Superior Water Light & Power
Superior, Wisconsin

Phase II, Part II Site Investigation Report – Appendices A through F

Former Manufactured Gas Plant
Superior, Wisconsin

ENSR *International*
February 2003
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APPENDIX A

Boring Logs and Borehole Abandonment Forms

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-8

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/18/02	9/18/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	613.89	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐ | Lat | Local Grid Location N☐ E☐
State Plane NA | Long | S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	38.4	NA	1–4	Topsoil with grass and roots, dark brown, moist, no odor	CL			0						
2	GP	48	NA	5–8					376						Soil Sample B-8-6-8
3	GP	48	NA	9–12	Clay, stiff, red-brown, slightly moist or moist, no odor.	CH			197						
4	GP	48	NA	13–16					25.5 8.7						
5	GP	48	NA	17–20					3.4 0						
				21–25	END OF BORING - 20 FEET										

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/18/02	9/18/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	614.10	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	40.8	NA	1–4	Topsoil with grass and roots, dark brown, moist, no odor	CL			0						
2	GP	45.6	NA	5–8					0						
3	GP	48	NA	9–12	Clay, stiff, red-brown, moist, no odor	CH			0						Soil Sample B-9-10-12
4	GP	48	NA	13–16					0						
5	GP	48	NA	17–20					0						
				20	END OF BORING - 20 FEET										

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Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of thes form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-10

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Welber, Thein Well Co	9/18/02	9/18/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	613.33	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	36	NA	1–2	Topsoil with grass and roots, brown, moist, no odor	CL			0						
2	GP	48	NA	5–7					556 901						Soil Sample B-10-6-8
3	GP	48	NA	8–11	Clay, stiff, red-brown, moist, slight odor	CH			236 791						
4	GP	48	NA	12–15					296 22						
5	GP	48	NA	16–19					8.6						
				20	END OF BORING - 20 FEET										

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	GAEA Technologies Ltd.	202, 1614 Dundas Street East Whitby, ON

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-11

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Welber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.21	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	45.6	NA	1-4	2 inches gravel, then lime-like material, hard, gray, no odor				6.6						EnChem B-11-1-3
2	GP	48	NA	4-8	Same as above except dark gray and slight odor				11 220						
3	GP	48	NA	8-12	1" dark brown peat layer, odor				1261 3300						EnChem B-11-10-12
4	GP	38.4	NA	12-16	Cinder-like material with sand, loose, wet and tarry, strong odor Clay, red-brown, stiff, moist, slight odor	CH			NA						GII B-11-12-13
5	GP	36	NA	16-20	Same as above, except coated with sand and tar sluff from 12-13 foot layer				NA						
				20-25	END OF BORING - 20 FEET										

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Welber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	610.96	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
1	GP	45.6	NA	1-4	Gray lime-like material, hard and crumbly, slightly moist, grey, no odor				40						
2	GP	46.8	NA	5-8	- Slight petro odor -				556 3300						
3	GP	36	NA	9-12	Same as above except dark gray and with 1" peat layer Cinder-like material, wet and tarry, black, strong odor, some peat layers				3300 NA						EnChem B-12-8-10 GTI B-12-11-12
4	GP	2.4	NA	13-16		CH			NA						
5	GP	45.6	NA	17-20	Clay, red-brown, with coating of tarry sluff from above layer, odor, stiff END OF BORING - 20 FEET				NA						
				21-25											

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-13

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	610.81	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	48	NA	1-4	0 - 2" = gravel, 1 - 2 ft = gray lime-like material, 2 - 3 ft = white, crumbly, soft material, 3 - 4 ft = gray lime material. All moist with no odor.				2						
2	GP	48	NA	5-8	Gray, lime-like material, slightly moist, hard, crumbly, slight odor				9.1 0						
3	GP	48	NA	9-11	Same as above except dark gray and moist				2 1857						
4	GP	48	NA	12-15	Peat material with tar, black, wet, strong odor Fine to coarse sand, tarry, wet, strong odor Clay, red-brown, coated in sluff of tarry material from above layer, tarry odor, moist	SP CH			NA						GTI B-13-12-13 EnChem B-13-15-16
5	GP	24	NA	16-19					NA						
				20-25	END OF BORING - 20 FEET										

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Signature	Firm	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-14

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Welber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.03	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐ | Lat | Local Grid Location N☐ E☐ S☐ W☐
State Plane NA | Long

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				1	Parking lot aggregate										
1	GP	42	NA	2	Gray fill material				7.5						
				3											
				4											
2	GP	48	NA	5					799						
				6											
				7											
				8											
3	GP	48	NA	9					3281						
				10											
				11					2591						EnChem B-14-11-12
				12	Cinder-like material with possible purifier waste (wood chips) and 2" layer of sand above clay, wet, tarry, strong odor										
4	GP	44.4	NA	13		CH									
				14	Clay, red-brown, moist, stiff, covered in tarry material from above				NA						
				15											EnChem B-14-15-16
				16											
				17											
5	GP	12	NA	18					0						
				19											
				20											
				21	END OF BORING - 20 FEET										
				22											
				23											
				24											
				25											

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-15

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.68	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
1	GP	45.6	NA	1-4	Gravel, mixed with sand and lime material, brown, gray, yellow-brown, dry and crumbly				0						EnChem B-15-1-3
2	GP	42	NA	5-8	Clay with trace gravel, red-brown, with black shiny coal-like material in 4" layer, moist, stiff, slight odor, appears to be fill because of cracked structure.				1080						EnChem B-15-6-8
3	GP	9.6	NA	9-12	Clay with tarry wood pieces causing low recovery. Wet pulverized wood pieces, tarry, black, strong odor.				NA						
4	GP	48	NA	13-16	Clay, red-brown, moist, stiff, odor				NA						
5	GP	0	NA	17-20	No recovery, only tarry sleave				NA						
				21-25	END OF BORING - 20 FEET										

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Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-16

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Welber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.24	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	38.4	NA	1-4	Lime-like material, gravel, brick, and black cindery-like material mixed. Crumbly, dry, no odor.				0						
2	GP	33.6	NA	5-8	Clay with trace gravel, fill, moist, med-stiff, cracked structure, slight odor				104						EnChem B-16-6-8
3	GP	24	NA	9-12	Clay and wood, low recovery due to large pieces of wood, strong odor from wood.				2640						
4	GP	0	NA	13-16	No recovery, just tarry tube. Mixed sand and firewood pieces, wet, black, tarry, strong odor.										
5	GP	48	NA	17-20	Clay, red-brown, moist, med-stiff, odor, covered in tarry liquid.	CH									
				21-25	END OF BORING - 20 FEET										

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-17

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.52	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N ☐ E ☐ S ☐ W ☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	36	NA	1–4	0-2" gravel. Lime-like material, gray to yellow-brown, crumbly, slightly moist, no odor.				0						
2	GP	38.4	NA	5–7	Black cinder and wood and topsoil-like material, moist, no odor, crumbly.				0						EnChem B-17-6-8
				8–9	Clay with trace gravel, fill, moist, med-stiff, Hit Steel at 8 ft - Refusal -										
				10	END OF BORING - 8 FEET										

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-18

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	612.07	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N ☐ E ☐ S ☐ W ☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	48	NA	1-3	Gravel and sand 0-1 Ft, brown, moist 1-3 Ft = lime-like material, gray, no odor, moist				0						
2	GP	45.6	NA	4-7	Clay, red-brown, trace gravel, moist, cracked structure, Fill.	CH			0						
3	GP	27.6	NA	8-11					0						EnChem B-18-10-12
4	GP	48	NA	12-15	4-inch med sand layer, wet, brown, no odor. Clay, red-brown, w/some gray mottles, moist, med-stiff, no odor.	CH			0						
5	GP	48	NA	16-19					0						
				20	END OF BORING - 20 FEET										
				21-25											

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm
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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-19

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	611.84	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat / Long	Local Grid Location
State Plane NA		N☐ S☐ E☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	48	NA	1-6	0-6" = gravel and sand 6"-6.5 Ft = brick and concrete, orange, white, and yellow, dry, intact, no odor.				0						
2	GP	48	NA	6-8	Clay, red-brown, moist, stiff, no odor	CH			0						
3	GP	12	NA	9-12	- low recovery - rock in sampler tip -				0						EnChem B-19-10-12
4	GP	48	NA	13-16					0						
				16-25	END OF BORING - 16 FEET										

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-20

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	612.33	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	40.8	NA	1-16	0-1" = gravel and sand Mixed brick, cinders, sand and gravel, red-brown, black, and brown, dry, no odor.				0						
2	GP	36	NA	6-8	Clay, red-brown, moist, no odor, native	CH			0						
3	GP	42	NA	10-12					0						EnChem B-20-10-12
4	GP	48	NA	14-16					0						
				16	END OF BORING - 16 FEET										

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-21

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	612.75	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N☐ E☐ S☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	38.4	NA	1-3	0-1" = gravel and sand, brown 1-2" lime-like material, gray 2-3" Brick, orange. All crumbly and dry, no odor.				0						
2	GP	36	NA	4-7	Mixed brick, cinders, sand and gravel, red-brown, black, and brown, dry, no odor. Brick with med brown sand layer @ 6-7 Ft.				0						
3	GP	48	NA	8-11	Clay, red-brown, moist, no odor, native	CH			0						EnChem B-21-10-12
4	GP		NA	12-15					0						
				16	END OF BORING - 16 FEET										
				17-25											

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-22

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	612.29	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat / Long	Local Grid Location
State Plane NA		N☐ S☐ E☐ W☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	GP	24	NA	1–4	Sand with gravel, brown and dark brown, dry, crumbly, no odor. Bricks, red, white, and purple-brown, crumbly, intact and hard, no odor.				0						
2	GP	33.6	NA	5–8					0						
3	GP	36	NA	9–12	Clay with sand and gravel layers that are wet, red-brown to brown, no odor.	CH			0						EnChem B-22-8-10
4	GP	38.4	NA	13–16					0						
				17–25	END OF BORING - 16 FEET										

I herby certify that the information on this form is true and the correct to the best of my knowledge

Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of thes form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
SWL&P MGP		B-23

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Alvin Weiber, Thein Well Co	9/19/02	9/19/02	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
NA	NA	NA	NA	613.65	2 inch

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☐	Lat	Local Grid Location
State Plane NA	Long	N ☐ E ☐ S ☐ W ☐

Facility ID	County	County Code	Civil Town/City/or Village
	Douglas		Superior

Sample Number	Sample Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic	Well	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
1	GP	38.4	NA	1–3	Topsoil with roots and grass, red-brown and dark brown 0-1'	CL			0						
				3–4	Clay, red-brown, moist, stiff, no odor	CH									
2	GP	36	NA	4–8	- Same with petro odor -				3771						GTI B-23-6-8
3	GP	48	NA	8–12					2310						
									3676						GTI B-23-10-12
4	GP	48	NA	12–16					849						
				16	END OF BORING - 16 FEET										

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Signature	Firm
	GAEA Technologies Ltd. 202, 1614 Dundas Street East Whitby, ON

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County

Common Well Name _____ Gov't Lot (If applicable) ☐ E ☒ W

SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14
Grid Location

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ Long ___ ___ ___ or

St. Plane _____ ft. N. _____ ft. E. S ☐ C ☐ N ☐ Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well: _ _ _ _ _ _

(2) FACILITY / OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID | License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE | Original Owner

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.): 20' (From groundsurface) Casing Diameter (in.): N/A Casing Depth (ft.): _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#8

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature] Date Signed: 10/24/02

Street or Route: P.O. BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

FEB-17-2003 MON 04:48 PM THEIN WELL CLARA CITY 3208473459 P. 02

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) ☐ E ☒ W

SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 Grid Location

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ Long ___ ___ ___ or

St. Plane _____ ft. N. _____ ft. E. ☐S ☐C ☐N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#9

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature]

Date Signed: 10/24/02

Street or Route: P.O.BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments:

FEB-17-2003 MON 04:49 PM THEIN WELL CLARA CITY 3208473459 P. 04

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000

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Route to: ☐ Drinking Water ☐ Watersbed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
— — — — —		DOUGLAS

Common Well Name _____ _____ Gov't Lot (If applicable)

Grid Location SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ° ' " Long ° ' " or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	— — — — —

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#10

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature] Date Signed: 10/24/02

Street or Route: P.O.BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ Long ___ ___ ___ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID | License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE | Original Owner

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 24' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	24'	1	

(6) Comments: GP#11

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY | Date of Abandonment: 9/19/02

Signature of Person Doing Work | Date Signed: 10/24/02

Street or Route: P.O.BOX 422 | Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
_ _ _ _ _ _ _ _		DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ° ' " Long ° ' " or

St. Plane _____ ft. N. _____ ft. E. S ☐ C ☐ N ☐ Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	_ _ _ _ _ _ _ _

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#12

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work

Date Signed: 10/24/02

Street or Route: P.O.BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropiate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W
Grid Location

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ° ' " Long ° ' " or

St. Plane _____ ft. N. _____ ft. E. S ☐ C ☐ N ☐ Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET & WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#13

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature]

Date Signed: 10/24/02

Street or Route: P.O. BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments:

DNR/COUNTY

FEB-17-2003 MON 04:53 PM THEIN WELL CLARA CITY 3208473459 P. 12

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropiate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
_ _ - _ _ _ _		DOUGLAS

Common Well Name _____ _____ Gov't Lot (If applicable) ☐ E ☒ W

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ . ___ Long ___ ___ ___ . ___ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	_ _ - _ _ _ _

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface)
Casing Diameter (in.) N/A
Casing Depth (ft.) _____
Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP # 1014

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY
Date of Abandonment: 9/19/02
Signature of Person Doing Work:
Date Signed: 10/24/02
Street or Route: P.O.BOX 422
Telephone Number: (320) 847-3207
City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY
Date Received: Noted By:
Comments:

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. _____ DNR Well ID No. _____ County: DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) ☐ E ☒ W

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ____ ° ____ ' ____ . ____ " Long ____ ° ____ ' ____ . ____ " or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well _____

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID _____ License/Permit/Monitoring No. _____

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE Original Owner _____

Street Address or Route of Owner _____

City, State, Zip Code _____

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20'	1	

(6) Comments: GP#15

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature] Date Signed: 10/24/02

Street or Route: P.O.BOX 422 Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received _____ Noted By _____

Comments _____

DNR/COUNTY

FEB-17-2003 MON 04:54 PM THEIN WELL CLARA CITY 3208473459 P. 18

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.: _ _ _ _ _ _ _
DNR Well ID No.:
County: DOUGLAS
Common Well Name: _____ Gov't Lot (If applicable): _____
Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W
_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.
Local Grid Origin ☐ (estimated: ☐) or Well Location ☐
Lat. ___ ___ ___ . ___ Long ___ ___ ___ . ___ or
St. Plane _____ ft. N. _____ ft. E. G ☐ C ☐ N ☐ Zone
Reason For Abandonment: BORE HOLE ONLY
WI Unique Well No. of Replacement Well: _ _ _ _ _ _ _

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER
Facility ID:
License/Permit/Monitoring No.:
Street Address of Well: WINTER STREET @ WATER STREET
City, Village, or Town: SUPERIOR, WI
Present Well Owner: SAME AS ABOVE
Original Owner:
Street Address or Route of Owner:
City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.): 20' (From groundsurface)
Casing Diameter (in.): N/A
Casing Depth (ft.):
Lower Drillhole Diameter (in.):

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet

Depth to Water (Feet):

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Powered (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20	1	

(6) Comments: GP#16

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY
Date of Abandonment: 9/19/02
Signature of Person Doing Work:
Date Signed: 10/24/02
Street or Route: P.O. BOX 422
Telephone Number: (320) 847-3207
City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY
Date Received:
Noted By:
Comments:

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
_ _ _ _ _ _ _		DOUGLAS

Common Well Name _____ _____ Gov't Lot (If applicable)

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ Long ___ ___ ___ or

St. Plane _____ ft. N. _____ ft. E. ☐S ☐E ☐N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 7½' (From groundsurface) Casing Diameter (in.) N/A

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	7½	½	

(6) Comments: GP#17

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work

Date Signed: 10/24/02

Street or Route: P.O. BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County: DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ . ___ Long ___ ___ ___ . ___ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well ___ ___ ___ ___ ___

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID | License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE | Original Owner

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 20' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	20	1	

(6) Comments: GP#18

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work

Date Signed: 10/24/02

Street or Route: P.O.BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: ORTONVILLE, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. _ _ _ _ _ _ _ _ | DNR Well ID No. | County: DOUGLAS

Common Well Name _____ Gov't Lot (if applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ____ ° ____ ' ____ " Long ____ ° ____ ' ____ " or

St. Plane _____ ft. N. _____ ft. E. S ☐ C ☐ N ☐ Zone

Reason For Abandonment: BORE HOLE ONLY | WI Unique Well No. of Replacement Well _ _ _ _ _ _ _ _

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID | License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE | Original Owner

Street Address or Route of Owner

City, State, Zip Code

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	16'	1	

(6) Comments: GP#19

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY | Date of Abandonment: 9/19/02

Signature of Person Doing Work | Date Signed: 10/24/02

Street or Route: P.O.BOX 422 | Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY
Date Received | Noted By
Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ____ ° ____ ' ____ . ____ " Long ____ ° ____ ' ____ . ____ " or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	16'	1	

(6) Comments: GP#20

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature] Date Signed: 10/24/02

Street or Route: P.O. BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. _____ DNR Well ID No. _____ County: DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 : T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ° ' " Long ° ' " or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well _____

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID _____ License/Permit/Monitoring No. _____

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE Original Owner _____

Street Address or Route of Owner _____

City, State, Zip Code _____

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16' (From groundsurface) Casing Diameter (in.) N/A

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	16	1	

(6) Comments: GP#21

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work

Date Signed: 10/24/02

Street or Route: P.O.BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received _____ Noted By _____

Comments

DNR/COUNTY

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W
Grid Location

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ___ ___ ___ . ___ Long ___ ___ ___ . ___ or

St. Plane _____ ft. N. _____ ft. E. S ☐ C ☐ N ☐ Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
BORE HOLE ONLY	

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID	License/Permit/Monitoring No.

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner	Original Owner
SAME AS ABOVE	

Street Address or Route of Owner:

City, State, Zip Code:

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	16	1	

(6) Comments: GP # 22

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: Robert Thein

Date Signed: 10/24/02

Street or Route: P.O. BOX 422

Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION

WI Unique Well No. _____ DNR Well ID No. _____ County: DOUGLAS

Common Well Name _____ Gov't Lot (If applicable) _____

Grid Location: SW 1/4 of SW 1/4 of Sec. 13 ; T. 49 N; R. 14 ☐ E ☒ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat. ____ ____ ____ Long ____ ____ ____ or

St. Plane _____ ft. N. _____ ft. E. ☐ S ☐ C ☐ N Zone

Reason For Abandonment: BORE HOLE ONLY

WI Unique Well No. of Replacement Well _____

(2) FACILITY/OWNER INFORMATION

Facility Name: SUPERIOR WATER, LIGHT & POWER

Facility ID _____ License/Permit/Monitoring No. _____

Street Address of Well: WINTER STREET @ WATER STREET

City, Village, or Town: SUPERIOR, WI

Present Well Owner: SAME AS ABOVE Original Owner _____

Street Address or Route of Owner _____

City, State, Zip Code _____

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 9/18/02

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 16' (From groundsurface) Casing Diameter (in.) N/A Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☒ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Bentonite-Sand Slurry " "
☐ Bentonite Chips

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite - Cement Grout
☐ Bentonite - Sand Slurry

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	No. Yards, Sacks, Sealant or Volume (Circle One)	Mix Ratio or Mud Weight
NEAT CEMENT	Surface	16	1	

(6) Comments: GP#23

(7) Name of Person or Firm Doing Sealing Work: THEIN WELL COMPANY

Date of Abandonment: 9/19/02

Signature of Person Doing Work: [signature] Date Signed: 10/24/02

Street or Route: P.O. BOX 422 Telephone Number: (320) 847-3207

City, State, Zip Code: CLARA CITY, MN 56222

FOR DNR OR COUNTY USE ONLY

Date Received _____ Noted By _____

Comments _____

APPENDIX B

Groundwater Collection Logs

ENSR

WELL NO. MW-1

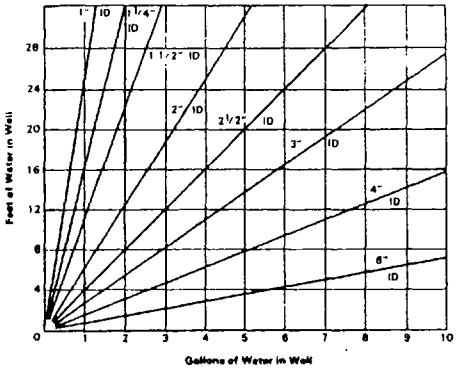
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/20/02 Time: Start 915 am/pm

Project Name Superior WL+P M&P Finish 945 am/pm

Location Superior, WI

Weather Conds.: 60's, partly Sunny Collector C. Boehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 8.58 Casing Diameter 2"

c. Length of Water Column _____ (a-b)

d. Calculated Purgeable Volume _____

2. WELL PURGEABLE DATA

a. Purge Method Peristaltic Pump

b. Required Purge Volume (@ _____ well volumes)

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T° (C)	PH	Spec. Cond. (ms/cm)	ORP (mV)	Color	Other
9.90		7.86	2.12	57	Clear	

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL vial	HCl	VOC 8260
1 liter glass	none	PAH 8270

Comments Low flow sampling. Well doesn't recharge. ~~Very low flow used and~~ Did not purge

M890244

MW0 MW0 MW0

ENSR

WELL NO. MW-2

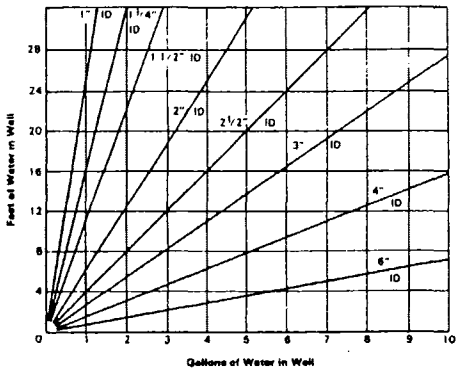
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/18/02 Time: Start _____ am/pm

Project Name SWL+P M&P Finish _____ am/pm

Location Superior, WI

Weather Conds.: 60's, partly sunny Collector C. Buehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 4.65 Casing Diameter 2"

c. Length of Water Column 16' (a-b)

d. Calculated Purgeable Volume 2.6 gal

2. WELL PURGEABLE DATA

a. Purge Method ~~dt~~ peristaltic pump

b. Required Purge Volume (@ _____ well volumes) _____

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T°	PH	Spec. Cond.	ORP	Color	Other
1630	14.91	7.84	1.72	59	clear	no purge sampled first then took readings

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL vial	HCl	VOC
1 liter glass	none	PAH

Comments low flow sampling - well doesn't recharge did not purge

M890244

ENSR

WELL NO. MW-3

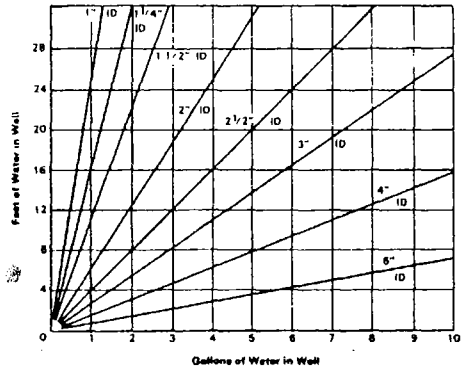
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098- Date 9/20/02 Time: Start 1000 am/pm

Project Name SWL+P M&P Finish 1020 am/pm

Location Superior, WI

Weather Conds.: 60's, sunny Collector C. Boehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 4.94 Casing Diameter 2"

c. Length of Water Column _____ (a-b)

d. Calculated Purgeable Volume _____

2. WELL PURGEABLE DATA

a. Purge Method peristaltic pump

b. Required Purge Volume (@ _____ well volumes) _____

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T°	PH	Spec. Cond.	ORP	Color	Other
	14.33	7.82	1.480	47	clear	

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL vial	HCl	VOC
1 Liter glass	none	PAH

Comments low flow sampling
well doesn't recharge - did not purge

M890244

ENSR

WELL NO. MW-4

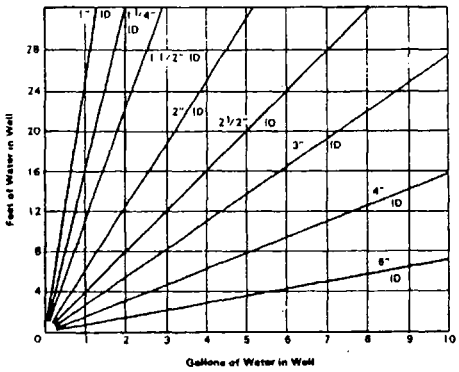
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/20/02 Time: Start 1030 am/pm

Project Name SWL+P MGP Finish 1050 am/pm

Location Superior, WI

Weather Conds.: 60's, Sunny Collector C. Boehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 6.80 Casing Diameter 2"

c. Length of Water Column _____ (a-b)

d. Calculated Purgeable Volume _____

2. WELL PURGEABLE DATA

a. Purge Method ~~of~~ Peristaltic Pump

b. Required Purge Volume (@ _____ well volumes) _____

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T°	PH	Spec. Cond.	ORP	Color	Other
	11.55	7.50	4.34	37	clear, odor	

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL glass vial	HCL	VOC
1 liter amber	none	PAH

Comments Low flow sampling - did not purge
Well doesn't recharge

Collected MW-4 @ 1050
collected MW-4-dup @ 1055

M890244

ENSR

WELL NO. MW-5

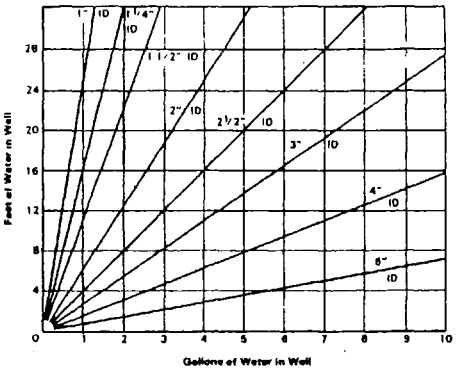
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/18/02 Time: Start 1700 am/pm

Project Name SWL+P MGP Finish 1730 am/pm

Location Superior, WI

Weather Conds.: 60's, sunny Collector C. Boehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 6.57 Casing Diameter 2"

c. Length of Water Column 14' (a-b)

d. Calculated Purgeable Volume 2 1/4

2. WELL PURGEABLE DATA

a. Purge Method peristaltic pump

b. Required Purge Volume (@ _____ well volumes)

c. Field Testing: Equipment Used Quanta Hydro lab

Volume Removed (time)	T°	PH	Spec. Cond.	ORP	Color	Other (volume)
1720	12.24	8.5	1,151	-23	clear	
1725	11.90 ~~11.90~~	8.23	1,193	-20	"	
1730	11.66 ~~11.89~~	7.95	1,189	-19		
1738	11.62	7.77	1,204	-19		

3. SAMPLE COLLECTION: Method Peristaltic pump

Container Type	Preservation	Analysis Req.
40 mL vial	~~None~~ HCl	VOC
1 liter amber	None	PAH

Comments low flow sampling

M890244

ENSR

WELL NO. MW-6

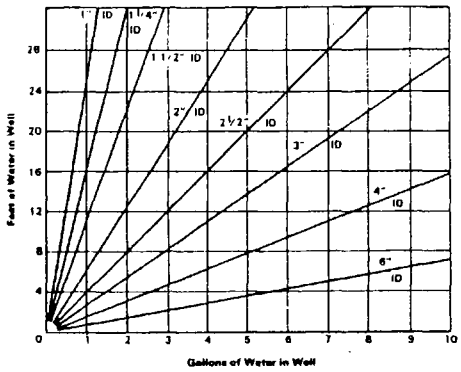
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/18/02 Time: Start 1630 am/pm

Project Name SWL+P MGP Finish 1650 am/pm

Location Superior, WI

Weather Conds.: 60's, partly sunny Collector C. Buehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 9.63 Casing Diameter 2"

c. Length of Water Column _____ (a-b)

d. Calculated Purgeable Volume _____

2. WELL PURGEABLE DATA

a. Purge Method Peristaltic Pump

b. Required Purge Volume (@ _____ well volumes)

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T°	PH	Spec. Cond.	ORP	Color	Other (gal)
1634	15	12.13	5.98	-120	clear	0
1637	14.72	12.32	6.17	-120	"	1
1640	14.72	12.38	6.27	-115	"	2
1643	14.71	12.42	6.39	-107	"	3
1647	14.71	12.45	6.48	-102	"	4

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL vial	HCl	VOC
1 liter glass	none	PAH

Comments Low flow sampling

Collected MW-6 at 1650

Collected MW-6-dup at 1655

M890244

ENSR

WELL NO. MW-7

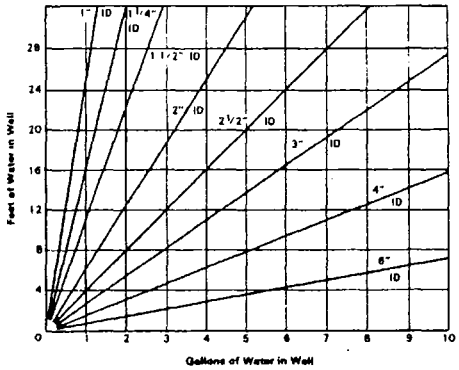
GROUND WATER SAMPLE COLLECTION RECORD

Project No. 09413-098 Date 9/18/02 Time: Start 1540 am/pm

Project Name SWL+P MGP Finish 1615 am/pm

Location Superior, WI

Weather Conds.: 60's, partly Sunny Collector C. Boehm



1. WATER LEVEL DATA: (measured from ToC)

a. Total Well Length 20.3 Well Casing Type PVC

b. Water Table Depth 11.31 Casing Diameter 2"

c. Length of Water Column _____ (a-b)

d. Calculated Purgeable Volume _____

2. WELL PURGEABLE DATA

a. Purge Method Peristaltic Pump

b. Required Purge Volume (@ _____ well volumes) _____

c. Field Testing: Equipment Used Quanta Hydrolab

Volume Removed	T°	PH	Spec. Cond.	ORP	Color	Other	volume (gal)
1603	10.44	8.03	1.198	-59	clear, odor	0	
1606	10.39	7.94	1.198	-63		1	
1609	10.39	7.90	1.201	-70		2	
1612	10.30	7.89	1.216	-78		3	
1616	10.30	7.85	1.214	-86		4	

3. SAMPLE COLLECTION: Method Peristaltic Pump

Container Type	Preservation	Analysis Req.
40 mL vial	HCl	VOC
1 liter amber	none	PAH

Comments low flow sampling.

0.3 gal/min

2oz / 50 sec

.6 L/min

M890244

APPENDIX C

Survey of Site Map

APPENDIX D

Photographs of Test Trench

Photo 1: View of 5-inch steel pipe at south end of excavation with building in background.

Photo 2: View of timber box discovered surrounding the steel pipe. The soil type is the gray lime-like fill material.

Photo 3: View of excavation looking down with water in bottom of excavation from 12-inch clay pipe.

Photo 4: View of excavated material including soil, bricks, and cinders.

Photo 5: View of material in backhoe bucket, and collection of sample for lab analysis.

Photo 6: View of excavation with the clay pipe visible at the bottom of the trench.

APPENDIX E

Soil and Groundwater Laboratory Analytical Report

(Please Print Legibly)

Company Name: ENSR

Branch or Location: St. Louis Park

Project Contact: Bill Gregg

Telephone: 952-924-0117

Project Number: 09413-098

Project Name: SWL+P MGP

Project State: WI

Sampled By (Print): Chris Boehm

EN CHEM INC.

1241 Bellevue St., Suite 9
Green Bay, WI 54302
920-469-2436
FAX 920-469-8827

525 Science Drive
Madison, WI 53711
608-232-3300
FAX: 608-233-0502

CHAIN OF CUSTODY

Page 1 of 2

P.O. # _____ Quote # _____

Mail Report To: Bill Gregg

Company: ENSR

Address: 4500 Park Glen Rd, Suite 210
St. Louis Park, MN 55416

Invoice To: Bill Gregg

Company: -Same-

Address: _____

Mail Invoice To: _____

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH
H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other

Data Package Options - (please circle if requested)
Sample Results Only (no QC)
EPA Level II (Subject to Surcharge)
EPA Level III (Subject to Surcharge)
EPA Level IV (Subject to Surcharge)

Regulatory Programs: UST, RCRA, SDWA, NPDES, CERCLA

Matrix Codes: W=Water, S=Soil, A=Air, C=Charcoal, B=Biota, Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	ANALYSES REQUESTED: BTEX	VOC 8260 (w/ MTBE)	PAH 8270	Dry Weight	Cyanide	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
001	Methanol Blank	9/19/02	840	-		F	X					1	- 20g m	
002	B-11-1-3		740	S		A		X	X	X		3	1-8oz, 1-4oz, 1-20g m	
003	B-11-10-12		810			A								
004	B-12-8-10		845			A								
005	B-13-15-16		940			A								
006	B-14-15-16		1040			A								
007	B-14-11-12		1045			A				X		1	8-oz	
008	B-15-1-3		1115			A		X	X	X		3	1-8oz, 1-4oz, 1-20g m	
009	B-15-6-8		1130			A								
010	B-16-6-8		1210			A								
011	B-17-6-8		1330			A								
012	B-18-10-12		1350			A								

Rush Turnaround Time Requested (TAT) - Prelim
(Rush TAT subject to approval/surcharge)
Date Needed: Standard
Transmit Prelim Rush Results by (circle):
Phone Fax E-Mail
Phone #: _____
Fax #: _____
E-Mail Address: _____

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Chris Boehm	9/20/02 1200	Tom Mashek	9-20-02 12:00
Tom Mashek	9-22-02 14:00	Dunham	9-23-02 14:00
Dunham		R Jacobs	9/24/02 8:30

En Chem Project No.: 825494

Sample Receipt Temp.: KOT

Sample Receipt pH (Met/Metals):

Cooler Custody Seal: Present / (Not Present)

Intact / Not Intact

Version 2.0: 1/02

(Please Print Legibly)

Company Name: ENSR

Branch or Location: St. Louis Park

Project Contact: Bill Gregg

Telephone: 952-924-0117

Project Number: 09413-098

Project Name: SNL & P MGP

Project State: WI

Sampled By (Print): Chris Boehm

EN CHEM INC.

1241 Bellevue St., Suite 9
Green Bay, WI 54302
920-469-2436
FAX 920-469-8827

525 Science Drive
Madison, WI 53711
608-232-3300
FAX: 608-233-0502

CHAIN OF CUSTODY

77791

Page 1 (2) of 2

P.O. # _____ Quote # _____

Mail Report To: Bill Gregg

Company: ENSR

Address: 4500 Park Glen Rd. Suite 210
St. Louis Park, MN 55416

Invoice To: -Same-

Company: _____

Address: _____

Mail Invoice To: _____

*Preservation Codes

A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH
H = Sodium Bisulfate Solution I = Other

FILTERED? (YES/NO)

PRESERVATION (CODE)* E A A

ANALYSES REQUESTED: VOC 8260 (VA List) | PAH 8270 | Dry Weight

TOTAL # OF BOTTLES SENT

Data Package Options
(please circle if requested)
Results Only
EnChem Level III (Subject to Surcharge)
EnChem Level IV (Subject to Surcharge)

Regulatory Program: UST, RCRA, SDWA, NPDES, CERCLA

Matrix Codes: W=Water, S=Soil, A=Air, C=Charcoal, B=Biota, Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	VOC 8260	PAH 8270	Dry Weight	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
013	B-20-10-12	9/19/02	1445	S	X	X	X	3	1-8oz, 1-4oz, 1-2oz jar	
014	B-21-10-12		1520							
015	B-21-10-12-dup		1525							
016	B-22-8-10		1550							
017	B-17-10-12		1420		✓	✓				

Rush Turnaround Time Requested (TAT) - Prelim
(Rush TAT subject to approval/surcharge)
Date Needed: Standard
Transmit Prelim Rush Results by (circle):
Phone Fax E-Mail
Phone #: _____
Fax #: _____
E-Mail Address: _____

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Chris Boehm	9/20/02 12:00	Tom Mathes	9-20-02 12:00
Tom Mathes	9-23-02 14:00	Dan Ham	9-23-02 14:00
Dan Ham		R Jacobs	9/24/02

En Chem Project No. 825 9-24

Sample Receipt Temp. RCT

Sample Receipt pH (Wet/Metals)

Cooler Custody Seal Present / Not Present / N/A

Intact

EN CHEM INC.

Corporate Office & Laboratory
1241 Bellevue Street, Suite 9 • Green Bay, WI 54302
920-469-2436 • Fax: 920-469-8827 • 800-7-ENCHEM
www.enchem.com

- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client: ENSR CORPORATION

WI DNR LAB ID : 405132750

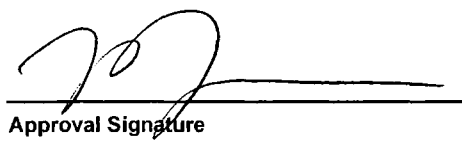
Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
825994-001	METHANOL BLANK	9/19/02			
825994-002	B-11-1-3	9/19/02			
825994-003	B-11-10-12	9/19/02			
825994-004	B-12-8-10	9/19/02			
825994-005	B-13-15-16	9/19/02			
825994-006	B-14-15-16	9/19/02			
825994-007	B-14-11-12	9/19/02			
825994-008	B-15-1-3	9/19/02			
825994-009	B-15-6-8	9/19/02			
825994-010	B-16-6-8	9/19/02			
825994-011	B-17-6-8	9/19/02			
825994-012	B-18-10-12	9/19/02			
825994-013	B-20-10-12	9/19/02			
825994-014	B-21-10-12	9/19/02			
825994-015	B-21-10-12-DUP	9/19/02			
825994-016	B-22-8-10	9/19/02			
825994-017	B-19-10-12	9/19/02			

Please visit our Internet homepage at: www.enchem.com

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.



Approval Signature

10/09/02

Date

En Chem, Inc. Cooler Receipt Log

Batch No. 825994

Project Name or ID SWL&P MGP No. of Coolers: _____ Temps: ROT

A. Receipt Phase: Date cooler was opened: 9/24/02 **By:** RJ.

1: Were samples received on ice? (Must be ≤ 6 C)	(YES)	NO[2]	
2. Was there a Temperature Blank?	YES	(NO)	
3: Were custody seals present and intact? (Record on COC)	YES	(NO)	
4: Are COC documents present?	(YES)	NO[2]	
5: Does this Project require quick turn around analysis?	YES	(NO)	
6: Is there any sub-work?	YES	(NO)	
7: Are there any short hold time tests?	YES	(NO)	
8: Are any samples nearing expiration of hold-time? (Within 2 days)	YES[1]	(NO)	Contacted by/Who_____
9: Do any samples need to be Filtered or Preserved in the lab?	YES[1]	(NO)	Contacted by/Who_____

B. Check-in Phase: Date samples were Checked-in: 9-24-02 **By:** RJ

1: Were all sample containers listed on the COC received and intact?	(YES)	NO[2]	NA
2: Sign the COC as received by En Chem. Completed	(YES)	NO	
3: Do sample labels match the COC?	YES	(NO[2])	
4: Check sample pH of preserved samples. (Not VOCs) Completed	YES	NO	(NA)
5: Do samples have correct chemical preservation?	YES	NO[2]	(NA)
6: Are dissolved parameters field filtered?	YES	NO[2]	(NA)
7: Are sample volumes adequate for tests requested?	(YES)	NO[2]	
8: Are VOC samples free of bubbles >6mm	YES	NO[2]	(NA)
9: Enter samples into logbook. Completed PRE #	(YES)	NO	
10: Place laboratory sample number on all containers and COC. Completed	(YES)	NO	
11: Complete Laboratory Tracking Sheet (LTS). Completed	YES	NO	(NA)
12: Start Nonconformance form.	YES	NO	(NA)
13: Initiate Subcontracting procedure. Completed	YES	NO	(NA)
14: Check laboratory sample number on all containers and COC. ✓	(YES)	NO	NA

Short Hold-time tests:

48 Hours or less	7 days
Coliform (6 hrs)	Flashpoint
Hexavalent Chromium (24 Hrs)	TSS
BOD	Total Solids
Nitrite or Nitrate	TDS
Low Level Mercury	Sulfide
Ortho Phosphorus	Free Liquids
Turbidity	Total Volatile Solids
Surfactants	Aqueous Extractable Organics- ALL
Sulfite	Unpreserved VOC's
En Core Preservation	Ash
Color	

Footnotes
1 Notify proper lab group immediately.
2 Complete nonconformance memo.

Rev. 9/5/2001, Attachment to 1-REC-5.
Subject to QA Audit.

Reviewed by/date W 9/26/02

p:/everyone/forms/samplereceiving/crl.doc

En Chem Inc.

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Green Bay, WI 54302
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Lab Sample Number	Test Group Name	Wisconsin Cert #
825994-007	CYANIDE, TOTAL	113172950
825994-007	SOLIDS, PERCENT	113172950

En Chem Inc.

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Green Bay, WI 54302
920-469-2436
800-7-ENCHEM
Fax: 920-469-8827

Lab#:	TestGroupID:	Comment:
825994-002 B-11-1-3	8260+-S-ME	F - Surrogate was below control criteria. This was confirmed by a prior analysis on 09/25/2002.
825994-003 B-11-10-12	8260+-S-ME	F - Surrogates were diluted out of sample.
825994-004 B-12-8-10	8260+-S-ME	F - Surrogates were diluted out of sample.
825994-009 B-15-6-8	8260+-S-ME	F - Surrogates were diluted out of sample.

Organic Data Qualifiers

B	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	Elevated detection limit.
D	Analyte value from diluted analysis, or surrogate result not applicable due to sample dilution.
E	Analyte concentration exceeds calibration range.
F	Surrogate results outside control criteria.
H	Extraction or analysis performed past holding time.
J	Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than the reporting limit.
K	Detection limit may be elevated due to the presence of an unrequested analyte.
N	Spiked sample recovery not within control limits.
P	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	The analyte was not detected above the reporting limit.
W	Sample received with headspace.
X	See Sample Narrative.
&	Laboratory Control Spike recovery not within control limits.
*	Duplicate analyses not within control limits.
SUB1	Assay was subcontracted to an approved lab.
SUB2	Assay was subcontracted to En Chem Green Bay WI Cert. #405132750.

En Chem Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
800-7-ENCHEM
Fax: 920-469-8827

- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : METHANOL BLANK
Lab Sample Number : 825994-001
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : METHANOL

Organic Results

BTEX - METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** PMS

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	104				%Recov		9/25/02	SW846 M8021B
Benzene	< 25	25	60		ug/l		9/25/02	SW846 M8021B
Ethylbenzene	< 25	25	60		ug/l		9/25/02	SW846 M8021B
Toluene	< 25	25	60		ug/l		9/25/02	SW846 M8021B
Xylenes, -m, -p	< 25	25	60		ug/l		9/25/02	SW846 M8021B
Xylene, -o	< 25	25	60		ug/l		9/25/02	SW846 M8021B

En Chem Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
800-7-ENCHEM
Fax: 920-469-8827

- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-11-1-3
Lab Sample Number : 825994-002
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	70.6				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	2200	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-11-1-3
Lab Sample Number : 825994-002
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene		120	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene		3400	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Styrene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Toluene		900	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene		130	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	<	25	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene		79	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	<	25	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p		260	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o		160	25	60	ug/kg		9/27/02	SW846 8260B
4-Bromofluorobenzene		87			%Recov		9/27/02	SW846 8260B
Dibromofluoromethane	<	0.5			%Recov	F	9/27/02	SW846 8260B
Toluene-d8		87			%Recov		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-11-1-3
Lab Sample Number : 825994-002
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 23	23	73		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	25	18	57		ug/kg	Q	10/2/02	SW846 8270C
Anthracene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	52	19	61		ug/kg	Q	10/2/02	SW846 8270C
Benzo(a)pyrene	51	18	57		ug/kg	Q	10/2/02	SW846 8270C
Benzo(b)fluoranthene	30	16	51		ug/kg	Q	10/2/02	SW846 8270C
Benzo(g,h,i)perylene	54	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	43	18	57		ug/kg	Q	10/2/02	SW846 8270C
Chrysene	57	19	61		ug/kg	Q	10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Fluoranthene	30	15	48		ug/kg	Q	10/2/02	SW846 8270C
Fluorene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	36	16	51		ug/kg	Q	10/2/02	SW846 8270C
1-Methylnaphthalene	73	20	64		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	74	17	54		ug/kg		10/2/02	SW846 8270C
Naphthalene	660	24	76		ug/kg		10/2/02	SW846 8270C
Phenanthrene	32	16	51		ug/kg	Q	10/2/02	SW846 8270C
Pyrene	98	17	54		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	53				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	71				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	55				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-11-10-12
Lab Sample Number : 825994-003
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	63.6				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	240000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 1000	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 1000	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : B-11-10-12

Report Date : 10/9/02

Lab Sample Number : 825994-003

Collection Date : 9/19/02

WI DNR LAB ID : 405132750

Matrix Type : SOIL

1,2-Dichloropropane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene		7200	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene		4800	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Styrene		40000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Toluene		340000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene		7100	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene		5200	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	<	1000	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p		130000	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o		35000	25	60	ug/kg		9/27/02	SW846 8260B
4-Bromofluorobenzene	<	0.5			%Recov	F	9/27/02	SW846 8260B
Dibromofluoromethane	<	0.5			%Recov	F	9/27/02	SW846 8260B
Toluene-d8	<	0.5			%Recov	F	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-11-10-12
Lab Sample Number : 825994-003
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	3500	260	830		ug/kg		10/3/02	SW846 8270C
Acenaphthylene	930	200	640		ug/kg		10/3/02	SW846 8270C
Anthracene	2300	190	610		ug/kg		10/3/02	SW846 8270C
Benzo(a)anthracene	2700	210	670		ug/kg		10/3/02	SW846 8270C
Benzo(a)pyrene	2300	200	640		ug/kg		10/3/02	SW846 8270C
Benzo(b)fluoranthene	1200	170	540		ug/kg		10/3/02	SW846 8270C
Benzo(g,h,i)perylene	1900	180	570		ug/kg		10/3/02	SW846 8270C
Benzo(k)fluoranthene	1800	200	640		ug/kg		10/3/02	SW846 8270C
Chrysene	3400	210	670		ug/kg		10/3/02	SW846 8270C
Dibenzo(a,h)anthracene	460	170	540		ug/kg	Q	10/3/02	SW846 8270C
Fluoranthene	4200	170	540		ug/kg		10/3/02	SW846 8270C
Fluorene	2100	200	640		ug/kg		10/3/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	1200	180	570		ug/kg		10/3/02	SW846 8270C
1-Methylnaphthalene	3400	220	700		ug/kg		10/3/02	SW846 8270C
2-Methylnaphthalene	3400	190	610		ug/kg		10/3/02	SW846 8270C
Naphthalene	8900	270	860		ug/kg		10/3/02	SW846 8270C
Phenanthrene	9200	170	540		ug/kg		10/3/02	SW846 8270C
Pyrene	8100	190	610		ug/kg		10/3/02	SW846 8270C
Nitrobenzene-d5	54				%Recov		10/3/02	SW846 8270C
2-Fluorobiphenyl	55				%Recov		10/3/02	SW846 8270C
Terphenyl-d14	58				%Recov		10/3/02	SW846 8270C

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-12-8-10
Lab Sample Number : 825994-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	62.2				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	590000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 5000	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 5000	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : B-12-8-10

Report Date : 10/9/02

Lab Sample Number : 825994-004

Collection Date : 9/19/02

WI DNR LAB ID : 405132750

Matrix Type : SOIL

1,2-Dichloropropane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene	45000	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene	57000	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Styrene	140000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Toluene	1700000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	38000	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	24000	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	< 5000	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p	540000	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o	150000	25	60	ug/kg		9/27/02	SW846 8260B
4-Bromofluorobenzene	< 0.5			%Recov	F	9/27/02	SW846 8260B
Dibromofluoromethane	< 0.5			%Recov	F	9/27/02	SW846 8260B
Toluene-d8	< 0.5			%Recov	F	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-12-8-10
Lab Sample Number : 825994-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	820	530	1700		ug/kg	Q	10/3/02	SW846 8270C
Acenaphthylene	630	400	1300		ug/kg	Q	10/3/02	SW846 8270C
Anthracene	420	390	1200		ug/kg	Q	10/3/02	SW846 8270C
Benzo(a)anthracene	690	430	1400		ug/kg	Q	10/3/02	SW846 8270C
Benzo(a)pyrene	690	400	1300		ug/kg	Q	10/3/02	SW846 8270C
Benzo(b)fluoranthene	500	350	1100		ug/kg	Q	10/3/02	SW846 8270C
Benzo(g,h,i)perylene	1000	370	1200		ug/kg	Q	10/3/02	SW846 8270C
Benzo(k)fluoranthene	580	420	1300		ug/kg	Q	10/3/02	SW846 8270C
Chrysene	1000	430	1400		ug/kg	Q	10/3/02	SW846 8270C
Dibenzo(a,h)anthracene	< 350	350	1100		ug/kg		10/3/02	SW846 8270C
Fluoranthene	1500	340	1100		ug/kg		10/3/02	SW846 8270C
Fluorene	< 400	400	1300		ug/kg		10/3/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	710	370	1200		ug/kg	Q	10/3/02	SW846 8270C
1-Methylnaphthalene	2300	450	1400		ug/kg		10/3/02	SW846 8270C
2-Methylnaphthalene	3200	390	1200		ug/kg		10/3/02	SW846 8270C
Naphthalene	36000	550	1800		ug/kg		10/3/02	SW846 8270C
Phenanthrene	2200	350	1100		ug/kg		10/3/02	SW846 8270C
Pyrene	2000	390	1200		ug/kg		10/3/02	SW846 8270C
Nitrobenzene-d5	70				%Recov		10/3/02	SW846 8270C
2-Fluorobiphenyl	69				%Recov		10/3/02	SW846 8270C
Terphenyl-d14	61				%Recov		10/3/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-13-15-16
Lab Sample Number : 825994-005
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	73.3				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	27000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 100	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 100	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 100	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : B-13-15-16

Report Date : 10/9/02

Lab Sample Number : 825994-005

Collection Date : 9/19/02

WI DNR LAB ID : 405132750

Matrix Type : SOIL

1,2-Dichloropropane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	370	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	460	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	460	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	220	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 100	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 100	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	260	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 100	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	84			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	72			%Recov	9/27/02	SW846 8260B
Toluene-d8	84			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-13-15-16
Lab Sample Number : 825994-005
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	82	23	73		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Chrysene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	23	17	54		ug/kg	Q	10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	85	19	61		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	77	16	51		ug/kg		10/2/02	SW846 8270C
Naphthalene	42	23	73		ug/kg	Q	10/2/02	SW846 8270C
Phenanthrene	42	15	48		ug/kg	Q	10/2/02	SW846 8270C
Pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	71				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	70				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	68				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-14-15-16
Lab Sample Number : 825994-006
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	71.0				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	12000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Field ID : B-14-15-16

Lab Sample Number : 825994-006

WI DNR LAB ID : 405132750

Client : ENSR CORPORATION

Report Date : 10/9/02

Collection Date : 9/19/02

Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene	160	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene	2900	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Toluene	230	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	71	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p	140	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o	39	25	60	ug/kg	Q	9/27/02	SW846 8260B
4-Bromofluorobenzene	81			%Recov		9/27/02	SW846 8260B
Dibromofluoromethane	72			%Recov		9/27/02	SW846 8260B
Toluene-d8	80			%Recov		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-14-15-16
Lab Sample Number : 825994-006
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 23	23	73		ug/kg		10/1/02	SW846 8270C
Acenaphthylene	< 18	18	57		ug/kg		10/1/02	SW846 8270C
Anthracene	< 17	17	54		ug/kg		10/1/02	SW846 8270C
Benzo(a)anthracene	< 19	19	61		ug/kg		10/1/02	SW846 8270C
Benzo(a)pyrene	< 18	18	57		ug/kg		10/1/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/1/02	SW846 8270C
Benzo(g,h,i)perylene	< 16	16	51		ug/kg		10/1/02	SW846 8270C
Benzo(k)fluoranthene	< 18	18	57		ug/kg		10/1/02	SW846 8270C
Chrysene	< 19	19	61		ug/kg		10/1/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/1/02	SW846 8270C
Fluoranthene	< 15	15	48		ug/kg		10/1/02	SW846 8270C
Fluorene	< 18	18	57		ug/kg		10/1/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 16	16	51		ug/kg		10/1/02	SW846 8270C
1-Methylnaphthalene	< 20	20	64		ug/kg		10/1/02	SW846 8270C
2-Methylnaphthalene	< 17	17	54		ug/kg		10/1/02	SW846 8270C
Naphthalene	410	24	76		ug/kg	N	10/1/02	SW846 8270C
Phenanthrene	< 15	15	48		ug/kg		10/1/02	SW846 8270C
Pyrene	< 17	17	54		ug/kg		10/1/02	SW846 8270C
Nitrobenzene-d5	83				%Recov		10/1/02	SW846 8270C
2-Fluorobiphenyl	78				%Recov		10/1/02	SW846 8270C
Terphenyl-d14	86				%Recov		10/1/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-14-11-12
Lab Sample Number : 825994-007
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, total	3.0	0.12	0.38		mg/kg		10/2/02	SW846 9010A	SW846 9010A	daw
Solids, percent	68.6			0.0100	%		1/2/02	SM2540G	SM2540G	KAH

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-15-1-3
Lab Sample Number : 825994-008
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	87.1				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	21000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : B-15-1-3

Report Date : 10/9/02

Lab Sample Number : 825994-008

Collection Date : 9/19/02

WI DNR LAB ID : 405132750

Matrix Type : SOIL

1,2-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	5100	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	160	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	510	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	9300	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	980	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	460	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	5800	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	1400	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	78			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	76			%Recov	9/27/02	SW846 8260B
Toluene-d8	83			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Field ID : B-15-1-3

Lab Sample Number : 825994-008

WI DNR LAB ID : 405132750

Client : ENSR CORPORATION

Report Date : 10/9/02

Collection Date : 9/19/02

Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	95	95	300		ug/kg	Q	10/3/02	SW846 8270C
Acenaphthylene	920	72	230		ug/kg		10/3/02	SW846 8270C
Anthracene	350	69	220		ug/kg		10/3/02	SW846 8270C
Benzo(a)anthracene	1600	77	250		ug/kg		10/3/02	SW846 8270C
Benzo(a)pyrene	1900	72	230		ug/kg		10/3/02	SW846 8270C
Benzo(b)fluoranthene	1700	63	200		ug/kg		10/3/02	SW846 8270C
Benzo(g,h,i)perylene	1900	66	210		ug/kg		10/3/02	SW846 8270C
Benzo(k)fluoranthene	1800	75	240		ug/kg		10/3/02	SW846 8270C
Chrysene	2200	77	250		ug/kg		10/3/02	SW846 8270C
Dibenzo(a,h)anthracene	570	63	200		ug/kg		10/3/02	SW846 8270C
Fluoranthene	1600	60	190		ug/kg		10/3/02	SW846 8270C
Fluorene	110	72	230		ug/kg	Q	10/3/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	1400	66	210		ug/kg		10/3/02	SW846 8270C
1-Methylnaphthalene	860	80	250		ug/kg		10/3/02	SW846 8270C
2-Methylnaphthalene	1100	69	220		ug/kg		10/3/02	SW846 8270C
Naphthalene	840	98	310		ug/kg		10/3/02	SW846 8270C
Phenanthrene	1200	63	200		ug/kg		10/3/02	SW846 8270C
Pyrene	2900	69	220		ug/kg		10/3/02	SW846 8270C
Nitrobenzene-d5	69				%Recov		10/3/02	SW846 8270C
2-Fluorobiphenyl	61				%Recov		10/3/02	SW846 8270C
Terphenyl-d14	63				%Recov		10/3/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-15-6-8
Lab Sample Number : 825994-009
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	76.5				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	76000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 2500	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 2500	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-15-6-8
Lab Sample Number : 825994-009
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene		100000	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene		140000	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Styrene		240000	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Toluene		790000	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene		130000	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene		83000	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	<	2500	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p		1100000	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o		310000	25	60	ug/kg		9/27/02	SW846 8260B
4-Bromofluorobenzene	<	0.5			%Recov	F	9/27/02	SW846 8260B
Dibromofluoromethane	<	0.5			%Recov	F	9/27/02	SW846 8260B
Toluene-d8	<	0.5			%Recov	F	9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-15-6-8
Lab Sample Number : 825994-009
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 220	220	700		ug/kg		10/5/02	SW846 8270C
Acenaphthylene	< 160	160	510		ug/kg		10/5/02	SW846 8270C
Anthracene	180	160	510		ug/kg	Q	10/5/02	SW846 8270C
Benzo(a)anthracene	330	180	570		ug/kg	Q	10/5/02	SW846 8270C
Benzo(a)pyrene	270	160	510		ug/kg	Q	10/5/02	SW846 8270C
Benzo(b)fluoranthene	210	140	450		ug/kg	Q	10/5/02	SW846 8270C
Benzo(g,h,i)perylene	300	150	480		ug/kg	Q	10/5/02	SW846 8270C
Benzo(k)fluoranthene	260	170	540		ug/kg	Q	10/5/02	SW846 8270C
Chrysene	340	180	570		ug/kg	Q	10/5/02	SW846 8270C
Dibenzo(a,h)anthracene	< 140	140	450		ug/kg		10/5/02	SW846 8270C
Fluoranthene	780	140	450		ug/kg		10/5/02	SW846 8270C
Fluorene	190	160	510		ug/kg	Q	10/5/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 150	150	480		ug/kg		10/5/02	SW846 8270C
1-Methylnaphthalene	270	180	570		ug/kg	Q	10/5/02	SW846 8270C
2-Methylnaphthalene	420	160	510		ug/kg	Q	10/5/02	SW846 8270C
Naphthalene	4900	220	700		ug/kg		10/5/02	SW846 8270C
Phenanthrene	1200	140	450		ug/kg		10/5/02	SW846 8270C
Pyrene	1400	160	510		ug/kg		10/5/02	SW846 8270C
Nitrobenzene-d5	48				%Recov		10/5/02	SW846 8270C
2-Fluorobiphenyl	45				%Recov		10/5/02	SW846 8270C
Terphenyl-d14	60				%Recov		10/5/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-16-6-8
Lab Sample Number : 825994-010
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	72.7				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	10000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-16-6-8
Lab Sample Number : 825994-010
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	3500	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	74	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	1500	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	290	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	5500	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	1400	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	700	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	7600	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	2100	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	80			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	72			%Recov	9/27/02	SW846 8260B
Toluene-d8	79			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-16-6-8
Lab Sample Number : 825994-010
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	23	23	73		ug/kg	Q	10/2/02	SW846 8270C
Acenaphthylene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Anthracene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Chrysene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	25	19	61		ug/kg	Q	10/2/02	SW846 8270C
2-Methylnaphthalene	32	17	54		ug/kg	Q	10/2/02	SW846 8270C
Naphthalene	410	23	73		ug/kg		10/2/02	SW846 8270C
Phenanthrene	41	15	48		ug/kg	Q	10/2/02	SW846 8270C
Pyrene	20	17	54		ug/kg	Q	10/2/02	SW846 8270C
Nitrobenzene-d5	61				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	67				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	89				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-17-6-8
Lab Sample Number : 825994-011
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	76.9				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	16000	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 50	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 50	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-17-6-8
Lab Sample Number : 825994-011
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	350	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	6100	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	1400	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	16000	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	1900	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 50	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	1200	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 50	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	11000	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	3400	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	82			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	76			%Recov	9/27/02	SW846 8260B
Toluene-d8	82			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-17-6-8
Lab Sample Number : 825994-011
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 210	210	670		ug/kg		10/3/02	SW846 8270C
Acenaphthylene	310	160	510		ug/kg	Q	10/3/02	SW846 8270C
Anthracene	< 160	160	510		ug/kg		10/3/02	SW846 8270C
Benzo(a)anthracene	410	180	570		ug/kg	Q	10/3/02	SW846 8270C
Benzo(a)pyrene	180	160	510		ug/kg	Q	10/3/02	SW846 8270C
Benzo(b)fluoranthene	280	140	450		ug/kg	Q	10/3/02	SW846 8270C
Benzo(g,h,i)perylene	510	150	480		ug/kg		10/3/02	SW846 8270C
Benzo(k)fluoranthene	280	170	540		ug/kg	Q	10/3/02	SW846 8270C
Chrysene	480	180	570		ug/kg	Q	10/3/02	SW846 8270C
Dibenzo(a,h)anthracene	< 140	140	450		ug/kg		10/3/02	SW846 8270C
Fluoranthene	910	140	450		ug/kg		10/3/02	SW846 8270C
Fluorene	230	160	510		ug/kg	Q	10/3/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	310	150	480		ug/kg	Q	10/3/02	SW846 8270C
1-Methylnaphthalene	730	180	570		ug/kg		10/3/02	SW846 8270C
2-Methylnaphthalene	1300	160	510		ug/kg		10/3/02	SW846 8270C
Naphthalene	7900	220	700		ug/kg		10/3/02	SW846 8270C
Phenanthrene	1800	140	450		ug/kg		10/3/02	SW846 8270C
Pyrene	1200	160	510		ug/kg		10/3/02	SW846 8270C
Nitrobenzene-d5	66				%Recov		10/3/02	SW846 8270C
2-Fluorobiphenyl	62				%Recov		10/3/02	SW846 8270C
Terphenyl-d14	72				%Recov		10/3/02	SW846 8270C

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-18-10-12
Lab Sample Number : 825994-012
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	74.8				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-18-10-12
Lab Sample Number : 825994-012
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	98	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	85			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	74			%Recov	9/27/02	SW846 8260B
Toluene-d8	85			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-18-10-12
Lab Sample Number : 825994-012
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 22	22	70		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Chrysene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Naphthalene	< 23	23	73		ug/kg		10/2/02	SW846 8270C
Phenanthrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	75				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	76				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	83				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-20-10-12
Lab Sample Number : 825994-013
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	83.5				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	54	25	60		ug/kg	Q	9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-20-10-12
Lab Sample Number : 825994-013
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Naphthalene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Toluene	35	25	60	ug/kg	Q	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg		9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg		9/27/02	SW846 8260B
4-Bromofluorobenzene	91			%Recov		9/27/02	SW846 8260B
Dibromofluoromethane	78			%Recov		9/27/02	SW846 8260B
Toluene-d8	90			%Recov		9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-20-10-12
Lab Sample Number : 825994-013
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 20	20	64		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Anthracene	23	14	45		ug/kg	Q	10/2/02	SW846 8270C
Benzo(a)anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 13	13	41		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Chrysene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 13	13	41		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 13	13	41		ug/kg		10/2/02	SW846 8270C
Fluorene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	28	17	54		ug/kg	Q	10/2/02	SW846 8270C
2-Methylnaphthalene	44	14	45		ug/kg	Q	10/2/02	SW846 8270C
Naphthalene	< 20	20	64		ug/kg		10/2/02	SW846 8270C
Phenanthrene	22	13	41		ug/kg	Q	10/2/02	SW846 8270C
Pyrene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	66				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	68				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	66				%Recov		10/2/02	SW846 8270C

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-21-10-12
Lab Sample Number : 825994-014
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	77.6				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-21-10-12
Lab Sample Number : 825994-014
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	84			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	70			%Recov	9/27/02	SW846 8260B
Toluene-d8	82			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-21-10-12
Lab Sample Number : 825994-014
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 21	21	67		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Chrysene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Naphthalene	< 22	22	70		ug/kg		10/2/02	SW846 8270C
Phenanthrene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Pyrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	72				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	74				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	80				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-21-10-12-DUP
Lab Sample Number : 825994-015
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	73.5				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : B-21-10-12-DUP

Report Date : 10/9/02

Lab Sample Number : 825994-015

Collection Date : 9/19/02

WI DNR LAB ID : 405132750

Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	83			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	71			%Recov	9/27/02	SW846 8260B
Toluene-d8	82			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-21-10-12-DUP
Lab Sample Number : 825994-015
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 22	22	70		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Chrysene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Naphthalene	< 23	23	73		ug/kg		10/2/02	SW846 8270C
Phenanthrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	67				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	68				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	75				%Recov		10/2/02	SW846 8270C

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-22-8-10
Lab Sample Number : 825994-016
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	72.7				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-22-8-10
Lab Sample Number : 825994-016
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	84			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	73			%Recov	9/27/02	SW846 8260B
Toluene-d8	83			%Recov	9/27/02	SW846 8260B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-22-8-10
Lab Sample Number : 825994-016
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 23	23	73		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Anthracene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Chrysene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	< 19	19	61		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Naphthalene	< 23	23	73		ug/kg		10/2/02	SW846 8270C
Phenanthrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Pyrene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	74				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	75				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	96				%Recov		10/2/02	SW846 8270C

All soil results are reported on a dry weight basis unless otherwise noted.

En Chem Inc.

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-19-10-12
Lab Sample Number : 825994-017
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	77.1				%		9/24/02	SM2540G	SM2540G	KEG

Organic Results

EPA 8260 VOLATILE LIST - SOIL/METHANOL **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** TLT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	36	25	60		ug/kg	Q	9/27/02	SW846 8260B
Bromobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromochloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromodichloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromoform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Bromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
s-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
t-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
n-Butylbenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Carbon tetrachloride	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroform	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chlorodibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Chloromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
2-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
4-Chlorotoluene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dibromoethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dibromomethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichloroethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
1,1-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 25	25	60		ug/kg		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 25	25	60		ug/kg		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP

Project Number : 09413-098

Field ID : B-19-10-12

Lab Sample Number : 825994-017

WI DNR LAB ID : 405132750

Client : ENSR CORPORATION

Report Date : 10/9/02

Collection Date : 9/19/02

Matrix Type : SOIL

1,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
2,2-Dichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Diisopropyl ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Ethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Fluorotrichloromethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Hexachlorobutadiene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Isopropylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
p-Isopropyltoluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methylene chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Naphthalene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
n-Propylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Styrene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Tetrachloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Toluene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Trichloroethene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 25	25	60	ug/kg	9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Vinyl chloride	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60	ug/kg	9/27/02	SW846 8260B
Xylene, -o	< 25	25	60	ug/kg	9/27/02	SW846 8260B
4-Bromofluorobenzene	84			%Recov	9/27/02	SW846 8260B
Dibromofluoromethane	71			%Recov	9/27/02	SW846 8260B
Toluene-d8	82			%Recov	9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL&P MGP
Project Number : 09413-098
Field ID : B-19-10-12
Lab Sample Number : 825994-017
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 10/9/02
Collection Date : 9/19/02
Matrix Type : SOIL

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3545 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Acenaphthene	< 21	21	67		ug/kg		10/2/02	SW846 8270C
Acenaphthylene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Anthracene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(a)anthracene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Benzo(a)pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Benzo(b)fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Benzo(g,h,i)perylene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
Benzo(k)fluoranthene	< 17	17	54		ug/kg		10/2/02	SW846 8270C
Chrysene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluoranthene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Fluorene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 15	15	48		ug/kg		10/2/02	SW846 8270C
1-Methylnaphthalene	< 18	18	57		ug/kg		10/2/02	SW846 8270C
2-Methylnaphthalene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Naphthalene	< 22	22	70		ug/kg		10/2/02	SW846 8270C
Phenanthrene	< 14	14	45		ug/kg		10/2/02	SW846 8270C
Pyrene	< 16	16	51		ug/kg		10/2/02	SW846 8270C
Nitrobenzene-d5	70				%Recov		10/2/02	SW846 8270C
2-Fluorobiphenyl	68				%Recov		10/2/02	SW846 8270C
Terphenyl-d14	62				%Recov		10/2/02	SW846 8270C

All soil results are reported on a dry weight basis unless otherwise noted.

EN CHEM INC.

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FAX: 608-233-0502

CHAIN OF CUSTODY

85036

Page 1 of 1

(Please Print Legibly)
Company Name: ENSR
Branch or Location: St. Louis Park
Project Contact: Bill Gregg
Telephone: 952-924-0117
Project Number: 09413-098
Project Name: SWLRP MGP
Project State: WI
Sampled By (Print): Chris Boehm

P.O. # _____ Quote # _____
Mail Report To: Bill Gregg
Company: ENSR
Address: 4500 Park Glen Rd, 210
St. Louis Park, MN 55416
Invoice To: Bill Gregg
Company: same
Address: ↓
Mail Invoice To: _____

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH
H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other

Data Package Options - (please circle if requested)
Sample Results Only (no QC)
EPA Level II (Subject to Surcharge)
EPA Level III (Subject to Surcharge)
EPA Level IV (Subject to Surcharge)

Regulatory Program: UST, RCRA, SDWA, NPDES, CERCLA

Matrix Codes: W=Water, S=Soil, A=Air, C=Charcoal, B=Biota, Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	ANALYSES REQUESTED: PAH 8270	VOC 8260	BTEX	Dry Weight	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
001	Trip Blank	—	—	W				X			2		2 40ml VL Amber A
002	MW-7	9/18/02	1615		X	X					4		3 40ml VL Amber A
003	MW-6		1650		X	X							
004	MW-6-dup		1655		X	X							
005	MW-5		1720		X	X							
006	MW-2		1830	↓	X	X					↓		1 250ml 1-4oz Glass
007	B-10-6-8		1900	S				X	X		2		
008	B-9-10-12	↓	1750	S				X	X		2		
009	B-8-6-8	9/18	1745	S				X	X		2		

Rush Turnaround Time Requested (TAT) - Prelim
(Rush TAT subject to approval/surcharge)
Date Needed: Standard
Transmit Prelim Rush Results by (circle):
Phone Fax E-Mail
Phone #: _____
Fax #: _____
E-Mail Address: _____

Samples on HOLD are subject to standard pricing and release liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/19/02 1900	[signature]	9-14-02 09:00
[signature]	9-19-02 14:00	Dunham	9-19-02 14:00
Dunham		[signature]	9/20/02 0800

En Chem Project No: 825903
Sample Receipt Temp: ROI
Sample Receipt pH (Met/Metals): N/A
Cooler Custody Seal:
Preservation Confirmed:
Rack:

ENCHEM INC.

