 0.3	pCi/g	0.6	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	24.9	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	24.9	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	10.4	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	157000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	92.8	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	156	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	6300	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	119000	mg/kg	100			ETLSK
Uranium (U)	1.95	mg/kg	0.0005		27-OCT-00	GC
pH	7.70	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	20300	mg/kg	0.5			GC
Antimony (Sb)-Total	1.13	mg/kg	0.001			GC
Arsenic (As)-Total	5.24	mg/kg	0.006			GC
Barium (Ba)-Total	615	mg/kg	0.01			GC
Beryllium (Be)-Total	1.80	mg/kg	0.02			GC
Cadmium (Cd)-Total	1.01	mg/kg	0.02			GC
Calcium (Ca)-Total	19100	mg/kg	2			GC
Chromium (Cr)-Total	30.6	mg/kg	0.01			GC
Cobalt (Co)-Total	10.4	mg/kg	0.006			GC
Copper (Cu)-Total	34.7	mg/kg	0.01			GC
Iron (Fe)-Total	14200	mg/kg	1			GC
Lead (Pb)-Total	42.3	mg/kg	0.009			GC
Magnesium (Mg)-Total	668	mg/kg	0.1			GC

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 15 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-04 PA/ASH-0.1D
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-4
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Target Analyte List of Metals						
Manganese (Mn)-Total	1750	mg/kg	0.02			GC
Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
Nickel (Ni)-Total	21.2	mg/kg	0.01			GC
Potassium (K)-Total	9590	mg/kg	0.5			GC
Selenium (Se)-Total	<0.0300	mg/kg	0.03			GC
Silver (Ag)-Total	0.935	mg/kg	0.01			GC
Sodium (Na)-Total	5990	mg/kg	0.07			GC
Thallium (Tl)-Total	0.470	mg/kg	0.01			GC
Vanadium (V)-Total	55.8	mg/kg	0.006			GC
Zinc (Zn)-Total	118	mg/kg	0.04			GC
Strontium-89/90						
Strontium-90	2.7 +/- 1	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Strontium-89	<2 +/- 1	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS						
Naphthalene	550	ug/kg	6	09-OCT-00	12-OCT-00	PR
2-methylnaphthalene	220	ug/kg	6	09-OCT-00	12-OCT-00	PR
1-Methylnaphthalene	150	ug/kg	6	09-OCT-00	12-OCT-00	PR
Acenaphthylene	30	ug/kg	6	09-OCT-00	12-OCT-00	PR
Acenaphthene	12	ug/kg	6	09-OCT-00	12-OCT-00	PR
Fluorene	53	ug/kg	6	09-OCT-00	12-OCT-00	PR
Phenanthrene	340	ug/kg	6	09-OCT-00	12-OCT-00	PR
Anthracene	54	ug/kg	6	09-OCT-00	12-OCT-00	PR
Fluoranthene	64	ug/kg	6	09-OCT-00	12-OCT-00	PR
Pyrene	63	ug/kg	6	09-OCT-00	12-OCT-00	PR
Benzo(a)anthracene	34	ug/kg	6	09-OCT-00	12-OCT-00	PR
Chrysene	31	ug/kg	6	09-OCT-00	12-OCT-00	PR
Benzo(b)fluoranthene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Benzo(k)fluoranthene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Benzo(a)pyrene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Indeno(1,2,3-c,d)pyrene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Dibenzo(a,h)Anthracene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Benzo(ghi)perylene	<6.0	ug/kg	6	09-OCT-00	12-OCT-00	PR
Surrogate: Nitrobenzene d5(Surr.)	94	%	51.1-137.9	09-OCT-00	12-OCT-00	PR
Surrogate: 2-Fluorobiphenyl (surr)	75	%	70.31-145	09-OCT-00	12-OCT-00	PR
Surrogate: P-Terphenyl D14 (Surr)	80	%	75.29-129.04	09-OCT-00	12-OCT-00	PR
Isotopic Thorium 227/8/30/2						

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 16 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-04 PA/ASH-0.1D
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-4
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.54 +/- 0.14	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.41 +/- 0.11	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.39 +/- 0.11	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.000 +/- 0.034	pCi/g	0.008	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.156 +/- 0.038	pCi/g	0.008	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
2,4-DB	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
Dalapon	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
Dicamba	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
Dinoseb	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
MCPA	<12000	ug/kg	12000	28-NOV-00	08-DEC-00	GPL
MCPP	<12000	ug/kg	12000	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<120	ug/kg	120	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	45.3 +/- 15.7	pCi/g	2.9	16-OCT-00	27-OCT-00	NRF
Gross Beta	66.3 +/- 4.4	pCi/g	3.2	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	2.05 +/- 0.30	pCi/g	0.46		17-OCT-00	DMF
Silver-110m	-0.11 +/- 1.94	pCi/g	3.25		17-OCT-00	DMF
Americium-241	0.17 +/- 0.11	pCi/g	0.17		17-OCT-00	DMF
Beryllium-7	2.01 +/- 1.03	pCi/g	1.8		17-OCT-00	DMF
Bismuth-212	3.78 +/- 1.48	pCi/g	1.84		17-OCT-00	DMF
Bismuth-214	2.18 +/- 0.28	pCi/g	0.27		17-OCT-00	DMF
Cerium-139	-0.02 +/- 0.07	pCi/g	0.11		17-OCT-00	DMF
Cerium-144	-0.25 +/- 0.40	pCi/g	0.65		17-OCT-00	DMF
Cobalt-56	-0.02 +/- 0.11	pCi/g	0.17		17-OCT-00	DMF
Cobalt-57	0.001 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Cobalt-58	0.02 +/- 0.10	pCi/g	0.17		17-OCT-00	DMF
Cobalt-60	0.10 +/- 0.09	pCi/g	0.16		17-OCT-00	DMF
Chromium-51	0.08 +/- 1.22	pCi/g	1.97		17-OCT-00	DMF
Cesium-134	-0.11 +/- 0.10	pCi/g	0.13		17-OCT-00	DMF
Cesium-137	5.60 +/- 0.27	pCi/g	0.14		17-OCT-00	DMF
Europium-152	0.41 +/- 0.41	pCi/g	0.73		17-OCT-00	DMF
Europium-154	-0.05 +/- 0.10	pCi/g	0.16		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 17 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-04 PA/ASH-0.1D
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-4
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.55 +/- 0.16	pCi/g	0.2		17-OCT-00	DMF
Iron-59	0.04 +/- 0.25	pCi/g	0.41		17-OCT-00	DMF
Iodine-131	-0.17 +/- 0.90	pCi/g	1.44		17-OCT-00	DMF
Potassium-40	36.9 +/- 2.2	pCi/g	1.28		17-OCT-00	DMF
Manganese-54	0.01 +/- 0.09	pCi/g	0.14		17-OCT-00	DMF
Sodium-22	-0.008 +/- 0.09	pCi/g	0.15		17-OCT-00	DMF
Niobium-94	-0.006 +/- 0.08	pCi/g	0.13		17-OCT-00	DMF
Niobium-95	0.17 +/- 0.16	pCi/g	0.24		17-OCT-00	DMF
Protactinium-234m	7.08 +/- 12.9	pCi/g	21.6		17-OCT-00	DMF
Lead-212	2.64 +/- 0.19	pCi/g	0.2		17-OCT-00	DMF
Lead-214	2.41 +/- 0.24	pCi/g	0.26		17-OCT-00	DMF
Ruthenium-106	4.90 +/- 0.80	pCi/g	0.58		17-OCT-00	DMF
Antimony-124	-0.06 +/- 0.13	pCi/g	0.18		17-OCT-00	DMF
Antimony-125	0.11 +/- 0.23	pCi/g	0.39		17-OCT-00	DMF
Scandium-46	0.65 +/- 0.24	pCi/g	0.18		17-OCT-00	DMF
Strontium-85	0.66 +/- 0.12	pCi/g	0.2		17-OCT-00	DMF
Thorium-227	4.05 +/- 0.61	pCi/g	0.99		17-OCT-00	DMF
Thorium-234	3.68 +/- 1.18	pCi/g	1.05		17-OCT-00	DMF
Thallium-208	0.93 +/- 0.15	pCi/g	0.13		17-OCT-00	DMF
Uranium-235	0.50 +/- 0.13	pCi/g	0.69		17-OCT-00	DMF
Zinc-65	0.02 +/- 0.23	pCi/g	0.32		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	20-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	20-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 18 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-05 PA/ASH-01
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-5
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	210	mg/kg	5		11-OCT-00	MGB
Americium-241	0.01 +/- 0.01	pCi/g	0.006	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<0.50	mg/kg	0.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	210	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	7	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	2.6	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.5 +/- 0.3	pCi/g	0.5	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	13.3	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	0.58	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	0.6	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	275000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	48.0	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	12	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	<1000	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	33000	mg/kg	100			ETLSK
Uranium (U)	1.44	mg/kg	0.0005		27-OCT-00	GC
pH	7.71	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	12000	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0303	mg/kg	0.001			GC
Arsenic (As)-Total	2.06	mg/kg	0.006			GC
Barium (Ba)-Total	139	mg/kg	0.01			GC
Beryllium (Be)-Total	0.872	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.150	mg/kg	0.02			GC
Calcium (Ca)-Total	6830	mg/kg	2			GC
Chromium (Cr)-Total	13.5	mg/kg	0.01			GC
Cobalt (Co)-Total	4.26	mg/kg	0.006			GC
Copper (Cu)-Total	12.4	mg/kg	0.01			GC
Iron (Fe)-Total	9950	mg/kg	1			GC
Lead (Pb)-Total	14.5	mg/kg	0.009			GC
Magnesium (Mg)-Total	2330	mg/kg	0.1			GC

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 19 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-05 PA/ASH-01
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-5
Matrix: SOLID SAMPLE

	Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	596	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	8.37	mg/kg	0.01			GC
	Potassium (K)-Total	2190	mg/kg	0.5			GC
	Selenium (Se)-Total	0.265	mg/kg	0.03			GC
	Silver (Ag)-Total	0.297	mg/kg	0.01			GC
	Sodium (Na)-Total	426	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.167	mg/kg	0.01			GC
	Vanadium (V)-Total	19.5	mg/kg	0.006			GC
	Zinc (Zn)-Total	54.0	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
	Strontium-89	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS							
	Naphthalene	36	ug/kg	3	09-OCT-00	14-OCT-00	PR
	2-methylnaphthalene	12	ug/kg	3	09-OCT-00	14-OCT-00	PR
	1-Methylnaphthalene	12	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Acenaphthylene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Acenaphthene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Fluorene	4.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Phenanthrene	22	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Anthracene	3.1	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Fluoranthene	5.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Pyrene	5.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Benzo(a)anthracene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Chrysene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Benzo(b)fluoranthene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Benzo(k)fluoranthene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Benzo(a)pyrene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
	Benzo(ghi)perylene	<3.0	ug/kg	3	09-OCT-00	14-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	93	%	51.1-137.9	09-OCT-00	14-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	78	%	70.31-145	09-OCT-00	14-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	121	%	75.29-129.04	09-OCT-00	14-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 20 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-05 PA/ASH-01
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-5
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.28 +/- 0.06	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.21 +/- 0.05	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.28 +/- 0.06	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.048 +/- 0.017	pCi/g	0.003	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.040 +/- 0.016	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
2,4-DB	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
Dalapon	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
Dicamba	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
Dinoseb	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
MCPA	<15400	ug/kg	15400	28-NOV-00	08-DEC-00	GPL
MCPP	<15400	ug/kg	15400	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<154	ug/kg	154	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	31.1 +/- 12.1	pCi/g	3.6	16-OCT-00	27-OCT-00	NRF
Gross Beta	48.7 +/- 3.8	pCi/g	3.3	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.82 +/- 0.13	pCi/g	0.16		17-OCT-00	DMF
Silver-110m	-0.23 +/- 0.67	pCi/g	1.1		17-OCT-00	DMF
Americium-241	0.05 +/- 0.09	pCi/g	0.15		17-OCT-00	DMF
Beryllium-7	0.86 +/- 0.47	pCi/g	0.54		17-OCT-00	DMF
Bismuth-212	1.80 +/- 0.53	pCi/g	0.65		17-OCT-00	DMF
Bismuth-214	1.85 +/- 0.13	pCi/g	0.09		17-OCT-00	DMF
Cerium-139	-0.02 +/- 0.03	pCi/g	0.04		17-OCT-00	DMF
Cerium-144	-0.10 +/- 0.18	pCi/g	0.28		17-OCT-00	DMF
Cobalt-56	-0.02 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Cobalt-57	0.006 +/- 0.02	pCi/g	0.03		17-OCT-00	DMF
Cobalt-58	-0.04 +/- 0.03	pCi/g	0.06		17-OCT-00	DMF
Cobalt-60	0.002 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Chromium-51	-0.37 +/- 0.48	pCi/g	0.47		17-OCT-00	DMF
Cesium-134	-0.003 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cesium-137	1.64 +/- 0.08	pCi/g	0.05		17-OCT-00	DMF
Europium-152	0.34 +/- 0.18	pCi/g	0.27		17-OCT-00	DMF
Europium-154	0.03 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 21 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-05 PA/ASH-01
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-5
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.46 +/- 0.07	pCi/g	0.11		17-OCT-00	DMF
Iron-59	0.02 +/- 0.09	pCi/g	0.15		17-OCT-00	DMF
Iodine-131	-0.23 +/- 0.34	pCi/g	0.56		17-OCT-00	DMF
Potassium-40	35.3 +/- 1.2	pCi/g	0.43		17-OCT-00	DMF
Manganese-54	-0.001 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Sodium-22	-0.01 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Niobium-94	-0.02 +/- 0.03	pCi/g	0.04		17-OCT-00	DMF
Niobium-95	0.06 +/- 0.06	pCi/g	0.09		17-OCT-00	DMF
Protactinium-234m	7.27 +/- 6.42	pCi/g	7.27		17-OCT-00	DMF
Lead-212	1.69 +/- 0.07	pCi/g	0.08		17-OCT-00	DMF
Lead-214	2.12 +/- 0.10	pCi/g	0.09		17-OCT-00	DMF
Ruthenium-106	2.68 +/- 0.31	pCi/g	0.2		17-OCT-00	DMF
Antimony-124	-0.008 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Antimony-125	-0.03 +/- 0.08	pCi/g	0.13		17-OCT-00	DMF
Scandium-46	0.45 +/- 0.09	pCi/g	0.07		17-OCT-00	DMF
Strontium-85	0.07 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Thorium-227	0.17 +/- 0.22	pCi/g	0.32		17-OCT-00	DMF
Thorium-234	6.03 +/- 1.20	pCi/g	0.54		17-OCT-00	DMF
Thallium-208	0.56 +/- 0.06	pCi/g	0.05		17-OCT-00	DMF
Uranium-235	0.40 +/- 0.06	pCi/g	0.27		17-OCT-00	DMF
Zinc-65	-0.02 +/- 0.08	pCi/g	0.11		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 22 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-06 PA/ASH-02
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-6
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	177	mg/kg	5		11-OCT-00	MGB
Americium-241	0.02 +/- 0.01	pCi/g	0.01	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<0.50	mg/kg	0.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	177	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	<5	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	4.5	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	14.9	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	0.39	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	0.4	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	263000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	63.1	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	23	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	<1000	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	39000	mg/kg	100			ETLSK
Uranium (U)	1.79	mg/kg	0.0005		27-OCT-00	GC
pH	7.97	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	13800	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0324	mg/kg	0.001			GC
Arsenic (As)-Total	2.64	mg/kg	0.006			GC
Barium (Ba)-Total	181	mg/kg	0.01			GC
Beryllium (Be)-Total	0.887	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.215	mg/kg	0.02			GC
Calcium (Ca)-Total	10900	mg/kg	2			GC
Chromium (Cr)-Total	14.9	mg/kg	0.01			GC
Cobalt (Co)-Total	5.03	mg/kg	0.006			GC
Copper (Cu)-Total	13.3	mg/kg	0.01			GC
Iron (Fe)-Total	11200	mg/kg	1			GC
Lead (Pb)-Total	19.9	mg/kg	0.009			GC
Magnesium (Mg)-Total	2990	mg/kg	0.1			GC

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 23 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-06 PA/ASH-02
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-6
Matrix: SOLID SAMPLE

	Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	750	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	9.70	mg/kg	0.01			GC
	Potassium (K)-Total	2690	mg/kg	0.5			GC
	Selenium (Se)-Total	0.303	mg/kg	0.03			GC
	Silver (Ag)-Total	0.271	mg/kg	0.01			GC
	Sodium (Na)-Total	390	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.179	mg/kg	0.01			GC
	Vanadium (V)-Total	24.1	mg/kg	0.006			GC
	Zinc (Zn)-Total	58.5	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
	Strontium-89	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS							
	Naphthalene	240	ug/kg	3	09-OCT-00	12-OCT-00	PR
	2-methylnaphthalene	84	ug/kg	3	09-OCT-00	12-OCT-00	PR
	1-Methylnaphthalene	77	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthylene	13	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthene	3.1	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluorene	21	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Phenanthrene	89	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Anthracene	13	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluoranthene	8.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Pyrene	22	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)anthracene	10	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Chrysene	7.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(b)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(k)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(ghi)perylene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	100	%	51.1-137.9	09-OCT-00	12-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	108	%	70.31-145	09-OCT-00	12-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	88	%	75.29-129.04	09-OCT-00	12-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 24 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-06 PA/ASH-02
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-6
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.28 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.28 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.30 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.049 +/- 0.017	pCi/g	0.006	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.057 +/- 0.019	pCi/g	0.003	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
2,4-DB	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
Dalapon	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
Dicamba	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
Dinoseb	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
MCPA	<14700	ug/kg	14700	28-NOV-00	08-DEC-00	GPL
MCPP	<14700	ug/kg	14700	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<147	ug/kg	147	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	33.9 +/- 11	pCi/g	3.6	16-OCT-00	27-OCT-00	NRF
Gross Beta	51.8 +/- 4	pCi/g	3.2	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.32 +/- 0.16	pCi/g	0.22		17-OCT-00	DMF
Silver-110m	-0.009 +/- 0.88	pCi/g	1.47		17-OCT-00	DMF
Americium-241	0.08 +/- 0.06	pCi/g	0.08		17-OCT-00	DMF
Beryllium-7	0.26 +/- 0.46	pCi/g	0.77		17-OCT-00	DMF
Bismuth-212	1.28 +/- 0.68	pCi/g	1.03		17-OCT-00	DMF
Bismuth-214	1.64 +/- 0.14	pCi/g	0.13		17-OCT-00	DMF
Cerium-139	-0.007 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cerium-144	-0.12 +/- 0.19	pCi/g	0.31		17-OCT-00	DMF
Cobalt-56	-0.004 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Cobalt-57	0.02 +/- 0.02	pCi/g	0.04		17-OCT-00	DMF
Cobalt-58	-0.06 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Cobalt-60	0.002 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Chromium-51	0.06 +/- 0.58	pCi/g	0.94		17-OCT-00	DMF
Cesium-134	0.05 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Cesium-137	2.35 +/- 0.11	pCi/g	0.06		17-OCT-00	DMF
Europium-152	0.09 +/- 0.20	pCi/g	0.35		17-OCT-00	DMF
Europium-154	0.005 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 25 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-06 PA/ASH-02
Job Name:
Sampled By: CLIENT

Date Collected: 25-SEP-00
Lab Sample ID: L1961-6
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.39 +/- 0.07	pCi/g	0.1		17-OCT-00	DMF
Iron-59	-0.05 +/- 0.13	pCi/g	0.2		17-OCT-00	DMF
Iodine-131	-0.15 +/- 0.47	pCi/g	0.74		17-OCT-00	DMF
Potassium-40	31.5 +/- 1.32	pCi/g	0.56		17-OCT-00	DMF
Manganese-54	-0.02 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Sodium-22	0.01 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Niobium-94	-0.003 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Niobium-95	0.11 +/- 0.08	pCi/g	0.12		17-OCT-00	DMF
Protactinium-234m	7.07 +/- 6.43	pCi/g	10.9		17-OCT-00	DMF
Lead-212	1.52 +/- 0.09	pCi/g	0.09		17-OCT-00	DMF
Lead-214	1.78 +/- 0.12	pCi/g	0.12		17-OCT-00	DMF
Ruthenium-106	2.20 +/- 0.34	pCi/g	0.26		17-OCT-00	DMF
Antimony-124	0.02 +/- 0.06	pCi/g	0.08		17-OCT-00	DMF
Antimony-125	-0.03 +/- 0.11	pCi/g	0.17		17-OCT-00	DMF
Scandium-46	0.49 +/- 0.10	pCi/g	0.1		17-OCT-00	DMF
Strontium-85	0.23 +/- 0.05	pCi/g	0.09		17-OCT-00	DMF
Thorium-227	2.63 +/- 0.30	pCi/g	0.49		17-OCT-00	DMF
Thorium-234	2.60 +/- 0.72	pCi/g	0.51		17-OCT-00	DMF
Thallium-208	0.47 +/- 0.06	pCi/g	0.06		17-OCT-00	DMF
Uranium-235	0.26 +/- 0.06	pCi/g	0.32		17-OCT-00	DMF
Zinc-65	-0.05 +/- 0.12	pCi/g	0.16		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
HMX	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS
Nitrobenzene	<100	ug/kg	95.2	09-OCT-00	19-OCT-00	SS
RDX	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS
Tetryl	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS
o-nitrotoluene	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS
p-nitrotoluene	<200	ug/kg	190	09-OCT-00	19-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 26 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-07 WATER/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-7
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	376	mg/kg	5		11-OCT-00	MGB
Americium-241	0.03 +/- 0.02	pCi/g	0.01	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<2.5	mg/kg	2.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	376	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	37	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	3.1	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	1.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.6 +/- 0.3	pCi/g	0.6	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	14.2	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	13.6	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	8.2	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	219000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	61.0	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	140	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	<1000	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	34000	mg/kg	100			ETLSK
Uranium (U)	1.37	mg/kg	0.0005		27-OCT-00	GC
pH	7.66	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	19700	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0291	mg/kg	0.001			GC
Arsenic (As)-Total	2.75	mg/kg	0.006			GC
Barium (Ba)-Total	255	mg/kg	0.01			GC
Beryllium (Be)-Total	1.04	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.260	mg/kg	0.02			GC
Calcium (Ca)-Total	8280	mg/kg	2			GC
Chromium (Cr)-Total	15.8	mg/kg	0.01			GC
Cobalt (Co)-Total	5.70	mg/kg	0.006			GC
Copper (Cu)-Total	15.9	mg/kg	0.01			GC
Iron (Fe)-Total	12800	mg/kg	1			GC
Lead (Pb)-Total	20.8	mg/kg	0.009			GC
Magnesium (Mg)-Total	3010	mg/kg	0.1			GC