Corporate Office & Laboratory
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www.enchem.com

- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client: ENSR CORPORATION

WI DNR LAB ID : 405132750

Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
825923-001	TRIP BLANK	9/18/02			
825923-002	MW-7	9/18/02			
825923-003	MW-6	9/18/02			
825923-004	MW-6-DUP	9/18/02			
825923-005	MW-5	9/18/02			
825923-006	MW-2	9/18/02			
825923-007	B-10-6-8	9/18/02			
825923-008	B-9-10-12	9/18/02			
825923-009	B-8-6-8	9/18/02			

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The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

Approval Signature

09/30/02
Date

En Chem, Inc. Cooler Receipt Log

Batch No. 825923

Project Name or ID 09413-098 No. of Coolers: 1 Temps: ROI 3.9°C

A. Receipt Phase: Date cooler was opened: 9-20-02 **By:** GD

1: Were samples received on ice? (Must be ≤ 6 C)	YES	NO[2]	
2. Was there a Temperature Blank?	YES	NO	
3: Were custody seals present and intact? (Record on COC)	YES	NO	
4: Are COC documents present?	YES	NO[2]	
5: Does this Project require quick turn around analysis?	YES	NO	
6: Is there any sub-work?	YES	NO	
7: Are there any short hold time tests?	YES	NO	
8: Are any samples nearing expiration of hold-time? (Within 2 days)	YES[1]	NO	Contacted by/Who
9: Do any samples need to be Filtered or Preserved in the lab?	YES[1]	NO	Contacted by/Who

B. Check-in Phase: Date samples were Checked-in: 9-20-02 **By:** GD

1: Were all sample containers listed on the COC received and intact?	YES	NO[2]	NA
2: Sign the COC as received by En Chem. Completed	YES	NO	
3: Do sample labels match the COC?	YES	NO[2]	
4: Check sample pH of preserved samples. (Not VOCs) Completed	YES	NO	NA
5: Do samples have correct chemical preservation?	YES	NO[2]	NA
6: Are dissolved parameters field filtered?	YES	NO[2]	NA
7: Are sample volumes adequate for tests requested?	YES	NO[2]	
8: Are VOC samples free of bubbles >6mm	YES	NO[2]	NA
9: Enter samples into logbook. Completed	YES	NO	
10: Place laboratory sample number on all containers and COC. Completed	YES	NO	
11: Complete Laboratory Tracking Sheet (LTS). Completed	YES	NO	NA
12: Start Nonconformance form.	YES	NO	NA
13: Initiate Subcontracting procedure. Completed	YES	NO	NA
14: Check laboratory sample number on all containers and COC. //	YES	NO	NA

Short Hold-time tests:

48 Hours or less	7 days
Coliform (6 hrs)	Flashpoint
Hexavalent Chromium (24 Hrs)	TSS
BOD	Total Solids
Nitrite or Nitrate	TDS
Low Level Mercury	Sulfide
Ortho Phosphorus	Free Liquids
Turbidity	Total Volatile Solids
Surfactants	Aqueous Extractable Organics- ALL
Sulfite	Unpreserved VOC's
En Core Preservation	Ash
Color	

Footnotes
1 Notify proper lab group immediately.
2 Complete nonconformance memo.

Rev. 9/5/2001, Attachment to 1-REC-5.
Subject to QA Audit.

Reviewed by/date WW 9/23/02

p:/everyone/forms/samplereceiving/crl.doc

Organic Data Qualifiers

B	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	Elevated detection limit.
D	Analyte value from diluted analysis, or surrogate result not applicable due to sample dilution.
E	Analyte concentration exceeds calibration range.
F	Surrogate results outside control criteria.
H	Extraction or analysis performed past holding time.
J	Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than the reporting limit.
K	Detection limit may be elevated due to the presence of an unrequested analyte.
N	Spiked sample recovery not within control limits.
P	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	The analyte was not detected above the reporting limit.
W	Sample received with headspace.
X	See Sample Narrative.
&	Laboratory Control Spike recovery not within control limits.
*	Duplicate analyses not within control limits.
SUB1	Assay was subcontracted to an approved lab.
SUB2	Assay was subcontracted to En Chem Green Bay WI Cert. #405132750.

En Chem Inc.

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Field ID : TRIP BLANK

Lab Sample Number : 825923-001

WI DNR LAB ID : 405132750

Client : ENSR CORPORATION

Report Date : 9/30/02

Collection Date : 9/18/02

Matrix Type : WATER

Organic Results

BTEX - WATER **Prep Method:** SW846 5030B **Prep Date:** 9/23/02 **Analyst:** PMS

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	98				%Recov		9/24/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		9/24/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		9/24/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		9/24/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		9/24/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		9/24/02	SW846 M8021B

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-7

Report Date : 9/30/02

Lab Sample Number : 825923-002

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/21/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	110000	250	800		ug/L		9/24/02	SW846 8260B
Bromobenzene	< 740	740	2400		ug/L		9/24/02	SW846 8260B
Bromochloromethane	< 670	670	2100		ug/L		9/24/02	SW846 8260B
Bromodichloromethane	< 230	230	730		ug/L		9/24/02	SW846 8260B
Bromoform	< 450	450	1400		ug/L		9/24/02	SW846 8260B
Bromomethane	< 870	870	2800		ug/L		9/24/02	SW846 8260B
s-Butylbenzene	< 620	620	2000		ug/L		9/24/02	SW846 8260B
t-Butylbenzene	< 960	960	3100		ug/L		9/24/02	SW846 8260B
n-Butylbenzene	< 650	650	2100		ug/L		9/24/02	SW846 8260B
Carbon tetrachloride	< 470	470	1500		ug/L		9/24/02	SW846 8260B
Chloroform	< 450	450	1400		ug/L		9/24/02	SW846 8260B
Chlorobenzene	< 580	580	1800		ug/L		9/24/02	SW846 8260B
Chlorodibromomethane	< 840	840	2700		ug/L		9/24/02	SW846 8260B
Chloroethane	< 840	840	2700		ug/L		9/24/02	SW846 8260B
Chloromethane	< 270	270	860		ug/L		9/24/02	SW846 8260B
2-Chlorotoluene	< 660	660	2100		ug/L		9/24/02	SW846 8260B
4-Chlorotoluene	< 890	890	2800		ug/L		9/24/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 880	880	2800		ug/L		9/24/02	SW846 8260B
1,2-Dibromoethane	< 660	660	2100		ug/L		9/24/02	SW846 8260B
Dibromomethane	< 740	740	2400		ug/L		9/24/02	SW846 8260B
1,3-Dichlorobenzene	< 580	580	1800		ug/L		9/24/02	SW846 8260B
1,4-Dichlorobenzene	< 630	630	2000		ug/L		9/24/02	SW846 8260B
1,2-Dichloroethane	< 550	550	1800		ug/L		9/24/02	SW846 8260B
1,2-Dichlorobenzene	< 710	710	2300		ug/L		9/24/02	SW846 8260B
1,1-Dichloroethene	< 560	560	1800		ug/L		9/24/02	SW846 8260B
cis-1,2-Dichloroethene	< 810	810	2600		ug/L		9/24/02	SW846 8260B
Dichlorodifluoromethane	< 570	570	1800		ug/L		9/24/02	SW846 8260B
trans-1,2-Dichloroethene	< 800	800	2500		ug/L		9/24/02	SW846 8260B
1,2-Dichloropropane	< 390	390	1200		ug/L		9/24/02	SW846 8260B
1,1-Dichloroethane	< 870	870	2800		ug/L		9/24/02	SW846 8260B
1,3-Dichloropropane	< 620	620	2000		ug/L		9/24/02	SW846 8260B
2,2-Dichloropropane	< 990	990	3200		ug/L		9/24/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-7
Lab Sample Number : 825923-002
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

1,1-Dichloropropene	<	790	790	2500	ug/L		9/24/02	SW846 8260B
cis-1,3-Dichloropropene	<	570	570	1800	ug/L		9/24/02	SW846 8260B
trans-1,3-Dichloropropene	<	640	640	2000	ug/L		9/24/02	SW846 8260B
Diisopropyl ether	<	600	600	1900	ug/L		9/24/02	SW846 8260B
Ethylbenzene		6100	530	1700	ug/L		9/24/02	SW846 8260B
Fluorotrichloromethane	<	850	850	2700	ug/L		9/24/02	SW846 8260B
Hexachlorobutadiene	<	950	950	3000	ug/L		9/24/02	SW846 8260B
Isopropylbenzene	<	660	660	2100	ug/L		9/24/02	SW846 8260B
p-Isopropyltoluene	<	580	580	1800	ug/L		9/24/02	SW846 8260B
Methylene chloride	<	470	470	1500	ug/L		9/24/02	SW846 8260B
Methyl-tert-butyl-ether	<	870	870	2800	ug/L		9/24/02	SW846 8260B
Naphthalene	<	630	630	2000	ug/L		9/24/02	SW846 8260B
n-Propylbenzene	<	950	950	3000	ug/L		9/24/02	SW846 8260B
Styrene	<	620	620	2000	ug/L		9/24/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	770	770	2500	ug/L		9/24/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	950	950	3000	ug/L		9/24/02	SW846 8260B
Tetrachloroethene	<	630	630	2000	ug/L		9/24/02	SW846 8260B
Toluene		64000	840	2700	ug/L		9/24/02	SW846 8260B
1,2,3-Trichlorobenzene	<	770	770	2500	ug/L		9/24/02	SW846 8260B
1,2,4-Trichlorobenzene	<	570	570	1800	ug/L		9/24/02	SW846 8260B
1,1,1-Trichloroethane	<	650	650	2100	ug/L		9/24/02	SW846 8260B
1,1,2-Trichloroethane	<	500	500	1600	ug/L		9/24/02	SW846 8260B
1,2,4-Trimethylbenzene		770	690	2200	ug/L	Q	9/24/02	SW846 8260B
Trichloroethene	<	390	390	1200	ug/L		9/24/02	SW846 8260B
1,2,3-Trichloropropane	<	920	920	2900	ug/L		9/24/02	SW846 8260B
1,3,5-Trimethylbenzene	<	640	640	2000	ug/L		9/24/02	SW846 8260B
Vinyl chloride	<	110	110	350	ug/L		9/24/02	SW846 8260B
Xylenes, -m, -p		18000	1100	3500	ug/L		9/24/02	SW846 8260B
Xylene, -o		4800	730	2300	ug/L		9/24/02	SW846 8260B
4-Bromofluorobenzene		113			%Recov		9/24/02	SW846 8260B
Dibromofluoromethane		130			%Recov		9/24/02	SW846 8260B
Toluene-d8		120			%Recov		9/24/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/23/02 **Analyst:** RJN

Analyte		Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	<	NA				%Recov	D	9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-7

Report Date : 9/30/02

Lab Sample Number : 825923-002

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	<	NA			%Recov	D	9/26/02	SW846 8270C
2-Fluorobiphenyl	<	NA			%Recov	D	9/26/02	SW846 8270C
Acenaphthene		5.4	3.6	11	ug/L	Q	9/26/02	SW846 8270C
Acenaphthylene	<	4.6	4.6	15	ug/L		9/26/02	SW846 8270C
Anthracene	<	4.0	4.0	13	ug/L		9/26/02	SW846 8270C
Benzo(a)anthracene	<	3.8	3.8	12	ug/L		9/26/02	SW846 8270C
Benzo(a)pyrene	<	2.4	2.4	7.6	ug/L		9/26/02	SW846 8270C
Benzo(b)fluoranthene	<	2.8	2.8	8.9	ug/L		9/26/02	SW846 8270C
Benzo(g,h,i)perylene	<	3.0	3.0	9.6	ug/L		9/26/02	SW846 8270C
Benzo(k)fluoranthene	<	2.6	2.6	8.3	ug/L		9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	<	2.8	2.8	8.9	ug/L		9/26/02	SW846 8270C
Chrysene	<	3.6	3.6	11	ug/L		9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	<	3.4	3.4	11	ug/L		9/26/02	SW846 8270C
Fluoranthene	<	5.6	5.6	18	ug/L		9/26/02	SW846 8270C
Fluorene	<	4.2	4.2	13	ug/L		9/26/02	SW846 8270C
2-Methylnaphthalene		13	5.6	18	ug/L	Q	9/26/02	SW846 8270C
1-Methylnaphthalene		10	5.4	17	ug/L	Q	9/26/02	SW846 8270C
Naphthalene		490	54	170	ug/L	D	9/26/02	SW846 8270C
Phenanthrene		6.7	3.8	12	ug/L	Q	9/26/02	SW846 8270C
Pyrene	<	4.0	4.0	13	ug/L		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-6

Report Date : 9/30/02

Lab Sample Number : 825923-003

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/21/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	3.1	0.25	0.80		ug/L		9/23/02	SW846 8260B
Bromobenzene	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
Bromochloromethane	< 0.67	0.67	2.1		ug/L		9/23/02	SW846 8260B
Bromodichloromethane	< 0.23	0.23	0.73		ug/L		9/23/02	SW846 8260B
Bromoform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Bromomethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
s-Butylbenzene	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
t-Butylbenzene	< 0.96	0.96	3.1		ug/L		9/23/02	SW846 8260B
n-Butylbenzene	< 0.65	0.65	2.1		ug/L		9/23/02	SW846 8260B
Carbon tetrachloride	< 0.47	0.47	1.5		ug/L		9/23/02	SW846 8260B
Chloroform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Chlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
Chlorodibromomethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloroethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloromethane	< 0.27	0.27	0.86		ug/L		9/23/02	SW846 8260B
2-Chlorotoluene	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
4-Chlorotoluene	< 0.89	0.89	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 0.88	0.88	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromoethane	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
Dibromomethane	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
1,3-Dichlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
1,4-Dichlorobenzene	< 0.63	0.63	2.0		ug/L		9/23/02	SW846 8260B
1,2-Dichloroethane	< 0.55	0.55	1.8		ug/L		9/23/02	SW846 8260B
1,2-Dichlorobenzene	< 0.71	0.71	2.3		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethene	< 0.56	0.56	1.8		ug/L		9/23/02	SW846 8260B
cis-1,2-Dichloroethene	< 0.81	0.81	2.6		ug/L		9/23/02	SW846 8260B
Dichlorodifluoromethane	< 0.57	0.57	1.8		ug/L		9/23/02	SW846 8260B
trans-1,2-Dichloroethene	< 0.80	0.80	2.5		ug/L		9/23/02	SW846 8260B
1,2-Dichloropropane	< 0.39	0.39	1.2		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
1,3-Dichloropropane	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
2,2-Dichloropropane	< 0.99	0.99	3.2		ug/L		9/23/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-6
Lab Sample Number : 825923-003
WI DNR LAB ID : 405132750
Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

1,1-Dichloropropene	< 0.79	0.79	2.5	ug/L		9/23/02	SW846 8260B
cis-1,3-Dichloropropene	< 0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
trans-1,3-Dichloropropene	< 0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Diisopropyl ether	< 0.60	0.60	1.9	ug/L		9/23/02	SW846 8260B
Ethylbenzene	1.1	0.53	1.7	ug/L	Q	9/23/02	SW846 8260B
Fluorotrichloromethane	< 0.85	0.85	2.7	ug/L		9/23/02	SW846 8260B
Hexachlorobutadiene	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Isopropylbenzene	< 0.66	0.66	2.1	ug/L		9/23/02	SW846 8260B
p-Isopropyltoluene	1.4	0.58	1.8	ug/L	Q	9/23/02	SW846 8260B
Methylene chloride	< 0.47	0.47	1.5	ug/L		9/23/02	SW846 8260B
Methyl-tert-butyl-ether	< 0.87	0.87	2.8	ug/L		9/23/02	SW846 8260B
Naphthalene	17	0.63	2.0	ug/L		9/23/02	SW846 8260B
n-Propylbenzene	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Styrene	< 0.62	0.62	2.0	ug/L	&	9/23/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Tetrachloroethene	< 0.63	0.63	2.0	ug/L		9/23/02	SW846 8260B
Toluene	0.84	0.84	2.7	ug/L	Q	9/23/02	SW846 8260B
1,2,3-Trichlorobenzene	< 0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,2,4-Trichlorobenzene	< 0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
1,1,1-Trichloroethane	< 0.65	0.65	2.1	ug/L		9/23/02	SW846 8260B
1,1,2-Trichloroethane	< 0.50	0.50	1.6	ug/L		9/23/02	SW846 8260B
1,2,4-Trimethylbenzene	0.80	0.69	2.2	ug/L	Q	9/23/02	SW846 8260B
Trichloroethene	< 0.39	0.39	1.2	ug/L		9/23/02	SW846 8260B
1,2,3-Trichloropropane	< 0.92	0.92	2.9	ug/L		9/23/02	SW846 8260B
1,3,5-Trimethylbenzene	< 0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Vinyl chloride	< 0.11	0.11	0.35	ug/L		9/23/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5	ug/L		9/23/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3	ug/L		9/23/02	SW846 8260B
4-Bromofluorobenzene	114			%Recov		9/23/02	SW846 8260B
Dibromofluoromethane	127			%Recov		9/23/02	SW846 8260B
Toluene-d8	120			%Recov		9/23/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/23/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	103				%Recov		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-6

Report Date : 9/30/02

Lab Sample Number : 825923-003

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	157			%Recov		9/26/02	SW846 8270C
2-Fluorobiphenyl	89			%Recov		9/26/02	SW846 8270C
Acenaphthene	4.5	0.72	2.3	ug/L		9/26/02	SW846 8270C
Acenaphthylene	< 0.92	0.92	2.9	ug/L		9/26/02	SW846 8270C
Anthracene	< 0.80	0.80	2.5	ug/L		9/26/02	SW846 8270C
Benzo(a)anthracene	< 0.76	0.76	2.4	ug/L		9/26/02	SW846 8270C
Benzo(a)pyrene	< 0.48	0.48	1.5	ug/L		9/26/02	SW846 8270C
Benzo(b)fluoranthene	< 0.56	0.56	1.8	ug/L		9/26/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.60	0.60	1.9	ug/L		9/26/02	SW846 8270C
Benzo(k)fluoranthene	< 0.52	0.52	1.7	ug/L		9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.56	0.56	1.8	ug/L		9/26/02	SW846 8270C
Chrysene	< 0.72	0.72	2.3	ug/L		9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.68	0.68	2.2	ug/L		9/26/02	SW846 8270C
Fluoranthene	< 1.1	1.1	3.5	ug/L		9/26/02	SW846 8270C
Fluorene	< 0.84	0.84	2.7	ug/L		9/26/02	SW846 8270C
2-Methylnaphthalene	1.6	1.1	3.5	ug/L	Q	9/26/02	SW846 8270C
1-Methylnaphthalene	2.5	1.1	3.5	ug/L	Q	9/26/02	SW846 8270C
Naphthalene	12	1.1	3.5	ug/L		9/26/02	SW846 8270C
Phenanthrene	3.4	0.76	2.4	ug/L		9/26/02	SW846 8270C
Pyrene	1.1	0.80	2.5	ug/L	Q	9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-6-DUP
Lab Sample Number : 825923-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/21/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	3.1	0.25	0.80		ug/L		9/23/02	SW846 8260B
Bromobenzene	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
Bromochloromethane	< 0.67	0.67	2.1		ug/L		9/23/02	SW846 8260B
Bromodichloromethane	< 0.23	0.23	0.73		ug/L		9/23/02	SW846 8260B
Bromoform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Bromomethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
s-Butylbenzene	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
t-Butylbenzene	< 0.96	0.96	3.1		ug/L		9/23/02	SW846 8260B
n-Butylbenzene	< 0.65	0.65	2.1		ug/L		9/23/02	SW846 8260B
Carbon tetrachloride	< 0.47	0.47	1.5		ug/L		9/23/02	SW846 8260B
Chloroform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Chlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
Chlorodibromomethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloroethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloromethane	< 0.27	0.27	0.86		ug/L		9/23/02	SW846 8260B
2-Chlorotoluene	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
4-Chlorotoluene	< 0.89	0.89	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 0.88	0.88	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromoethane	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
Dibromomethane	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
1,3-Dichlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
1,4-Dichlorobenzene	< 0.63	0.63	2.0		ug/L		9/23/02	SW846 8260B
1,2-Dichloroethane	< 0.55	0.55	1.8		ug/L		9/23/02	SW846 8260B
1,2-Dichlorobenzene	< 0.71	0.71	2.3		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethene	< 0.56	0.56	1.8		ug/L		9/23/02	SW846 8260B
cis-1,2-Dichloroethene	< 0.81	0.81	2.6		ug/L		9/23/02	SW846 8260B
Dichlorodifluoromethane	< 0.57	0.57	1.8		ug/L		9/23/02	SW846 8260B
trans-1,2-Dichloroethene	< 0.80	0.80	2.5		ug/L		9/23/02	SW846 8260B
1,2-Dichloropropane	< 0.39	0.39	1.2		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
1,3-Dichloropropane	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
2,2-Dichloropropane	< 0.99	0.99	3.2		ug/L		9/23/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-6-DUP
Lab Sample Number : 825923-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

1,1-Dichloropropene	<	0.79	0.79	2.5	ug/L		9/23/02	SW846 8260B
cis-1,3-Dichloropropene	<	0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
trans-1,3-Dichloropropene	<	0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Diisopropyl ether	<	0.60	0.60	1.9	ug/L		9/23/02	SW846 8260B
Ethylbenzene		1.2	0.53	1.7	ug/L	Q	9/23/02	SW846 8260B
Fluorotrichloromethane	<	0.85	0.85	2.7	ug/L		9/23/02	SW846 8260B
Hexachlorobutadiene	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Isopropylbenzene	<	0.66	0.66	2.1	ug/L		9/23/02	SW846 8260B
p-Isopropyltoluene		1.6	0.58	1.8	ug/L	Q	9/23/02	SW846 8260B
Methylene chloride	<	0.47	0.47	1.5	ug/L		9/23/02	SW846 8260B
Methyl-tert-butyl-ether	<	0.87	0.87	2.8	ug/L		9/23/02	SW846 8260B
Naphthalene		17	0.63	2.0	ug/L		9/23/02	SW846 8260B
n-Propylbenzene	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Styrene	<	0.62	0.62	2.0	ug/L	&	9/23/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Tetrachloroethene	<	0.63	0.63	2.0	ug/L		9/23/02	SW846 8260B
Toluene		0.85	0.84	2.7	ug/L	Q	9/23/02	SW846 8260B
1,2,3-Trichlorobenzene	<	0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,2,4-Trichlorobenzene	<	0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
1,1,1-Trichloroethane	<	0.65	0.65	2.1	ug/L		9/23/02	SW846 8260B
1,1,2-Trichloroethane	<	0.50	0.50	1.6	ug/L		9/23/02	SW846 8260B
1,2,4-Trimethylbenzene		0.81	0.69	2.2	ug/L	Q	9/23/02	SW846 8260B
Trichloroethene	<	0.39	0.39	1.2	ug/L		9/23/02	SW846 8260B
1,2,3-Trichloropropane	<	0.92	0.92	2.9	ug/L		9/23/02	SW846 8260B
1,3,5-Trimethylbenzene	<	0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Vinyl chloride	<	0.11	0.11	0.35	ug/L		9/23/02	SW846 8260B
Xylenes, -m, -p	<	1.1	1.1	3.5	ug/L		9/23/02	SW846 8260B
Xylene, -o	<	0.73	0.73	2.3	ug/L		9/23/02	SW846 8260B
4-Bromofluorobenzene		113			%Recov		9/23/02	SW846 8260B
Dibromofluoromethane		129			%Recov		9/23/02	SW846 8260B
Toluene-d8		120			%Recov		9/23/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/23/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	110				%Recov		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-6-DUP

Report Date : 9/30/02

Lab Sample Number : 825923-004

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	119			%Recov		9/26/02	SW846 8270C
2-Fluorobiphenyl	82			%Recov		9/26/02	SW846 8270C
Acenaphthene	3.9	0.72	2.3	ug/L		9/26/02	SW846 8270C
Acenaphthylene	< 0.92	0.92	2.9	ug/L		9/26/02	SW846 8270C
Anthracene	< 0.80	0.80	2.5	ug/L		9/26/02	SW846 8270C
Benzo(a)anthracene	< 0.76	0.76	2.4	ug/L		9/26/02	SW846 8270C
Benzo(a)pyrene	< 0.48	0.48	1.5	ug/L		9/26/02	SW846 8270C
Benzo(b)fluoranthene	< 0.56	0.56	1.8	ug/L		9/26/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.60	0.60	1.9	ug/L		9/26/02	SW846 8270C
Benzo(k)fluoranthene	< 0.52	0.52	1.7	ug/L		9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.56	0.56	1.8	ug/L		9/26/02	SW846 8270C
Chrysene	< 0.72	0.72	2.3	ug/L		9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.68	0.68	2.2	ug/L		9/26/02	SW846 8270C
Fluoranthene	< 1.1	1.1	3.5	ug/L		9/26/02	SW846 8270C
Fluorene	< 0.84	0.84	2.7	ug/L		9/26/02	SW846 8270C
2-Methylnaphthalene	1.3	1.1	3.5	ug/L	Q	9/26/02	SW846 8270C
1-Methylnaphthalene	2.1	1.1	3.5	ug/L	Q	9/26/02	SW846 8270C
Naphthalene	10	1.1	3.5	ug/L		9/26/02	SW846 8270C
Phenanthrene	3.8	0.76	2.4	ug/L		9/26/02	SW846 8270C
Pyrene	1.2	0.80	2.5	ug/L	Q	9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-5
Lab Sample Number : 825923-005
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/21/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	0.99	0.25	0.80		ug/L		9/23/02	SW846 8260B
Bromobenzene	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
Bromochloromethane	< 0.67	0.67	2.1		ug/L		9/23/02	SW846 8260B
Bromodichloromethane	< 0.23	0.23	0.73		ug/L		9/23/02	SW846 8260B
Bromoform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Bromomethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
s-Butylbenzene	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
t-Butylbenzene	< 0.96	0.96	3.1		ug/L		9/23/02	SW846 8260B
n-Butylbenzene	< 0.65	0.65	2.1		ug/L		9/23/02	SW846 8260B
Carbon tetrachloride	< 0.47	0.47	1.5		ug/L		9/23/02	SW846 8260B
Chloroform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Chlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
Chlorodibromomethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloroethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloromethane	< 0.27	0.27	0.86		ug/L		9/23/02	SW846 8260B
2-Chlorotoluene	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
4-Chlorotoluene	< 0.89	0.89	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 0.88	0.88	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromoethane	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
Dibromomethane	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
1,3-Dichlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
1,4-Dichlorobenzene	< 0.63	0.63	2.0		ug/L		9/23/02	SW846 8260B
1,2-Dichloroethane	< 0.55	0.55	1.8		ug/L		9/23/02	SW846 8260B
1,2-Dichlorobenzene	< 0.71	0.71	2.3		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethene	< 0.56	0.56	1.8		ug/L		9/23/02	SW846 8260B
cis-1,2-Dichloroethene	< 0.81	0.81	2.6		ug/L		9/23/02	SW846 8260B
Dichlorodifluoromethane	< 0.57	0.57	1.8		ug/L		9/23/02	SW846 8260B
trans-1,2-Dichloroethene	< 0.80	0.80	2.5		ug/L		9/23/02	SW846 8260B
1,2-Dichloropropane	< 0.39	0.39	1.2		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
1,3-Dichloropropane	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
2,2-Dichloropropane	< 0.99	0.99	3.2		ug/L		9/23/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-5
Lab Sample Number : 825923-005
WI DNR LAB ID : 405132750
Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

1,1-Dichloropropene	< 0.79	0.79	2.5	ug/L		9/23/02	SW846 8260B
cis-1,3-Dichloropropene	< 0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
trans-1,3-Dichloropropene	< 0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Diisopropyl ether	< 0.60	0.60	1.9	ug/L		9/23/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7	ug/L		9/23/02	SW846 8260B
Fluorotrichloromethane	< 0.85	0.85	2.7	ug/L		9/23/02	SW846 8260B
Hexachlorobutadiene	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Isopropylbenzene	< 0.66	0.66	2.1	ug/L		9/23/02	SW846 8260B
p-Isopropyltoluene	< 0.58	0.58	1.8	ug/L		9/23/02	SW846 8260B
Methylene chloride	< 0.47	0.47	1.5	ug/L		9/23/02	SW846 8260B
Methyl-tert-butyl-ether	< 0.87	0.87	2.8	ug/L		9/23/02	SW846 8260B
Naphthalene	0.89	0.63	2.0	ug/L	Q	9/23/02	SW846 8260B
n-Propylbenzene	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Styrene	< 0.62	0.62	2.0	ug/L	&	9/23/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Tetrachloroethene	< 0.63	0.63	2.0	ug/L		9/23/02	SW846 8260B
Toluene	< 0.84	0.84	2.7	ug/L		9/23/02	SW846 8260B
1,2,3-Trichlorobenzene	< 0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,2,4-Trichlorobenzene	< 0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
1,1,1-Trichloroethane	< 0.65	0.65	2.1	ug/L		9/23/02	SW846 8260B
1,1,2-Trichloroethane	< 0.50	0.50	1.6	ug/L		9/23/02	SW846 8260B
1,2,4-Trimethylbenzene	< 0.69	0.69	2.2	ug/L		9/23/02	SW846 8260B
Trichloroethene	< 0.39	0.39	1.2	ug/L		9/23/02	SW846 8260B
1,2,3-Trichloropropane	< 0.92	0.92	2.9	ug/L		9/23/02	SW846 8260B
1,3,5-Trimethylbenzene	< 0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Vinyl chloride	< 0.11	0.11	0.35	ug/L		9/23/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5	ug/L		9/23/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3	ug/L		9/23/02	SW846 8260B
4-Bromofluorobenzene	113			%Recov		9/23/02	SW846 8260B
Dibromofluoromethane	129			%Recov		9/23/02	SW846 8260B
Toluene-d8	118			%Recov		9/23/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/23/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	88				%Recov		9/25/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-5

Report Date : 9/30/02

Lab Sample Number : 825923-005

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5		129			%Recov		9/25/02	SW846 8270C
2-Fluorobiphenyl		74			%Recov		9/25/02	SW846 8270C
Acenaphthene		0.43	0.018	0.057	ug/L		9/25/02	SW846 8270C
Acenaphthylene	<	0.023	0.023	0.073	ug/L		9/25/02	SW846 8270C
Anthracene		0.059	0.020	0.064	ug/L	Q	9/25/02	SW846 8270C
Benzo(a)anthracene	<	0.019	0.019	0.061	ug/L		9/25/02	SW846 8270C
Benzo(a)pyrene	<	0.012	0.012	0.038	ug/L		9/25/02	SW846 8270C
Benzo(b)fluoranthene	<	0.014	0.014	0.045	ug/L		9/25/02	SW846 8270C
Benzo(g,h,i)perylene	<	0.015	0.015	0.048	ug/L		9/25/02	SW846 8270C
Benzo(k)fluoranthene	<	0.013	0.013	0.041	ug/L		9/25/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	<	0.014	0.014	0.045	ug/L		9/25/02	SW846 8270C
Chrysene	<	0.018	0.018	0.057	ug/L		9/25/02	SW846 8270C
Dibenzo(a,h)anthracene	<	0.017	0.017	0.054	ug/L		9/25/02	SW846 8270C
Fluoranthene		0.051	0.028	0.089	ug/L	Q	9/25/02	SW846 8270C
Fluorene		0.24	0.021	0.067	ug/L		9/25/02	SW846 8270C
2-Methylnaphthalene		0.15	0.028	0.089	ug/L		9/25/02	SW846 8270C
1-Methylnaphthalene		0.19	0.027	0.086	ug/L		9/25/02	SW846 8270C
Naphthalene		1.3	0.14	0.45	ug/L	D	9/25/02	SW846 8270C
Phenanthrene		0.22	0.019	0.061	ug/L		9/25/02	SW846 8270C
Pyrene		0.039	0.020	0.064	ug/L	Q	9/25/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-2

Report Date : 9/30/02

Lab Sample Number : 825923-006

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/21/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.25	0.25	0.80		ug/L		9/23/02	SW846 8260B
Bromobenzene	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
Bromochloromethane	< 0.67	0.67	2.1		ug/L		9/23/02	SW846 8260B
Bromodichloromethane	< 0.23	0.23	0.73		ug/L		9/23/02	SW846 8260B
Bromoform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Bromomethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
s-Butylbenzene	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
t-Butylbenzene	< 0.96	0.96	3.1		ug/L		9/23/02	SW846 8260B
n-Butylbenzene	< 0.65	0.65	2.1		ug/L		9/23/02	SW846 8260B
Carbon tetrachloride	< 0.47	0.47	1.5		ug/L		9/23/02	SW846 8260B
Chloroform	< 0.45	0.45	1.4		ug/L		9/23/02	SW846 8260B
Chlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
Chlorodibromomethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloroethane	< 0.84	0.84	2.7		ug/L		9/23/02	SW846 8260B
Chloromethane	< 0.27	0.27	0.86		ug/L		9/23/02	SW846 8260B
2-Chlorotoluene	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
4-Chlorotoluene	< 0.89	0.89	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 0.88	0.88	2.8		ug/L		9/23/02	SW846 8260B
1,2-Dibromoethane	< 0.66	0.66	2.1		ug/L		9/23/02	SW846 8260B
Dibromomethane	< 0.74	0.74	2.4		ug/L		9/23/02	SW846 8260B
1,3-Dichlorobenzene	< 0.58	0.58	1.8		ug/L		9/23/02	SW846 8260B
1,4-Dichlorobenzene	< 0.63	0.63	2.0		ug/L		9/23/02	SW846 8260B
1,2-Dichloroethane	< 0.55	0.55	1.8		ug/L		9/23/02	SW846 8260B
1,2-Dichlorobenzene	< 0.71	0.71	2.3		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethene	< 0.56	0.56	1.8		ug/L		9/23/02	SW846 8260B
cis-1,2-Dichloroethene	< 0.81	0.81	2.6		ug/L		9/23/02	SW846 8260B
Dichlorodifluoromethane	< 0.57	0.57	1.8		ug/L		9/23/02	SW846 8260B
trans-1,2-Dichloroethene	< 0.80	0.80	2.5		ug/L		9/23/02	SW846 8260B
1,2-Dichloropropane	< 0.39	0.39	1.2		ug/L		9/23/02	SW846 8260B
1,1-Dichloroethane	< 0.87	0.87	2.8		ug/L		9/23/02	SW846 8260B
1,3-Dichloropropane	< 0.62	0.62	2.0		ug/L		9/23/02	SW846 8260B
2,2-Dichloropropane	< 0.99	0.99	3.2		ug/L		9/23/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-2
Lab Sample Number : 825923-006
WI DNR LAB ID : 405132750
Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : WATER

1,1-Dichloropropene	<	0.79	0.79	2.5	ug/L		9/23/02	SW846 8260B
cis-1,3-Dichloropropene	<	0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
trans-1,3-Dichloropropene	<	0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Diisopropyl ether	<	0.60	0.60	1.9	ug/L		9/23/02	SW846 8260B
Ethylbenzene	<	0.53	0.53	1.7	ug/L		9/23/02	SW846 8260B
Fluorotrichloromethane	<	0.85	0.85	2.7	ug/L		9/23/02	SW846 8260B
Hexachlorobutadiene	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Isopropylbenzene	<	0.66	0.66	2.1	ug/L		9/23/02	SW846 8260B
p-Isopropyltoluene	<	0.58	0.58	1.8	ug/L		9/23/02	SW846 8260B
Methylene chloride	<	0.47	0.47	1.5	ug/L		9/23/02	SW846 8260B
Methyl-tert-butyl-ether	<	0.87	0.87	2.8	ug/L		9/23/02	SW846 8260B
Naphthalene	<	0.63	0.63	2.0	ug/L		9/23/02	SW846 8260B
n-Propylbenzene	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Styrene	<	0.62	0.62	2.0	ug/L	&	9/23/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	0.95	0.95	3.0	ug/L		9/23/02	SW846 8260B
Tetrachloroethene	<	0.63	0.63	2.0	ug/L		9/23/02	SW846 8260B
Toluene	<	0.84	0.84	2.7	ug/L		9/23/02	SW846 8260B
1,2,3-Trichlorobenzene	<	0.77	0.77	2.5	ug/L		9/23/02	SW846 8260B
1,2,4-Trichlorobenzene	<	0.57	0.57	1.8	ug/L		9/23/02	SW846 8260B
1,1,1-Trichloroethane	<	0.65	0.65	2.1	ug/L		9/23/02	SW846 8260B
1,1,2-Trichloroethane	<	0.50	0.50	1.6	ug/L		9/23/02	SW846 8260B
1,2,4-Trimethylbenzene	<	0.69	0.69	2.2	ug/L		9/23/02	SW846 8260B
Trichloroethene	<	0.39	0.39	1.2	ug/L		9/23/02	SW846 8260B
1,2,3-Trichloropropane	<	0.92	0.92	2.9	ug/L		9/23/02	SW846 8260B
1,3,5-Trimethylbenzene	<	0.64	0.64	2.0	ug/L		9/23/02	SW846 8260B
Vinyl chloride	<	0.11	0.11	0.35	ug/L		9/23/02	SW846 8260B
Xylenes, -m, -p	<	1.1	1.1	3.5	ug/L		9/23/02	SW846 8260B
Xylene, -o	<	0.73	0.73	2.3	ug/L		9/23/02	SW846 8260B
4-Bromofluorobenzene		112			%Recov		9/23/02	SW846 8260B
Dibromofluoromethane		124			%Recov		9/23/02	SW846 8260B
Toluene-d8		121			%Recov		9/23/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/24/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	102				%Recov		9/25/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-2

Report Date : 9/30/02

Lab Sample Number : 825923-006

Collection Date : 9/18/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	62			%Recov	9/25/02	SW846 8270C
2-Fluorobiphenyl	60			%Recov	9/25/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057	ug/L	9/25/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073	ug/L	9/25/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064	ug/L	9/25/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061	ug/L	9/25/02	SW846 8270C
Benzo(a)pyrene	< 0.012	0.012	0.038	ug/L	9/25/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045	ug/L	9/25/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L	9/25/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L	9/25/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L	9/25/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L	9/25/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L	9/25/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L	9/25/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L	9/25/02	SW846 8270C
2-Methylnaphthalene	< 0.028	0.028	0.089	ug/L	9/25/02	SW846 8270C
1-Methylnaphthalene	< 0.027	0.027	0.086	ug/L	9/25/02	SW846 8270C
Naphthalene	< 0.027	0.027	0.086	ug/L	9/25/02	SW846 8270C
Phenanthrene	< 0.019	0.019	0.061	ug/L	9/25/02	SW846 8270C
Pyrene	< 0.020	0.020	0.064	ug/L	9/25/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : B-10-6-8
Lab Sample Number : 825923-007
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	75.2				%		9/20/02	SM2540G	SM2540G	KEG

Organic Results

BTEX - METHANOL PRESERVED SOIL **Prep Method:** SW846 5030B **Prep Date:** 9/23/02 **Analyst:** PMS

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	95				%Recov		9/24/02	SW846 M8021B
Benzene	120000	330	790		ug/kg		9/24/02	SW846 M8021B
Ethylbenzene	410	330	790		ug/kg	Q	9/24/02	SW846 M8021B
Toluene	59000	330	790		ug/kg		9/24/02	SW846 M8021B
Xylenes, -m, -p	6700	330	790		ug/kg		9/24/02	SW846 M8021B
Xylene, -o	1700	330	790		ug/kg		9/24/02	SW846 M8021B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : B-9-10-12
Lab Sample Number : 825923-008
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	71.6				%		9/20/02	SM2540G	SM2540G	KEG

Organic Results

BTEX - METHANOL PRESERVED SOIL **Prep Method:** SW846 5030B **Prep Date:** 9/23/02 **Analyst:** PMS

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	98				%Recov		9/24/02	SW846 M8021B
Benzene	100	35	84		ug/kg		9/24/02	SW846 M8021B
Ethylbenzene	< 25	25	60		ug/kg		9/24/02	SW846 M8021B
Toluene	< 25	25	60		ug/kg		9/24/02	SW846 M8021B
Xylenes, -m, -p	< 25	25	60		ug/kg		9/24/02	SW846 M8021B
Xylene, -o	< 25	25	60		ug/kg		9/24/02	SW846 M8021B

All soil results are reported on a dry weight basis unless otherwise noted.

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : B-8-6-8
Lab Sample Number : 825923-009
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/18/02
Matrix Type : SOIL

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Solids, percent	74.5				%		9/20/02	SM2540G	SM2540G	KEG

Organic Results

BTEX - METHANOL PRESERVED SOIL **Prep Method:** SW846 5030B **Prep Date:** 9/23/02 **Analyst:** PMS

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	95				%Recov		9/24/02	SW846 M8021B
Benzene	54000	170	410		ug/kg		9/24/02	SW846 M8021B
Ethylbenzene	380	170	410		ug/kg	Q	9/24/02	SW846 M8021B
Toluene	< 130	130	310		ug/kg		9/24/02	SW846 M8021B
Xylenes, -m, -p	1100	170	410		ug/kg		9/24/02	SW846 M8021B
Xylene, -o	< 130	130	310		ug/kg		9/24/02	SW846 M8021B

All soil results are reported on a dry weight basis unless otherwise noted.

(Please Print Legibly)
Company Name: ENSR
Branch or Location: St. Louis Park
Project Contact: Bill Gregg
Telephone: 952-924-8017
Project Number: 09413-098
Project Name: SWL+P MGP
Project State: WI
Sampled By (Print): Chris Boehm

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CHAIN OF CUSTODY

ESC.5

Page 1 of 1

P.O. # _____ Quote # _____

Mail Report To: Bill Gregg
Company: ENSR
Address: 4500 Park Glen Road, #210
St. Louis Park, MN 55416

Invoice To: - Same -
Company:
Address:

Mail Invoice To:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH
H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other

Data Package Options - (please circle if requested)
Sample Results Only (no QC)
EPA Level II (Subject to Surcharge)
EPA Level III (Subject to Surcharge)
EPA Level IV (Subject to Surcharge)

Regulatory Program: UST, RCRA, SDWA, NPDES, CERCLA

Matrix Codes: W=Water, S=Soil, A=Air, C=Charcoal, B=Biota, Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	ANALYSES REQUESTED: VOC	ANALYSES REQUESTED: PAH	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
001	MW-1	9/20/02	945	W	N	B	X	X	4	1-L Amber None preserved 4 - 40 mL HCl	
002	MW-3		1020								
003	MW-4		1050								
004	MW-4-dup		1055								

Rush Turnaround Time Requested (TAT) - Prelim
(Rush TAT subject to approval/surcharge)
Date Needed: standard
Transmit Prelim Rush Results by (circle):
Phone Fax E-Mail
Phone #:
Fax #:
E-Mail Address:

Samples on HOLD are subject to special pricing and release liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/20/02 1300	[signature]	9-20-02 13:00
[signature]	9-23-02 14:00	Dunham	9-23-02 14:00
Dunham	9-24-02 8:30	[signature]	9-24-02 8:30

En Chem Project No.: 926041
Sample Receipt Temp.: 2.4°C
Sample Receipt pH (Met/Metals): N/A
Cooler Custody Seal: Present / Not Present
Intact / Not Intact

Version 2.0: 1/02

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www.enchem.com

- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client: ENSR CORPORATION

WI DNR LAB ID : 405132750

Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
826041-001	MW-1	9/20/02			
826041-002	MW-3	9/20/02			
826041-003	MW-4	9/20/02			
826041-004	MW-4-DUP	9/20/02			

Please visit our Internet homepage at: www.enchem.com

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

Approval Signature

09/30/02
Date

En Chem, Inc. Cooler Receipt Log

Batch No. 826041

Project Name or ID 09413-098 No. of Coolers: 1 Temps: 2.4 °C

A. Receipt Phase: Date cooler was opened: 9-24-02 **By:** JCK

1: Were samples received on ice? (Must be ≤ 6 C)	(YES)	NO[2]	
2: Was there a Temperature Blank?	YES	(NO)	
3: Were custody seals present and intact? (Record on COC)	YES	(NO)	
4: Are COC documents present?	(YES)	NO[2]	
5: Does this Project require quick turn around analysis?	YES	(NO)	
6: Is there any sub-work?	YES	(NO)	
7: Are there any short hold time tests?	YES	(NO)	
8: Are any samples nearing expiration of hold-time? (Within 2 days)	YES[1]	(NO)	Contacted by/Who_____
9: Do any samples need to be Filtered or Preserved in the lab?	YES[1]	(NO)	Contacted by/Who_____

B. Check-in Phase: Date samples were Checked-in: 9-24-02 **By:** JCK

1: Were all sample containers listed on the COC received and intact?	(YES)	NO[2]	NA
2: Sign the COC as received by En Chem. Completed	(YES)	NO	
3: Do sample labels match the COC?	(YES)	NO[2]	
4: Check sample pH of preserved samples. (Not VOCs) Completed	YES	NO	(NA)
5: Do samples have correct chemical preservation?	YES	NO[2]	(NA)
6: Are dissolved parameters field filtered?	YES	NO[2]	(NA)
7: Are sample volumes adequate for tests requested?	(YES)	NO[2]	
8: Are VOC samples free of bubbles >6mm	(YES)	NO[2]	NA
9: Enter samples into logbook. Completed	(YES)	NO	
10: Place laboratory sample number on all containers and COC. Completed	(YES)	NO	
11: Complete Laboratory Tracking Sheet (LTS). Completed	YES	NO	(NA)
12: Start Nonconformance form.	YES	NO	(NA)
13: Initiate Subcontracting procedure. Completed	YES	NO	(NA)
14: Check laboratory sample number on all containers and COC. RJ	(YES)	NO	NA

Short Hold-time tests:

48 Hours or less	7 days
Coliform (6 hrs)	Flashpoint
Hexavalent Chromium (24 Hrs)	TSS
BOD	Total Solids
Nitrite or Nitrate	TDS
Low Level Mercury	Sulfide
Ortho Phosphorus	Free Liquids
Turbidity	Total Volatile Solids
Surfactants	Aqueous Extractable Organics- ALL
Sulfite	Unpreserved VOC's
En Core Preservation	Ash
Color	

Footnotes
1 Notify proper lab group immediately.
2 Complete nonconformance memo.

Rev. 9/5/2001, Attachment to 1-REC-5.
Subject to QA Audit.

Reviewed by/date LW 9/25/02 1

Organic Data Qualifiers

B	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	Elevated detection limit.
D	Analyte value from diluted analysis, or surrogate result not applicable due to sample dilution.
E	Analyte concentration exceeds calibration range.
F	Surrogate results outside control criteria.
H	Extraction or analysis performed past holding time.
J	Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than the reporting limit.
K	Detection limit may be elevated due to the presence of an unrequested analyte.
N	Spiked sample recovery not within control limits.
P	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	The analyte was not detected above the reporting limit.
W	Sample received with headspace.
X	See Sample Narrative.
&	Laboratory Control Spike recovery not within control limits.
*	Duplicate analyses not within control limits.
SUB1	Assay was subcontracted to an approved lab.
SUB2	Assay was subcontracted to En Chem Green Bay WI Cert. #405132750.

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-1
Lab Sample Number : 826041-001
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.25	0.25	0.80		ug/L		9/25/02	SW846 8260B
Bromobenzene	< 0.74	0.74	2.4		ug/L		9/25/02	SW846 8260B
Bromochloromethane	< 0.67	0.67	2.1		ug/L		9/25/02	SW846 8260B
Bromodichloromethane	< 0.23	0.23	0.73		ug/L		9/25/02	SW846 8260B
Bromoform	< 0.45	0.45	1.4		ug/L		9/25/02	SW846 8260B
Bromomethane	< 0.87	0.87	2.8		ug/L		9/25/02	SW846 8260B
s-Butylbenzene	< 0.62	0.62	2.0		ug/L		9/25/02	SW846 8260B
t-Butylbenzene	< 0.96	0.96	3.1		ug/L		9/25/02	SW846 8260B
n-Butylbenzene	< 0.65	0.65	2.1		ug/L		9/25/02	SW846 8260B
Carbon tetrachloride	< 0.47	0.47	1.5		ug/L		9/25/02	SW846 8260B
Chloroform	< 0.45	0.45	1.4		ug/L		9/25/02	SW846 8260B
Chlorobenzene	< 0.58	0.58	1.8		ug/L		9/25/02	SW846 8260B
Chlorodibromomethane	< 0.84	0.84	2.7		ug/L		9/25/02	SW846 8260B
Chloroethane	< 0.84	0.84	2.7		ug/L		9/25/02	SW846 8260B
Chloromethane	< 0.27	0.27	0.86		ug/L		9/25/02	SW846 8260B
2-Chlorotoluene	< 0.66	0.66	2.1		ug/L		9/25/02	SW846 8260B
4-Chlorotoluene	< 0.89	0.89	2.8		ug/L		9/25/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 0.88	0.88	2.8		ug/L		9/25/02	SW846 8260B
1,2-Dibromoethane	< 0.66	0.66	2.1		ug/L		9/25/02	SW846 8260B
Dibromomethane	< 0.74	0.74	2.4		ug/L		9/25/02	SW846 8260B
1,3-Dichlorobenzene	< 0.58	0.58	1.8		ug/L		9/25/02	SW846 8260B
1,4-Dichlorobenzene	< 0.63	0.63	2.0		ug/L		9/25/02	SW846 8260B
1,2-Dichloroethane	< 0.55	0.55	1.8		ug/L		9/25/02	SW846 8260B
1,2-Dichlorobenzene	< 0.71	0.71	2.3		ug/L		9/25/02	SW846 8260B
1,1-Dichloroethene	< 0.56	0.56	1.8		ug/L		9/25/02	SW846 8260B
cis-1,2-Dichloroethene	< 0.81	0.81	2.6		ug/L		9/25/02	SW846 8260B
Dichlorodifluoromethane	< 0.57	0.57	1.8		ug/L		9/25/02	SW846 8260B
trans-1,2-Dichloroethene	< 0.80	0.80	2.5		ug/L		9/25/02	SW846 8260B
1,2-Dichloropropane	< 0.39	0.39	1.2		ug/L		9/25/02	SW846 8260B
1,1-Dichloroethane	< 0.87	0.87	2.8		ug/L		9/25/02	SW846 8260B
1,3-Dichloropropane	< 0.62	0.62	2.0		ug/L		9/25/02	SW846 8260B
2,2-Dichloropropane	< 0.99	0.99	3.2		ug/L		9/25/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Client : ENSR CORPORATION
Field ID : MW-1
Report Date : 9/30/02
Lab Sample Number : 826041-001
Collection Date : 9/20/02
WI DNR LAB ID : 405132750
Matrix Type : WATER

1,1-Dichloropropene	< 0.79	0.79	2.5	ug/L		9/25/02	SW846 8260B
cis-1,3-Dichloropropene	< 0.57	0.57	1.8	ug/L		9/25/02	SW846 8260B
trans-1,3-Dichloropropene	< 0.64	0.64	2.0	ug/L		9/25/02	SW846 8260B
Diisopropyl ether	< 0.60	0.60	1.9	ug/L		9/25/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7	ug/L		9/25/02	SW846 8260B
Fluorotrichloromethane	< 0.85	0.85	2.7	ug/L		9/25/02	SW846 8260B
Hexachlorobutadiene	< 0.95	0.95	3.0	ug/L		9/25/02	SW846 8260B
Isopropylbenzene	< 0.66	0.66	2.1	ug/L		9/25/02	SW846 8260B
p-Isopropyltoluene	< 0.58	0.58	1.8	ug/L		9/25/02	SW846 8260B
Methylene chloride	< 0.47	0.47	1.5	ug/L		9/25/02	SW846 8260B
Methyl-tert-butyl-ether	< 0.87	0.87	2.8	ug/L		9/25/02	SW846 8260B
Naphthalene	< 0.63	0.63	2.0	ug/L		9/25/02	SW846 8260B
n-Propylbenzene	< 0.95	0.95	3.0	ug/L		9/25/02	SW846 8260B
Styrene	< 0.62	0.62	2.0	ug/L	&	9/25/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 0.77	0.77	2.5	ug/L		9/25/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 0.95	0.95	3.0	ug/L		9/25/02	SW846 8260B
Tetrachloroethene	< 0.63	0.63	2.0	ug/L		9/25/02	SW846 8260B
Toluene	< 0.84	0.84	2.7	ug/L		9/25/02	SW846 8260B
1,2,3-Trichlorobenzene	< 0.77	0.77	2.5	ug/L		9/25/02	SW846 8260B
1,2,4-Trichlorobenzene	< 0.57	0.57	1.8	ug/L		9/25/02	SW846 8260B
1,1,1-Trichloroethane	< 0.65	0.65	2.1	ug/L		9/25/02	SW846 8260B
1,1,2-Trichloroethane	< 0.50	0.50	1.6	ug/L		9/25/02	SW846 8260B
1,2,4-Trimethylbenzene	< 0.69	0.69	2.2	ug/L		9/25/02	SW846 8260B
Trichloroethene	< 0.39	0.39	1.2	ug/L		9/25/02	SW846 8260B
1,2,3-Trichloropropane	< 0.92	0.92	2.9	ug/L		9/25/02	SW846 8260B
1,3,5-Trimethylbenzene	< 0.64	0.64	2.0	ug/L		9/25/02	SW846 8260B
Vinyl chloride	< 0.11	0.11	0.35	ug/L		9/25/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5	ug/L		9/25/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3	ug/L		9/25/02	SW846 8260B
4-Bromofluorobenzene	107			%Recov		9/25/02	SW846 8260B
Dibromofluoromethane	101			%Recov		9/25/02	SW846 8260B
Toluene-d8	103			%Recov		9/25/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	106				%Recov		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-1

Report Date : 9/30/02

Lab Sample Number : 826041-001

Collection Date : 9/20/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5		66			%Recov	9/26/02	SW846 8270C
2-Fluorobiphenyl		57			%Recov	9/26/02	SW846 8270C
Acenaphthene	<	0.018	0.018	0.057	ug/L	9/26/02	SW846 8270C
Acenaphthylene	<	0.023	0.023	0.073	ug/L	9/26/02	SW846 8270C
Anthracene	<	0.020	0.020	0.064	ug/L	9/26/02	SW846 8270C
Benzo(a)anthracene	<	0.019	0.019	0.061	ug/L	9/26/02	SW846 8270C
Benzo(a)pyrene	<	0.012	0.012	0.038	ug/L	9/26/02	SW846 8270C
Benzo(b)fluoranthene	<	0.014	0.014	0.045	ug/L	9/26/02	SW846 8270C
Benzo(g,h,i)perylene	<	0.015	0.015	0.048	ug/L	9/26/02	SW846 8270C
Benzo(k)fluoranthene	<	0.013	0.013	0.041	ug/L	9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	<	0.014	0.014	0.045	ug/L	9/26/02	SW846 8270C
Chrysene	<	0.018	0.018	0.057	ug/L	9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	<	0.017	0.017	0.054	ug/L	9/26/02	SW846 8270C
Fluoranthene	<	0.028	0.028	0.089	ug/L	9/26/02	SW846 8270C
Fluorene	<	0.021	0.021	0.067	ug/L	9/26/02	SW846 8270C
2-Methylnaphthalene	<	0.028	0.028	0.089	ug/L	9/26/02	SW846 8270C
1-Methylnaphthalene	<	0.027	0.027	0.086	ug/L	9/26/02	SW846 8270C
Naphthalene	<	0.027	0.027	0.086	ug/L	9/26/02	SW846 8270C
Phenanthrene	<	0.019	0.019	0.061	ug/L	9/26/02	SW846 8270C
Pyrene	<	0.020	0.020	0.064	ug/L	9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-3

Report Date : 9/30/02

Lab Sample Number : 826041-002

Collection Date : 9/20/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	620	1.2	3.8		ug/L		9/27/02	SW846 8260B
Bromobenzene	< 3.7	3.7	12		ug/L		9/27/02	SW846 8260B
Bromochloromethane	< 3.4	3.4	11		ug/L		9/27/02	SW846 8260B
Bromodichloromethane	< 1.2	1.2	3.8		ug/L		9/27/02	SW846 8260B
Bromoform	< 2.2	2.2	7.0		ug/L		9/27/02	SW846 8260B
Bromomethane	< 4.3	4.3	14		ug/L		9/27/02	SW846 8260B
s-Butylbenzene	< 3.1	3.1	9.9		ug/L		9/27/02	SW846 8260B
t-Butylbenzene	< 4.8	4.8	15		ug/L		9/27/02	SW846 8260B
n-Butylbenzene	< 3.2	3.2	10		ug/L		9/27/02	SW846 8260B
Carbon tetrachloride	< 2.3	2.3	7.3		ug/L		9/27/02	SW846 8260B
Chloroform	< 2.2	2.2	7.0		ug/L		9/27/02	SW846 8260B
Chlorobenzene	< 2.9	2.9	9.2		ug/L		9/27/02	SW846 8260B
Chlorodibromomethane	< 4.2	4.2	13		ug/L		9/27/02	SW846 8260B
Chloroethane	< 4.2	4.2	13		ug/L		9/27/02	SW846 8260B
Chloromethane	< 1.4	1.4	4.5		ug/L		9/27/02	SW846 8260B
2-Chlorotoluene	< 3.3	3.3	11		ug/L		9/27/02	SW846 8260B
4-Chlorotoluene	< 4.5	4.5	14		ug/L		9/27/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 4.4	4.4	14		ug/L		9/27/02	SW846 8260B
1,2-Dibromoethane	< 3.3	3.3	11		ug/L		9/27/02	SW846 8260B
Dibromomethane	< 3.7	3.7	12		ug/L		9/27/02	SW846 8260B
1,3-Dichlorobenzene	< 2.9	2.9	9.2		ug/L		9/27/02	SW846 8260B
1,4-Dichlorobenzene	< 3.1	3.1	9.9		ug/L		9/27/02	SW846 8260B
1,2-Dichloroethane	< 2.8	2.8	8.9		ug/L		9/27/02	SW846 8260B
1,2-Dichlorobenzene	< 3.5	3.5	11		ug/L		9/27/02	SW846 8260B
1,1-Dichloroethene	< 2.8	2.8	8.9		ug/L		9/27/02	SW846 8260B
cis-1,2-Dichloroethene	< 4.0	4.0	13		ug/L		9/27/02	SW846 8260B
Dichlorodifluoromethane	< 2.8	2.8	8.9		ug/L		9/27/02	SW846 8260B
trans-1,2-Dichloroethene	< 4.0	4.0	13		ug/L		9/27/02	SW846 8260B
1,2-Dichloropropane	< 1.9	1.9	6.1		ug/L		9/27/02	SW846 8260B
1,1-Dichloroethane	< 4.3	4.3	14		ug/L		9/27/02	SW846 8260B
1,3-Dichloropropane	< 3.1	3.1	9.9		ug/L		9/27/02	SW846 8260B
2,2-Dichloropropane	< 5.0	5.0	16		ug/L		9/27/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-3
Lab Sample Number : 826041-002
WI DNR LAB ID : 405132750
Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

1,1-Dichloropropene	< 4.0	4.0	13	ug/L		9/27/02	SW846 8260B
cis-1,3-Dichloropropene	< 2.8	2.8	8.9	ug/L		9/27/02	SW846 8260B
trans-1,3-Dichloropropene	< 3.2	3.2	10	ug/L		9/27/02	SW846 8260B
Diisopropyl ether	< 3.0	3.0	9.6	ug/L		9/27/02	SW846 8260B
Ethylbenzene	45	2.6	8.3	ug/L		9/27/02	SW846 8260B
Fluorotrichloromethane	< 4.2	4.2	13	ug/L		9/27/02	SW846 8260B
Hexachlorobutadiene	< 4.8	4.8	15	ug/L		9/27/02	SW846 8260B
Isopropylbenzene	< 3.3	3.3	11	ug/L		9/27/02	SW846 8260B
p-Isopropyltoluene	< 2.9	2.9	9.2	ug/L		9/27/02	SW846 8260B
Methylene chloride	< 2.3	2.3	7.3	ug/L		9/27/02	SW846 8260B
Methyl-tert-butyl-ether	< 4.3	4.3	14	ug/L		9/27/02	SW846 8260B
Naphthalene	330	3.1	9.9	ug/L		9/27/02	SW846 8260B
n-Propylbenzene	< 4.8	4.8	15	ug/L		9/27/02	SW846 8260B
Styrene	< 3.1	3.1	9.9	ug/L	&	9/27/02	SW846 8260B
1,1,2,2-Tetrachloroethane	< 3.9	3.9	12	ug/L		9/27/02	SW846 8260B
1,1,1,2-Tetrachloroethane	< 4.8	4.8	15	ug/L		9/27/02	SW846 8260B
Tetrachloroethene	< 3.1	3.1	9.9	ug/L		9/27/02	SW846 8260B
Toluene	100	4.2	13	ug/L		9/27/02	SW846 8260B
1,2,3-Trichlorobenzene	< 3.9	3.9	12	ug/L		9/27/02	SW846 8260B
1,2,4-Trichlorobenzene	< 2.8	2.8	8.9	ug/L		9/27/02	SW846 8260B
1,1,1-Trichloroethane	< 3.2	3.2	10	ug/L		9/27/02	SW846 8260B
1,1,2-Trichloroethane	< 2.5	2.5	8.0	ug/L		9/27/02	SW846 8260B
1,2,4-Trimethylbenzene	26	3.4	11	ug/L		9/27/02	SW846 8260B
Trichloroethene	< 1.9	1.9	6.1	ug/L		9/27/02	SW846 8260B
1,2,3-Trichloropropane	< 4.6	4.6	15	ug/L		9/27/02	SW846 8260B
1,3,5-Trimethylbenzene	11	3.2	10	ug/L		9/27/02	SW846 8260B
Vinyl chloride	< 0.55	0.55	1.8	ug/L		9/27/02	SW846 8260B
Xylenes, -m, -p	130	5.5	18	ug/L		9/27/02	SW846 8260B
Xylene, -o	96	3.6	11	ug/L		9/27/02	SW846 8260B
4-Bromofluorobenzene	106			%Recov		9/27/02	SW846 8260B
Dibromofluoromethane	100			%Recov		9/27/02	SW846 8260B
Toluene-d8	102			%Recov		9/27/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	91				%Recov		9/27/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-3

Report Date : 9/30/02

Lab Sample Number : 826041-002

Collection Date : 9/20/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	77			%Recov		9/27/02	SW846 8270C
2-Fluorobiphenyl	58			%Recov		9/27/02	SW846 8270C
Acenaphthene	< 7.2	7.2	23	ug/L	D	9/27/02	SW846 8270C
Acenaphthylene	< 9.2	9.2	29	ug/L	D	9/27/02	SW846 8270C
Anthracene	0.27	0.020	0.064	ug/L		9/27/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061	ug/L		9/27/02	SW846 8270C
Benzo(a)pyrene	0.014	0.012	0.038	ug/L	Q	9/27/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045	ug/L		9/27/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L		9/27/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L		9/27/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L		9/27/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L		9/27/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L		9/27/02	SW846 8270C
Fluoranthene	0.061	0.028	0.089	ug/L	Q	9/27/02	SW846 8270C
Fluorene	< 8.4	8.4	27	ug/L	D	9/27/02	SW846 8270C
2-Methylnaphthalene	15	11	35	ug/L	QD	9/27/02	SW846 8270C
1-Methylnaphthalene	22	11	35	ug/L	QD	9/27/02	SW846 8270C
Naphthalene	160	11	35	ug/L	D	9/27/02	SW846 8270C
Phenanthrene	< 7.6	7.6	24	ug/L	D	9/27/02	SW846 8270C
Pyrene	0.076	0.020	0.064	ug/L		9/27/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-4
Lab Sample Number : 826041-003
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	120000	250	800		ug/L		9/26/02	SW846 8260B
Bromobenzene	< 740	740	2400		ug/L		9/26/02	SW846 8260B
Bromochloromethane	< 670	670	2100		ug/L		9/26/02	SW846 8260B
Bromodichloromethane	< 230	230	730		ug/L		9/26/02	SW846 8260B
Bromoform	< 450	450	1400		ug/L		9/26/02	SW846 8260B
Bromomethane	< 870	870	2800		ug/L		9/26/02	SW846 8260B
s-Butylbenzene	< 620	620	2000		ug/L		9/26/02	SW846 8260B
t-Butylbenzene	< 960	960	3100		ug/L		9/26/02	SW846 8260B
n-Butylbenzene	< 650	650	2100		ug/L		9/26/02	SW846 8260B
Carbon tetrachloride	< 470	470	1500		ug/L		9/26/02	SW846 8260B
Chloroform	< 450	450	1400		ug/L		9/26/02	SW846 8260B
Chlorobenzene	< 580	580	1800		ug/L		9/26/02	SW846 8260B
Chlorodibromomethane	< 840	840	2700		ug/L		9/26/02	SW846 8260B
Chloroethane	< 840	840	2700		ug/L		9/26/02	SW846 8260B
Chloromethane	< 270	270	860		ug/L		9/26/02	SW846 8260B
2-Chlorotoluene	< 660	660	2100		ug/L		9/26/02	SW846 8260B
4-Chlorotoluene	< 890	890	2800		ug/L		9/26/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 880	880	2800		ug/L		9/26/02	SW846 8260B
1,2-Dibromoethane	< 660	660	2100		ug/L		9/26/02	SW846 8260B
Dibromomethane	< 740	740	2400		ug/L		9/26/02	SW846 8260B
1,3-Dichlorobenzene	< 580	580	1800		ug/L		9/26/02	SW846 8260B
1,4-Dichlorobenzene	< 630	630	2000		ug/L		9/26/02	SW846 8260B
1,2-Dichloroethane	< 550	550	1800		ug/L		9/26/02	SW846 8260B
1,2-Dichlorobenzene	< 710	710	2300		ug/L		9/26/02	SW846 8260B
1,1-Dichloroethene	< 560	560	1800		ug/L		9/26/02	SW846 8260B
cis-1,2-Dichloroethene	< 810	810	2600		ug/L		9/26/02	SW846 8260B
Dichlorodifluoromethane	< 570	570	1800		ug/L		9/26/02	SW846 8260B
trans-1,2-Dichloroethene	< 800	800	2500		ug/L		9/26/02	SW846 8260B
1,2-Dichloropropane	< 390	390	1200		ug/L		9/26/02	SW846 8260B
1,1-Dichloroethane	< 870	870	2800		ug/L		9/26/02	SW846 8260B
1,3-Dichloropropane	< 620	620	2000		ug/L		9/26/02	SW846 8260B
2,2-Dichloropropane	< 990	990	3200		ug/L		9/26/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-4
Lab Sample Number : 826041-003
WI DNR LAB ID : 405132750
Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

1,1-Dichloropropene	<	790	790	2500	ug/L		9/26/02	SW846 8260B
cis-1,3-Dichloropropene	<	570	570	1800	ug/L		9/26/02	SW846 8260B
trans-1,3-Dichloropropene	<	640	640	2000	ug/L		9/26/02	SW846 8260B
Diisopropyl ether	<	600	600	1900	ug/L		9/26/02	SW846 8260B
Ethylbenzene	<	530	530	1700	ug/L		9/26/02	SW846 8260B
Fluorotrichloromethane	<	850	850	2700	ug/L		9/26/02	SW846 8260B
Hexachlorobutadiene	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Isopropylbenzene	<	660	660	2100	ug/L		9/26/02	SW846 8260B
p-Isopropyltoluene	<	580	580	1800	ug/L		9/26/02	SW846 8260B
Methylene chloride	<	470	470	1500	ug/L		9/26/02	SW846 8260B
Methyl-tert-butyl-ether	<	870	870	2800	ug/L		9/26/02	SW846 8260B
Naphthalene	<	630	630	2000	ug/L		9/26/02	SW846 8260B
n-Propylbenzene	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Styrene	<	620	620	2000	ug/L	&	9/26/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	770	770	2500	ug/L		9/26/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Tetrachloroethene	<	630	630	2000	ug/L		9/26/02	SW846 8260B
Toluene	<	840	840	2700	ug/L		9/26/02	SW846 8260B
1,2,3-Trichlorobenzene	<	770	770	2500	ug/L		9/26/02	SW846 8260B
1,2,4-Trichlorobenzene	<	570	570	1800	ug/L		9/26/02	SW846 8260B
1,1,1-Trichloroethane	<	650	650	2100	ug/L		9/26/02	SW846 8260B
1,1,2-Trichloroethane	<	500	500	1600	ug/L		9/26/02	SW846 8260B
1,2,4-Trimethylbenzene	<	690	690	2200	ug/L		9/26/02	SW846 8260B
Trichloroethene	<	390	390	1200	ug/L		9/26/02	SW846 8260B
1,2,3-Trichloropropane	<	920	920	2900	ug/L		9/26/02	SW846 8260B
1,3,5-Trimethylbenzene	<	640	640	2000	ug/L		9/26/02	SW846 8260B
Vinyl chloride	<	110	110	350	ug/L		9/26/02	SW846 8260B
Xylenes, -m, -p	<	1100	1100	3500	ug/L		9/26/02	SW846 8260B
Xylene, -o	<	730	730	2300	ug/L		9/26/02	SW846 8260B
4-Bromofluorobenzene		106			%Recov		9/26/02	SW846 8260B
Dibromofluoromethane		102			%Recov		9/26/02	SW846 8260B
Toluene-d8		102			%Recov		9/26/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	102				%Recov		9/26/02	SW846 8270C

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Fax: 920-469-8827

- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-4

Report Date : 9/30/02

Lab Sample Number : 826041-003

Collection Date : 9/20/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5		75			%Recov		9/26/02	SW846 8270C
2-Fluorobiphenyl		63			%Recov		9/26/02	SW846 8270C
Acenaphthene	<	0.018	0.018	0.057	ug/L		9/26/02	SW846 8270C
Acenaphthylene	<	0.023	0.023	0.073	ug/L		9/26/02	SW846 8270C
Anthracene	<	0.020	0.020	0.064	ug/L		9/26/02	SW846 8270C
Benzo(a)anthracene	<	0.019	0.019	0.061	ug/L		9/26/02	SW846 8270C
Benzo(a)pyrene	<	0.012	0.012	0.038	ug/L		9/26/02	SW846 8270C
Benzo(b)fluoranthene	<	0.014	0.014	0.045	ug/L		9/26/02	SW846 8270C
Benzo(g,h,i)perylene	<	0.015	0.015	0.048	ug/L		9/26/02	SW846 8270C
Benzo(k)fluoranthene	<	0.013	0.013	0.041	ug/L		9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	<	0.014	0.014	0.045	ug/L		9/26/02	SW846 8270C
Chrysene	<	0.018	0.018	0.057	ug/L		9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	<	0.017	0.017	0.054	ug/L		9/26/02	SW846 8270C
Fluoranthene	<	0.028	0.028	0.089	ug/L		9/26/02	SW846 8270C
Fluorene	<	0.021	0.021	0.067	ug/L		9/26/02	SW846 8270C
2-Methylnaphthalene		0.059	0.028	0.089	ug/L	Q	9/26/02	SW846 8270C
1-Methylnaphthalene		0.042	0.027	0.086	ug/L	Q	9/26/02	SW846 8270C
Naphthalene		0.38	0.027	0.086	ug/L		9/26/02	SW846 8270C
Phenanthrene	<	0.019	0.019	0.061	ug/L		9/26/02	SW846 8270C
Pyrene	<	0.020	0.020	0.064	ug/L		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-4-DUP
Lab Sample Number : 826041-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

Organic Results

EPA 8260 VOLATILE LIST- WATER **Prep Method:** SW846 5030B **Prep Date:** 9/25/02 **Analyst:** JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	130000	250	800		ug/L		9/26/02	SW846 8260B
Bromobenzene	< 740	740	2400		ug/L		9/26/02	SW846 8260B
Bromochloromethane	< 670	670	2100		ug/L		9/26/02	SW846 8260B
Bromodichloromethane	< 230	230	730		ug/L		9/26/02	SW846 8260B
Bromoform	< 450	450	1400		ug/L		9/26/02	SW846 8260B
Bromomethane	< 870	870	2800		ug/L		9/26/02	SW846 8260B
s-Butylbenzene	< 620	620	2000		ug/L		9/26/02	SW846 8260B
t-Butylbenzene	< 960	960	3100		ug/L		9/26/02	SW846 8260B
n-Butylbenzene	< 650	650	2100		ug/L		9/26/02	SW846 8260B
Carbon tetrachloride	< 470	470	1500		ug/L		9/26/02	SW846 8260B
Chloroform	< 450	450	1400		ug/L		9/26/02	SW846 8260B
Chlorobenzene	< 580	580	1800		ug/L		9/26/02	SW846 8260B
Chlorodibromomethane	< 840	840	2700		ug/L		9/26/02	SW846 8260B
Chloroethane	< 840	840	2700		ug/L		9/26/02	SW846 8260B
Chloromethane	< 270	270	860		ug/L		9/26/02	SW846 8260B
2-Chlorotoluene	< 660	660	2100		ug/L		9/26/02	SW846 8260B
4-Chlorotoluene	< 890	890	2800		ug/L		9/26/02	SW846 8260B
1,2-Dibromo-3-chloropropane	< 880	880	2800		ug/L		9/26/02	SW846 8260B
1,2-Dibromoethane	< 660	660	2100		ug/L		9/26/02	SW846 8260B
Dibromomethane	< 740	740	2400		ug/L		9/26/02	SW846 8260B
1,3-Dichlorobenzene	< 580	580	1800		ug/L		9/26/02	SW846 8260B
1,4-Dichlorobenzene	< 630	630	2000		ug/L		9/26/02	SW846 8260B
1,2-Dichloroethane	< 550	550	1800		ug/L		9/26/02	SW846 8260B
1,2-Dichlorobenzene	< 710	710	2300		ug/L		9/26/02	SW846 8260B
1,1-Dichloroethene	< 560	560	1800		ug/L		9/26/02	SW846 8260B
cis-1,2-Dichloroethene	< 810	810	2600		ug/L		9/26/02	SW846 8260B
Dichlorodifluoromethane	< 570	570	1800		ug/L		9/26/02	SW846 8260B
trans-1,2-Dichloroethene	< 800	800	2500		ug/L		9/26/02	SW846 8260B
1,2-Dichloropropane	< 390	390	1200		ug/L		9/26/02	SW846 8260B
1,1-Dichloroethane	< 870	870	2800		ug/L		9/26/02	SW846 8260B
1,3-Dichloropropane	< 620	620	2000		ug/L		9/26/02	SW846 8260B
2,2-Dichloropropane	< 990	990	3200		ug/L		9/26/02	SW846 8260B

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- Analytical Report -

Project Name : SWL & P MGP
Project Number : 09413-098
Field ID : MW-4-DUP
Lab Sample Number : 826041-004
WI DNR LAB ID : 405132750

Client : ENSR CORPORATION
Report Date : 9/30/02
Collection Date : 9/20/02
Matrix Type : WATER

1,1-Dichloropropene	<	790	790	2500	ug/L		9/26/02	SW846 8260B
cis-1,3-Dichloropropene	<	570	570	1800	ug/L		9/26/02	SW846 8260B
trans-1,3-Dichloropropene	<	640	640	2000	ug/L		9/26/02	SW846 8260B
Diisopropyl ether	<	600	600	1900	ug/L		9/26/02	SW846 8260B
Ethylbenzene	<	530	530	1700	ug/L		9/26/02	SW846 8260B
Fluorotrichloromethane	<	850	850	2700	ug/L		9/26/02	SW846 8260B
Hexachlorobutadiene	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Isopropylbenzene	<	660	660	2100	ug/L		9/26/02	SW846 8260B
p-Isopropyltoluene	<	580	580	1800	ug/L		9/26/02	SW846 8260B
Methylene chloride	<	470	470	1500	ug/L		9/26/02	SW846 8260B
Methyl-tert-butyl-ether	<	870	870	2800	ug/L		9/26/02	SW846 8260B
Naphthalene	<	630	630	2000	ug/L		9/26/02	SW846 8260B
n-Propylbenzene	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Styrene	<	620	620	2000	ug/L	&	9/26/02	SW846 8260B
1,1,2,2-Tetrachloroethane	<	770	770	2500	ug/L		9/26/02	SW846 8260B
1,1,1,2-Tetrachloroethane	<	950	950	3000	ug/L		9/26/02	SW846 8260B
Tetrachloroethene	<	630	630	2000	ug/L		9/26/02	SW846 8260B
Toluene		960	840	2700	ug/L	Q	9/26/02	SW846 8260B
1,2,3-Trichlorobenzene	<	770	770	2500	ug/L		9/26/02	SW846 8260B
1,2,4-Trichlorobenzene	<	570	570	1800	ug/L		9/26/02	SW846 8260B
1,1,1-Trichloroethane	<	650	650	2100	ug/L		9/26/02	SW846 8260B
1,1,2-Trichloroethane	<	500	500	1600	ug/L		9/26/02	SW846 8260B
1,2,4-Trimethylbenzene	<	690	690	2200	ug/L		9/26/02	SW846 8260B
Trichloroethene	<	390	390	1200	ug/L		9/26/02	SW846 8260B
1,2,3-Trichloropropane	<	920	920	2900	ug/L		9/26/02	SW846 8260B
1,3,5-Trimethylbenzene	<	640	640	2000	ug/L		9/26/02	SW846 8260B
Vinyl chloride	<	110	110	350	ug/L		9/26/02	SW846 8260B
Xylenes, -m, -p	<	1100	1100	3500	ug/L		9/26/02	SW846 8260B
Xylene, -o	<	730	730	2300	ug/L		9/26/02	SW846 8260B
4-Bromofluorobenzene		104			%Recov		9/26/02	SW846 8260B
Dibromofluoromethane		102			%Recov		9/26/02	SW846 8260B
Toluene-d8		101			%Recov		9/26/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES **Prep Method:** SW846 3510 **Prep Date:** 9/25/02 **Analyst:** RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Terphenyl-d14	101				%Recov		9/26/02	SW846 8270C

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- Analytical Report -

Project Name : SWL & P MGP

Project Number : 09413-098

Client : ENSR CORPORATION

Field ID : MW-4-DUP

Report Date : 9/30/02

Lab Sample Number : 826041-004

Collection Date : 9/20/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Nitrobenzene-d5	70			%Recov		9/26/02	SW846 8270C
2-Fluorobiphenyl	56			%Recov		9/26/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057	ug/L		9/26/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073	ug/L		9/26/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064	ug/L		9/26/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061	ug/L		9/26/02	SW846 8270C
Benzo(a)pyrene	< 0.012	0.012	0.038	ug/L		9/26/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045	ug/L		9/26/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L		9/26/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L		9/26/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L		9/26/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L		9/26/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L		9/26/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L		9/26/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L		9/26/02	SW846 8270C
2-Methylnaphthalene	0.048	0.028	0.089	ug/L	Q	9/26/02	SW846 8270C
1-Methylnaphthalene	0.033	0.027	0.086	ug/L	Q	9/26/02	SW846 8270C
Naphthalene	0.32	0.027	0.086	ug/L		9/26/02	SW846 8270C
Phenanthrene	< 0.019	0.019	0.061	ug/L		9/26/02	SW846 8270C
Pyrene	< 0.020	0.020	0.064	ug/L		9/26/02	SW846 8270C

APPENDIX F

GTI Fingerprinting Analytical Report

IGT Project Number: 49010-01

COMPARATIVE ANALYSIS OF EIGHT SOIL SAMPLES FROM THE SWL&P FORMER MGP SITE, SUPERIOR, WISCONSIN

Prepared by

GAS TECHNOLOGY INSTITUTE
1700 South Mount Prospect Road
Des Plaines, Illinois 60018

for

SUPERIOR WATER, LIGHT & POWER
2915 Hill Avenue
P.O. Box 519
Superior, Wisconsin 54880

February, 2003

gti SM

IGT Project Number: 49010-01

COMPARATIVE ANALYSIS OF EIGHT SOIL SAMPLES FROM THE SWL&P FORMER MGP SITE, SUPERIOR, WISCONSIN

Prepared by

GAS TECHNOLOGY INSTITUTE
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February, 2003

gti SM

EXECUTIVE SUMMARY

The Gas Technology Institute has conducted a comparative study of soil samples collected from the Superior Water, Light and Power Company (SWL&P) former manufactured gas plant site in Superior, Wisconsin. Samples were tested and evaluated against known standards for the presence of pyrogenic substances (tars), petrogenic substances (crude oil derivatives) and other organic compounds. This study has defined potential sources for the contamination at the site through chemical fingerprinting.

Using GC/FID fingerprinting techniques, results concluded that six of the eight soils from the SWL&P Site contained both petrogenic and pyrogenic substances. Samples T10-1, T10-2, T10-3, B-11-12-13, B-12-11-12 and B-13-12-13 demonstrated PAH patterns and diagnostic ratios which indicated MGP-type tar, probably from a carbureted water gas (CWG) process. The samples also contained a petrogenic fraction, characterized by an unresolved complex mixture in the C10 to C40 range. This is characteristic of #5 and #6 fuel oils. Samples T10-1, T10-2, T10-3, B-11-12-13, B-12-11-12 and B-13-12-13 are highly similar to each other.

Chemical fingerprints of samples B-23-6-8 and B-23-10-12 showed only the presence of a gasoline-range material. No pyrogenic substances were detected in these two samples. The lack of tri- and tetra-alkyl benzenes indicates that the gasoline-range material is not gasoline. The gasoline-range material consists almost exclusively of benzene and toluene, with lesser amounts of xylenes, ethylbenzene and a very small quantity of styrene. This material is similar to a blended volatile petroleum solvent

INTRODUCTION

Superior Water, Light and Power Company (SWL&P) has contracted the Gas Technology Institute (GTI) to determine whether organic residues found in soil samples from their Superior, Wisconsin former manufactured gas plant (MGP) site are chemically similar or dissimilar to petrogenic, pyrogenic or other organic materials specifically associated with MGP operations. GTI has performed a series of highly definitive, defendable tests designed to determine the generic source of the organic material, to determine the chemical similarity or dissimilarity between all samples, and to determine the exact composition of the samples.

Recent trends in environmental investigation, particularly of sites containing former MGP materials, have increasingly employed the use of environmental forensic techniques to identify specific wastes. Environmental forensic methodologies have been especially effective in discerning MGP-type tars from other tars and waste mixtures. Former MGP wastes possess distinct "chemical fingerprints", based upon the gas production process used and other factors. This is also true of other tar wastes, such as asphalt/roofing tar, creosotes or other types. Chemical fingerprinting is also able to identify compounds associated with the tars, either from distinctly separate sources or purposely co-mingled with the tar. Therefore, analysis and comparison of specific fingerprints with known standards may elucidate the sources of the contamination.

Chemical fingerprinting has also been applied to site investigations, in order to determine the extent of organic residues that may be attributable to specific sources. The chemical fingerprints of site samples can be compared to each other and to off-site sample fingerprints, to determine if off-site impacts are caused by on-site sources. As such, environmental forensic methods have been increasing applied to a variety of site investigation efforts.

Hydrocarbons, such as those found on former MGP sites, can be divided into three classes: petrogenic substances, pyrogenic substances, and diagenetic substances. Petrogenic substances can be defined as substances originating from petroleum, including crude oil, fuels, lubricants and derivatives of those materials. Aliphatic and aromatic hydrocarbons constitute the vast majority of compounds in petrogenic substances. Two features most clearly represent fresh

crude oil: 1) a regular series of normal alkanes peaks (the "picket fence") on the chromatogram, and, 2) the "hump" in the baseline of the chromatogram (unresolved complex mixture.) The fraction of crude oil contained in the sample (i.e., gasoline, diesel fuel, kerosene, etc.) can be determined by examination of the elution time of the cluster of peaks and the presence of particular compounds.

Pyrogenic substances can be defined as those organic substances originating from oxygen-depleted high temperature processes, including: incomplete combustion, pyrolysis, cracking and destructive distillation. Pyrogenic materials consist primarily of aromatic hydrocarbons. By definition, tar is a pyrogenic material. MGP-type tars, because of the conditions under which they were formed, are distinct. The resulting chromatograms possess a particular pattern. However, examination of the ratios of particular polynuclear aromatic hydrocarbons (PAHs) and alkylated PAHs can be used as indicator of the source of the material. Typically, the ratios of fluoranthene to pyrene and dibenzofuran to fluorine are most often examined. Comparison of these ratios can discern MGP tars from non-MGP tars as well as within the grouping of MGP tars (for instance, carburetted water gas tar from oil gas or coal carbonization tar). Identification of the tars may also be based upon the relative abundance of certain PAHs, such as naphthalene and anthracene.

Diagenetic substances include PAHs from natural sources. These sources include plants and buried organic material, including municipal waste.

METHODOLOGY

GTI has completed chemical forensic analysis of eight soil samples from a former MGP site in Superior, Wisconsin. These samples include Sample T10-1, Sample T10-2, Sample T10-3, Sample B-11-12-13, Sample B-12-11-12, Sample B-13-12-13, Samples B-23-6-8 and Sample B-23-10-12. Analyses of these samples have included identification and/or quantification of: 1) monocyclic hydrocarbons (MAHs), 2) polycyclic aromatic hydrocarbons (PAHs), and, 3) aliphatic hydrocarbons and polar hydrocarbons. Analyses and hydrocarbon fingerprinting were performed using gas chromatography with flame ionization detection (GC/FID) and gas chromatography with mass spectrometry (GC/MS). The soil samples were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standards and analyzed by GC/FID (EPA 8100 mod.) and GC/MS (EPA 8270 mod.).

The GC/FID method of analysis is routinely used to identify specific compounds present in a sample, which can then be compared with a "standard" sample of known origin or composition. The GC/FID analysis does not quantify the compounds found in the mixture. Results obtained from a single GC/FID scan show the FID detector response versus residence time of each compound in the chromatographic column. The pattern of peaks versus residence time that is generated in the GC/FID scan is sometimes referred to as the "fingerprint" of the sample. In this way, an investigator may "fingerprint" the sample by comparing scan features of the test sample with scan features of a control sample. For instance, particular relative ratios of one compound to another, the relatively high concentration of a compound or the absence of particular compounds may be indicative of a carburetted water gas tar, a high temperature coal tar or a mixture of alternate origin. Generally, several identified reference samples are used when conducting the GC/FID analysis, so that the test sample may be compared with accuracy.

In order to quantify the compounds or classes of compounds contained in the sample mixture, the sample is then subjected to a second set of analyses through GC/MS. In GC/MS, chromatograms are produced which show peaks that are similar to the chromatograms obtained in GC/FID analysis, but additional compound-specific information is obtained as well. When performed in a controlled and reproducible manner, the GC/MS method produces multiple "fingerprints" of a

sample when specific fragment ions are isolated. Analysis of the specific ions can be highly useful in sample identification. Additionally, compounds of certain target classes, such as biomarker compounds, can be selectively measured.

Results of these analyses are included in this report, with expanded analytical data detailed in Appendices A-E.

INTERPRETATION

Based upon review of the data, the following interpretation of data is presented.

Sample T10-1 This sample contained pyrogenic and petrogenic substances (see definitions above). The pattern of PAHs, especially the ratios of fluoranthene to pyrene and dibenzofuran to fluorene indicate that this sample contains MGP tar, probably from a carburetted water gas (CWG) process. The presence of MAHs and the high concentration of naphthalene relative to other PAHs indicate that this material is relatively unweathered. The amounts of MAHs relative to PAHs are higher than is usually seen in MGP tars, suggesting a mixture of materials.

The petroleum is indicated by an unresolved complex mixture (UCM or "hump") which eluted from approximately decane (C10 – 9 minutes) to beyond tetracontane (C40 – 45 minutes). Examples of common petroleum products with these features include wide spectrum distillates such as the types of gas oils used in typical CWG processes, as well as residual oils such as #5 and #6 oils. These types of materials are sometimes seen at MGP sites, but may be indicative of other sources.

Sample T10-2 This sample also contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs indicate that this sample contains MGP tar, probably CWG. The reduced amounts of MAHs and naphthalene relative to other PAHs indicate that this material has been subject to mild weathering.

The petroleum is indicated by a UCM similar in range and shape to that seen on sample T10-1.

Sample T10-3 This sample also contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs indicate that this sample contains MGP tar, probably CWG tar. The presence of MAHs and the high concentration of naphthalene relative to other PAHs indicate that this material is relatively unweathered. However, the amounts of MAHs relative to PAHs are much higher than is usually seen in MGP tars, suggesting mixed products.

The petroleum is indicated by a UCM similar in range and shape to that seen on sample T10-1.

Sample B-11-12-13 This sample also contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs indicate that this sample contains MGP tar, probably CWG. The reduced amounts of naphthalene relative to other PAHs indicate that this material has been subject to mild weathering. However, the amounts of MAHs relative to PAHs are much higher than is usually seen in MGP tars, suggesting mixed products.

The petroleum is indicated by a UCM similar in range and shape to that seen on sample T10-1.

Sample B-12-11-12 This sample also contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs indicate that this sample contains MGP tar, probably CWG. The reduced amounts of naphthalene relative to other PAHs indicate that this material has been subject to mild weathering. However, the amounts of MAHs relative to PAHs are much higher than is usually seen in MGP tars, suggesting mixed products.

The petroleum is indicated by a UCM similar in range and shape to that seen on sample T10-1.

Sample B-13-12-13 This sample also contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs indicate that this sample contains MGP tar, probably CWG. The reduced amounts of naphthalene relative to other PAHs indicate that this material has been subject to mild weathering. However, the amounts of MAHs, especially toluene, relative to PAHs are higher than is usually seen in MGP tars, suggesting mixed products.

The petroleum is indicated by a UCM similar in range and shape to that seen on sample T10-1.

Sample B-23-6-8 This sample contained a gasoline-range product. However, the lack of tri- and tetra-alkyl benzenes indicates that it is not gasoline. Based on this composition, the material can be described as a volatile petroleum solvent.

Sample B-23-10-12 This sample also contained a gasoline-range product similar to that found in sample B-23-6-8.

DISCUSSION

Recent work by GTI, collaborative laboratories (META Environmental, Inc.) and EPRI (1) has shown that pyrogenic materials from different sources have characteristic compound ratios. For example, the ratios of fluoranthene to pyrene in wastes from former MGP plants operating the relatively low temperature CWG process range from about 0.6 to 0.8 typically. This is in contrast to coke oven tars and other pyrogenic materials generated at relatively high temperatures where the fluoranthene to pyrene ratios range from about 1.0 to about 1.4. Similarly, CWG wastes are low in oxygen containing compounds. Thus, the ratio of dibenzofuran (an oxygen-containing compound) to fluorine in CWG wastes ranges from about 0.1 to 0.4 while the same ratio in coal tars ranges from about 0.4 to 0.8. Other compound ratios and chemical indicators have been identified. These ratios are relatively stable in the environment over time and during the various refining processes that produce coal tar-based products. The source ratios for samples T10-1, T10-2, T10-3, B-11-12-13, B-12-12, and B-13-12-13 ranged from 0.74 to 0.81 for fluoranthene/pyrene and 0.05 to 0.11 for dibenzofuran/fluorene indicating low temperature gas plant wastes probably from a CWG plant.

Total PAH concentration is also indicative of chemical source. Contamination by PAHs can be found at both high and low concentrations throughout urban America. Recent work by GTI, collaborative laboratories and EPRI (2) has shown that *high* concentrations of PAHs in soil are not "background", but generally originated from one or more concentrated sources, such as coal tar, creosote, or other coal tar products. A survey of PAHs in surface soil samples from randomly-selected, visually un-impacted sites in small to large cities and towns indicated that "background levels" of total PAHs are generally *less than* 50 mg/kg. Thus, samples with greater than 50 to 100 mg/kg total PAHs are most likely to be impacted by one or more concentrated PAH sources, such as coal tar, coal tar products, or some petroleum products. The concentrations of total PAHs in samples T10-1, T10-2, T10-3, B-11-12-13, B-12-11-12, and B-13-12-13 were all well above 100 mg/kg. These results combined with the fingerprints indicate that these samples contained MGP wastes.

Because of the relatively high concentrations of mono-aromatic hydrocarbons (MAHs) in the samples from the site, the nature and concentrations of volatile compounds was examined in detail. In GTI's experience, as well as in other referenced literature (1, 3), the levels of benzene, toluene, and xylenes (BTX) in pyrogenic sources, including gas plant and coke oven residues are *less than* those of naphthalene and other PAHs. Furthermore, BTX are never found as sole constituents in samples from these sites, except in *some* groundwater samples in their dissolved state. However, over the past century, BTX have been isolated from crude oil and coal tar by several processes, primarily distillation, which requires specialized process engineering for this purpose. BTX are also produced during petroleum refining and can be found in a number of petroleum products and are principal constituents of gasoline. When isolated from coal tar, BTX are called light oil.

The data were examined for indications that *gasoline* was present. However gasoline was not indicated based on the relative amounts of aromatic and aliphatic compounds in the gasoline range. Specifically, gasolines contain about 40 to 60 percent aromatic compounds with the remaining hydrocarbons being straight, branched, and naphthenic (4). These relative abundances are clearly visible in a GC/FID fingerprint or GC/MS ion chromatogram of the types included in this report. However, very little saturated hydrocarbon content was present in any of the samples. Further, the saturated hydrocarbons that were present could be attributed to the middle distillate petrogenic material that was present in significant amounts in samples T10-1, T10-2, T10-3, B-11-12-13, B-12-11-12, and B-13-12-13.

Chemical fingerprints of samples B-23-6-8 and B-23-10-12 showed the presence of a gasoline-range product, although the lack of tri- and tetra-alkyl benzenes indicates that it is *not* gasoline. The product consists almost exclusively of benzene and toluene, with lesser amounts of xylenes, ethylbenzene and a very small quantity of styrene. The lack of saturated hydrocarbons in the gasoline range suggests some type of light oil distillate, because light oils are low in saturated components. However, other products, such as some aromatic solvents consist of nearly all BTX. For example, a sample of Gumout Choke and Carburetor Cleaner consisted of nearly all ethylbenzene and xylenes (5). The fact that there are non-detect quantities of other compounds typically associated with MGP-type waste may indicate that this is a custom-blended petroleum

solvent, perhaps used for stripping or cleaning and not directly associated with MGP operations. However, a good match to a commercial solvent could not be found among the reference chromatograms available to GTI, but may exist for one of the many products sold. It is not likely that the material is a gas pipeline condensate, due to its highly pure nature.

Finally, some data has been reported that suggests that when gasoline in soil is severely degraded, the relative amount of aromatic hydrocarbons can increase to over 90 % (4). Presumably, this occurs because the saturated hydrocarbons degrade preferentially over aromatic hydrocarbons. However, the naphthalene concentrations indicate that weathering *has not been* severe for most of the site samples. Therefore, co-mingling of MGP wastes with severely weathered gasoline could be a possible explanation, but this could not be confirmed with the available data.

Because gasoline was not indicated in these initial analyses, supplemental analyses for total paraffins, isoparaffins, aromatics, naphthenics, and olefins (PIANO) would not provide additional discriminating information and was not conducted.

REFERENCES

1. "Chemical Source Attribution at Former MGP Sites," EPRI Report 1000728, December, 2000.

2. "Polycyclic Aromatic Hydrocarbons (PAHs) In Surface Soil," EPRI Report in print, December, 2000.

3. "Chemical and Physical Characteristics of Tar Samples from Selected Manufactured Gas Plant (MGP) Sites," EPRI Report TR-102184, May, 1993.

4. "Patterns of Chemical Changes during Environmental Alteration of Hydrocarbon Fuels," Kaplan, I.R., Galperin, Y., Alimi, H., Lee, R., and Lu, S., *Groundwater Monitoring Review*, Fall, 1996.

5. GC/MS Guide to Ignitable Liquids. CRC Press, Boca Raton, Florida, 1998.

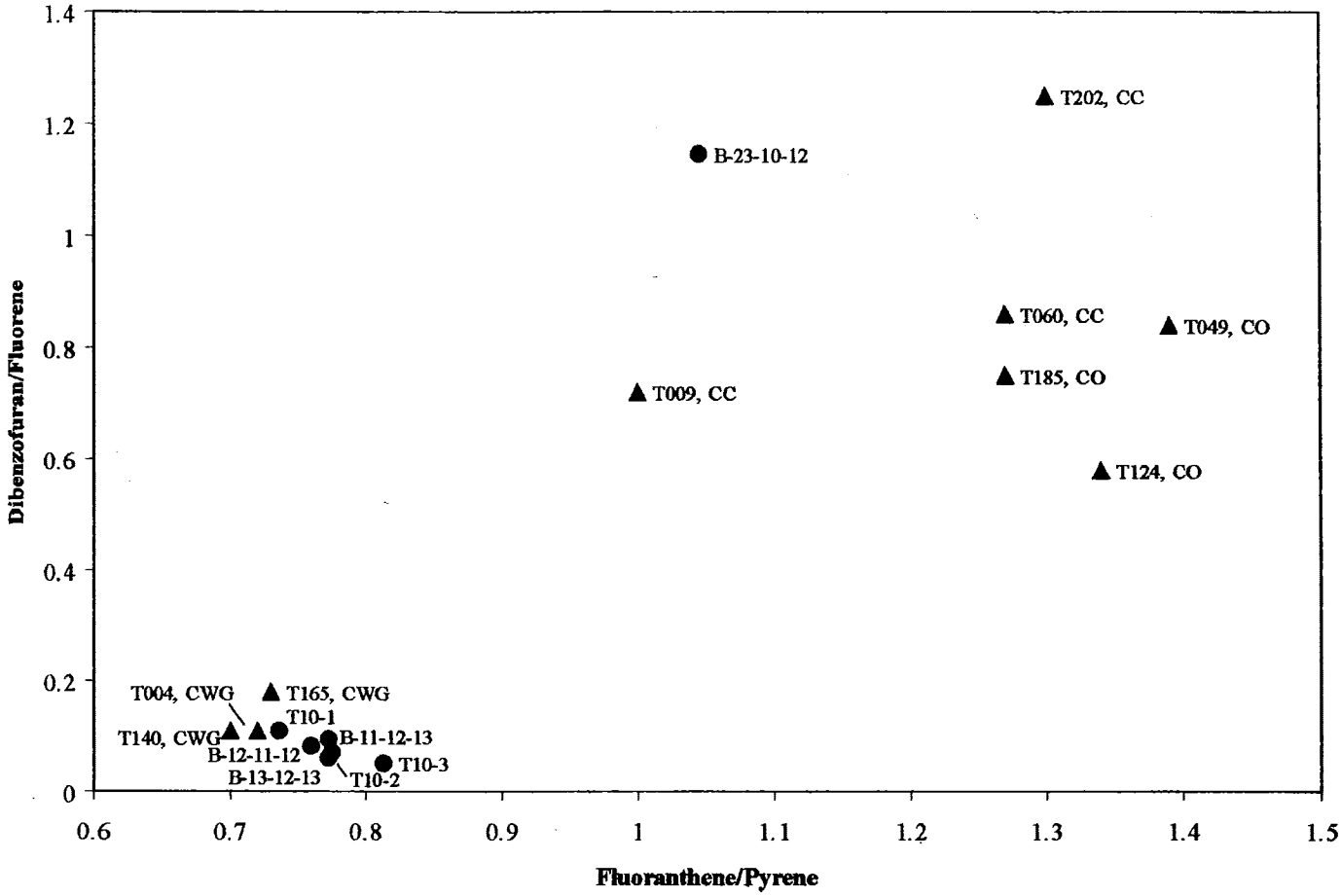
Table 1
Source and Weathering Ratios

Sample	Fl/Py	D/F	C17/Pris	C18/Phy	Pris/Phy	C3D/C3PA	C2D/C2PA
T10-1	0.74	0.11	1.27	1.12	1.30	0.62	0.21
T10-2	0.77	0.07	1.49	1.66	1.57	0.67	0.25
T10-3	0.81	0.05	1.14	0.86	1.11	0.35	0.21
B-11-12-13	0.77	0.09	2.21	0.25	0.20	0.62	0.23
B-12-11-12	0.76	0.08	0.85	0.70	1.46	0.61	0.22
B-13-12-13	0.77	0.06	2.81	2.70	1.44	0.63	0.23
B-23-6-8	ND	ND	ND	ND	ND	ND	ND
B-23-10-12	1.05	1.15	ND	ND	ND	ND	ND

Ratios:

Fl/Py	fluoranthene/pyrene
D/F	dibenzofuran/fluorene
C17/Pris	septadecane/pristane
C18/Phy	octadecane/phytane
Pris/Phy	pristane/phytane
C3D/C3PA	trialkyldibenzothiophenes/trialkylphenanthrenes/anthracenes
C2D/C2PA	dialkyldibenzothiophenes/dialkylphenanthrenes/anthracenes

Figure 1
Selected Source Ratios



TXXX	Tar Sample from META's in house source library
CC	Coal Carbonization Tar
CO	Coke Oven Tar
CWG	Carburetted Water Gas Tar
●	Site Sample

Appendix A

Chains of Custody

META ENVIRONMENTAL SAMPLE RECEIPT

Lab ID	Field ID	Matrix	Analysis			Date Sampled	Date Received	Client/ Project	Container/ Storage
GT020924-01	T10-1	Soil				9/18/2002	9/24/2002		4oz. Jar
GT020924-02	T10-2	Soil				9/18/2002	9/24/2002		4oz. Jar
GT020924-03a,b	B-11-12-13	Soil				9/19/2002	9/24/2002		4oz. Jar
GT020924-04a,b	B-12-11-12	Soil				9/19/2002	9/24/2002		4oz. Jar
GT020924-05a,b	B13-12-13	Soil				9/19/2002	9/24/2002		4oz. Jar
GT020924-06a,b	B23-6-8	Soil				9/19/2002	9/24/2002		4oz. Jar
GT020924-07a,b	B-23-10-12	Soil				9/19/2002	9/24/2002		4oz. Jar

Dwm 9/24/02

Chain of Custody Record

GTI

SEVERN TRENT SERVICES — Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: ENSR	Project Manager: Bill Gregg	Date: 9/18/02	Chain of Custody Number: 150716
Address: 4500 Park Glen Road, Suite 210	Telephone Number (Area Code)/Fax Number: 952-924-0117	Lab Number:	Page 1 of 1
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact:	Lab Contact: Diane Saber	
Project Name and Location (State): Superior MGP, Wisconsin	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PIANO	PAH-MOD	Fingerprint	Special Instructions/ Conditions of Receipt
T10-1	9/18/02	1130				X	1						X	X		broken jar / GT020924-01
T10-2	↓	1230				↓	↓						↓	↓		↓ -02
T10-3	↓	1530				↓	↓						↓	↓		
~~B-8-6-8~~		~~1745~~														
B-11-12-13	9/19/02	800				X	2						X	X		-03a,b
B-12-11-12	↓	850				↓	↓						↓	↓		-04a,b
B-13-12-13		945														-05a,b
B-23-6-8		1615														-06a,b
B-23-10-12	↓	1620				↓	↓						↓	↓		-07a,b

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: Chris Bochow / ENSR	Date: 9/19/02	Time: 1730	1. Received By:	Date: 9/19/02	Time:
2. Relinquished By: John Connell / GTI	Date: 9/23/02	Time:	2. Received By: Dusty Peckham	Date: 9/24/02	Time: 9:30 am
3. Relinquished By:	Date:	Time:	3. Received By: rec'd @ 6.5°C	Date:	Time:

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

META ENVIRONMENTAL SAMPLE RECEIPT

Lab ID	Field ID	Matrix	Analysis			Date Sampled	Date Received	Client/ Project	Container/ Storage
GT021121-01	ENSRSWLP MGP T10-3	Soil	3540	4007	4008	9/18/2002	11/21/2002	G13010-60	4oz. Jar

DMM 11/21/02

NO.

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	DESIRED ANALYSIS						REMARKS
80014-19			Fingerprinting						Rush Superior G13010
SAMPLERS: *(Signature)*									
SAMPLE NO.	DATE / TIME / SAMPLE LOCATION								
	9/18/02 15:30 ENSR SWLP MGP T10-3	1	X			GTO	1121-01		From previous sample set

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
[signature]	11/20/02 0800				
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time		
		[signature]	11/21/02 9:15am		

REMARKS:

rec'd @ 4.5°C

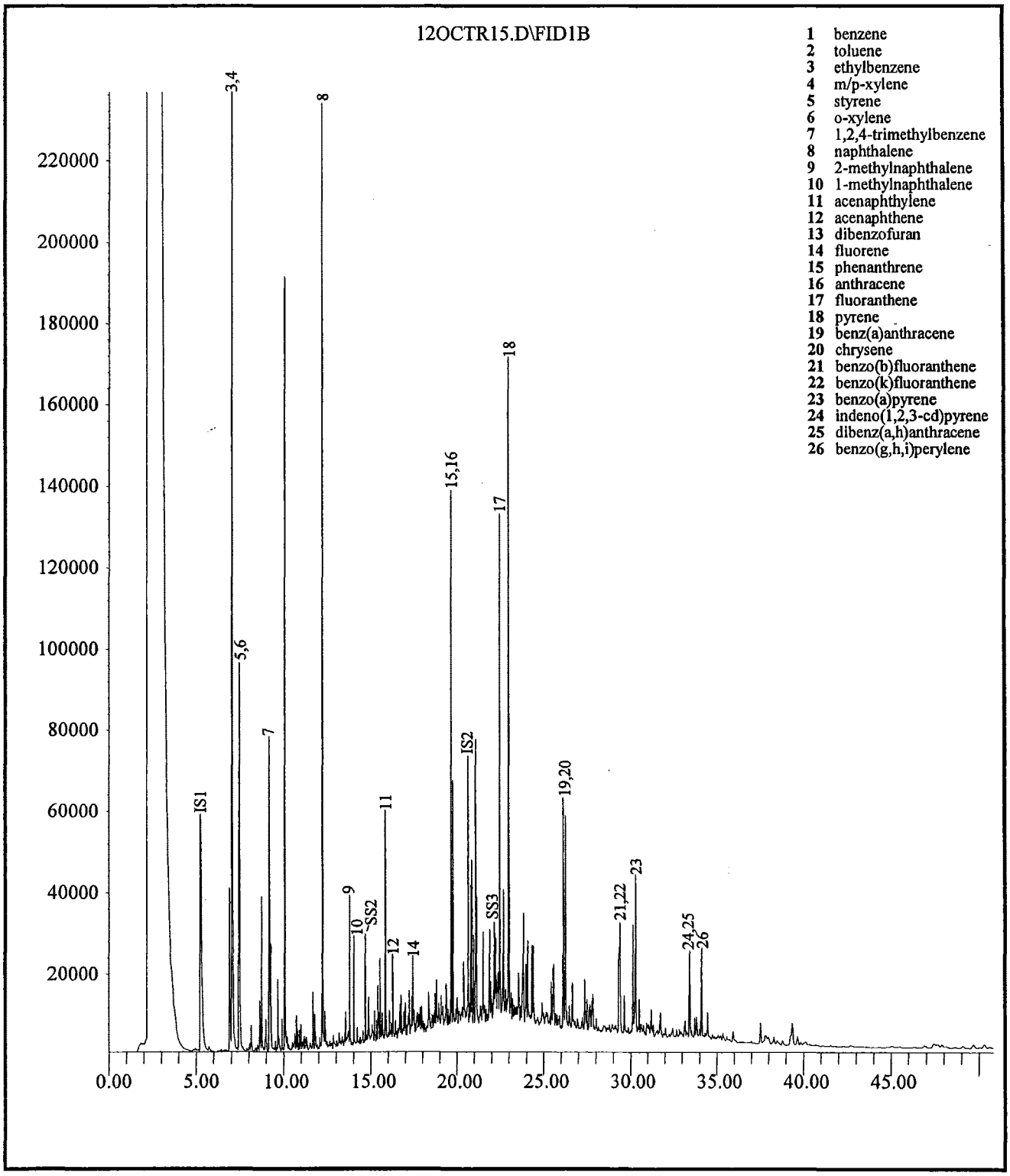
IGT

INSTITUTE OF GAS TECHNOLOGY
1700 S. Mount Prospect Rd.
Des Plaines, IL 60018-1804

Appendix B

GC/FID Fingerprints

GC/FID Fingerprint

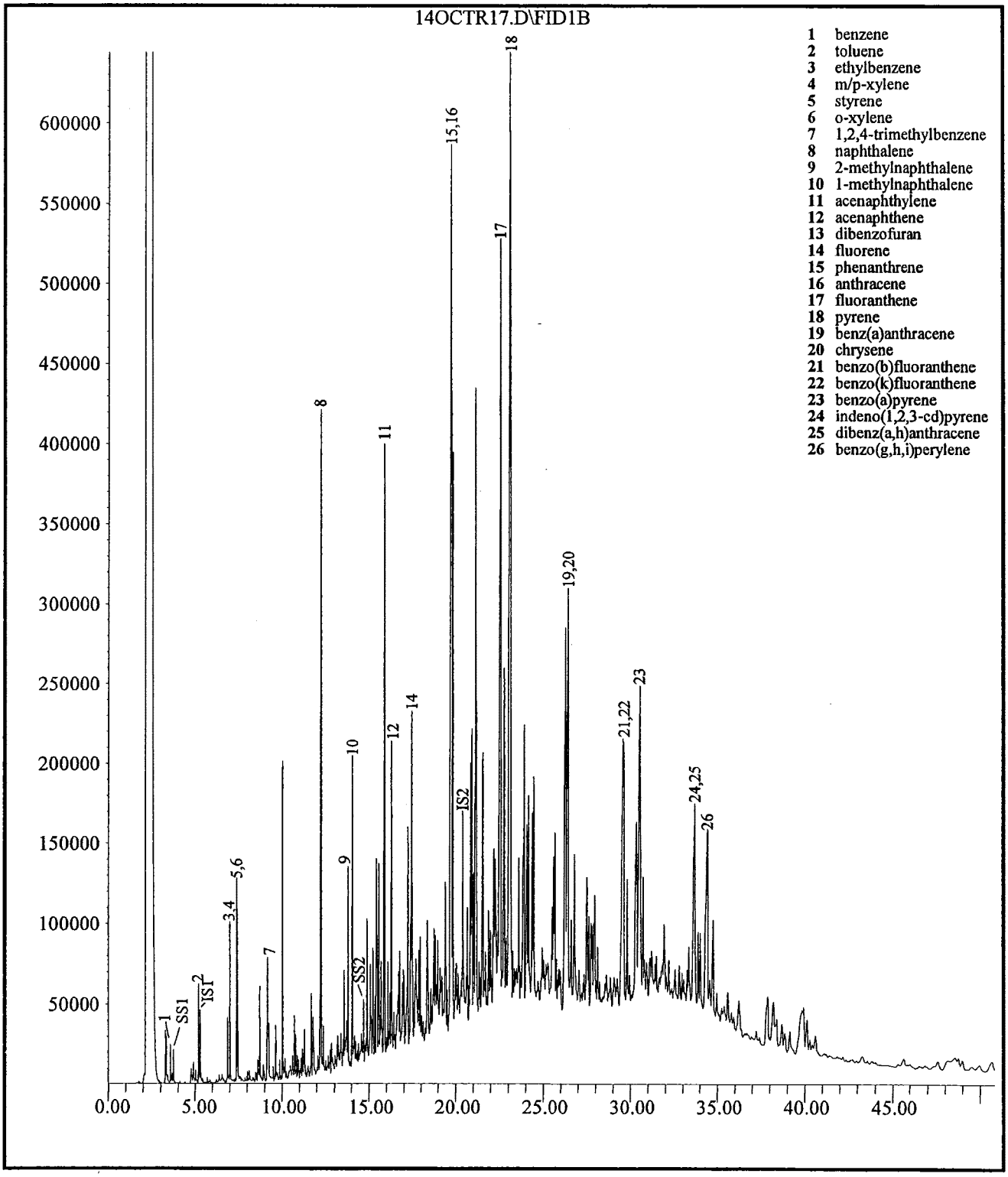


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**T10-1**
Laboratory ID:	GT020924-01
Method:	MET4007D

META

GC/FID Fingerprint

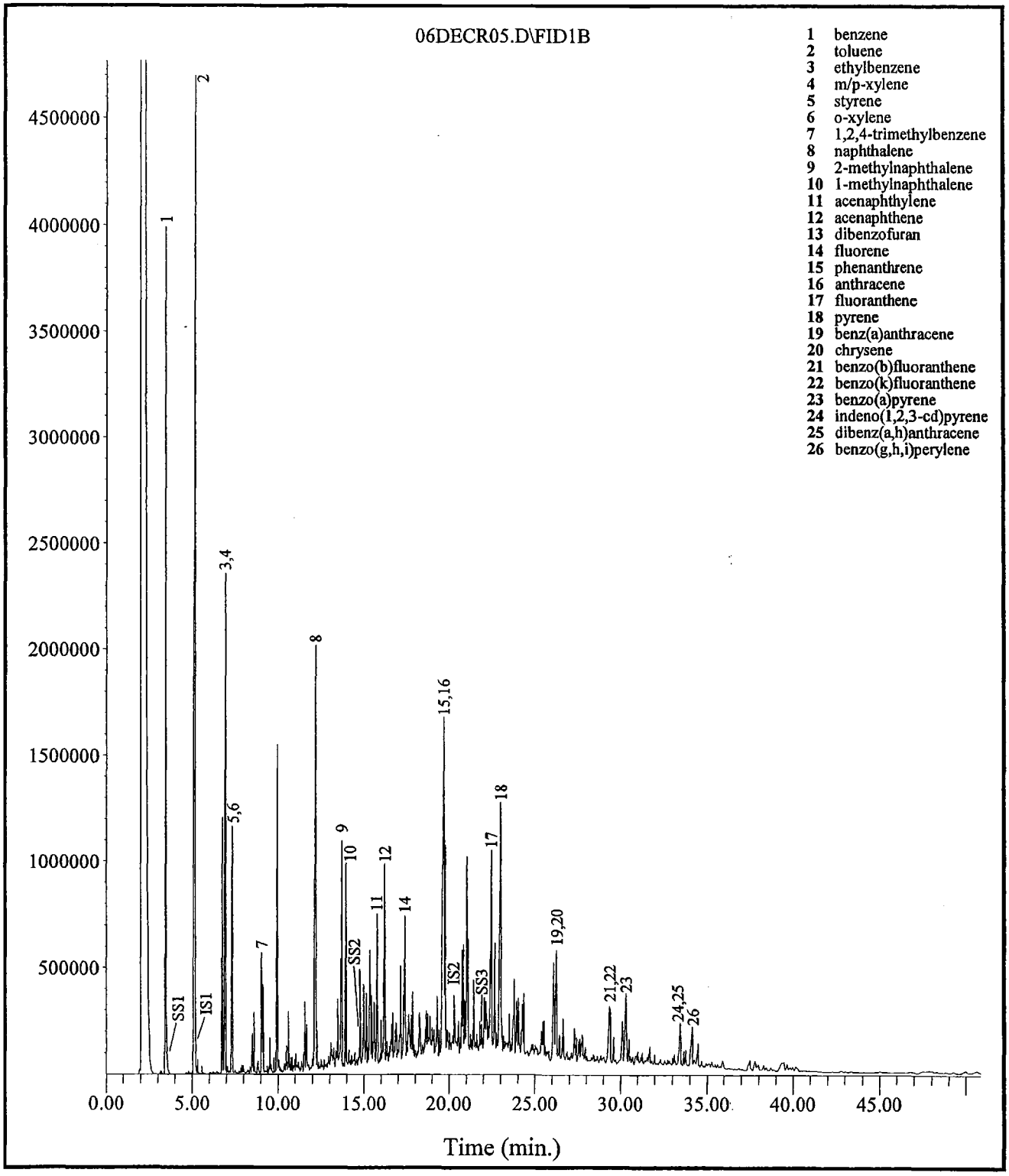


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**T10-2**
Laboratory ID:	GT020924-02
Method:	MET4007D

META

GC/FID Fingerprint

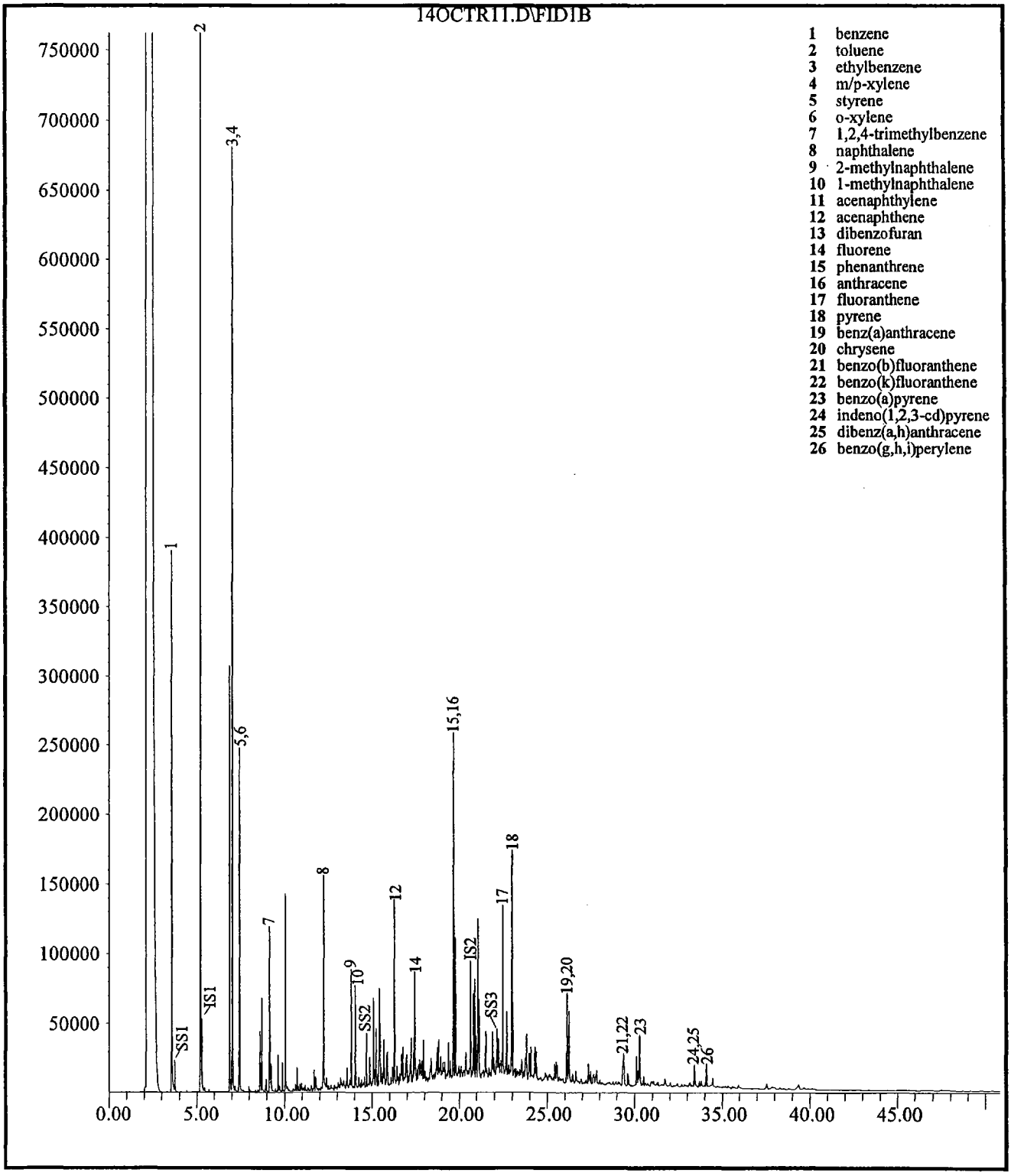


IS1 – 2,4-difluorotoluene
IS2 – o-terphenyl
SS1 – fluorobenzene
SS2 – 2-fluorobiphenyl
SS3 – 5α-androstane
SS4 – benzo(a)pyrene-d12

Field ID:	**T10-3**
Laboratory ID:	GT021121-01
Method:	MET4007

META

GC/FID Fingerprint

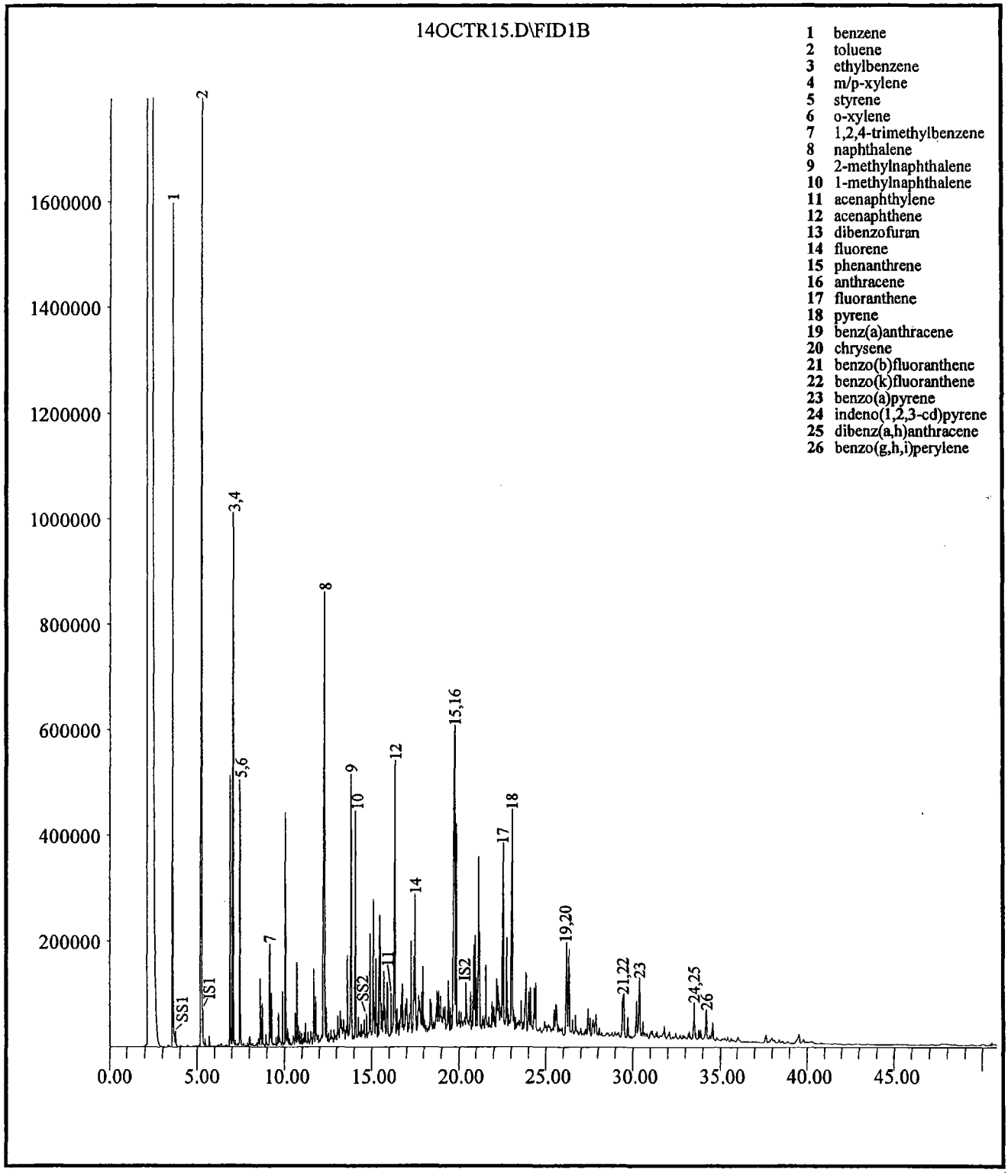


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**B-11-12-13**
Laboratory ID:	GT020924-03
Method:	MET4007D

META

GC/FID Fingerprint

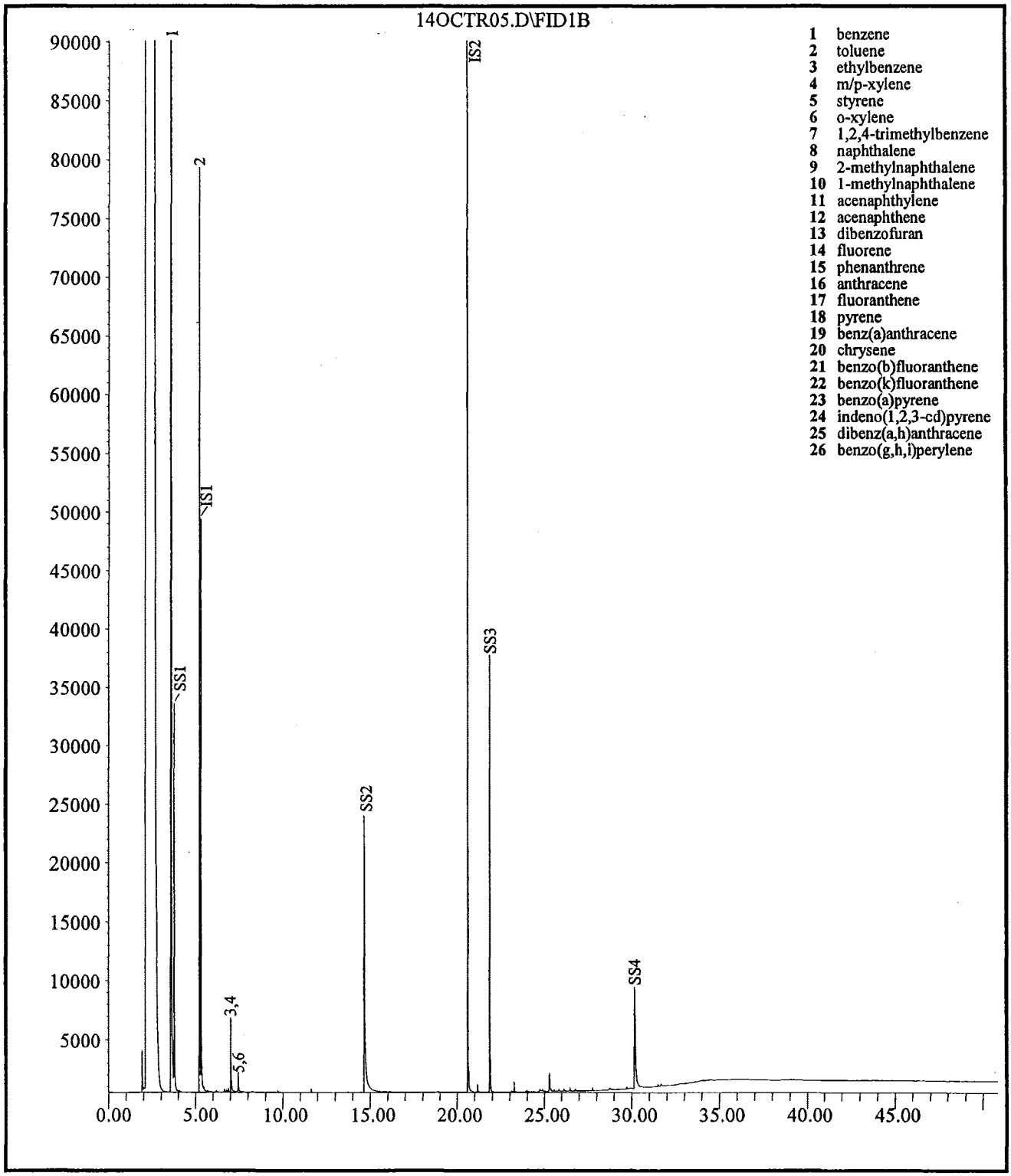


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**B-12-11-12**
Laboratory ID:	GT020924-04
Method:	MET4007D

META

GC/FID Fingerprint

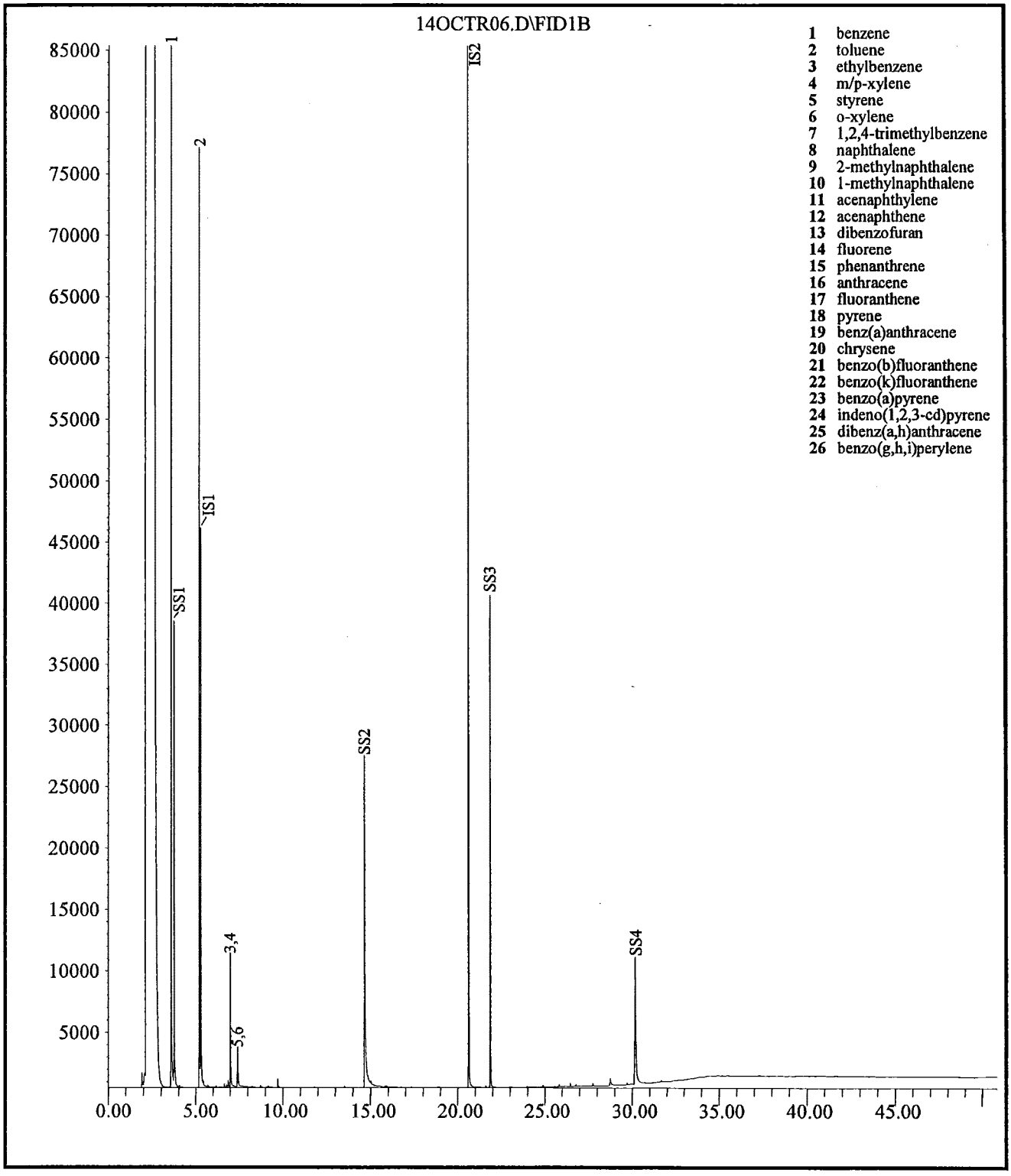


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane
SS4 – benzo(a)pyrene-d12

Field ID:	**B23-6-8**
Laboratory ID:	GT020924-06
Method:	MET4007D

META

GC/FID Fingerprint



IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane
SS4 – benzo(a)pyrene-d12

Field ID:	**B-23-10-12**
Laboratory ID:	GT020924-07
Method:	MET4007D

META

Appendix C

Chemical Concentrations

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-1

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
Lab ID:	GT020924-01 1:10	Analysis Method:	GC/MS (EPA 8270 Mod.)		
File ID:	14OCT18.D	Matrix:	Soil		
		Preservation:	None		
Date Sampled:	9/18/2002	Decanted:	No		
Date Received:	9/24/2002	Sample Size:	2.212	g	
Date Prepared:	10/11/2002	%Solid:	74%		
Date Cleanup:		Extract Volume:	2	mL	
Date Analyzed:	15 Oct 2002 7:15 am	Prep DF:	10		
Instrument:	GC/MS Ins	Analysis DF:	1		
Operator:	ECC	Injection Volume:	0.001	mL	
		Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	32.4		1.22	0.61	
Toluene	217	B	1.22	0.61	
Ethylbenzene	82.5		1.22	0.61	
m/p-Xylenes	422		1.22	0.61	
Styrene	105		1.22	0.61	
o-Xylene	135		1.22	0.61	
1,2,4-Trimethylbenzene	110		1.22	0.61	
Naphthalene	339		1.22	0.61	
2-Methylnaphthalene	56.4		1.22	0.61	
1-Methylnaphthalene	37.7		1.22	0.61	
Acenaphthylene	61.9		1.22	0.61	
Acenaphthene	30.2		1.22	0.61	
Dibenzofuran	3.84		1.22	0.61	
Fluorene	35.0		1.22	0.61	
Phenanthrene	209		1.22	0.61	
Anthracene	68.9		1.22	0.61	
Fluoranthene	131		1.22	0.61	
Pyrene	178		1.22	0.61	
Benz[a]anthracene	41.6		1.22	0.61	
Chrysene	46.1		1.22	0.61	
Benzo[b]fluoranthene	22.7		1.22	0.61	
Benzo[k]fluoranthene	22.7		1.22	0.61	
Benzo(e)pyrene	23.5		1.22	0.61	
Benzo[a]pyrene	26.5		1.22	0.61	
Perylene	3.89		1.22	0.61	
Indeno[1,2,3-cd]pyrene	16.9		1.22	0.61	
Dibenz[a,h]anthracene	4.73		1.22	0.61	
Benzo[g,h,i]perylene	38.7		1.22	0.61	
ALKYLATED PAHs:					
C0 - Benzene	32.4		1.22	0.61	
C1 - Benzene	260		1.22	0.61	
C2 - Benzene	769		1.22	0.61	
C3 - Benzene	236		1.22	0.61	
C4 - Benzene	67.1		1.22	0.61	
C5 - Benzene	12.7		1.22	0.61	
C0 - Naphthalene	339		1.22	0.61	
C1 - Naphthalene	53.9		1.22	0.61	
C2 - Naphthalene	32.2		1.22	0.61	
C3- Naphthalene	19.4		1.22	0.61	
C4- Naphthalene	12.7		1.22	0.61	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-1

Client:	GTI	Preparation Method:	EPA 3570
Project:	Superior	Cleanup Method(s):	
		Analysis Method:	GC/MS (EPA 8270 Mod.)
Lab ID:	GT020924-01 1:10	Matrix:	Soil
File ID:	14OCT18.D	Preservation:	None
		Decanted:	No
Date Sampled:	9/18/2002	Sample Size:	2.212 g
Date Received:	9/24/2002	%Solid:	74%
Date Prepared:	10/11/2002	Extract Volume:	2 mL
Date Cleanup:		Prep DF:	10
Date Analyzed:	15 Oct 2002 7:15 am	Analysis DF:	1
Instrument:	GC/MS Ins	Injection Volume:	0.001 mL
Operator:	ECC	Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	35.0		1.22	0.61	
C1 - Fluorene	34.5		1.22	0.61	
C2 - Fluorene	12.8		1.22	0.61	
C3 - Fluorene	6.48		1.22	0.61	
C0 - Phenanthrene/Anthracene	290		1.22	0.61	
C1 - Phenanthrene/Anthracene	120		1.22	0.61	
C2 - Phenanthrene/Anthracene	44.2		1.22	0.61	
C3 - Phenanthrene/Anthracene	8.30		1.22	0.61	
C4 - Phenanthrene/Anthracene	3.29		1.22	0.61	
C0 - Dibenzothiophene	49.3		1.22	0.61	
C1 - Dibenzothiophene	16.3		1.22	0.61	
C2 - Dibenzothiophene	9.49		1.22	0.61	
C3 - Dibenzothiophene	5.16		1.22	0.61	
C0 - Fluoranthene/Pyrene	346		1.22	0.61	
C1 - Fluoranthene/Pyrene	68.0		1.22	0.61	
C2 - Fluoranthene/Pyrene	14.7		1.22	0.61	
C3 - Fluoranthene/Pyrene	4.20		1.22	0.61	
C0 - Benz(a)anthracene/Chrysene	98.0		1.22	0.61	
C1 - Benz(a)anthracene/Chrysene	20.3		1.22	0.61	
C2 - Benz(a)anthracene/Chrysene	5.30		1.22	0.61	
C3 - Benz(a)anthracene/Chrysene	1.32		1.22	0.61	
C4 - Benz(a)anthracene/Chrysene	0.89	J	1.22	0.61	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	57%	50%	150%
2-Fluorobiphenyl	83%	50%	120%
5a-Androstane	71%	50%	120%
Benzo(a)pyrene-d12	59%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-2

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
Lab ID:	GT020924-02 1:10	Analysis Method:	GC/MS (EPA 8270 Mod.)		
File ID:	14OCT19.D	Matrix:	Soil		
		Preservation:	None		
Date Sampled:	9/18/2002	Decanted:	No		
Date Received:	9/24/2002	Sample Size:	2.183	g	
Date Prepared:	10/11/2002	%Solid:	37%		
Date Cleanup:		Extract Volume:	2	mL	
Date Analyzed:	15 Oct 2002 8:26 am	Prep DF:	10		
Instrument:	GC/MS Ins	Analysis DF:	1		
Operator:	ECC	Injection Volume:	0.001	mL	
		Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	42.3		2.51	1.26	
Toluene	116	B	2.51	1.26	
Ethylbenzene	78.8		2.51	1.26	
m/p-Xylenes	185		2.51	1.26	
Styrene	241		2.51	1.26	
o-Xylene	156		2.51	1.26	
1,2,4-Trimethylbenzene	138		2.51	1.26	
Naphthalene	1,260		2.51	1.26	
2-Methylnaphthalene	360		2.51	1.26	
1-Methylnaphthalene	554		2.51	1.26	
Acenaphthylene	1,160		2.51	1.26	
Acenaphthene	590		2.51	1.26	
Dibenzofuran	56.2		2.51	1.26	
Fluorene	793		2.51	1.26	
Phenanthrene	2,670		2.51	1.26	
Anthracene	803		2.51	1.26	
Fluoranthene	1,410		2.51	1.26	
Pyrene	1,820		2.51	1.26	
Benz[a]anthracene	533		2.51	1.26	
Chrysene	518		2.51	1.26	
Benzo[b]fluoranthene	305		2.51	1.26	
Benzo[k]fluoranthene	453		2.51	1.26	
Benzo(e)pyrene	447		2.51	1.26	
Benzo[a]pyrene	637		2.51	1.26	
Perylene	112		2.51	1.26	
Indeno[1,2,3-cd]pyrene	511		2.51	1.26	
Dibenz[a,h]anthracene	147		2.51	1.26	
Benzo[g,h,i]perylene	951		2.51	1.26	
ALKYLATED PAHs:					
C0 - Benzene	42.3		2.51	1.26	
C1 - Benzene	140		2.51	1.26	
C2 - Benzene	505		2.51	1.26	
C3 - Benzene	430		2.51	1.26	
C4 - Benzene	244		2.51	1.26	
C5 - Benzene	82.9		2.51	1.26	
C0 - Naphthalene	1,260		2.51	1.26	
C1 - Naphthalene	520		2.51	1.26	
C2 - Naphthalene	611		2.51	1.26	
C3- Naphthalene	229		2.51	1.26	
C4- Naphthalene	107		2.51	1.26	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-2