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 27 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-07 WATER/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-7
Matrix: SOLID SAMPLE

Test Description		Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	1020	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	9.65	mg/kg	0.01			GC
	Potassium (K)-Total	3380	mg/kg	0.5			GC
	Selenium (Se)-Total	0.287	mg/kg	0.03			GC
	Silver (Ag)-Total	0.277	mg/kg	0.01			GC
	Sodium (Na)-Total	383	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.246	mg/kg	0.01			GC
	Vanadium (V)-Total	23.8	mg/kg	0.006			GC
	Zinc (Zn)-Total	69.3	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<2 +/- 0.9	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
	Strontium-89	<2 +/- 0.9	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS							
	Naphthalene	69	ug/kg	3	09-OCT-00	12-OCT-00	PR
	2-methylnaphthalene	28	ug/kg	3	09-OCT-00	12-OCT-00	PR
	1-Methylnaphthalene	19	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthylene	4.4	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Acenaphthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluorene	7.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Phenanthrene	47	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Anthracene	4.3	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Fluoranthene	10	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Pyrene	10	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)anthracene	4.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Chrysene	8.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(b)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(k)fluoranthene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(a)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
	Benzo(ghi)perylene	<3.0	ug/kg	3	09-OCT-00	12-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	91	%	51.1-137.9	09-OCT-00	12-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	107	%	70.31-145	09-OCT-00	12-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	121	%	75.29-129.04	09-OCT-00	12-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 28 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-07 WATER/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-7
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.31 +/- 0.10	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.17 +/- 0.06	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.19 +/- 0.07	pCi/g	0.01	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.000 +/- 0.023	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.054 +/- 0.020	pCi/g	0.003	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
2,4-DB	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
Dalapon	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
Dicamba	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
Dinoseb	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
MCPA	<10100	ug/kg	10100	28-NOV-00	08-DEC-00	GPL
MCPP	<10100	ug/kg	10100	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<101	ug/kg	101	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	38.8 +/- 13.7	pCi/g	2.9	16-OCT-00	27-OCT-00	NRF
Gross Beta	57.5 +/- 4.1	pCi/g	3.1	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.68 +/- 0.13	pCi/g	0.17		17-OCT-00	DMF
Silver-110m	0.84 +/- 0.78	pCi/g	1.34		17-OCT-00	DMF
Americium-241	0.05 +/- 0.10	pCi/g	0.16		17-OCT-00	DMF
Beryllium-7	2.08 +/- 0.68	pCi/g	0.64		17-OCT-00	DMF
Bismuth-212	2.12 +/- 0.61	pCi/g	0.71		17-OCT-00	DMF
Bismuth-214	1.70 +/- 0.12	pCi/g	0.1		17-OCT-00	DMF
Cerium-139	-0.03 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cerium-144	-0.07 +/- 0.19	pCi/g	0.31		17-OCT-00	DMF
Cobalt-56	-0.01 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Cobalt-57	-0.007 +/- 0.02	pCi/g	0.04		17-OCT-00	DMF
Cobalt-58	0.008 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Cobalt-60	0.002 +/- 0.03	pCi/g	0.06		17-OCT-00	DMF
Chromium-51	0.30 +/- 0.53	pCi/g	0.86		17-OCT-00	DMF
Cesium-134	-0.03 +/- 0.04	pCi/g	0.05		17-OCT-00	DMF
Cesium-137	2.85 +/- 0.10	pCi/g	0.06		17-OCT-00	DMF
Europium-152	0.14 +/- 0.24	pCi/g	0.28		17-OCT-00	DMF
Europium-154	-0.008 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 29 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-07 WATER/ASH-0.1
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-7
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.49 +/- 0.09	pCi/g	0.1		17-OCT-00	DMF
Iron-59	-0.004 +/- 0.10	pCi/g	0.16		17-OCT-00	DMF
Iodine-131	-0.32 +/- 0.38	pCi/g	0.63		17-OCT-00	DMF
Potassium-40	37.4 +/- 1.35	pCi/g	0.48		17-OCT-00	DMF
Manganese-54	-0.03 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Sodium-22	-0.01 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Niobium-94	-0.01 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Niobium-95	0.21 +/- 0.09	pCi/g	0.08		17-OCT-00	DMF
Protactinium-234m	7.00 +/- 6.87	pCi/g	8.37		17-OCT-00	DMF
Lead-212	1.59 +/- 0.08	pCi/g	0.09		17-OCT-00	DMF
Lead-214	1.71 +/- 0.12	pCi/g	0.1		17-OCT-00	DMF
Ruthenium-106	2.92 +/- 0.30	pCi/g	0.23		17-OCT-00	DMF
Antimony-124	-0.02 +/- 0.05	pCi/g	0.07		17-OCT-00	DMF
Antimony-125	-0.04 +/- 0.09	pCi/g	0.15		17-OCT-00	DMF
Scandium-46	0.36 +/- 0.08	pCi/g	0.12		17-OCT-00	DMF
Strontium-85	0.16 +/- 0.04	pCi/g	0.07		17-OCT-00	DMF
Thorium-227	0.03 +/- 0.24	pCi/g	0.35		17-OCT-00	DMF
Thorium-234	4.86 +/- 1.18	pCi/g	0.6		17-OCT-00	DMF
Thallium-208	0.52 +/- 0.06	pCi/g	0.05		17-OCT-00	DMF
Uranium-235	0.44 +/- 0.08	pCi/g	0.31		17-OCT-00	DMF
Zinc-65	-0.01 +/- 0.09	pCi/g	0.13		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 30 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-08 WATER/ASH-0.1A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-8
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Alkalinity, Total	210	mg/kg	5		11-OCT-00	MGB
Americium-241	0.02 +/- 0.02	pCi/g	0.02	17-OCT-00	29-NOV-00	DMF
Ammonia-N	<2.5	mg/kg	2.5		19-OCT-00	MGB
Bicarbonate (as CaCO3)	210	mg/L	2		11-OCT-00	MGB
Bromide	<2	mg/kg	2		23-OCT-00	MSA
Carbonate (as CaCO3)	<2	mg/L	2		11-OCT-00	MGB
Chloride (Cl)	15	mg/kg	5		12-OCT-00	MGB
Cyanide (Cn)	4.4	mg/Kg dwt	0.5	18-OCT-00	19-OCT-00	ETL-TB
Fluoride, Total	<0.5	mg/kg	0.5		12-OCT-00	MGB
Plutonium-241	<0.6 +/- 0.3	pCi/g	0.6	17-OCT-00	03-NOV-00	PLJ
Lithium (Li)	15.4	mg/kg	0.01		27-OCT-00	GC
Nitrate/Nitrite-N	10.9	mg/kg	0.1		14-NOV-00	JPM
Orthophosphate (PO4)	11.3	mg/kg	0.1		16-NOV-00	JPM
Silicon (Si)	240000	mg/kg	0.5		27-OCT-00	GC
Strontium (Sr)	83.7	mg/kg	0.005		27-OCT-00	GC
Sulfate (SO4)	230	mg/kg	10		16-OCT-00	MGB
Technetium-99	<0.4 +/- 0.2	pCi/g	0.4	17-OCT-00	20-OCT-00	NRF
Total Kjeldahl Nitrogen	1300	mg/kg	1000		18-NOV-00	MSA
Total Organic Carbon	50000	mg/kg	100			ETLSK
Uranium (U)	1.72	mg/kg	0.0005		27-OCT-00	GC
pH	7.96	pH	0.01		11-OCT-00	MGB
Target Analyte List of Metals						
Aluminum (Al)-Total	22300	mg/kg	0.5			GC
Antimony (Sb)-Total	0.0618	mg/kg	0.001			GC
Arsenic (As)-Total	8.27	mg/kg	0.006			GC
Barium (Ba)-Total	399	mg/kg	0.01			GC
Beryllium (Be)-Total	1.03	mg/kg	0.02			GC
Cadmium (Cd)-Total	0.417	mg/kg	0.02			GC
Calcium (Ca)-Total	12900	mg/kg	2			GC
Chromium (Cr)-Total	19.3	mg/kg	0.01			GC
Cobalt (Co)-Total	6.85	mg/kg	0.006			GC
Copper (Cu)-Total	18.4	mg/kg	0.01			GC
Iron (Fe)-Total	14600	mg/kg	1			GC
Lead (Pb)-Total	27.4	mg/kg	0.009			GC
Magnesium (Mg)-Total	3560	mg/kg	0.1			GC

ETL Enviro • Test
LABORATORIES LLC.
420 West Street Casper, Wyoming 8260
Phone: (307) 235-5741 Fax:(307) 266-1676
Toll Free 1(800)666-030

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 31 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-08 WATER/ASH-0.1A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-8
Matrix: SOLID SAMPLE

Test Description		Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc							
Target Analyte List of Metals							
	Manganese (Mn)-Total	1490	mg/kg	0.02			GC
	Mercury (Hg)-Total	<0.0200	mg/kg	0.02			GC
	Nickel (Ni)-Total	11.9	mg/kg	0.01			GC
	Potassium (K)-Total	3860	mg/kg	0.5			GC
	Selenium (Se)-Total	0.508	mg/kg	0.03			GC
	Silver (Ag)-Total	1.18	mg/kg	0.01			GC
	Sodium (Na)-Total	417	mg/kg	0.07			GC
	Thallium (Tl)-Total	0.273	mg/kg	0.01			GC
	Vanadium (V)-Total	29.4	mg/kg	0.006			GC
	Zinc (Zn)-Total	82.2	mg/kg	0.04			GC
Strontium-89/90							
	Strontium-90	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
	Strontium-89	<2 +/- 0.8	pCi/g	2	18-OCT-00	02-NOV-00	SLT/PLJ
Modified 8270 SIMS							
	Naphthalene	190	ug/kg	6	09-OCT-00	13-OCT-00	PR
	2-methylnaphthalene	71	ug/kg	6	09-OCT-00	13-OCT-00	PR
	1-Methylnaphthalene	61	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Acenaphthylene	10	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Acenaphthene	11	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Fluorene	18	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Phenanthrene	140	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Anthracene	15	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Fluoranthene	32	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Pyrene	44	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Benzo(a)anthracene	18	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Chrysene	24	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Benzo(b)fluoranthene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Benzo(k)fluoranthene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Benzo(a)pyrene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Indeno(1,2,3-c,d)pyrene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Dibenzo(a,h)Anthracene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
	Benzo(ghi)perylene	<6.0	ug/kg	6	09-OCT-00	13-OCT-00	PR
Surrogate:	Nitrobenzene d5(Surr.)	77	%	51.1-137.9	09-OCT-00	13-OCT-00	PR
Surrogate:	2-Fluorobiphenyl (surr)	110	%	70.31-145	09-OCT-00	13-OCT-00	PR
Surrogate:	P-Terphenyl D14 (Surr)	110	%	75.29-129.04	09-OCT-00	13-OCT-00	PR
Isotopic Thorium 227/8/30/2							

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 32 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-08 WATER/ASH-0.1A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-8
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Isotopic Thorium 227/8/30/2						
Thorium-228	0.25 +/- 0.09	pCi/g	0.02	17-OCT-00	26-OCT-00	DMF
Thorium-230	0.17 +/- 0.07	pCi/g	0.02	17-OCT-00	26-OCT-00	DMF
Thorium-232	0.13 +/- 0.06	pCi/g	0.02	17-OCT-00	26-OCT-00	DMF
Isotopic Plutonium 238/9/40						
Plutonium-238	0.000 +/- 0.022	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Plutonium-239/40	0.060 +/- 0.018	pCi/g	0.007	17-OCT-00	02-NOV-00	DMF
Herbicides By SW8151A						
2,4-D	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
2,4-DB	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
Dalapon	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
Dicamba	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
Dichloroprop	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
Dinoseb	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
MCPA	<10400	ug/kg	10400	28-NOV-00	08-DEC-00	GPL
MCPP	<10400	ug/kg	10400	28-NOV-00	08-DEC-00	GPL
2,4,5-T	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
2,4,5-TP	<104	ug/kg	104	28-NOV-00	08-DEC-00	GPL
Gross Alpha/Beta						
Gross Alpha	38.2 +/- 12.8	pCi/g	2.2	16-OCT-00	27-OCT-00	NRF
Gross Beta	49.7 +/- 3.7	pCi/g	3.1	16-OCT-00	27-OCT-00	NRF
Gamma Spectroscopy						
Actinium-228	1.35 +/- 0.22	pCi/g	0.29		17-OCT-00	DMF
Silver-110m	-0.53 +/- 1.11	pCi/g	1.84		17-OCT-00	DMF
Americium-241	0.11 +/- 0.07	pCi/g	0.1		17-OCT-00	DMF
Beryllium-7	0.80 +/- 0.66	pCi/g	0.93		17-OCT-00	DMF
Bismuth-212	1.59 +/- 0.92	pCi/g	1.11		17-OCT-00	DMF
Bismuth-214	1.59 +/- 0.16	pCi/g	0.16		17-OCT-00	DMF
Cerium-139	-0.02 +/- 0.04	pCi/g	0.06		17-OCT-00	DMF
Cerium-144	-0.02 +/- 0.23	pCi/g	0.37		17-OCT-00	DMF
Cobalt-56	0.008 +/- 0.06	pCi/g	0.11		17-OCT-00	DMF
Cobalt-57	0.02 +/- 0.03	pCi/g	0.05		17-OCT-00	DMF
Cobalt-58	-0.06 +/- 0.06	pCi/g	0.1		17-OCT-00	DMF
Cobalt-60	-0.05 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Chromium-51	-0.18 +/- 0.73	pCi/g	1.18		17-OCT-00	DMF
Cesium-134	0.04 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Cesium-137	2.80 +/- 0.13	pCi/g	0.09		17-OCT-00	DMF
Europium-152	0.12 +/- 0.25	pCi/g	0.43		17-OCT-00	DMF
Europium-154	-0.01 +/- 0.06	pCi/g	0.09		17-OCT-00	DMF

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Chemical Analysis Report

PINNACLE LABORATORIES, INC
2709D PAN AMERICAN FREEWAY NE
ALBUQUERQUE NM 87107
ATTN: PROJECT MANAGER

Report Date: 27-DEC-00
Page: 33 of 34
PO No.:
WO NO.: L1961

Sample ID: 009160-08 WATER/ASH-0.1A
Job Name:
Sampled By: CLIENT

Date Collected: 26-SEP-00
Lab Sample ID: L1961-8
Matrix: SOLID SAMPLE

Test Description	Result	Units of Measure	D.L.	Prep Date	Analyzed	By
Misc						
Gamma Spectroscopy						
Europium-155	0.28 +/- 0.07	pCi/g	0.12		17-OCT-00	DMF
Iron-59	-0.03 +/- 0.16	pCi/g	0.25		17-OCT-00	DMF
Iodine-131	0.25 +/- 0.55	pCi/g	0.9		17-OCT-00	DMF
Potassium-40	35.6 +/- 1.63	pCi/g	0.74		17-OCT-00	DMF
Manganese-54	-0.03 +/- 0.05	pCi/g	0.09		17-OCT-00	DMF
Sodium-22	-0.002 +/- 0.06	pCi/g	0.1		17-OCT-00	DMF
Niobium-94	0.01 +/- 0.05	pCi/g	0.08		17-OCT-00	DMF
Niobium-95	0.05 +/- 0.10	pCi/g	0.14		17-OCT-00	DMF
Protactinium-234m	2.06 +/- 8.14	pCi/g	1.34		17-OCT-00	DMF
Lead-212	1.71 +/- 0.11	pCi/g	0.11		17-OCT-00	DMF
Lead-214	1.71 +/- 0.13	pCi/g	0.16		17-OCT-00	DMF
Ruthenium-106	2.92 +/- 0.39	pCi/g	0.34		17-OCT-00	DMF
Antimony-124	-0.03 +/- 0.07	pCi/g	0.1		17-OCT-00	DMF
Antimony-125	-0.01 +/- 0.13	pCi/g	0.21		17-OCT-00	DMF
Scandium-46	0.38 +/- 0.12	pCi/g	0.12		17-OCT-00	DMF
Strontium-85	0.27 +/- 0.07	pCi/g	0.11		17-OCT-00	DMF
Thorium-227	2.72 +/- 0.36	pCi/g	0.59		17-OCT-00	DMF
Thorium-234	2.44 +/- 0.73	pCi/g	0.67		17-OCT-00	DMF
Thallium-208	0.54 +/- 0.08	pCi/g	0.08		17-OCT-00	DMF
Uranium-235	0.29 +/- 0.08	pCi/g	0.39		17-OCT-00	DMF
Zinc-65	-0.18 +/- 0.15	pCi/g	0.19		17-OCT-00	DMF
Explosives by HPLC 8330						
1,3,5-Trinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
1,3-Dinitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4,6-Trinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,4-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
2-Amino-4,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
4-Amino-2,6-Dinitrotoluene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
HMX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Nitrobenzene	<100	ug/kg	100	09-OCT-00	19-OCT-00	SS
RDX	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
Tetryl	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
m-Nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
o-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS
p-nitrotoluene	<200	ug/kg	200	09-OCT-00	19-OCT-00	SS

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Methodology Reference

ETL Test Code	Matrix	Test Description	Methodology Reference
8151-HERBICIDES-CA	Soil	Herbicides By SW8151A	EPA SW-846 Method 8151A
8270-SIMS-CA	Soil	Modified 8270 SIMS	EPA 8270C Modified fpr S.I.M.
8330-HPLC-CA	Soil	Explosives by HPLC 8330	EPA SW-846 Method 8330
ALK-CO3-CA	Soil	Carbonate (as CaCO3)	SM 2320 B-Pot. Titration
ALK-HCO3-CA	Soil	Bicarbonate (as CaCO3)	SM 2320 B-Pot. Titration
ALK-TOT-CA	Soil	Alkalinity, Total	SM 2320 B-Auto-Pot. Titration
AM241-CA	Soil	Americium -241	Mod.HASL 300
BR-CA	Soil	Bromide by IC	SW846 9056
CL-CA	Soil	Chloride (Cl)	SM 4500 Cl B-Titrimetric
CYN-TOT-SAD-CA	Soil	Cyanide, Total (SAD)	SM 4500-CN C and E
F-TOT-CA	Soil	Fluoride (Total)	SM 4500 F-C-Electrode
GAMMA-ALL-CA	Soil	Gamma Spectroscopy	Mod.EPA.901.1
GROSS AB-CA	Soil	Gross Alpha/Beta	Mod.EPA.900.0
ISO-PU-241-CA	Soil	Isotopic Plutonium 241	Mod.HASL 300
ISO-PU-ALPHA-CA	Soil	Isotopic Plutonium 238/9/40	Mod.HASL 300
ISO-TH-ALPHA-CA	Soil	Isotopic Thorium 227/8/30/2	Mod.HASL 300
LI-CA	Soil	Lithium (Li)	SW 846 - 3050/6010-ICP
METAL-TAL-CA	Soil	Target Analyte List of Metals	SW846 3050/6020/7471A
N2N3-CA	Soil	Nitrate+Nitrite-N	SM 4500 NO3E
NH4-CA	Soil	Ammonia-N	SM 4500 NH3D
PH-CA	Soil	pH	SW846 9045C
PO4-CA	Soil	Orthophosphate (PO4)	SM 4500 PE-
SI-CA	Soil	Silicon (Si)	SW 846 - 3050/6010-ICP
SO4-CALC-CA	Soil	Sulfate	SM 4500SO4C
SR-CA	Soil	Strontium (Sr)	SW 846 - 3050/6010-ICP
SR89/90-CA	Soil	Strontium-89/90	Mod.EPA.905.0
TC99-CA	Soil	Technicium-99	Mod.HASL 300
TKN-CA	Soil	Total Kjeldahl Nitrogen	EPA 351.3
TOC-SOIL-CA	Soil	Total Organic Carbon	EPA 415.2
U-CA	Soil	Uranium (U)	SW 846 - 3050/6020-ICP/MS

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ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

QC Type: BLANK

Lab QC Number:		Result	Qualifier	Units	Limit	Analyzed
WG7282-1						
CL-CA	Chloride (Cl)	<1		mg/L	1	12-OCT-00
WG7284-1						
PH-CA	pH	6.42		pH	0.01	13-OCT-00
WG7290-5						
8270-SIMS-CA	Naphthalene	<3.0		ug/kg	3	12-OCT-00
	2-methylnaphthalene	<3.0		ug/kg	3	12-OCT-00
	1-Methylnaphthalene	<3.0		ug/kg	3	12-OCT-00
	Acenaphthylene	<3.0		ug/kg	3	12-OCT-00
	Acenaphthene	<3.0		ug/kg	3	12-OCT-00
	Fluorene	<3.0		ug/kg	3	12-OCT-00
	Phenanthrene	<3.0		ug/kg	3	12-OCT-00
	Anthracene	<3.0		ug/kg	3	12-OCT-00
	Fluoranthene	<3.0		ug/kg	3	12-OCT-00
	Pyrene	<3.0		ug/kg	3	12-OCT-00
	Benzo(a)anthracene	<3.0		ug/kg	3	12-OCT-00
	Chrysene	<3.0		ug/kg	3	12-OCT-00
	Benzo(b)fluoranthene	<3.0		ug/kg	3	12-OCT-00
	Benzo(k)fluoranthene	<3.0		ug/kg	3	12-OCT-00
	Benzo(a)pyrene	<3.0		ug/kg	3	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	<3.0		ug/kg	3	12-OCT-00
	Dibenzo(a,h)Anthracene	<3.0		ug/kg	3	12-OCT-00
	Benzo(ghi)perylene	<3.0		ug/kg	3	12-OCT-00
WG7346-1						
NH4-CA	Ammonia-N	<0.5		mg/L	0.5	19-OCT-00
WG7349-1						
8330-HPLC-CA	1,3,5-Trinitrobenzene	<100		ug/kg	100	19-OCT-00
	1,3-Dinitrobenzene	<100		ug/kg	100	19-OCT-00
	2,4,6-Trinitrotoluene	<100		ug/kg	100	19-OCT-00
	2,4-Dinitrotoluene	<100		ug/kg	100	19-OCT-00
	2,6-Dinitrotoluene	<100		ug/kg	100	19-OCT-00
	2-Amino-4,6-Dinitrotoluene	<100		ug/kg	100	19-OCT-00
	4-Amino-2,6-Dinitrotoluene	<100		ug/kg	100	19-OCT-00
	HMX	<200		ug/kg	200	19-OCT-00
	Nitrobenzene	<100		ug/kg	100	19-OCT-00
	RDX	<200		ug/kg	200	19-OCT-00
	Tetryl	<200		ug/kg	200	19-OCT-00
	m-Nitrotoluene	<200		ug/kg	200	19-OCT-00
	o-nitrotoluene	<200		ug/kg	200	19-OCT-00
	p-nitrotoluene	<200		ug/kg	200	19-OCT-00
WG7366-2						

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

TC99-CA	Technetium-99	<1.8 +/- 1.1	pCi/g	1.8	20-OCT-00
WG7377-2					
N2N3-CA	Nitrate/Nitrite-N	<0.10	mg/kg	0.1	14-NOV-00
WG7390-1					
LI-CA	Lithium (Li)	0.34	mg/kg	0.01	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	14.6	mg/kg	0.5	
	Antimony (Sb)-Total	0.0800	mg/kg	0.001	
	Arsenic (As)-Total	0.0200	mg/kg	0.006	
	Barium (Ba)-Total	0.354	mg/kg	0.01	
	Beryllium (Be)-Total	<0.0200	mg/kg	0.02	
	Cadmium (Cd)-Total	<0.0200	mg/kg	0.02	
	Calcium (Ca)-Total	36.5	mg/kg	2	
	Chromium (Cr)-Total	2.97	mg/kg	0.01	
	Cobalt (Co)-Total	0.0260	mg/kg	0.006	
	Copper (Cu)-Total	1.24	mg/kg	0.01	
	Iron (Fe)-Total	15.1	mg/kg	1	
	Lead (Pb)-Total	0.122	mg/kg	0.009	
	Magnesium (Mg)-Total	4.46	mg/kg	0.1	
	Manganese (Mn)-Total	1.18	mg/kg	0.02	
	Nickel (Ni)-Total	1.65	mg/kg	0.01	
	Potassium (K)-Total	40.2	mg/kg	0.5	
	Selenium (Se)-Total	0.0440	mg/kg	0.03	
	Silver (Ag)-Total	0.203	mg/kg	0.01	
	Sodium (Na)-Total	13.3	mg/kg	0.07	
	Thallium (Tl)-Total	<0.0100	mg/kg	0.01	
	Vanadium (V)-Total	<0.00600	mg/kg	0.006	
	Zinc (Zn)-Total	10.5	mg/kg	0.04	
SR-CA	Strontium (Sr)	0.088	mg/kg	0.005	27-OCT-00
U-CA	Uranium (U)	0.0020	mg/kg	0.0005	27-OCT-00
WG7391-1					
LI-CA	Lithium (Li)	0.59	mg/kg	0.01	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	22.5	mg/kg	0.5	27-OCT-00
	Antimony (Sb)-Total	0.0240	mg/kg	0.001	27-OCT-00
	Arsenic (As)-Total	<0.00600	mg/kg	0.006	27-OCT-00
	Barium (Ba)-Total	0.432	mg/kg	0.01	27-OCT-00
	Beryllium (Be)-Total	<0.0200	mg/kg	0.02	27-OCT-00
	Cadmium (Cd)-Total	<0.0200	mg/kg	0.02	27-OCT-00
	Calcium (Ca)-Total	139	mg/kg	2	27-OCT-00
	Chromium (Cr)-Total	0.450	mg/kg	0.01	27-OCT-00
	Cobalt (Co)-Total	0.0100	mg/kg	0.006	27-OCT-00

	Copper (Cu)-Total	2.56	mg/kg	0.01	27-OCT-00
	Iron (Fe)-Total	52.7	mg/kg	1	27-OCT-00
	Lead (Pb)-Total	0.472	mg/kg	0.009	27-OCT-00
	Magnesium (Mg)-Total	6.87	mg/kg	0.1	27-OCT-00
	Manganese (Mn)-Total	0.264	mg/kg	0.02	27-OCT-00
	Nickel (Ni)-Total	0.666	mg/kg	0.01	27-OCT-00
	Potassium (K)-Total	36.3	mg/kg	0.5	27-OCT-00
	Selenium (Se)-Total	0.0460	mg/kg	0.03	27-OCT-00
	Silver (Ag)-Total	0.141	mg/kg	0.01	27-OCT-00
	Sodium (Na)-Total	19.0	mg/kg	0.07	27-OCT-00
	Thallium (Tl)-Total	<0.0100	mg/kg	0.01	27-OCT-00
	Vanadium (V)-Total	<0.00600	mg/kg	0.006	27-OCT-00
	Zinc (Zn)-Total	17.2	mg/kg	0.04	27-OCT-00
SI-CA	Silicon (Si)	9.0	mg/kg	0.5	27-OCT-00
SR-CA	Strontium (Sr)	0.202	mg/kg	0.005	27-OCT-00
U-CA	Uranium (U)	<0.0005	mg/kg	0.0005	27-OCT-00
WG7392-1					
SI-CA	Silicon (Si)	<0.5	mg/kg	0.5	27-OCT-00
WG7404-1					
CYN-TOT-SAD-CA	Cyanide (Cn)	<0.50	mg/Kg dwt	0.5	19-OCT-00
WG7428-2					
GROSS AB-CA	Gross Alpha	<0.3 +/- 0.2	pCi/g	0.3	27-OCT-00
	Gross Beta	2 +/- 0.5	pCi/g	0.7	27-OCT-00
WG7429-3					
ISO-TH-ALPHA-CA	Thorium-228	0.10 +/- 0.1	pCi/g	0.01	26-OCT-00
	Thorium-230	0.06 +/- 0.0	pCi/g	0.04	26-OCT-00
	Thorium-232	0.02 +/- 0.0	pCi/g	0.04	26-OCT-00
WG7457-2					
SR89/90-CA	Strontium-90	<1 +/- 0.3	pCi/g	1	02-NOV-00
	Strontium-89	<1 +/- 0.3	pCi/g	1	02-NOV-00
WG7472-2					
ISO-PU-ALPHA-CA	Plutonium-238	0.071 +/- 0.	pCi/g	0.045	02-NOV-00
	Plutonium-239/40	0.034 +/- 0.	pCi/g	0.045	02-NOV-00
WG7493-2					
ISO-PU-241-CA	Plutonium-241	<1.1 +/- 0.6	pCi/g	1.1	03-NOV-00
WG7523-2					
PO4-CA	Orthophosphate (PO4)	<0.1	mg/kg	0.1	16-NOV-00
WG7557-1					

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

BR-CA	Bromide	<2	mg/kg	2	23-OCT-00
WG7558-2					
TKN-CA	Total Kjeldahl Nitrogen	<1000	mg/kg	1000	18-NOV-00
WG7558-6					
TKN-CA	Total Kjeldahl Nitrogen	<1000	mg/kg	1000	18-NOV-00
WG7665-3					
AM241-CA	Americium-241	0.03 +/- 0.0	pCi/g	0.05	29-NOV-00
WG7290-10					
8270-SIMS-CA	Naphthalene	<3.0	ug/kg	3	12-OCT-00
	2-methylnaphthalene	<3.0	ug/kg	3	12-OCT-00
	1-Methylnaphthalene	<3.0	ug/kg	3	12-OCT-00
	Acenaphthylene	<3.0	ug/kg	3	12-OCT-00
	Acenaphthene	<3.0	ug/kg	3	12-OCT-00
	Fluorene	<3.0	ug/kg	3	12-OCT-00
	Phenanthrene	<3.0	ug/kg	3	12-OCT-00
	Anthracene	<3.0	ug/kg	3	12-OCT-00
	Fluoranthene	<3.0	ug/kg	3	12-OCT-00
	Pyrene	<3.0	ug/kg	3	12-OCT-00
	Benzo(a)anthracene	<3.0	ug/kg	3	12-OCT-00
	Chrysene	<3.0	ug/kg	3	12-OCT-00
	Benzo(b)fluoranthene	<3.0	ug/kg	3	12-OCT-00
	Benzo(k)fluoranthene	<3.0	ug/kg	3	12-OCT-00
	Benzo(a)pyrene	<3.0	ug/kg	3	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	12-OCT-00
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	12-OCT-00
	Benzo(ghi)perylene	<3.0	ug/kg	3	12-OCT-00
WG7290-12					
8270-SIMS-CA	Naphthalene	<3.0	ug/kg	3	12-OCT-00
	2-methylnaphthalene	<3.0	ug/kg	3	12-OCT-00
	1-Methylnaphthalene	<3.0	ug/kg	3	12-OCT-00
	Acenaphthylene	<3.0	ug/kg	3	12-OCT-00
	Acenaphthene	<3.0	ug/kg	3	12-OCT-00
	Fluorene	<3.0	ug/kg	3	12-OCT-00
	Phenanthrene	<3.0	ug/kg	3	12-OCT-00
	Anthracene	<3.0	ug/kg	3	12-OCT-00
	Fluoranthene	<3.0	ug/kg	3	12-OCT-00
	Pyrene	<3.0	ug/kg	3	12-OCT-00
	Benzo(a)anthracene	<3.0	ug/kg	3	12-OCT-00
	Chrysene	<3.0	ug/kg	3	12-OCT-00
	Benzo(b)fluoranthene	<3.0	ug/kg	3	12-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

	Benzo(k)fluoranthene	<3.0	ug/kg	3	12-OCT-00
	Benzo(a)pyrene	<3.0	ug/kg	3	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	12-OCT-00
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	12-OCT-00
	Benzo(ghi)perylene	<3.0	ug/kg	3	12-OCT-00
WG7290-15					
8270-SIMS-CA	Naphthalene	<3.0	ug/kg	3	13-OCT-00
	2-methylnaphthalene	<3.0	ug/kg	3	13-OCT-00
	1-Methylnaphthalene	<3.0	ug/kg	3	13-OCT-00
	Acenaphthylene	<3.0	ug/kg	3	13-OCT-00
	Acenaphthene	<3.0	ug/kg	3	13-OCT-00
	Fluorene	<3.0	ug/kg	3	13-OCT-00
	Phenanthrene	<3.0	ug/kg	3	13-OCT-00
	Anthracene	<3.0	ug/kg	3	13-OCT-00
	Fluoranthene	<3.0	ug/kg	3	13-OCT-00
	Pyrene	<3.0	ug/kg	3	13-OCT-00
	Benzo(a)anthracene	<3.0	ug/kg	3	13-OCT-00
	Chrysene	<3.0	ug/kg	3	13-OCT-00
	Benzo(b)fluoranthene	<3.0	ug/kg	3	13-OCT-00
	Benzo(k)fluoranthene	<3.0	ug/kg	3	13-OCT-00
	Benzo(a)pyrene	<3.0	ug/kg	3	13-OCT-00
	Indeno(1,2,3-c,d)pyrene	<3.0	ug/kg	3	13-OCT-00
	Dibenzo(a,h)Anthracene	<3.0	ug/kg	3	13-OCT-00
	Benzo(ghi)perylene	<3.0	ug/kg	3	13-OCT-00

QC Type: DUP

Lab QC Number:		RPD	Qualifier	Limit %	Analyzed
WG7272-6					
F-TOT-CA	Fluoride, Total	24	RPD-NA	0-1	12-OCT-00
WG7282-2					
CL-CA	Chloride (Cl)	N/A	RPD-NA	0-20	12-OCT-00
WG7284-2					
PH-CA	pH	0.4		0-20	13-OCT-00
WG7294-2					
ALK-TOT-CA	Alkalinity, Total	N/A		0-3	11-OCT-00
WG7346-2					
NH4-CA	Ammonia-N	N/A	RPD-NA	0-20	19-OCT-00
WG7366-1					

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

TC99-CA	Technetium-99	100	RPD-NA	0-20	20-OCT-00
WG7377-3					
N2N3-CA	Nitrate/Nitrite-N	2.5	RPD-NA	0-20	14-NOV-00
WG7390-3					
LI-CA	Lithium (Li)	10		0-20	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	19		0-20	27-OCT-00
	Antimony (Sb)-Total	13		0-20	27-OCT-00
	Arsenic (As)-Total	6.5		0-20	27-OCT-00
	Barium (Ba)-Total	2.3		0-20	27-OCT-00
	Beryllium (Be)-Total	8.9		0-20	27-OCT-00
	Cadmium (Cd)-Total	3.7		0-20	27-OCT-00
	Calcium (Ca)-Total	3.0		0-20	27-OCT-00
	Chromium (Cr)-Total	20		0-20	27-OCT-00
	Cobalt (Co)-Total	5.9		0-20	27-OCT-00
	Copper (Cu)-Total	14		0-20	27-OCT-00
	Iron (Fe)-Total	11		0-20	27-OCT-00
	Lead (Pb)-Total	0.7		0-20	27-OCT-00
	Magnesium (Mg)-Total	11		0-20	27-OCT-00
	Manganese (Mn)-Total	3.3		0-20	27-OCT-00
	Nickel (Ni)-Total	9.2		0-20	27-OCT-00
	Potassium (K)-Total	18		0-20	27-OCT-00
	Selenium (Se)-Total	5.7		0-20	27-OCT-00
	Silver (Ag)-Total	15		0-20	27-OCT-00
	Sodium (Na)-Total	25		0-20	27-OCT-00
	Thallium (Tl)-Total	11		0-20	27-OCT-00
	Vanadium (V)-Total	19		0-20	27-OCT-00
	Zinc (Zn)-Total	23		0-20	27-OCT-00
SR-CA	Strontium (Sr)	6.3		0-20	27-OCT-00
U-CA	Uranium (U)	21		0-20	27-OCT-00
WG7391-3					
LI-CA	Lithium (Li)	0		0-20	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	0.4		0-20	27-OCT-00
	Antimony (Sb)-Total	3.2		0-20	27-OCT-00
	Arsenic (As)-Total	0.1		0-20	27-OCT-00
	Barium (Ba)-Total	0.5		0-20	27-OCT-00
	Beryllium (Be)-Total	4.7		0-20	27-OCT-00
	Cadmium (Cd)-Total	2.1		0-20	27-OCT-00
	Calcium (Ca)-Total	0		0-20	27-OCT-00
	Chromium (Cr)-Total	0		0-20	27-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

	Cobalt (Co)-Total	0.7		0-20	27-OCT-00
	Copper (Cu)-Total	0.5		0-20	27-OCT-00
	Iron (Fe)-Total	0		0-20	27-OCT-00
	Lead (Pb)-Total	1.1		0-20	27-OCT-00
	Magnesium (Mg)-Total	0.3		0-20	27-OCT-00
	Manganese (Mn)-Total	2.6		0-20	27-OCT-00
	Nickel (Ni)-Total	0		0-20	27-OCT-00
	Potassium (K)-Total	0.3		0-20	27-OCT-00
	Selenium (Se)-Total	5.4		0-20	27-OCT-00
	Silver (Ag)-Total	36		0-20	27-OCT-00
	Sodium (Na)-Total	2.4		0-20	27-OCT-00
	Thallium (Tl)-Total	0.7		0-20	27-OCT-00
	Vanadium (V)-Total	0.3		0-20	27-OCT-00
	Zinc (Zn)-Total	0.1		0-20	27-OCT-00
SI-CA	Silicon (Si)	0.3		0-20	27-OCT-00
SR-CA	Strontium (Sr)	0.4		0-20	27-OCT-00
U-CA	Uranium (U)	1.2		0-20	27-OCT-00
WG7392-3					
SI-CA	Silicon (Si)	12		0-20	27-OCT-00
WG7404-3					
CYN-TOT-SAD-CA	Cyanide (Cn)	0		0-20	19-OCT-00
WG7428-1					
GROSS AB-CA	Gross Alpha	16		0-	27-OCT-00
	Gross Beta	5.3		0-	27-OCT-00
WG7457-1					
SR89/90-CA	Strontium-90	N/A	RPD-NA	0-20	02-NOV-00
	Strontium-89	N/A	RPD-NA	0-20	02-NOV-00
WG7472-1					
ISO-PU-ALPHA-CA	Plutonium-238	46		0-20	02-NOV-00
	Plutonium-239/40	100	RPD-NA	0-20	02-NOV-00
WG7493-1					
ISO-PU-241-CA	Plutonium-241	143	RPD-NA	0-20	03-NOV-00
WG7523-3					
PO4-CA	Orthophosphate (PO4)	12	RPD-NA	0-20	16-NOV-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

QC Type: LCS

Lab QC Number:		% Recovery	Qualifier	Limit %	Analyzed
WG7282-3					
CL-CA	Chloride (Cl)	115		80-120	12-OCT-00
WG7290-2					
8270-SIMS-CA	Naphthalene	72		70-130	11-OCT-00
	2-methylnaphthalene	89		70-130	11-OCT-00
	1-Methylnaphthalene	85		70-130	11-OCT-00
	Acenaphthylene	89		70-130	11-OCT-00
	Acenaphthene	78		70-130	11-OCT-00
	Fluorene	91		70-130	11-OCT-00
	Phenanthrene	103		70-130	11-OCT-00
	Anthracene	79		70-130	11-OCT-00
	Fluoranthene	116		70-130	11-OCT-00
	Pyrene	111		70-130	11-OCT-00
	Benzo(a)anthracene	109		70-130	11-OCT-00
	Chrysene	109		70-130	11-OCT-00
	Benzo(b)fluoranthene	108		70-130	11-OCT-00
	Benzo(k)fluoranthene	101		70-130	11-OCT-00
	Benzo(a)pyrene	111		70-130	11-OCT-00
	Indeno(1,2,3-c,d)pyrene	87		70-130	11-OCT-00
	Dibenzo(a,h)Anthracene	102		70-130	11-OCT-00
	Benzo(ghi)perylene	112		70-130	11-OCT-00
WG7290-7					
8270-SIMS-CA	Naphthalene	85		70-130	12-OCT-00
	2-methylnaphthalene	96		70-130	12-OCT-00
	1-Methylnaphthalene	97		70-130	12-OCT-00
	Acenaphthylene	102		70-130	12-OCT-00
	Acenaphthene	97		70-130	12-OCT-00
	Fluorene	104		70-130	12-OCT-00
	Phenanthrene	111		70-130	12-OCT-00
	Anthracene	100		70-130	12-OCT-00
	Fluoranthene	99		70-130	12-OCT-00
	Pyrene	104		70-130	12-OCT-00
	Benzo(a)anthracene	107		70-130	12-OCT-00
	Chrysene	103		70-130	12-OCT-00
	Benzo(b)fluoranthene	95		70-130	12-OCT-00
	Benzo(k)fluoranthene	111		70-130	12-OCT-00
	Benzo(a)pyrene	99		70-130	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	106		70-130	12-OCT-00
	Dibenzo(a,h)Anthracene	103		70-130	12-OCT-00
	Benzo(ghi)perylene	101		70-130	12-OCT-00
WG7294-1					