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
Lab ID:	GT020924-02 1:10	Analysis Method:	GC/MS (EPA 8270 Mod.)		
File ID:	14OCT19.D	Matrix:	Soil		
		Preservation:	None		
Date Sampled:	9/18/2002	Decanted:	No		
Date Received:	9/24/2002	Sample Size:	2.183	g	
Date Prepared:	10/11/2002	%Solid:	37%		
Date Cleanup:		Extract Volume:	2	mL	
Date Analyzed:	15 Oct 2002 8:26 am	Prep DF:	10		
Instrument:	GC/MS Ins	Analysis DF:	1		
Operator:	ECC	Injection Volume:	0.001	mL	
		Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	793		2.51	1.26	
C1 - Fluorene	412		2.51	1.26	
C2 - Fluorene	126		2.51	1.26	
C3 - Fluorene	54.1		2.51	1.26	
C0 - Phenanthrene/Anthracene	3,650		2.51	1.26	
C1 - Phenanthrene/Anthracene	1,110		2.51	1.26	
C2 - Phenanthrene/Anthracene	367		2.51	1.26	
C3 - Phenanthrene/Anthracene	72.6		2.51	1.26	
C4 - Phenanthrene/Anthracene	29.5		2.51	1.26	
C0 - Dibenzothiophene	215		2.51	1.26	
C1 - Dibenzothiophene	146		2.51	1.26	
C2 - Dibenzothiophene	90.7		2.51	1.26	
C3 - Dibenzothiophene	49.0		2.51	1.26	
C0 - Fluoranthene/Pyrene	3,820		2.51	1.26	
C1 - Fluoranthene/Pyrene	791		2.51	1.26	
C2 - Fluoranthene/Pyrene	188		2.51	1.26	
C3 - Fluoranthene/Pyrene	49.7		2.51	1.26	
C0 - Benz(a)anthracene/Chrysene	1,150		2.51	1.26	
C1 - Benz(a)anthracene/Chrysene	265		2.51	1.26	
C2 - Benz(a)anthracene/Chrysene	89.9		2.51	1.26	
C3 - Benz(a)anthracene/Chrysene	23.1		2.51	1.26	
C4 - Benz(a)anthracene/Chrysene	8.78		2.51	1.26	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	63%	50%	150%
2-Fluorobiphenyl	92%	50%	120%
5a-Androstane	65%	50%	120%
Benzo(a)pyrene-d12	84%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-3

Client:	GTI	Preparation Method:	EPA 3540	
Project:	Superior	Cleanup Method(s):		
Lab ID:	GT021121-01 1/10	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	15DEC10.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	9/18/2002	Decanted:	No	
Date Received:	11/21/2002	Sample Size:	10.369	g
Date Prepared:	11/21/2002	%Solid:	58%	
Date Cleanup:		Extract Volume:	10	mL
Date Analyzed:	16 Dec 2002 12:10 am	Prep DF:	10	
Instrument:	GC4-MS_59	Analysis DF:	1	
Operator:	DRC	Injection Volume:	0.001	mL
		Batch QC:	IS021121-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	5,610	D	1.66	0.83	
Toluene	8,840	D	1.66	0.83	
Ethylbenzene	1,290		1.66	0.83	
m/p-Xylenes	4,180	D	1.66	0.83	
Styrene	721		1.66	0.83	
o-Xylene	943		1.66	0.83	
1,2,4-Trimethylbenzene	473		1.66	0.83	
Naphthalene	4,070	D	1.66	0.83	
2-Methylnaphthalene	1,400		1.66	0.83	
1-Methylnaphthalene	1,050		1.66	0.83	
Acenaphthylene	806		1.66	0.83	
Acenaphthene	1,200		1.66	0.83	
Dibenzofuran	41.6		1.66	0.83	
Fluorene	815		1.66	0.83	
Phenanthrene	4,150	D	1.66	0.83	
Anthracene	961		1.66	0.83	
Fluoranthene	1,050		1.66	0.83	
Pyrene	1,290		1.66	0.83	
Benz[a]anthracene	691		1.66	0.83	
Chrysene	833		1.66	0.83	
Benzo[b]fluoranthene	537		1.66	0.83	
Benzo[k]fluoranthene	460		1.66	0.83	
Benzo(e)pyrene	562		1.66	0.83	
Benzo[a]pyrene	870		1.66	0.83	
Perylene	182		1.66	0.83	
Indeno[1,2,3-cd]pyrene	419		1.66	0.83	
Dibenz[a,h]anthracene	127		1.66	0.83	
Benzo[g,h,i]perylene	575		1.66	0.83	
ALKYLATED PAHs:					
C0 - Benzene	5,610	D	1.66	0.83	
C1 - Benzene	9,590	D	1.66	0.83	
C2 - Benzene	7,710	D	1.66	0.83	
C3 - Benzene	1,430		1.66	0.83	
C4 - Benzene	548		1.66	0.83	
C5 - Benzene	256		1.66	0.83	
C0 - Naphthalene	4,070	D	1.66	0.83	
C1 - Naphthalene	2,260		1.66	0.83	
C2 - Naphthalene	2,920		1.66	0.83	
C3- Naphthalene	1,120		1.66	0.83	
C4- Naphthalene	241		1.66	0.83	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: T10-3

Client:	GTI	Preparation Method:	EPA 3540	
Project:	Superior	Cleanup Method(s):		
Lab ID:	GT021121-01 1/10	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	15DEC10.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	9/18/2002	Decanted:	No	
Date Received:	11/21/2002	Sample Size:	10.369	g
Date Prepared:	11/21/2002	%Solid:	58%	
Date Cleanup:		Extract Volume:	10	mL
Date Analyzed:	16 Dec 2002 12:10 am	Prep DF:	10	
Instrument:	GC4-MS_59	Analysis DF:	1	
Operator:	DRC	Injection Volume:	0.001	mL
		Batch QC:	IS021121-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	815		1.66	0.83	
C1 - Fluorene	684		1.66	0.83	
C2 - Fluorene	169		1.66	0.83	
C3 - Fluorene	90.9		1.66	0.83	
C0 - Phenanthrene/Anthracene	5,820	D	1.66	0.83	
C1 - Phenanthrene/Anthracene	473		1.66	0.83	
C2 - Phenanthrene/Anthracene	374		1.66	0.83	
C3 - Phenanthrene/Anthracene	95.0		1.66	0.83	
C4 - Phenanthrene/Anthracene	27.2		1.66	0.83	
C0 - Dibenzothiophene	246		1.66	0.83	
C1 - Dibenzothiophene	139		1.66	0.83	
C2 - Dibenzothiophene	79.6		1.66	0.83	
C3 - Dibenzothiophene	33.2		1.66	0.83	
C0 - Fluoranthene/Pyrene	3,100		1.66	0.83	
C1 - Fluoranthene/Pyrene	1,320		1.66	0.83	
C2 - Fluoranthene/Pyrene	369		1.66	0.83	
C3 - Fluoranthene/Pyrene	152		1.66	0.83	
C0 - Benz(a)anthracene/Chrysene	1,540		1.66	0.83	
C1 - Benz(a)anthracene/Chrysene	669		1.66	0.83	
C2 - Benz(a)anthracene/Chrysene	278		1.66	0.83	
C3 - Benz(a)anthracene/Chrysene	78.6		1.66	0.83	
C4 - Benz(a)anthracene/Chrysene	28.2		1.66	0.83	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	63%	50%	150%
2-Fluorobiphenyl	138%	50%	120%
5a-Androstane	148%	50%	120%
Benzo(a)pyrene-d12	62%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B11-12-13

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
Lab ID:	GT020924-03	Analysis Method:	GC/MS (EPA 8270 Mod.)		
File ID:	14OCT33.D	Matrix:	Soil		
		Preservation:	None		
Date Sampled:	9/19/2002	Decanted:	No		
Date Received:	9/24/2002	Sample Size:	1.547	g	
Date Prepared:	10/11/2002	%Solid:	77%		
Date Cleanup:		Extract Volume:	2	mL	
Date Analyzed:	16 Oct 2002 1:06 am	Prep DF:	1		
Instrument:	GC/MS Ins	Analysis DF:	1		
Operator:	ECC	Injection Volume:	0.001	mL	
		Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	568	D	0.17	0.08	
Toluene	1,380	D	0.17	0.08	
Ethylbenzene	531	D	0.17	0.08	
m/p-Xylenes	1,370	D	0.17	0.08	
Styrene	24.1		0.17	0.08	
o-Xylene	386	D	0.17	0.08	
1,2,4-Trimethylbenzene	219	D	0.17	0.08	
Naphthalene	303	D	0.17	0.08	
2-Methylnaphthalene	157		0.17	0.08	
1-Methylnaphthalene	127		0.17	0.08	
Acenaphthylene	27.2		0.17	0.08	
Acenaphthene	282	D	0.17	0.08	
Dibenzofuran	14.4		0.17	0.08	
Fluorene	152		0.17	0.08	
Phenanthrene	520	D	0.17	0.08	
Anthracene	118		0.17	0.08	
Fluoranthene	112		0.17	0.08	
Pyrene	145		0.17	0.08	
Benz[a]anthracene	42.7		0.17	0.08	
Chrysene	46.5		0.17	0.08	
Benzo[b]fluoranthene	17.6		0.17	0.08	
Benzo[k]fluoranthene	29.8		0.17	0.08	
Benzo(e)pyrene	27.9		0.17	0.08	
Benzo[a]pyrene	41.4		0.17	0.08	
Perylene	6.63		0.17	0.08	
Indeno[1,2,3-cd]pyrene	24.2		0.17	0.08	
Dibenz[a,h]anthracene	7.85		0.17	0.08	
Benzo[g,h,i]perylene	44.7		0.17	0.08	
ALKYLATED PAHs:					
C0 - Benzene	568	D	0.17	0.08	
C1 - Benzene	1,650	D	0.17	0.08	
C2 - Benzene	2,710	D	0.17	0.08	
C3 - Benzene	566	D	0.17	0.08	
C4 - Benzene	51.7		0.17	0.08	
C5 - Benzene	20.7		0.17	0.08	
C0 - Naphthalene	303	D	0.17	0.08	
C1 - Naphthalene	163		0.17	0.08	
C2 - Naphthalene	207		0.17	0.08	
C3- Naphthalene	67.6		0.17	0.08	
C4- Naphthalene	25.1		0.17	0.08	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B11-12-13

Client:	GTI	Preparation Method:	EPA 3570
Project:	Superior	Cleanup Method(s):	
Lab ID:	GT020924-03	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	14OCT33.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	9/19/2002	Decanted:	No
Date Received:	9/24/2002	Sample Size:	1.547 g
Date Prepared:	10/11/2002	%Solid:	77%
Date Cleanup:		Extract Volume:	2 mL
Date Analyzed:	16 Oct 2002 1:06 am	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	152		0.17	0.08	
C1 - Fluorene	95.5		0.17	0.08	
C2 - Fluorene	27.6		0.17	0.08	
C3 - Fluorene	8.22		0.17	0.08	
C0 - Phenanthrene/Anthracene	679	D	0.17	0.08	
C1 - Phenanthrene/Anthracene	191		0.17	0.08	
C2 - Phenanthrene/Anthracene	67.2		0.17	0.08	
C3 - Phenanthrene/Anthracene	13.0		0.17	0.08	
C4 - Phenanthrene/Anthracene	5.18		0.17	0.08	
C0 - Dibenzothiophene	34.6		0.17	0.08	
C1 - Dibenzothiophene	26.8		0.17	0.08	
C2 - Dibenzothiophene	15.4		0.17	0.08	
C3 - Dibenzothiophene	8.06		0.17	0.08	
C0 - Fluoranthene/Pyrene	314		0.17	0.08	
C1 - Fluoranthene/Pyrene	91.4		0.17	0.08	
C2 - Fluoranthene/Pyrene	23.6		0.17	0.08	
C3 - Fluoranthene/Pyrene	6.78		0.17	0.08	
C0 - Benz(a)anthracene/Chrysene	99.3		0.17	0.08	
C1 - Benz(a)anthracene/Chrysene	31.5		0.17	0.08	
C2 - Benz(a)anthracene/Chrysene	11.8		0.17	0.08	
C3 - Benz(a)anthracene/Chrysene	2.82		0.17	0.08	
C4 - Benz(a)anthracene/Chrysene	0.72		0.17	0.08	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	75%	50%	150%
2-Fluorobiphenyl	102%	50%	120%
5a-Androstane	72%	50%	120%
Benzo(a)pyrene-d12	120%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B12-11-12

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
		Analysis Method:	GC/MS (EPA 8270 Mod.)		
Lab ID:	GT020924-04 1:10	Matrix:	Soil		
File ID:	14OCT21.D	Preservation:	None		
		Decanted:	No		
		Sample Size:	1.26	g	
Date Sampled:	9/19/2002	%Solid:	76%		
Date Received:	9/24/2002	Extract Volume:	2	mL	
Date Prepared:	10/11/2002	Prep DF:	10		
Date Cleanup:		Analysis DF:	1		
Date Analyzed:	15 Oct 2002 10:49 am	Injection Volume:	0.001	mL	
Instrument:	GC/MS Ins				
Operator:	ECC	Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	3,050	E	2.08	1.04	
Toluene	4,330	E	2.08	1.04	
Ethylbenzene	1,250		2.08	1.04	
m/p-Xylenes	2,600	E	2.08	1.04	
Styrene	85.8		2.08	1.04	
o-Xylene	916		2.08	1.04	
1,2,4-Trimethylbenzene	401		2.08	1.04	
Naphthalene	3,230	E	2.08	1.04	
2-Methylnaphthalene	2,070		2.08	1.04	
1-Methylnaphthalene	1,410		2.08	1.04	
Acenaphthylene	157		2.08	1.04	
Acenaphthene	2,260	E	2.08	1.04	
Dibenzofuran	80.9		2.08	1.04	
Fluorene	982		2.08	1.04	
Phenanthrene	2,480	E	2.08	1.04	
Anthracene	862		2.08	1.04	
Fluoranthene	695		2.08	1.04	
Pyrene	915		2.08	1.04	
Benz[a]anthracene	223		2.08	1.04	
Chrysene	220		2.08	1.04	
Benzo[b]fluoranthene	132		2.08	1.04	
Benzo[k]fluoranthene	126		2.08	1.04	
Benzo(e)pyrene	137		2.08	1.04	
Benzo[a]pyrene	214		2.08	1.04	
Perylene	31.4		2.08	1.04	
Indeno[1,2,3-cd]pyrene	126		2.08	1.04	
Dibenz[a,h]anthracene	35.9		2.08	1.04	
Benzo[g,h,i]perylene	240		2.08	1.04	
ALKYLATED PAHs:					
C0 - Benzene	3,050	E	2.08	1.04	
C1 - Benzene	5,190		2.08	1.04	
C2 - Benzene	5,670		2.08	1.04	
C3 - Benzene	1,260		2.08	1.04	
C4 - Benzene	807		2.08	1.04	
C5 - Benzene	159		2.08	1.04	
C0 - Naphthalene	3,230	E	2.08	1.04	
C1 - Naphthalene	1,990		2.08	1.04	
C2 - Naphthalene	1,210		2.08	1.04	
C3- Naphthalene	334		2.08	1.04	
C4- Naphthalene	112		2.08	1.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B12-11-12

Client:	GTI	Preparation Method:	EPA 3570	
Project:	Superior	Cleanup Method(s):		
Lab ID:	GT020924-04 1:10	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	14OCT21.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	9/19/2002	Decanted:	No	
Date Received:	9/24/2002	Sample Size:	1.26	g
Date Prepared:	10/11/2002	%Solid:	76%	
Date Cleanup:		Extract Volume:	2	mL
Date Analyzed:	15 Oct 2002 10:49 am	Prep DF:	10	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	ECC	Injection Volume:	0.001	mL
		Batch QC:	GT021011-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	982		2.08	1.04	
C1 - Fluorene	524		2.08	1.04	
C2 - Fluorene	112		2.08	1.04	
C3 - Fluorene	30.1		2.08	1.04	
C0 - Phenanthrene/Anthracene	3,460	E	2.08	1.04	
C1 - Phenanthrene/Anthracene	911		2.08	1.04	
C2 - Phenanthrene/Anthracene	267		2.08	1.04	
C3 - Phenanthrene/Anthracene	47.3		2.08	1.04	
C4 - Phenanthrene/Anthracene	14.3		2.08	1.04	
C0 - Dibenzothiophene	200		2.08	1.04	
C1 - Dibenzothiophene	122		2.08	1.04	
C2 - Dibenzothiophene	58.2		2.08	1.04	
C3 - Dibenzothiophene	29.0		2.08	1.04	
C0 - Fluoranthene/Pyrene	1,950		2.08	1.04	
C1 - Fluoranthene/Pyrene	427		2.08	1.04	
C2 - Fluoranthene/Pyrene	96.9		2.08	1.04	
C3 - Fluoranthene/Pyrene	27.3		2.08	1.04	
C0 - Benz(a)anthracene/Chrysene	497		2.08	1.04	
C1 - Benz(a)anthracene/Chrysene	128		2.08	1.04	
C2 - Benz(a)anthracene/Chrysene	45.0		2.08	1.04	
C3 - Benz(a)anthracene/Chrysene	15.2		2.08	1.04	
C4 - Benz(a)anthracene/Chrysene	4.55		2.08	1.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	96%	50%	150%
2-Fluorobiphenyl	115%	50%	120%
5a-Androstane	73%	50%	120%
Benzo(a)pyrene-d12	85%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B13-12-13

Client:	GTI	Preparation Method:	EPA 3570	
Project:	Superior	Cleanup Method(s):		
		Analysis Method:	GC/MS (EPA 8270 Mod.)	
Lab ID:	GT020924-05 1:10	Matrix:	Soil	
File ID:	14OCT22.D	Preservation:	None	
		Decanted:	No	
		Sample Size:	1.433	g
Date Sampled:	9/19/2002	%Solid:	79%	
Date Received:	9/24/2002	Extract Volume:	2	mL
Date Prepared:	10/11/2002	Prep DF:	10	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	15 Oct 2002 12:01 pm	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	ECC	Batch QC:	GT021011-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	377		1.77	0.88	
Toluene	1,250	B	1.77	0.88	
Ethylbenzene	175		1.77	0.88	
m/p-Xylenes	159		1.77	0.88	
Styrene	5.02		1.77	0.88	
o-Xylene	67.3		1.77	0.88	
1,2,4-Trimethylbenzene	65.6		1.77	0.88	
Naphthalene	1,580		1.77	0.88	
2-Methylnaphthalene	581		1.77	0.88	
1-Methylnaphthalene	364		1.77	0.88	
Acenaphthylene	38.3		1.77	0.88	
Acenaphthene	830		1.77	0.88	
Dibenzofuran	15.5		1.77	0.88	
Fluorene	254		1.77	0.88	
Phenanthrene	899		1.77	0.88	
Anthracene	244		1.77	0.88	
Fluoranthene	254		1.77	0.88	
Pyrene	329		1.77	0.88	
Benz[a]anthracene	62.4		1.77	0.88	
Chrysene	62.4		1.77	0.88	
Benzo[b]fluoranthene	37.5		1.77	0.88	
Benzo[k]fluoranthene	35.3		1.77	0.88	
Benzo(e)pyrene	39.4		1.77	0.88	
Benzo[a]pyrene	58.4		1.77	0.88	
Perylene	8.51		1.77	0.88	
Indeno[1,2,3-cd]pyrene	31.4		1.77	0.88	
Dibenz[a,h]anthracene	7.67		1.77	0.88	
Benzo[g,h,i]perylene	64.9		1.77	0.88	
ALKYLATED PAHs:					
C0 - Benzene	377		1.77	0.88	
C1 - Benzene	1,500	B	1.77	0.88	
C2 - Benzene	494		1.77	0.88	
C3 - Benzene	237		1.77	0.88	
C4 - Benzene	221		1.77	0.88	
C5 - Benzene	41.5		1.77	0.88	
C0 - Naphthalene	1,580		1.77	0.88	
C1 - Naphthalene	542		1.77	0.88	
C2 - Naphthalene	234		1.77	0.88	
C3- Naphthalene	58.9		1.77	0.88	
C4- Naphthalene	19.2		1.77	0.88	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B13-12-13

Client:	GTI	Preparation Method:	EPA 3570		
Project:	Superior	Cleanup Method(s):			
Lab ID:	GT020924-05 1:10	Analysis Method:	GC/MS (EPA 8270 Mod.)		
File ID:	14OCT22.D	Matrix:	Soil		
		Preservation:	None		
Date Sampled:	9/19/2002	Decanted:	No		
Date Received:	9/24/2002	Sample Size:	1.433	g	
Date Prepared:	10/11/2002	%Solid:	79%		
Date Cleanup:		Extract Volume:	2	mL	
Date Analyzed:	15 Oct 2002 12:01 pm	Prep DF:	10		
Instrument:	GC/MS Ins	Analysis DF:	1		
Operator:	ECC	Injection Volume:	0.001	mL	
		Batch QC:	GT021011-SB		

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	254		1.77	0.88	
C1 - Fluorene	89.3		1.77	0.88	
C2 - Fluorene	23.3		1.77	0.88	
C3 - Fluorene	6.58		1.77	0.88	
C0 - Phenanthrene/Anthracene	1,170		1.77	0.88	
C1 - Phenanthrene/Anthracene	193		1.77	0.88	
C2 - Phenanthrene/Anthracene	47.0		1.77	0.88	
C3 - Phenanthrene/Anthracene	8.41		1.77	0.88	
C4 - Phenanthrene/Anthracene	2.66		1.77	0.88	
C0 - Dibenzothiophene	83.8		1.77	0.88	
C1 - Dibenzothiophene	24.0		1.77	0.88	
C2 - Dibenzothiophene	10.7		1.77	0.88	
C3 - Dibenzothiophene	5.28		1.77	0.88	
C0 - Fluoranthene/Pyrene	682		1.77	0.88	
C1 - Fluoranthene/Pyrene	99.3		1.77	0.88	
C2 - Fluoranthene/Pyrene	17.4		1.77	0.88	
C3 - Fluoranthene/Pyrene	3.73		1.77	0.88	
C0 - Benz(a)anthracene/Chrysene	140		1.77	0.88	
C1 - Benz(a)anthracene/Chrysene	24.6		1.77	0.88	
C2 - Benz(a)anthracene/Chrysene	7.95		1.77	0.88	
C3 - Benz(a)anthracene/Chrysene	2.39		1.77	0.88	
C4 - Benz(a)anthracene/Chrysene	1.63	J	1.77	0.88	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	70%	50%	150%
2-Fluorobiphenyl	93%	50%	120%
5a-Androstane	70%	50%	120%
Benzo(a)pyrene-d12	76%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B23-6-8

Client:	GTI	Preparation Method:	EPA 3570
Project:	Superior	Cleanup Method(s):	
Lab ID:	GT020924-06	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	14OCT23.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	9/18/2002	Decanted:	No
Date Received:	9/24/2002	Sample Size:	2.057 g
Date Prepared:	10/11/2002	%Solid:	73%
Date Cleanup:		Extract Volume:	1.5 mL
Date Analyzed:	15 Oct 2002 1:13 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	138	E	0.10	0.05	
Toluene	53.1	B	0.10	0.05	
Ethylbenzene	0.28		0.10	0.05	
m/p-Xylenes	5.71		0.10	0.05	
Styrene	0.72		0.10	0.05	
o-Xylene	1.22		0.10	0.05	
1,2,4-Trimethylbenzene	0.15		0.10	0.05	
Naphthalene	0.18		0.10	0.05	
2-Methylnaphthalene	0.06	J	0.10	0.05	
1-Methylnaphthalene		U	0.10	0.05	
Acenaphthylene		U	0.10	0.05	
Acenaphthene	0.10	J	0.10	0.05	
Dibenzofuran		U	0.10	0.05	
Fluorene		U	0.10	0.05	
Phenanthrene	0.10		0.10	0.05	
Anthracene		U	0.10	0.05	
Fluoranthene		U	0.10	0.05	
Pyrene		U	0.10	0.05	
Benz[a]anthracene		U	0.10	0.05	
Chrysene		U	0.10	0.05	
Benzo[b]fluoranthene		U	0.10	0.05	
Benzo[k]fluoranthene		U	0.10	0.05	
Benzo(e)pyrene		U	0.10	0.05	
Benzo[a]pyrene		U	0.10	0.05	
Perylene		U	0.10	0.05	
Indeno[1,2,3-cd]pyrene		U	0.10	0.05	
Dibenz[a,h]anthracene		U	0.10	0.05	
Benzo[g,h,i]perylene		U	0.10	0.05	
ALKYLATED PAHs:					
C0 - Benzene	138	E	0.10	0.05	
C1 - Benzene	63.7	B	0.10	0.05	
C2 - Benzene	8.87		0.10	0.05	
C3 - Benzene	0.36		0.10	0.05	
C4 - Benzene		U	0.10	0.05	
C5 - Benzene		U	0.10	0.05	
C0 - Naphthalene	0.18		0.10	0.05	
C1 - Naphthalene	0.06	J	0.10	0.05	
C2 - Naphthalene		U	0.10	0.05	
C3- Naphthalene		U	0.10	0.05	
C4- Naphthalene		U	0.10	0.05	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B23-6-8

Client:	GTI	Preparation Method:	EPA 3570
Project:	Superior	Cleanup Method(s):	
Lab ID:	GT020924-06	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	14OCT23.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	9/18/2002	Decanted:	No
Date Received:	9/24/2002	Sample Size:	2.057 g
Date Prepared:	10/11/2002	%Solid:	73%
Date Cleanup:		Extract Volume:	1.5 mL
Date Analyzed:	15 Oct 2002 1:13 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene		U	0.10	0.05	
C1 - Fluorene		U	0.10	0.05	
C2 - Fluorene		U	0.10	0.05	
C3 - Fluorene		U	0.10	0.05	
C0 - Phenanthrene/Anthracene	0.14		0.10	0.05	
C1 - Phenanthrene/Anthracene		U	0.10	0.05	
C2 - Phenanthrene/Anthracene		U	0.10	0.05	
C3 - Phenanthrene/Anthracene		U	0.10	0.05	
C4 - Phenanthrene/Anthracene		U	0.10	0.05	
C0 - Dibenzothiophene		U	0.10	0.05	
C1 - Dibenzothiophene		U	0.10	0.05	
C2 - Dibenzothiophene		U	0.10	0.05	
C3 - Dibenzothiophene		U	0.10	0.05	
C0 - Fluoranthene/Pyrene		U	0.10	0.05	
C1 - Fluoranthene/Pyrene		U	0.10	0.05	
C2 - Fluoranthene/Pyrene		U	0.10	0.05	
C3 - Fluoranthene/Pyrene		U	0.10	0.05	
C0 - Benz(a)anthracene/Chrysene		U	0.10	0.05	
C1 - Benz(a)anthracene/Chrysene		U	0.10	0.05	
C2 - Benz(a)anthracene/Chrysene		U	0.10	0.05	
C3 - Benz(a)anthracene/Chrysene		U	0.10	0.05	
C4 - Benz(a)anthracene/Chrysene		U	0.10	0.05	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	74%	50%	150%
2-Fluorobiphenyl	82%	50%	120%
5a-Androstane	63%	50%	120%
Benzo(a)pyrene-d12	91%	50%	120%

FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	0%	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B23-10-12

Client:	GTI	Preparation Method:	EP A 3570
Project:	Superior	Cleanup Method(s):	
Lab ID:	GT020924-07	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	14OCT26.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	9/19/2002	Decanted:	No
Date Received:	9/24/2002	Sample Size:	2.018 g
Date Prepared:	10/11/2002	%Solid:	77%
Date Cleanup:		Extract Volume:	1.3 mL
Date Analyzed:	15 Oct 2002 3:57 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	49.7		0.08	0.04	
Toluene	49.1	B	0.08	0.04	
Ethylbenzene	0.60		0.08	0.04	
m/p-Xylenes	9.68		0.08	0.04	
Styrene	2.70		0.08	0.04	
o-Xylene	2.23		0.08	0.04	
1,2,4-Trimethylbenzene	0.50		0.08	0.04	
Naphthalene	0.37		0.08	0.04	
2-Methylnaphthalene	0.37		0.08	0.04	
1-Methylnaphthalene	0.35		0.08	0.04	
Acenaphthylene	0.35		0.08	0.04	
Acenaphthene	0.42		0.08	0.04	
Dibenzofuran	0.39		0.08	0.04	
Fluorene	0.34		0.08	0.04	
Phenanthrene	0.32		0.08	0.04	
Anthracene	0.35		0.08	0.04	
Fluoranthene	0.23		0.08	0.04	
Pyrene	0.22		0.08	0.04	
Benz[a]anthracene	0.09		0.08	0.04	
Chrysene	0.16		0.08	0.04	
Benzo[b]fluoranthene	0.12		0.08	0.04	
Benzo[k]fluoranthene	0.20		0.08	0.04	
Benzo(e)pyrene		U	0.08	0.04	
Benzo[a]pyrene	0.20		0.08	0.04	
Perylene		U	0.08	0.04	
Indeno[1,2,3-cd]pyrene	0.11		0.08	0.04	
Dibenz[a,h]anthracene	0.06	J	0.08	0.04	
Benzo[g,h,i]perylene	0.20		0.08	0.04	
ALKYLATED PAHs:					
C0 - Benzene	49.7		0.08	0.04	
C1 - Benzene	58.9	B	0.08	0.04	
C2 - Benzene	15.7		0.08	0.04	
C3 - Benzene	1.29		0.08	0.04	
C4 - Benzene	0.44		0.08	0.04	
C5 - Benzene		U	0.08	0.04	
C0 - Naphthalene	0.37		0.08	0.04	
C1 - Naphthalene	0.43		0.08	0.04	
C2 - Naphthalene		U	0.08	0.04	
C3- Naphthalene		U	0.08	0.04	
C4- Naphthalene		U	0.08	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: B23-10-12

Client:	GTI	Preparation Method:	EP A 3570
Project:	Superior	Cleanup Method(s):	
Lab ID:	GT020924-07	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	14OCT26.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	9/19/2002	Decanted:	No
Date Received:	9/24/2002	Sample Size:	2.018 g
Date Prepared:	10/11/2002	%Solid:	77%
Date Cleanup:		Extract Volume:	1.3 mL
Date Analyzed:	15 Oct 2002 3:57 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	0.34		0.08	0.04	
C1 - Fluorene		U	0.08	0.04	
C2 - Fluorene		U	0.08	0.04	
C3 - Fluorene		U	0.08	0.04	
C0 - Phenanthrene/Anthracene	0.66		0.08	0.04	
C1 - Phenanthrene/Anthracene		U	0.08	0.04	
C2 - Phenanthrene/Anthracene		U	0.08	0.04	
C3 - Phenanthrene/Anthracene		U	0.08	0.04	
C4 - Phenanthrene/Anthracene		U	0.08	0.04	
C0 - Dibenzothiophene		U	0.08	0.04	
C1 - Dibenzothiophene		U	0.08	0.04	
C2 - Dibenzothiophene		U	0.08	0.04	
C3 - Dibenzothiophene		U	0.08	0.04	
C0 - Fluoranthene/Pyrene	0.47		0.08	0.04	
C1 - Fluoranthene/Pyrene		U	0.08	0.04	
C2 - Fluoranthene/Pyrene		U	0.08	0.04	
C3 - Fluoranthene/Pyrene		U	0.08	0.04	
C0 - Benz(a)anthracene/Chrysene	0.26		0.08	0.04	
C1 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C2 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C3 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C4 - Benz(a)anthracene/Chrysene		U	0.08	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	87%	50%	150%
2-Fluorobiphenyl	89%	50%	120%
5a-Androstane	67%	50%	120%
Benzo(a)pyrene-d12	91%	50%	120%
FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	1%	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Various	Preparation Method:	EPA 3570
Project:	Various	Cleanup Method(s):	
Lab ID:	GT021011-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	16OCT11.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	2 g
Date Prepared:	10/11/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	1.1 mL
Date Analyzed:	16 Oct 2002 9:39 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene		U	0.06	0.03	
Toluene	0.04	J	0.06	0.03	
Ethylbenzene		U	0.06	0.03	
m/p-Xylenes		U	0.06	0.03	
Styrene		U	0.06	0.03	
o-Xylene		U	0.06	0.03	
1,2,4-Trimethylbenzene		U	0.06	0.03	
Naphthalene		U	0.06	0.03	
2-Methylnaphthalene		U	0.06	0.03	
1-Methylnaphthalene		U	0.06	0.03	
Acenaphthylene		U	0.06	0.03	
Acenaphthene		U	0.06	0.03	
Dibenzofuran		U	0.06	0.03	
Fluorene		U	0.06	0.03	
Phenanthrene		U	0.06	0.03	
Anthracene		U	0.06	0.03	
Fluoranthene		U	0.06	0.03	
Pyrene		U	0.06	0.03	
Benz[a]anthracene		U	0.06	0.03	
Chrysene		U	0.06	0.03	
Benzo[b]fluoranthene		U	0.06	0.03	
Benzo[k]fluoranthene		U	0.06	0.03	
Benzo(e)pyrene		U	0.06	0.03	
Benzo[a]pyrene		U	0.06	0.03	
Perylene		U	0.06	0.03	
Indeno[1,2,3-cd]pyrene		U	0.06	0.03	
Dibenz[a,h]anthracene		U	0.06	0.03	
Benzo[g,h,i]perylene		U	0.06	0.03	
ALKYLATED PAHs:					
C0 - Benzene		U	0.06	0.03	
C1 - Benzene	0.05	J	0.06	0.03	
C2 - Benzene		U	0.06	0.03	
C3 - Benzene		U	0.06	0.03	
C4 - Benzene		U	0.06	0.03	
C5 - Benzene		U	0.06	0.03	
C0 - Naphthalene		U	0.06	0.03	
C1 - Naphthalene		U	0.06	0.03	
C2 - Naphthalene		U	0.06	0.03	
C3 - Naphthalene		U	0.06	0.03	
C4 - Naphthalene		U	0.06	0.03	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Various	Preparation Method:	EPA 3570
Project:	Various	Cleanup Method(s):	
Lab ID:	GT021011-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	16OCT11.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	2 g
Date Prepared:	10/11/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	1.1 mL
Date Analyzed:	16 Oct 2002 9:39 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	ECC	Injection Volume:	0.001 mL
		Batch QC:	GT021011-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene		U	0.06	0.03	
C1 - Fluorene		U	0.06	0.03	
C2 - Fluorene		U	0.06	0.03	
C3 - Fluorene		U	0.06	0.03	
C0 - Phenanthrene/Anthracene		U	0.06	0.03	
C1 - Phenanthrene/Anthracene		U	0.06	0.03	
C2 - Phenanthrene/Anthracene		U	0.06	0.03	
C3 - Phenanthrene/Anthracene		U	0.06	0.03	
C4 - Phenanthrene/Anthracene		U	0.06	0.03	
C0 - Dibenzothiophene		U	0.06	0.03	
C1 - Dibenzothiophene		U	0.06	0.03	
C2 - Dibenzothiophene		U	0.06	0.03	
C3 - Dibenzothiophene		U	0.06	0.03	
C0 - Fluoranthene/Pyrene		U	0.06	0.03	
C1 - Fluoranthene/Pyrene		U	0.06	0.03	
C2 - Fluoranthene/Pyrene		U	0.06	0.03	
C3 - Fluoranthene/Pyrene		U	0.06	0.03	
C0 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C1 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C2 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C3 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C4 - Benz(a)anthracene/Chrysene		U	0.06	0.03	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	67%	50%	150%
2-Fluorobiphenyl	80%	50%	120%
5a-Androstane	68%	50%	120%
Benzo(a)pyrene-d12	109%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Various	Preparation Method:	EPA 3570	
Project:	Various	Cleanup Method(s):		
Lab ID:	GT021011-SBS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	14OCT17.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:		Decanted:	No	
Date Received:		Sample Size:	2	g
Date Prepared:	10/11/2002	%Solid:	100%	
Date Cleanup:		Extract Volume:	1.3	mL
Date Analyzed:	15 Oct 2002 6:05 am	Prep DF:	1	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	ECC	Injection Volume:	0.001	mL
		Batch QC:	GT021011-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	14.8		0.07	0.03	72.1%
Toluene	16.7		0.07	0.03	72.5%
Ethylbenzene	18.3		0.07	0.03	68.5%
m/p-Xylenes	16.8		0.07	0.03	67.1%
Styrene	20.0		0.07	0.03	65.4%
o-Xylene	17.5		0.07	0.03	67.8%
1,2,4-Trimethylbenzene	22.1		0.07	0.03	68.2%
Naphthalene	22.4		0.07	0.03	69.2%
2-Methylnaphthalene	25.7		0.07	0.03	71.8%
1-Methylnaphthalene	24.7		0.07	0.03	72.7%
Acenaphthylene	24.8		0.07	0.03	73.6%
Acenaphthene	27.2		0.07	0.03	72.7%
Dibenzofuran	24.7		0.07	0.03	71.8%
Fluorene	23.1		0.07	0.03	71.5%
Phenanthrene	21.5		0.07	0.03	68.1%
Anthracene	20.5		0.07	0.03	62.9%
Fluoranthene	14.6		0.07	0.03	61.0%
Pyrene	14.1		0.07	0.03	57.2%
Benz[a]anthracene	9.47		0.07	0.03	44.3%
Chrysene	10.6		0.07	0.03	49.4%
Benzo[b]fluoranthene	10.3		0.07	0.03	40.1%
Benzo[k]fluoranthene	12.5		0.07	0.03	52.8%
Benzo[a]pyrene	10.3		0.07	0.03	46.6%
Indeno[1,2,3-cd]pyrene	15.5		0.07	0.03	61.4%
Dibenz[a,h]anthracene	12.1		0.07	0.03	51.7%
Benzo[g,h,i]perylene	18.8		0.07	0.03	74.3%

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	73%	50%	150%
2-Fluorobiphenyl	82%	50%	120%
5a-Androstane	67%	50%	120%
Benzo(a)pyrene-d12	87%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	GTI	Preparation Method:	EPA 3540
Project:	Superior	Cleanup Method(s):	
Lab ID:	IS021121-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	15DEC05.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	10 g
Date Prepared:	11/21/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	2 mL
Date Analyzed:	15 Dec 2002 6:27 pm	Prep DF:	1
Instrument:	GC4-MS_59	Analysis DF:	1
Operator:	DRC	Injection Volume:	0.001 mL
		Batch QC:	IS021121-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene		U	0.02	0.01	
Toluene	0.02	J	0.02	0.01	
Ethylbenzene		U	0.02	0.01	
m/p-Xylenes		U	0.02	0.01	
Styrene		U	0.02	0.01	
o-Xylene		U	0.02	0.01	
1,2,4-Trimethylbenzene		U	0.02	0.01	
Naphthalene		U	0.02	0.01	
2-Methylnaphthalene		U	0.02	0.01	
1-Methylnaphthalene		U	0.02	0.01	
Acenaphthylene		U	0.02	0.01	
Acenaphthene		U	0.02	0.01	
Dibenzofuran		U	0.02	0.01	
Fluorene		U	0.02	0.01	
Phenanthrene		U	0.02	0.01	
Anthracene		U	0.02	0.01	
Fluoranthene		U	0.02	0.01	
Pyrene		U	0.02	0.01	
Benz[a]anthracene		U	0.02	0.01	
Chrysene		U	0.02	0.01	
Benzo[b]fluoranthene		U	0.02	0.01	
Benzo[k]fluoranthene		U	0.02	0.01	
Benzo(e)pyrene		U	0.02	0.01	
Benzo[a]pyrene		U	0.02	0.01	
Perylene		U	0.02	0.01	
Indeno[1,2,3-cd]pyrene		U	0.02	0.01	
Dibenz[a,h]anthracene		U	0.02	0.01	
Benzo[g,h,i]perylene		U	0.02	0.01	
ALKYLATED PAHs:					
C0 - Benzene		U	0.02	0.01	
C1 - Benzene	0.02	J	0.02	0.01	
C2 - Benzene		U	0.02	0.01	
C3 - Benzene		U	0.02	0.01	
C4 - Benzene		U	0.02	0.01	
C5 - Benzene		U	0.02	0.01	
C0 - Naphthalene		U	0.02	0.01	
C1 - Naphthalene		U	0.02	0.01	
C2 - Naphthalene		U	0.02	0.01	
C3- Naphthalene		U	0.02	0.01	
C4- Naphthalene		U	0.02	0.01	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	GTI	Preparation Method:	EPA 3540
Project:	Superior	Cleanup Method(s):	
Lab ID:	IS021121-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	15DEC05.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	10 g
Date Prepared:	11/21/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	2 mL
Date Analyzed:	15 Dec 2002 6:27 pm	Prep DF:	1
Instrument:	GC4-MS_59	Analysis DF:	1
Operator:	DRC	Injection Volume:	0.001 mL
		Batch QC:	IS021121-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene		U	0.02	0.01	
C1 - Fluorene		U	0.02	0.01	
C2 - Fluorene		U	0.02	0.01	
C3 - Fluorene		U	0.02	0.01	
C0 - Phenanthrene/Anthracene		U	0.02	0.01	
C1 - Phenanthrene/Anthracene		U	0.02	0.01	
C2 - Phenanthrene/Anthracene		U	0.02	0.01	
C3 - Phenanthrene/Anthracene		U	0.02	0.01	
C4 - Phenanthrene/Anthracene		U	0.02	0.01	
C0 - Dibenzothiophene		U	0.02	0.01	
C1 - Dibenzothiophene		U	0.02	0.01	
C2 - Dibenzothiophene		U	0.02	0.01	
C3 - Dibenzothiophene		U	0.02	0.01	
C0 - Fluoranthene/Pyrene		U	0.02	0.01	
C1 - Fluoranthene/Pyrene		U	0.02	0.01	
C2 - Fluoranthene/Pyrene		U	0.02	0.01	
C3 - Fluoranthene/Pyrene		U	0.02	0.01	
C0 - Benz(a)anthracene/Chrysene		U	0.02	0.01	
C1 - Benz(a)anthracene/Chrysene		U	0.02	0.01	
C2 - Benz(a)anthracene/Chrysene		U	0.02	0.01	
C3 - Benz(a)anthracene/Chrysene		U	0.02	0.01	
C4 - Benz(a)anthracene/Chrysene		U	0.02	0.01	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	75%	50%	150%
2-Fluorobiphenyl	119%	50%	120%
5a-Androstane	109%	50%	120%
Benzo(a)pyrene-d12	55%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Blank Spike

Client:	GTI	Preparation Method:	EPA 3540
Project:	Superior	Cleanup Method(s):	
Lab ID:	IS021121-SBS	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	15DEC06.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	10 g
Date Prepared:	11/21/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	2 mL
Date Analyzed:	15 Dec 2002 7:36 pm	Prep DF:	1
Instrument:	GC4-MS_59	Analysis DF:	1
Operator:	DRC	Injection Volume:	0.001 mL
		Batch QC:	IS021121-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	3.49		0.02	0.01	69.8%
Toluene	5.40		0.02	0.01	108.0%
Ethylbenzene	5.77		0.02	0.01	115.4%
m/p-Xylenes	5.84		0.02	0.01	116.8%
Styrene	5.77		0.02	0.01	115.4%
o-Xylene	5.75		0.02	0.01	115.0%
1,2,4-Trimethylbenzene	5.50		0.02	0.01	110.0%
Naphthalene	5.65		0.02	0.01	113.0%
2-Methylnaphthalene	5.75		0.02	0.01	115.0%
1-Methylnaphthalene	5.44		0.02	0.01	108.8%
Acenaphthylene	5.59		0.02	0.01	111.8%
Acenaphthene	5.35		0.02	0.01	107.0%
Dibenzofuran	5.24		0.02	0.01	104.8%
Fluorene	5.37		0.02	0.01	107.4%
Phenanthrene	5.24		0.02	0.01	104.8%
Anthracene	4.87		0.02	0.01	97.4%
Fluoranthene	5.23		0.02	0.01	104.6%
Pyrene	5.26		0.02	0.01	105.2%
Benz[a]anthracene	5.75		0.02	0.01	115.0%
Chrysene	5.31		0.02	0.01	106.2%
Benzo[b]fluoranthene	6.22		0.02	0.01	124.4%
Benzo[k]fluoranthene	5.16		0.02	0.01	103.2%
Benzo(e)pyrene	5.64		0.02	0.01	112.8%
Benzo[a]pyrene	5.64		0.02	0.01	112.8%
Perylene	5.64		0.02	0.01	112.8%
Indeno[1,2,3-cd]pyrene	6.14		0.02	0.01	122.8%
Dibenz[a,h]anthracene	6.25		0.02	0.01	125.0%
Benzo[g,h,i]perylene	5.70		0.02	0.01	114.0%

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	77%	50%	150%
2-Fluorobiphenyl	119%	50%	120%
5a-Androstane	108%	50%	120%
Benzo(a)pyrene-d12	56%	50%	120%

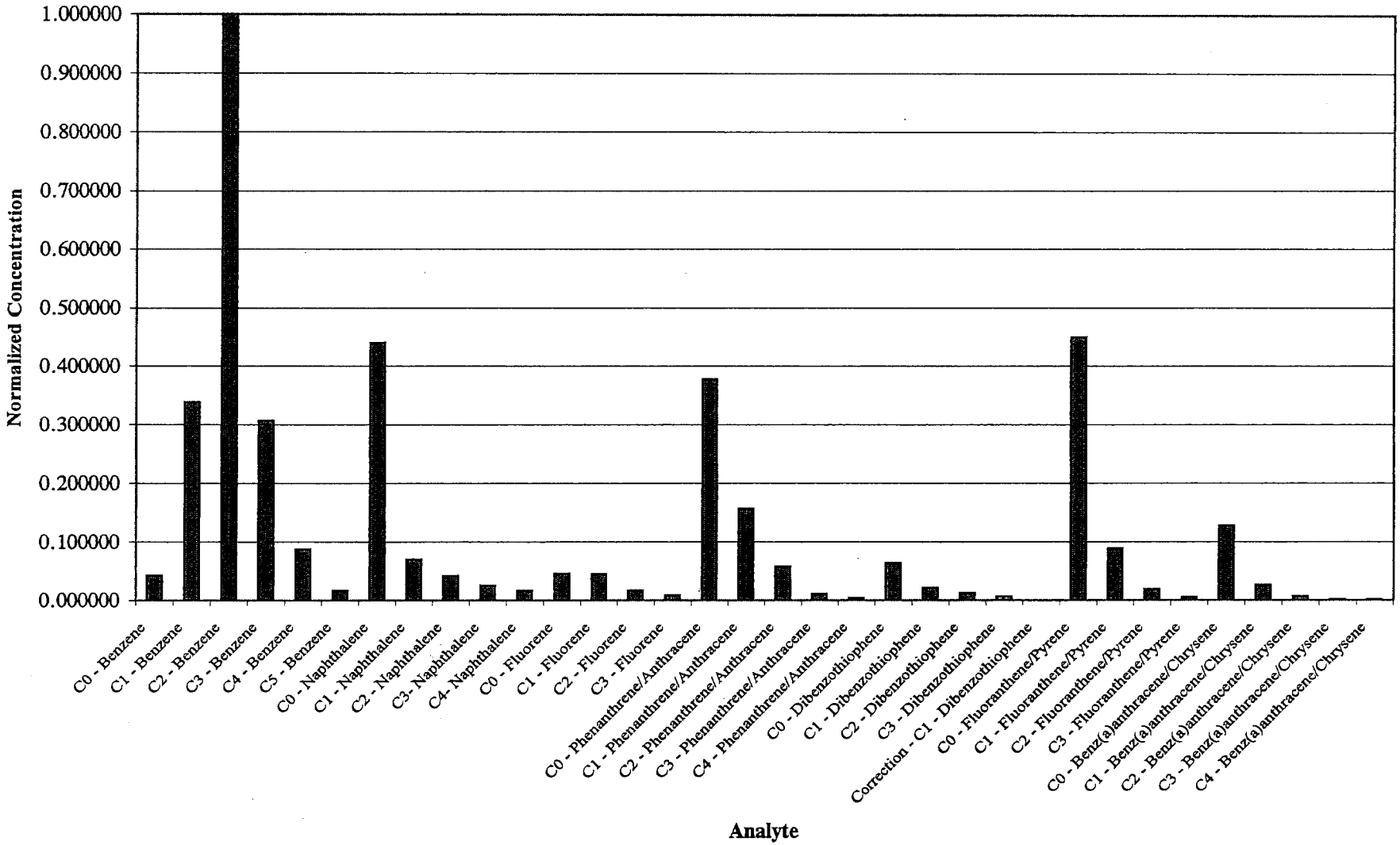
Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Appendix D

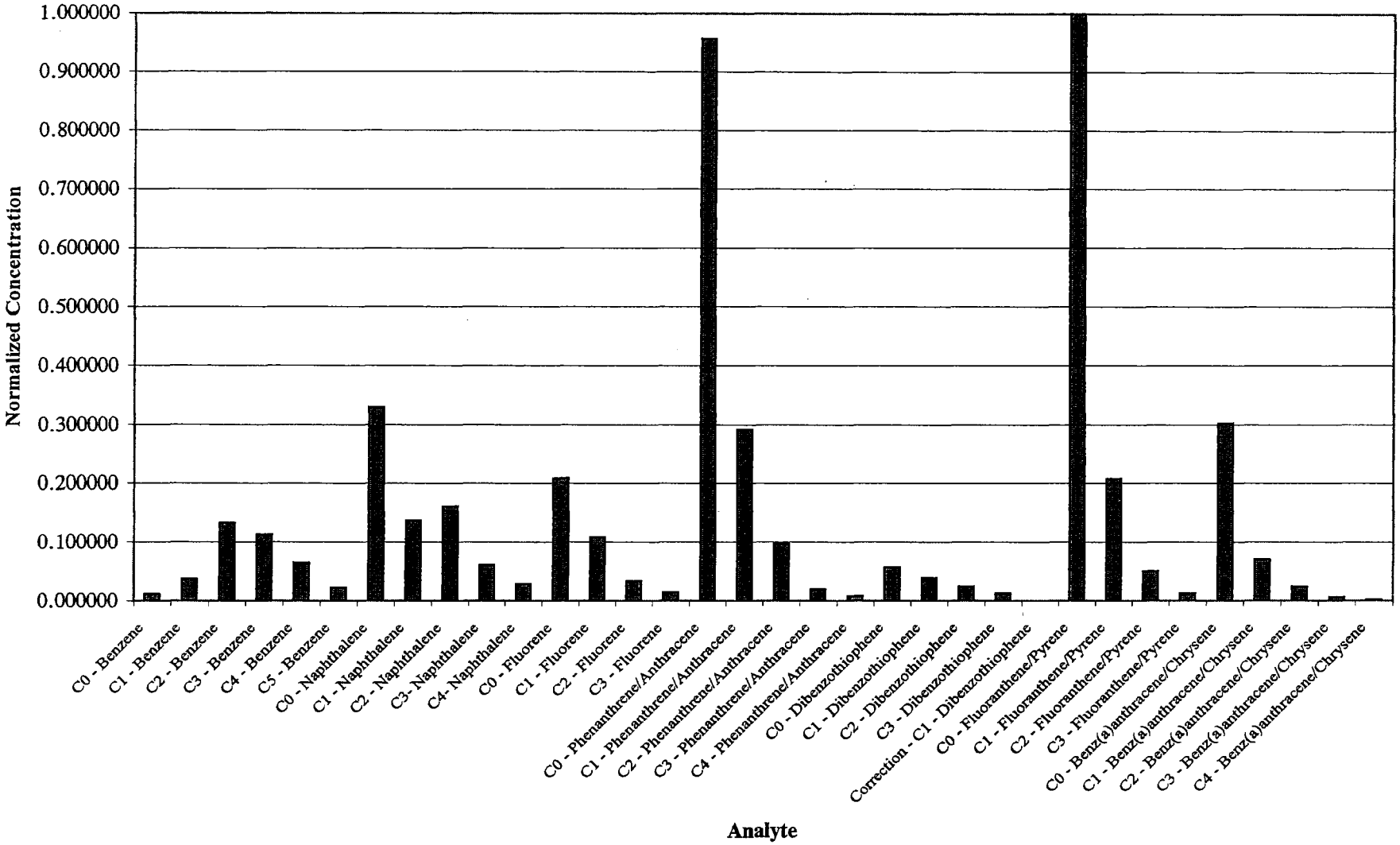
Extended PAH Profiles – Bar Graphs

T10-1


Normalized Concentration
1.000000
0.900000
0.800000
0.700000
0.600000
0.500000
0.400000
0.300000
0.200000
0.100000
0.000000
C0 - Benzene
C1 - Benzene
C2 - Benzene
C3 - Benzene
C4 - Benzene
C5 - Benzene
C0 - Naphthalene
C1 - Naphthalene
C2 - Naphthalene
C3- Naphthalene
C4- Naphthalene
C0 - Fluorene
C1 - Fluorene
C2 - Fluorene
C3 - Fluorene
C0 - Phenanthrene/Anthracene
C1 - Phenanthrene/Anthracene
C2 - Phenanthrene/Anthracene
C3 - Phenanthrene/Anthracene
C4 - Phenanthrene/Anthracene
C0 - Dibenzothiophene
C1 - Dibenzothiophene
C2 - Dibenzothiophene
C3 - Dibenzothiophene
Correction - C1 - Dibenzothiophene
C0 - Fluoranthene/Pyrene
C1 - Fluoranthene/Pyrene
C2 - Fluoranthene/Pyrene
C3 - Fluoranthene/Pyrene
C0 - Benz(a)anthracene/Chrysene
C1 - Benz(a)anthracene/Chrysene
C2 - Benz(a)anthracene/Chrysene
C3 - Benz(a)anthracene/Chrysene
C4 - Benz(a)anthracene/Chrysene
Analyte

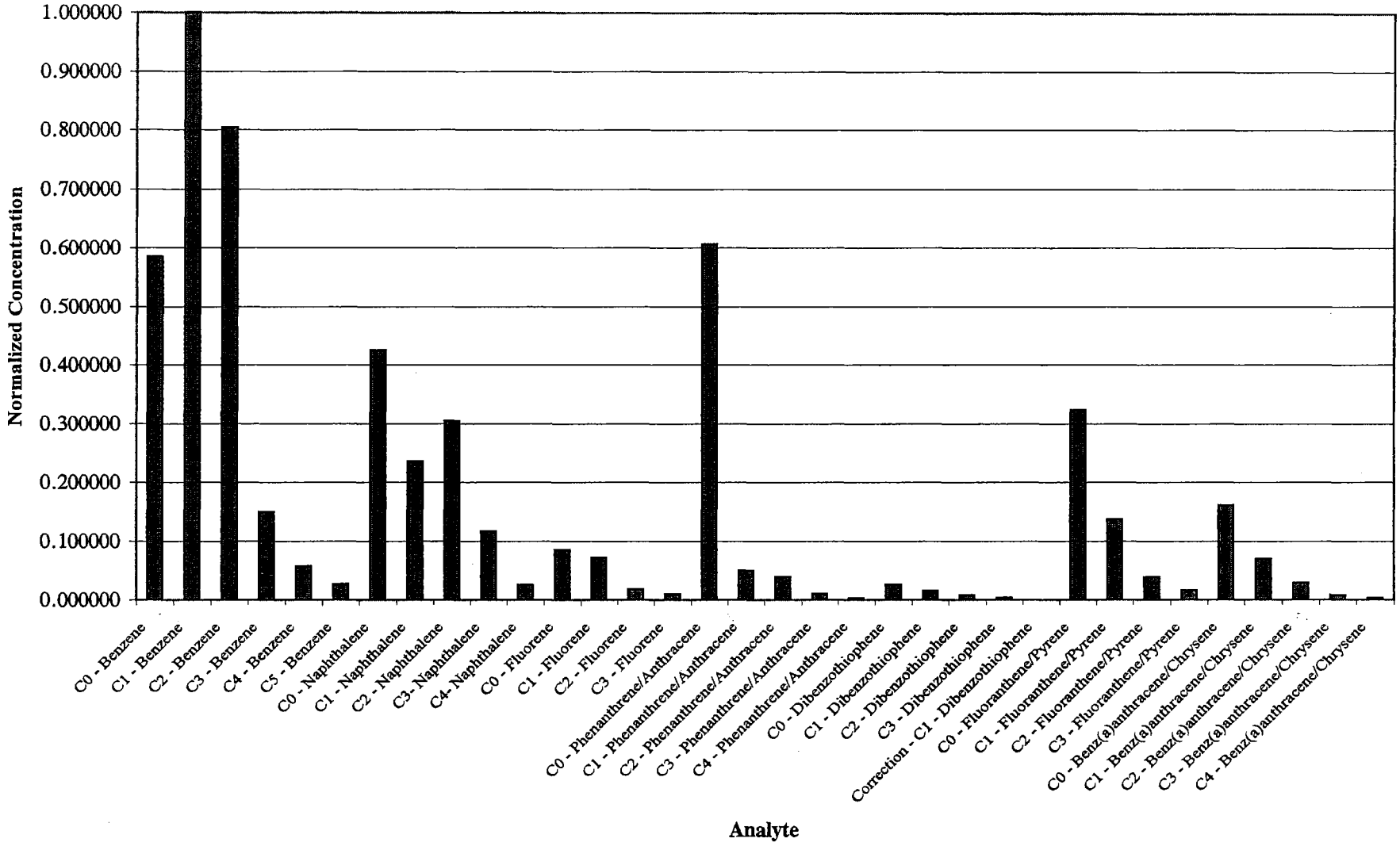
META

T10-2


Normalized Concentration
1.000000
0.900000
0.800000
0.700000
0.600000
0.500000
0.400000
0.300000
0.200000
0.100000
0.000000
C0 - Benzene
C1 - Benzene
C2 - Benzene
C3 - Benzene
C4 - Benzene
C5 - Benzene
C0 - Naphthalene
C1 - Naphthalene
C2 - Naphthalene
C3- Naphthalene
C4- Naphthalene
C0 - Fluorene
C1 - Fluorene
C2 - Fluorene
C3 - Fluorene
C0 - Phenanthrene/Anthracene
C1 - Phenanthrene/Anthracene
C2 - Phenanthrene/Anthracene
C3 - Phenanthrene/Anthracene
C4 - Phenanthrene/Anthracene
C0 - Dibenzothiophene
C1 - Dibenzothiophene
C2 - Dibenzothiophene
C3 - Dibenzothiophene
Correction - C1 - Dibenzothiophene
C0 - Fluoranthene/Pyrene
C1 - Fluoranthene/Pyrene
C2 - Fluoranthene/Pyrene
C3 - Fluoranthene/Pyrene
C0 - Benz(a)anthracene/Chrysene
C1 - Benz(a)anthracene/Chrysene
C2 - Benz(a)anthracene/Chrysene
C3 - Benz(a)anthracene/Chrysene
C4 - Benz(a)anthracene/Chrysene
Analyte

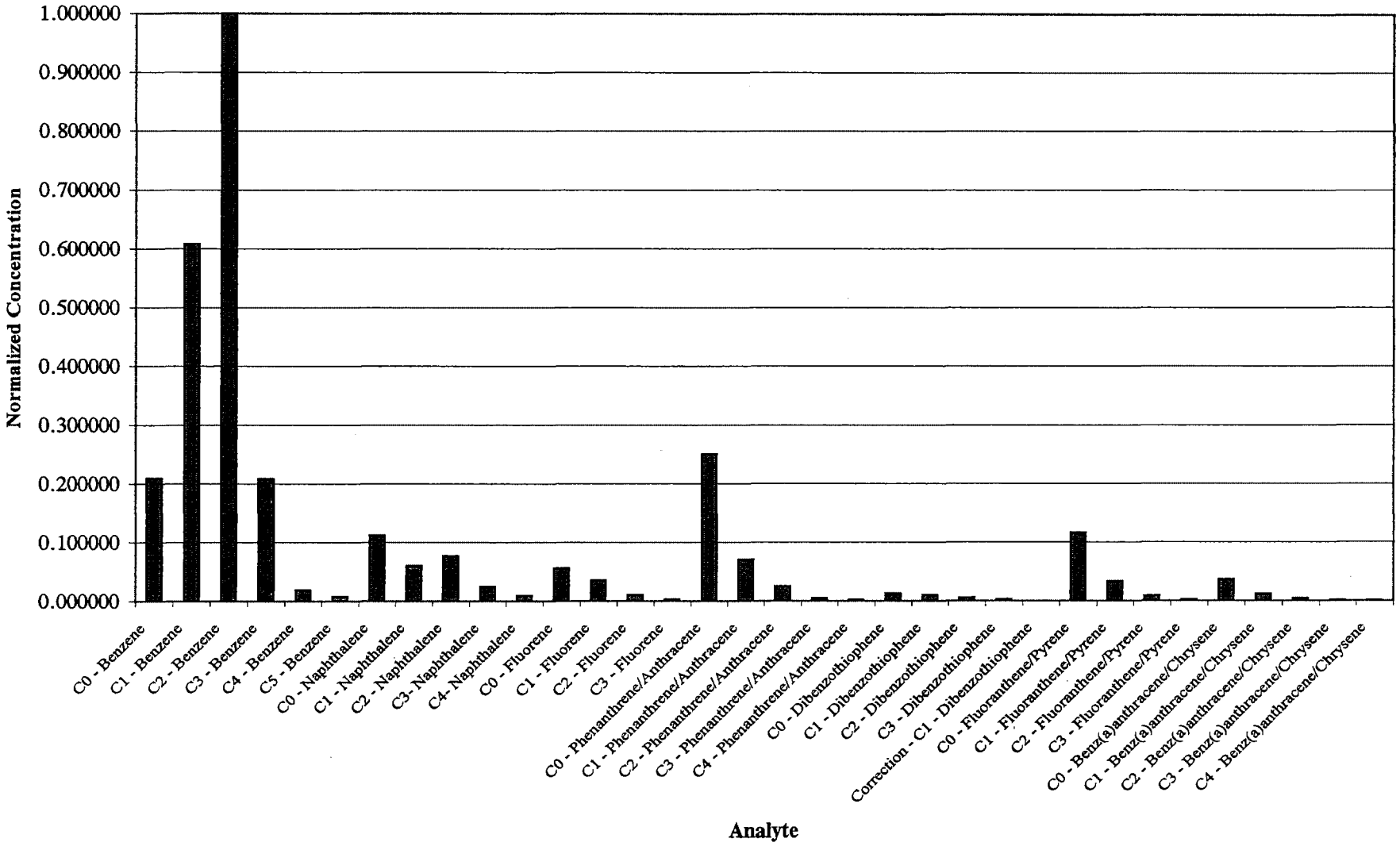
META

T10-3


1.000000
0.900000
0.800000
0.700000
0.600000
0.500000
0.400000
0.300000
0.200000
0.100000
0.000000
Normalized Concentration
C0 - Benzene
C1 - Benzene
C2 - Benzene
C3 - Benzene
C4 - Benzene
C5 - Benzene
C0 - Naphthalene
C1 - Naphthalene
C2 - Naphthalene
C3- Naphthalene
C4- Naphthalene
C0 - Fluorene
C1 - Fluorene
C2 - Fluorene
C3 - Fluorene
C0 - Phenanthrene/ Anthracene
C1 - Phenanthrene/Anthracene
C2 - Phenanthrene/Anthracene
C3 - Phenanthrene/Anthracene
C4 - Phenanthrene/Anthracene
C0 - Dibenzothiophene
C1 - Dibenzothiophene
C2 - Dibenzothiophene
C3 - Dibenzothiophene
Correction - C1 - Dibenzothiophene
C0 - Fluoranthene/Pyrene
C1 - Fluoranthene/Pyrene
C2 - Fluoranthene/Pyrene
C3 - Fluoranthene/Pyrene
C0 - Benz(a)anthracene/Chrysene
C1 - Benz(a)anthracene/Chrysene
C2 - Benz(a)anthracene/Chrysene
C3 - Benz(a)anthracene/Chrysene
C4 - Benz(a)anthracene/Chrysene
Analyte