PLI ID #009160

ENVIRO-TEST QC REPORT

Workorder #: L1961

ALK-TOT-CA	Alkalinity, Total	403	N/A	11-OCT-00
WG7346-3				
NH4-CA	Ammonia-N	93	85-115	19-OCT-00
WG7349-2				
8330-HPLC-CA	1,3,5-Trinitrobenzene	100	70-118	19-OCT-00
	1,3-Dinitrobenzene	94	70-118	19-OCT-00
	2,4,6-Trinitrotoluene	109	70-150	19-OCT-00
	2,4-Dinitrotoluene	65	64-100	19-OCT-00
	2-Amino-4,6-Dinitrotoluene	132	69-146	19-OCT-00
	4-Amino-2,6-Dinitrotoluene	103	60-112	19-OCT-00
	HMX	98	70-114	19-OCT-00
	Nitrobenzene	91	70-121	19-OCT-00
	RDX	90	70-118	19-OCT-00
	Tetryl	60	26-100	19-OCT-00
	m-Nitrotoluene	85	70-122	19-OCT-00
	o-nitrotoluene	86	70-111	19-OCT-00
	p-nitrotoluene	87	70-119	19-OCT-00
WG7366-5				
TC99-CA	Technetium-99	100	75-125	20-OCT-00
WG7377-1				
N2N3-CA	Nitrate/Nitrite-N	107	80-120	14-NOV-00
WG7390-2				
LI-CA	Lithium (Li)	105	36.1-164	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	102	17.1-183	
	Arsenic (As)-Total	100	53-147	
	Barium (Ba)-Total	84	48.6-151	
	Beryllium (Be)-Total	111	59.7-140	
	Cadmium (Cd)-Total	85	77.1-123	
	Calcium (Ca)-Total	117	61.5-138	
	Chromium (Cr)-Total	108	31.3-169	
	Cobalt (Co)-Total	110	78.7-121	
	Copper (Cu)-Total	109	58.5-141	
	Iron (Fe)-Total	100	58.1-142	
	Lead (Pb)-Total	100	78-122	
	Magnesium (Mg)-Total	112	71.2-129	
	Manganese (Mn)-Total	128	58.9-141	
	Nickel (Ni)-Total	98	34.5-165	
	Potassium (K)-Total	100	55.6-144	

	Selenium (Se)-Total	103	40.8-159	
	Sodium (Na)-Total	115	47.5-152	
	Thallium (Tl)-Total	83	39.7-160	
	Vanadium (V)-Total	105	18.2-182	
	Zinc (Zn)-Total	108	72.2-128	
SR-CA	Strontium (Sr)	100	69-131	27-OCT-00
U-CA	Uranium (U)	104	70.1-130	27-OCT-00
WG7391-2				
LI-CA	Lithium (Li)	107	61.8-138.2	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	117	34.3-165.7	27-OCT-00
	Arsenic (As)-Total	102	70-130	27-OCT-00
	Barium (Ba)-Total	87	70-130	27-OCT-00
	Beryllium (Be)-Total	116	57.6-142.4	27-OCT-00
	Cadmium (Cd)-Total	95	70-130	27-OCT-00
	Calcium (Ca)-Total	107	70-130	27-OCT-00
	Chromium (Cr)-Total	120	60.9-139.1	27-OCT-00
	Cobalt (Co)-Total	106	70-130	27-OCT-00
	Copper (Cu)-Total	120	70-130	27-OCT-00
	Iron (Fe)-Total	99	70-130	27-OCT-00
	Lead (Pb)-Total	90	70-130	27-OCT-00
	Magnesium (Mg)-Total	110	69.1-130.9	27-OCT-00
	Manganese (Mn)-Total	108	70-130	27-OCT-00
	Nickel (Ni)-Total	103	70-130	27-OCT-00
	Potassium (K)-Total	106	53.5-146.6	27-OCT-00
	Selenium (Se)-Total	94	63.3-136.7	27-OCT-00
	Sodium (Na)-Total	110	65.1-134.9	27-OCT-00
	Thallium (Tl)-Total	98	68.9-131.1	27-OCT-00
	Vanadium (V)-Total	123	46.3-153.7	27-OCT-00
	Zinc (Zn)-Total	106	70-130	27-OCT-00
SR-CA	Strontium (Sr)	98	70-130	27-OCT-00
U-CA	Uranium (U)	98	70-130	27-OCT-00
WG7392-2				
SI-CA	Silicon (Si)	68	70-130	27-OCT-00
WG7428-3				
GROSS AB-CA	Gross Alpha	73	70-125	27-OCT-00
WG7428-5				
GROSS AB-CA	Gross Beta	113	70-125	27-OCT-00
WG7429-4				

ENVIRO-TEST QC REPORT

Workorder #: L1961

ISO-TH-ALPHA-CA	Thorium-230	102	75-125	26-OCT-00
WG7457-4				
SR89/90-CA	Strontium-90	96	75-125	02-NOV-00
WG7472-3				
ISO-PU-ALPHA-CA	Plutonium-239/40	95	75-125	02-NOV-00
WG7493-4				
ISO-PU-241-CA	Plutonium-241	103	75-125	03-NOV-00
WG7523-1				
PO4-CA	Orthophosphate (PO4)	98	80-120	16-NOV-00
WG7557-2				
BR-CA	Bromide	91	90-110	23-OCT-00
WG7558-1				
TKN-CA	Total Kjeldahl Nitrogen	101	90-110	18-NOV-00
WG7558-5				
TKN-CA	Total Kjeldahl Nitrogen	99	90-110	18-NOV-00
WG7665-4				
AM241-CA	Americium-241	92	75-125	29-NOV-00
WG7290-14				
8270-SIMS-CA	Naphthalene	75	70-130	13-OCT-00
	2-methylnaphthalene	89	70-130	13-OCT-00
	1-Methylnaphthalene	78	70-130	13-OCT-00
	Acenaphthylene	97	70-130	13-OCT-00
	Acenaphthene	87	70-130	13-OCT-00
	Fluorene	86	70-130	13-OCT-00
	Phenanthrene	97	70-130	13-OCT-00
	Anthracene	92	70-130	13-OCT-00
	Fluoranthene	94	70-130	13-OCT-00
	Pyrene	90	70-130	13-OCT-00
	Benzo(a)anthracene	106	70-130	13-OCT-00
	Chrysene	109	70-130	13-OCT-00
	Benzo(b)fluoranthene	103	70-130	13-OCT-00
	Benzo(k)fluoranthene	106	70-130	13-OCT-00
	Benzo(a)pyrene	94	70-130	13-OCT-00
	Indeno(1,2,3-c,d)pyrene	100	70-130	13-OCT-00
	Dibenzo(a,h)Anthracene	122	70-130	13-OCT-00
	Benzo(ghi)perylene	121	70-130	13-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

QC Type: MS

Lab QC Number:		% Recovery	Qualifier	Limit %	Analyzed
WG7272-7					
F-TOT-CA	Fluoride, Total	100		90-110	12-OCT-00
WG7282-4					
CL-CA	Chloride (Cl)	99		80-120	12-OCT-00
WG7290-3					
8270-SIMS-CA	Naphthalene	73		70-130	11-OCT-00
	2-methylnaphthalene	79		70-130	11-OCT-00
	1-Methylnaphthalene	80		70-130	11-OCT-00
	Acenaphthylene	81		70-130	11-OCT-00
	Acenaphthene	84		70-130	11-OCT-00
	Fluorene	98		70-130	11-OCT-00
	Phenanthrene	103		70-130	11-OCT-00
	Anthracene	79		70-130	11-OCT-00
	Fluoranthene	111		70-130	11-OCT-00
	Pyrene	102		70-130	11-OCT-00
	Benzo(a)anthracene	98		70-130	11-OCT-00
	Chrysene	104		70-130	11-OCT-00
	Benzo(b)fluoranthene	95		70-130	11-OCT-00
	Benzo(k)fluoranthene	106		70-130	11-OCT-00
	Benzo(a)pyrene	81		70-130	11-OCT-00
	Indeno(1,2,3-c,d)pyrene	104		70-130	11-OCT-00
	Dibenzo(a,h)Anthracene	112		70-130	11-OCT-00
	Benzo(ghi)perylene	108		70-130	11-OCT-00
WG7290-8					
8270-SIMS-CA	Naphthalene	99		70-130	12-OCT-00
	2-methylnaphthalene	103		70-130	12-OCT-00
	1-Methylnaphthalene	102		70-130	12-OCT-00
	Acenaphthylene	105		70-130	12-OCT-00
	Acenaphthene	104		70-130	12-OCT-00
	Fluorene	109		70-130	12-OCT-00
	Phenanthrene	120		70-130	12-OCT-00
	Anthracene	94		70-130	12-OCT-00
	Fluoranthene	89		70-130	12-OCT-00
	Pyrene	106		70-130	12-OCT-00
	Benzo(a)anthracene	111		70-130	12-OCT-00
	Chrysene	106		70-130	12-OCT-00
	Benzo(b)fluoranthene	101		70-130	12-OCT-00
	Benzo(k)fluoranthene	122		70-130	12-OCT-00
	Benzo(a)pyrene	105		70-130	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	102		70-130	12-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

	Dibenzo(a,h)Anthracene	102	70-130	12-OCT-00
	Benzo(ghi)perylene	117	70-130	12-OCT-00
WG7346-4				
NH4-CA	Ammonia-N	85	80-120	19-OCT-00
WG7349-3				
8330-HPLC-CA	1,3,5-Trinitrobenzene	50	20-150	19-OCT-00
	1,3-Dinitrobenzene	100	70-127	19-OCT-00
	2,4,6-Trinitrotoluene	120	46-150	19-OCT-00
	2,4-Dinitrotoluene	67	56-100	19-OCT-00
	2-Amino-4,6-Dinitrotoluene	127	43-150	19-OCT-00
	4-Amino-2,6-Dinitrotoluene	107	39-136	19-OCT-00
	HMX	93	70-113	19-OCT-00
	Nitrobenzene	93	70-120	19-OCT-00
	RDX	90	70-124	19-OCT-00
	Tetryl	83	20-103	19-OCT-00
	m-Nitrotoluene	93	70-116	19-OCT-00
	o-nitrotoluene	93	70-109	19-OCT-00
	p-nitrotoluene	97	72-114	19-OCT-00
WG7366-3				
TC99-CA	Technetium-99	86	75-125	20-OCT-00
WG7377-5				
N2N3-CA	Nitrate/Nitrite-N	101	90-110	14-NOV-00
WG7390-4				
LI-CA	Lithium (Li)	95	75-125	27-OCT-00
METAL-TAL-CA	Aluminum (Al)-Total	188	N/A	27-OCT-00
	Antimony (Sb)-Total	106	75-125	27-OCT-00
	Arsenic (As)-Total	98	75-125	27-OCT-00
	Barium (Ba)-Total	90	75-125	27-OCT-00
	Beryllium (Be)-Total	106	75-125	27-OCT-00
	Cadmium (Cd)-Total	104	75-125	27-OCT-00
	Calcium (Ca)-Total	108	75-125	27-OCT-00
	Chromium (Cr)-Total	110	75-125	27-OCT-00
	Cobalt (Co)-Total	105	75-125	27-OCT-00
	Copper (Cu)-Total	100	75-125	27-OCT-00
	Iron (Fe)-Total	98	75-125	27-OCT-00
	Lead (Pb)-Total	96	75-125	27-OCT-00
	Magnesium (Mg)-Total	107	75-125	27-OCT-00
	Manganese (Mn)-Total	115	75-125	27-OCT-00

	Nickel (Ni)-Total	104	75-125	27-OCT-00
	Potassium (K)-Total	100	75-125	27-OCT-00
	Selenium (Se)-Total	97	75-125	27-OCT-00
	Silver (Ag)-Total	76	75-125	27-OCT-00
	Sodium (Na)-Total	109	75-125	27-OCT-00
	Thallium (Tl)-Total	95	75-125	27-OCT-00
	Vanadium (V)-Total	110	75-125	27-OCT-00
	Zinc (Zn)-Total	98	75-125	27-OCT-00
SR-CA	Strontium (Sr)	95	75-125	27-OCT-00
U-CA	Uranium (U)	97	75-125	27-OCT-00
WG7391-4				
LI-CA	Lithium (Li)	91	75-125	27-OCT-00
METAL-TAL-CA	Antimony (Sb)-Total	106	75-125	27-OCT-00
	Arsenic (As)-Total	99	75-125	27-OCT-00
	Barium (Ba)-Total	98	75-125	27-OCT-00
	Beryllium (Be)-Total	101	75-125	27-OCT-00
	Cadmium (Cd)-Total	102	75-125	27-OCT-00
	Calcium (Ca)-Total	102	75-125	27-OCT-00
	Chromium (Cr)-Total	108	75-125	27-OCT-00
	Cobalt (Co)-Total	103	75-125	27-OCT-00
	Copper (Cu)-Total	99	75-125	27-OCT-00
	Iron (Fe)-Total	86	75-125	27-OCT-00
	Lead (Pb)-Total	93	75-125	27-OCT-00
	Magnesium (Mg)-Total	104	75-125	27-OCT-00
	Manganese (Mn)-Total	72	-	27-OCT-00
	Nickel (Ni)-Total	101	75-125	27-OCT-00
	Potassium (K)-Total	94	75-125	27-OCT-00
	Selenium (Se)-Total	96	75-125	27-OCT-00
	Silver (Ag)-Total	77	75-125	27-OCT-00
	Sodium (Na)-Total	107	75-125	27-OCT-00
	Thallium (Tl)-Total	93	75-125	27-OCT-00
	Vanadium (V)-Total	109	75-125	27-OCT-00
	Zinc (Zn)-Total	94	75-125	27-OCT-00
SI-CA	Silicon (Si)	95	75-125	27-OCT-00
SR-CA	Strontium (Sr)	97	75-125	27-OCT-00
U-CA	Uranium (U)	95	75-125	27-OCT-00
WG7392-4				
SI-CA	Silicon (Si)	110	75-125	27-OCT-00
WG7404-4				

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

CYN-TOT-SAD-CA	Cyanide (Cn)	100	75-125	19-OCT-00
WG7457-3				
SR89/90-CA	Strontium-90	104	70-125	02-NOV-00
WG7472-4				
ISO-PU-ALPHA-CA	Plutonium-239/40	97	75-125	02-NOV-00
WG7493-3				
ISO-PU-241-CA	Plutonium-241	77	70-125	03-NOV-00
WG7523-4				
PO4-CA	Orthophosphate (PO4)	84	80-120	16-NOV-00
WG7557-3				
BR-CA	Bromide	87	80-120	23-OCT-00
WG7558-3				
TKN-CA	Total Kjeldahl Nitrogen	97	75-125	18-NOV-00
WG7558-7				
TKN-CA	Total Kjeldahl Nitrogen	98	75-125	18-NOV-00
WG7665-2				
AM241-CA	Americium-241	114	75-125	29-NOV-00

QC Type: MSD

Lab QC Number:	RPD	Qualifier	Limit %	Analyzed

QC Type: SSS

Lab QC Number:		% Recovery	Qualifier	Limit %	Analyzed
WG7290-1					
8270-SIMS-CA	Naphthalene	97		70-130	11-OCT-00
	2-methylnaphthalene	96		70-130	11-OCT-00
	1-Methylnaphthalene	112		70-130	11-OCT-00
	Acenaphthylene	116		70-130	11-OCT-00
	Acenaphthene	109		70-130	11-OCT-00
	Fluorene	119		70-130	11-OCT-00
	Phenanthrene	118		70-130	11-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

WG7290-4				
8270-SIMS-CA	Naphthalene	1.4	0-20	12-OCT-00
	2-methylnaphthalene	7.3	0-20	12-OCT-00
	1-Methylnaphthalene	9.5	0-20	12-OCT-00
	Acenaphthylene	31	0-20	12-OCT-00
	Acenaphthene	8.7	0-20	12-OCT-00
	Fluorene	3.1	0-20	12-OCT-00
	Phenanthrene	3.8	0-20	12-OCT-00
	Anthracene	2.6	0-20	12-OCT-00
	Fluoranthene	0.90	0-20	12-OCT-00
	Pyrene	0.99	0-20	12-OCT-00
	Benzo(a)anthracene	4.0	0-20	12-OCT-00
	Chrysene	0.96	0-20	12-OCT-00
	Benzo(b)fluoranthene	6.1	0-20	12-OCT-00
	Benzo(k)fluoranthene	17	0-20	12-OCT-00
	Benzo(a)pyrene	3.8	0-20	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	10	0-20	12-OCT-00
	Dibenzo(a,h)Anthracene	3.5	0-20	12-OCT-00
	Benzo(ghi)perylene	5.4	0-20	12-OCT-00
WG7290-9				
8270-SIMS-CA	Naphthalene	12	0-20	12-OCT-00
	2-methylnaphthalene	18	0-20	12-OCT-00
	1-Methylnaphthalene	17	0-20	12-OCT-00
	Acenaphthylene	8.3	0-20	12-OCT-00
	Acenaphthene	2.4	0-20	12-OCT-00
	Fluorene	1.0	0-20	12-OCT-00
	Phenanthrene	11	0-20	12-OCT-00
	Anthracene	11	0-20	12-OCT-00
	Fluoranthene	25	0-20	12-OCT-00
	Pyrene	2.0	0-20	12-OCT-00
	Benzo(a)anthracene	11	0-20	12-OCT-00
	Chrysene	1.9	0-20	12-OCT-00
	Benzo(b)fluoranthene	4.1	0-20	12-OCT-00
	Benzo(k)fluoranthene	12	0-20	12-OCT-00
	Benzo(a)pyrene	15	0-20	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	13	0-20	12-OCT-00
	Dibenzo(a,h)Anthracene	8.4	0-20	12-OCT-00
	Benzo(ghi)perylene	9.7	0-20	12-OCT-00

WG7349-4					
8330-HPLC-CA	1,3,5-Trinitrobenzene	3.9		0-25	19-OCT-00
	1,3-Dinitrobenzene	6.8		0-25	19-OCT-00
	2,4,6-Trinitrotoluene	13		0-25	19-OCT-00
	2,4-Dinitrotoluene	2.9		0-25	19-OCT-00
	2,6-Dinitrotoluene	N/A		0-25	19-OCT-00
	2-Amino-4,6-Dinitrotoluene	17		0-25	19-OCT-00
	4-Amino-2,6-Dinitrotoluene	0.0		0-25	19-OCT-00
	HMX	7.3		0-25	19-OCT-00
	Nitrobenzene	14		0-25	19-OCT-00
	RDX	7.5		0-25	19-OCT-00
	Tetryl	14		0-25	19-OCT-00
	m-Nitrotoluene	7.3		0-25	19-OCT-00
	o-nitrotoluene	7.3		0-25	19-OCT-00
	p-nitrotoluene	0.0		0-25	19-OCT-00
WG7366-4					
TC99-CA	Technetium-99	6.6		0-20	20-OCT-00
WG7557-4					
BR-CA	Bromide	1.9		0-20	23-OCT-00
WG7558-4					
TKN-CA	Total Kjeldahl Nitrogen	4.8		0-20	18-NOV-00
WG7558-8					
TKN-CA	Total Kjeldahl Nitrogen	1.2		0-20	18-NOV-00

QC Type: LCSD

Lab QC Number:		RPD	Qualifier	Limit %	Analyzed
WG7428-4					
GROSS AB-CA	Gross Alpha	4.3		0-20	27-OCT-00
WG7428-6					
GROSS AB-CA	Gross Beta	0.80		0-20	27-OCT-00

	Anthracene	112	70-130	11-OCT-00
	Fluoranthene	127	70-130	11-OCT-00
	Pyrene	98	70-130	11-OCT-00

	Benzo(a)anthracene	119	70-130	11-OCT-00
	Chrysene	105	70-130	11-OCT-00
	Benzo(b)fluoranthene	103	70-130	11-OCT-00
	Benzo(k)fluoranthene	126	70-130	11-OCT-00
	Benzo(a)pyrene	110	70-130	11-OCT-00
	Indeno(1,2,3-c,d)pyrene	115	70-130	11-OCT-00
	Dibenzo(a,h)Anthracene	98	70-130	11-OCT-00
	Benzo(ghi)perylene	125	70-130	11-OCT-00

QC Type: CCV

Lab QC Number:		% Recovery	Qualifier	Limit %	Analyzed
WG7282-5					
CL-CA	Chloride (Cl)	82		80-120	12-OCT-00
WG7284-4					
PH-CA	pH	101		90-110	13-OCT-00
WG7290-6					
8270-SIMS-CA	Naphthalene	103		70-130	12-OCT-00
	2-methylnaphthalene	105		70-130	12-OCT-00
	1-Methylnaphthalene	109		70-130	12-OCT-00
	Acenaphthylene	106		70-130	12-OCT-00
	Acenaphthene	102		70-130	12-OCT-00
	Fluorene	103		70-130	12-OCT-00
	Phenanthrene	101		70-130	12-OCT-00
	Anthracene	103		70-130	12-OCT-00
	Fluoranthene	86		70-130	12-OCT-00
	Pyrene	103		70-130	12-OCT-00
	Benzo(a)anthracene	102		70-130	12-OCT-00
	Chrysene	92		70-130	12-OCT-00
	Benzo(b)fluoranthene	101		70-130	12-OCT-00
	Benzo(k)fluoranthene	105		70-130	12-OCT-00
	Benzo(a)pyrene	108		70-130	12-OCT-00
	Indeno(1,2,3-c,d)pyrene	99		70-130	12-OCT-00
	Dibenzo(a,h)Anthracene	101		70-130	12-OCT-00
	Benzo(ghi)perylene	106		70-130	12-OCT-00
WG7346-5					
NH4-CA	Ammonia-N	87		85-115	19-OCT-00
WG7377-4					
N2N3-CA	Nitrate/Nitrite-N	99		N/A	14-NOV-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

PLI ID #009160

WG7377-6				
N2N3-CA	Nitrate/Nitrite-N	95	90-110	14-NOV-00
WG7404-2				
CYN-TOT-SAD-CA	Cyanide (Cn)	99	90-110	19-OCT-00
WG7523-5				
PO4-CA	Orthophosphate (PO4)	100	90-110	16-NOV-00
WG7523-6				
PO4-CA	Orthophosphate (PO4)	99	90-110	16-NOV-00
WG7290-11				
8270-SIMS-CA	Naphthalene	103	70-130	
	2-methylnaphthalene	106	70-130	
	1-Methylnaphthalene	111	70-130	
	Acenaphthylene	107	70-130	
	Acenaphthene	104	70-130	
	Fluorene	102	70-130	
	Phenanthrene	98	70-130	
	Anthracene	107	70-130	
	Fluoranthene	83	70-130	
	Pyrene	111	70-130	
	Benzo(a)anthracene	102	70-130	
	Chrysene	105	70-130	
	Benzo(b)fluoranthene	105	70-130	
	Benzo(k)fluoranthene	99	70-130	
	Benzo(a)pyrene	100	70-130	
	Indeno(1,2,3-c,d)pyrene	109	70-130	
	Dibenzo(a,h)Anthracene	106	70-130	
	Benzo(ghi)perylene	113	70-130	
WG7290-13				
8270-SIMS-CA	Naphthalene	103	70-130	13-OCT-00
	2-methylnaphthalene	107	70-130	13-OCT-00
	1-Methylnaphthalene	112	70-130	13-OCT-00
	Acenaphthylene	108	70-130	13-OCT-00
	Acenaphthene	103	70-130	13-OCT-00
	Fluorene	104	70-130	13-OCT-00
	Phenanthrene	99	70-130	13-OCT-00
	Anthracene	107	70-130	13-OCT-00
	Fluoranthene	88	70-130	13-OCT-00
	Pyrene	98	70-130	13-OCT-00
	Benzo(a)anthracene	104	70-130	13-OCT-00
	Chrysene	105	70-130	13-OCT-00

	Benzo(b)fluoranthene	92	70-130	13-OCT-00
	Benzo(k)fluoranthene	89	70-130	13-OCT-00
	Benzo(a)pyrene	102	70-130	13-OCT-00
	Indeno(1,2,3-c,d)pyrene	109	70-130	13-OCT-00
	Dibenzo(a,h)Anthracene	105	70-130	13-OCT-00
	Benzo(ghi)perylene	105	70-130	13-OCT-00
WG7290-16				
8270-SIMS-CA	Naphthalene	104	70-130	13-OCT-00
	2-methylnaphthalene	103	70-130	13-OCT-00
	1-Methylnaphthalene	115	70-130	13-OCT-00
	Acenaphthylene	104	70-130	13-OCT-00
	Acenaphthene	104	70-130	13-OCT-00
	Fluorene	102	70-130	13-OCT-00
	Phenanthrene	95	70-130	13-OCT-00
	Anthracene	113	70-130	13-OCT-00
	Fluoranthene	108	70-130	13-OCT-00
	Pyrene	99	70-130	13-OCT-00
	Benzo(a)anthracene	99	70-130	13-OCT-00
	Chrysene	108	70-130	13-OCT-00
	Benzo(b)fluoranthene	108	70-130	13-OCT-00
	Benzo(k)fluoranthene	94	70-130	13-OCT-00
	Benzo(a)pyrene	103	70-130	13-OCT-00
	Indeno(1,2,3-c,d)pyrene	105	70-130	13-OCT-00
	Dibenzo(a,h)Anthracene	106	70-130	13-OCT-00
	Benzo(ghi)perylene	104	70-130	13-OCT-00
WG7290-17				
8270-SIMS-CA	Naphthalene	103	70-130	14-OCT-00
	2-methylnaphthalene	98	70-130	14-OCT-00
	1-Methylnaphthalene	106	70-130	14-OCT-00
	Acenaphthylene	99	70-130	14-OCT-00
	Acenaphthene	103	70-130	14-OCT-00
	Fluorene	100	70-130	14-OCT-00
	Phenanthrene	90	70-130	14-OCT-00
	Anthracene	115	70-130	14-OCT-00
	Fluoranthene	78	70-130	14-OCT-00
	Pyrene	98	70-130	14-OCT-00
	Benzo(a)anthracene	97	70-130	14-OCT-00
	Chrysene	92	70-130	14-OCT-00
	Benzo(b)fluoranthene	108	70-130	14-OCT-00
	Benzo(k)fluoranthene	111	70-130	14-OCT-00

Benzo(a)pyrene	103		70-130	14-OCT-00
Indeno(1,2,3-c,d)pyrene	99		70-130	14-OCT-00
Dibenzo(a,h)Anthracene	103		70-130	14-OCT-00
Benzo(ghi)perylene	104		70-130	14-OCT-00

QC Type: ICV

Lab QC Number:		% Recovery	Qualifier	Limit %	Analyzed
WG7284-3					
PH-CA	pH	104		90-110	13-OCT-00

ENVIRO-TEST QC REPORT

Workorder #: L1961

Legend:

QC Type	Description
BLANK	Laboratory Blank
BS	Blank Spike
BSD	Blank Spike Duplicate
CCB	Continuing Calibration Blank
CCC	Continuing Calibration Check
CCV	Cont. Cal. Verification
DUP	Duplicate
ICB	Instrument Blank
ICV	Instument Calibration Verification
INST BLK	Instrument Blank
LCS	Laboratory Control Spike
LCSD	Lab Control Spike Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SPCC	System Performance Check Compound
SRM	Standard Reference Material
SSS	Second source std

Qualifier:

RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
A	Method blank exceeds detection limit. Blank correction applied, where appropriate.
B	Method blank result exceeds detection limit, however, it is less that 5% of sample concentration. Blank correction not applied.
C	Method blank result exceeds detection limit, however, it is less than 5% of the regulatory limit for the analyte of interest. Blank correction not applied.
D	Duplicate result exceeds limit due to increased variability for low level samples.
E	Matrix spike limit exceeded due to high sample background.
F	Silver recovery low, likely due to elevated choride levels in sample.
G	Outlier - No assignable cause for nonconformity has been determined.

Analytical Report For 11189

for

Enviro Test Laboratories, LLC

Project Manager: Paul Reeks

Project Name : Various Analyses

PLI ID #009160

December 14, 2000

GPL

Laboratories

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
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GPL

Laboratories

CASE NARRATIVE

CLIENT: **ENVIRO TEST LABORATORIES, LLC**
PROJECT/SITE: **VARIOUS ANALYSES**
WORK ORDER(S): 11189 PLI ID #009160
REVIEW DATE: 12/14/00

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Fourteen soils were received on 10/06/2000. The samples were delivered by Fed Ex. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

The samples were originally assigned to GPL Work Order 10027 for explosives analysis. On 11/27/00 the client requested that herbicide analysis be done on the samples.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

Herbicides

1. Fourteen soil samples were extracted and analyzed for Herbicide Compounds using Method 8151A. The client waived the extraction holding time.

2. MS/MSD analysis was performed on sample 009159-01. MCPP and Dinoseb percent recovery for the MS/MSD were outside QC limits. Percent RPD recovery for Dinoseb was outside QC limits. A Laboratory Control Sample was extracted with this batch. MCPP and Dinoseb recovery were outside QC limits for BKS8271.

3. Continuing Calibration J11780 had Dalapon recovery outside QC limits; there was no presence of the compound in the samples and the samples were not reanalyzed.

4. Concentrations reported on Form I are the higher values of results generated by two columns. However, the analyst based on the evaluation of quality control parameters determines the most reliable results. Flagged concentrations (*) on Form I indicate that reported results are the lower values.

5. Due to software limitations, some forms were corrected manually.

Project Manager

Lab Director

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-01 PA/ASH-01A
GPL ID: 11189-007-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	67.0	1	%		1

0 00 9

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-02 PA/ASH-02A
GPL ID: 11189-008-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	63.2	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-03 PA/ASH-0.1
GPL ID: 11189-009-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	76.4	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-04 PA/ASH-0.1D
GPL ID: 11189-010-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	82.3	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-05 PA/ASH-01
GPL ID: 11189-011-01-1/1
Matrix: Soil
Date Collected: Sep-25-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	64.9	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-06 PA/ASH-02
GPL ID: 11189-012-01-1/1
Matrix: Soil
Date Collected: Sep-25-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	66.6	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-07 WATER/ASH-0.1
GPL ID: 11189-013-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	96.8	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-08 WATER/ASH-0.1A
GPL ID: 11189-014-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method:
Prep Date:
Prep Time:
Prep Chemist:

Analytical Method: CLP_SOLIDS
Date Analyzed: Dec-01-2000
Time Analyzed 13:20
Analyst: Roya Sabouri

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	95.2	1	%		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-01 PA/ASH-01A
GPL ID: 11189-007-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 02:13
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	145	ug/kg	U	1
2,4,5-Tp	BQL	145	ug/kg	U	1
2,4-D	BQL	145	ug/kg	U	1
2,4-Db	BQL	145	ug/kg	U	1
Dalapon	BQL	145	ug/kg	U	1
Dicamba	BQL	145	ug/kg	U	1
Dichloroprop	BQL	145	ug/kg	U	1
Dinoseb	BQL	145	ug/kg	U	1
MCPA	BQL	14500	ug/kg	U	1
MCPP	BQL	14500	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-02 PA/ASH-02A
GPL ID: 11189-008-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 02:39
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	157	ug/kg	U	1
2,4,5-Tp	BQL	157	ug/kg	U	1
2,4-D	BQL	157	ug/kg	U	1
2,4-Db	BQL	157	ug/kg	U	1
Dalapon	BQL	157	ug/kg	U	1
Dicamba	BQL	157	ug/kg	U	1
Dichloroprop	BQL	157	ug/kg	U	1
Dinoseb	BQL	157	ug/kg	U	1
MCPA	BQL	15700	ug/kg	U	1
MCPP	BQL	15700	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-03 PA/ASH-0.1
GPL ID: 11189-009-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 03:05
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	128	ug/kg	U	1
2,4,5-Tp	BQL	128	ug/kg	U	1
2,4-D	BQL	128	ug/kg	U	1
2,4-Db	BQL	128	ug/kg	U	1
Dalapon	BQL	128	ug/kg	U	1
Dicamba	BQL	128	ug/kg	U	1
Dichloroprop	BQL	128	ug/kg	U	1
Dinoseb	BQL	128	ug/kg	U	1
MCPA	BQL	12800	ug/kg	U	1
MCPP	BQL	12800	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-04 PA/ASH-0.1D
GPL ID: 11189-010-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 03:31
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	120	ug/kg	U	1
2,4,5-Tp	BQL	120	ug/kg	U	1
2,4-D	BQL	120	ug/kg	U	1
2,4-Db	BQL	120	ug/kg	U	1
Dalapon	BQL	120	ug/kg	U	1
Dicamba	BQL	120	ug/kg	U	1
Dichloroprop	BQL	120	ug/kg	U	1
Dinoseb	BQL	120	ug/kg	U	1
MCPA	BQL	12000	ug/kg	U	1
MCPP	BQL	12000	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-05 PA/ASH-02
GPL ID: 11189-011-01-1/1
Matrix: Soil
Date Collected: Sep-25-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 03:57
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	154	ug/kg	U	1
2,4,5-Tp	BQL	154	ug/kg	U	1
2,4-D	BQL	154	ug/kg	U	1
2,4-Db	BQL	154	ug/kg	U	1
Dalapon	BQL	154	ug/kg	U	1
Dicamba	BQL	154	ug/kg	U	1
Dichloroprop	BQL	154	ug/kg	U	1
Dinoseb	BQL	154	ug/kg	U	1
MCPA	BQL	15400	ug/kg	U	1
MCPP	BQL	15400	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-06 PA/ASH-02
GPL ID: 11189-012-01-1/1
Matrix: Soil
Date Collected: Sep-25-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 04:23
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	147	ug/kg	U	1
2,4,5-Tp	BQL	147	ug/kg	U	1
2,4-D	BQL	147	ug/kg	U	1
2,4-Db	BQL	147	ug/kg	U	1
Dalapon	BQL	147	ug/kg	U	1
Dicamba	BQL	147	ug/kg	U	1
Dichloroprop	BQL	147	ug/kg	U	1
Dinoseb	BQL	147	ug/kg	U	1
MCPA	BQL	14700	ug/kg	U	1
MCPP	BQL	14700	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-07 WATER/ASH-0.1
GPL ID: 11189-013-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 04:49
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	101	ug/kg	U	1
2,4,5-Tp	BQL	101	ug/kg	U	1
2,4-D	BQL	101	ug/kg	U	1
2,4-Db	BQL	101	ug/kg	U	1
Dalapon	BQL	101	ug/kg	U	1
Dicamba	BQL	101	ug/kg	U	1
Dichloroprop	BQL	101	ug/kg	U	1
Dinoseb	BQL	101	ug/kg	U	1
MCPA	BQL	10100	ug/kg	U	1
MCPP	BQL	10100	ug/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 009160-08 WATER/ASH-0.1A
GPL ID: 11189-014-01-1/1
Matrix: Soil
Date Collected: Sep-26-2000
Date Received: Oct-06-2000

Prep Method: EXT_SW8151
Prep Date: Nov-28-2000
Prep Time: 21:08
Prep Chemist: Abel Moses

Analytical Method: SW8151
Date Analyzed: Dec-08-2000
Time Analyzed 05:15
Analyst: Philipos Yosief

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-T	BQL	104	ug/kg	U	1
2,4,5-Tp	BQL	104	ug/kg	U	1
2,4-D	BQL	104	ug/kg	U	1
2,4-Db	BQL	104	ug/kg	U	1
Dalapon	BQL	104	ug/kg	U	1
Dicamba	BQL	104	ug/kg	U	1
Dichloroprop	BQL	104	ug/kg	U	1
Dinoseb	BQL	104	ug/kg	U	1
MCPA	BQL	10400	ug/kg	U	1
MCPP	BQL	10400	ug/kg	U	1

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : Various Analyses

Date Printe December 14, 2000

GPL ID	Client ID
11189-001-01-1/1	009159-01
11189-002-01-1/1	009159-02
11189-003-01-1/1	009159-03
11189-004-01-1/1	009159-04
11189-005-01-1/1	009159-05
11189-006-01-1/1	009159-06
11189-007-01-1/1	009160-01
11189-008-01-1/1	009160-02
11189-009-01-1/1	009160-03
11189-010-01-1/1	009160-04
11189-011-01-1/1	009160-05
11189-012-01-1/1	009160-06
11189-013-01-1/1	009160-07
11189-013-01-1/1	009160-07
11189-014-01-1/1	009160-08
11189-001-01-1/1	009159-01
11189-002-01-1/1	009159-02
11189-003-01-1/1	009159-03
11189-004-01-1/1	009159-04
11189-005-01-1/1	009159-05
11189-006-01-1/1	009159-06
11189-007-01-1/1	009160-01
11189-008-01-1/1	009160-02
11189-009-01-1/1	009160-03
11189-010-01-1/1	009160-04
11189-011-01-1/1	009160-05
11189-012-01-1/1	009160-06
11189-013-01-1/1	009160-07
11189-013-01-1/1	009160-07
11189-014-01-1/1	009160-08

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

• = Duplicate analysis not within control limits

10/30/00
I:USER/G_SECURE/LOGFORMS/QUALDEF.DOC
Form:Gen-004

11189

ANALYSIS REQUEST FORM

EnviroTest – add on analyses

11-27-00
DATE REQUESTED

DT
COMPLETED BY

WORK ORDER #	SAMPLE ID	MATRIX	DATE SAMPLED	FRACTION	ADDITIONAL ANALYSIS	DUE DATE
10027	009160-01	soil	9-26	001	8151, solids	12-11-00
	02			002		
	03			003		
	04			004		
	05		9-25	005		
	06			006		
	07		9-26	007		
	08			008		
	009159-01			009		
	02			010		
	03			011		
	04		9-27	012		
	05			013		
	06			014		

11/27/00 per client request, analyze all for 8151
HT waived

L Petruk
PROJECT MANAGER

0133

HERBICIDE QC

GPL Laboratories, LLLP

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: GPL LABORATORIES Project: Enviro Test Labs.

Lab Code: GPLL WO No.: 11189 SAS No.: N/A SDG No.: N/A

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

	CLIENT SAMPLE ID	DCAA 1 %REC #	DCAA 2 %REC #	TOT OUT
01	BLK8271	77	74	0
02	BKS8271	93	102	0
03	009159-01	113	82	0
04	009159-01 MS	120	85	0
05	009159-01 MSD	113	85	0
06	009159-02	93	89	0
07	009159-03	99	109	0
08	009159-04	86	70	0
09	009159-05	98	93	0
10	009159-06	95	102	0
11	009160-01	103	90	0
12	009160-02	95	82	0
13	009160-03	101	83	0
14	009160-04	98	78	0
15	009160-05	96	88	0
16	009160-06	81	72	0
17	009160-07	126	92	0
18	009160-08	112	96	0

DCAA = 2,4-DCAA

ADVISORY QC LIMITS (7-170)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II PEST-2

3E

SOIL HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GP Environmental Services | Client: Enviro Test Laboratories

Lab Code: GPENV | Case No.: 11189 | SAS No.: N/A | SDG No.: N/A

EPA Sample No.: 11189-001-01-1/1 | GP ID: 11189-001-01-1/1

PLI ID #009160

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	QC LIMITS REC
Dalapon	400	0	470	116	10-150
Dicamba	400	0	510	125	10-150
MCPA	40000	0	52800	131	10-150
Dichloroprop	400	0	500	125	10-150
2,4-D	400	0	530	131	10-150
MCPP	40000	0	61498	152 *	10-150
2,4,5-TP(Silvex)	400	0	490	121	10-150
2,4,5-T	400	0	460	115	10-150
2,4-DB	400	0	520	129	10-150
Dinoseb	400	0	30	7 *	10-150

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENTRATION (ug/kg)	MSD % REC	% RPD	LIMITS RPD %	QC LIMITS REC
Dalapon	400	470	116	0	25	10-150
Dicamba	400	520	129	3	25	10-150
MCPA	40000	56000	138	5	25	10-150
Dichloroprop	400	520	130	4	25	10-150
2,4-D	400	550	135	3	25	10-150
MCPP	40000	65000	161 *	5	25	10-150
2,4,5-TP(Silvex)	400	490	122	1	25	10-150
2,4,5-T	400	480	118	3	25	10-150
2,4-DB	400	543	135	4	25	10-150
Dinoseb	400	8	2 *	113 *	25	10-150

* Value outside outside QC limits

Spike Recovery: 4 out of 20 outside limits.

Spike RPD: 1 out of 10 outside limits.

COMMENTS:

3F

SOIL LABORATORY CONTROL SPIKE RECOVERY

Lab Name: GP Environmental Services

Contract: Enviro Test Labs.