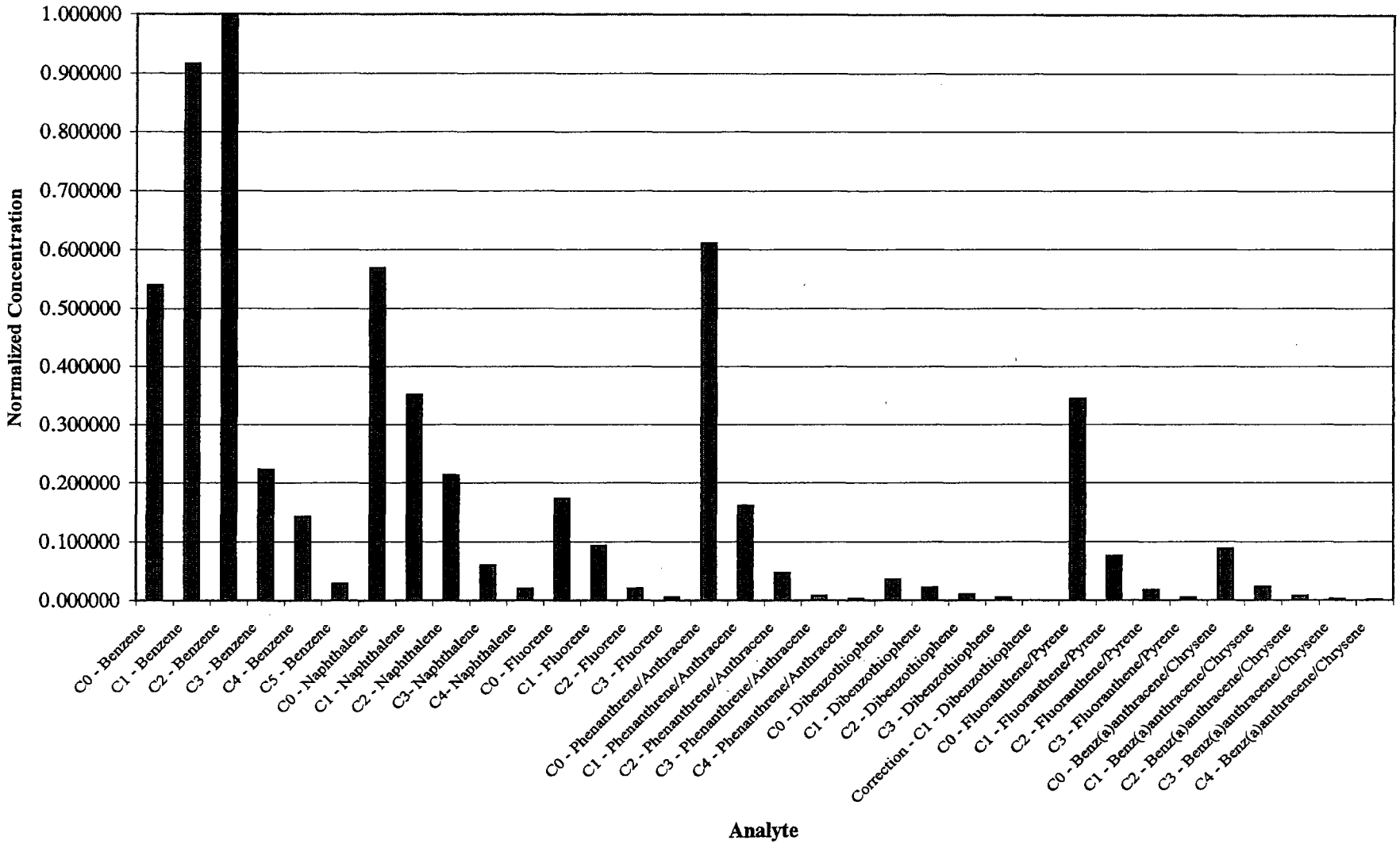
META

B-11-12-13



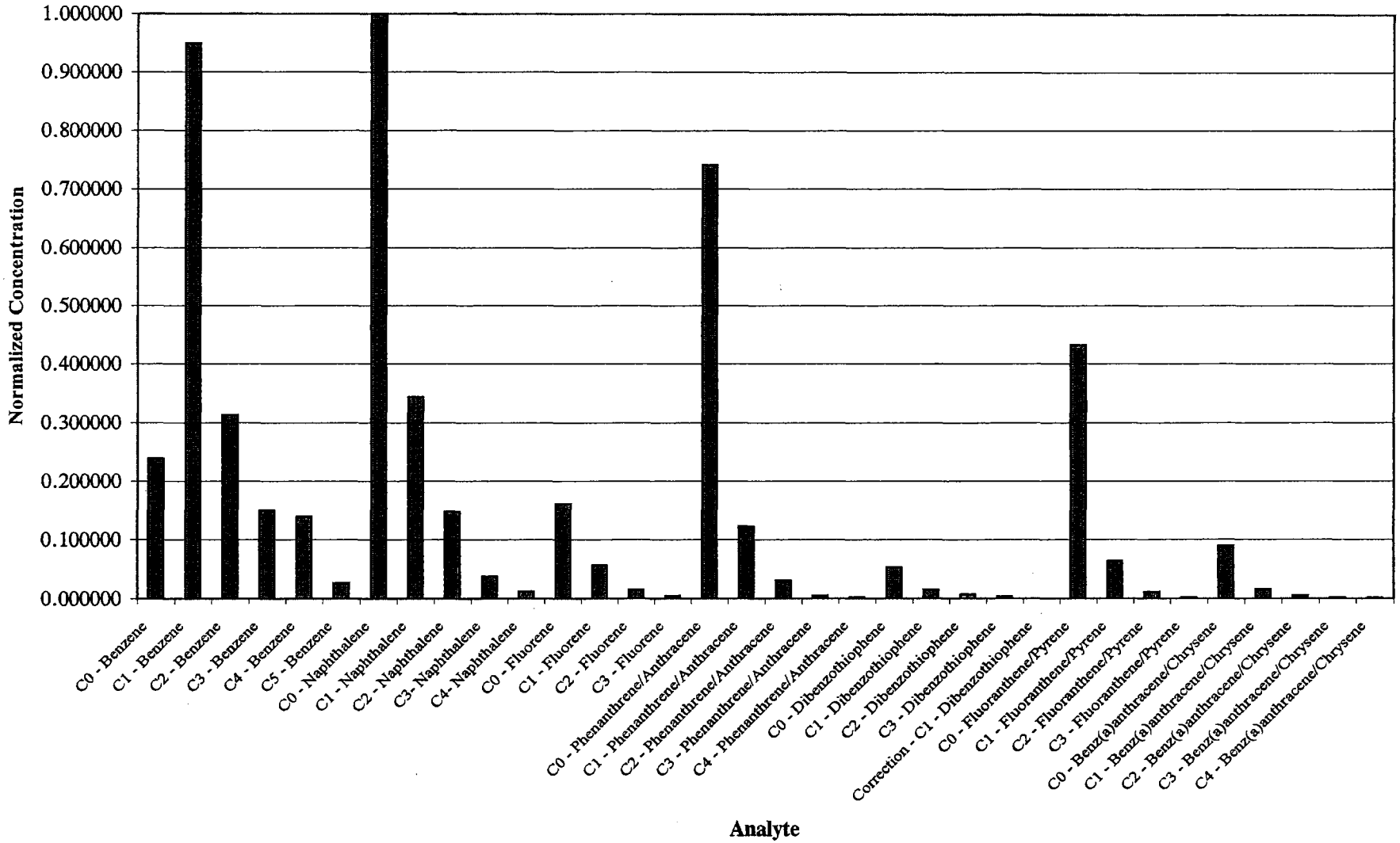
META

B-12-11-12



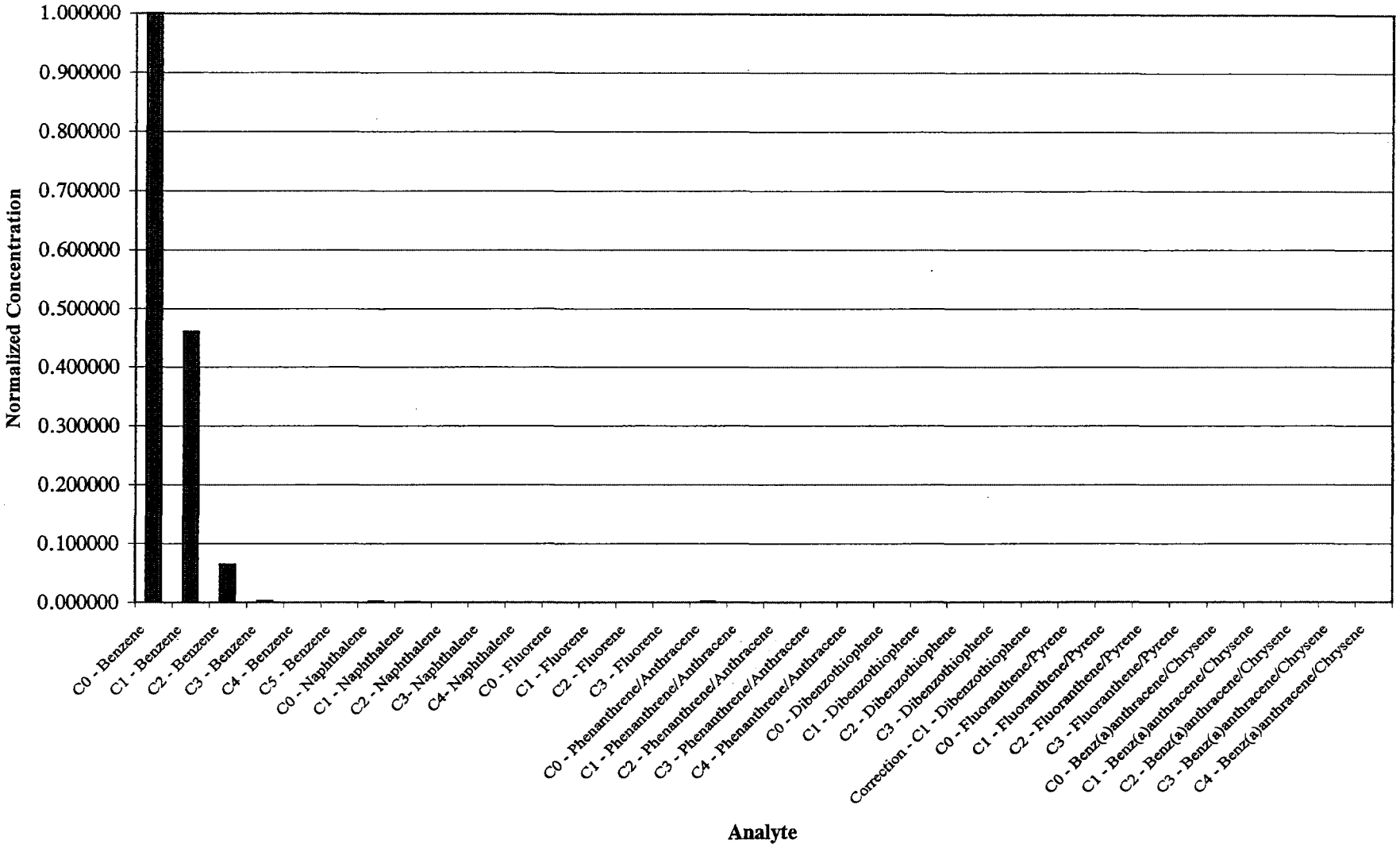
META

B-13-12-13



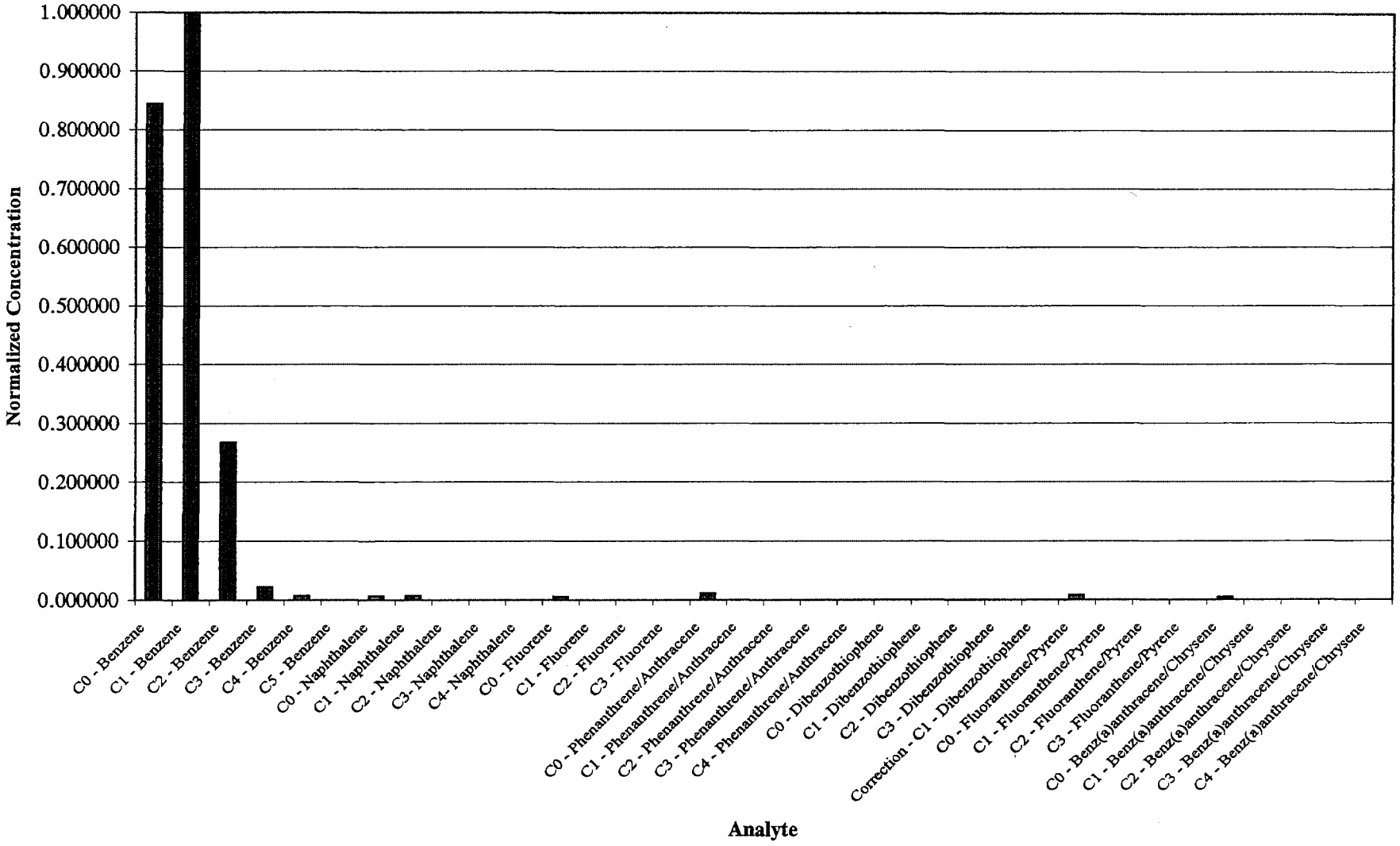
META

B-23-6-8


Normalized Concentration
1.000000
0.900000
0.800000
0.700000
0.600000
0.500000
0.400000
0.300000
0.200000
0.100000
0.000000
C0 - Benzene
C1 - Benzene
C2 - Benzene
C3 - Benzene
C4 - Benzene
C5 - Benzene
C0 - Naphthalene
C1 - Naphthalene
C2 - Naphthalene
C3- Naphthalene
C4- Naphthalene
C0 - Fluorene
C1 - Fluorene
C2 - Fluorene
C3 - Fluorene
C0 - Phenanthrene/Anthracene
C1 - Phenanthrene/Anthracene
C2 - Phenanthrene/Anthracene
C3 - Phenanthrene/Anthracene
C4 - Phenanthrene/Anthracene
C0 - Dibenzothiophene
C1 - Dibenzothiophene
C2 - Dibenzothiophene
C3 - Dibenzothiophene
Correction - C1 - Dibenzothiophene
C0 - Fluoranthene/Pyrene
C1 - Fluoranthene/Pyrene
C2 - Fluoranthene/Pyrene
C3 - Fluoranthene/Pyrene
C0 - Benz(a)anthracene/Chrysene
C1 - Benz(a)anthracene/Chrysene
C2 - Benz(a)anthracene/Chrysene
C3 - Benz(a)anthracene/Chrysene
C4 - Benz(a)anthracene/Chrysene
Analyte

META

B-23-10-12



META

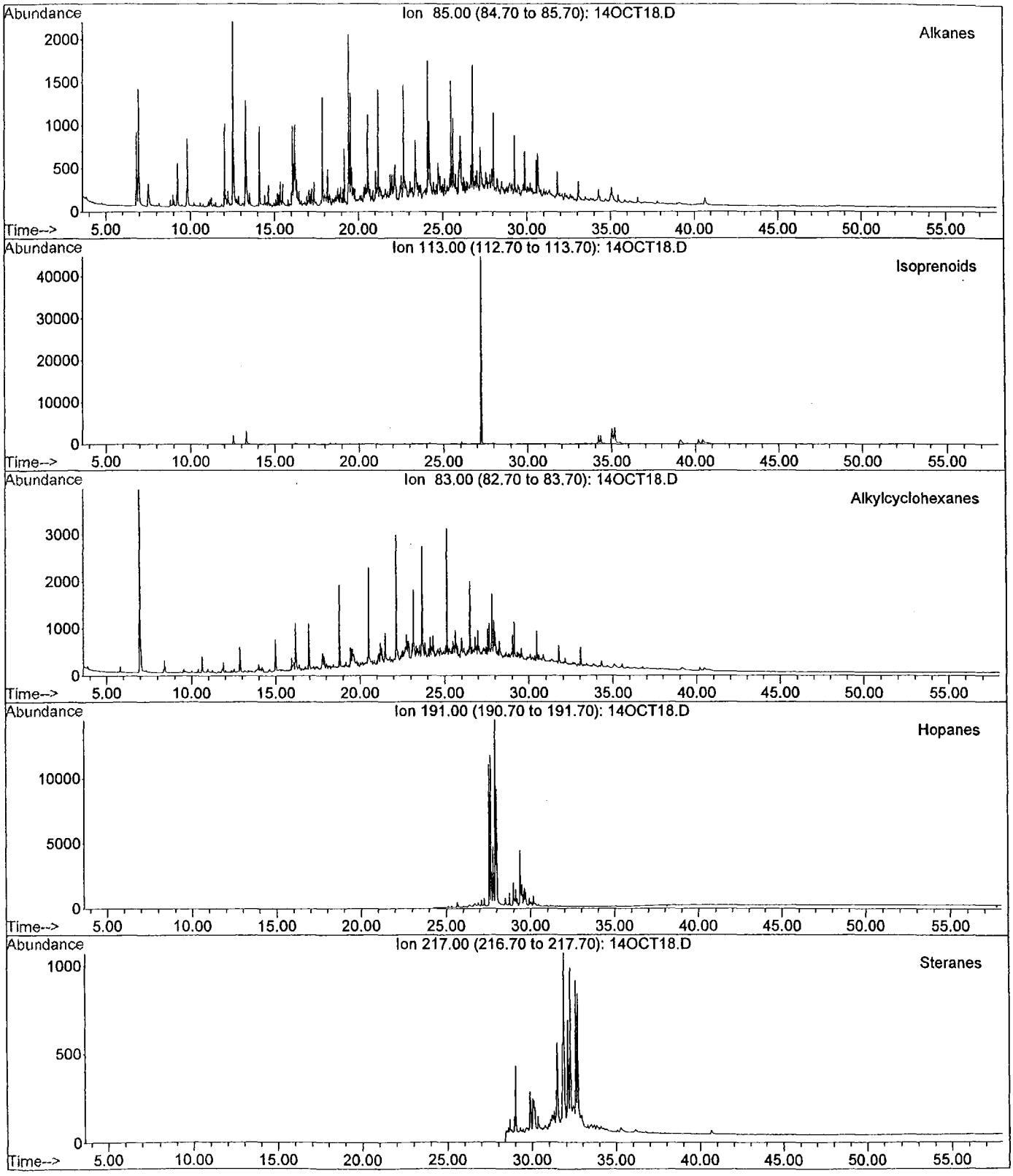
Appendix E

Extracted Ion Current Profiles (EICs)

Primary Ions for Target Compounds and Compound Groups

Target Compound or Group	Abbreviation	Ion
Alkylated cyclohexanes		83
Normal alkanes, pristane, phytane		85
Isoprenoid hydrocarbons, pristane, phytane		113
Olefins		115
Hopanes		191
Steranes		217
Benzene	B	78
Monoalkylbenzenes	C1B	91
Dialkylbenzenes	C2B	91
Trialkylbenzenes	C3B	105
Tetraalkylbenzenes	C4B	119
Pentaalkylbenzenes	C5B	133
Naphthalene	N	128
Monoalkylnaphthalenes	C1N	142
Dialkylnaphthalenes	C2N	156
Trialkylnaphthalenes	C3N	170
Tetraalkylnaphthalenes	C4N	184
Fluorene	F	166
Monoalkylfluorenes	C1F	180
Dialkylfluorenes	C2F	194
Trialkylfluorenes	C3F	208
Phenanthrene, anthracene	PA	178
Monoalkylphenanthrenes and anthracenes	C1PA	192
Dialkylphenanthrenes and anthracenes	C2PA	206
Trialkylphenanthrenes and anthracenes	C3PA	220
Tetraalkylphenanthrenes and anthracenes	C4PA	234
Dibenzothiophene	D	184
Monoalkyldibenzothiophenes	C1D	198
Dialkyldibenzothiophenes	C2D	212
Trialkyldibenzothiophenes	C3D	226
Fluoranthene, pyrene	FP	202
Monoalkylfluoranthenes and pyrenes	C1FP	216
Dialkylfluoranthenes and pyrenes	C2FP	230
Trialkyfluoranthenes and pyrenes	C3FP	244
Benz(a)anthracene, chrysene	BC	228
Monoalkylbenz(a)anthracenes and chrysenes	C1BC	242
Dialkylbenz(a)anthracenes and chrysenes	C2BC	256
Trialkylbenz(a)anthracenes and chrysenes	C3BC	270
Tetraalkylbenz(a)anthrancenes and chrysenes	C4BC	284

Field ID: T10-1
Lab ID: GT020924-01 1:10
File: G:\1\DATA\021014\14OCT18.D
Acquired: 15 Oct 2002 7:15 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC



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Lab ID: GT020924-01 1:10
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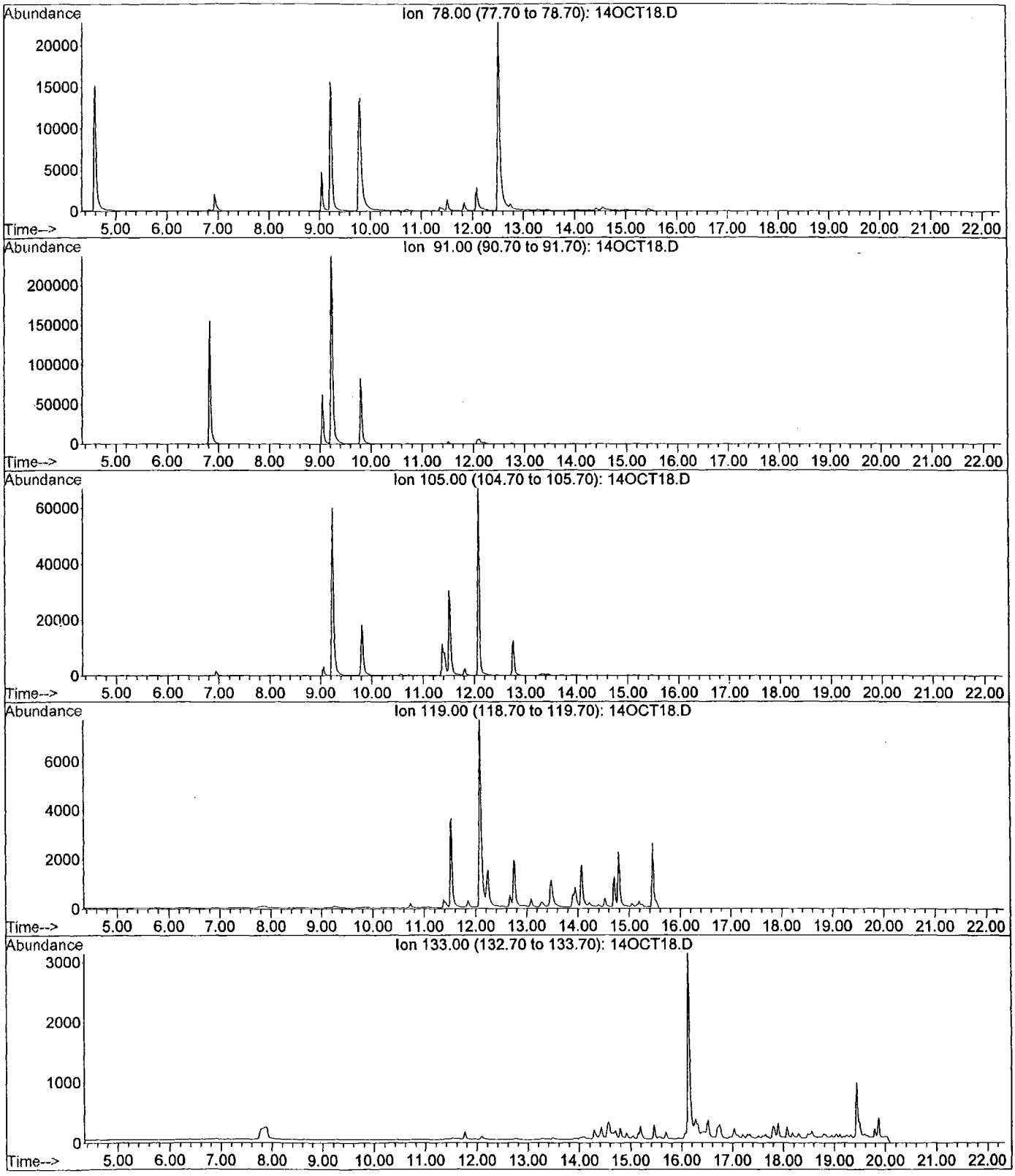
Acquired: 15 Oct 2002 7:15 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC

Benzenes



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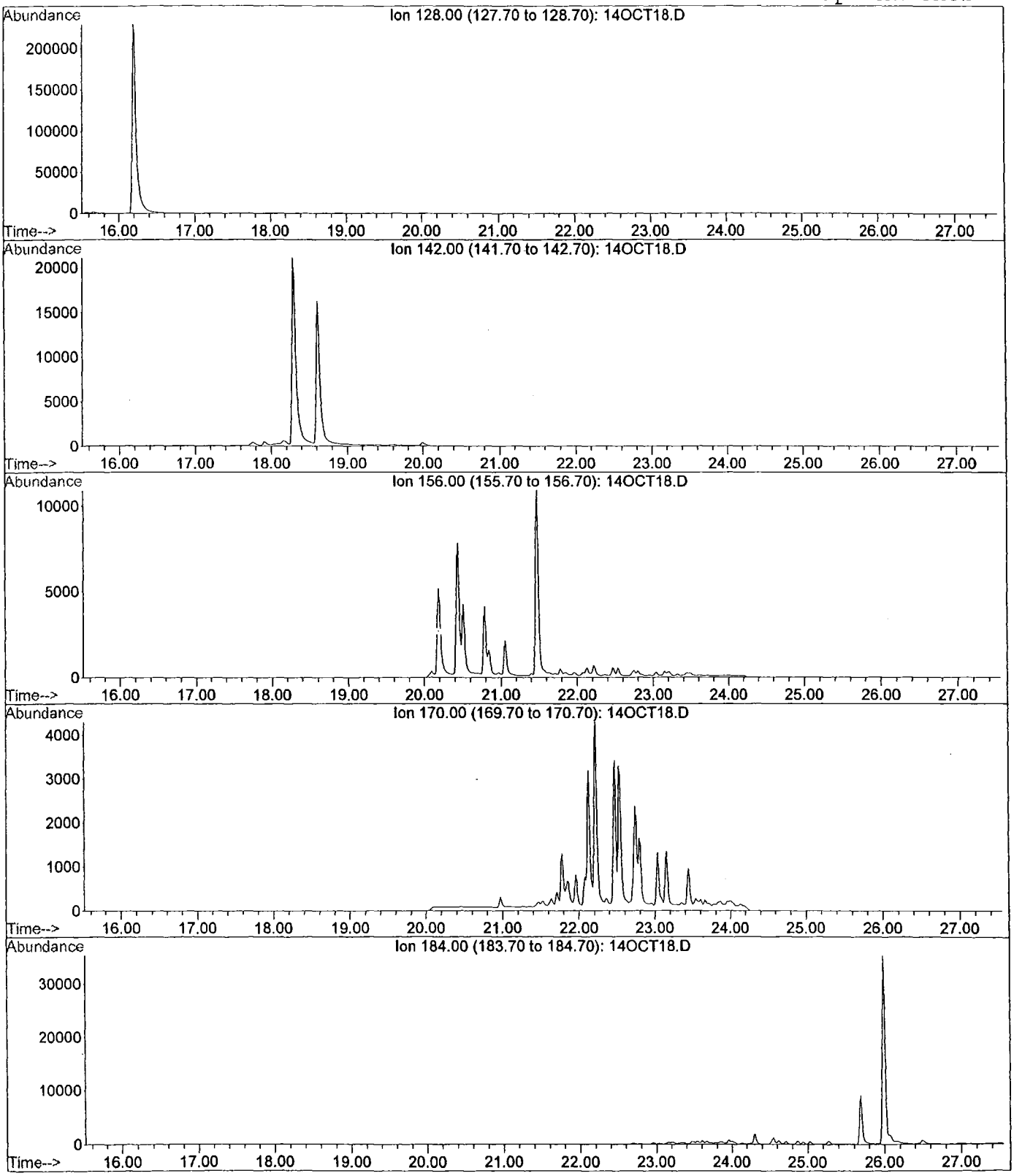
Instrument: GC/MS Ins Operator: ECC

Naphthalenes



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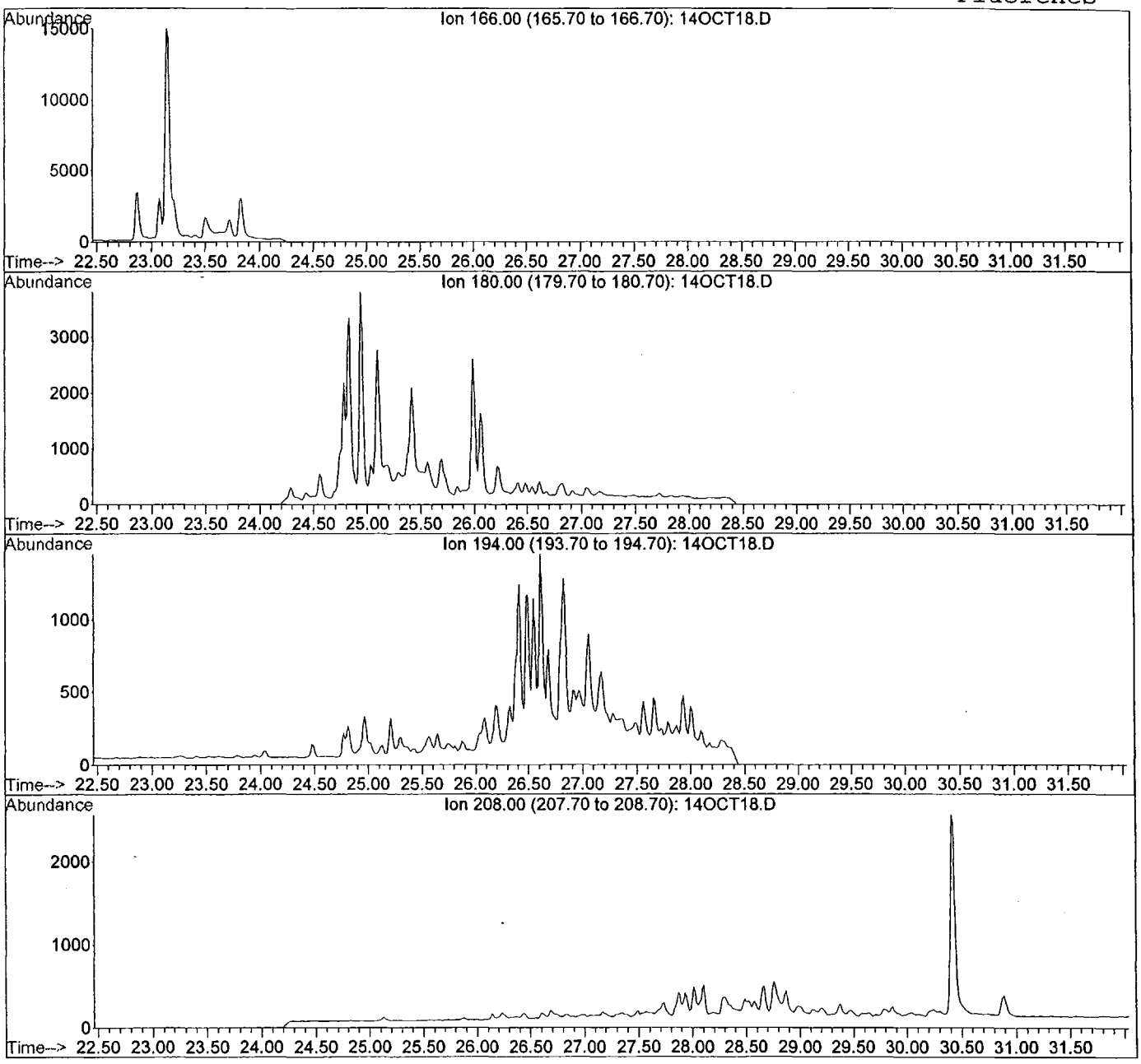
Fluorenes



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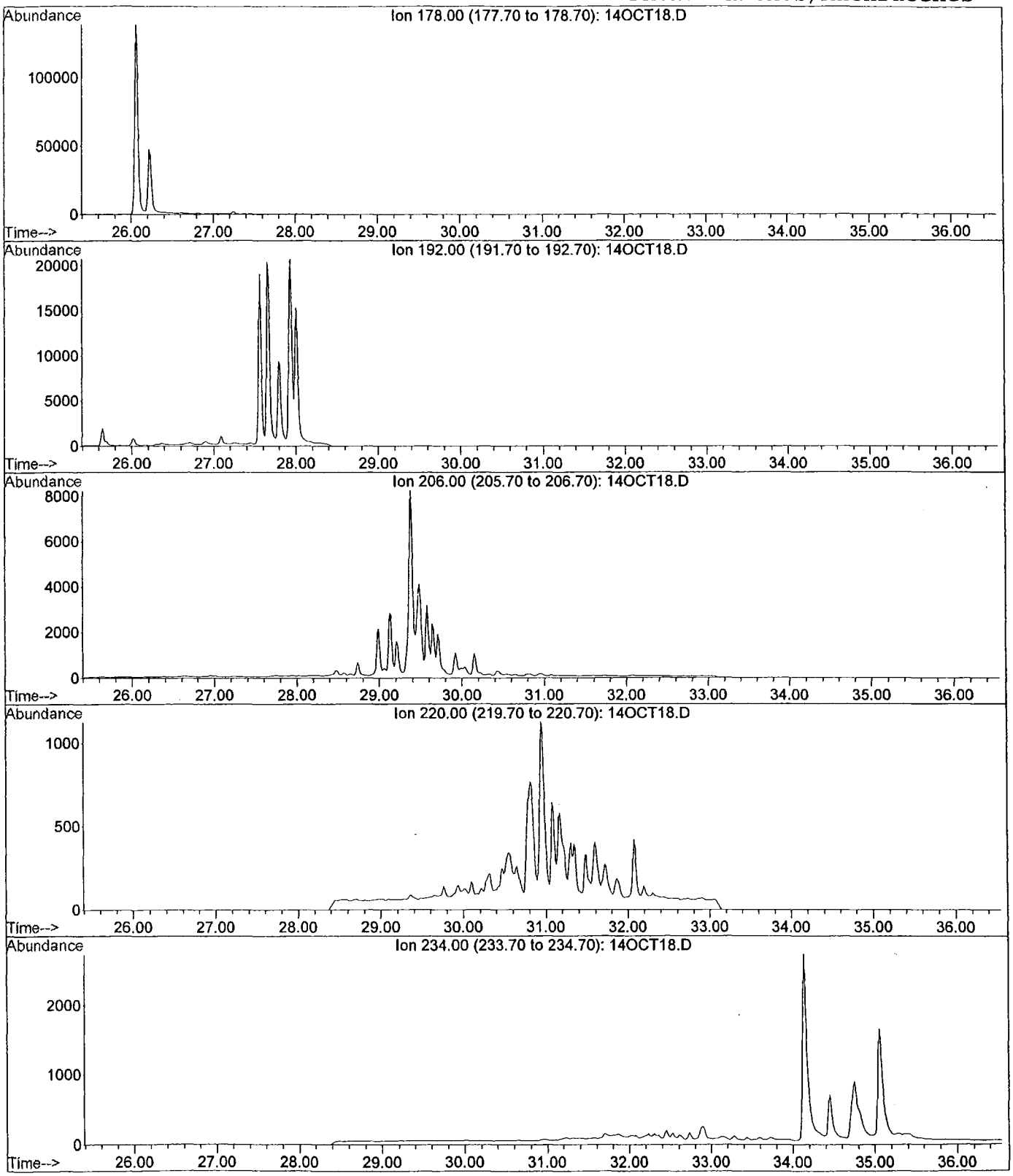
Phenanthrenes/Anthracenes



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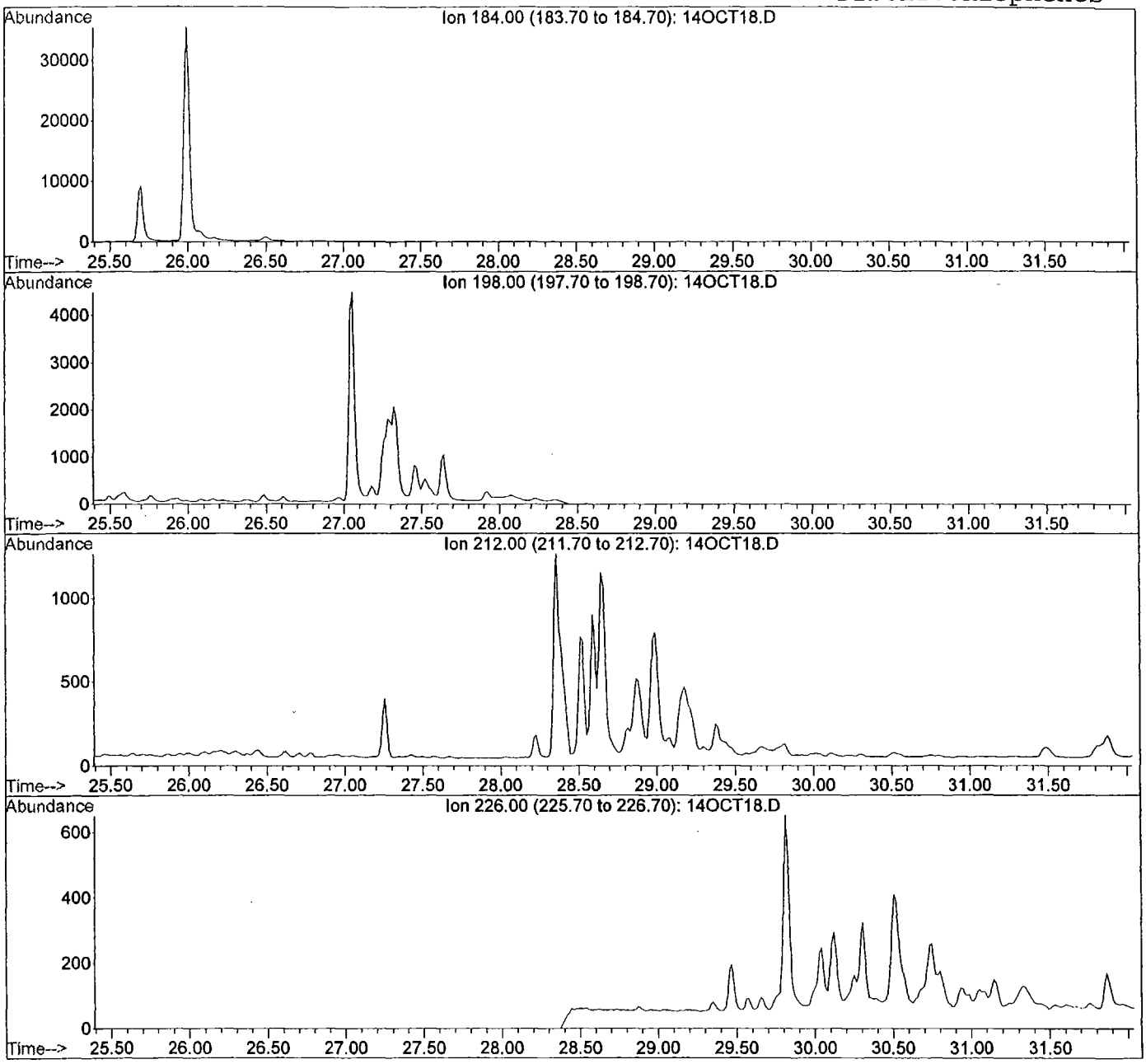
Dibenzothiophenes



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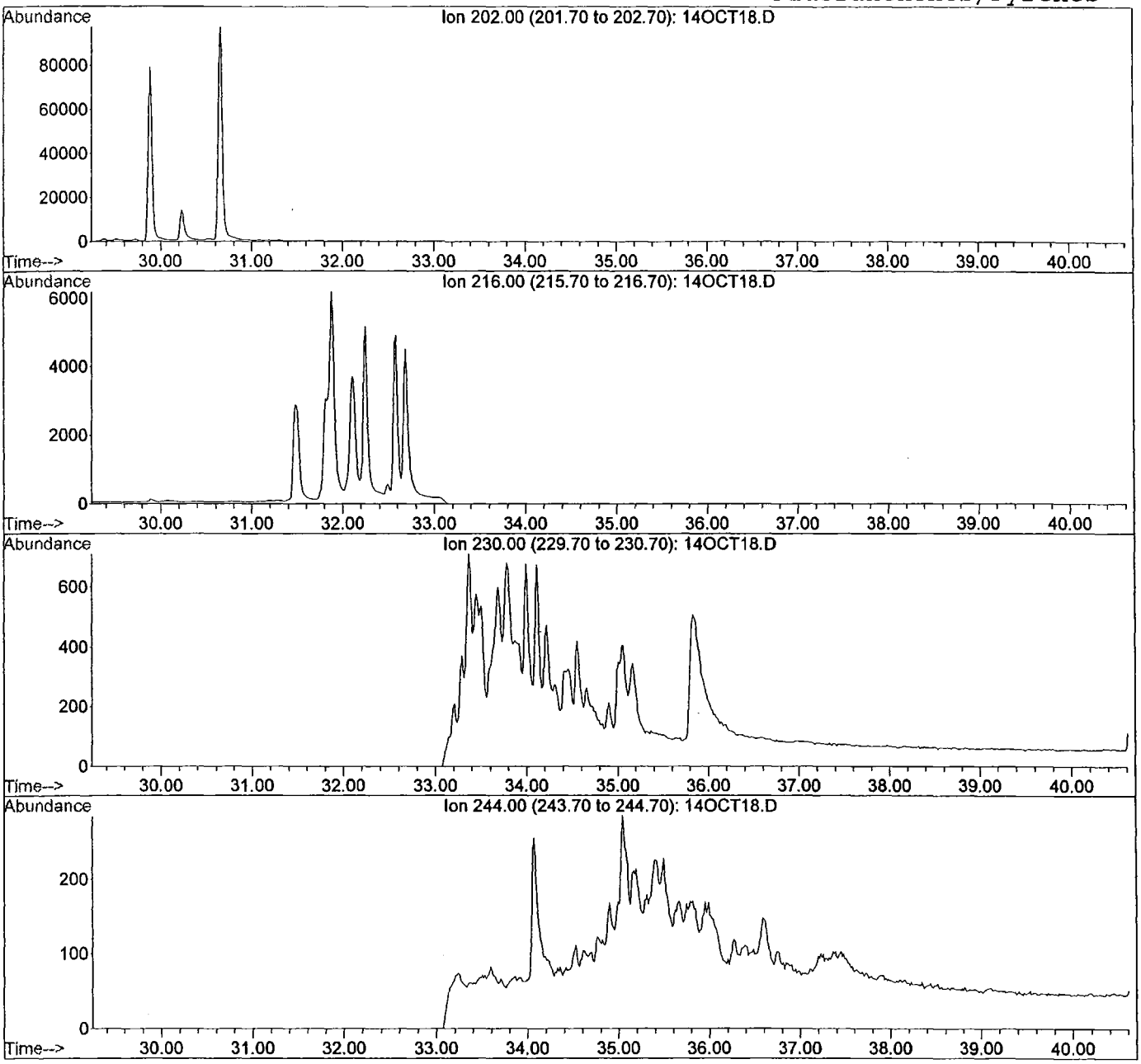
Acquired: 15 Oct 2002 7:15 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC

Fluoranthenes/Pyrenes



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File: G:\1\DATA\021014\14OCT18.D
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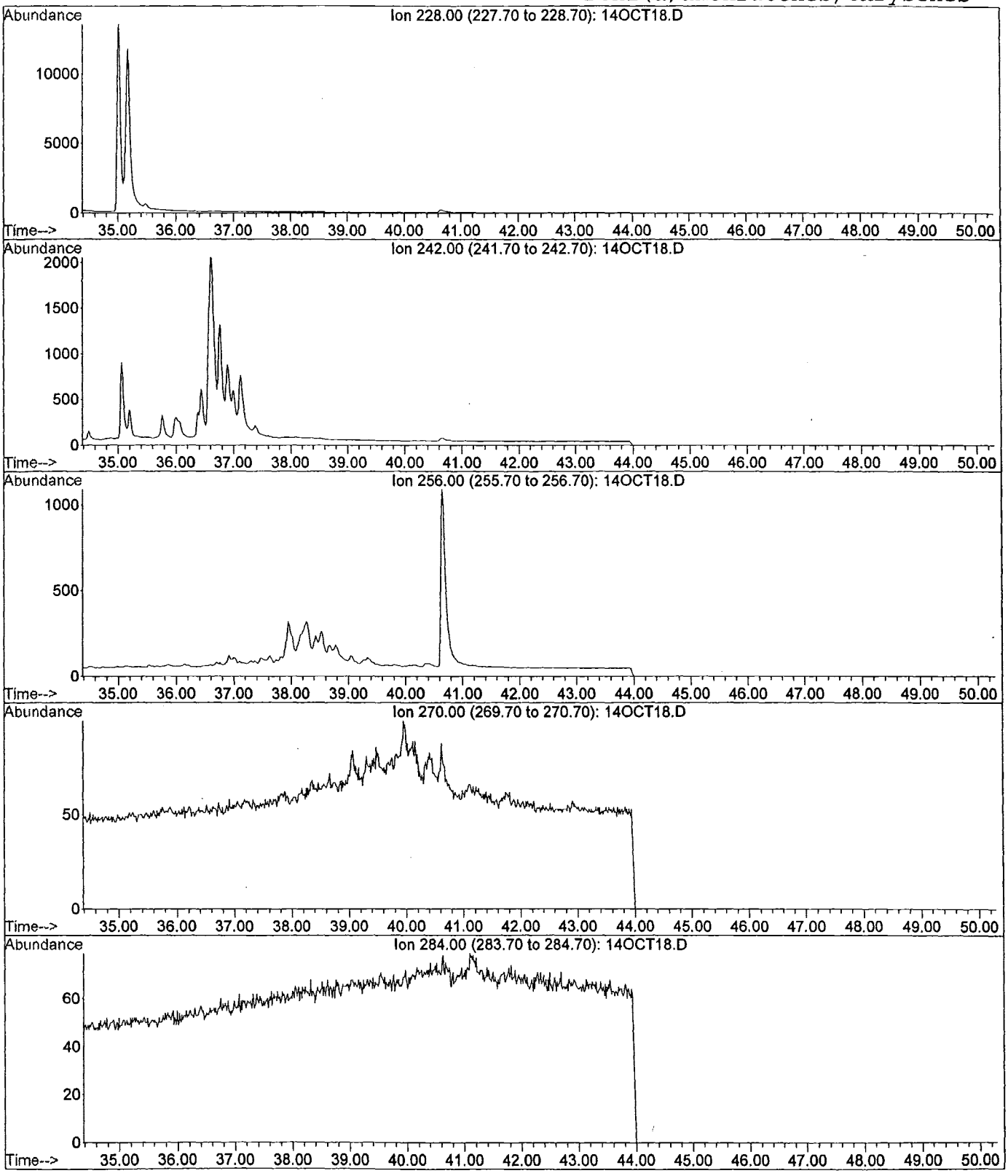
Instrument: GC/MS Ins Operator: ECC

Benz(a)anthracenes/Chrysenes



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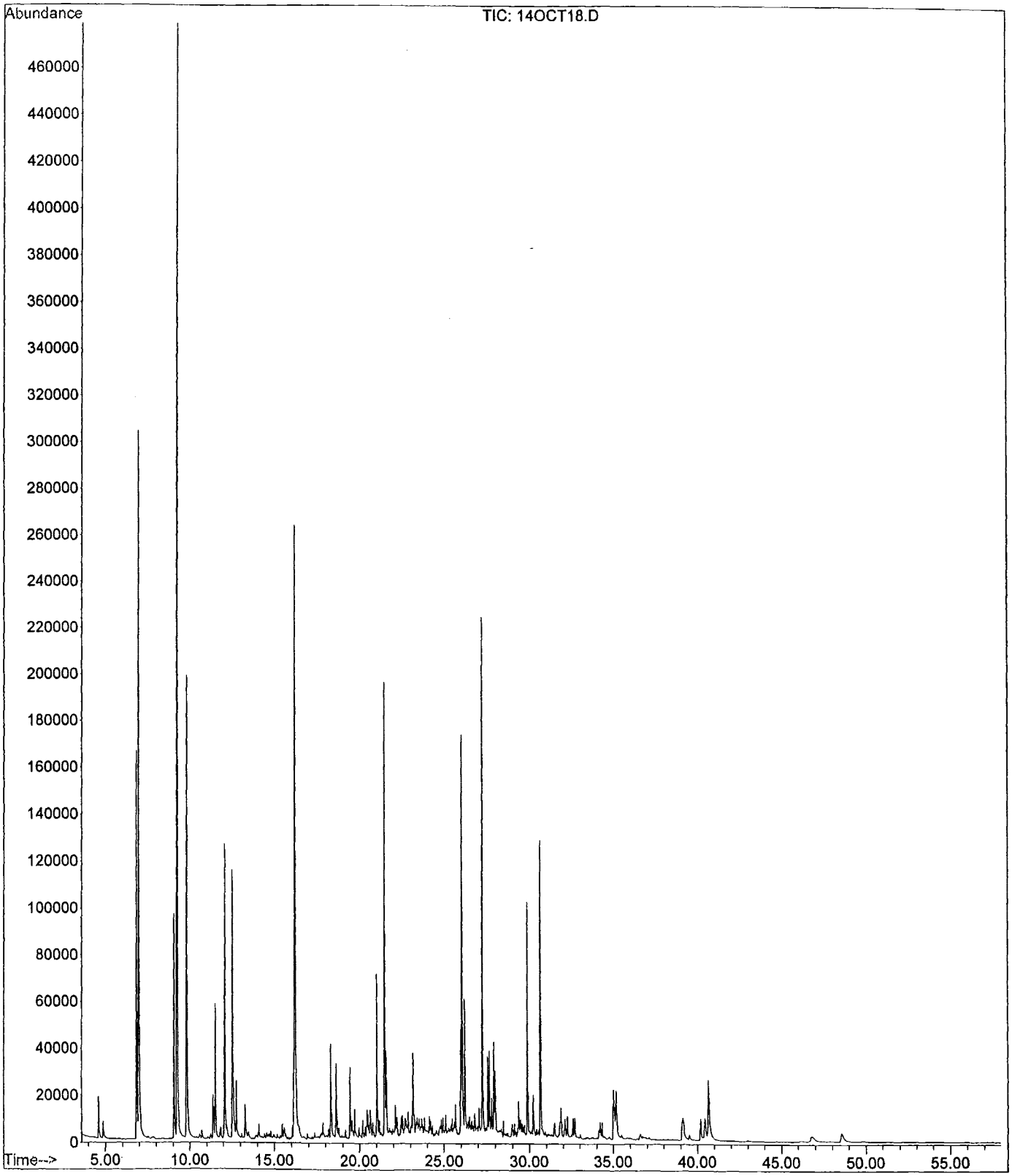

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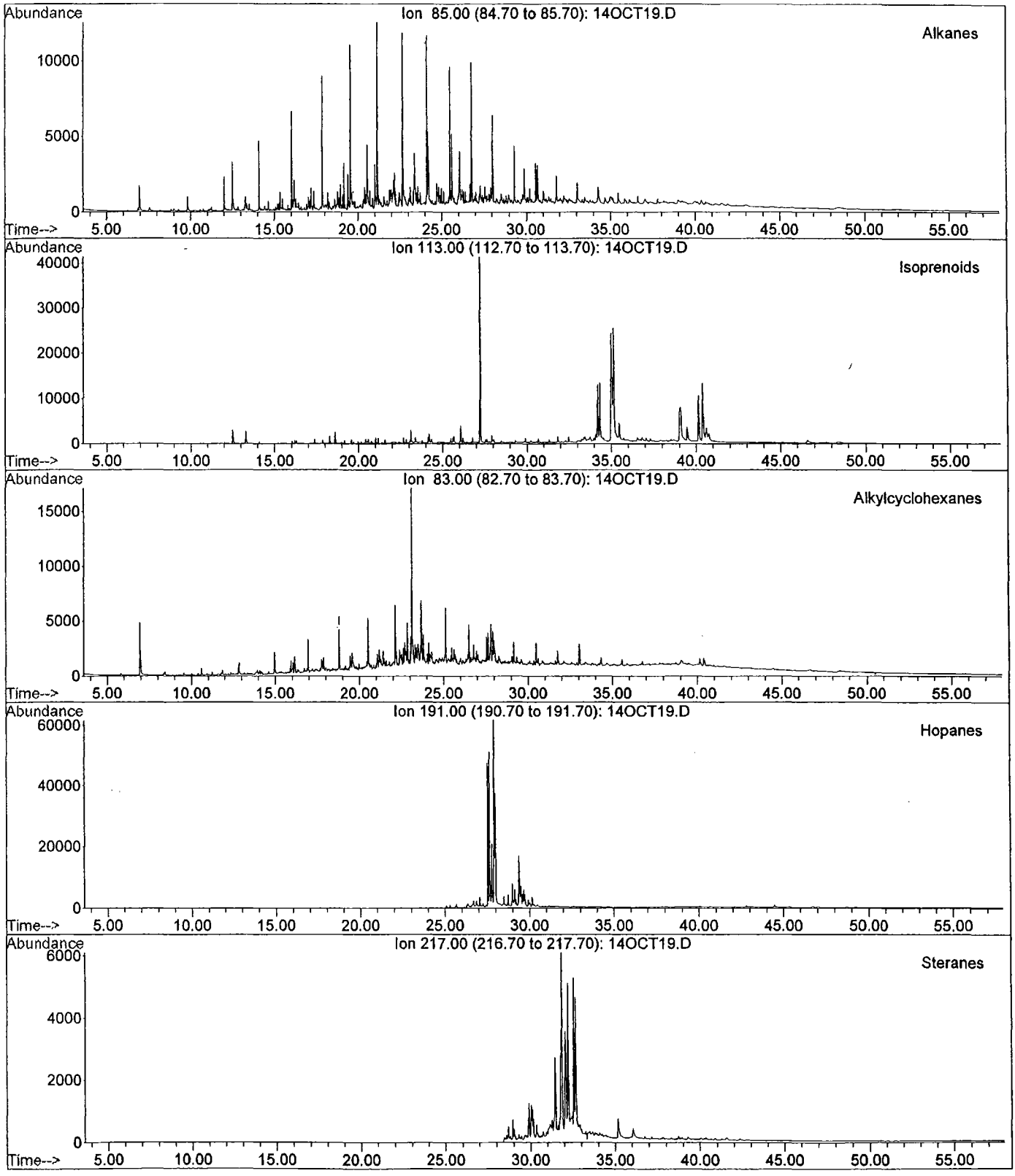
Acquired: 15 Oct 2002 8:26 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC



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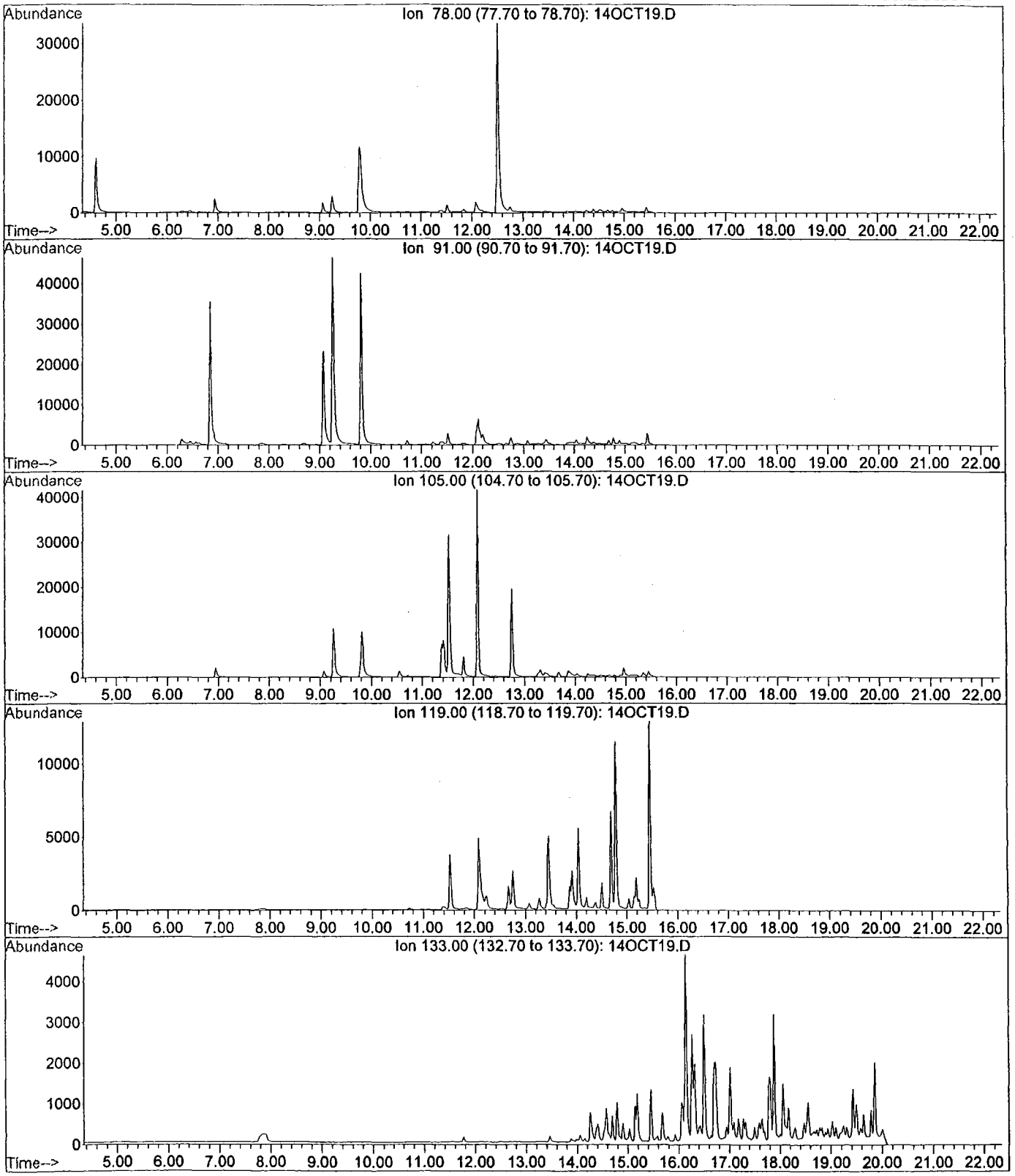
Instrument: GC/MS Ins Operator: ECC

Benzenes



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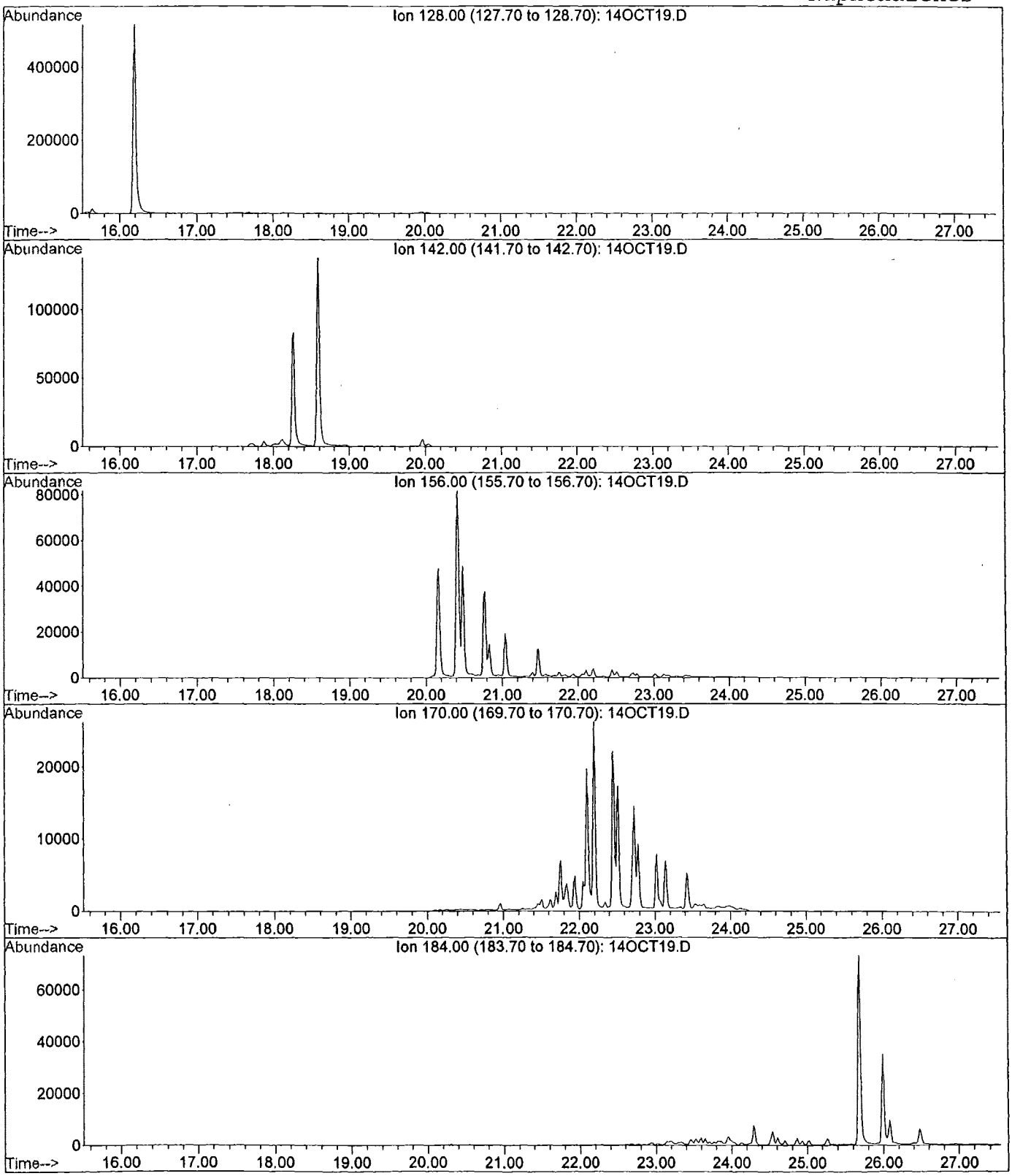
Instrument: GC/MS Ins Operator: ECC

Naphthalenes



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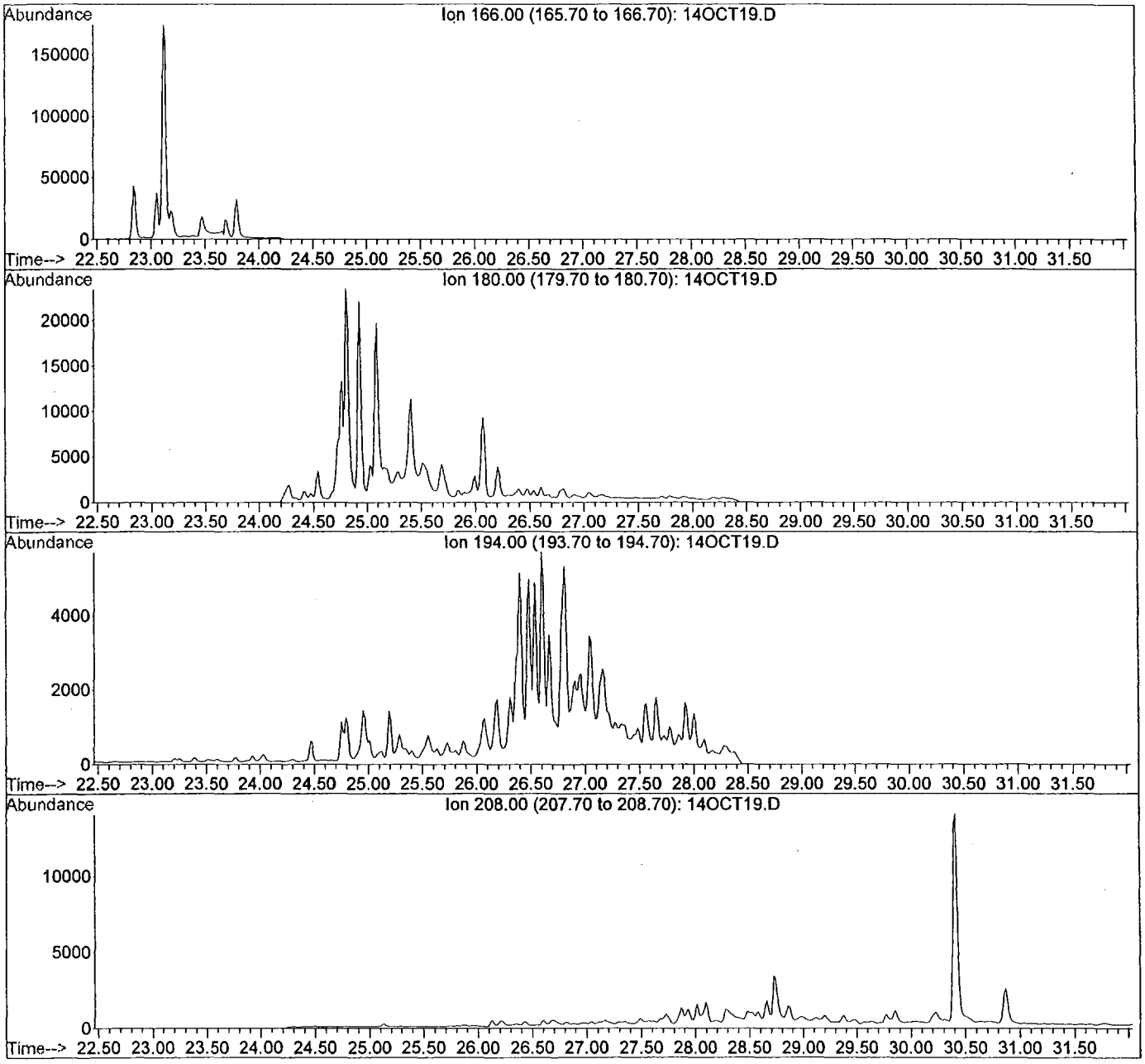
Fluorenes



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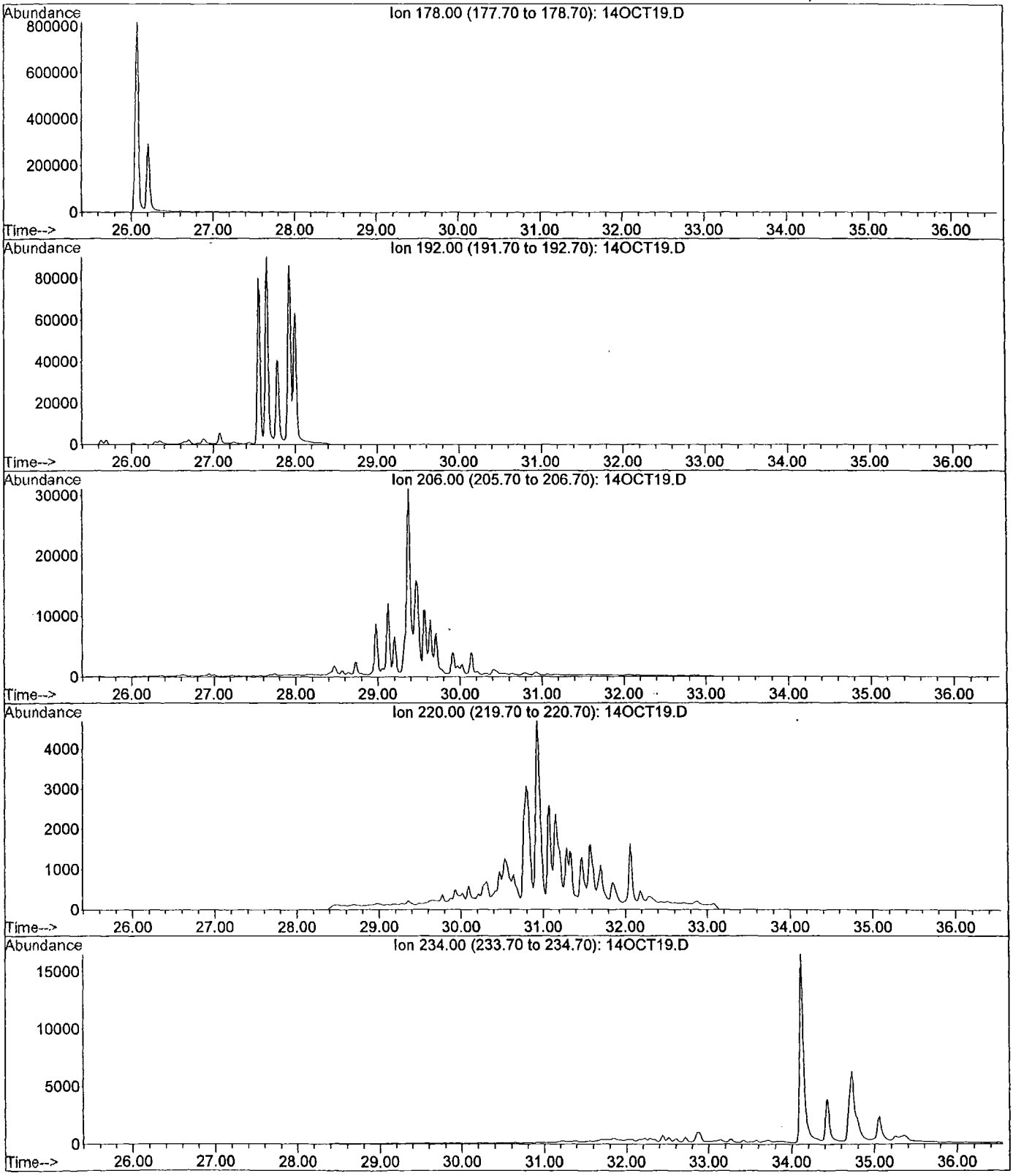
Instrument: GC/MS Ins Operator: ECC

Phenanthrenes/Anthracenes



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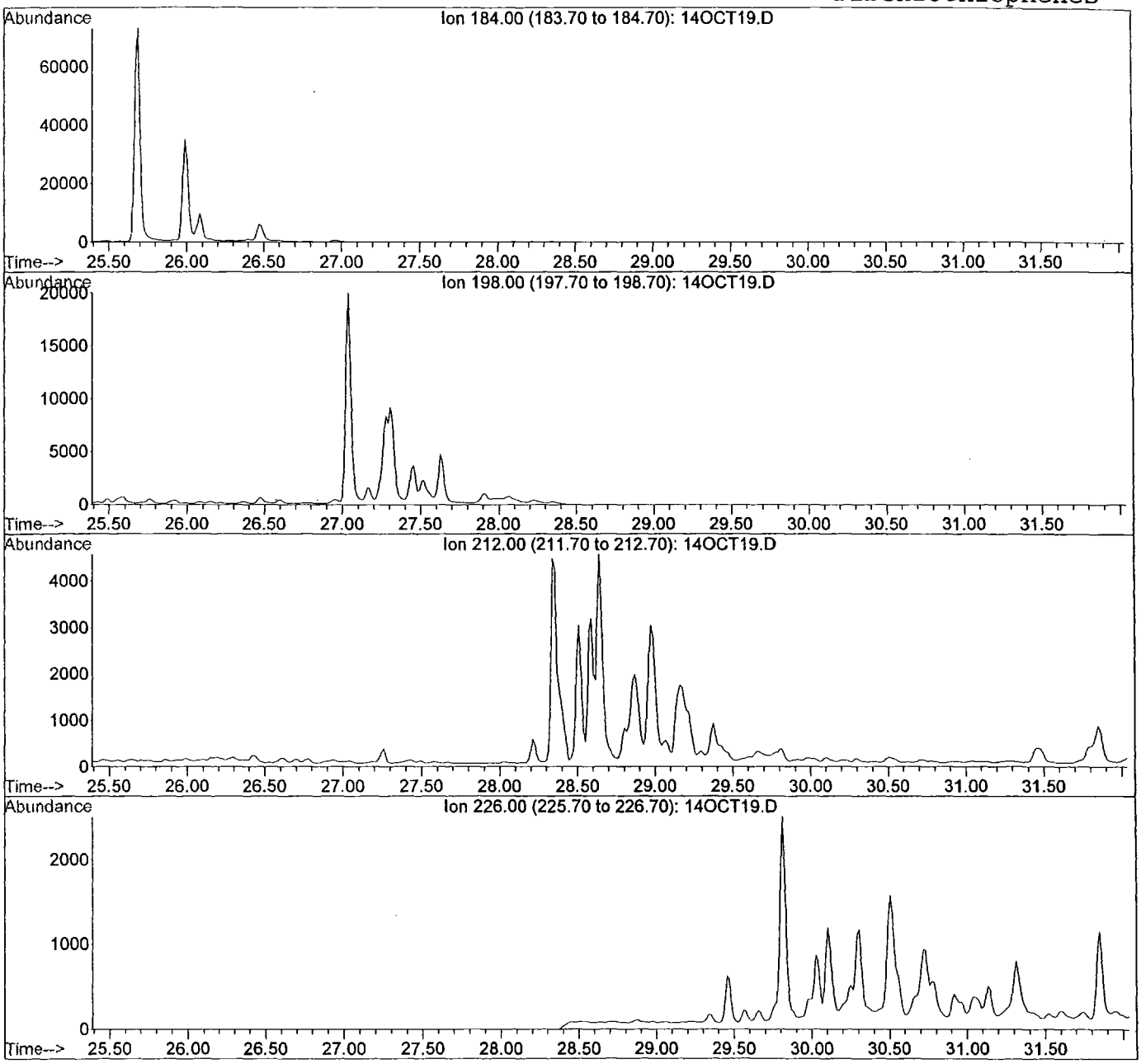
Acquired: 15 Oct 2002 8:26 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC

Dibenzothiophenes



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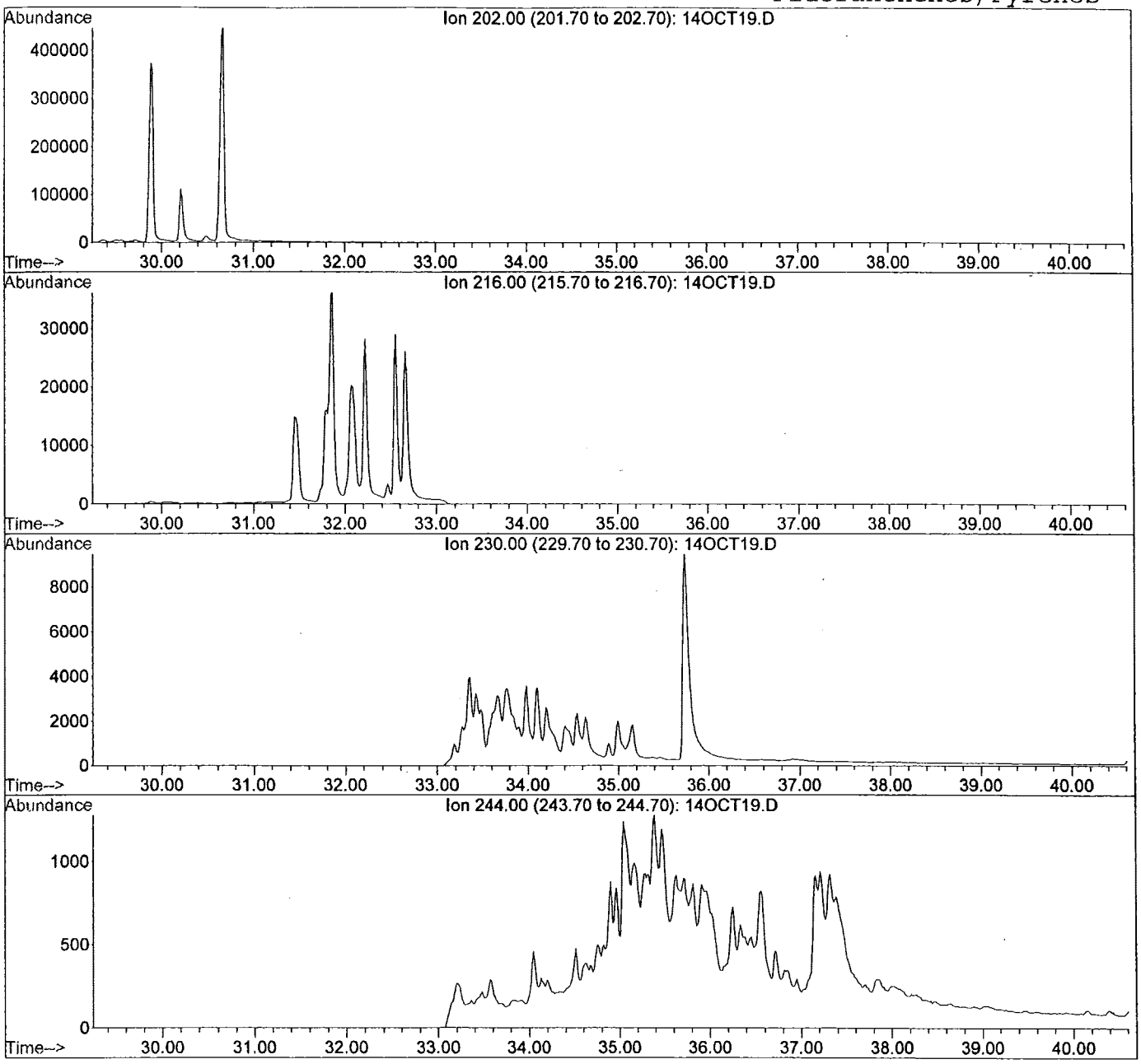
Fluoranthenes/Pyrenes



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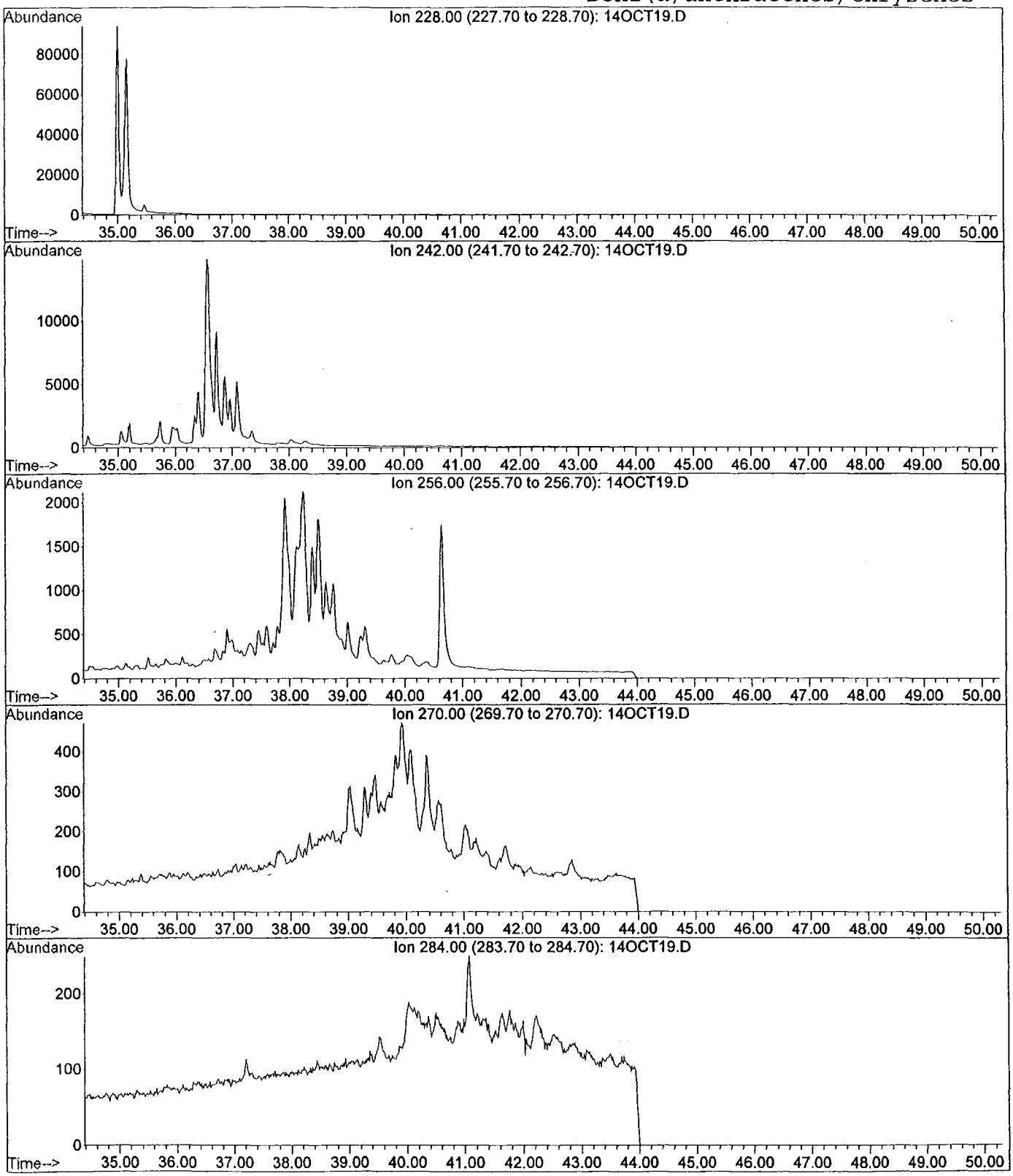
Benz(a)anthracenes/Chrysenes



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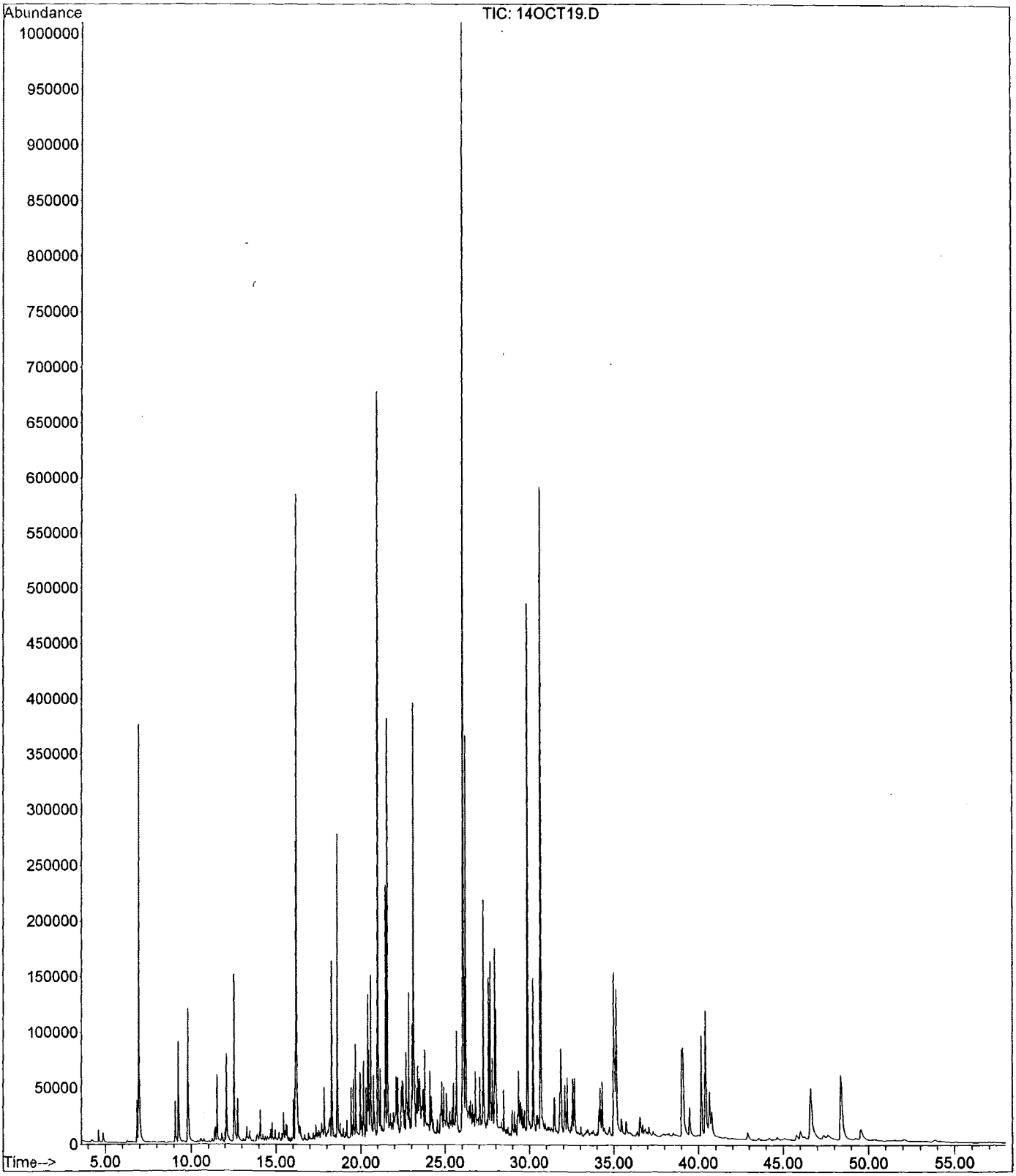
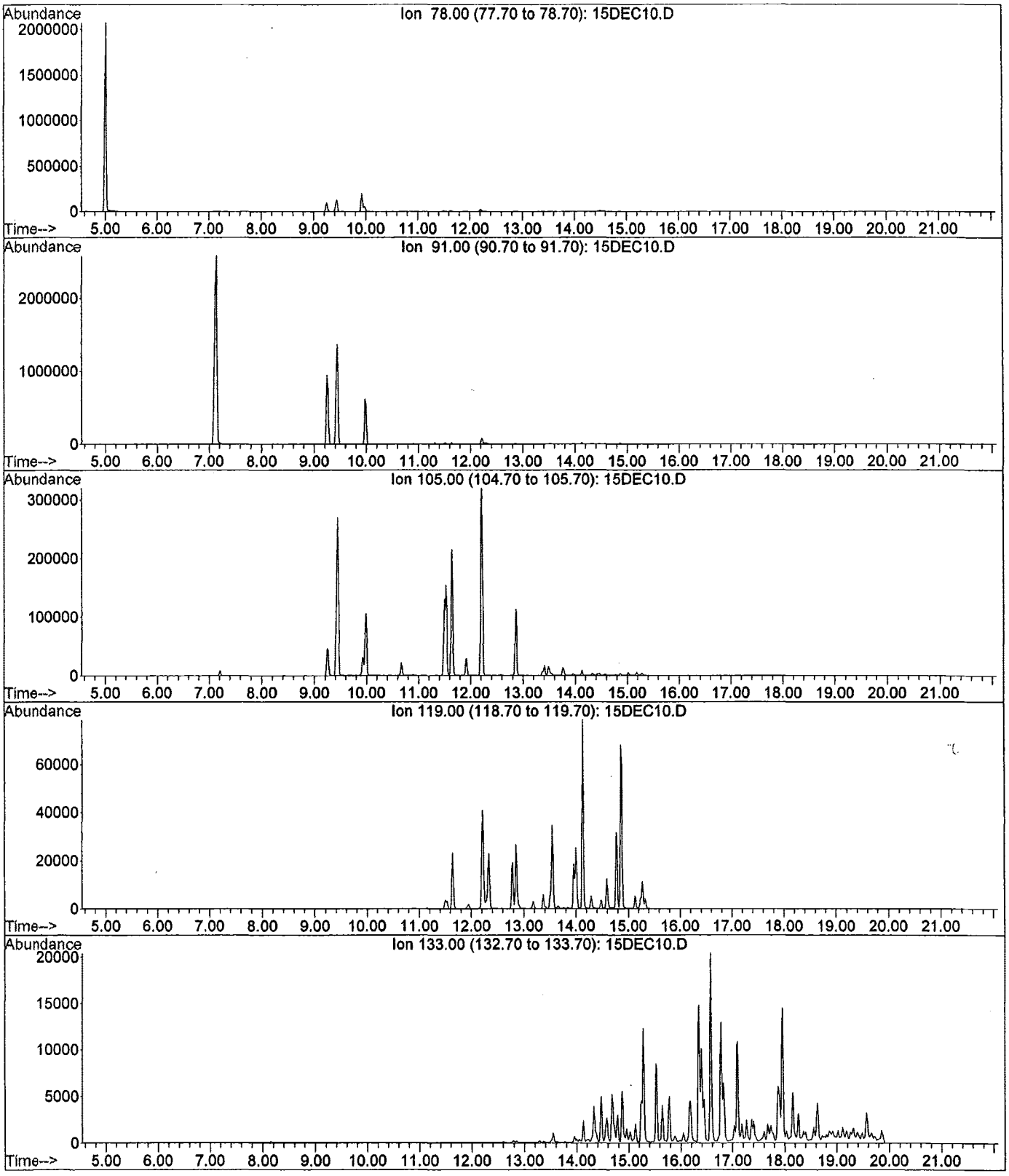


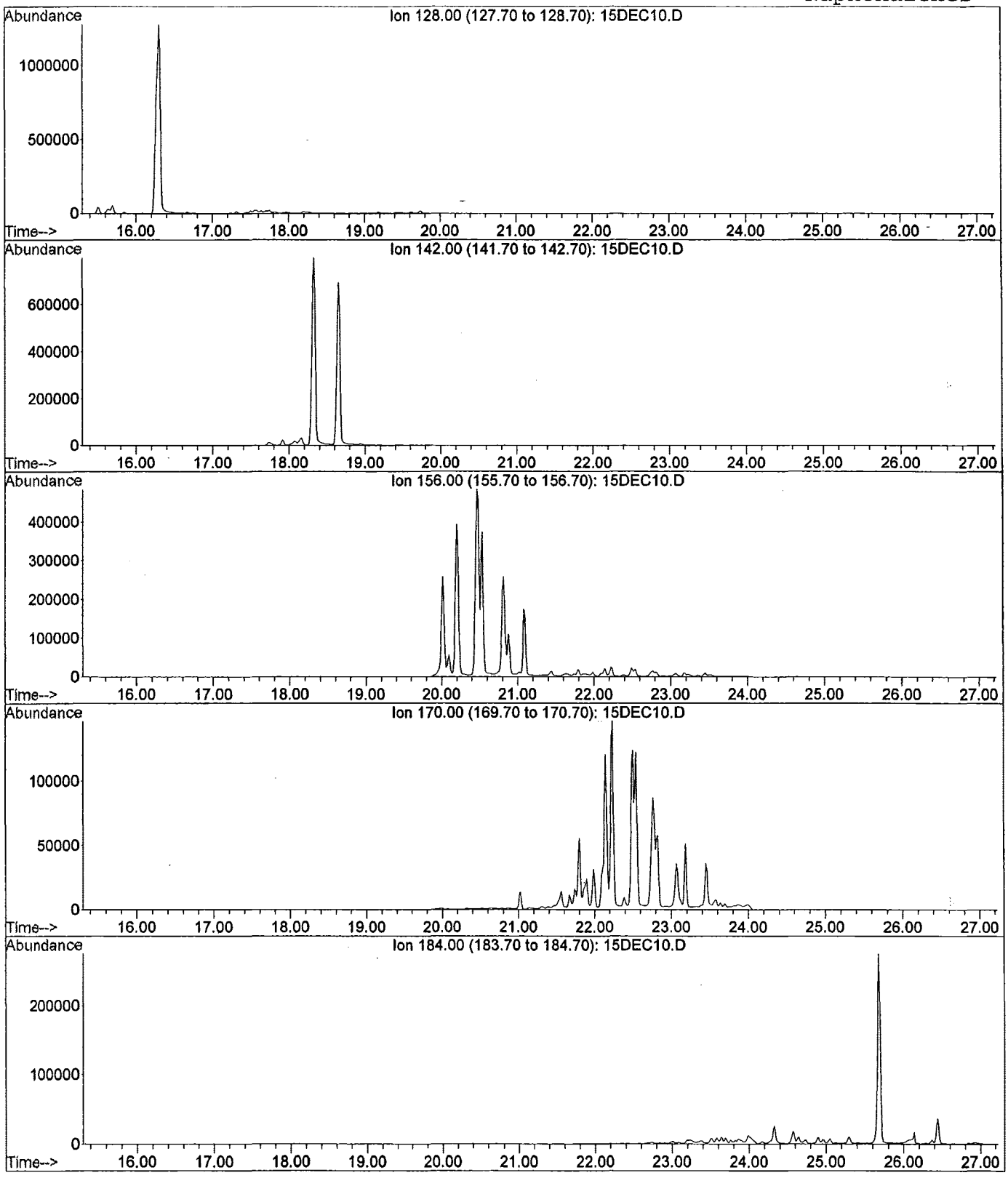
Field ID: T10-3
Lab ID: GT021121-01 1/10
File: I:\4\DATA\021215\15DEC10.D
Acquired: 16 Dec 2002 12:10 am using AcqMethod MET4008
Instrument: GC4-MS_59 Operator: DRC

Benzenes



Field ID: T10-3
Lab ID: GT021121-01 1/10
File: I:\4\DATA\021215\15DEC10.D
Acquired: 16 Dec 2002 12:10 am using AcqMethod MET4008
Instrument: GC4-MS_59 Operator: DRC

Naphthalenes



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Lab ID: GT021121-01 1/10
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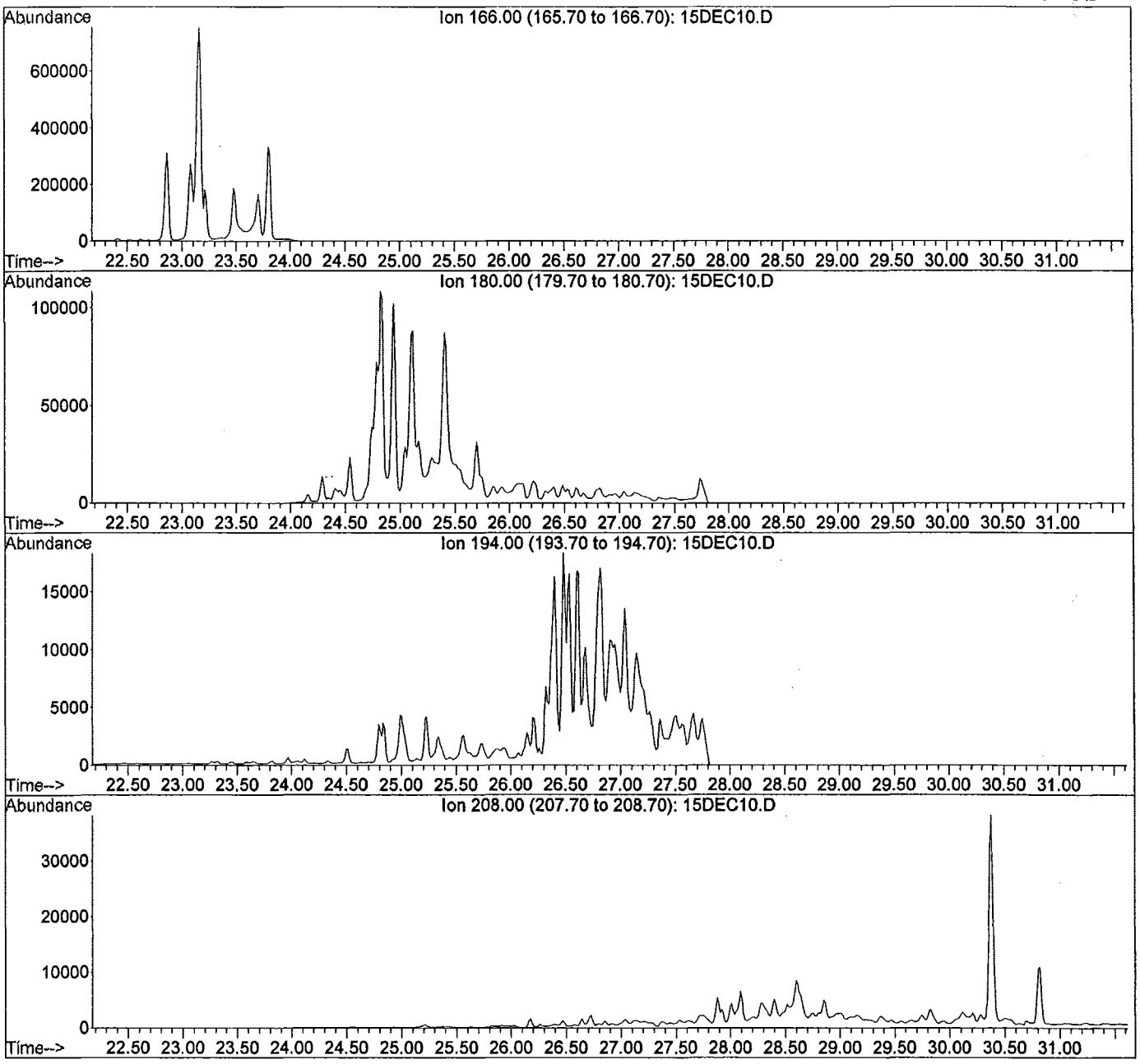
Instrument: GC4-MS_59 Operator: DRC

Fluorenes



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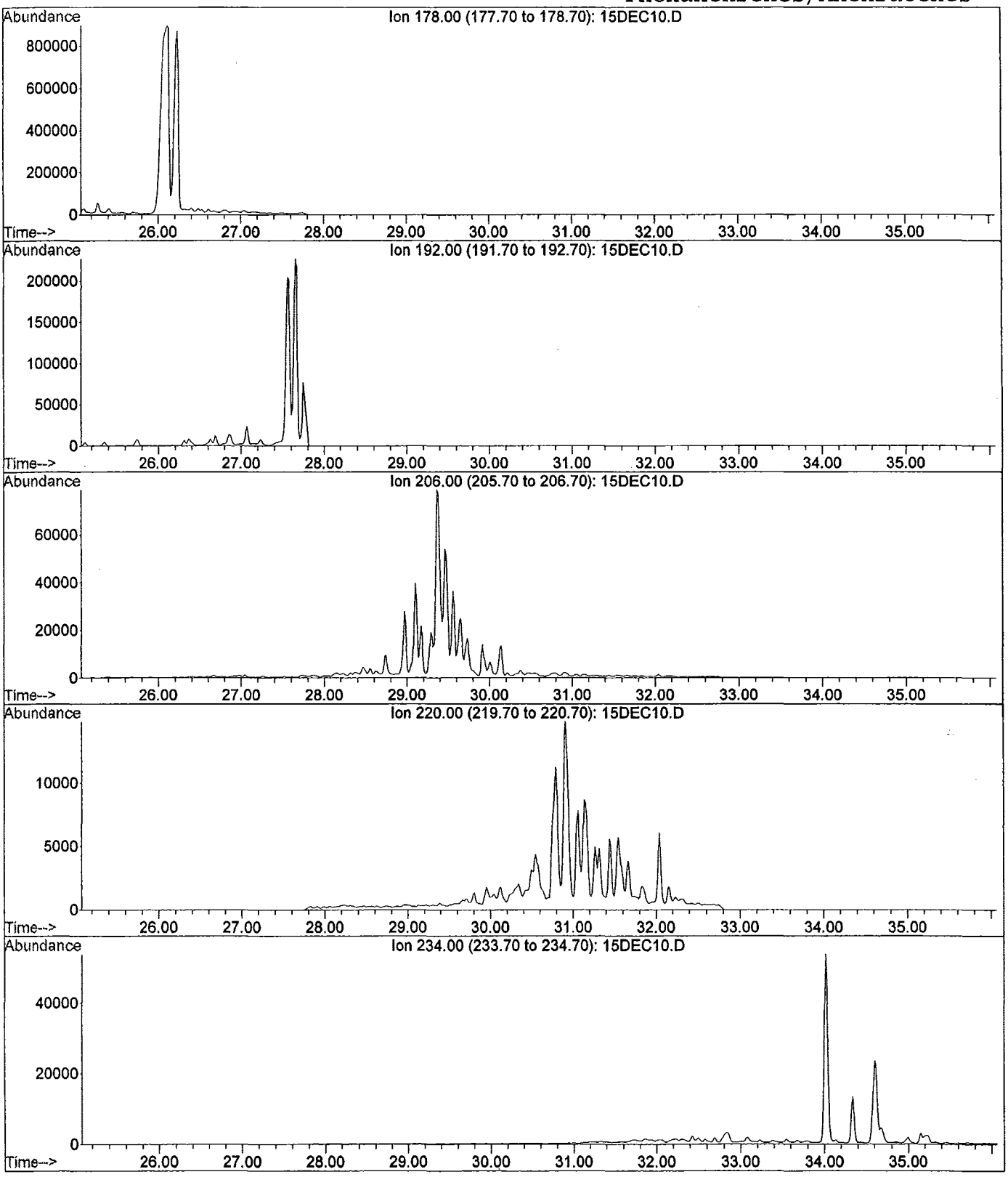
Lab ID: GT021121-01 1/10
File: I:\4\DATA\021215\15DEC10.D
Acquired: 16 Dec 2002 12:10 am using AcqMethod MET4008
Instrument: GC4-MS_59 Operator: DRC

Phenanthrenes/Anthracenes



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Lab ID: GT021121-01 1/10
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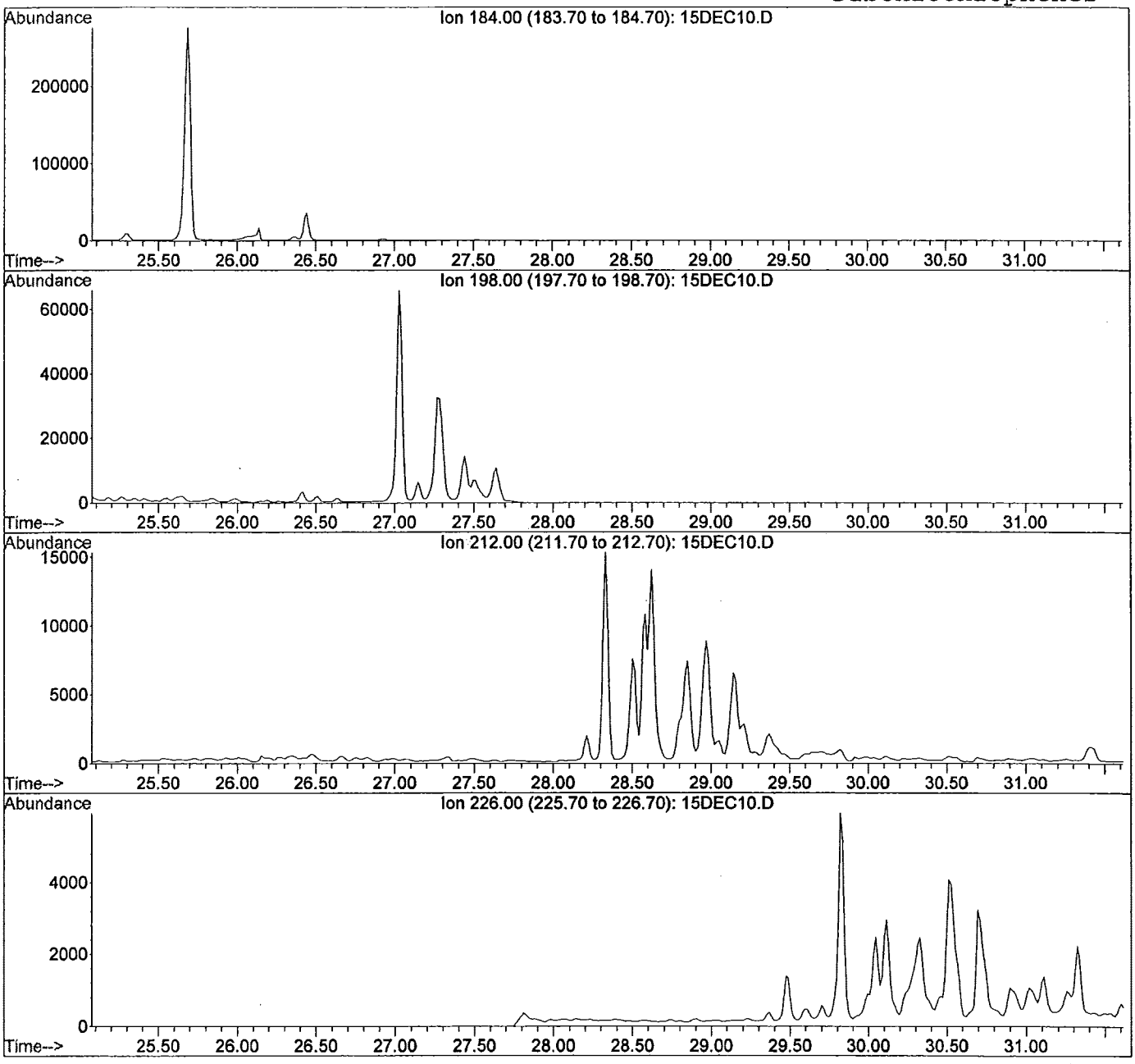
Instrument: GC4-MS_59 Operator: DRC

Dibenzothiophenes



Field ID: T10-3
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File: I:\4\DATA\021215\15DEC10.D
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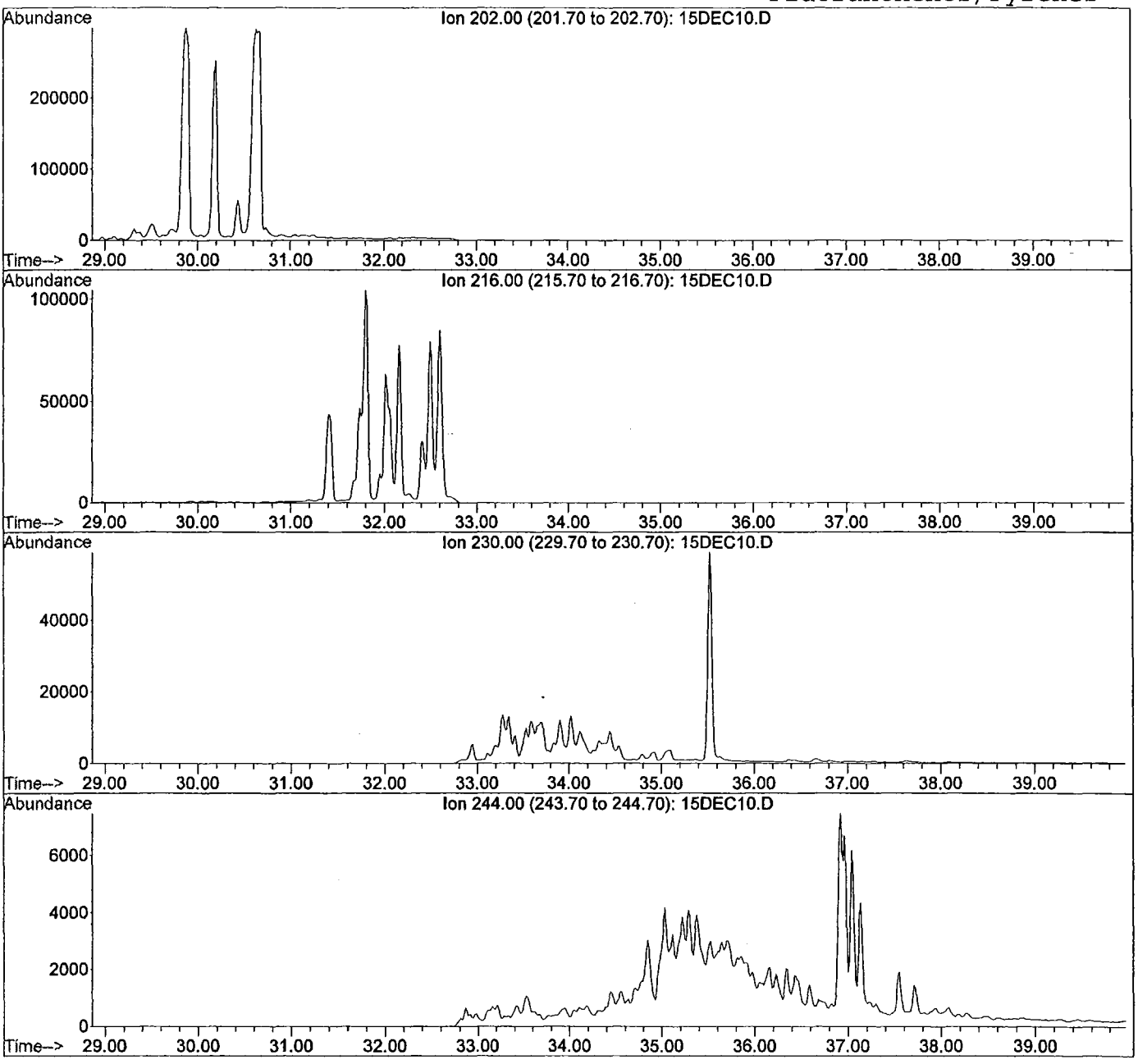
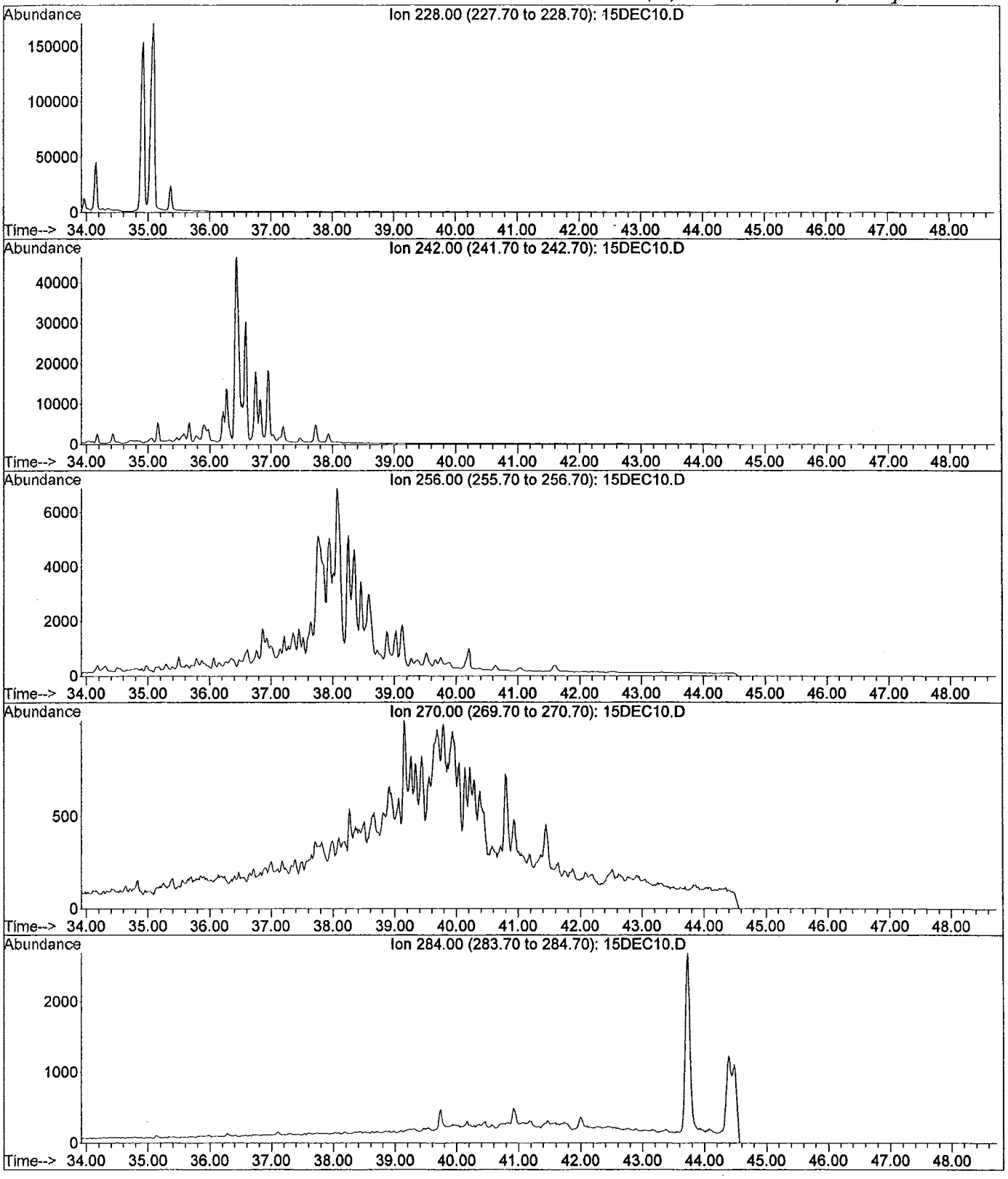
Instrument: GC4-MS_59 Operator: DRC

Fluoranthenes/Pyrenes



Field ID: T10-3
Lab ID: GT021121-01 1/10
File: I:\4\DATA\021215\15DEC10.D
Acquired: 16 Dec 2002 12:10 am using AcqMethod MET4008
Instrument: GC4-MS_59 Operator: DRC

Benz(a)anthracenes/Chrysenes



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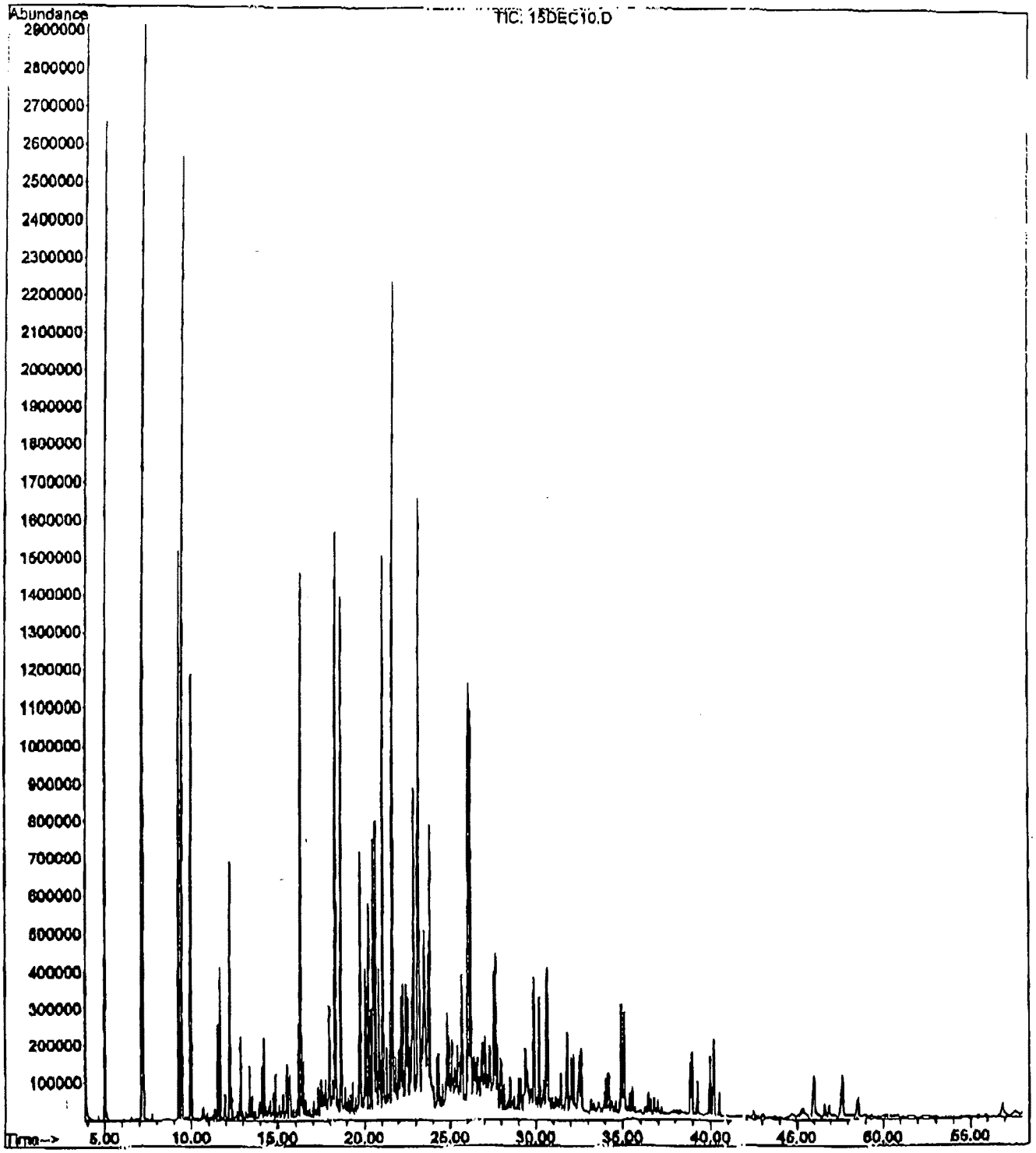
Instrument : GC4-MS_59
Sample Name: GT021121-01 1/10
Misc Info : T10-3
Vial Number: 10



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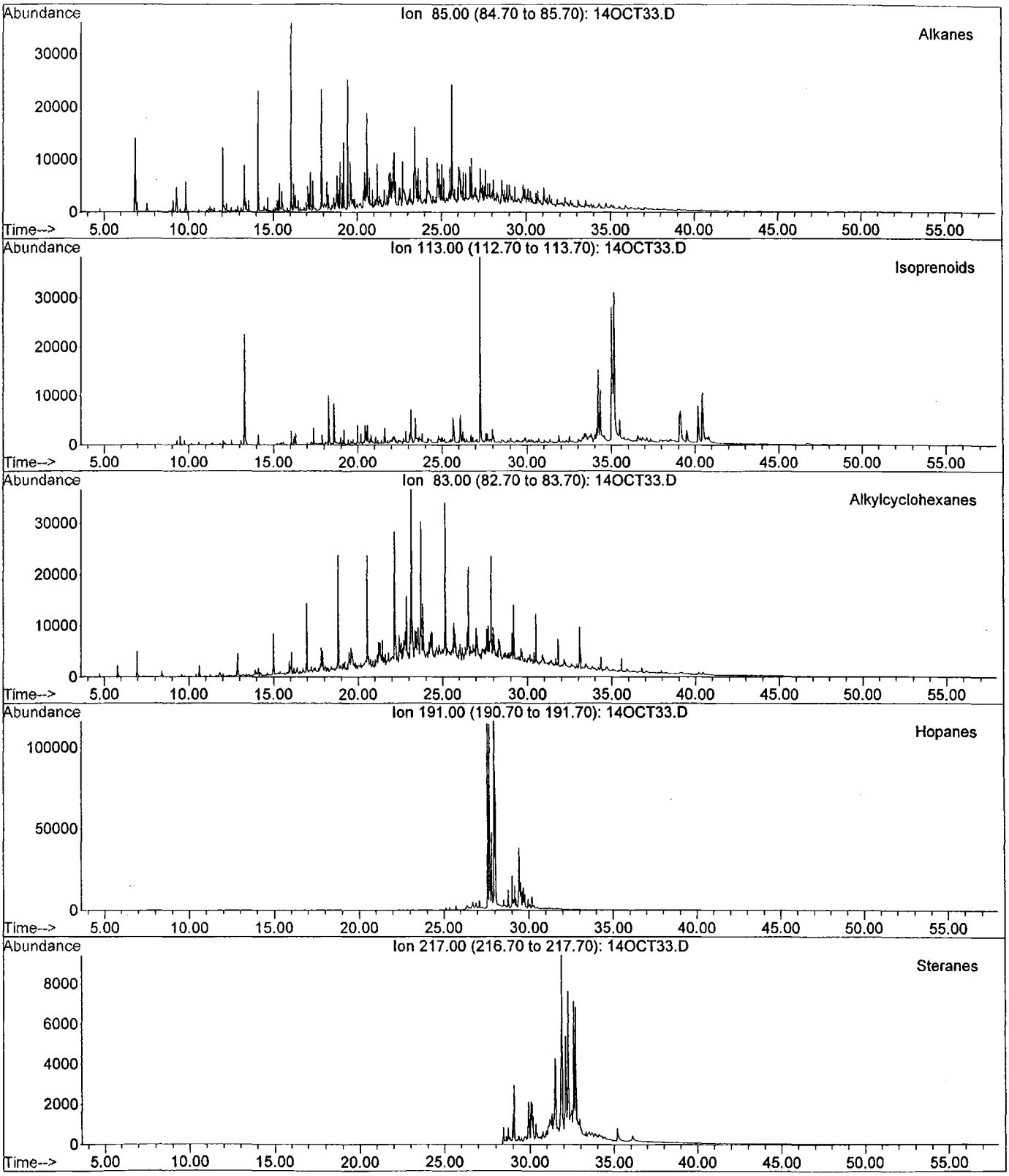
Instrument: GC/MS Ins Operator: ECC



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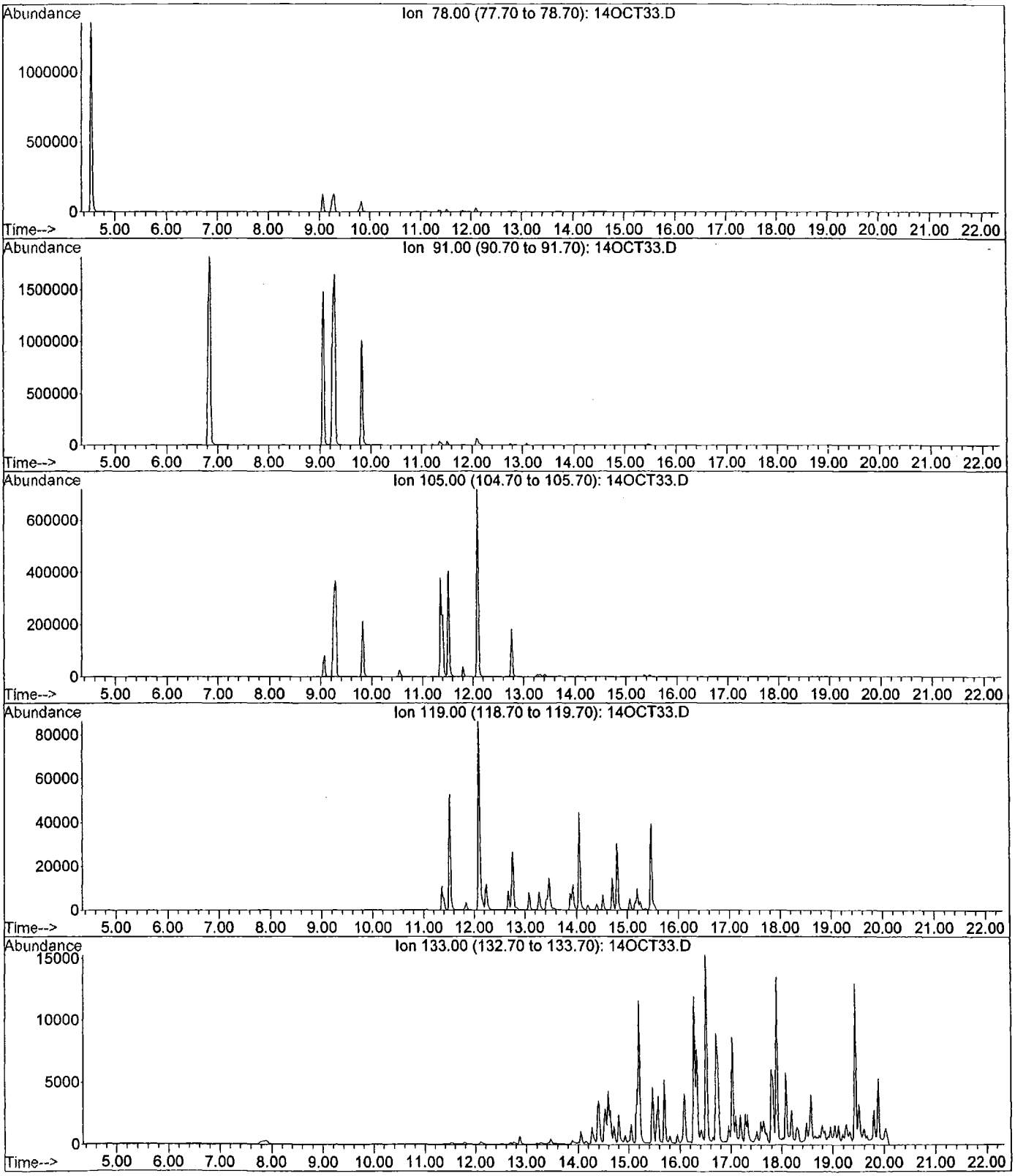
Benzenes



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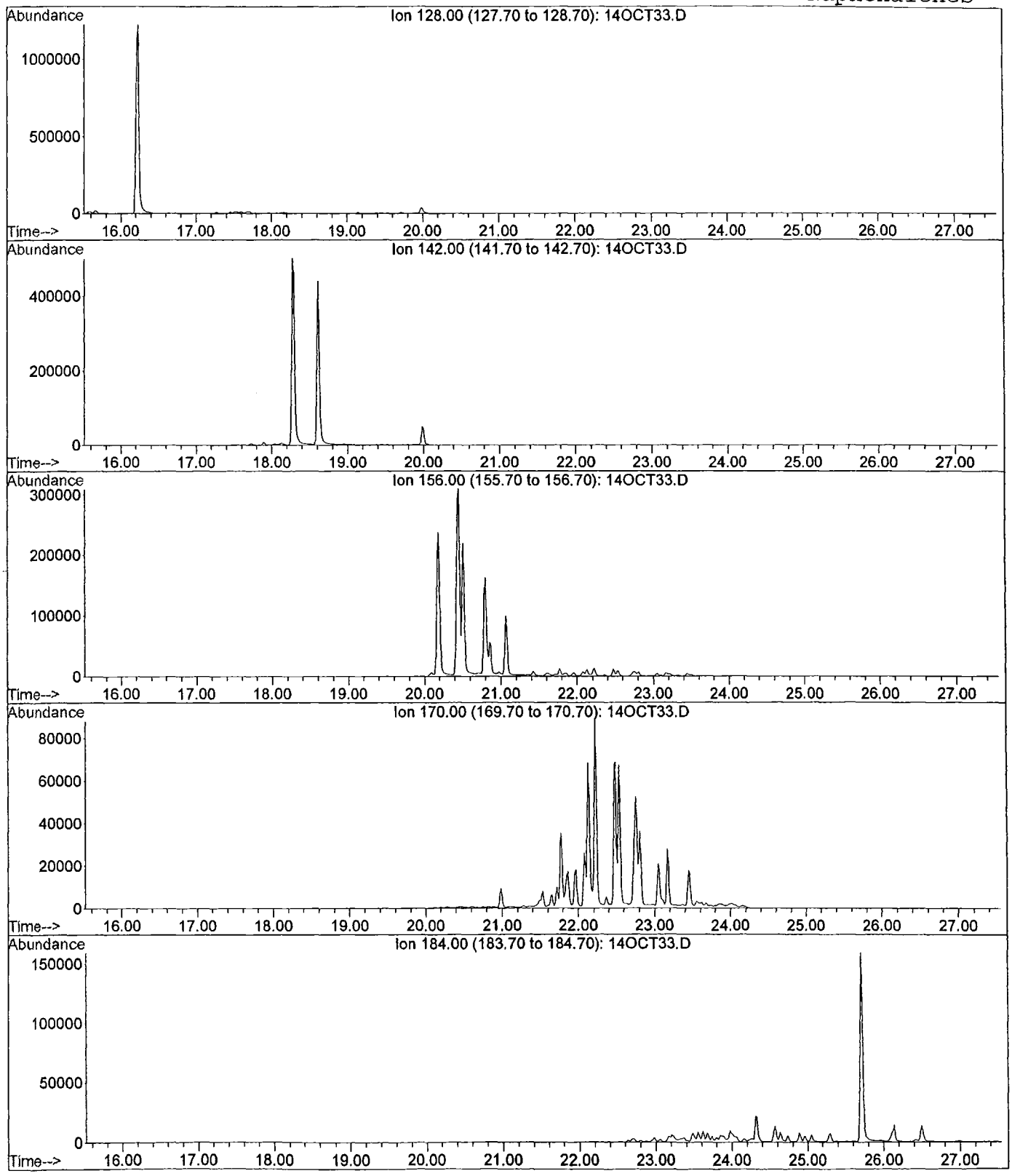
Instrument: GC/MS Ins Operator: ECC

Naphthalenes



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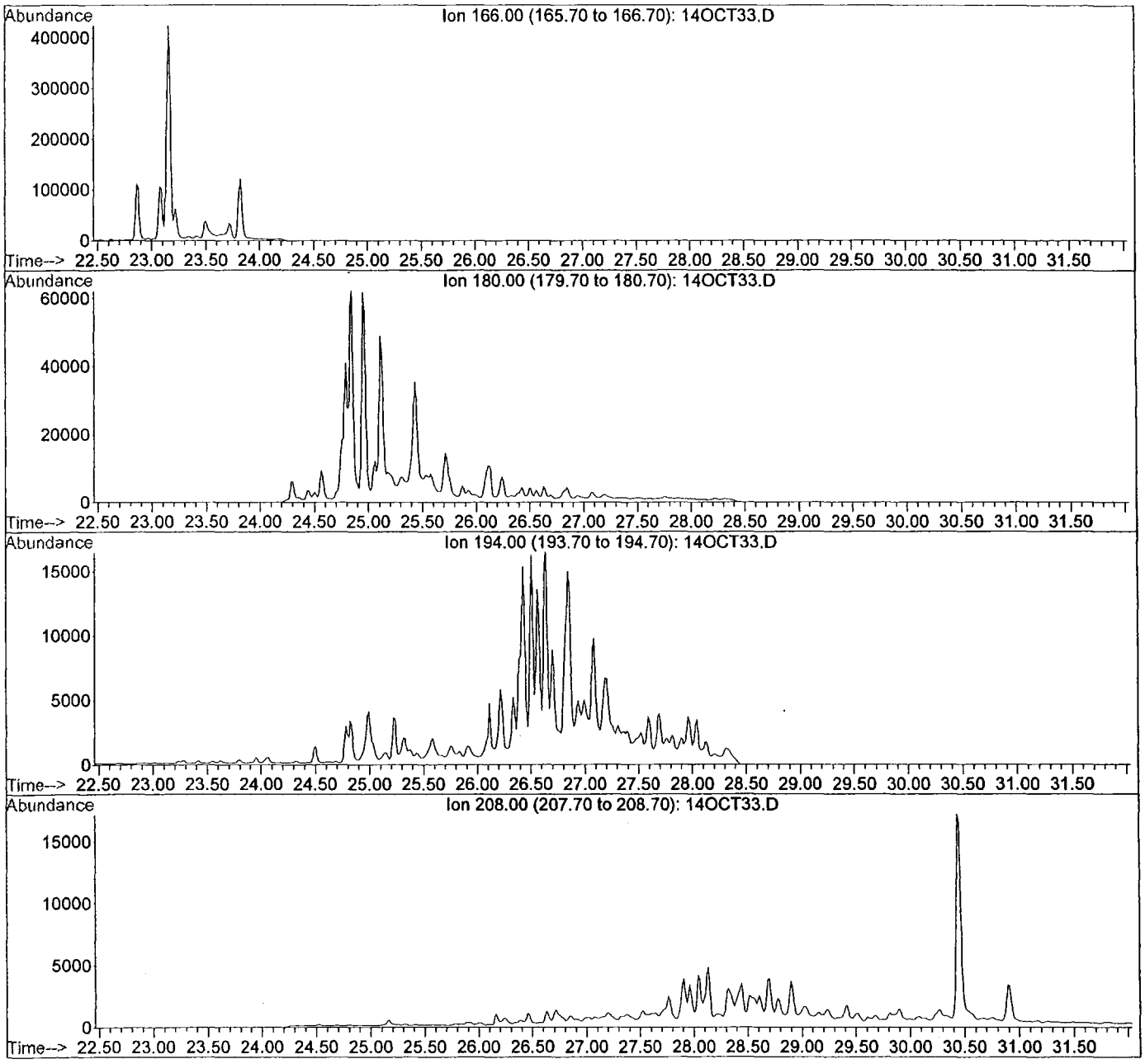
Fluorenes



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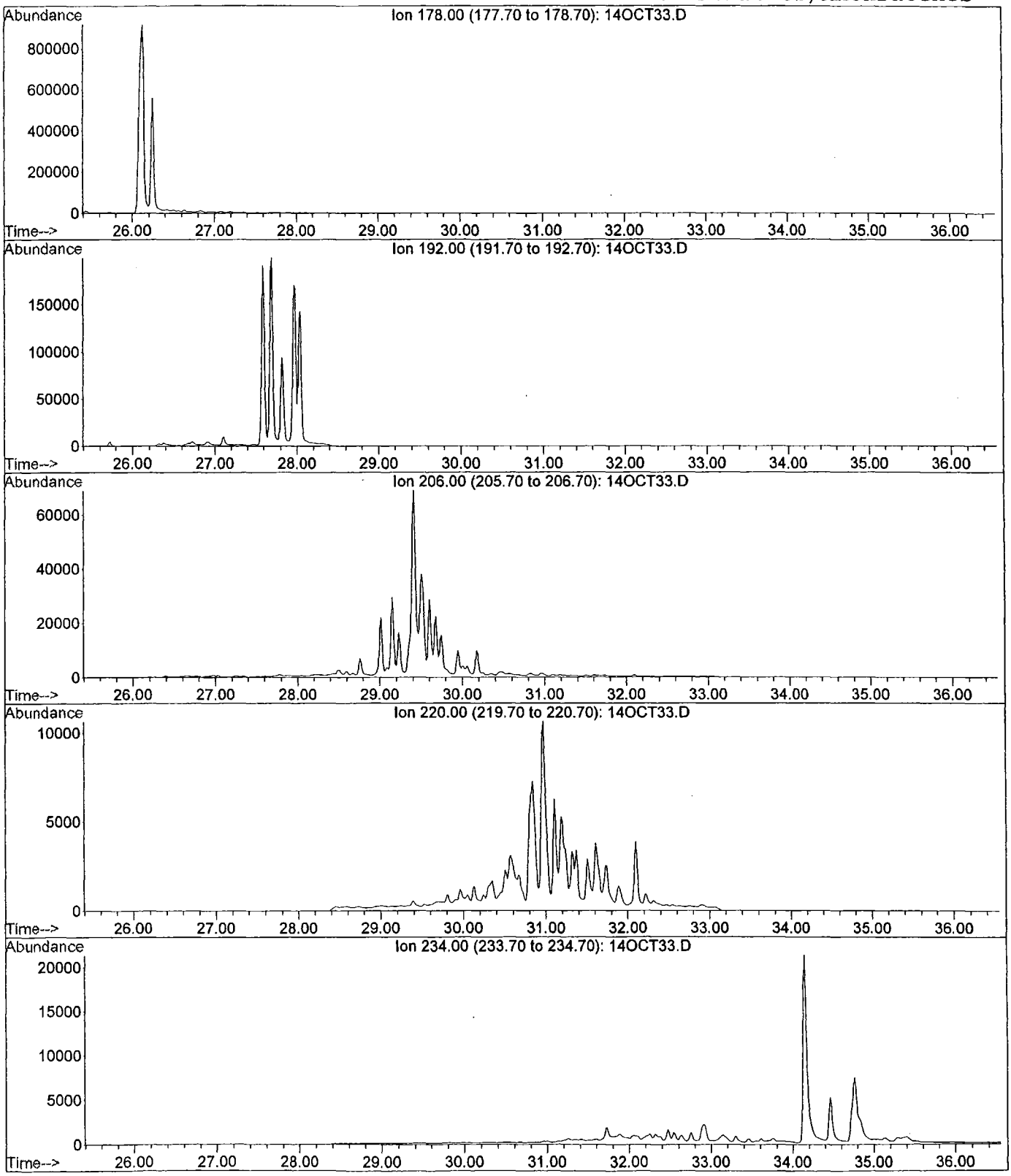
Instrument: GC/MS Ins Operator: ECC

Phenanthrenes/Anthracenes



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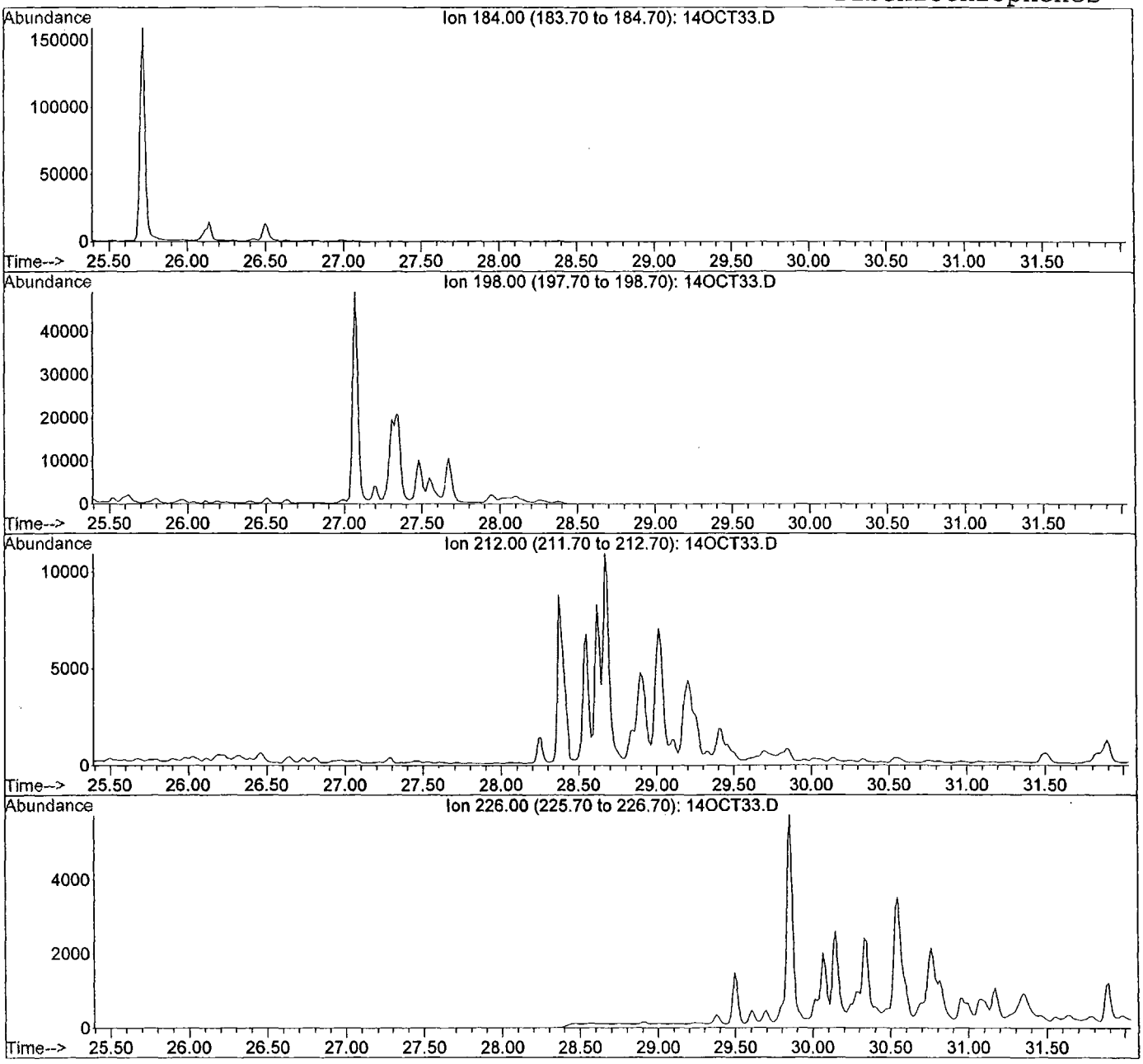
Instrument: GC/MS Ins Operator: ECC

Dibenzothiophenes



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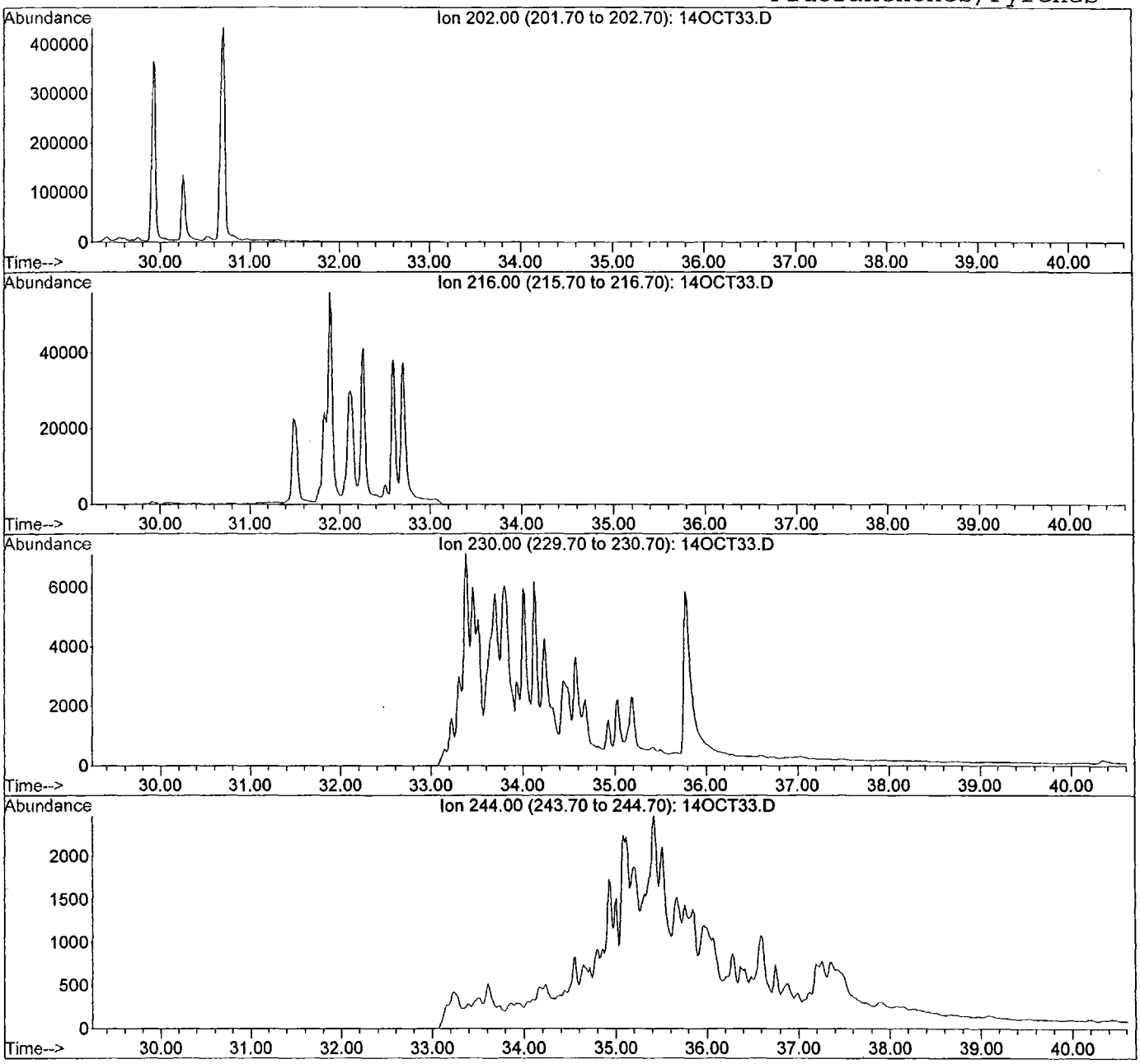
Instrument: GC/MS Ins Operator: ECC

Fluoranthenes/Pyrenes



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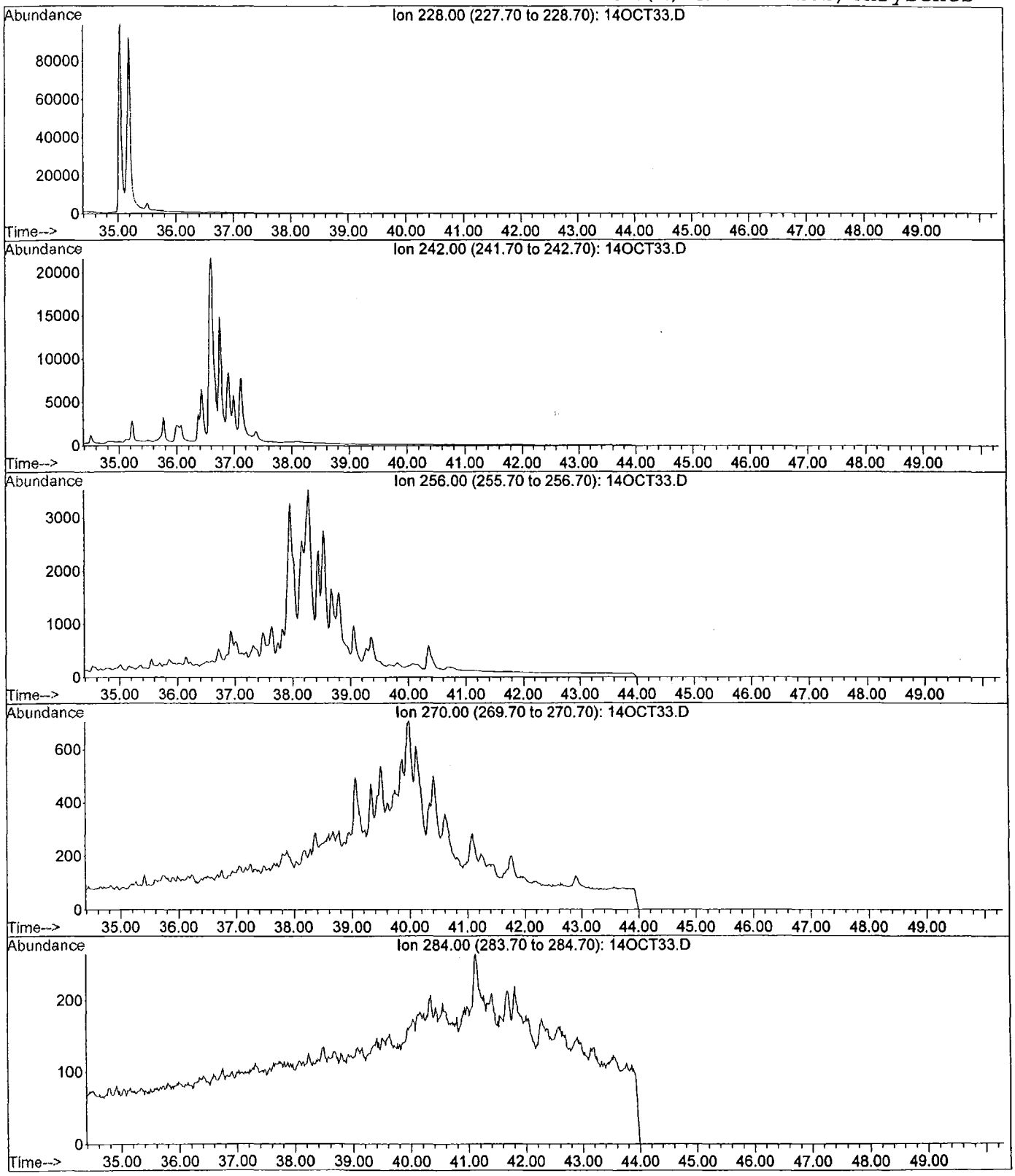
Benz(a)anthracenes/Chrysenes



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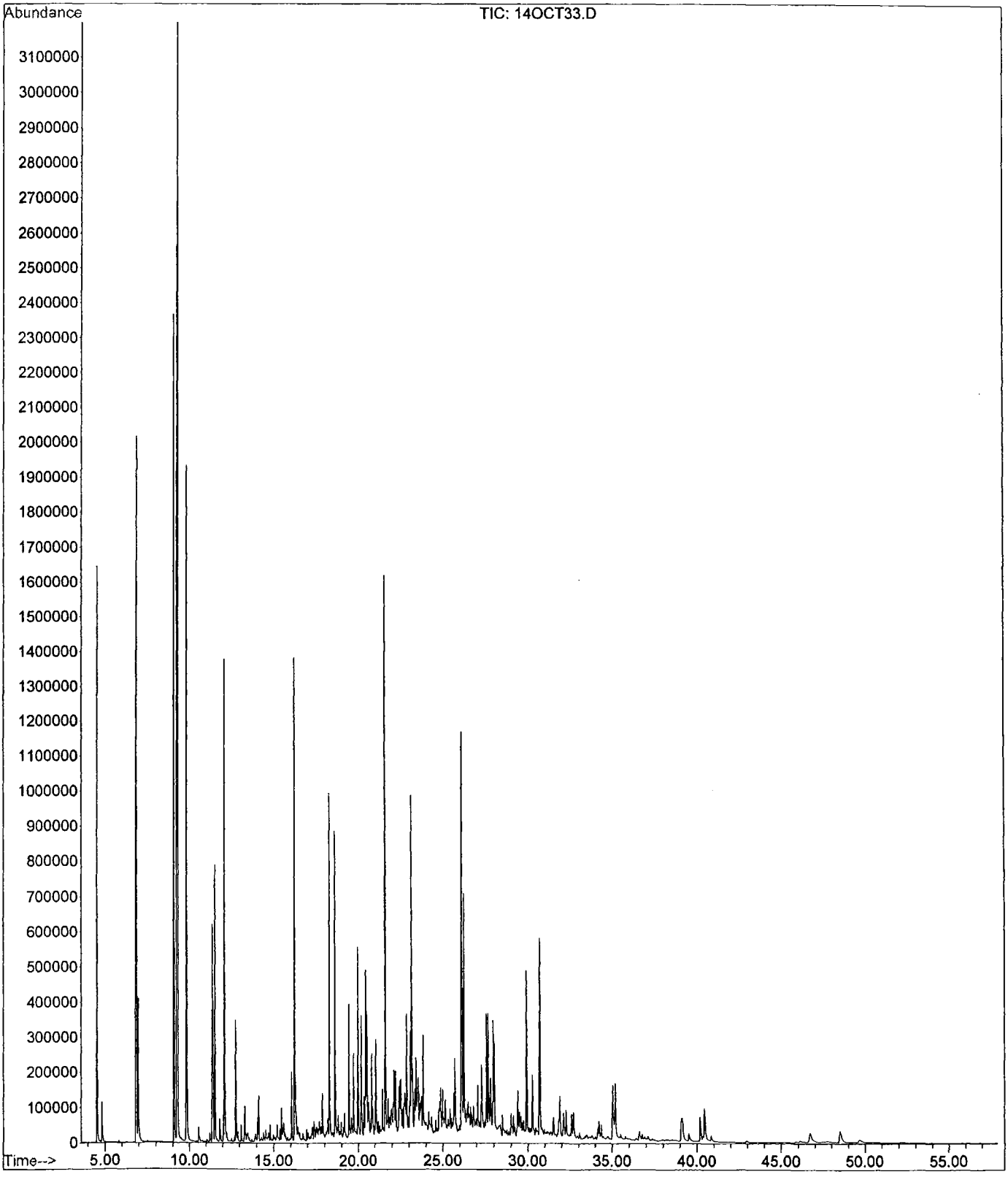

Field ID: B12-11-12
Lab ID: GT020924-04 1:10
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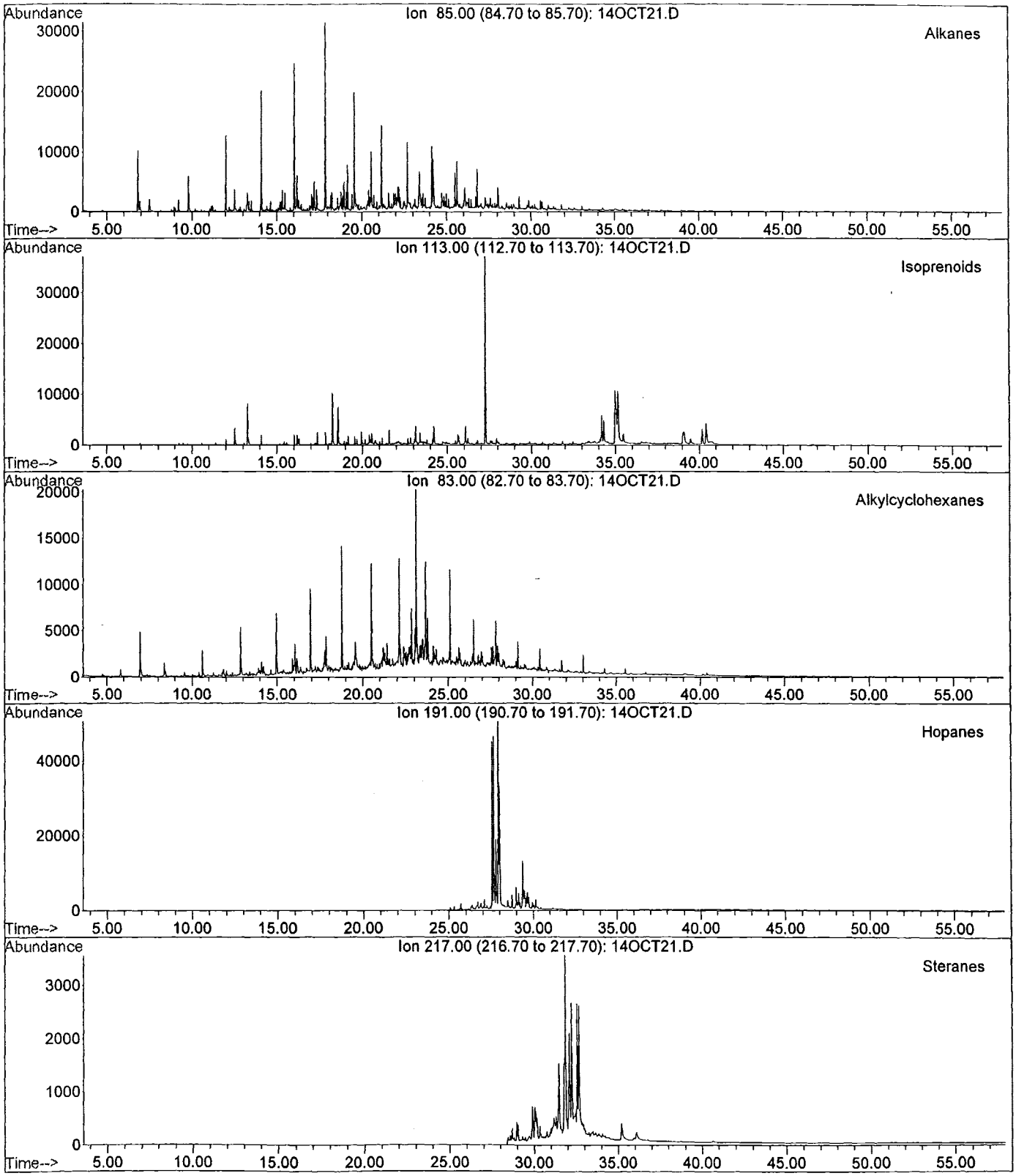
Instrument: GC/MS Ins Operator: ECC



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Lab ID: GT020924-04 1:10
File: G:\1\DATA\021014\14OCT21.D
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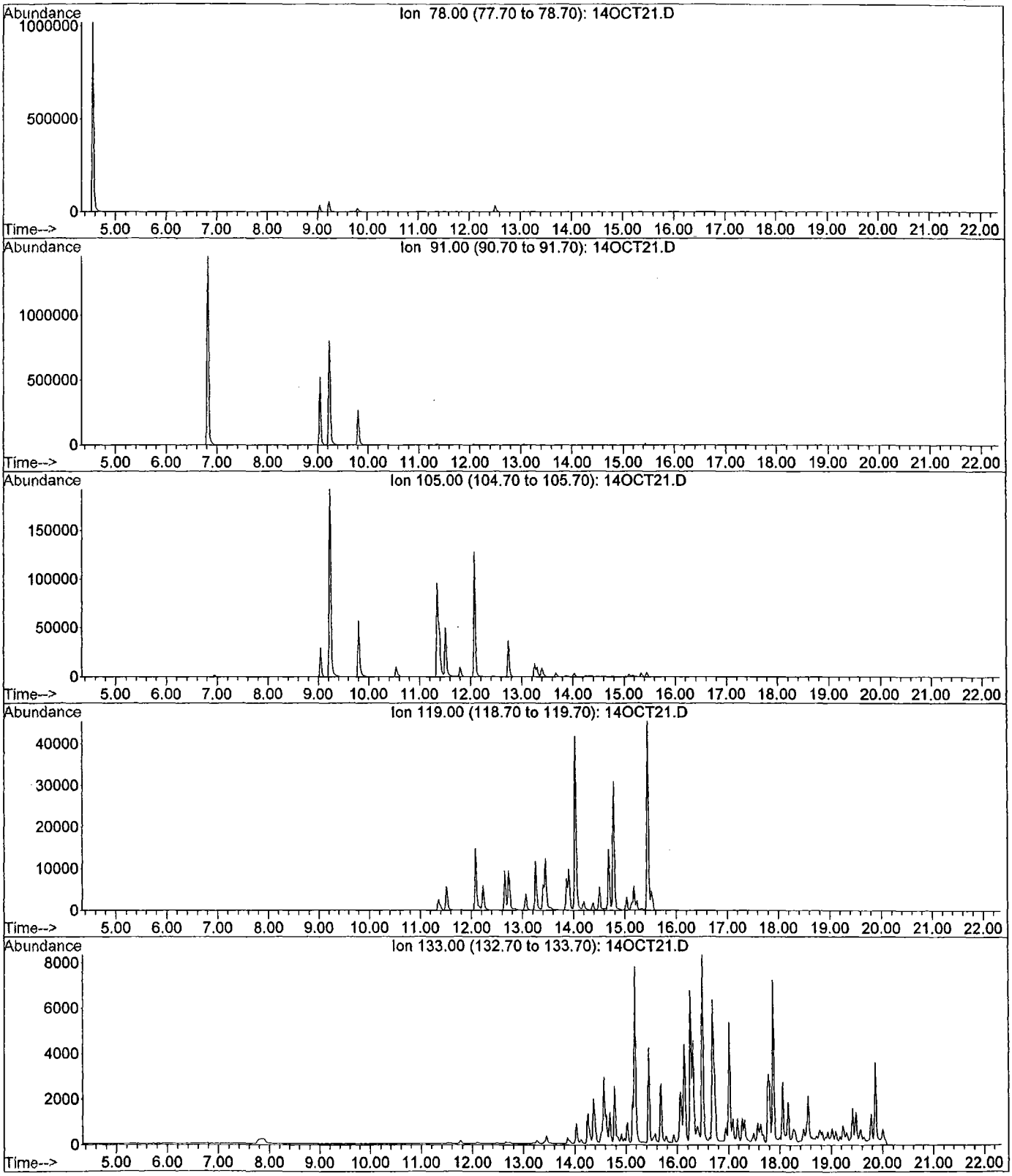
Instrument: GC/MS Ins Operator: ECC

Benzenes



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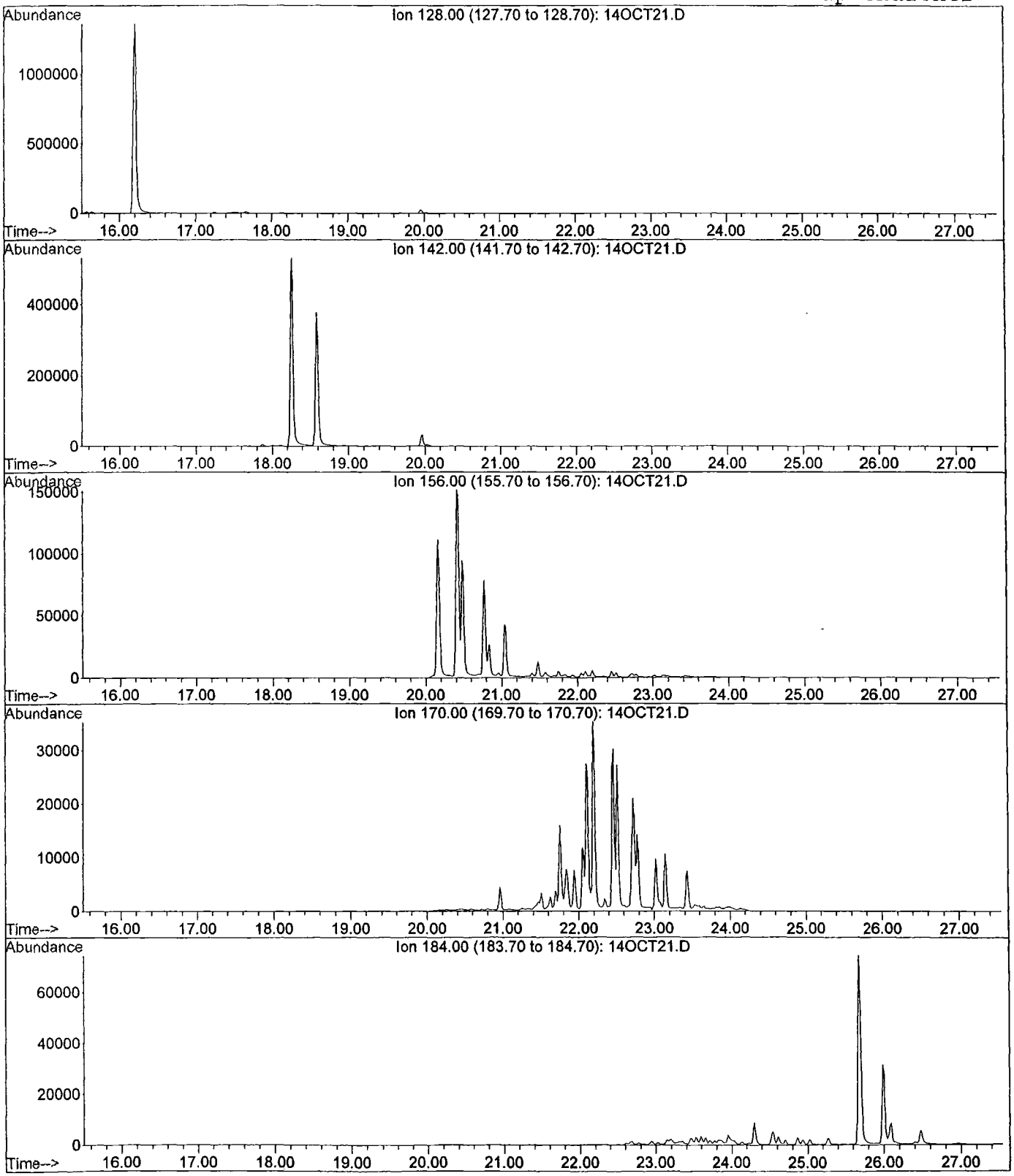
Acquired: 15 Oct 2002 10:49 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC

Naphthalenes



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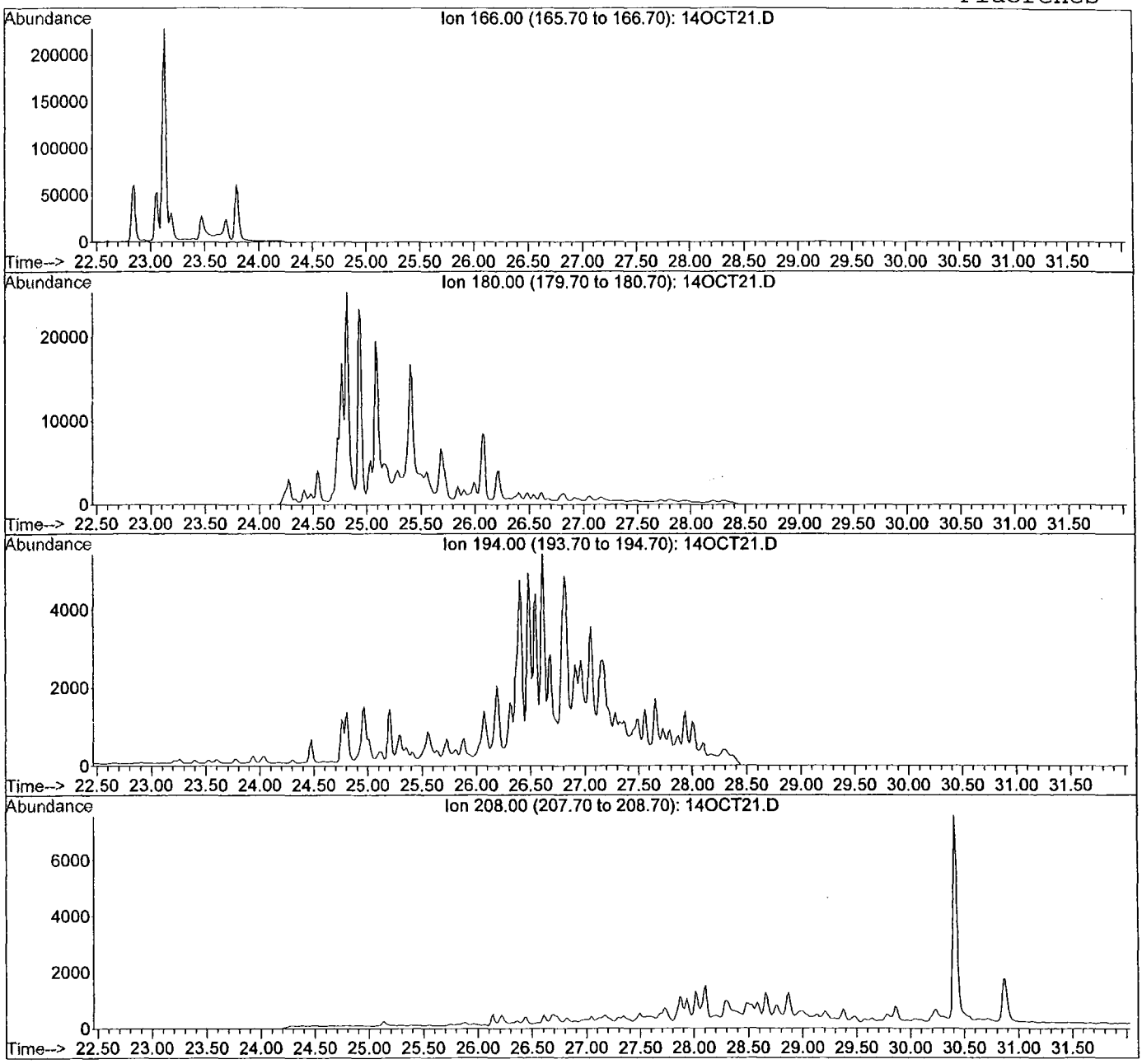
Instrument: GC/MS Ins Operator: ECC

Fluorenes



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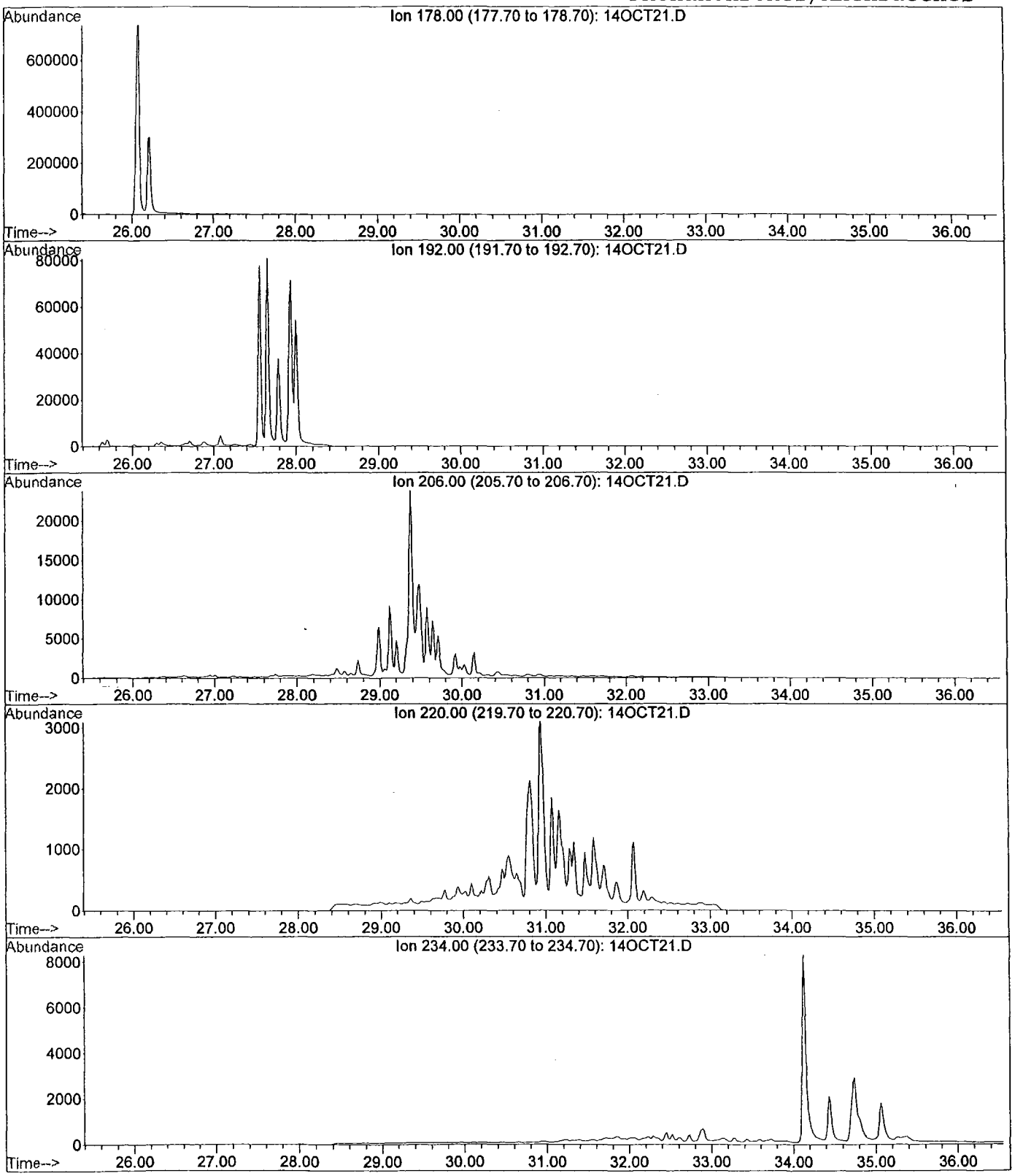
Instrument: GC/MS Ins Operator: ECC

Phenanthrenes/Anthracenes



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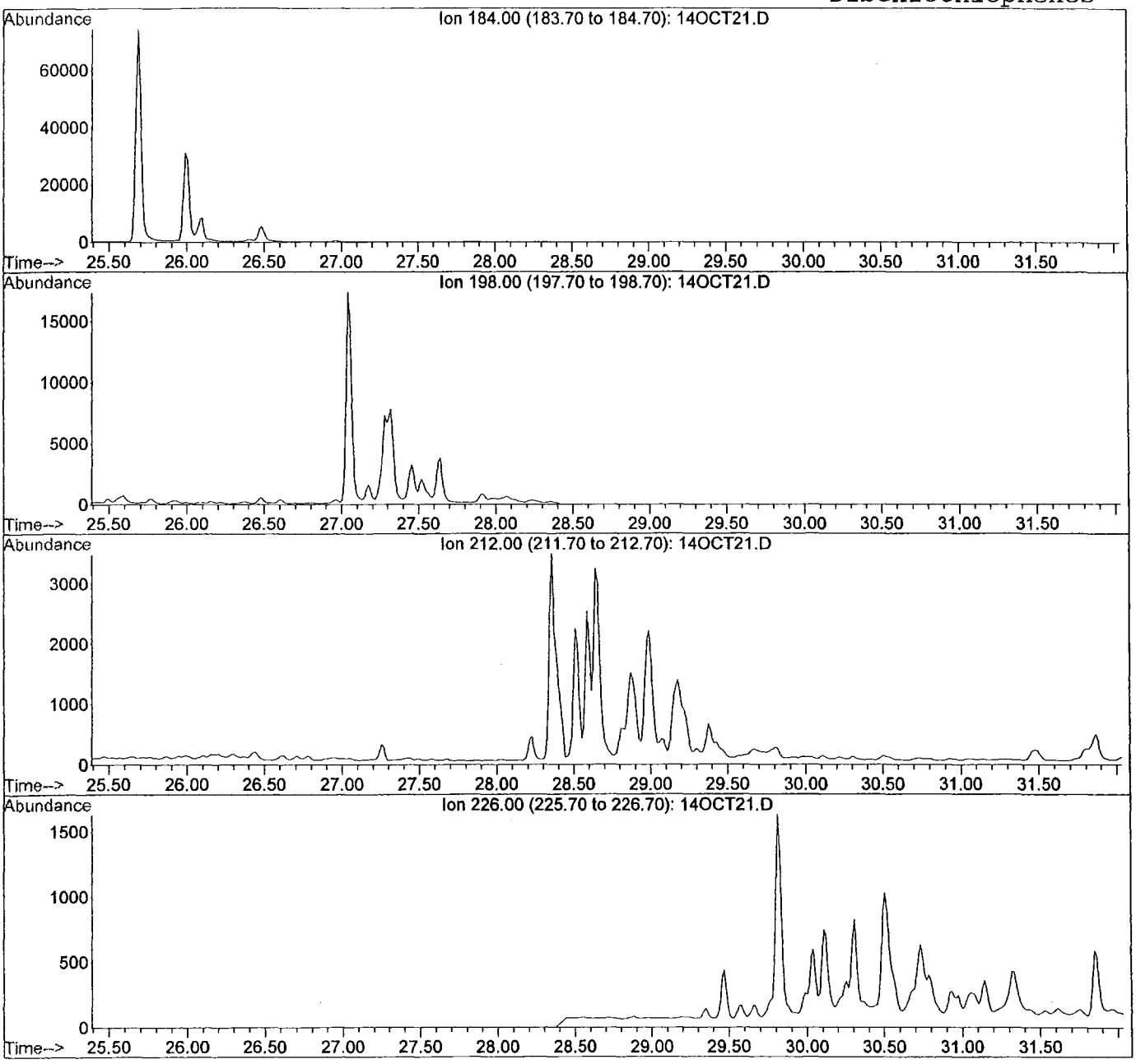
Instrument: GC/MS Ins Operator: ECC

Dibenzothiophenes



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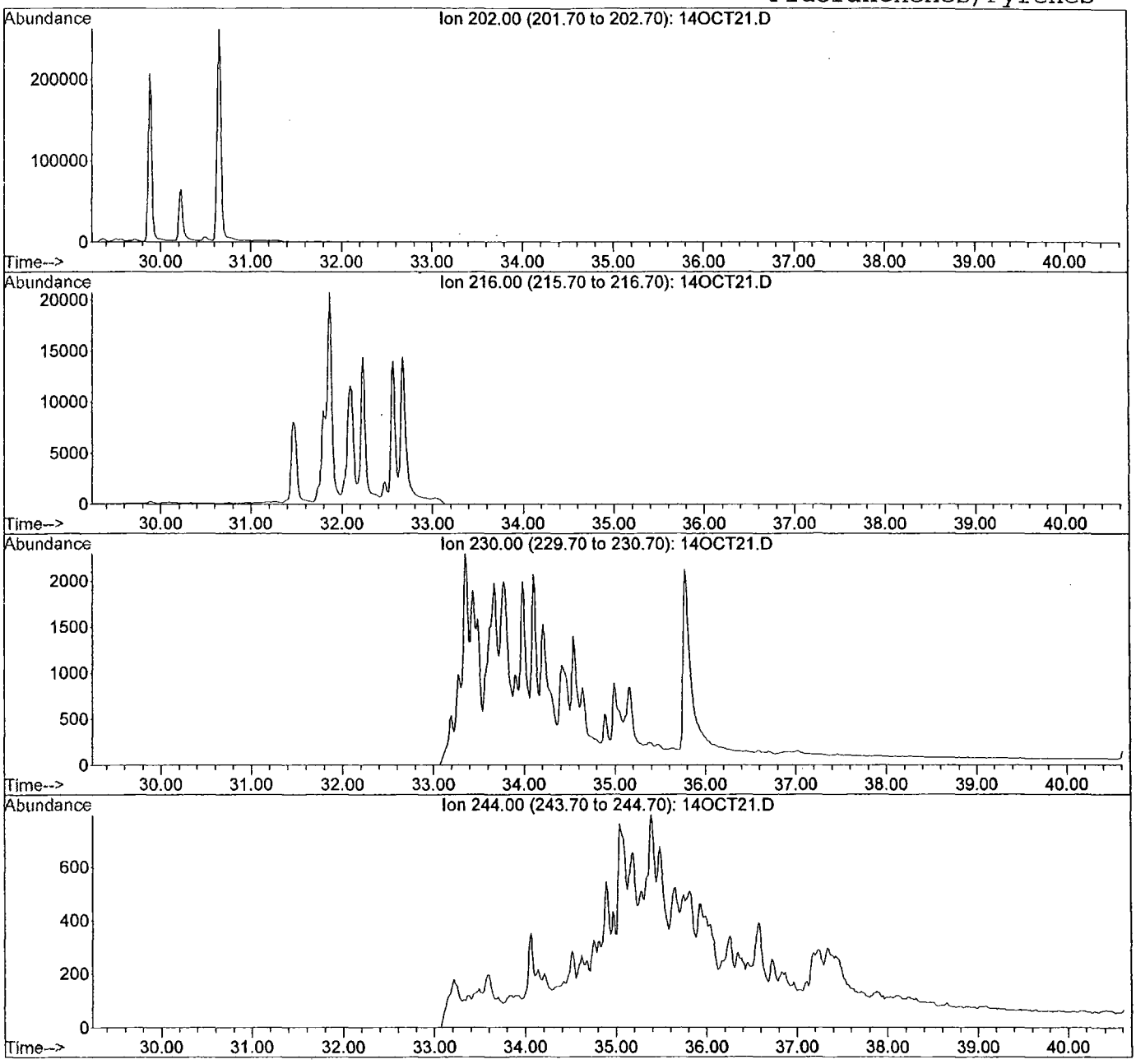
Instrument: GC/MS Ins Operator: ECC

Fluoranthenes/Pyrenes



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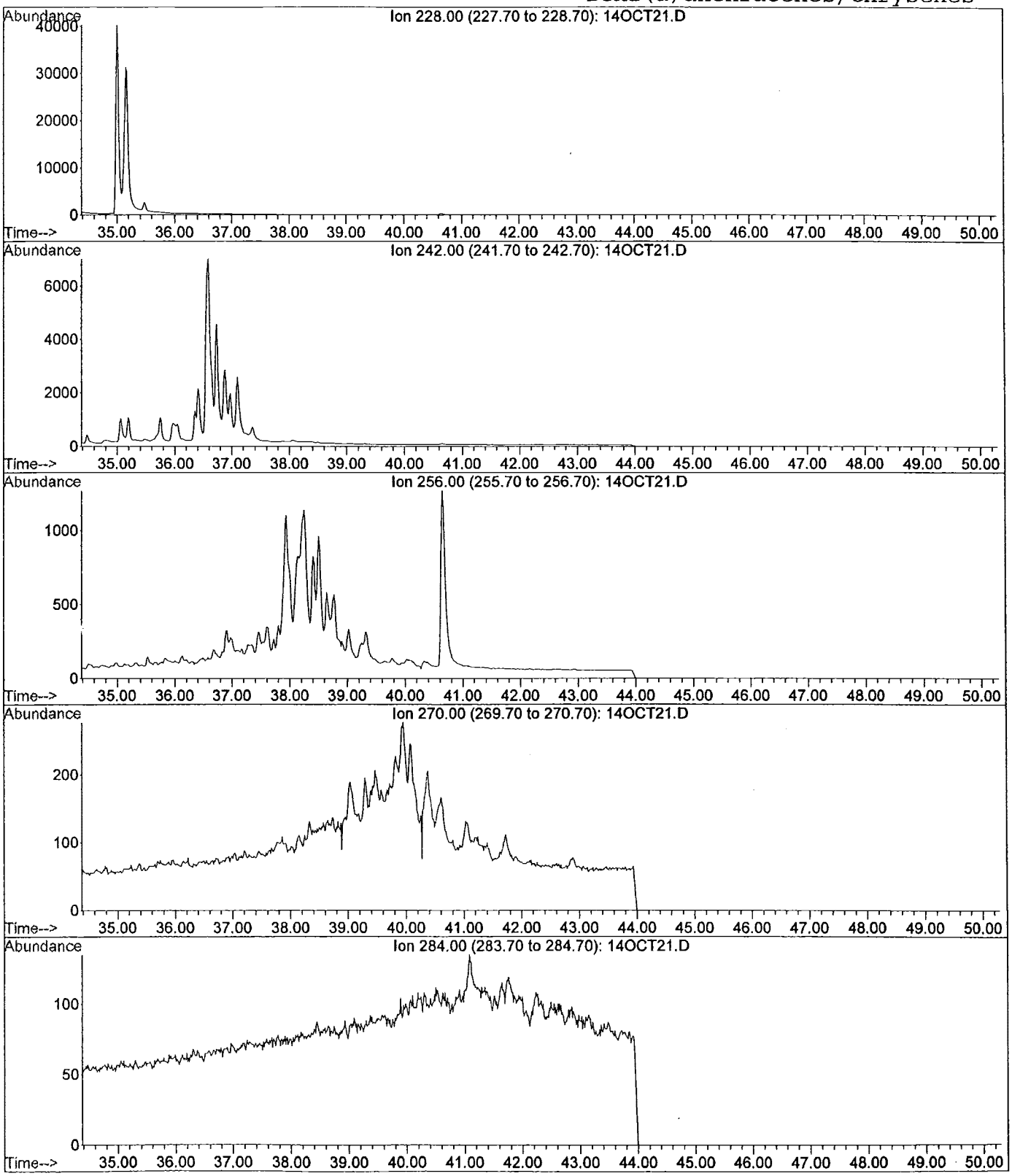
Benz(a)anthracenes/Chrysenes



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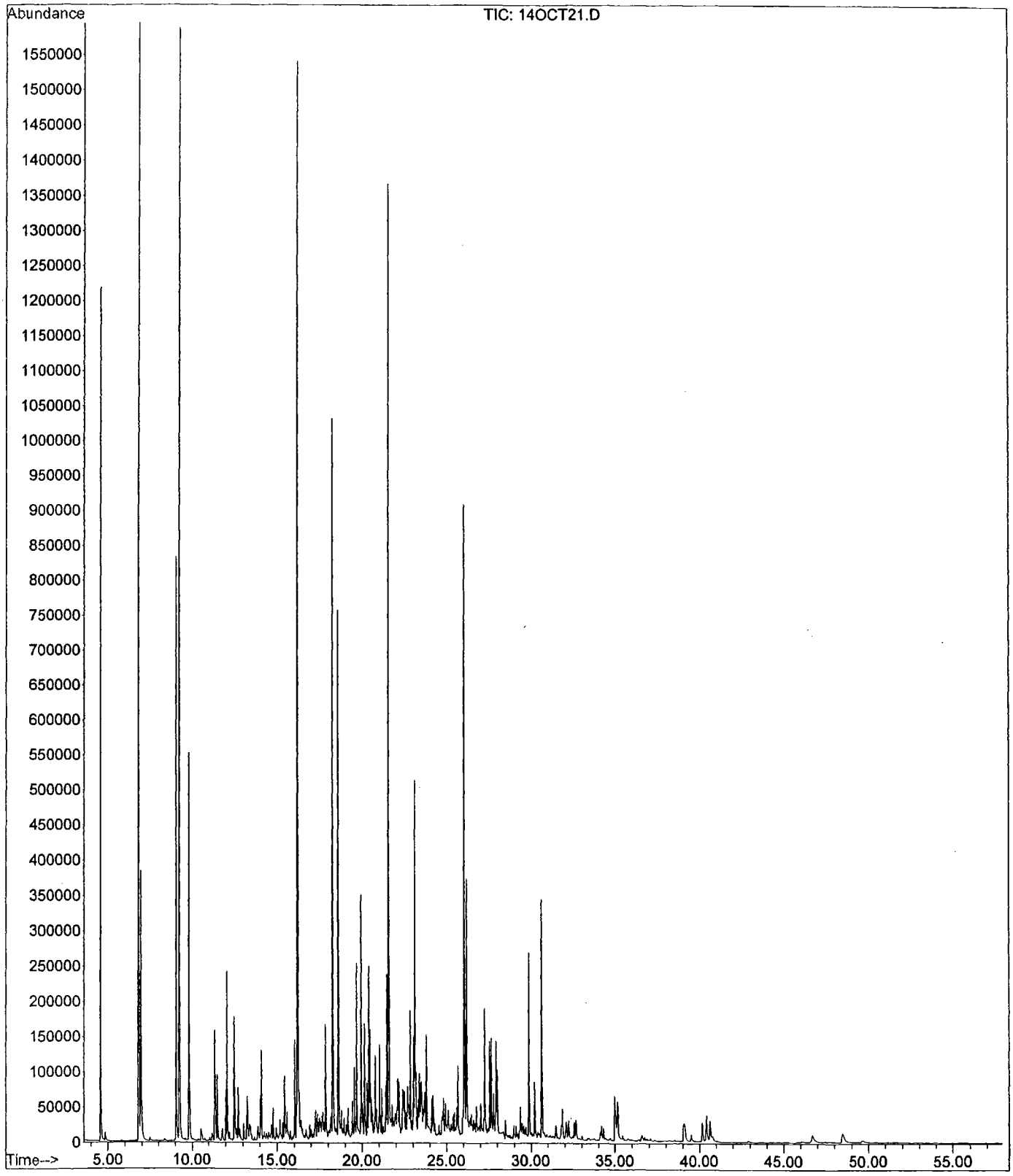

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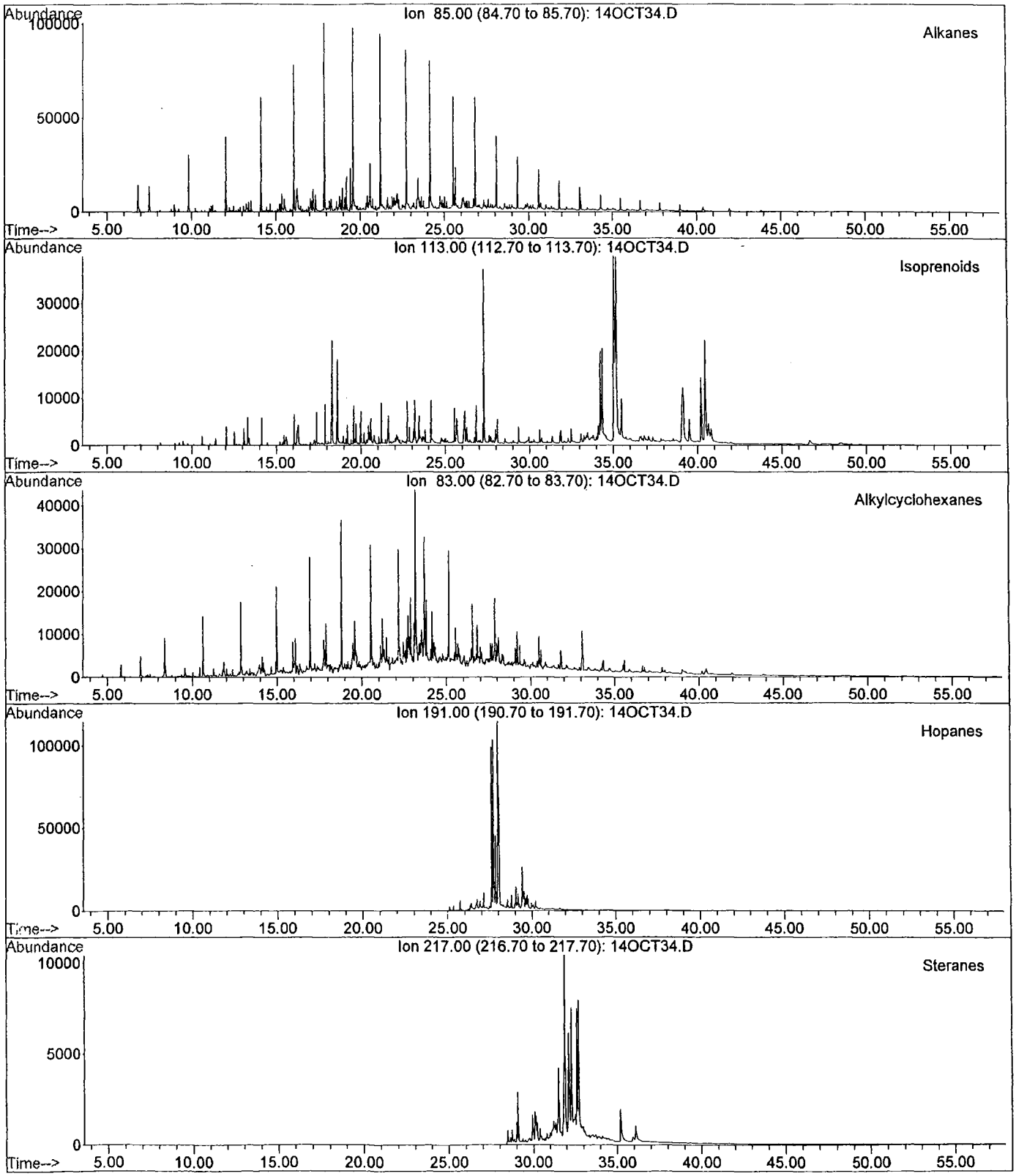
Acquired: 16 Oct 2002 2:26 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: ECC



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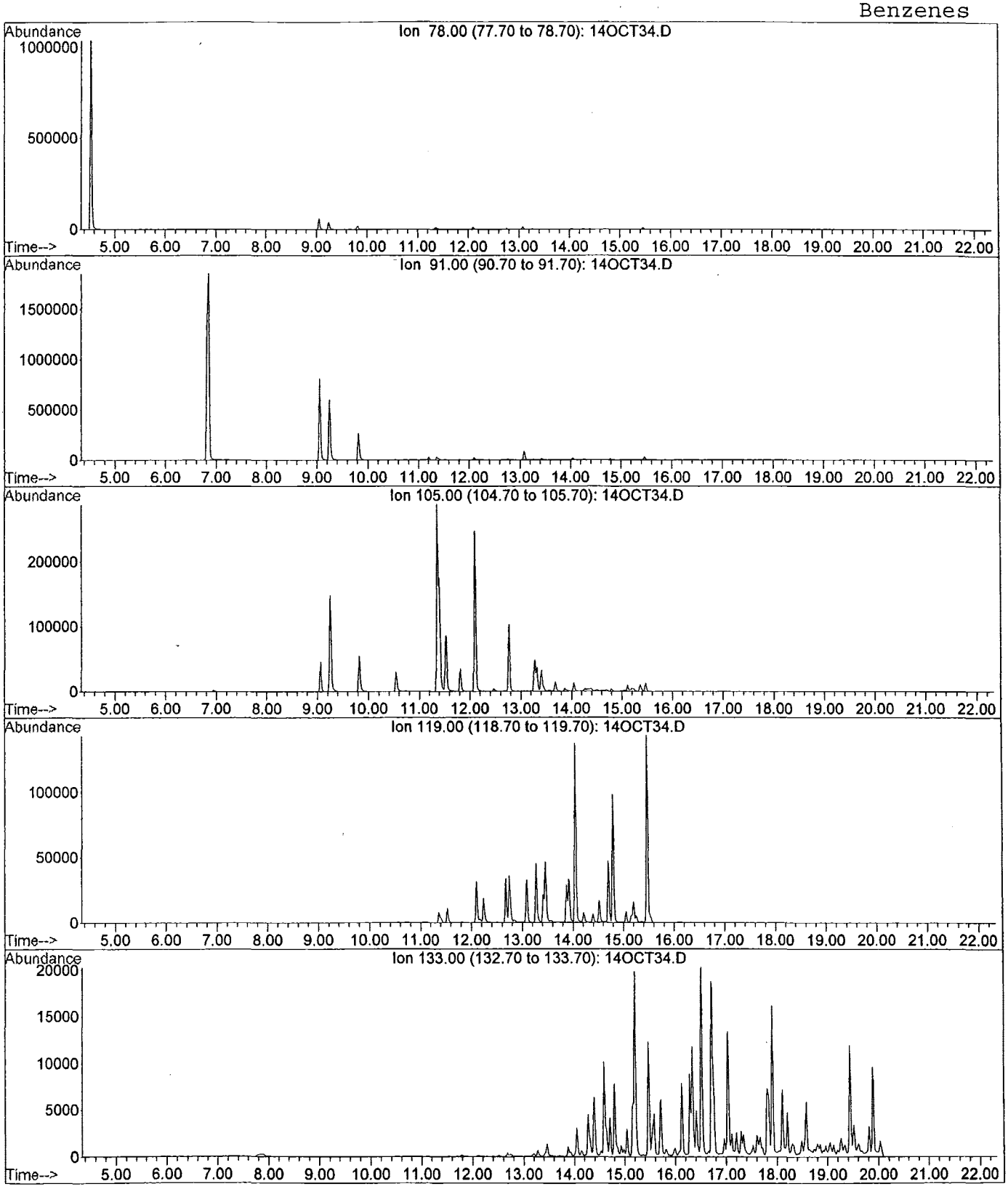
Instrument: GC/MS Ins Operator: ECC

Benzenes



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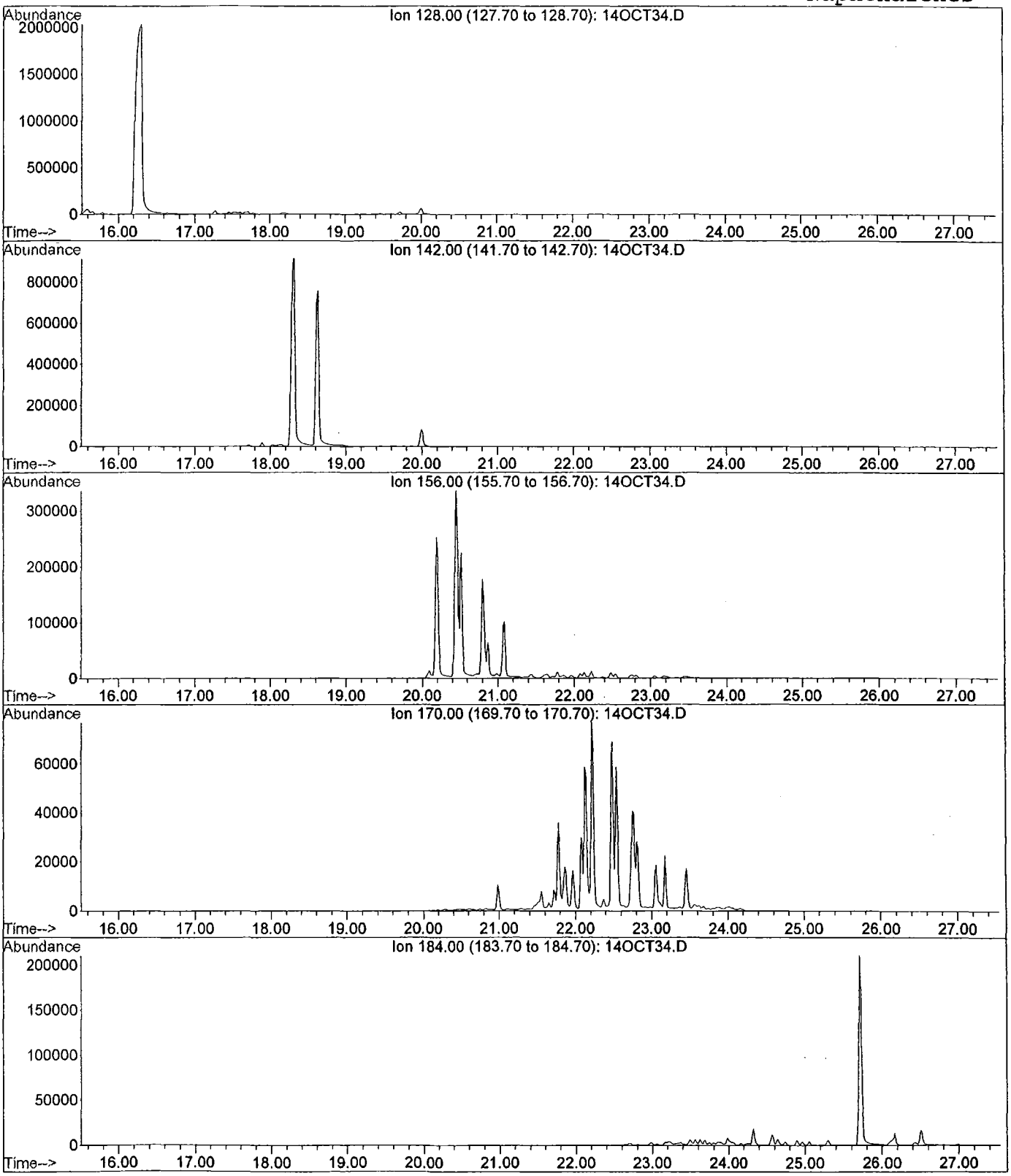
Naphthalenes



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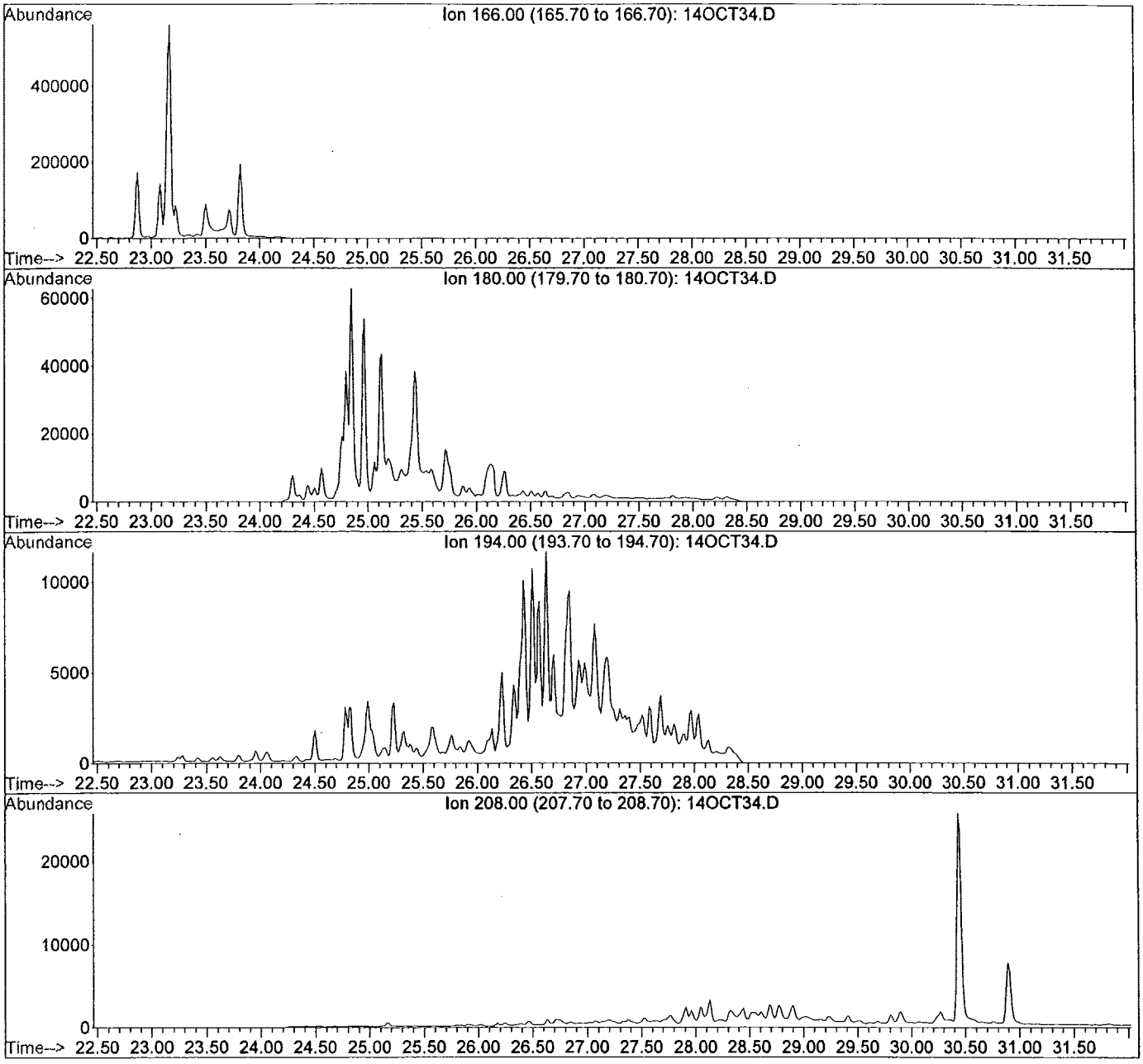
Instrument: GC/MS Ins Operator: ECC

Fluorenes



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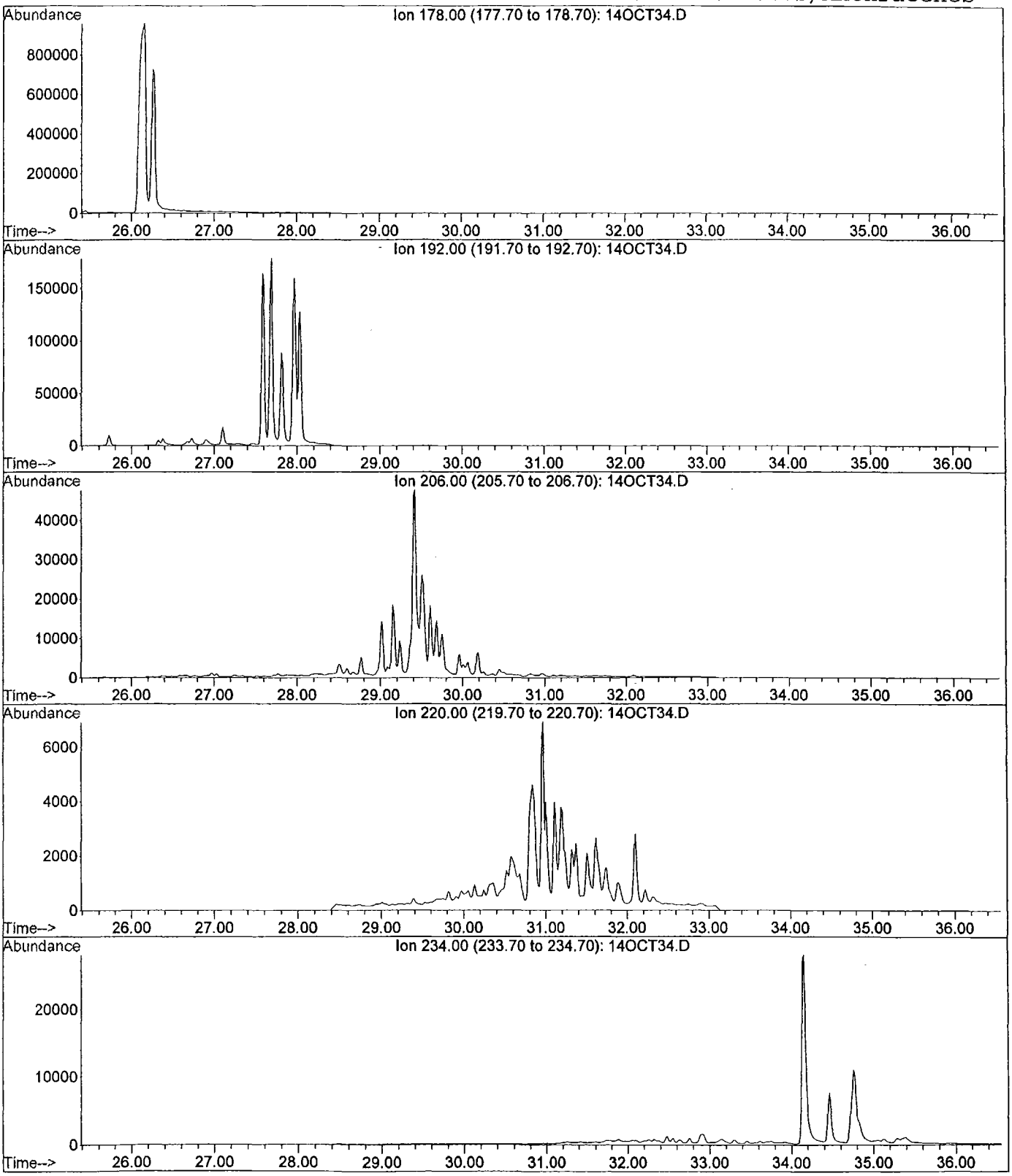
Instrument: GC/MS Ins Operator: ECC

Phenanthrenes/Anthracenes



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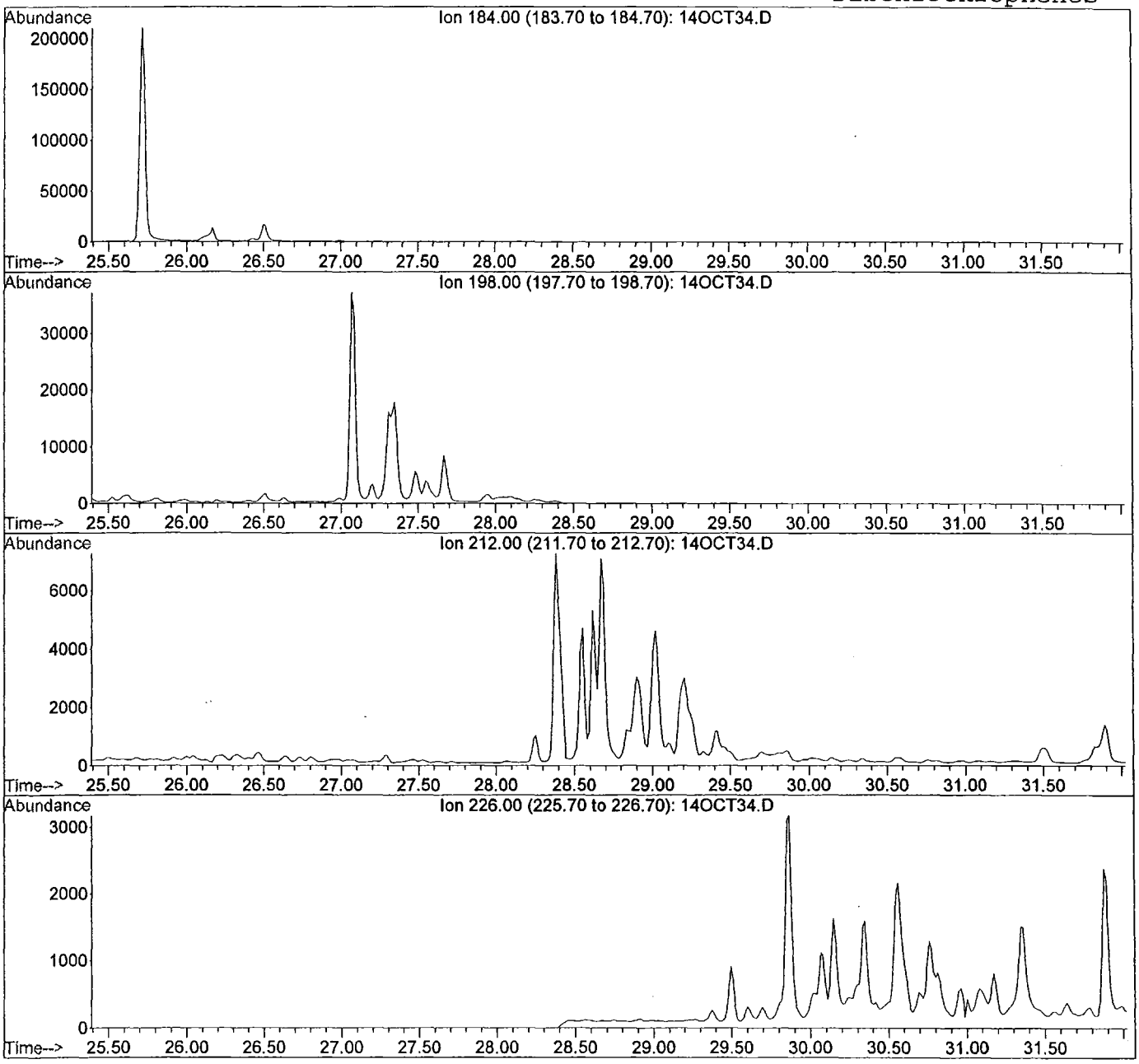
Instrument: GC/MS Ins Operator: ECC

Dibenzothiophenes



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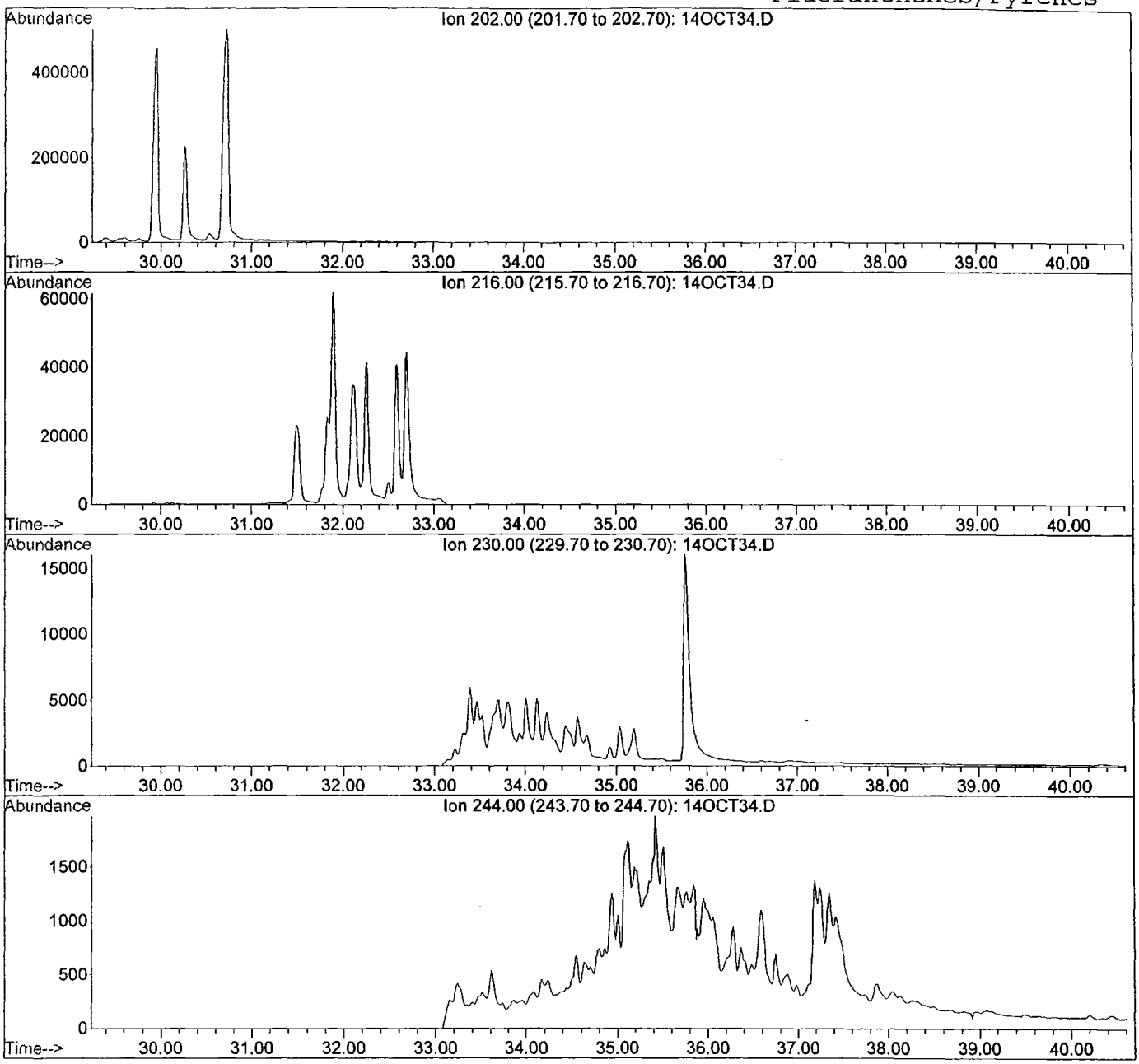
Fluoranthenes/Pyrenes



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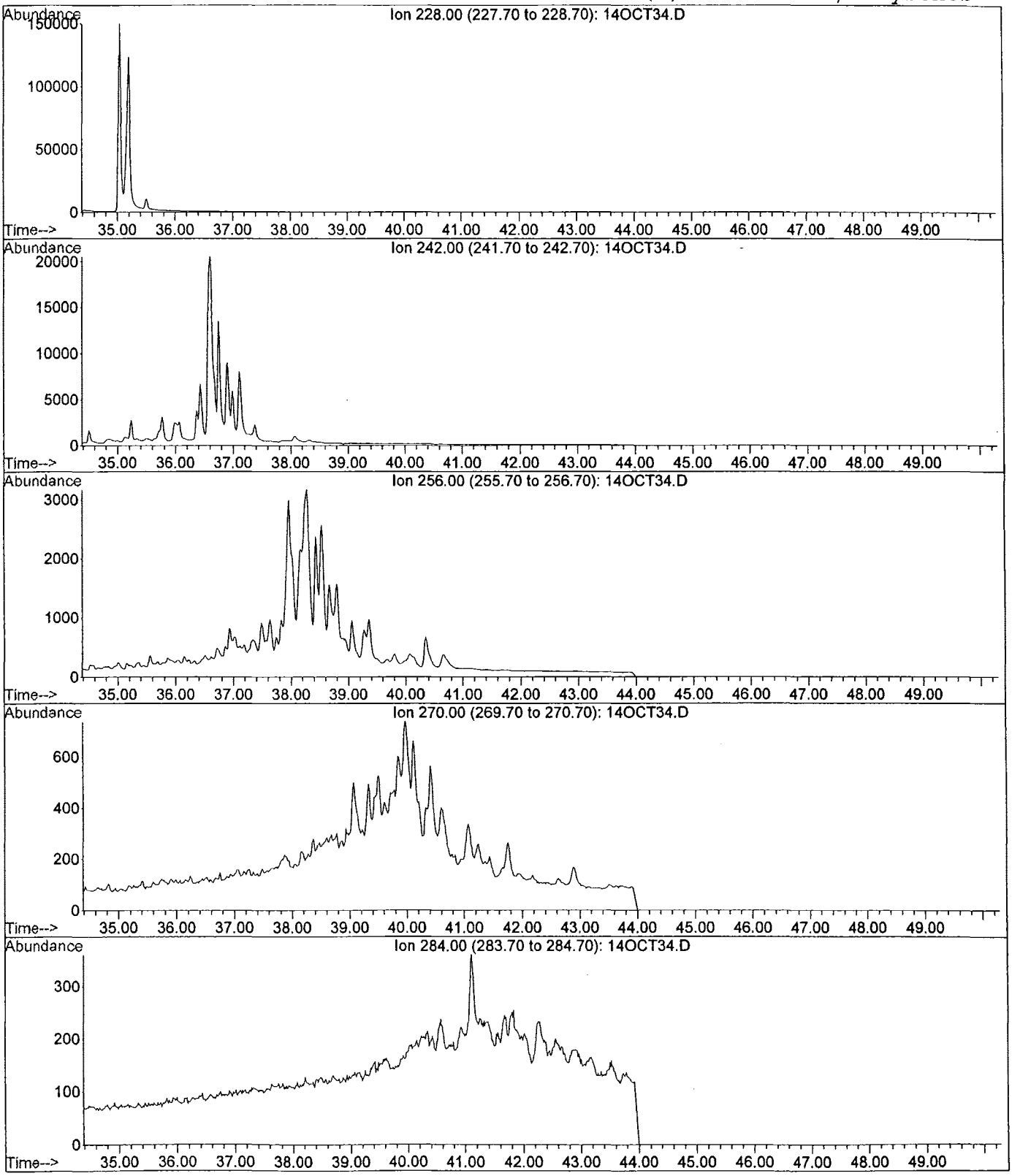
Benz(a)anthracenes/Chrysenes



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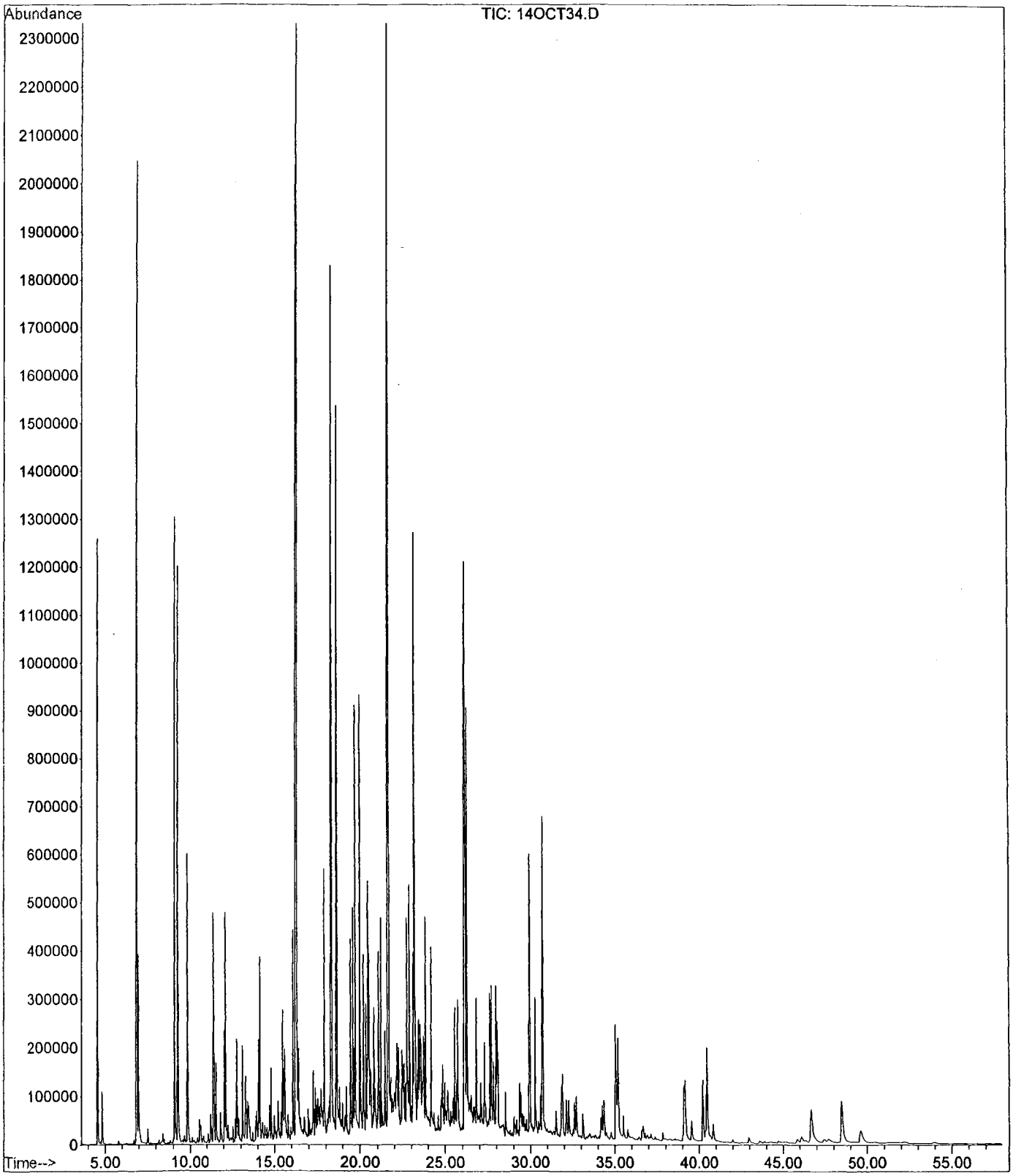

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Lab ID: GT020924-06
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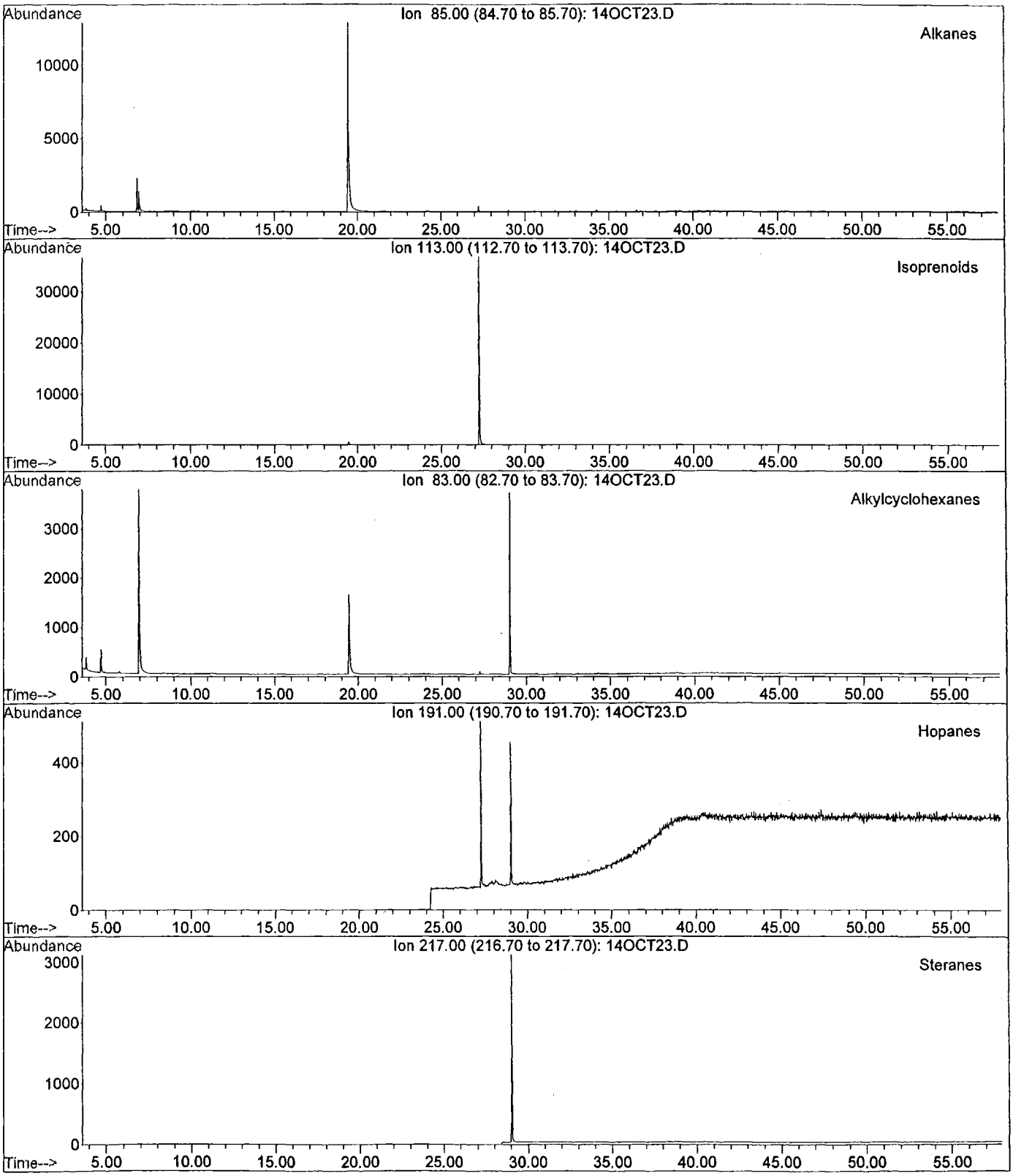

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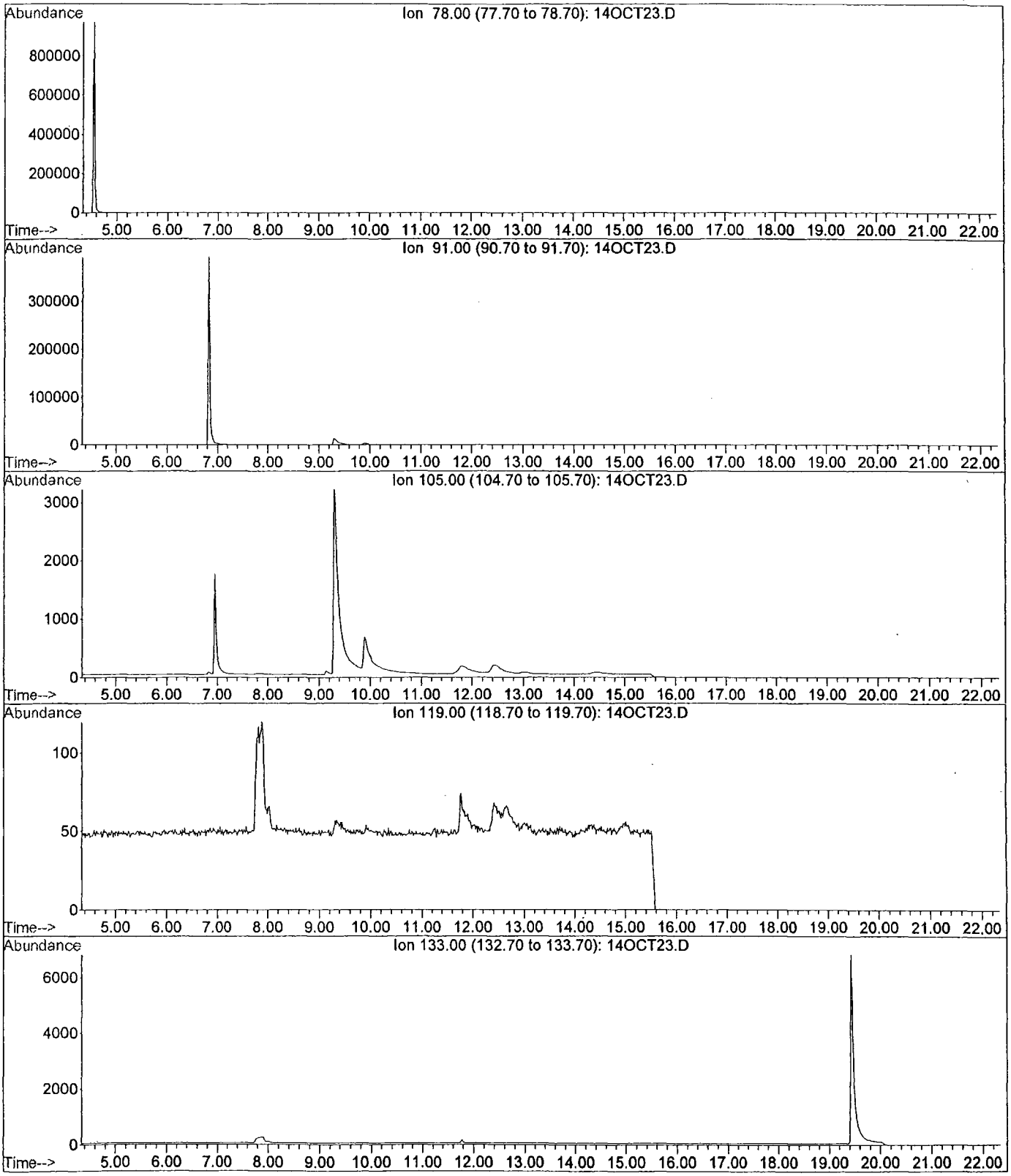
Benzenes



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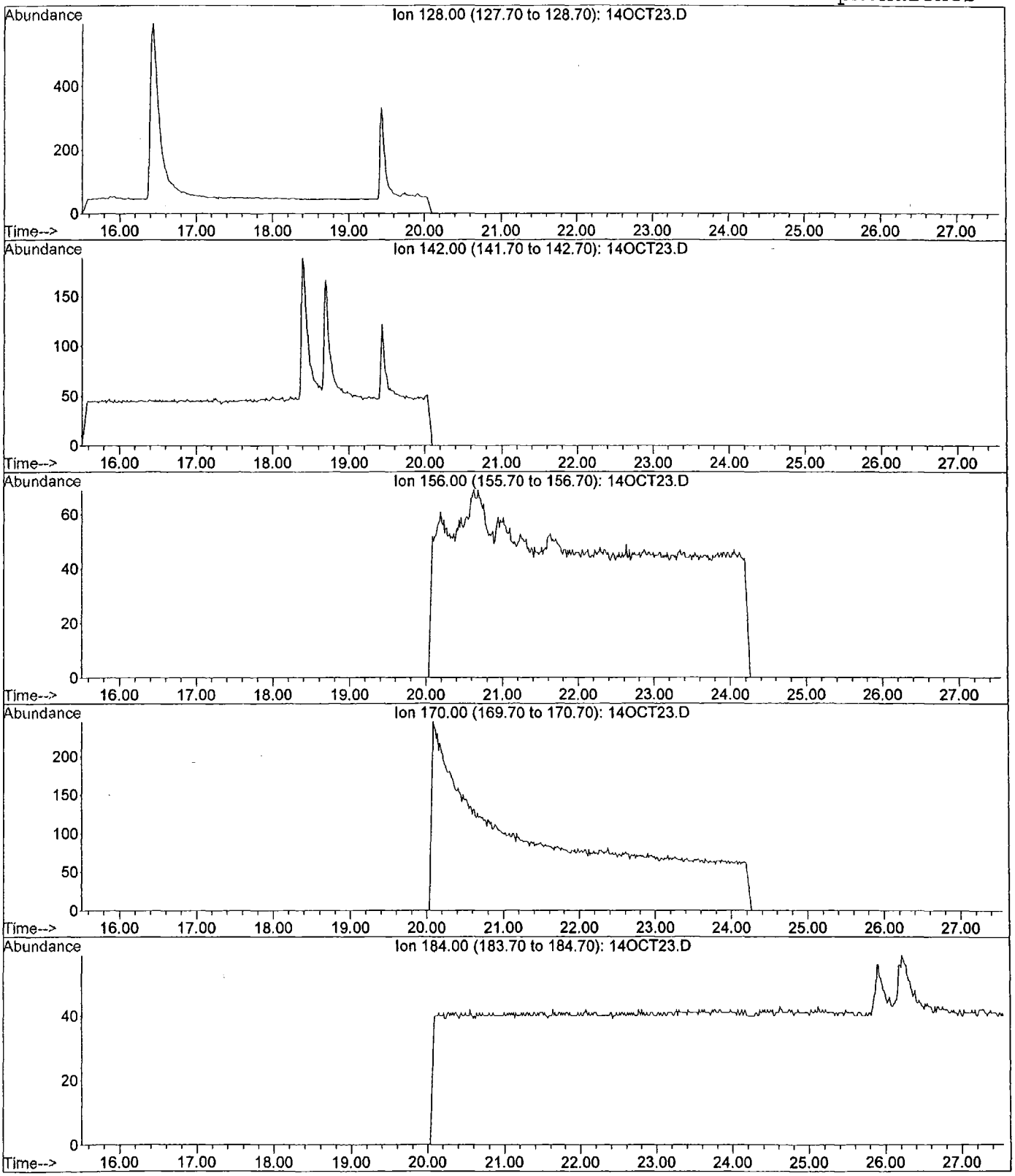
Naphthalenes



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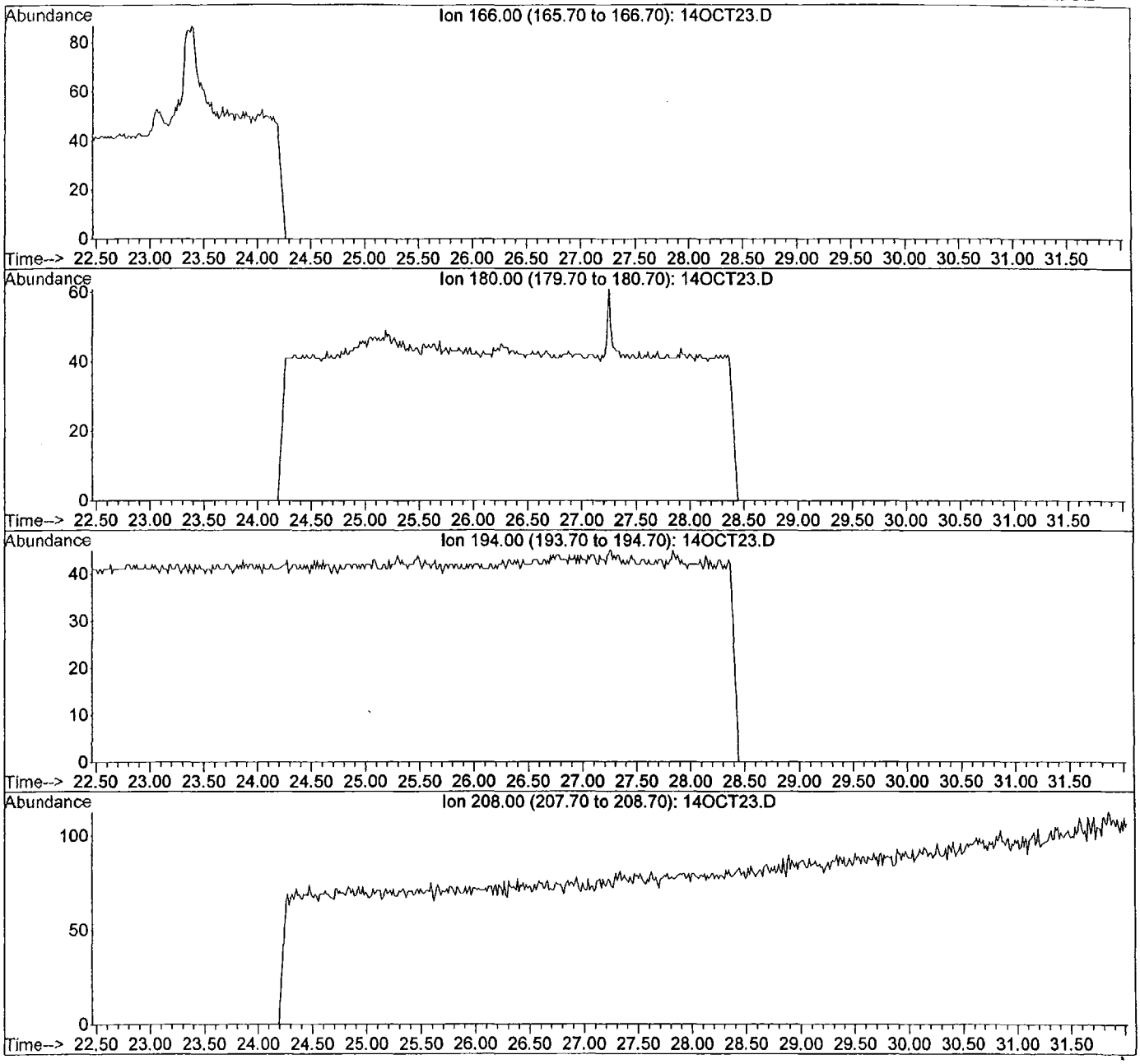
Fluorenes



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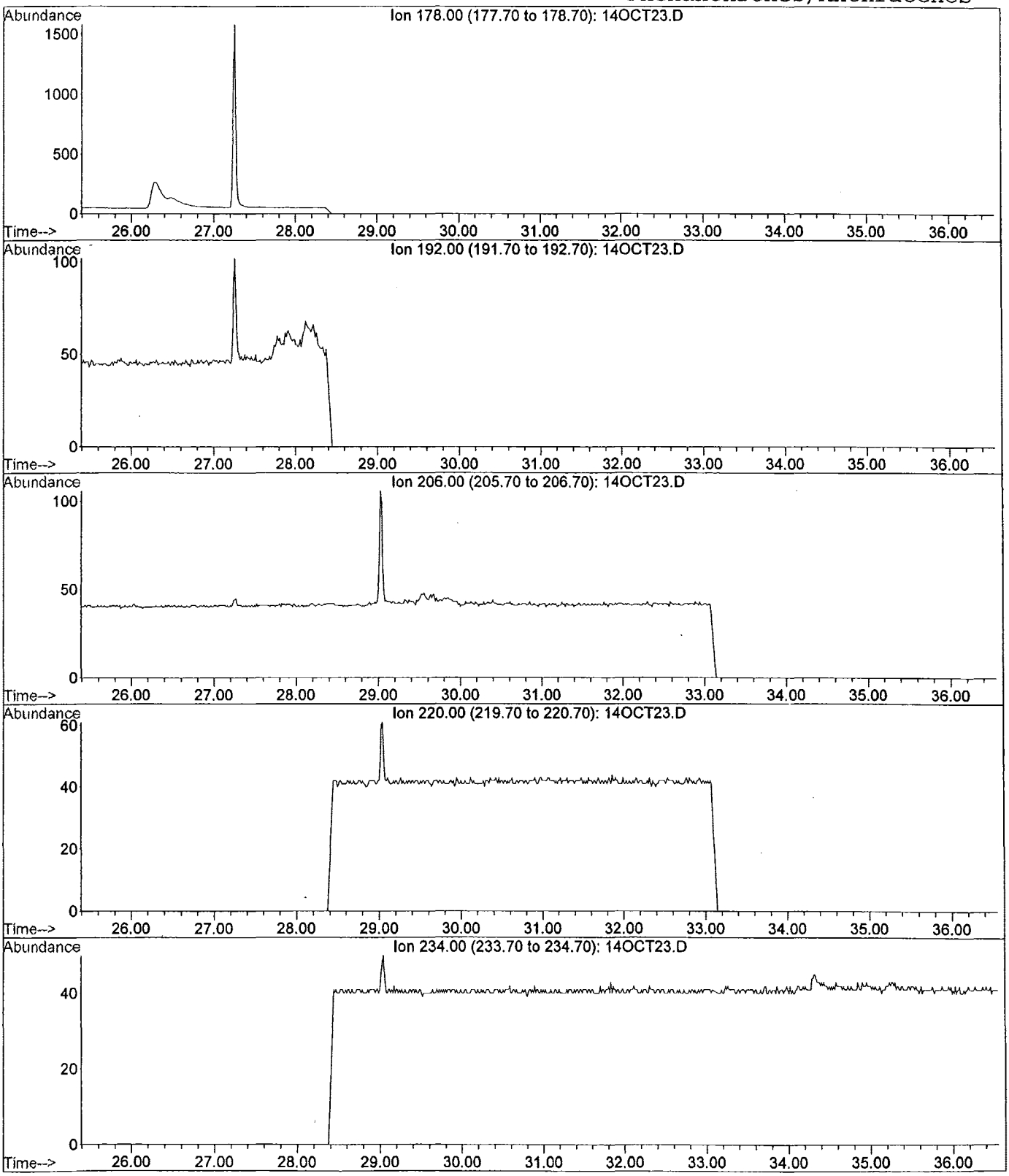
Phenanthrenes/Anthracenes



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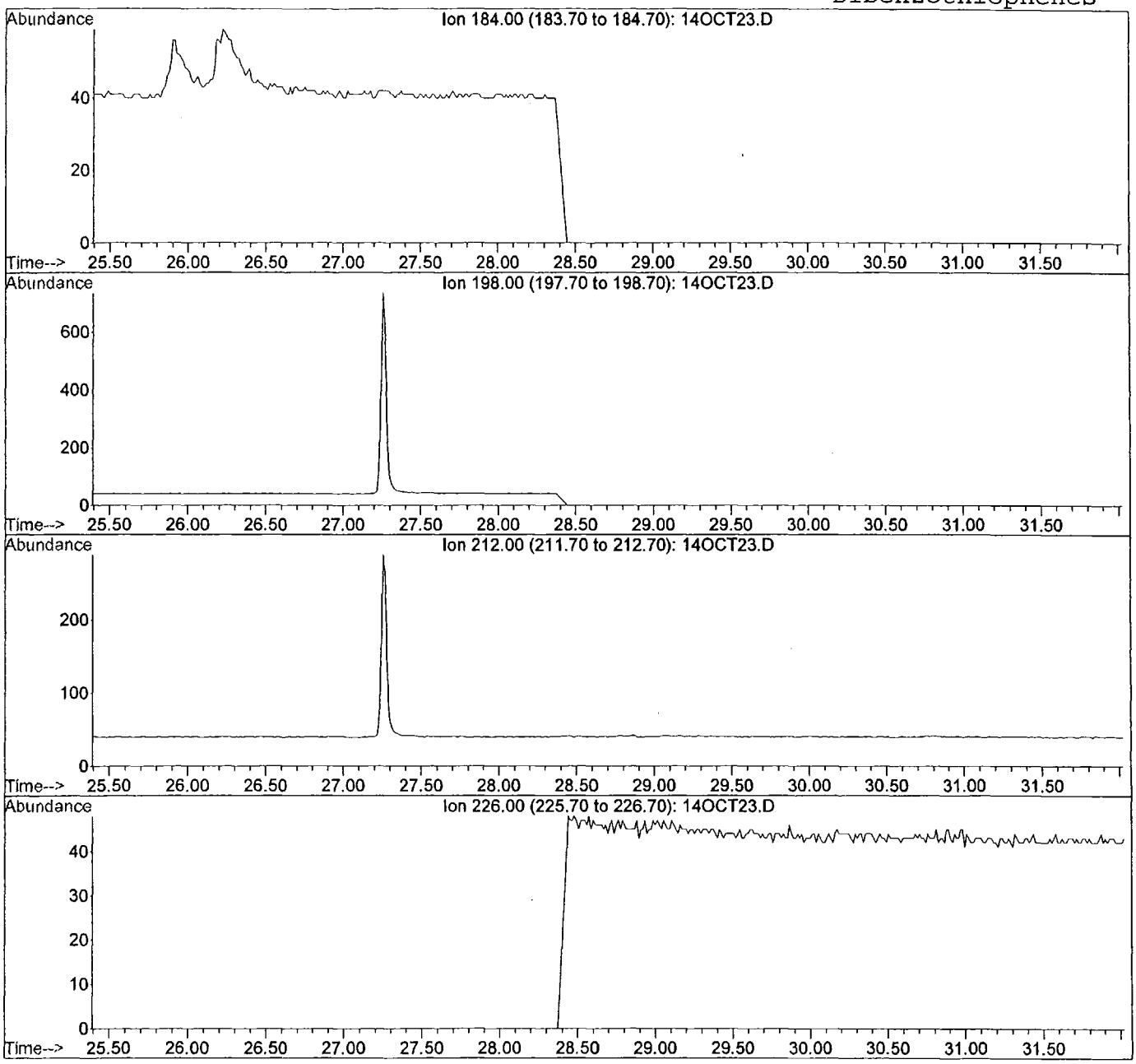
Dibenzothiophenes



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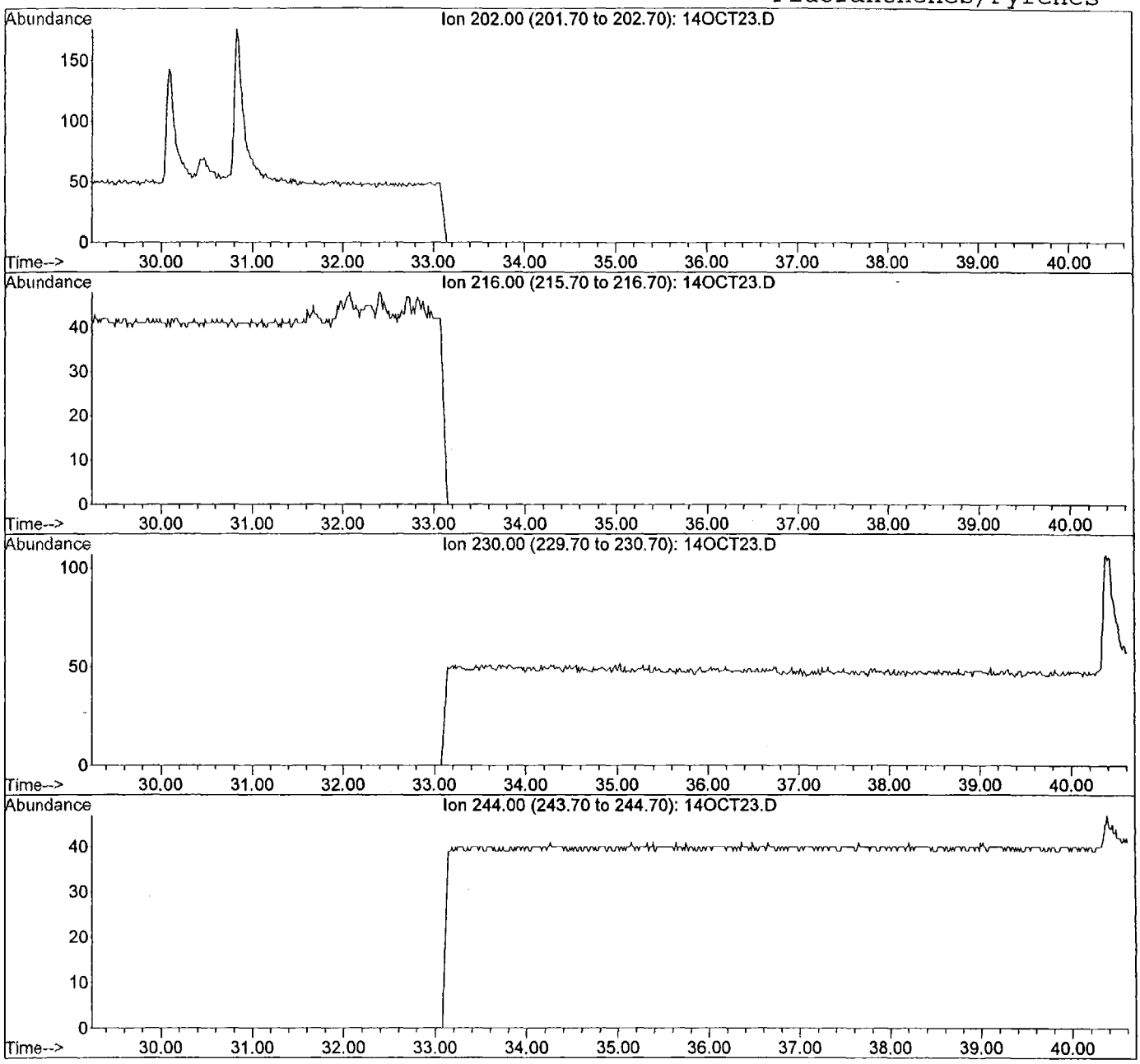
Fluoranthenes/Pyrenes



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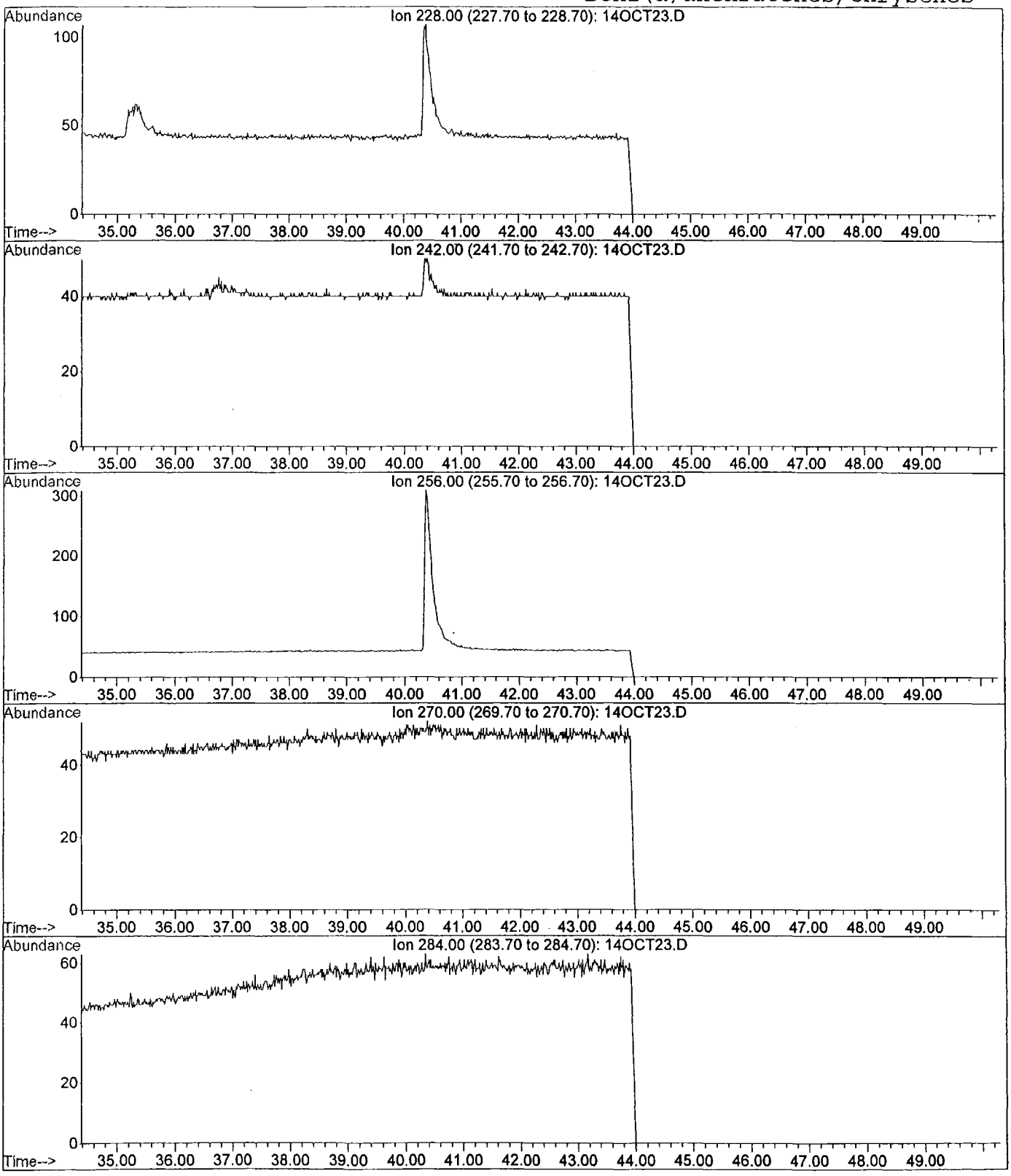
Benz(a)anthracenes/Chrysenes



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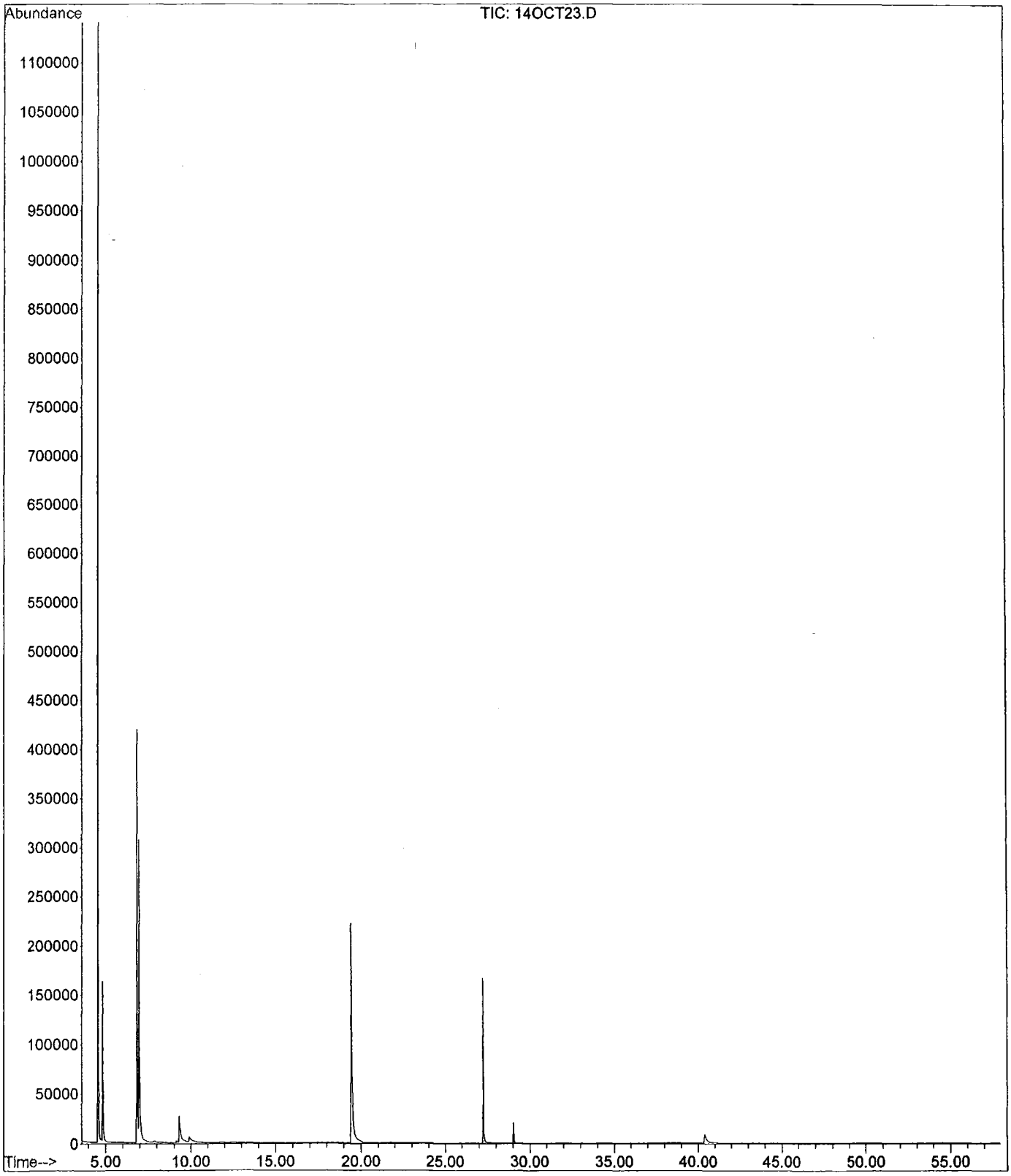

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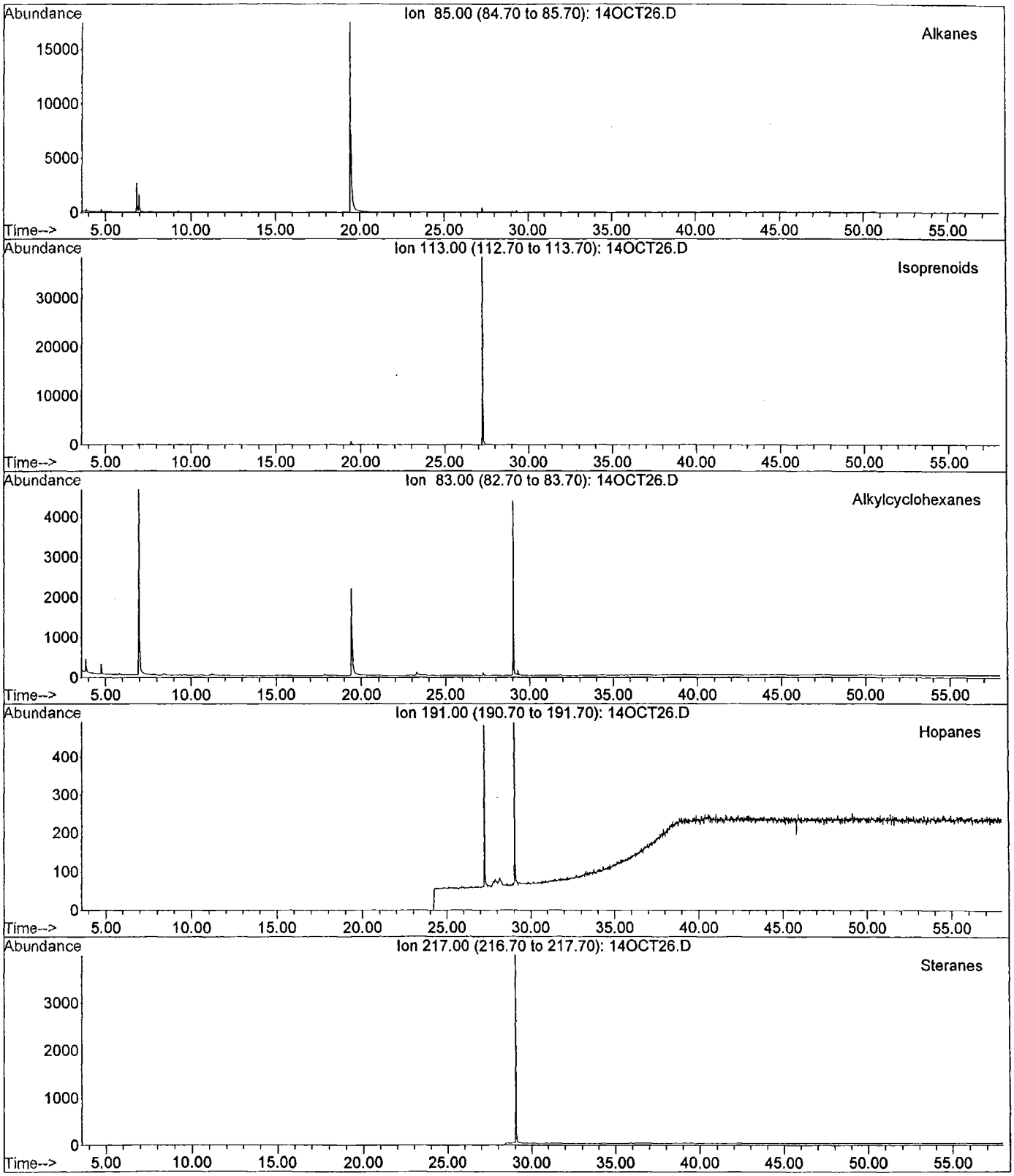

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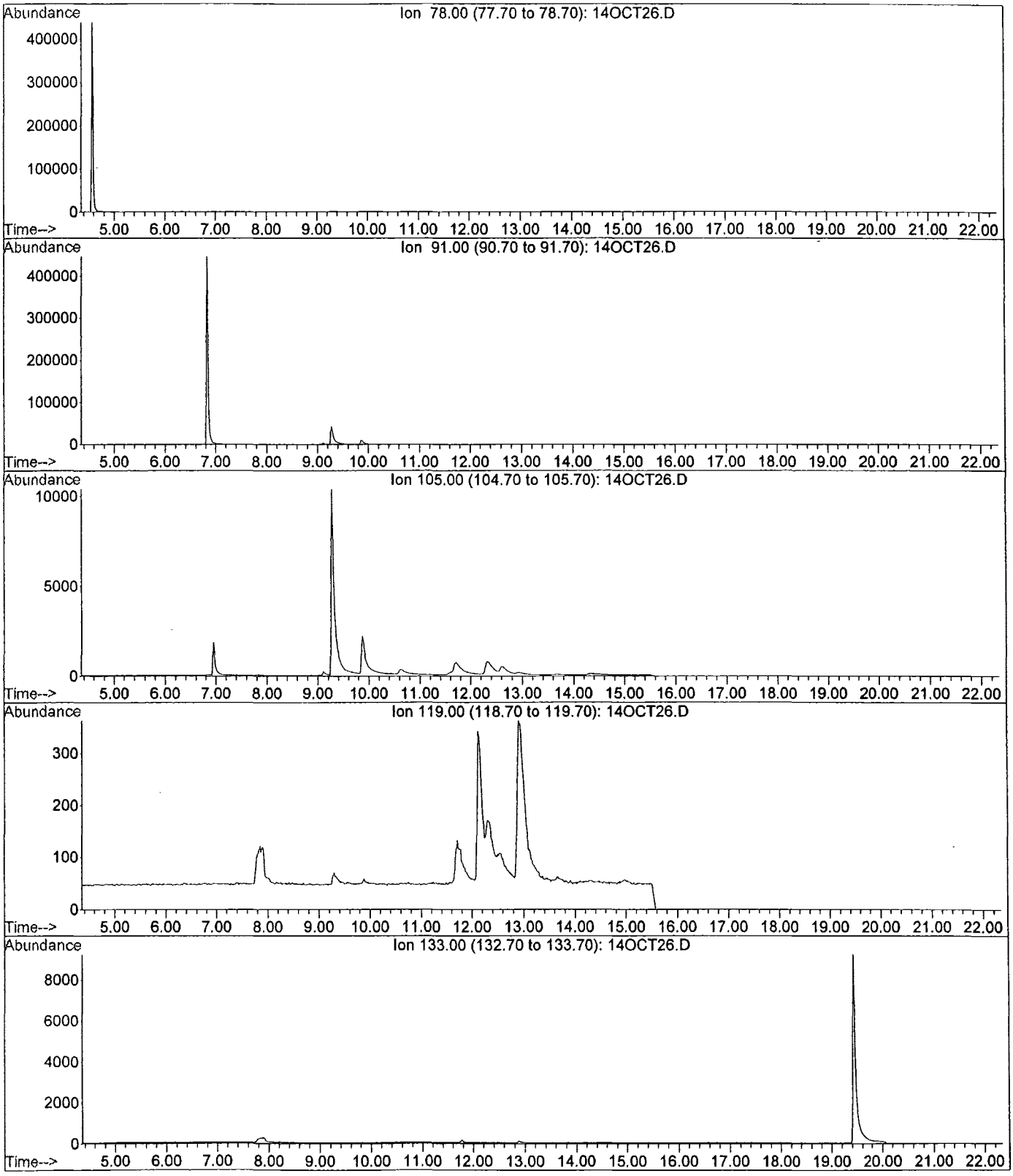
Benzenes



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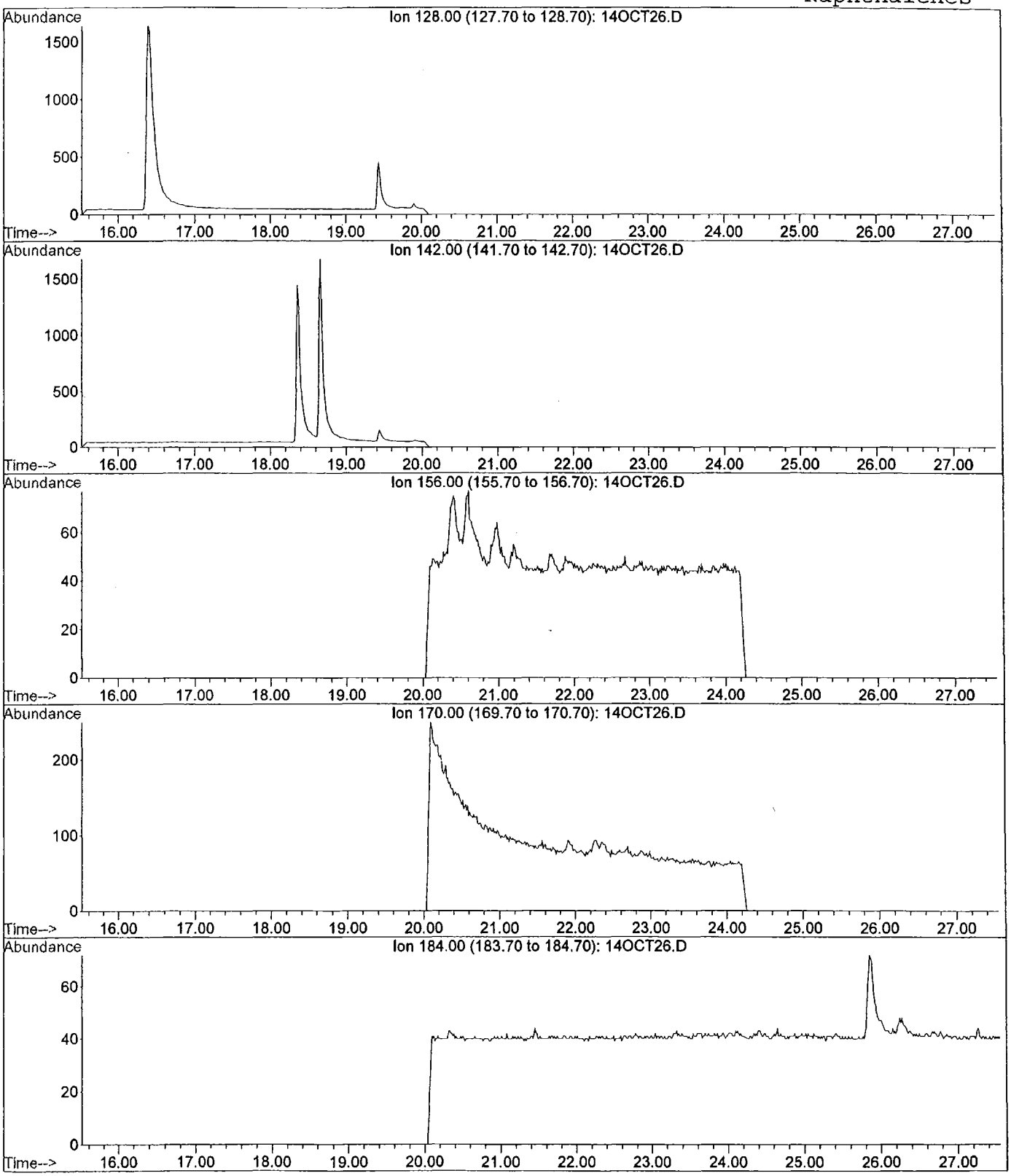
Naphthalenes



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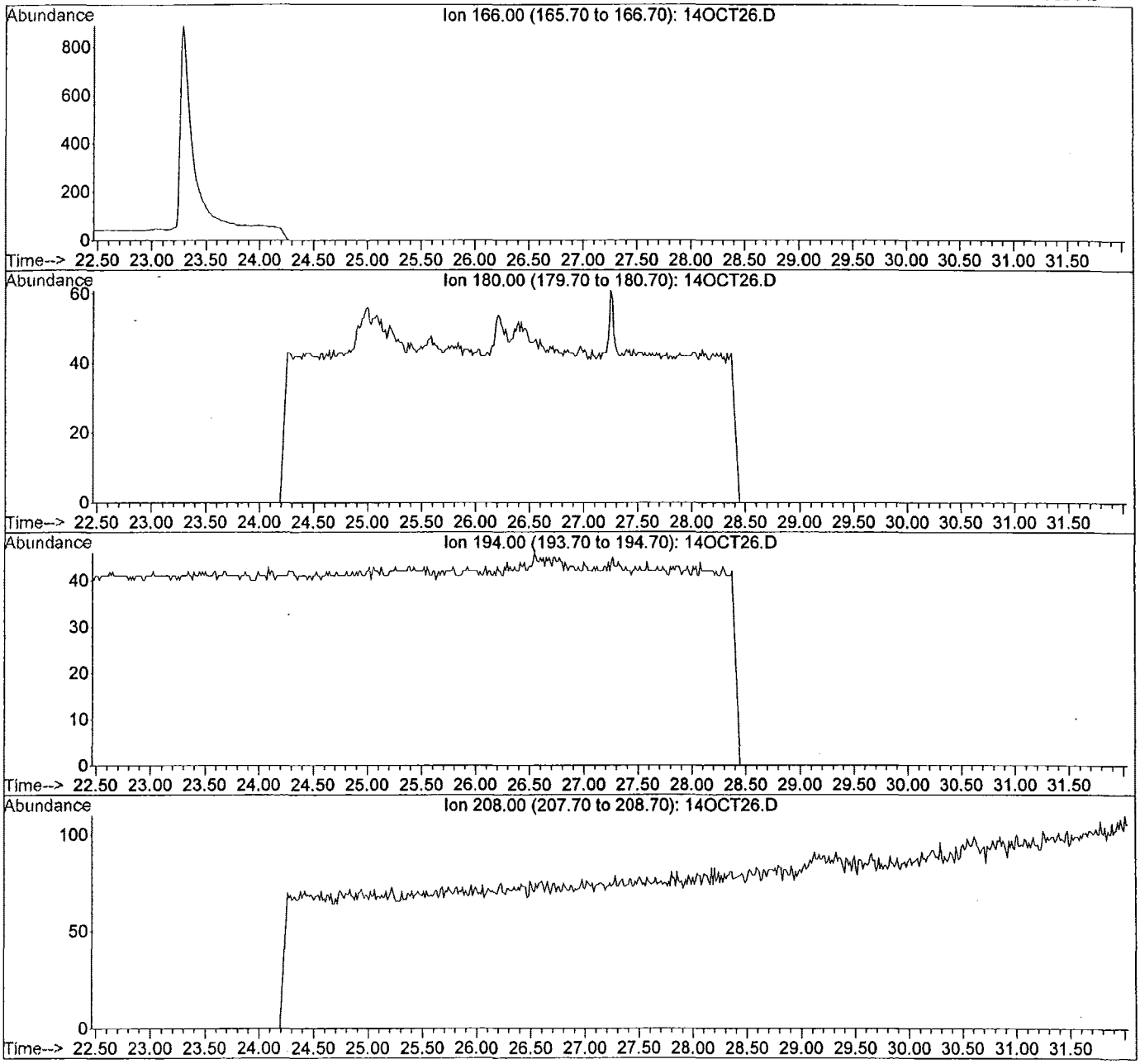
Fluorenes



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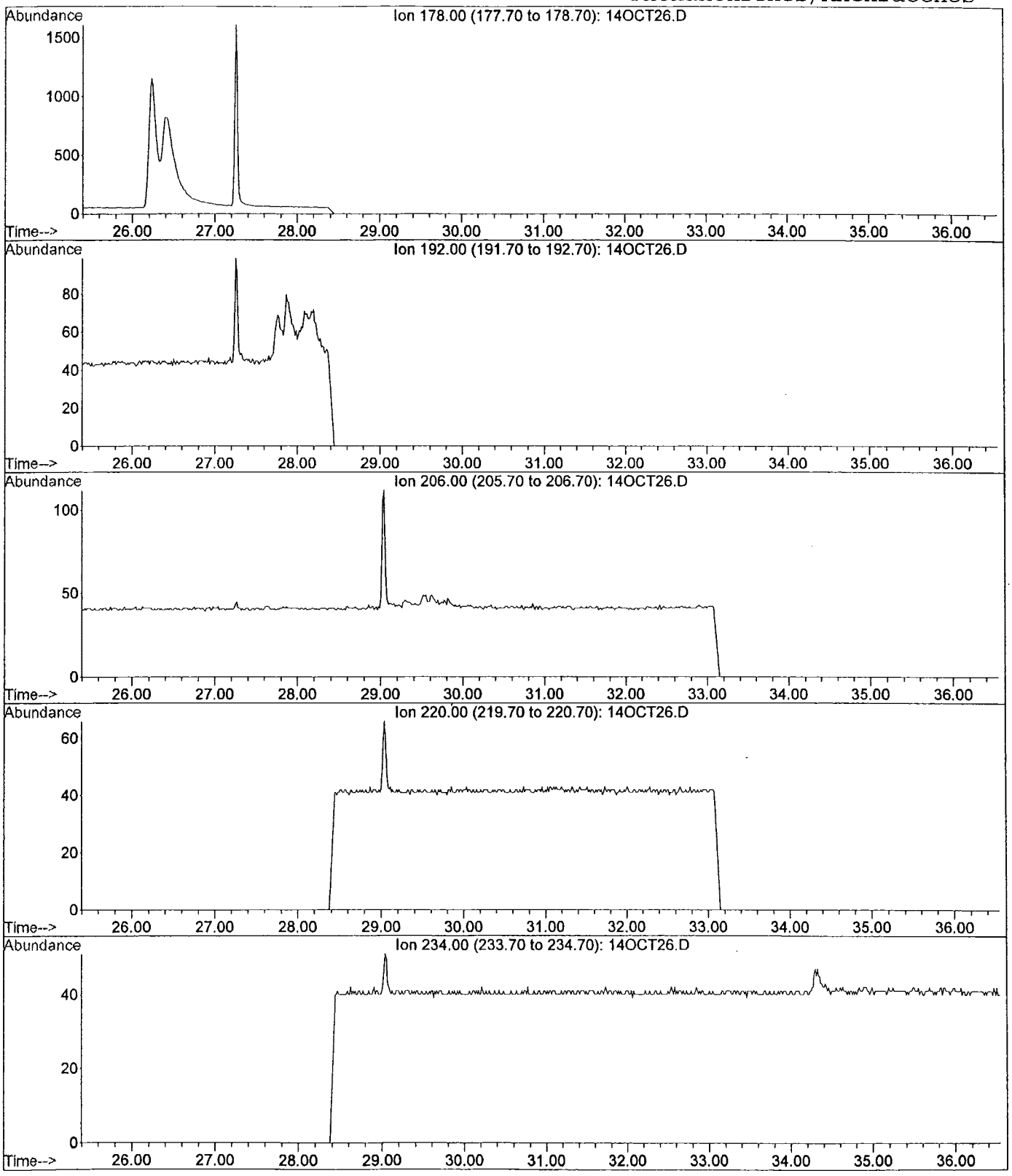
Instrument: GC/MS Ins Operator: ECC

Phenanthrenes/Anthracenes



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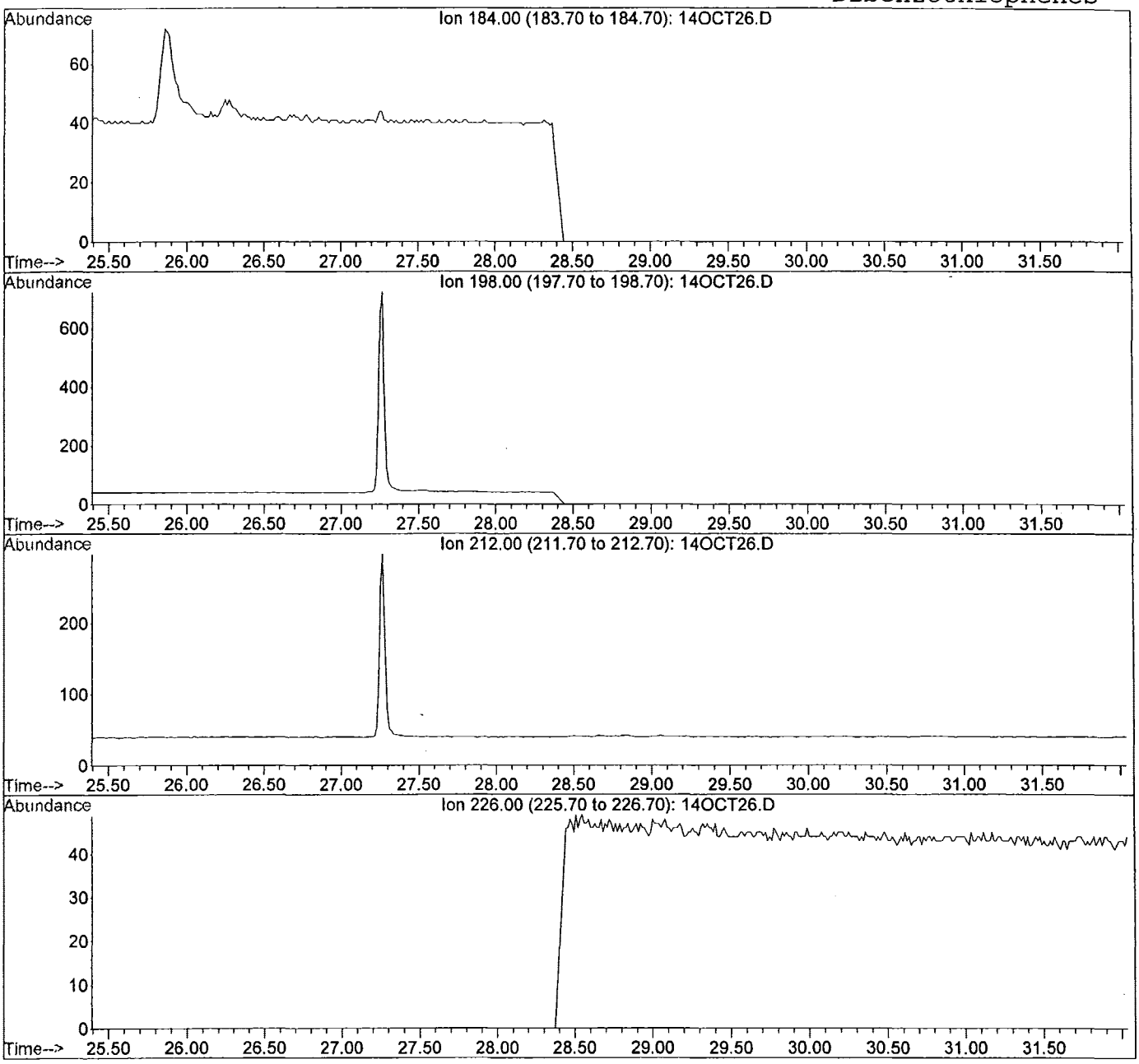
Dibenzothiophenes



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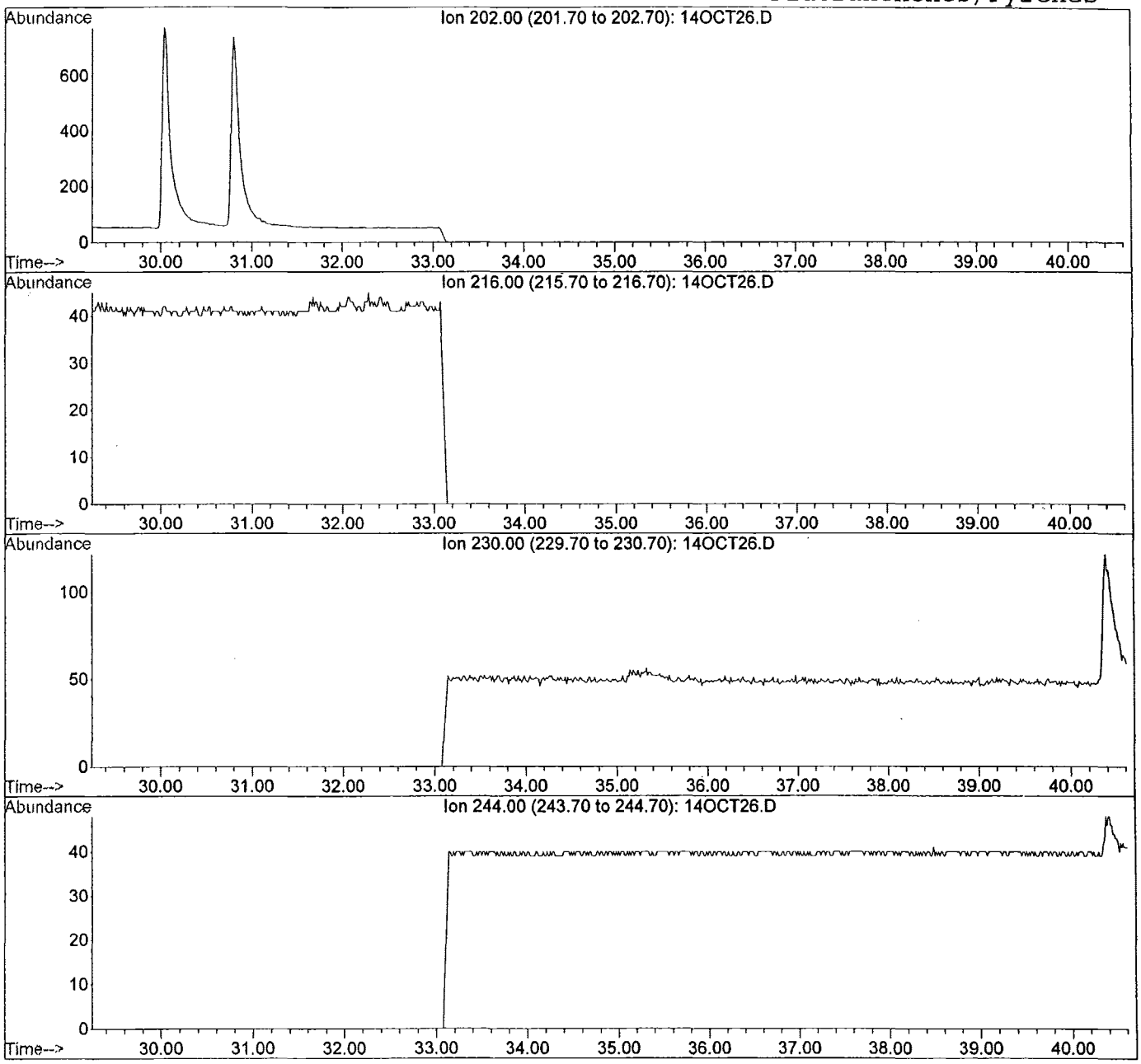
Fluoranthenes/Pyrenes



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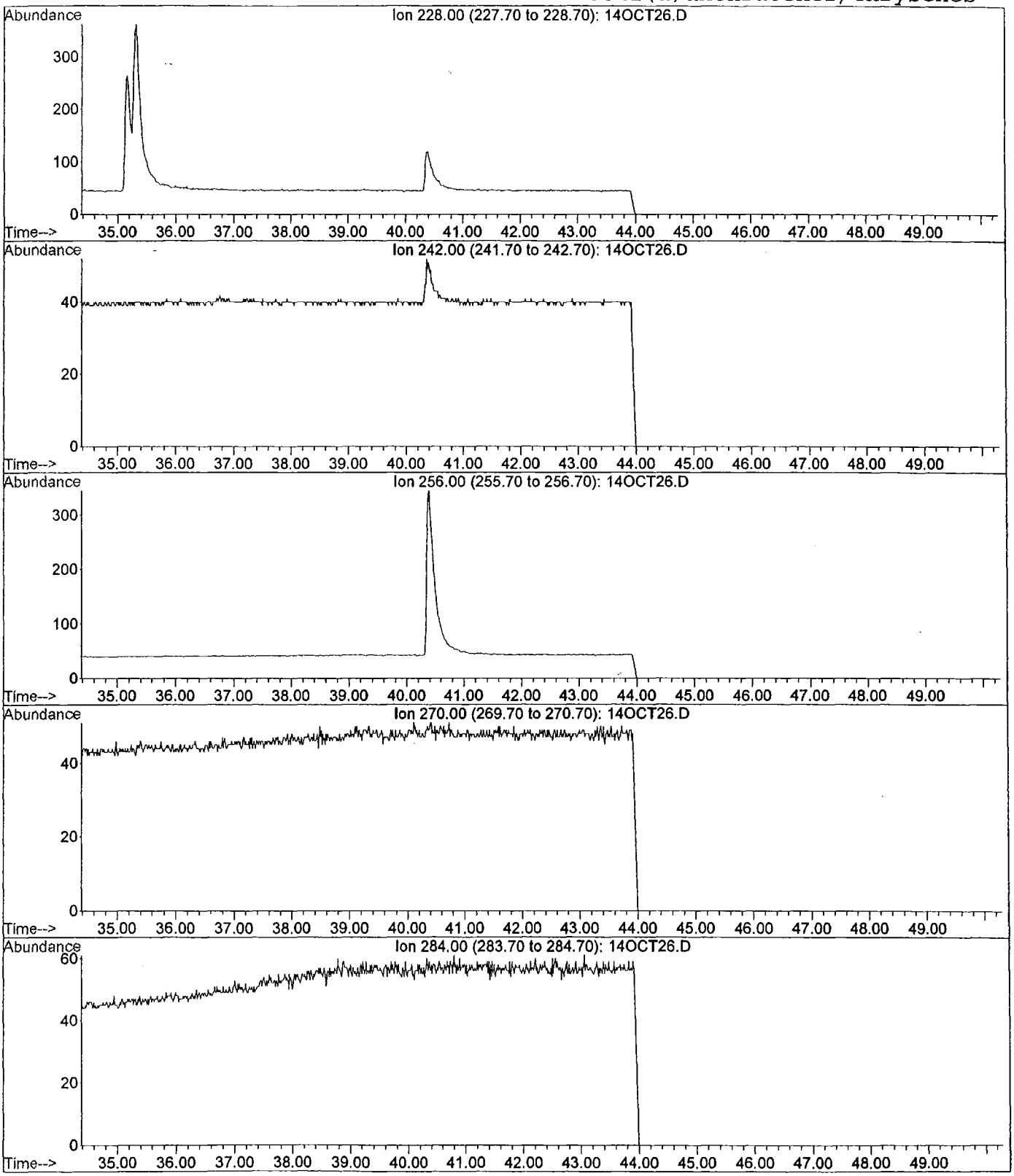
Benz(a)anthracenes/Chrysenes



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