Lab Code: GPENV

Case No.: 11189

SAS No.: N/A

SDG No.: N/A

EPA Sample No.: BKS8271

GP ID: BKS8271

PLI ID #009160

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC.
Dalapon	400	0.0	360	91	25-140
Dicamba	400	0.0	520	131	25-140
MCPA	40000	0.0	53000	131	25-140
Dichloroprop	400	0.0	530	131	25-140
2,4-D	400	0.0	550	138	25-140
MCPP	40000	0.0	66000	166 *	25-140
2,4,5-TP(Silvex)	400	0.0	490	123	25-140
2,4,5-T	400	0.0	460	115	25-140
2,4-DB	400	0.0	500	124	25-140
Dinoseb	400	0.0	10	2 *	25-140

* Value outside of QC limits

Spike recovery: 2 out of 10 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

CLIENT ID PLI ID #009160

BLK8271

Lab Name: GPL LABORATORIES Project: Enviro Test La

Lab Code: GPLL WO No.: 11189 SAS No.: N/A SDG No.: N/A

Lab Sample ID: BLK8271 Lab File ID: J11771.D

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 11/28/00

Date Analyzed (1) : 12/07/00 Date Analyzed (2) : 12/07/00

Time Analyzed (1) : 2103 Time Analyzed (2) : 2103

Instrument ID (1) : GC-J Instrument ID (2) : GC-J

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BKS8271	BKS8271	12/07/00	12/07/00
02	009159-01	11189-001-01-1/1	12/07/00	12/07/00
03	009159-01 MS	11189-001-01-1/1 MS	12/07/00	12/07/00
04	009159-01 MSD	11189-001-01-1/1 MSD	12/07/00	12/07/00
05	009159-02	11189-002-01-1/1	12/07/00	12/07/00
06	009159-03	11189-003-01-1/1	12/07/00	12/07/00
07	009159-04	11189-004-01-1/1	12/08/00	12/08/00
08	009159-05	11189-005-01-1/1	12/08/00	12/08/00
09	009159-06	11189-006-01-1/1	12/08/00	12/08/00
10	009160-01	11189-007-01-1/1	12/08/00	12/08/00
11	009160-02	11189-008-01-1/1	12/08/00	12/08/00
12	009160-03	11189-009-01-1/1	12/08/00	12/08/00
13	009160-04	11189-010-01-1/1	12/08/00	12/08/00
14	009160-05	11189-011-01-1/1	12/08/00	12/08/00
15	009160-06	11189-012-01-1/1	12/08/00	12/08/00
16	009160-07	11189-013-01-1/1	12/08/00	12/08/00
17	009160-08	11189-014-01-1/1	12/08/00	12/08/00

COMMENTS:

Response Factor Report GC-J

Method : H:\GCDATA\METHODS\J_ICAL\001205J.M (Chemstation Integrator)
Title : 8150/8151-Soil Herbicide Method
Last Update : Wed Dec 06 09:42:41 2000

Calibration Files
H001 =J11664.D H002 =J11663.D H003 =J11662.D
H004 =J11661.D H005 =J11660.D

		Compound	H001	H002	H003	H004	H005	Avg		%RSD
1)	A	Dalapon	2.069	1.757	1.675	1.606	1.736	1.769	E3	10.06
2)	A	4-Nitrophenol	1.962	1.657	1.549	1.445	1.584	1.639	E3	11.95
3)	A	Dicamba	7.842	6.469	6.172	5.849	6.609	6.588	E3	11.52
4)	A	MCPA	1.859	1.370	1.243	1.111	1.209	1.358	E1	21.71
5)	A	Dichloroprop	2.929	2.419	2.270	2.118	2.327	2.412	E3	12.81
6)	A	2,4-D	3.453	2.841	2.694	2.504	2.797	2.858	E3	12.50
7)	A	MCPP	1.153	0.895	0.806	0.740	0.808	0.881	E1	18.41
8)	A	Pentachlorophenol	2.615	2.225	2.144	2.024	2.303	2.262	E4	9.84
9)	A	2,4,5-TP(Silvex)	1.221	1.047	1.003	0.943	1.062	1.055	E4	9.82
10)	A	2,4,5-T	1.165	0.991	0.949	0.901	0.989	0.999	E4	9.98
11)	A	2,4-DB	1.603	1.481	1.540	1.325	1.436	1.477	E3	7.15
12)	A	Dinoseb	1.462	1.254	1.241	1.152	1.357	1.293	E4	9.21
13)	S	2,4-DCAA	2.675	2.274	2.116	1.984	2.148	2.239	E3	11.80

Signal #2 Calibration Files
H001 =J11664.D H002 =J11663.D H003 =J11662.D
H004 =J11661.D H005 =J11660.D

		Compound	H001	H002	H003	H004	H005	Avg		%RSD
1)	A	Dalapon	1.384	1.216	1.134	1.084	1.008	1.165	E4	12.34
2)	A	4-Nitrophenol	1.530	1.248	1.158	1.076	0.978	1.198	E4	17.57
3)	A	Dicamba	6.193	4.895	4.542	4.233	4.030	4.779	E4	17.91
4)	A	MCPA	8.732	7.105	6.776	6.336	5.868	6.963	E1	15.69
5)	A	Dichloroprop	2.045	1.662	1.549	1.411	1.306	1.595	E4	17.91
6)	A	2,4-D	1.784	1.529	1.477	1.423	1.321	1.507	E4	11.48
7)	A	MCPP	6.432	4.807	4.467	4.152	3.811	4.734	E1	21.52
8)	A	Pentachlorophenol	2.136	1.871	2.406	2.320	1.890	2.125	E5	11.45
9)	A	2,4,5-TP(Silvex)	8.969	7.425	7.089	6.841	7.085	7.482	E4	11.45
10)	A	2,4,5-T	7.163	5.942	5.854	5.719	5.407	6.017	E4	11.17
11)	A	2,4-DB	1.174	1.120	1.069	0.995	0.858	1.043	E4	11.75
12)	A	Dinoseb	5.749	4.643	4.352	4.227	4.133	4.621	E4	14.27
13)	S	2,4-DCAA	1.462	1.348	1.224	1.155	1.018	1.241	E4	13.84

1006

(#) = Out of Range

Evaluate Continuing Calibration Report

PLI ID #009160

Signal #1 : H:\GCDATA\J\DEC0700\J11768.D\ECD1A.CH Vial: 19
Signal #2 : H:\GCDATA\J\DEC0700\J11768.D\ECD2B.CH
Acq On : 7 Dec 2000 19:45 Operator: PY
Sample : HERB-3 Inst : GC-J
Misc : 8151A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\J_ICAL\001207J.M (Chemstation Integrator)
Title : 8150/8151-Soil Herbicide Method
Last Update : Thu Dec 07 15:36:55 2000
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	A	Dalapon	1.730	1.988 E3	-14.9	0#	0.00
2	A	4-Nitrophenol	1.380	1.524 E3	-10.4	0#	-0.01
3	A	Dicamba	5.876	6.833 E3	-16.3#	0#	0.00
4	A	MCPA	11.457	12.404	-8.3	0#	0.00
5	A	Dichloroprop	2.094	2.389 E3	-14.1	0#	0.00
6	A	2,4-D	2.502	2.766 E3	-10.6	0#	0.00
7	A	MCPP	7.605	7.542	0.8	0#	0.00
8	A	Pentachlorophenol	20.202	23.340 E3	-15.5#	0#	0.00
9	A	2,4,5-TP(Silvex)	9.259	10.624 E3	-14.7	0#	0.00
10	A	2,4,5-T	8.768	10.107 E3	-15.3#	0#	0.00
11	A	2,4-DB	1.210	1.453 E3	-20.1#	0#	0.00
12	A	Dinoseb	11.213	13.055 E3	-16.4#	0#	0.00
13	S	2,4-DCAA	1.924	2.171 E3	-12.8	0#	0.00

Signal #2

1	A	Dalapon	12.589	14.054 E3	-11.6	0#	0.02
2	A	4-Nitrophenol	10.079	11.275 E3	-11.9	0#	0.00
3	A	Dicamba	47.373	51.145 E3	-8.0	0#	0.00
4	A	MCPA	53.071	59.791	-12.7	0#	0.00
5	A	Dichloroprop	15.073	16.021 E3	-6.3	0#	0.00
6	A	2,4-D	13.957	15.585 E3	-11.7	0#	0.00
7	A	MCPP	36.360	42.536	-17.0#	0#	0.00
8	A	Pentachlorophenol	216.858	293.697 E3	-35.4#	0#	0.00
9	A	2,4,5-TP(Silvex)	72.880	78.776 E3	-8.1	0#	0.00
10	A	2,4,5-T	57.666	62.844 E3	-9.0	0#	0.00
11	A	2,4-DB	8.911	9.989 E3	-12.1	0#	0.00
12	A	Dinoseb	40.107	42.247 E3	-5.3	0#	0.00
13	S	2,4-DCAA	11.656	13.063 E3	-12.1	0#	0.00

0 1007

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

PLI ID #009160

Signal #1 : H:\GCDATA\J\DEC0700\J11780.D\ECD1A.CH Vial: 31
Signal #2 : H:\GCDATA\J\DEC0700\J11780.D\ECD2B.CH
Acq On : 8 Dec 2000 00:56 Operator: PY
Sample : HERB-3 Inst : GC-J
Misc : 8151A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\J_ICAL\001207J.M (Chemstation Integrator)
Title : 8150/8151-Soil Herbicide Method
Last Update : Thu Dec 07 15:36:55 2000
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	A	Dalapon	1.730	2.038 E3	-17.8#	0#	0.00
2	A	4-Nitrophenol	1.380	1.535 E3	-11.2	0#	-0.02
3	A	Dicamba	5.876	7.005 E3	-19.2#	0#	-0.01
4	A	MCPA	11.457	12.264	-7.0	0#	0.00
5	A	Dichloroprop	2.094	2.374 E3	-13.4	0#	-0.01
6	A	2,4-D	2.502	2.810 E3	-12.3	0#	-0.01
7	A	MCPP	7.605	7.573	0.4	0#	0.00
8	A	Pentachlorophenol	20.202	23.807 E3	-17.8#	0#	-0.01
9	A	2,4,5-TP(Silvex)	9.259	10.615 E3	-14.6	0#	-0.01
10	A	2,4,5-T	8.768	10.019 E3	-14.3	0#	-0.01
11	A	2,4-DB	1.210	1.316 E3	-8.8	0#	-0.01
12	A	Dinoseb	11.213	13.192 E3	-17.6#	0#	-0.01
13	S	2,4-DCAA	1.924	2.213 E3	-15.0#	0#	-0.01

Signal #2

1	A	Dalapon	12.589	14.785 E3	-17.4#	0#	0.02
2	A	4-Nitrophenol	10.079	11.451 E3	-13.6	0#	0.00
3	A	Dicamba	47.373	54.016 E3	-14.0	0#	0.00
4	A	MCPA	53.071	60.773	-14.5	0#	0.00
5	A	Dichloroprop	15.073	16.876 E3	-12.0	0#	0.00
6	A	2,4-D	13.957	15.240 E3	-9.2	0#	0.00
7	A	MCPP	36.360	43.738	-20.3#	0#	0.00
8	A	Pentachlorophenol	216.858	311.638 E3	-43.7#	0#	0.00
9	A	2,4,5-TP(Silvex)	72.880	82.997 E3	-13.9	0#	0.00
10	A	2,4,5-T	57.666	64.448 E3	-11.8	0#	0.00
11	A	2,4-DB	8.911	10.110 E3	-13.5	0#	0.00
12	A	Dinoseb	40.107	46.114 E3	-15.0	0#	0.00
13	S	2,4-DCAA	11.656	13.234 E3	-13.5	0#	0.00

0 1008

Evaluate Continuing Calibration Report

PLI ID #009160

Signal #1 : H:\GCDATA\J\DEC0700\J11792.D\ECD1A.CH Vial: 43
Signal #2 : H:\GCDATA\J\DEC0700\J11792.D\ECD2B.CH
Acq On : 8 Dec 2000 6:07 Operator: PY
Sample : HERB-3 Inst : GC-J
Misc : 8151A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\J_ICAL\001207J.M (Chemstation Integrator)
Title : 8150/8151-Soil Herbicide Method
Last Update : Thu Dec 07 15:36:55 2000
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	A	Dalapon	1.730	1.642 E3	5.1	0#	0.00
2	A	4-Nitrophenol	1.380	1.219 E3	11.7	0#	-0.02
3	A	Dicamba	5.876	5.573 E3	5.2	0#	-0.01
4	A	MCPA	11.457	10.074	12.1	0#	-0.01
5	A	Dichloroprop	2.094	1.852 E3	11.6	0#	-0.01
6	A	2,4-D	2.502	2.238 E3	10.6	0#	-0.02
7	A	MCPP	7.605	6.474	14.9	0#	-0.01
8	A	Pentachlorophenol	20.202	18.709 E3	7.4	0#	-0.01
9	A	2,4,5-TP(Silvex)	9.259	8.360 E3	9.7	0#	-0.01
10	A	2,4,5-T	8.768	8.014 E3	8.6	0#	-0.01
11	A	2,4-DB	1.210	1.041 E3	14.0	0#	-0.02
12	A	Dinoseb	11.213	9.882 E3	11.9	0#	-0.01
13	S	2,4-DCAA	1.924	1.763 E3	8.4	0#	-0.01

Signal #2

1	A	Dalapon	12.589	13.509 E3	-7.3	0#	0.00
2	A	4-Nitrophenol	10.079	9.511 E3	5.6	0#	-0.01
3	A	Dicamba	47.373	46.435 E3	2.0	0#	-0.01
4	A	MCPA	53.071	48.084	9.4	0#	0.00
5	A	Dichloroprop	15.073	14.645 E3	2.8	0#	0.00
6	A	2,4-D	13.957	13.728 E3	1.6	0#	-0.01
7	A	MCPP	36.360	34.029	6.4	0#	0.00
8	A	Pentachlorophenol	216.858	269.906 E3	-24.5#	0#	0.00
9	A	2,4,5-TP(Silvex)	72.880	68.006 E3	6.7	0#	-0.01
10	A	2,4,5-T	57.666	53.791 E3	6.7	0#	-0.01
11	A	2,4-DB	8.911	8.080 E3	9.3	0#	0.00
12	A	Dinoseb	40.107	38.273 E3	4.6	0#	-0.01
13	S	2,4-DCAA	11.656	11.548 E3	0.9	0#	-0.01

0 1009

(#) = Out of Range SPCC's out = 0 CCC's out = 0

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT ID PLI ID #009160

BLK8271

Lab Name: GPL LABORATORIES Project: Enviro Test La

Lab Code: GPLL WO No.: 11189 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: BLK8271

Sample wt/vol: 10 (g/ml) G Lab File ID: J11771.D

% Moisture: 0 decanted:(Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/28/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/07/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-99-0	Dalapon	100	U
1918-00-9	Dicamba	100	U
94-74-6	MCPA	10000	U
120-36-5	Dichloroprop	100	U
94-75-7	2,4-D	100	U
93-65-2	MCPP	10000	U
93-72-1	2,4,5-TP(Silvex)	100	U
93-76-5	2,4,5-T	100	U
94-82-6	2,4-DB	100	U
88-85-7	Dinoseb	100	U

WET CHEMISTRY:
% SOLIDS SUMMARY

GPL Laboratories, LLLP

	Description	A	Sample Id /	ST	Method	Results	RL Raw	R	Raw	Multiplier	Reporti	Raw Unt	nFinal Result	spk	Raw Final	Flag	mdl	S	LCL	UCL	Moistu	Final Reporting Limit	Flag_c
1	Percent Solids	AN	11188-001-01	SMP /	10-02-6	83.4	1.0000	☑	83.3971	1.0000000	PER	PER	83.4000	0.0000	83.3971		1.00000	☑	0	0	1.0	1.000	
2	Percent Solids	AN	11188-002-01	SMP /	10-02-6	76.6	1.0000	☑	76.6122	1.0000000	PER	PER	76.6000	0.0000	76.6122		1.00000	☑	0	0	1.0	1.000	
3	Percent Solids	AN	11188-003-01	SMP /	10-02-6	70.6	1.0000	☑	70.6079	1.0000000	PER	PER	70.6000	0.0000	70.6079		1.00000	☑	0	0	1.0	1.000	
4	Percent Solids	AN	11188-004-01	SMP /	10-02-6	72.8	1.0000	☑	72.7600	1.0000000	PER	PER	72.8000	0.0000	72.7600		1.00000	☑	0	0	1.0	1.000	
5	Percent Solids	AN	11188-005-01	SMP /	10-02-6	87.2	1.0000	☑	87.2356	1.0000000	PER	PER	87.2000	0.0000	87.2356		1.00000	☑	0	0	1.0	1.000	
6	Percent Solids	AN	11188-006-01	SMP /	10-02-6	87.3	1.0000	☑	87.3362	1.0000000	PER	PER	87.3000	0.0000	87.3362		1.00000	☑	0	0	1.0	1.000	
7	Percent Solids	AN	11188-007-01	SMP /	10-02-6	82.8	1.0000	☑	82.7901	1.0000000	PER	PER	82.8000	0.0000	82.7901		1.00000	☑	0	0	1.0	1.000	
8	Percent Solids	AN	11188-008-01	SMP /	10-02-6	82.7	1.0000	☑	82.6963	1.0000000	PER	PER	82.7000	0.0000	82.6963		1.00000	☑	0	0	1.0	1.000	
9	Percent Solids	AN	11188-009-01	SMP /	10-02-6	85.8	1.0000	☑	85.8059	1.0000000	PER	PER	85.8000	0.0000	85.8059		1.00000	☑	0	0	1.0	1.000	
10	Percent Solids	AN	11188-009-01	MD /	10-02-6	86.0	1.0000	☑	86.0014	1.0000000	PER	PER	86.0000	0.0000	86.0014		1.00000	☑	0	0	1.0	1.000	
11	Percent Solids	AN	11188-010-01	SMP /	10-02-6	83.6	1.0000	☑	83.5560	1.0000000	PER	PER	83.6000	0.0000	83.5560		1.00000	☑	0	0	1.0	1.000	
12	Percent Solids	AN	11188-011-01	SMP /	10-02-6	86.1	1.0000	☑	86.1471	1.0000000	PER	PER	86.1000	0.0000	86.1471		1.00000	☑	0	0	1.0	1.000	
13	Percent Solids	AN	11188-012-01	SMP /	10-02-6	85.3	1.0000	☑	85.2498	1.0000000	PER	PER	85.3000	0.0000	85.2498		1.00000	☑	0	0	1.0	1.000	
14	Percent Solids	AN	11188-013-01	SMP /	10-02-6	85.0	1.0000	☑	84.9904	1.0000000	PER	PER	85.0000	0.0000	84.9904		1.00000	☑	0	0	1.0	1.000	
15	Percent Solids	AN	11188-014-01	SMP /	10-02-6	82.4	1.0000	☑	82.3896	1.0000000	PER	PER	82.4000	0.0000	82.3896		1.00000	☑	0	0	1.0	1.000	
16	Percent Solids	AN	11189-001-01	SMP /	10-02-6	99.1	1.0000	☑	99.0729	1.0000000	PER	PER	99.1000	0.0000	99.0729		1.00000	☑	0	0	1.0	1.000	
17	Percent Solids	AN	11189-002-01	SMP /	10-02-6	71.6	1.0000	☑	71.5630	1.0000000	PER	PER	71.6000	0.0000	71.5630		1.00000	☑	0	0	1.0	1.000	
18	Percent Solids	AN	11189-003-01	SMP /	10-02-6	69.2	1.0000	☑	69.2026	1.0000000	PER	PER	69.2000	0.0000	69.2026		1.00000	☑	0	0	1.0	1.000	
19	Percent Solids	AN	11189-003-01	MD /	10-02-6	69.2	1.0000	☑	69.2346	1.0000000	PER	PER	69.2000	0.0000	69.2346		1.00000	☑	0	0	1.0	1.000	
20	Percent Solids	AN	11189-004-01	SMP /	10-02-6	61.7	1.0000	☑	61.7048	1.0000000	PER	PER	61.7000	0.0000	61.7048		1.00000	☑	0	0	1.0	1.000	
21	Percent Solids	AN	11189-005-01	SMP /	10-02-6	61.9	1.0000	☑	61.8961	1.0000000	PER	PER	61.9000	0.0000	61.8961		1.00000	☑	0	0	1.0	1.000	
22	Percent Solids	AN	11189-006-01	SMP /	10-02-6	66.5	1.0000	☑	66.4897	1.0000000	PER	PER	66.5000	0.0000	66.4897		1.00000	☑	0	0	1.0	1.000	
23	Percent Solids	AN	11189-007-01	SMP /	10-02-6	67.0	1.0000	☑	66.9602	1.0000000	PER	PER	67.0000	0.0000	66.9602		1.00000	☑	0	0	1.0	1.000	
24	Percent Solids	AN	11189-008-01	SMP /	10-02-6	63.2	1.0000	☑	63.1682	1.0000000	PER	PER	63.2000	0.0000	63.1682		1.00000	☑	0	0	1.0	1.000	
25	Percent Solids	AN	11189-009-01	SMP /	10-02-6	76.4	1.0000	☑	76.3585	1.0000000	PER	PER	76.4000	0.0000	76.3585		1.00000	☑	0	0	1.0	1.000	
26	Percent Solids	AN	11189-010-01	SMP /	10-02-6	82.3	1.0000	☑	82.3236	1.0000000	PER	PER	82.3000	0.0000	82.3236		1.00000	☑	0	0	1.0	1.000	
27	Percent Solids	AN	11189-011-01	SMP /	10-02-6	64.9	1.0000	☑	64.9226	1.0000000	PER	PER	64.9000	0.0000	64.9226		1.00000	☑	0	0	1.0	1.000	
28	Percent Solids	AN	11189-012-01	SMP /	10-02-6	66.6	1.0000	☑	66.5947	1.0000000	PER	PER	66.6000	0.0000	66.5947		1.00000	☑	0	0	1.0	1.000	
29	Percent Solids	AN	11189-013-01	SMP /	10-02-6	96.8	1.0000	☑	96.7910	1.0000000	PER	PER	96.8000	0.0000	96.7910		1.00000	☑	0	0	1.0	1.000	
30	Percent Solids	AN	11189-014-01	SMP /	10-02-6	95.2	1.0000	☑	95.2149	1.0000000	PER	PER	95.2000	0.0000	95.2149		1.00000	☑	0	0	1.0	1.000	

Y.B 11/05/00

PLI ID #009160

1012

	Sample Id	Clas	Method	Q	Anal Date	Tech	Smp Amt	Uni	Fin	Uni	Dil	SEQ No.	Multip	M	Prep	R	Client	A	B	C	D	Calculate	Meth_	Meth	C	Perce	Last QC Sample
1	11188-001-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26600	10.18490	8.70410		83.3971	1.0000	1.0000		1.0000	
2	11188-002-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27770	10.02800	7.98150		76.6122	1.0000	1.0000		1.0000	
3	11188-003-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27130	10.37510	7.69930		70.6079	1.0000	1.0000		1.0000	
4	11188-004-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26010	10.02000	7.63380		72.7600	1.0000	1.0000		1.0000	
5	11188-005-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27360	10.11300	8.98470		87.2356	1.0000	1.0000		1.0000	
6	11188-006-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27900	10.40660	9.25070		87.3362	1.0000	1.0000		1.0000	
7	11188-007-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26880	10.12590	8.60160		82.7901	1.0000	1.0000		1.0000	
8	11188-008-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.28340	10.14220	8.60930		82.6963	1.0000	1.0000		1.0000	
9	11188-009-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27630	10.14900	8.88960		85.8059	1.0000	1.0000		1.0000	
10	11188-009-01-	MD	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26570	10.13230	8.89110		86.0014	1.0000	1.0000		1.0000	
11	11188-010-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26940	10.62600	9.08740		83.5560	1.0000	1.0000		1.0000	
12	11188-011-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.25810	10.32910	9.07250		86.1471	1.0000	1.0000		1.0000	
13	11188-012-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27920	10.13470	8.82850		85.2498	1.0000	1.0000		1.0000	
14	11188-013-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.26500	10.07870	8.75580		84.9904	1.0000	1.0000		1.0000	
15	11188-014-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	OU4-A	1.27490	10.06100	8.51110		82.3596	1.0000	1.0000		1.0000	
16	11189-001-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.26540	10.08870	10.00690		99.0729	1.0000	1.0000		1.0000	
17	11189-002-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.27850	10.34450	7.76640		71.5630	1.0000	1.0000		1.0000	
18	11189-003-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.27380	10.12780	7.40100		69.2026	1.0000	1.0000		1.0000	
19	11189-003-01-	MD	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.27150	10.19940	7.45270		69.2346	1.0000	1.0000		1.0000	
20	11189-004-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.27500	10.50280	6.96900		61.7048	1.0000	1.0000		1.0000	
21	11189-005-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.28290	10.26150	6.84030		61.8961	1.0000	1.0000		1.0000	
22	11189-006-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009159	1.26570	10.30830	7.27810		66.4897	1.0000	1.0000		1.0000	
23	11189-007-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.27920	10.06920	7.16500		66.9602	1.0000	1.0000		1.0000	
24	11189-008-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.26880	10.13750	6.87100		63.1682	1.0000	1.0000		1.0000	
25	11189-009-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.27720	10.02200	7.95460		76.3585	1.0000	1.0000		1.0000	
26	11189-010-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.26520	10.06000	8.50540		82.3236	1.0000	1.0000		1.0000	
27	11189-011-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.26220	10.48950	7.25280		64.9226	1.0000	1.0000		1.0000	
28	11189-012-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.27900	10.03300	7.10870		66.5947	1.0000	1.0000		1.0000	
29	11189-013-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.28620	10.13940	9.85530		96.7910	1.0000	1.0000		1.0000	
30	11189-014-01-	SMP	CLP_SOLIDS		12-01-00 13:20	1300-06	1.0000	ML	1.0	ML	1.0	4757	000000	S		Y	009160	1.26470	4.66900	4.50610		95.2149	1.0000	1.0000		1.0000	

Y.B 12/05/00

PLI ID #009160

C 1013

PLI ID #009160

PERCENT SOLIDS DETERMINATION LOG

Method Title: %Solids
Method Reference: OLMO4.0 / ASTM D2216

Analyst: RoS
Reviewed By / Date: Y.B 11/05/00
(seq# 4757)

Analytical Balance ID: Mettler AE 240
Drying Oven Temp Maintained at 103-105C:
Time In (Oven): 1:20 pm Temp 106.1 Date: 12-01-00
Time Out (Oven): 8:55 Am Temp 104.7 Date: 12-04-00
Dessicator Temp: 18°C Dessicator % Humidity (<20%): 13%

W.O.#	Frac.	Client ID	Weight of Dish	Weight of wet Sample + Dish	Weight of dry Sample +Dish	DUP RPD <15%
11188	001	OU4 – AU27 – 1	1.2660	10.1849	8.7041	
	002	OU4 – AU27 – 2	1.2777	10.0280	7.9815	
	003	OU4 – AU27 – 3	1.2713	10.3751	7.6993	
	004	OU4 – AU27 – 4	1.2601	10.0200	7.6338	
	005	OU4 – AU27-SB-1	1.2736	10.1130	8.9847	
	006	OU4 – AU27 – SB-2	1.2790	10.4066	9.2507	
	007	OU4 – AU27-SB-3	1.2688	10.1259	8.6016	
	008	OU4 – AU27-SB-4	1.2834	10.1422	8.6093	
	009	OU4 – AU27 – SB.5	1.2763	10.1490	8.8896	
	DUP	↓	1.2657	10.1323	8.8911	1.1
	010	OU4 – AU27-SB-6	1.2694	10.6260	9.0874	
	011	OU4 – AU27-SB-7	1.2581	10.3291	9.0725	
	012	OU4 – AU27 – SB-8	1.2792	10.1347	8.8285	
	013	OU4 – AU27-SB-9	1.2650	10.0787	8.7558	
	014	OU4 – AU27 – SB-10	1.2749	10.0610	8.5111	
11189	001	009159-01	1.2654	10.0887	10.0069	
	002	009159-02	1.2785	10.3445	7.7664	
	003	009159-03	1.2738	10.1278	7.4010	
	DUP	↓	1.2715	10.1994	7.4527	1.4
	004	009159-04	1.2750	10.5028	6.9690	
	005	009159-05	1.2829	10.2615	6.8403	
	006	009159-06	1.2657	10.3083	7.2781	
	007	009160-01	1.2792	10.0692	7.1650	
	008	009160-02	1.2688	10.1375	6.8710	
	009	009160-03	1.2772	10.0220	7.9546	
	010	009160-04	1.2652	10.0600	8.5054	
	011	009160-05	1.2622	10.4895	7.2528	
	012	009160-06	1.2790	10.0330	7.1087	
	013	009160-07	1.2862	10.1394	9.8553	

Comments: RoS 12-01-00
dp-solids

0 1014

PERCENT SOLIDS DETERMINATION LOG

Method Title: %Solids
Method Reference: OLMO4.0 / ASTM D2216

Analyst: R.S
Reviewed By / Date: Y.B 12/06/00
(SC9 # 4761)

Analytical Balance ID: Mettler AE 240
Drying Oven Temp Maintained at 103-105C:
Time In (Oven): 1:20 /2:30pm Temp 106.1 Date: 12-01-00
Time Out (Oven): 8:55AM Temp 104.7 Date: 12-04-00
Dessicator Temp: 18°C Dessicator % Humidity (<20%): 13%

W.O.#	Frac.	Client ID	Weight of Dish	Weight of wet Sample + Dish	Weight of dry Sample +Dish	DUP RPD <15%
11189	014	009160-08	1.2647	4.6690	4.5061	
11190	001	OU4-AU28-1	1.2697	10.5102	8.7207	
	002	OU4-AU28-2	1.2646	10.2095	8.6345	
	003	OU4-AU28-3	1.2563	10.2045	9.1492	
	004	OU4-AU28-4	1.2566	10.1350	9.0840	
	005	OU4-AU28-SB1	1.2570	10.2393	8.8763	
	006	OU4-AU28-SB2	1.2583	10.3615	9.0094	
	007	OU4-AU28-SB3	1.2779	10.1050	8.6318	
	008	OU4-AU28-SB4	1.2778	10.7175	9.4396	
	009	OU4-AU28-SB5	1.2708	10.2914	8.9717	
	010	OU4-AU28-SB6	1.2611	10.7486	8.9072	
	011	OU4-AU28-SB7	1.2560	10.5713	8.6440	
	DUP	↓	1.2785	10.4900	8.5856	1.2
	012	OU4-AU28-SB8	1.2688	10.4350	8.7090	
	013	OU4-AU28-SB9	1.2838	10.4008	8.5407	
	014	OU4-AU28-SB10	1.2762	10.0940	8.6569	
	015	OU4-AU28-SBDUP09	1.2715	10.2503	8.9831	
11191	005	OU4-AU12-SB2	1.2603	10.4800	9.4042	
	006	OU4-AU12-SB4	1.2795	10.4060	9.1509	
	007	OU4-AU12-SB6	1.2633	10.1105	8.2211	
	DUP	↓	1.2660	10.0205	8.1766	1.2
	008	OU4-AU12-SB-8	1.2707	10.0243	7.9268	
	009	OU4-AU12-SB-10	1.2809	10.1050	8.1312	
11193	005	OU4-AU11-SB2	1.2770	10.3980	9.2486	
	006	OU4-AU11-SB4	1.2816	10.1029	9.0750	
	007	OU4-AU11-SB6	1.2847	10.0751	8.6720	
	008	OU4-AU11-SB-8	1.2790	10.2740	8.8440	
	009	OU4-AU11-SB-10	1.2822	10.0587	8.5090	
		R.S 12-01-00				

Comments: clp-solids
sample # 11189 (014) that was all the Amount That was in the jar.

1015

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-7
SAMPLE ID: 009160-01 09/26/00 17:00 PA/ASH-01A
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Nov-00
5PT date: 27-Nov-00
ORIGINAL SAMPLE MOISTURE: 33 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND		0.29	1	ND	0.14	TCDD	1.2	0.29	2
* 12378-PeCDD	ND		0.44	1.0	ND	0.22	PeCDD	ND	0.44	0
* 123478-HxCDD	ND		0.69	0.1	ND	0.034	HxCDD	ND	0.7	0
* 123678-HxCDD	ND		0.72	0.1	ND	0.036	HpCDD	6.2	0.76	1
* 123789-HxCDD	ND		0.70	0.1	ND	0.035				
1234678-HpCDD		7.5	0.76	0.01	0.075	0.075	Total Homologues	7.4		
OCDD		43	0.95	0.001	0.043	0.043				
* 2378-TCDF	ND		0.28	0.1	ND	0.014	TCDF	0.73	0.28	2
* 12378-PeCDF	ND		0.21	0.05	ND	0.0052	PeCDF	ND	0.21	0
* 23478-PeCDF	ND		0.22	0.5	ND	0.055	HxCDF	ND	0.61	0
* 123478-HxCDF	ND		0.64	0.1	ND	0.032	HpCDF	1.7	0.52	1
* 123678-HxCDF	ND		0.58	0.1	ND	0.029				
* 234678-HxCDF	ND		0.57	0.1	ND	0.029	Total Homologues	2.4		
* 123789-HxCDF	ND		0.66	0.1	ND	0.033				
1234678-HpCDF		1.2	0.45	0.01	0.012	0.012				
1234789-HpCDF	ND		0.60	0.01	ND	0.003				
OCDF		1.7	0.82	0.001	0.0017	0.0017				
				Total TEQ	0.13	0.80				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	80%
$^{13}C_{12}$-2378-TCDF	2	71%
$^{13}C_{12}$-12378-PeCDD	2	110%
$^{13}C_{12}$-12378-PeCDF	2	120%
$^{13}C_{12}$-23478-PeCDF	2	130%
$^{13}C_{12}$-123478-HxCDD	2	87%
$^{13}C_{12}$-123678-HxCDD	2	81%
$^{13}C_{12}$-123478-HxCDF	2	110%
$^{13}C_{12}$-123678-HxCDF	2	110%
$^{13}C_{12}$-234678-HxCDF	2	110%
$^{13}C_{12}$-123789-HxCDF	2	98%
$^{13}C_{12}$-1234678-HpCDD	2	99%
$^{13}C_{12}$-1234678-HpCDF	2	79%
$^{13}C_{12}$-1234789-HpCDF	2	80%
OCDD	4	53%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran

N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-8
SAMPLE ID: 009160-02 09/26/00 17:30 PA/ASH-02A
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 29-Nov-00
5PT date: 29-Nov-00
ORIGINAL SAMPLE MOISTURE: 36 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND		0.26	1	ND	0.13	TCDD	2.2	0.26	2
* 12378-PeCDD	ND		0.49	1.0	ND	0.25	PeCDD	ND	0.49	0
* 123478-HxCDD	ND		0.59	0.1	ND	0.03	HxCDD	1.8	0.62	1
* 123678-HxCDD	ND		0.64	0.1	ND	0.032	HpCDD	6.2	0.63	1
* 123789-HxCDD	ND		0.62	0.1	ND	0.031				
1234678-HpCDD		8.1	0.63	0.01	0.081	0.081	Total Homologues	10		
OCDD		41	1.3	0.001	0.041	0.041				
* 2378-TCDF	ND		0.36	0.1	ND	0.018	TCDF	0.55	0.36	1
* 12378-PeCDF	ND		0.59	0.05	ND	0.015	PeCDF	ND	0.55	0
* 23478-PeCDF	ND		0.52	0.5	ND	0.13	HxCDF	ND	0.38	0
* 123478-HxCDF	ND		0.44	0.1	ND	0.022	HpCDF	1.1	0.65	1
* 123678-HxCDF	ND		0.35	0.1	ND	0.018				
* 234678-HxCDF	ND		0.32	0.1	ND	0.016	Total Homologues	1.6		
* 123789-HxCDF	ND		0.40	0.1	ND	0.02				
1234678-HpCDF		1.0	0.49	0.01	0.01	0.01				
1234789-HpCDF	ND		0.81	0.01	ND	0.0041				
OCDF		1.4	1.1	0.001	0.0014	0.0014				
				Total TEQ	0.13	0.85				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	71%
$^{13}C_{12}$-2378-TCDF	2	60%
$^{13}C_{12}$-12378-PeCDD	2	87%
$^{13}C_{12}$-12378-PeCDF	2	74%
$^{13}C_{12}$-23478-PeCDF	2	91%
$^{13}C_{12}$-123478-HxCDD	2	100%
$^{13}C_{12}$-123678-HxCDD	2	90%
$^{13}C_{12}$-123478-HxCDF	2	94%
$^{13}C_{12}$-123678-HxCDF	2	110%
$^{13}C_{12}$-234678-HxCDF	2	110%
$^{13}C_{12}$-123789-HxCDF	2	110%
$^{13}C_{12}$-1234678-HpCDD	2	110%
$^{13}C_{12}$-1234678-HpCDF	2	91%
$^{13}C_{12}$-1234789-HpCDF	2	78%
OCDD	4	73%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran

N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-9
SAMPLE ID: 009160-03 09/26/00 08:00 PA/ASH-0.1
SAMPLE SIZE 9 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Dec-00
5PT date: 24-Dec-00
ORIGINAL SAMPLE MOISTURE: 24 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND		0.098	1	ND	0.049	TCDD	5	0.098	2
* 12378-PeCDD	ND		0.13	1.0	ND	0.065	PeCDD	ND	0.13	0
* 123478-HxCDD		0.65	0.18	0.1	0.065	0.065	HxCDD	5	0.19	2
* 123678-HxCDD		1.4	0.19	0.1	0.14	0.14	HpCDD	24	0.16	1
* 123789-HxCDD		1.4	0.19	0.1	0.14	0.14				
1234678-HpCDD		28	0.16	0.01	0.28	0.28	Total			
OCDD		250	0.41	0.001	0.25	0.25	Homologues	33		
* 2378-TCDF	NDR	0.77	0.14	0.1	0.077	0.077	TCDF	1	0.14	3
* 12378-PeCDF	NDR	0.52	0.27	0.05	0.026	0.026	PeCDF	3	0.3	2
* 23478-PeCDF	NDR	0.41	0.32	0.5	0.2	0.2	HxCDF	2	0.14	2
* 123478-HxCDF		1.3	0.15	0.1	0.13	0.13	HpCDF	9	0.18	1
* 123678-HxCDF		0.58	0.13	0.1	0.058	0.058				
* 234678-HxCDF	NDR	0.48	0.13	0.1	0.048	0.048	Total			
* 123789-HxCDF	NDR	0.19	0.14	0.1	0.019	0.019	Homologues	15		
1234678-HpCDF		7.6	0.14	0.01	0.076	0.076				
1234789-HpCDF	NDR	0.68	0.22	0.01	0.0068	0.0068				
OCDF		15	0.25	0.001	0.015	0.015				
				Total TEQ	1.5	1.6				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	55%
$^{13}C_{12}$-2378-TCDF	2	54%
$^{13}C_{12}$-12378-PeCDD	2	86%
$^{13}C_{12}$-12378-PeCDF	2	73%
$^{13}C_{12}$-23478-PeCDF	2	76%
$^{13}C_{12}$-123478-HxCDD	2	82%
$^{13}C_{12}$-123678-HxCDD	2	79%
$^{13}C_{12}$-123478-HxCDF	2	77%
$^{13}C_{12}$-123678-HxCDF	2	73%
$^{13}C_{12}$-234678-HxCDF	2	80%
$^{13}C_{12}$-123789-HxCDF	2	82%
$^{13}C_{12}$-1234678-HpCDD	2	85%
$^{13}C_{12}$-1234678-HpCDF	2	69%
$^{13}C_{12}$-1234789-HpCDF	2	65%
OCDD	4	78%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran
N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-10
SAMPLE ID: 009160-04 09/26/00 08:30 PA/ASH-0.1D
SAMPLE SIZE 9 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Dec-00
5PT date: 24-Dec-00
ORIGINAL SAMPLE MOISTURE: 17 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND		0.12	1	ND	0.06	TCDD	5	0.12	2
* 12378-PeCDD	ND		0.15	1.0	ND	0.075	PeCDD	ND	0.15	0
* 123478-HxCDD		0.47	0.13	0.1	0.047	0.047	HxCDD	4	0.13	2
* 123678-HxCDD	NDR	0.93	0.13	0.1	0.093	0.093	HpCDD	21	0.2	1
* 123789-HxCDD	NDR	1.2	0.13	0.1	0.12	0.12				
1234678-HpCDD		22	0.2	0.01	0.22	0.22	Total			
OCDD		240	0.39	0.001	0.24	0.24	Homologues	29		
* 2378-TCDF	NDR	0.73	0.16	0.1	0.073	0.073	TCDF	5	0.16	5
* 12378-PeCDF	NDR	0.31	0.27	0.05	0.015	0.015	PeCDF	2	0.29	1
* 23478-PeCDF		0.33	0.32	0.5	0.17	0.17	HxCDF	2	0.2	1
* 123478-HxCDF		1	0.21	0.1	0.1	0.1	HpCDF	8	0.19	1
* 123678-HxCDF		0.36	0.2	0.1	0.036	0.036				
* 234678-HxCDF	NDR	0.38	0.19	0.1	0.038	0.038	Total			
* 123789-HxCDF	ND		0.21	0.1	ND	0.01	Homologues	16		
1234678-HpCDF		6.4	0.15	0.01	0.064	0.064				
1234789-HpCDF		0.5	0.23	0.01	0.005	0.005				
OCDF		12	0.22	0.001	0.012	0.012				
				Total TEQ	1.2	1.4				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	64%
$^{13}C_{12}$-2378-TCDF	2	56%
$^{13}C_{12}$-12378-PeCDD	2	79%
$^{13}C_{12}$-12378-PeCDF	2	78%
$^{13}C_{12}$-23478-PeCDF	2	76%
$^{13}C_{12}$-123478-HxCDD	2	80%
$^{13}C_{12}$-123678-HxCDD	2	77%
$^{13}C_{12}$-123478-HxCDF	2	73%
$^{13}C_{12}$-123678-HxCDF	2	65%
$^{13}C_{12}$-234678-HxCDF	2	71%
$^{13}C_{12}$-123789-HxCDF	2	77%
$^{13}C_{12}$-1234678-HpCDD	2	100%
$^{13}C_{12}$-1234678-HpCDF	2	83%
$^{13}C_{12}$-1234789-HpCDF	2	79%
OCDD	4	100%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran
N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-11
SAMPLE ID: 009160-05 09/22/00 16:00 PA/ASH-01
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Dec-00
5PT date: 24-Dec-00
ORIGINAL SAMPLE MOISTURE: 34 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g
2378-TCDD	ND		0.096	1	ND	0.048
* 12378-PeCDD	ND		0.23	1.0	ND	0.12
* 123478-HxCDD	ND		0.25	0.1	ND	0.013
* 123678-HxCDD		0.31	0.24	0.1	0.031	0.031
* 123789-HxCDD	ND		0.24	0.1	ND	0.012
1234678-HpCDD		4.9	0.12	0.01	0.049	0.049
OCDD		29	0.27	0.001	0.029	0.029

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDD	2	0.096	2
PeCDD	ND	0.23	0
HxCDD	1	0.24	1
HpCDD	3	0.12	1
Total Homologues	5		

* 2378-TCDF	ND		0.078	0.1	ND	0.0039
* 12378-PeCDF	ND		0.14	0.05	ND	0.0035
* 23478-PeCDF	ND		0.14	0.5	ND	0.035
* 123478-HxCDF	ND		0.16	0.1	ND	0.008
* 123678-HxCDF	ND		0.15	0.1	ND	0.0075
* 234678-HxCDF	ND		0.14	0.1	ND	0.007
* 123789-HxCDF	ND		0.15	0.1	ND	0.0075
1234678-HpCDF	NDR	0.63	0.099	0.01	0.0063	0.0063
1234789-HpCDF	ND		0.14	0.01	ND	0.0007
OCDF		0.83	0.23	0.001	0.00083	0.00083
				Total TEQ	0.12	0.38

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDF	1	0.078	2
PeCDF	ND	0.14	0
HxCDF	ND	0.15	0
HpCDF	1	0.12	1
Total Homologues	1		

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	74%
$^{13}C_{12}$-2378-TCDF	2	67%
$^{13}C_{12}$-12378-PeCDD	2	80%
$^{13}C_{12}$-12378-PeCDF	2	69%
$^{13}C_{12}$-23478-PeCDF	2	73%
$^{13}C_{12}$-123478-HxCDD	2	95%
$^{13}C_{12}$-123678-HxCDD	2	96%
$^{13}C_{12}$-123478-HxCDF	2	86%
$^{13}C_{12}$-123678-HxCDF	2	79%
$^{13}C_{12}$-234678-HxCDF	2	86%
$^{13}C_{12}$-123789-HxCDF	2	87%
$^{13}C_{12}$-1234678-HpCDD	2	110%
$^{13}C_{12}$-1234678-HpCDF	2	73%
$^{13}C_{12}$-1234789-HpCDF	2	94%
OCDD	4	97%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran
N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-12
SAMPLE ID: 009160-06 09/25/00 16:30 PA/ASH-02
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Dec-00
5PT date: 24-Dec-00
ORIGINAL SAMPLE MOISTURE: 33 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g
2378-TCDD	ND		0.14	1	ND	0.07
* 12378-PeCDD	ND		0.24	1.0	ND	0.12
* 123478-HxCDD	ND		0.34	0.1	ND	0.017
* 123678-HxCDD	NDR	0.35	0.33	0.1	0.035	0.035
* 123789-HxCDD	ND		0.33	0.1	ND	0.016
1234678-HpCDD		15	0.14	0.01	0.15	0.15
OCDD		89	0.31	0.001	0.089	0.089

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDD	2	0.14	2
PeCDD	ND	0.24	0
HxCDD	1	0.33	1
HpCDD	8	0.14	1
Total Homologues	11		

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g
* 2378-TCDF	ND		0.21	0.1	ND	0.01
* 12378-PeCDF	ND		0.14	0.05	ND	0.0035
* 23478-PeCDF	ND		0.17	0.5	ND	0.043
* 123478-HxCDF	ND		0.28	0.1	ND	0.014
* 123678-HxCDF	ND		0.24	0.1	ND	0.012
* 234678-HxCDF	ND		0.23	0.1	ND	0.012
* 123789-HxCDF	ND		0.24	0.1	ND	0.012
1234678-HpCDF	NDR	1.2	0.17	0.01	0.012	0.012
1234789-HpCDF	ND		0.23	0.01	ND	0.0012
OCDF		3.5	0.26	0.001	0.0035	0.0035
				Total TEQ	0.29	0.62

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDF	0	0.21	1
PeCDF	ND	0.15	0
HxCDF	ND	0.25	0
HpCDF	2	0.2	1
Total Homologues	3		

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	76%
$^{13}C_{12}$-2378-TCDF	2	71%
$^{13}C_{12}$-12378-PeCDD	2	120%
$^{13}C_{12}$-12378-PeCDF	2	110%
$^{13}C_{12}$-23478-PeCDF	2	110%
$^{13}C_{12}$-123478-HxCDD	2	88%
$^{13}C_{12}$-123678-HxCDD	2	89%
$^{13}C_{12}$-123478-HxCDF	2	85%
$^{13}C_{12}$-123678-HxCDF	2	77%
$^{13}C_{12}$-234678-HxCDF	2	88%
$^{13}C_{12}$-123789-HxCDF	2	91%
$^{13}C_{12}$-1234678-HpCDD	2	98%
$^{13}C_{12}$-1234678-HpCDF	2	78%
$^{13}C_{12}$-1234789-HpCDF	2	79%
OCDD	4	79%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran
N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-13
SAMPLE ID: 009160 07 09/26/00 12:00 **WATER/ASH-0.1A**
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5. 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Dec-00
5PT date: 24-Dec-00
ORIGINAL SAMPLE MOISTURE: 2.3 %

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND		0.21	1	ND	0.1	TCDD	1	0.21	1
* 12378-PeCDD	ND		0.23	1.0	ND	0.12	PeCDD	ND	0.23	0
* 123478-HxCDD	ND		0.3	0.1	ND	0.015	HxCDD	ND	0.29	0
* 123678-HxCDD	ND		0.28	0.1	ND	0.014	HpCDD	6	0.13	1
* 123789-HxCDD	ND		0.29	0.1	ND	0.014				
1234678-HpCDD		9.1	0.13	0.01	0.091	0.091	Total Homologues	7		
OCDD		250	0.42	0.001	0.25	0.25				
* 2378-TCDF		0.25	0.2	0.1	0.025	0.025	TCDF	0	0.2	1
* 12378-PeCDF	NDR	0.48	0.23	0.05	0.024	0.024	PeCDF	ND	0.26	0
* 23478-PeCDF	ND		0.28	0.5	ND	0.07	HxCDF	ND	0.24	0
* 123478-HxCDF	NDR	0.4	0.25	0.1	0.04	0.04	HpCDF	4	0.15	1
* 123678-HxCDF	ND		0.23	0.1	ND	0.012				
* 234678-HxCDF	ND		0.27	0.1	ND	0.014	Total Homologues	4		
* 123789-HxCDF	ND		0.21	0.1	ND	0.01				
1234678-HpCDF		2.8	0.12	0.01	0.028	0.028				
1234789-HpCDF		0.42	0.18	0.01	0.0042	0.0042				
OCDF		8.2	0.25	0.001	0.0082	0.0082				
				Total TEQ	0.47	0.84				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	75%
$^{13}C_{12}$-2378-TCDF	2	66%
$^{13}C_{12}$-12378-PeCDD	2	88%
$^{13}C_{12}$-12378-PeCDF	2	89%
$^{13}C_{12}$-23478-PeCDF	2	86%
$^{13}C_{12}$-123478-HxCDD	2	100%
$^{13}C_{12}$-123678-HxCDD	2	100%
$^{13}C_{12}$-123478-HxCDF	2	94%
$^{13}C_{12}$-123678-HxCDF	2	83%
$^{13}C_{12}$-234678-HxCDF	2	78%
$^{13}C_{12}$-123789-HxCDF	2	100%
$^{13}C_{12}$-1234678-HpCDD	2	120%
$^{13}C_{12}$-1234678-HpCDF	2	98%
$^{13}C_{12}$-1234789-HpCDF	2	99%
OCDD	4	110%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran

N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SOIL
SAMPLE #: L19024-14
SAMPLE ID: 009160-08 09/26/00 12:30 WATER/ASH-0.1A
SAMPLE SIZE 9.7 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 24-Nov-00
5PT date: 24-Nov-00
ORIGINAL SAMPLE MOISTURE: 15 %

PCDD/F Congener	Concentration pg/g	DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g
2378-TCDD	ND	0.38	1	ND	0.19
* 12378-PeCDD	ND	0.47	1.0	ND	0.23
* 123478-HxCDD	ND	0.69	0.1	ND	0.034
* 123678-HxCDD	1.6	0.69	0.1	0.16	0.16
* 123789-HxCDD	0.84	0.69	0.1	0.084	0.084
1234678-HpCDD	18	0.78	0.01	0.18	0.18
OCDD	140	1.8	0.001	0.14	0.14

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDD	3.4	0.38	2
PeCDD	ND	0.47	0
HxCDD	7.7	0.69	2
HpCDD	14	0.78	1
Total Homologues	25		

* 2378-TCDF	0.63	0.54	0.1	0.063	0.063
* 12378-PeCDF	ND	0.52	0.05	ND	0.013
* 23478-PeCDF	ND	0.59	0.5	ND	0.15
* 123478-HxCDF	ND	0.74	0.1	ND	0.037
* 123678-HxCDF	ND	0.74	0.1	ND	0.037
* 234678-HxCDF	ND	0.70	0.1	ND	0.035
* 123789-HxCDF	ND	0.85	0.1	ND	0.043
1234678-HpCDF	2.8	0.54	0.01	0.028	0.028
1234789-HpCDF	ND	0.79	0.01	ND	0.0039
OCDF	6.8	1.9	0.001	0.0068	0.0068
			Total TEQ	0.66	1.4

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDF	1.6	0.54	2
PeCDF	ND	0.56	0
HxCDF	1.6	0.76	1
HpCDF	ND	0.66	0
Total Homologues	3.2		

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	83%
$^{13}C_{12}$-2378-TCDF	2	69%
$^{13}C_{12}$-12378-PeCDD	2	76%
$^{13}C_{12}$-12378-PeCDF	2	76%
$^{13}C_{12}$-23478-PeCDF	2	71%
$^{13}C_{12}$-123478-HxCDD	2	110%
$^{13}C_{12}$-123678-HxCDD	2	100%
$^{13}C_{12}$-123478-HxCDF	2	110%
$^{13}C_{12}$-123678-HxCDF	2	110%
$^{13}C_{12}$-234678-HxCDF	2	120%
$^{13}C_{12}$-123789-HxCDF	2	100%
$^{13}C_{12}$-1234678-HpCDD	2	97%
$^{13}C_{12}$-1234678-HpCDF	2	87%
$^{13}C_{12}$-1234789-HpCDF	2	85%
OCDD	4	56%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
I dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran

N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SEA SAND
SAMPLE #: L19024-OPR
SAMPLE ID: ONGOING PRECISION AND RECOVERY TEST
SAMPLE SIZE 40 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 24-Dec-00
5PT date: 24-Dec-00

PCDD/F Congener	Concentration pg/g	Recovery Limits
2378-TCDD	9.5	6.7-15.8
* 12378-PeCDD	41	35-71
* 123478-HxCDD	50	35-82
* 123678-HxCDD	52	38-67
* 123789-HxCDD	52	32-81
1234678-HpCDD	53	35-70
OCDD	120	78-144
* 2378-TCDF	11	7.5-15.8
* 12378-PeCDF	51	40-67
* 23478-PeCDF	52	34-80
* 123478-HxCDF	51	36-67
* 123678-HxCDF	51	42-65
* 234678-HxCDF	48	35-78
* 123789-HxCDF	52	39-65
1234678-HpCDF	63	41-63
1234789-HpCDF	58	39-69
OCDF	100	63-170

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	67%
$^{13}C_{12}$-2378-TCDF	2	55%
$^{13}C_{12}$-12378-PeCDD	2	77%
$^{13}C_{12}$-12378-PeCDF	2	63%
$^{13}C_{12}$-23478-PeCDF	2	67%
$^{13}C_{12}$-123478-HxCDD	2	98%
$^{13}C_{12}$-123678-HxCDD	2	97%
$^{13}C_{12}$-123478-HxCDF	2	94%
$^{13}C_{12}$-123678-HxCDF	2	90%
$^{13}C_{12}$-234678-HxCDF	2	100%
$^{13}C_{12}$-123789-HxCDF	2	93%
$^{13}C_{12}$-1234678-HpCDD	2	100%
$^{13}C_{12}$-1234678-HpCDF	2	71%
$^{13}C_{12}$-1234789-HpCDF	2	86%
OCDD	4	93%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran

N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SEA SAND
SAMPLE #: L19024-MB FOR SAMPLES L19024-9,10,11,12,13
SAMPLE ID: METHOD BLANK
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 24-Dec-00
5PT date: 24-Dec-00

PCDD/F Congener	Concentration pg/g		DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g
2378-TCDD	ND		0.075	1	ND	0.038
* 12378-PeCDD	ND		0.12	1.0	ND	0.06
* 123478-HxCDD	ND		0.13	0.1	ND	0.0065
* 123678-HxCDD	ND		0.12	0.1	ND	0.006
* 123789-HxCDD	ND		0.12	0.1	ND	0.006
1234678-HpCDD	ND		0.72	0.01	ND	0.0036
OCDD		16	0.41	0.001	0.016	0.016
* 2378-TCDF	ND		0.078	0.1	ND	0.0039
* 12378-PeCDF	ND		0.14	0.05	ND	0.0035
* 23478-PeCDF	ND		0.17	0.5	ND	0.043
* 123478-HxCDF	ND		0.16	0.1	ND	0.008
* 123678-HxCDF	ND		0.15	0.1	ND	0.0075
* 234678-HxCDF	ND		0.15	0.1	ND	0.0075
* 123789-HxCDF	ND		0.16	0.1	ND	0.008
1234678-HpCDF	ND		0.14	0.01	ND	0.0007
1234789-HpCDF	ND		0.18	0.01	ND	0.0009
OCDF	ND		0.27	0.001	ND	0.00013
				Total TEQ	0.016	0.22

PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
TCDD	ND	0.075	0
PeCDD	ND	0.12	0
HxCDD	ND	0.12	0
HpCDD	ND	0.72	0
Total Homologues	ND		
TCDF	ND	0.078	0
PeCDF	ND	0.15	0
HxCDF	ND	0.15	0
HpCDF	ND	0.16	0
Total Homologues	ND		

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	53%
$^{13}C_{12}$-2378-TCDF	2	44%
$^{13}C_{12}$-12378-PeCDD	2	59%
$^{13}C_{12}$-12378-PeCDF	2	64%
$^{13}C_{12}$-23478-PeCDF	2	56%
$^{13}C_{12}$-123478-HxCDD	2	88%
$^{13}C_{12}$-123678-HxCDD	2	90%
$^{13}C_{12}$-123478-HxCDF	2	83%
$^{13}C_{12}$-123678-HxCDF	2	75%
$^{13}C_{12}$-234678-HxCDF	2	78%
$^{13}C_{12}$-123789-HxCDF	2	82%
$^{13}C_{12}$-1234678-HpCDD	2	100%
$^{13}C_{12}$-1234678-HpCDF	2	69%
$^{13}C_{12}$-1234789-HpCDF	2	76%
OCDD	4	92%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

The following abbreviations are used:

DL = Detection Limit
ND = Not Detected
TEQ = 2,3,7,8-TCDD Toxic Equivalency
NDR = Not Detected due to incorrect isotope Ratio
dibenzofuran = Polychlorinated dibenzo-p-dioxin/Polychlorinated dibenzofuran
N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

DIOXIN/FURAN ANALYSIS REPORT

ENVIRO-TEST LABORATORIES
TRACE ORGANICS DIVISION

PROJECT: PINNACLE LABS
MATRIX: SODIUM SULPHATE
SAMPLE #: L19024-MB
SAMPLE ID: METHOD BLANK
SAMPLE SIZE 10 g

GC COLUMN: J&W DB-5, 60m x 0.32mm
INSTRUMENT: KRATOS CONCEPT 1S HRMS
ANAL. DATE: 27-Nov-00
5PT date: 27-Nov-00

PCDD/F Congener	Concentration pg/g	DL pg/g	I-TEF (NATO)	TEQ (ND=0) pg/g	TEQ (ND=0.5DL) pg/g	PCDD/F Homologues	Concentration pg/g	DL pg/g	NP
2378-TCDD	ND	0.22	1	ND	0.11	TCDD	ND	0.22	0
* 12378-PeCDD	ND	0.37	1	ND	0.19	PeCDD	ND	0.37	0
* 123478-HxCDD	ND	0.73	0.1	ND	0.036	HxCDD	1.5	0.76	1
* 123678-HxCDD	ND	0.78	0.1	ND	0.039	HpCDD	2.5	0.79	1
* 123789-HxCDD	ND	0.76	0.1	ND	0.038				
1234678-HpCDD	3.8	0.79	0.01	0.038	0.038	Total			
OCDD	31	3.0	0.001	0.031	0.031	Homologues	4.0		
* 2378-TCDF	ND	0.22	0.1	ND	0.011	TCDF	ND	0.22	0
* 12378-PeCDF	ND	0.36	0.05	ND	0.009	PeCDF	ND	0.38	0
* 23478-PeCDF	ND	0.41	0.5	ND	0.1	HxCDF	ND	0.81	0
* 123478-HxCDF	ND	0.81	0.1	ND	0.041	HpCDF	ND	0.74	0
* 123678-HxCDF	ND	0.74	0.1	ND	0.037				
* 234678-HxCDF	ND	0.63	0.1	ND	0.032	Total			
* 123789-HxCDF	ND	1.1	0.1	ND	0.055	Homologues	ND		
1234678-HpCDF	1.1	0.59	0.01	0.011	0.011				
1234789-HpCDF	1.5	0.89	0.01	0.015	0.015				
OCDF	4.0	2.5	0.001	0.004	0.004				
			Total TEQ	0.099	0.80				

PCDD/F Surrogate	Amount added (ng)	Recovery
$^{13}C_{12}$-2378-TCDD	2	26%
$^{13}C_{12}$-2378-TCDF	2	21%
$^{13}C_{12}$-12378-PeCDD	2	32%
$^{13}C_{12}$-12378-PeCDF	2	26%
$^{13}C_{12}$-23478-PeCDF	2	27%
$^{13}C_{12}$-123478-HxCDD	2	39%
$^{13}C_{12}$-123678-HxCDD	2	39%
$^{13}C_{12}$-123478-HxCDF	2	41%
$^{13}C_{12}$-123678-HxCDF	2	38%
$^{13}C_{12}$-234678-HxCDF	2	48%
$^{13}C_{12}$-123789-HxCDF	2	42%
$^{13}C_{12}$-1234678-HpCDD	2	51%
$^{13}C_{12}$-1234678-HpCDF	2	38%
$^{13}C_{12}$-1234789-HpCDF	2	36%
OCDD	4	38%

Notes:
1 Results are corrected for surrogate recovery.
2 PCDD/F Homologues results do NOT include the 2,3,7,8-congeners.
*

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N/A = Not Applicable
NP = Number of Analyte Peaks
DPE = Chlorinated DiPhenylEther Interference
I-TEF = International Toxic Equivalency Factor

Pinnacle Laboratories, Inc.

Network Project Manager: Kimberly D. McNeill

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

Interlab Chain of Custody

Date: 9/29/2000 Page: 1 of 1

Authorized by/ Attn: John Young

CLIENT: NMED HWB
ADDRESS: 2044A Galisteo St.
CITY, STATE, ZIP: Santa Fe, NM 87505
(505) 827-1558 (ext. 1036) Fax (505)827-1544

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Isotopic Pu (Line Item # 103A)	Isotopic Am (Line Item 101A)	Isotopic U (Line Item # 105A)	Gamma Spec (Line Item # 121)	Gross Alpha/Beta (Line Item # 125)	Sr - 90 (Line Item # 130 B)	Dioxin/Furan (Line Item # 14B)	Total Organic Carbon (TOC) Line Item 90	Nitroaromatics & Nitroamines (Line Item # 16)	PNAs PAHs (Line Item # 21)	300 Series (Line Item # 77)	ICPAS individual metals Li, Si, Sr (Line Item # 33)	Acid Digestion for soils, sludge, sediment 3050 (Line Item 53)	23 Target Analyte List Metals plus CN (Line Item # 44)	310.1 Alkalinity & Carbonate / Bicarbonate (Line Item # 79)	pH (Line Item # 81)	Chlorinated Herbicides (Line Item # 8)	Isotopic Thorium (line Item # 104A)	PU 241 (Line Item # 115A)	Technecium 99 (Line Item 116)	Particle Size		NUMBER OF CONTAINERS
PA/ASH - 01A	09/25/2000	17:00	SEDIMENT	01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
PA/ASH - 02A	09/25/2000	17:30	SEDIMENT	02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
PA/ASH - 0.1	09/26/2000	8:00	SEDIMENT	03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
PA/ASH - 0.1D	09/26/2000	8:30	SEDIMENT	04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
PA/ASH - 01	09/25/2000	16:00	SEDIMENT	05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
PA/ASH - 02	09/25/2000	16:30	SEDIMENT	06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
WATER/ASH - 0.1	09/26/2000	12:00	SEDIMENT	07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
WATER/ASH - 0.1A	09/26/2000	12:30	SEDIMENT	08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		3
																										Total Number of Containers	24

PROJECT INFORMATION
PROJECT #: HWB -WRC-2000-CG.
PROJ. NAME: Raft Trip Seds
QC LEVEL: STD.
QC REQUIRED: MS MSD
TAT: Standard
DUE DATE:
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: YES NO

SAMPLE RECEIPT
Total Number of Containers: 24
Chain of Custody Seals: Y
Received Intact?: Y
Received Good Cond./Cold: Y 16°C
LAB NUMBER: 0001160

COMMENTS: Use volume provided to complete MS/MSD on WATER/ASH - 0.1A. Please spike

SAMPLES SENT TO:
PENSACOLA - STL-FL
ESL - OR
STL - CT
ATEL - AZ
ATEL - MARION
ATEL - MELMORE
BARRINGER
WCAS
WOHL

RELINQUISED BY: 1
Signature: [signature]
Printed Name: Ralph Ford-Schmid
Time: 15:45
Date: 09/29/2000

RECEIVED BY: 1
Signature: Francine Tenuto
Printed Name: Francine Tenuto
Company
Time: 1810
Date: 9/29/00

RELINQUISED BY:
Signature:
Printed Name:
Pinnacle Laboratories, Inc.
Time:
Date:

RECEIVED BY:
Signature:
Printed Name:
Company
Time:
Date: