PETREL SUB-BASIN STUDY 1995-1996

ORGANIC GEOCHEMISTRY OF OILS AND SOURCE ROCKS

BY

D.S. EDWARDS AND R.E. SUMMONS

AGSO RECORD 1996/42

Volume 2: Appendices

AGSO
AUSTRALIAN GEOLOGICAL SURVEY ORGANISATION

CONTENTS

APPENDIX A: Tables

Blank page 2

Table A1 Summary of Rock-Eval pyrolysis data for potential source rocks in the Petrel Sub-basin.

AGSO Sequence/ Supersequence	Total no wells	Total no. samples	No. SR samples	Lithology	Wells with identified source rocks	TOC (%)			Tmax (^oC)			S_1+S_2 (kg hc/t)			Production Index			HI ($mgS_2/gTOC$)		
						min	max	mean	min	max	mean	min	max	mean	min	max	mean	min	max	mean
Bathurst Isl.	13	134	30	Mdst	Cu1, Fi1, FT1, Gu1, Te1	0.51	1.70	0.76	420	439	432	0.24	2.80	0.64	0.02	0.25	0.11	36	183	70
			1	Coaly	FT1			44.30			441						0.02			7
Flamingo	13	50	18	Mdst	Cu1, Fi1, Gu1, Pet2	0.70	2.19	1.24	420	450	429	0.30	9.00	2.25	0.01	0.25	0.11	17	410	141
Plover	13	52	37	Mdst	Cu1, Fi1, FT1, Gu1, Pen1, Pet2, Te1	0.72	6.54	2.00	420	441	430	0.29	13.79	2.59	0.01	0.27	0.10	20	295	96
			3	Coaly	FT1	37.00	55.00	48.38	425	436	430	39.76	247.50	146.9	0.02	0.04	0.03	104	441	275
			1	Oil shl	Pen1			14.97			419			116.50			0.03			754
Malita	6	16	4	Mdst	Pet2	0.67	2.85	1.45	421	430	425	0.24	2.89	1.38	0.05	0.21	0.12	28	144	80
Cape Londonderry	8	23	3	Mdst	Pet2	0.82	1.04	0.89	431	434	433	1.00	1.74	1.25	0.20	0.22	0.21	98	130	109
Mt Goodwin	12	55	19	Mdst	Fi1, FT1, Pen1, Pet2, Te1	0.63	1.46	0.97	430	448	438	0.42	4.49	0.99	0.04	0.25	0.14	30	409	91
Hyland Bay	18	98	49	Mdst	Bou1, Ca1, Fi1, FT1, Ki1, Pen1, Pet2, Te1, Tu1	0.52	9.95	2.02	423	475	438	0.30	7.39	1.29	0.02	0.37	0.14	11	192	55
Fossil Head	19	196	130	Mdst	Ba1, Ba2, Bi1, Bou1, Ca1, Fi1, FT1, Ki1, Ma1, Pen1, Pet2, Te1, Tu1	0.52	4.97	1.84	416	491	440	0.22	11.61	0.93	0.02	0.40	0.16	14	218	41
Keyling	18	149	67	Mdst	Ba1, Be1, Bi1, Bou1, Ca1, FT1, K1, Ki1, Ku1, La1, Ma1, Tu1	0.50	7.98	2.78	419	452	437	0.32	28.78	3.56	0.01	0.24	0.10	29	357	95
			28	Coaly	FT1, Ki1	10.67	79.90	35.20	425	455	443	5.57	204.49	77.74	0.02	0.15	0.05	11	402	230
Treachery	17	60	32	Mdst	Ba1, Be1, FT1, K1, Ki1, La1, Ma1	0.50	8.58	1.27	425	456	443	0.28	13.58	1.28	0.04	0.22	0.13	37	269	88
			3	Coaly	FT1	13.61	37.50	28.87	432	455	444	3.50	57.88	67.43	0.06	0.18	0.11	21	169	113
Kuriyippi	16	91	39	Mdst	Bi1,Ca1,FT1,K1,Ki1,Ku1,La1,Ma1,Tu1	0.55	5.52	1.25	425	455	435	0.35	12.20	1.59	0.04	0.24	0.15	24	321	97
			4	Coaly	FT1, Ku1	13.39	22.29	17.92	437	451	444	22.15	46.70	32.26	0.06	0.10	0.09	140	188	161
Point Spring	20	33	11	Mdst	Ba2, Ca1, Ku1, La1, Ma1	0.69	1.03	0.77	416	466	439	0.22	1.35	0.56	0.16	0.38	0.26	21	197	59
			1	Coaly	Ba2			12.90			427			50.45			0.05			370
Tanmurra 2	19	39	9	Mdst	Ba1, K1, La1, Le1, Sk1	0.53	2.82	0.94	426	444	435	0.31	2.20	0.80	0.11	0.37	0.23	32	171	95
Tanmurra 1	15	34	10	Mdst	Ba2, Ca1, K1, Sk1	0.52	1.64	0.81	429	439	434	0.49	3.16	1.27	0.10	0.26	0.16	67	168	129
Milligans	17	219	74	Mdst	Ba2, Bo1, Bo2, Ca1, KR1, K1, NBF, Pl1, SH1, Sk1, Tu1, Tu2	0.48	4.33	1.29	418	522	447	0.21	11.70	1.00	0.03	0.48	0.21	8	292	57
Langfield	5	18	3	Lst, Mdst	SH1	0.39	0.72	0.53	433	434	433	0.31	0.37	0.33	0.23	0.31	0.28	31	67	49
Ningbing	6	49	5	Marl	SH1	0.35	1.73	1.13	432	443	437	0.31	2.51	0.83	0.08	0.28	0.17	24	123	59
Cockatoo	3	25	0	Marl																

Ba1=Barnett-1, Ba2=Barnett-2, Be1=Birkley-1, Bi1=Billawock-1, Bo1=Bonaparte-1, Bo2=Bonaparte-2, Bou1=Bougainville-1, Ca1=Cambridge-1, Cu1=Curlew-1, Fi1=Fishburn-1, FT1=Flat Top-1, GU1=Gull-1, KR1=Keep River-1, K1=Kingfisher-1, Ki=Kinmore-1, Ku1=Kulshill-1, Ku2=Kulshill-2, La=Lacrosse-1, Le1=Lesueur-1, Ma1=Matilda-1, NBF=NBF1002, Pl1=Pelican Island-1, Pen1=Penguin-1, Pet2=Petrel-2, Sk1=Skull-1, SH1=Spirit Hill-1, Te1=Tern-1, Tu1=Turtle-1, Tu2=Turtle-2

Clastic sediments are defined as 0.5 > TOC < 10 %. Coaly shale is defined as 10 > TOC < 50 %. Coal is defined as TOC > 50 %.

Table A2 Appraisal of source rock type and quality, Petrel Sub-basin.

AGSO Supersequence or Sequence	Depositional Environment	Maceral Assemblages	Kerogen Type Range	Kerogen Type Mean	Generative Potential	Hydrocarbons Generated	Maturity in wells
Bathurst Island	Marine shelf	I>>V>L	IV - II/III	III	Poor	Gas	Immature
Flamingo	Marine, deltaic and fluvial	I>>V>L or V>I>L	IV - II/III	III	Poor	Gas-condensate	Immature
Plover	Fluvio-deltaic	Mdst = I >> V > L	IV - II/III	III	Fair	Gas	Immature-marginal mature
		Coaly = V>L=I	II/III - II	II/III	Very Good	Condensate	Immature-marginal mature
		Oil shl = L	I/II	I/II	Very Good	Oil	Immature
Malita	Arid climate, aolian, playa lakes?	I>>V or V>I>L	IV-III	III	Poor	Gas	Immature
Cape Londonderry	Fluvial	I>>V or V>I>L	III	III	Poor	Gas	Immature
Mt Goodwin	Open marine	V>I >L or I>V>L	IV-II	III	Poor	Gas	Immature-mature
Hyland Bay	Deltaic, marine	I>>V>L or V>=I>L	IV-II/III	III	Poor	Gas	Immature-mature
Fossil Head	Marine shelf, estuarine	I>>V>L	IV-II/III	IV	Poor	Dry gas?	Immature-mature
Keyling	Coastal plain, marginal marine,	Mdst = I>=V>L	IV-II	II/III	Fair	Gas	Immature-mature
	and fluvio-deltaic	Coaly = nd	IV-II	II/III	Very good	Condensate	Immature-mature
Treachery	Glacial, lacustrine, estuarine	I>=L>>V	IV-III	III	Poor	Gas	Immature-mature
Kuriyippi	Glacial, lacustrine, fluvial, estuarine	Siltst = I>=L>>V	IV-III	III	Poor	Gas	Immature-mature
		Coaly = nd	II/III	II/III	Very Good	Condensate	Mature
Point Spring	Fluvio-deltaic	Mdst = I >=L>>V	IV-III	IV	Poor	Gas	Immature-marginal mature
		Coaly = nd	II/III	II/III	Very Good	Oil	Immature
Tanmurra 1 & 2	Marine	I >=V >= L	IV-III	IV	Poor	Gas	Immature-mature
Milligans (petroleum wells)	Marine	I>>V>=L	III/IV	IV	Poor	Gas	Immature-overmature
Milligans (mineral wells)	Marine	L>>I	II/III	II/III	Good	Gas, oil	Immature
Langfield	Marine shelf	nd	IV	IV	Poor	Gas	Immature-overmature
Ningbing	Shelf-open marine	I>>V	IV-III	III	Poor	Gas	Immature-overmature
Cockatoo	Marine shelf	nd	IV	IV	Poor	Dry Gas?	Immature-overmature

Macerals: L = liptinite (remains of plankton, benthic algae and land-plants remains such as spores, pollen and leaf cuticle), I = inertinite (oxidised land-plants), V = vitrinite (unoxidised wooc

Lithologies: cse = coarse, lst = limestone, mdst = mudstone, sst = sandstone, siltst = siltstone.

Table A3 Key to Rock-Eval pyrolysis parameters (after Espitalié *et al.*, 1985; Peters, 1986).

Parameter	Name (units)	Definition	Specificity	Problems
TOC	Total Organic Carbon (wt. percent)	Measure of the rock's organic richness.	Organic richness.	
S_1	Kg hc (extractable) / tonne rock	Measure of the amount of free hydrocarbons present in the rock.	Kerogen type. Maturity. Migrated oil.	
S_2	Kg hc (kerogen pyrolysate) / tonne rock	Measure of hydrocarbons formed by cracking of kerogen, resins and asphaltenes.	Kerogen type. Maturity.	High values may be obtained if oil or bitumen is present (Clementz, 1980). Lower values can arise from adsorption on the mineral matrix (Espitalié *et al.*, 1980; Orr, 1983).
S_3	Kg CO_2 (organic) / tonne rock	Measure of CO_2 generated from oxygenated functional groups in kerogen.	Kerogen type. Maturity.	Subject to interference by CO_2 from decomposition of carbonate minerals (Horsfield & Douglas, 1980; Horsfield, 1984).
S_1+S_2	Potential Yield (Kg hc / tonne rock)	The total hydrocarbon genetic potential *i.e.* the free and kerogen-bound hydrocarbons.	Source richness. Kerogen type.	
T_{max}	Position of S_2 peak in temperature program (°C)	Temperature corresponding to the maximum amount of hydrocarbons generated from the cracking of kerogen.	Maturity: Kerogen type	Depressed values indicate migrated hydrocarbons.
PI	Production Index (S_1/S_1+S_2)	Extent to which kerogen has been transformed into oil and gas.	Maturity. Migrated oil.	Anomalous values correspond to accumulation or drainage of hydrocarbons.
PC	Pyrolysable Carbon (wt. percent)	The amount of TOC represented by S_1 and S_2.	Source richness: Kerogen type. Maturity.	Oxidation of organic matter lowers the values.
C	Conversion Factor (PC/TOC) * 100	The per centage of TOC available for convertion to hydrocarbons.	Organic richness.	
HI	Hydrogen Index [mg hc (S_2) / g TOC]	High values > 150 indicate oil prone source rocks.	Kerogen type. Maturity.	
OI	Oxygen Index [mg CO_2 (S_3) / g TOC]	Indicate the presence of abundant woody or oxidised organic matter. High values indicate low hydrocarbon yields.	Kerogen type. Maturity.	Not reliable in carbonates and organically lean sediments.

hc hydrocarbon

Table A4 Summary of criteria used to define a mature source rock (modified from Peters, 1986).

Table A4a Source rock generative potential.

Quantity	**TOC (wt %)** Carbonate	**TOC (wt %)** Clastic	**S_1** kg hc / tonne	**S_2** kg hc / tonne	**$S_1 + S_2$** kg hc / tonne
Poor	0 - 0.2	0 - 0.5	0 - 0.5	0 - 2.5	0 - 3
Fair	0.2 - 0.5	0.5 - 1	0.5 - 1	2.5 - 5	3 - 6
Good	0.5 - 1	1 - 2	1 - 2	5 - 10	6 - 12
Very Good	> 1	> 2	> 2	> 10	> 12

Table A4b Source rock quality.

Type	**HI** (mg hc / g TOC)	**S_2 / S_3**
Gas	0 - 150	0 - 3
Gas and condensate	150 - 200	3 - 5
Oil and gas	200 - 300	5 - 10
Oil	> 300	> 10

Table A4c Source rock thermal maturity.

Maturation	**PI** $[S_1/(S_1 + S_2)]$	**T_{max}** °C	**Rv** %
Top oil window	~ 0.1	~ 435 - 445	~ 0.6
Bottom oil window	~ 0.4	~ 470	~ 1.4

Table A5 Maceral classification scheme (modified from AS 2856-1986) and relationship to kerogen type.

Maceral Group	Maceral	Origin	Petroleum Potential	Kerogen composition
Liptinite	Alginite Bituminite	Algal and bodies and tests Bacterial remains	Hydrogen-rich; oil-	Type I to II
	Resinite Liptodetrinite Sporinite Suberinite Flourinite Exsudatinite Cutinite	Plant resins Detrital remains of any liptinite Exines and perines of spores and Cork tissue Plant oils Secondary maceral, expelled Waxy leaf cuticles	Hydrogen-rich; oil and gas-prone	Type II
Vitrinite	Telovitrinite Detrovitrinite Gelovitrinite	Humified remains of lignin and cellulose derived from wood, bark leaves, and stems of land plants	Hydrogen-poor; mainly precursors for	Type III
Inertinite	Telo-inertinite Detro-inertinite Gelo-inertinite	Lignin and cellulose oxidised by charring or mouldering before deposition. Also produced from coalification of vitrinite and	Very hydrogen-poor; largely inert but may produce dry gas at very late stage of maturation.	Type IV

Table A6 Compilation of oil shows in mineral wells.

Well no.	Northing	Easting	Depth (m)	Formation	Shows
Northern Territory					
BHL 012	8328870	546370			Strong oil in flow from top of the unit.
BHL 013	8329000	546220			Calcareous micaceous siltstone with oil.
DDH 117	8308100	530120	6-134.7		Trace of bitumen at 108-110 m.
DDH 5	8312050	465625			Oolitic limestone with vugs containing bitumen at 39.95-46.5 m. Bitumen infilling vugs and fractures at 52.7-80.8 m.
DDH 6	8308000	465925			Traces of bitumen in sandstone 68.7-69.6 m.
NBC 4013	8309905	529937			Bitumen in sandy limestone at 48-50 m.
NBF 1002	8312795	530392	32 - 317.8	? Ningbing Limestone	1.5 cm wide coal seam at 119.4 m. Fracture infilled with soft bitumen at 123.25 m.
NBK 1010	8296290	519910	159.55-		1 cm coal band at 210.6m. Between 230-231 m petroliferous odour.
NBK 1021	8297200	520650	33-23.25	? Enga Sandstone, Milligans Beds	Minor bituminous material at 67.3-69 m. Bituminous patch 1-2 cm in size at 103.7 m
NBK 1023	8296900	520425	53.5-132.4		Globular bitumen in large cavities and minor in fractures at 66.5 and 67.5 m.
NBK 1029	8300100	521800	30-117.7	? Enga Sandstone, Milligans Beds	Bitumen in vugs at 56.4, 56.6 and 56.8 m.
NBK 1031	8295650	519725	22-99.8	Milligans Beds,	Minor Bitumen at 41 m. Trace bitumen in sand filled cavity at 41.6 m.
NBK 1032	8295300	519550	22-141.35	? Enga Sandstone, Milligans Beds,	Bitumen on fractures at 109.8 m
NBK 1034	8304300	525600	18.4-123.7	MIlligans Beds	Bitumen in quartzite bands at 27.4 m.
NBK 1035	8304300	525700	16.7-118.28	?Enga Sandstone, Milligans Beds	Bitumen at 33-46 m, particularly at 41 m.
NBK 1036	8297300	520650	29.35-249.85	Milligans Beds	Bituminous material in cavities and fractures 136.8-137.85 m.
NBK 1038	8297400	520675	18-284	MIlligans Beds	Vug containing bituminous material at 131.5, 205.45 and 235.6 m.
NBK 1039	8296512	520272	20.9-141.75	MIlligans Beds,	Vugs lined with bituminous material 75.2-91 m
NBK 4017	8304920	529732			Occassional bituminous fragments at 28-30m.
NBM 2001	8286175	512795			Thin grey-brown oily film on water from washing sample 46-48 m.
Western Australia					
WBJ 1001	8296300	485500	29.65-218.85	Milligans Beds	Bituminous smell along mud-lined stylolite (100-102 m) and on freshly broken surfaces (109-110.5 m; 154 m). Bituminous mud-lined stylolites (121-124 m, 185-186 m). Oily film at 127-128 m.
WBN 4002	8324500	462310		?Milligans Beds, Ningbing Limestone	Minor bitumens.
WBN 5003	8337150	458115	116.3-535.5	?Milligans Beds, Ningbing Limestone	Bitumen coating.
WBN 5004	8342440	457165	81.6-143m	?Milligans Beds, Ningbing Limestone	Minor bitumen.
WBN 5005	8345130	457066	91.8-451.9	?Milligans Beds, Ningbing limestone	Occassional bitumen.
WBN 5006	8342440	457520	246.8-301.5	?Milligans Beds, Ningbing Limestone	Bitumen is present in small vugs at 253-265m. Hairline fractures filled with bitumen fractures at 264-293 m.
WBR 1001	8299850	463650	9.8-158.1	Jeremiah Mbr, Cockatoo Fm?	Faint bituminous smell occassionally on freshly broken surfaces at 63.6-72.3 m. Possible bitumen at 74.2-82.0 m.
WBS 1036	8295339	495431	15-173	Cockatoo 170.35-173	Spots of black hydrocarbon at 78.6-80.8 m.
WBS 1038	8295339	495456	18-207		Hydrocarbons? at 52.9-56.25 m. Thin contorted black shales/bitumen? at 94.3-94 m
WBS 1048	8296439	496506	30-175.2		Rare bitumen at 47.15-58.7 m.
WBS 1099	8293539	497106	24-79		Vugs commonly bitumen infilled from 36.47-37.18 m.

Table A6 continued.

Well no.	Northing	Easting	Depth (m)	Formation	Shows
WBS 1100	8293539	497406	33-191		Bitumen is common in vugs from 50.71-52.79 m and 52.79-57.44 m.
WBS 5028	8297539	495706	109-362	?Jeremiah Mbr 167 - 330 m. Cockatoo Sandstone 330-362	Bitumen lines vugs in dolomite-sandstone at 117.1-117.4 m.
WBS 6010	8293139	496656			Minor bitumen at 32-34, 56-62 and 68-70 m.
WKNB 2	8315600	464500	12-198.1	Burvil beds, Milligans Fm, Ningbing Lst	Tar-filled cavities 193.8-194.1 m.

Data complied from information supplied by John Bunting (North Exploration), David Gellatly (Wilga Mines N.L.), Greg Irwin (Amity Oil N.L.) and Steve Vincent (Delta Gold N.L.).

Table A7: Samples chosen for geochemistry and isotopic analyses from the Petrel Sub-basin.

Table A7a: Liquid petroleums analysed.

AGSO No.	Well/Locality	Latitude	Longitude	Sample Type	Well Test	Depth top m	Depth base m	Reservoir Unit	Reservoir Sequence (AGSO)	Age
#8572	Barnett-1	-14.5305	129.0614	Core 3	Oil stain	1539		Upper Kulshill Unit C	Kuriyippi	Late Carboniferous
#8573	Barnett-1	-14.5305	129.0614	Core 4	Oil stain	1562		Upper Kulshill Unit C	Kuriyippi	Late Carboniferous
#8574	Barnett-1	-14.5305	129.0614	Cuttings	Oil stain	2035	2045	Lower Kulshill Unit A	Point Spring	Early Carboniferous
#440	Barnett-2	-14.5323	129.0522	Oil	DST 3	1491	1497	Upper Kuriyippi	Treachery	Early Permian
#441	Barnett-2	-14.5323	129.0522	Oil	DST 4	1501	1507	Upper Kuriyippi	Kuriyippi	Late Carboniferous
#439	Barnett-2	-14.5323	129.0522	Oil	DST 1	2393	2408	Upper Milligans, Barnett Mbr	Milligans A5-8	Early Carboniferous
#8528	Cambridge-1	-14.2904	128.4326	Cuttings	Oil stain	1455	1465	Kulshill Fm	Kuriyippi	Late Carboniferous
#8587	Lacrosse-1	-14.2975	128.5827	Cuttings	Oil stain	1451	1454	Kulshill Fm	Keyling	Early Permian
#8588	Lacrosse-1	-14.2975	128.5827	Cuttings	Oil stain	1588	1591	Kulshill Fm	Treachery	Early Permian
#7944	Milligans-1	-15.6498	129.0084	Cuttings	Oil stain	45	49	Milligans Fm	nd	Early Carboniferous
#7945	Milligans-1	-15.6498	129.0084	Cuttings	Oil stain	64	67	Milligans Fm	nd	Early Carboniferous
#7949	Milligans-1	-15.6498	129.0084	Cuttings	Oil stain	122	126	Milligans Fm	nd	Early Carboniferous
#8571	Ningbing-1	-15.1816	128.6810	Core 4	Oil stain	1268	1268	Cockatoo Fm, Cecil Mbr	Cockatoo?	Late Devonian
#4934	Outcrop Ningbing Lst			Outcrop	Oil stain			Ningbing Lst	nd	Late Devonian
#10017	Petrel-4	-12.8884	128.4948	Condensate	DST 4	3570	3586	Hyland Bay	Hyland Bay	Late Permian
#8575	Turtle-1	-14.4766	128.9448	Core 3	Oil stain	1457		Kulshill Fm	Treachery	Early Permian
#382	Turtle-1	-14.4766	128.9448	Oil	DST 5	1619	1621	Kulshill Fm	Treachery	Early Permian
#4915	Turtle-2	-14.5059	128.9458	Core	Oil stain	925		Keyling Fm	Keyling	Early Permian
#383	Turtle-2	-14.5059	128.9458	Oil	RFT	927		Keyling Fm	Keyling	Early Permian
#4916	Turtle-2	-14.5059	128.9458	Core	Oil stain	928		Keyling Fm	Keyling	Early Permian
#4917	Turtle-2	-14.5059	128.9458	Core	Oil stain	932		Keyling Fm	Keyling	Early Permian
#4918	Turtle-2	-14.5059	128.9458	Core	Oil stain	1440		Treachery Shale, Unit 2	Treachery	Early Permian
#4919	Turtle-2	-14.5059	128.9458	Core	Oil stain	1609		Kuriyippi Fm	Treachery	Early Permian
#384	Turtle-2	-14.5059	128.9458	Oil	DST 1A	2632	2721	Milligans Fm	Milligans A5-8 - Milligans praecipua	Early Carboniferous
#10014	Turtle-2	-14.5059	128.9458	Oil	DST 1A	2632	2721	Milligans Fm	Milligans A5-8 - Milligans praecipua	Early Carboniferous
#10068	Waggon Creek-1	-15.3238	128.7105	Oil	DST 3	586	601	Millgians Fm	nd	Early Carboniferous

Table A7b: Source rocks analysed.

AGSO No.	Well	Latitude	Longitude	Sample Type	Depth top m	base m	Formation	Sequence (AGSO)	Age	Biostratigraphy	Lithology
#8467	Barnett-2	-14.5323	129.0522	Core 2	2558	2558	Upper Milligans, Barnett Mbr	Milligans praecipua	Early Carboniferous	*G. praecipua*	Dark grey mdst
#7957	Bonaparte-1	-15.0167	128.7417	Core 13	1166	1167	Milligans Unit 3	Milligans 5	Early Carboniferous	*A. largus*	Mdst
#8580	Bonaparte-1	-15.0167	128.7417	Core 18	1594	1594	Milligans Unit 3	Milligans 4	Early Carboniferous	*A. largus*	Mdst
#7970	Bonaparte-2	-15.0853	128.7211	Core 7	1074	1075	Milligans Shl Unit 1	Milligans 5	Early Carboniferous	*A. largus*	Mdst
#7972	Bonaparte-2	-15.0853	128.7211	Core 8	1201	1201	Milligans Shl Unit 1	Milligans 4	Early Carboniferous	*A. largus*	Mdst
#7976	Bonaparte-2	-15.0853	128.7211	Core 12	1644	1644	Milligans Shl Unit 1	Milligans 3	Early Carboniferous	*A. largus*	Mdst
#8484	Flat Top-1	-12.3765	129.2655	Cuttings	1661	1664	Formation 6	Keyling	Early Permian	*D. townrowii*	Coal
#8989	Kinmore-1	-14.0336	129.2625	Cuttings	1470	1473	Kulshill Fm	Keyling	Early Permian	nd	Mudst, minor coal
#8551	Lesueur-1	-13.9526	128.1256	Cuttings	3453	3456	Tanmurra	Tanmurra 1	Early Carboniferous	*A. largus*	Mdst & Sst
#7923	NBF1002	-15.2609	129.2830	Core	176		Milligans	nd	Early Carboniferous	?	Calcareous mdst
#7924	NBF1002	-15.2609	129.2830	Core	184		Milligans	nd	Early Carboniferous	?	Calcareous mdst
#7925	NBF1002	-15.2609	129.2830	Core	208		Milligans	nd	Early Carboniferous	?	Calcareous mdst
#7926	NBF1002	-15.2609	129.2830	Core	220		Milligans	nd	Early Carboniferous	?	Mdst
#8557	Pelican Island-1	-14.7719	128.7742	Core 2	1438	1439	Bonaparte Beds	Milligans A5	Early Carboniferous	*A. largus*	Mdst
#8561	Pelican Island-1	-14.7719	128.7742	Cuttings	1591	1594	Bonaparte Beds	Milligans A4	Early Carboniferous	*A. largus*	Calcareous mdst
#8563	Pelican Island-1	-14.7719	128.7742	Cuttings	1765	1768	Bonaparte Beds	Milligans A4	Early Carboniferous	*A. largus*	Mdst
#8539	Spirit Hill-1	-15.5056	129.0717	Core	199	199	Milligans Beds	Miligans A1	Early Carboniferous	*A. largus*	Mdst
#8544	Spirit Hill-1	-15.5056	129.0717	Core	670	671	Enga Sst?	Ningbing	Late Devonian	*R. lepidophyta*	Mdst
#5226	Core hole TBA			Core Beds A	71	73	Millligans	nd	Early Carboniferous	nd	Mdst
#5227	Core hole TBA			Core Beds B			Millligans	nd	Early Carboniferous	nd	Mdst

Table A8: TOC and Rock-Eval pyrolysis data for source rocks analysed in this study

AGSO No.	Well	Depth top m	Depth base m	Sequence (AGSO)	TOC %	Tmax °C	S_1 kg hc/tonne	S_2 kg hc/tonne	S_3 kgCO_2/tonne	PI	S2/S3	HI mg hcS_2/gTOC	OI mg hcS_3/gTOC
#8467	Barnett 2	2558	2558	Milligans praecipua	0.68	442	0.11	0.58		0.16	nd	85	nd
#7957	Bonaparte 1	1166	1167	Milligans 5	1.27	451	0.21	0.62	0	0.25	nd	49	nd
#8580	Bonaparte 1	1594	1594	Milligans 4	1.28	467	0.05	0.20	0	0.20	nd	16	nd
#7970	Bonaparte 2	1074	1075	Milligans 5	3.81	434	0.36	1.64	0	0.18	nd	43	nd
#7972	Bonaparte 2	1201	1201	Milligans 5	1.85	450	0.25	1.08	0	0.19	nd	58	nd
#7976	Bonaparte 2	1644	1644	Milligans 3	2.22	461	0.29	0.79	0	0.27	nd	36	nd
#8484	Flat Top 1	1661	1664	Keyling	31.04	432	4.69	91.47	0	0.05	nd	295	nd
#8989	Kinmore 1	1470	1473	Keyling	6.65	424	0.86	18.82	0.88	0.04	21.39	283	13
#8989	Kinmore 1*	1470	1473	Kulshill Fm	32.66	425	4.97	131.24	3.53	0.04	37.18	402	11
#8551	Lesueur 1	3453	3456	Tanmurra 1	0.59	439	0.10	0.37	0.21	0.21	1.76	63	36
#7923	NBF1002	176		Milligans	4.16	424	0.55	6.06	0.52	0.08	11.65	146	13
#7924	NBF1002	184		Milligans	2.79	419	0.42	4.48	0.55	0.09	8.15	161	20
#7925	NBF1002	208		Milligans	3.67	418	0.97	10.73	0.56	0.08	19.16	292	15
#7926	NBF1002	220		Milligans	2.77	419	0.76	6.24	0.54	0.11	11.56	225	19
#8571	Ningbing-1#	1268		Cockatoo	0.51	435	0.24	0.28	nd	0.46	nd	55	nd
#8557	Pelican Island 1	1438	1439	Milligans A5	1.03	439	0.25	0.76	0.58	0.25	1.31	74	56
#8561	Pelican Island 1	1591	1594	Milligans A4	1.15	436	0.17	0.55	0.91	0.24	0.60	48	79
#8563	Pelican Island 1	1765	1768	Milligans A4	2.04	439	0.57	1.07	0.17	0.35	6.29	52	8
#8539	Spirit Hill 1	199	199	Miligans A1	1.71	434	0.15	1.03	0	0.13	nd	60	nd
#8544	Spirit Hill 1	670	671	Ningbing	0.73	443	0.39	2.12	0	0.16	nd	123	nd
#5226	Core hole TBA[1]	71	73	Milligans	3.08	440	0.22	2.23	0.11	0.09	20.27	93	5
#5227	Core hole TBA[1]			Milligans	0.83	434	0	0.18	0.1	0	4.8	27	15

* Picked sample

Oil-stained sample

[1] Summons and Hope (1989).

Table A9: Bulk composition of samples analysed from Petrel Sub-basin.
Table A9a: Liquid petroleums.

AGSO No.	Well	° API Gravity	Sulphur %	Nickel ppm	Vanadium ppm	Sat %	Arom %	NSO %	Asph %	Sat/Arom	δ^{13}Csat* ‰	δ^{13}Carom* ‰	CV
#8572	Barnett-1	nd	nd	nd	nd	35.6	33.5	30.9	nd	1.06	nd	nd	nd
#8573	Barnett-1	nd	nd	nd	nd	6.6	32.8	60.7	nd	0.20	nd	nd	nd
#8574	Barnett-1	nd	nd	nd	nd	44.2	25.9	29.9	nd	1.70	nd	nd	nd
#441	Barnett-2	39.8	0.02	1	1	69.1	26.3	3.8	0.9	2.63	-28.35	-27.30	-0.53
#440	Barnett-2	36.9	0.03	1	1	71.2	25.2	2.7	0.9	2.83	-28.41	-27.28	-0.33
#439	Barnett-2	36.6	0.02	2	1	74.2	23.5	2.3	0.0	3.16	-28.28	-27.28	-0.66
#8528	Cambridge-1	nd	nd	nd	nd	14.9	28.4	56.7	nd	0.53	nd	nd	nd
#8587	Lacrosse-1	nd	nd	nd	nd	41.6	12.0	46.4	nd	3.45	nd	nd	nd
#8588	Lacrosse-1	nd	nd	nd	nd	68.0	11.6	20.5	nd	5.87	-26.71	-25.23	-0.08
#7944	Milligans-1	nd	nd	nd	nd	21.8	5.1	73.0	nd	4.26	nd	nd	nd
#7945	Milligans-1	nd	nd	nd	nd	51.0	11.2	37.8	nd	4.55	nd	nd	nd
#7949	Milligans-1	nd	nd	nd	nd	48.5	9.4	42.1	nd	5.15	nd	nd	nd
#8571	Ningbing-1	nd	nd	nd	nd	59.9	18.7	21.4	3.20	3.20	-29.00	-27.90	-0.22
#4939	Outcrop Ningbing Lst	nd	nd	nd	nd	15.5	37.8	46.7	nd	0.41	-29.75	-28.70	-0.10
#10017	Petrel-4	37.7	0.02	5	<0.05	44.0	51.3	2.5	2.3	0.86	-24.57	-23.12	-0.81
#8575	Turtle-1	nd	nd	nd	nd	29.5	27.3	43.2	nd	1.08	nd	nd	nd
#382	Turtle-1	31.2	0.05	1	1	64.3	29.1	5.3	1.4	2.21	-28.02	-27.25	-1.25
#4915	Turtle-2	nd	nd	nd	nd	52.7	29.0	18.2	nd	1.82	nd	nd	nd
#383	Turtle-2	16.2	0.32	9	3	45.5	40.1	8.9	5.6	1.13	-27.97	-27.37	-1.65
#4916	Turtle-2	nd	nd	nd	nd	51.8	30.0	18.2	nd	1.73	nd	nd	nd
#4917	Turtle-2	nd	nd	nd	nd	25.8	41.0	33.2	nd	0.63	nd	nd	nd
#4918	Turtle-2	nd	nd	nd	nd	52.1	29.4	18.6	nd	1.77	nd	nd	nd
#4919	Turtle-2	nd	nd	nd	nd	64.3	22.8	12.9	nd	2.82	nd	nd	nd
#384	Turtle-2	34.8	0.11	1	2	63.2	31.2	5.4	0.2	2.03	-28.02	-27.03	-0.77
#10014	Turtle-2	35.5	0.27	2.3	<0.02	60.0	36.7	3.3	0.0	1.63	nd	nd	nd
#10068	Waggon Creek-1	nd	nd	nd	nd	75.9	21.7	2.4	nd	3.50	-27.71	-26.48	-0.33

* Results are presented in delta-notation ($\delta^{13}C$) relative to the Peedee Belemnite standard (*Belemnitella americana*) thus;

$$\delta^{13}C\ ‰ = \frac{{}^{13}C/{}^{12}C\ \text{sample} - {}^{13}C/{}^{12}C\ \text{standard}}{{}^{13}C/{}^{12}C\ \text{standard}} * 1000$$

CV canonical variable after Sofer 1984. Values > 0.47 predomiantly terrestrial-derived waxy organic matter, values < 0.47 predomiantly marine-derived organic matter.

Table A9b: Source rocks.

AGSO No.	Well	Age	Sample Wt g	TOC %	EOM Yield mg	EOM Yield ppm	EOM Yield mg/gTOC	HC Yield % EOM	HC Yield mg/gTOC	Sat %	Arom %	NSO %	Sat/Arom	δ^{13}Csat* ‰	δ^{13}Carom* ‰	CV
#8467	Barnett-2	Early Carboniferous	17.22	0.68	8.8	511.0	147	60	45	26.5	33.7	39.8	0.79	nd	nd	nd
#7957	Bonaparte-1	Early Carboniferous	22.29	1.27	19.3	866.3	79	42	29	39.5	2.9	57.6	13.41	nd	nd	nd
#8580	Bonaparte-1	Early Carboniferous	60.00	1.28	10.0	166.7	78	52	7	15.1	36.6	48.4	0.41	nd	nd	nd
#8582	Bonaparte-1	Early Carboniferous	41.35	2.51	11.7	283.0	40	51	6	1.0	49.5	49.5	0.02	nd	nd	nd
#7970	Bonaparte-2	Early Carboniferous	18.42	3.81	30.0	1630.3	26	38	16	9.2	28.9	61.9	0.32	nd	nd	nd
#7972	Bonaparte-2	Early Carboniferous	20.18	1.85	16.2	801.3	54	26	11	11.5	14.5	74.0	0.80	nd	nd	nd
#7976	Bonaparte-2	Early Carboniferous	18.89	2.22	15.3	807.3	36	38	14	23.0	14.8	62.2	1.56	nd	nd	nd
#8484	Flat Top-1	Early Permian	9.13	31.04	51.8	5673.6	18	46	8	13.7	32.4	53.9	0.42	-27.59	-23.88	5.14
#8989	Kinmore-1	Early Permian	15.33	6.65	47.6	3105.0	39	39	18	13.0	25.5	61.5	0.51	-27.44	-25.43	1.32
#8551	Lesueur-1	Early Carboniferous	43.15	0.59	16.1	373.1	63	60	38	23.8	35.8	40.4	0.67	nd	nd	nd
#7923	NBF1002	Early Carboniferous	56.07	4.16	57.4	1023.7	25	59	15	26.6	32.4	41.0	0.82	-26.49	-25.00	-0.13
#7924	NBF1002	Early Carboniferous	100.12	2.79	207.4	2071.5	74	41	30	15.6	25.3	59.0	0.62	nd	nd	nd
#7925	NBF1002	Early Carboniferous	82.01	3.67	262.0	3194.7	87	45	39	21.8	22.8	55.4	0.96	nd	nd	nd
#7926	NBF1002	Early Carboniferous	81.12	2.77	225.3	2777.4	100	42	42	18.1	23.9	58.0	0.76	nd	nd	nd
#5226	TBA: Beds A	Early Carboniferous	22.79	3.08	43.8	1921.9	62	30	19	6.5	23.7	69.8	0.27	-27.96	-25.87	nd
#5227	TBA: Beds B	Early Carboniferous	32.95	0.83	9.1	276.2	33	25	8	7.1	17.9	75.0	0.40	nd	nd	nd
#8557	Pelican Island-1	Early Carboniferous	55.35	1.03	27.4	495.0	48	64	31	19.7	44.2	36.1	0.45	-28.30	-28.69	-3.74
#8561	Pelican Island-1	Early Carboniferous	19.88	1.15	8.4	422.5	37	49	18	22.0	26.8	51.2	0.82	nd	nd	nd
#8563	Pelican Island-1	Early Carboniferous	22.93	2.04	33.7	1469.7	72	80	58	50.2	30.3	19.5	1.66	-26.21	-25.59	-2.15
#8539	Spirit Hill-1	Early Carboniferous	56.61	1.71	23.1	408.1	24	57	14	20.3	36.9	42.8	0.55	-27.20	-24.04	3.80
#8544	Spirit Hill-1	Late Devonian	30.36	0.73	22.4	737.8	101	69	70	32.5	36.8	30.7	0.88	-27.88	-26.74	-0.48

* Results are presented in delta-notation ($\delta^{13}C$) relative to the Peedee Belemnite standard (*Belemnitella americana*) thus;

$$\delta^{13}C\ ‰ \quad \frac{{}^{13}C/{}^{12}C \text{ sample} - {}^{13}C/{}^{12}C \text{ standard}}{{}^{13}C/{}^{12}C \text{ standard}} * 1000$$

CV canonical variable after Sofer 1984. Values > 0.47 predomiantly terrestrial-derived waxy organic matter, values < 0.47 predomiantly marine-derived organic matter.

Table A10: Alkane parameters of liquid petroleums and source rocks.

Well	AGSO No.	Comment	max *n*-alk	pr/ph	pr/*n*C17	Ph/*n*C18	*n*C27/*n*C17	21+22/28+29	CPI 22-32
Petroleums									
Barnett-1	#8572	Biodegraded	nd	2.61	2.16	1.85	nd	nd	nd
Barnett-1	#8573	UCM	17	3.83	0.69	0.24	0.62	1.22	1.16
Barnett-1	#8574	UCM	17	1.33	0.72	0.73	0.20	3.02	nd
Barnett-2	#439		15	1.09	0.60	0.62	0.24	2.96	1.13
Barnett-2	#440		11	1.35	0.76	0.70	0.16	nd	nd
Barnett-2	#441		13	1.19	0.65	0.67	0.18	nd	1.37
Cambridge-1	#8528	Biodegraded	nd	3.18	2.81	0.87	1.38	3.04	1.62
Lacrosse-1	#8587		16	1.32	0.30	0.38	nd	nd	nd
Lacrosse-1	#8588		18	0.92	0.37	0.38	nd	nd	nd
Milligans-1	#7945	Biodeg & UCM	nd	1.55	0.58	0.31	0.64	nd	nd
Milligans-1	#7949	Biodeg & UCM	nd	1.65	0.58	0.33	0.24	nd	nd
Ningbing-1	#8571		17	1.42	0.26	0.20	0.42	1.80	1.00
Outcrop Ningbing Lst	#4934		18	1.69	0.46	0.22	0.45	1.09	0.95
Petrel-4	#10017		11	3.50	0.15	0.06	0.07	nd	nd
Turtle-1	#8575	Biodegraded		2.03	2.46	1.51	1.10	0.86	1.05
Turtle-2	#10014		15	2.34	0.43	0.22	0.07	16.30	1.07
Turtle-2	#384		15	1.37	0.63	0.51	0.19	nd	1.06
Turtle-2	#382		16	1.08	1.03	1.30	0.21	2.64	1.06
Turtle-2	#383	Biodegraded	nd	nd	nd	nd	nd	nd	nd
Waggon Creek-1	#10068		19	0.92	0.53	0.57	0.75	1.91	1.05
Source Rocks									
Barnett-2	#8467		19	1.12	0.34	0.27	0.61	2.42	1.04
Bonaparte-1	#7957	Oil staining? UCM	18	0.91	0.69	0.48	0.15	6.00	1.12
Bonaparte-1	#8580	Oil staining? UCM	18	1.26	0.59	0.41	0.05	6.72	1.15
Bonaparte-2	#7970		18	2.65	0.55	0.20	0.57	2.49	1.17
Bonaparte-2	#7972		17	2.38	0.58	0.27	0.43	1.86	1.10
Bonaparte-2	#7976		18	2.25	0.36	0.18	0.16	4.03	1.07
Flat Top-1	#8484		17, 23	4.66	0.83	0.19	0.69	2.74	1.28
Kinmore-1	#7979		16, 25	3.63	1.46	0.38	1.07	1.24	1.10
Lesueur-1	#8551		18	1.52	0.50	0.36	0.15	5.76	1.04
NBF 1002	#7923	Weathered	nd	1.28	3.33	2.51	0.54	2.25	1.16
NBF 1002	#7924	Weathered	nd	0.99	2.45	2.49	0.71	1.89	1.13
NBF 1002	#7925	Weathered	nd	0.95	2.71	2.94	0.45	2.02	1.02
NBF 1002	#7926	Weathered	nd	1.04	0.66	0.58	0.27	2.70	1.06
Pelican Island-1	#8561		17	1.45	0.38	0.30	0.09	5.85	1.16
Pelican Island-1	#8563		17	1.13	0.54	0.60	0.16	3.94	1.01
Pelican Island-1	#8557		17	1.72	0.30	0.23	0.19	3.15	1.15
Spirit Hill-1	#8539		17	1.72	0.73	0.56	0.21	2.96	1.33
Spirit Hill-1	#8544		15	2.49	0.72	0.32	0.51	1.90	1.07

UCM - unresolved complex mixture

nC_{17} - normal alkane

$$\text{CPI 22-23} = 0.5 \times \left(\frac{C_{25}+C_{27}+C_{29}+C_{31}+C_{33}}{C_{24}+C_{26}+C_{28}+C_{30}+C_{32}} + \frac{C_{25}+C_{27}+C_{29}+C_{31}+C_{33}}{C_{26}+C_{28}+C_{30}+C_{32}+C_{34}} \right)$$

Pr - pristane; Ph - phytane

Pr/Ph < 1 anoxic or hypersaline; > 3 oxic

Table A11 Source-dependent sterane biomarker parameters for petroleums and source rocks.

AGSO No.	Well	File No.	ster/hop a	27:28:29 5α(H)-steranes b			27:28:29:30 5α(H)-ster & dia c				C30 Index d	27/29 ster e	28/29 ster f	Degree of biodegradation
Petroleums														
#8573	Barnett-1	A5NO12 21	0.45	26	22	52	23	21	54	3	0.03	0.51	0.42	2
#8574	Barnett-1	A5NO12 12	1.25	34	21	45	33	21	42	4	0.04	0.77	0.46	2
#439	Barnett-2	A6MA17 15	4.64	32	25	43	33	24	39	3	0.03	0.74	0.57	0
#440	Barnett-2	A5NO12 23	2.20	35	23	42	36	23	38	3	0.03	0.82	0.53	0, 6*
#441	Barnett-2	A5NO12 24	2.39	36	23	42	36	23	36	6	0.06	0.85	0.55	0, 6*
#8528	Cambridge-1	A5NO12 19	0.45	21	12	66	18	17	63	2	0.02	0.32	0.19	2, 6*
#8587	Lacrosse-1	A5NO12 14	0.45	17	41	42	20	39	40	2	0.02	0.40	0.97	0
#8588	Lacrosse-1	A5NO10C 17	0.56	15	45	39	18	43	37	2	0.02	0.39	1.15	0
#8571	Ningbing-1	A5NO10C 14	0.66	39	22	39	37	24	39	0	0.00	0.99	0.56	0
#4934	Ningbing Lst outcrop	A5NO10C 15	0.90	38	10	51	39	10	48	2	0.02	0.75	0.20	0
#10017	Petrel-4	A6MA17 14	2.03	30	21	49	24	23	49	4	0.03	0.61	0.44	0
#382	Turtle-1	A5NO8 7	3.23	38	22	40	36	23	35	6	0.06	0.93	0.54	2, 6*
#8575	Turtle-1	A5NO12 8	0.52	24	19	57	21	19	57	3	0.03	0.42	0.34	2, 6*
#10014	Turtle-2	A5NO8 5	2.41	43	20	37	43	23	30	4	0.04	1.18	0.54	0, 6*
#383	Turtle-2	A5NO12 22	2.35	35	21	44	33	21	40	5	0.05	0.80	0.48	6
#10068	Waggon Creek-1	A6JA23 9	2.87	33	21	46	34	19	41	6	0.06	0.71	0.45	0
Source Rocks														
#8467	Barnett-2	A5NO8 15	1.13	27	29	43	35	26	37	1	0.01	0.63	0.68	na
#7957	Bonaparte-1	A5NO12 11	0.70	38	20	42	39	21	37	2	0.02	0.90	0.48	na
#8580	Bonaparte-1	A5NO12 15	1.54	42	34	25	43	30	20	6	0.06	1.70	1.36	na
#7970	Bonaparte-2	A5NO12 9	0.38	24	21	55	22	21	55	2	0.02	0.45	0.39	na
#7972	Bonaparte-2	A5NO12 10	0.69	35	26	39	32	27	39	2	0.02	0.90	0.66	na
#8484	Flat Top-1	A6MA27 4	0.15	19	23	58	17	25	57	1	0.01	0.34	0.40	na
#8989	Kinmore-1	A6MA27 3	0.30	16	23	62	15	23	62	1	0.01	0.25	0.37	na
#8551	Lesueur-1	A5NO8 13	0.78	44	23	32	37	26	31	6	0.06	1.38	0.72	na
#7923	NBF 1002	A5NO12 4	0.96	39	14	46	41	14	43	2	0.02	0.85	0.30	na
#7924	NBF 1002	A5NO12 5	1.77	36	17	47	37	17	44	2	0.02	0.76	0.36	na
#7925	NBF 1002	A5NO8 10	1.16	42	16	42	45	15	37	2	0.02	1.01	0.37	na
#7926	NBF 1002	A5NO12 6	1.48	34	16	50	36	14	45	4	0.04	0.69	0.32	na
#8557	Pelican Island-1	A5NO8 12	0.51	28	16	56	30	16	52	2	0.02	0.49	0.29	na
#8561	Pelican Island-1	A5NO12 20	0.52	35	20	46	36	19	42	3	0.03	0.76	0.43	na
#8563	Pelican Island-1	A5NO8 11	2.44	36	26	39	39	25	31	6	0.06	0.93	0.66	na
#8539	Spirit Hill-1	A5NO8 14	0.26	23	25	52	22	23	53	2	0.02	0.45	0.47	na
#8544	Spirit Hill-1	A5NO10C 16	0.80	33	23	45	32	21	44	4	0.04	0.74	0.51	na

* These oils are composed of several different generations of liquid petroleums. The initial oil has been severely biodegraded with subsequently generated oils being preserved either unaltered or they have undergone further biodegradation.
NOTE: the derivation and specificity of each parameter is given in Table A13.

Table A12 Source-dependent terpane biomarker parameters for petroleums and source rocks.

AGSO No.	Well	File No.	Tricyclics					Triterpanes									
			C19/C23 g	C22/C21 h	C26/C25 i	tet/C23 j	tri/30 hop k	Ts/C30 l	dinor/hop m	29/30 hop n	25-nor/hop o	diah/hop p	31/30 hop q	G/hop r	C29Ts/29 s	2/3 mehop t
Petroleums																	
#8573	Barnett-1	A5NO12 21	1.20	0.22	0.67	0.43	2.24	0.18	0.76	0.85	0.06	0.07	0.79	0.08	0.12	1.73
#8574	Barnett-1	A5NO12 12	0.14	0.27	0.97	0.26	1.31	0.32	0.13	0.62	0.15	0.12	0.49	0.08	0.43	1.46
#439	Barnett-2	A6MA17 15	0.26	0.30	0.96	0.36	9.21	1.24	0.32	0.57	0	0.73	5.03	0	1.25	nd
#440	Barnett-2	A5NO12 23	0.30	0.19	0.95	0.32	5.90	0.68	0.23	0.77	0.85	0.30	0.55	0.31	0.43	0.72
#441	Barnett-2	A5NO12 24	0.46	0.18	1.03	0.14	6.58	0.69	0.26	0.76	0.90	0.34	0.58	0.26	0.50	1.88
#8528	Cambridge-1	A5NO12 19	0.39	0.29	0.73	0.45	0.77	0.17	0.20	0.88	0.08	0.08	0.60	0.03	0.20	2.97
#8587	Lacrosse-1	A5NO12 14	0.21	0.21	0.89	0.78	0.36	0.09	0.01	0.98	0	0	0.52	0.14	0.10	1.17
#8588	Lacrosse-1	A5NO10C 17	0.92	0.53	0.74	0.41	1.15	0.08	0.01	0.85	0	0	0.44	0.19	0.07	1.43
#8571	Ningbing-1	A5NO10C 14	0.82	0.46	0.99	0.45	0.36	0.39	0.27	1.19	0	0.09	0.73	0.53	0.19	1.35
#4934	Outcrop Ningbing	A5NO10C 15	0.05	0.47	0.53	0.17	1.15	0.13	0.01	0.70	0	0	1.10	0.06	0.20	1.40
#10017	Petrel-4	A6MA17 14	6.97	1.09	0	0.35	41.27	2.01	0.30	0.64	0.23	1.54	0.73	0	1.32	3.47
#382	Turtle-1	A5NO8 7	0.21	0.19	0.88	0.21	17.37	0.91	0.37	0.72	2.93	0.42	0.56	0.23	0.48	1.64
#8575	Turtle-1	A5NO12 8	1.01	0.39	0.69	0.73	1.73	0.18	0.06	0.84	0.04	0.07	0.82	0.01	0.15	2.54
#10014	Turtle-2	A5NO8 5	2.08	0.53	0.84	0.51	42.47	1.19	0.22	0.95	0	0.25	0.64	0	0.49	nd
#383	Turtle-2	A5NO12 22	0.19	0.19	0.73	0.12	7.46	0.58	0.35	0.65	0.17	0.28	0.55	0.36	0.29	1.07
#10068	Waggon Creek-1	A6JA23 9	0.47	0.43	1.29	0.15	5.91	1.08	0.09	0.51	0	0.66	0.60	0.73	1.07	1.31
Source rocks																	
#8467	Barnett-2	A5NO8 15	1.48	0.66	0.74	0.35	7.30	0.45	0.07	0.48	0	0.45	0.81	0.09	0.98	2.54
#7957	Bonaparte-1	A5NO12 11	0.19	0.45	0.46	0.10	14.13	0.54	0.06	0.69	0	0.20	0.56	0.38	0.63	1.14
#8580	Bonaparte-1	A5NO12 15	0.28	0.43	0.58	0.13	26.15	0.69	0.13	1.13	0.06	0.11	0.57	0.32	0.24	1.34
#7970	Bonaparte-2	A5NO12 9	0.84	0.30	0.77	0.89	0.60	0.19	0.09	0.56	0.03	0.17	0.55	0.05	0.39	1.74
#7972	Bonaparte-2	A5NO12 10	0.57	0.42	0.72	0.32	3.29	0.31	0.08	0.66	0	0.20	0.58	0.17	0.42	1.39
#8484	Flat Top-1	A6MA27 4	3.70	0.33	0	0	0.69	0.05	0.04	1.19	0	0.04	0.82	0	0.01	2.18
#8989	Kinmore-1	A6MA27 3	1.04	0.54	0	0	0.84	0.06	2.09	0.82	0	0.07	0.90	0	0.06	5.22
#8551	Lesueur-1	A5NO8 13	1.47	0.76	0.55	0.45	10.27	0.50	0.06	0.95	0.20	0.05	0.80	0.06	0.22	2.72
#7923	NBF 1002	A5NO12 4	0.15	0.16	0.47	0.24	1.43	0.16	0.10	0.63	0	0.04	0.55	0.10	0.30	1.08
#7924	NBF 1002	A5NO12 5	0.16	0.15	0.50	0.17	1.55	0.15	0.01	0.65	0	0.05	0.63	0.12	0.33	0.63
#7925	NBF 1002	A5NO8 10	0.12	0.14	0.55	0.18	1.23	0.14	0.01	0.63	0	0.04	0.69	0.08	0.32	0.44
#7926	NBF 1002	A5NO12 6	0.19	0.16	0.49	0.36	1.51	0.12	0.02	0.51	0	0.09	0.76	0.14	0.30	0.80
#8557	Pelican Island-1	A5NO8 12	2.61	0.59	0.54	0.79	3.01	0.41	0.02	0.66	0	0.28	0.95	0	0.57	0.83
#8561	Pelican Island-1	A5NO12 20	1.04	0.55	0.55	0.46	4.15	0.49	0.22	1.08	0.04	0.26	1.19	0.14	0.32	1.95
#8563	Pelican Island-1	A5NO8 11	0.43	0.49	0.88	0.19	28.81	2.34	0.16	0.98	0	1.48	0.82	0.14	0.53	nd
#8539	Spirit Hill-1	A5NO8 14	0.93	0.44	0.48	0.24	2.87	0.04	0.05	0.66	0	0.08	0.94	0	0.07	1.50
#8544	Spirit Hill-1	A5NO10C 16	1.17	3.28	0.60	0.53	15.96	0.59	0.08	0.74	0.02	0.75	0.79	0.10	0.56	1.08

NOTE: the derivation and specificity of each parameter is given in Table A13.

Table A13 Key to source-specific biomarker parameters listed in Tables A11 and A12.

	Biomarker Parameter	Specificity
	Steranes	
a	Sterane/hopane: C_{27}-C_{29} 5α(H) sterane (20R + 20S) / C_{29}-C_{31} 17α(H)21β(H) hopane	*Source*: low (<1) for prokaryote, high for eukaryote.
b	C_{27} : C_{28} : C_{29} 5α(H)-sterane (20R +20S)	*Source*: C_{27} and C_{28} dominant algal input. Late Carboniferous-Recent C_{29} dominant indicative of terrestrial plants. Palaeozoic C_{29} derived largely from algae
c	C_{27} : C_{28} : C_{29} : C_{30} steranes + diasteranes (20R +20S)	As above
d	Sterane Index: C_{30} steranes & diasteranes / (C_{27}-C_{30} steranes & diasteranes)	*Source*: C_{30} steranes diagnostic of marine organic matter.
e	C_{27} 5α(H) sterane (20R+20S) / C_{29} 5α(H) (20R+20S) sterane	*Source*: Late Carboniferous-Recent high values algal material, low values (< 1) terrestrial plants.
f	C_{28} 5α(H) sterane (20R+20S) / C_{29} 5α(H) (20R+20S) sterane	As above
	Tricyclic Terpanes	
g	C_{19}/C_{23} tricyclic	*Source*: high values terrestrial organic matter, low values marine organic matter
h	C_{22}/C_{21} tricyclic	Correlation
i	C_{26} (R+S) /C_{25} tricyclic (R+S)	Correlation
j	C_{24} tetracyclic/ C_{23} tricyclic	Correlation
k	C_{19}-C_{26} tricyclics/ C_{30} 17α(H)21β(H) hopane	Correlation
	Triterpanes	
l	C_{27} 18α(H)-22,29,30-trisnorneohopane (Ts) / C_{30} 17α(H)21β(H) hopane	*Source*: *Maturity*: parameter used in very mature oils and condensates.
m	C_{28} 28, 30-bisnorhopane / C_{30} 17α(H)21β(H) hopane	*Source:* high values are characteristic of anoxic marine environments.
n	C_{29} 17α(H)21β(H) hopane / C_{30} 17α(H)21β(H) hopane	*Source*: values > 1 anoxic, marine, carbonate environment.
o	C_{29} 25-norhopane / C_{30} 17α(H)21β(H) hopane	*Biodegradation*: heavy level 6-Table A16
p	C_{30} 17α(H)21β(H) diahopane / C_{30} 17α(H)21β(H) hopane	*Source.*
q	C_{31} 17α(H)21β(H) hopanes 22R + 22S / C_{30} 17α(H)21β(H) hopane	*Source*: high values anoxic during deposition and early diagenesis.
r	Gammacerane/ C_{30} 17α(H)21β(H) hopane	*Source*; saline conditions *e.g.* evaporitic lakes, sabkas, salinity stratification
s	C_{29}Ts/ C_{29} 17α(H)21β(H) hopane	Correlation
t	C_{31} 2α-methylhopane/C_{31} 3β-methylhopane	Correlation

Table A14 Maturity-dependent biomarker parameters for petroleums and source rocks.

AGSO No.	Well	File No.	Steranes					Triterpanes		
			C_{29} dia S/S+R 1	C_{27} ster S/S+R 2	C_{29} ster S/S+R 3	C_{29} ster ββ/ββ+αα 4	C_{29} dia/ster 5	Ts/Ts+Tm 6	C_{31} S/R+S 7	C_{30} βα/βα+αβ 8
Petroleums										
#8573	Barnett-1	A5NO12 21	0.54	0.48	0.34	0.39	1.08	0.18	0.56	0.21
#8574	Barnett-1	A5NO12 12	0.56	0.55	0.50	0.50	0.91	0.58	0.57	0.09
#439	Barnett-2	A6MA17 15	0.56	0.51	0.58	0.57	1.25	0.98	0.58	0.11
#440	Barnett-2	A5NO12 23	0.54	0.59	0.56	0.54	1.22	0.65	0.55	0.10
#441	Barnett-2	A5NO12 24	0.55	0.58	0.56	0.52	1.22	0.64	0.56	0.09
#8528	Cambridge-1	A5NO12 19	0.55	0.48	0.28	0.39	1.06	0.22	0.53	0.21
#8587	Lacrosse-1	A5NO12 14	0.58	0.45	0.37	0.35	0.12	0.25	0.57	0.11
#8588	Lacrosse-1	A5NO10C 17	0.56	0.45	0.37	0.31	0.09	0.21	0.55	0.13
#8571	Ningbing-1	A5NO10C 14	0.53	0.48	0.43	0.48	0.63	0.38	0.53	0.14
#4934	Ningbing Ist outcrop	A5NO10C 15	0.63	0.52	0.48	0.57	0.15	0.25	0.62	0.04
#10017	Petrel-4	A6MA17 14	0.58	0.54	0.47	0.53	2.32	0.80	0.47	0.06
#382	Turtle-1	A5NO8 7	0.45	0.60	0.57	0.51	1.41	0.66	0.54	0.08
#8575	Turtle-1	A5NO12 8	0.52	0.45	0.24	0.40	1.00	0.20	0.51	0.25
#10014	Turtle-2	A5NO8 5	0.58	0.53	0.51	0.60	0.93	0.63	0.55	0.07
#383	Turtle-2	A5NO12 22	0.51	0.63	0.60	0.54	1.19	0.57	0.55	0.10
#10068	Waggon Creek-1	A6JA23 9	0.56	0.59	0.60	0.61	1.61	0.83	0.53	0.09
Source Rocks										
#8467	Barnett-2	A5NO8 15	0.56	0.56	0.55	0.49	1.09	0.57	0.57	0.09
#7957	Bonaparte-1	A5NO12 11	0.55	0.52	0.51	0.50	0.98	0.61	0.56	0.09
#8580	Bonaparte-1	A5NO12 15	0.57	0.59	0.51	0.49	0.72	0.53	0.55	0.10
#7970	Bonaparte-2	A5NO12 9	0.58	0.57	0.55	0.53	1.66	0.35	0.59	0.08
#7972	Bonaparte-2	A5NO12 10	0.57	0.58	0.58	0.54	1.08	0.44	0.57	0.08
#8484	Flat Top-1	A6MA27 4	0.59	0.47	0.43	0.27	0.73	0.03	0.60	0.24
#8989	Kinmore-1	A6MA27 3	0.58	0.47	0.23	0.40	1.72	0.05	0.58	0.24
#8551	Lesueur-1	A5NO8 13	0.55	0.49	0.43	0.48	0.77	0.48	0.54	0.08
#7923	NBF1002	A5NO12 4	0.59	0.53	0.48	0.36	0.70	0.28	0.61	0.08
#7924	NBF1002	A5NO12 5	0.61	0.52	0.46	0.33	0.56	0.32	0.59	0.08
#7925	NBF1002	A5NO8 10	0.61	0.50	0.41	0.31	0.48	0.36	0.58	0.10
#7926	NBF1002	A5NO12 6	0.61	0.55	0.52	0.43	1.19	0.21	0.61	0.08
#8557	Pelican Island-1	A5NO8 12	0.58	0.56	0.56	0.52	1.32	0.57	0.58	0.09
#8561	Pelican Island-1	A5NO12 20	0.55	0.50	0.38	0.46	0.76	0.43	0.31	0.16
#8563	Pelican Island-1	A5NO8 11	0.59	0.56	0.48	0.55	2.41	0.81	0.59	0.14
#8539	Spirit Hill-1	A5NO8 14	0.59	0.53	0.47	0.40	1.69	0.08	0.60	0.18
#8544	Spirit Hill-1	A5NO10C 16	0.56	0.49	0.50	0.53	1.23	0.54	0.55	0.09

NOTE: the derivation and specificity of each parameter is given in Table A15.

Table A15 Key to maturity-dependant biomarker parameters listed in Table A14.

	Biomarker Parameter	Specificity
	Steranes	
1	C_{29} 13β(H)17α(H) 20S diasterane / C_{29} 13β(H)17α(H) 20R + 20S diasterane	*Maturity*: immature to early oil generation, 0-0.55. Values > 1 are observed in immature sediments.
2	C_{27} 5α(H)14α(H)17α(H) 20S sterane / C_{27} 5α(H)14α(H)17α(H) 20R + 20S sterane	*Maturity*: immature to early oil generation, 0-0.55.
3	C_{29} 5α(H)14α(H)17α(H) 20S sterane / C_{29} 5α(H)14α(H)17α(H) 20R + 20S sterane	As above.
4	C_{29} 5α(H)14β(H)17β(H) 20S + 20R sterane / C_{29} 5α(H)14β(H)17β(H) 20R + C_{29} 5α(H)14α(H)17α(H) 20S + 20R steranes	*Maturity*: immature to optimum hydrocarbon generation, variable 0-0.5 (0.8).
5	C_{29} 13β(H)17α(H) diasteranes (20R + 20S) / C_{29} 5α(H) steranes (20R + 20S)	*Maturity*: early mature to late oil/early gas generation, 0-1.0. *Source*: high for clastics, low for carbonates. *Migration*: diasteranes migrate faster than steranes.
	Triterpanes	
6	C_{27} 18α(H)-22,29,30-trisnorneohopane (Ts) / C_{27} 18α(H)-22,29,30-trisnorneohopane (Ts) + C_{27} 17α(H)-22,29,30-trisnorhopane (Tm)	*Maturity*: immature to post mature. *Source*: Tm derived from bacteria.
7	C_{31} 17α(H)21β(H) 22S homohopane / C_{31} 17α(H)21β(H) 22S + 22R homohopane	*Maturity*: immature to onset of oil generation, 0-0.55. Epimerisation reaction complete at Rv = 0.5 %.
8	C_{30} 17β(H)21α(H) moretane / C_{30} 17β(H)21α(H) moretane + 17α(H)21β(H) hopane	*Maturity*: immature to early oil generation 0.08-0.15.

Table A16 Extent of *in situ* biodegradation of oil (after Peters and Moldowan, 1993).

Extent	Compounds removed
Unaffected 0	Oil is intact
Light	
1	Lower *n*-alkane (< C_{15}) homologues removed.
2	General depletion of *n*-alkanes. Migration effects, evaporative loss and water washing results in higher Pr/*n*-C_{17} and Ph/*n*-C_{18} ratios.
3	Removal of most of *n*-alkanes. Acyclic isoprenoid alkanes intact.
Moderate	
4	*n*-Alkanes absent. Depletion of acyclic isoprenoid alkanes.
5	Acyclic isoprenoid alkanes absent.
Heavy	
6	Steranes partly degraded, removal of ααα 20R > 20S, $C_{27} > C_{28} > C_{29} > C_{30}$. Diasteranes intact. If 25-norhopanes are present, hopanes partly degraded.
7	Steranes degraded (αββ 20R and 20S C_{27}-C_{29}), diasteranes intact.
Very heavy	
8	Hopanes partly degraded. Highest molecular weight hopanes are most susceptible and 22R > 22S (when no 25-norhopanes are present).
9	Hopanes degraded, diasteranes partly degraded.
Severe	
10	Diasteranes degraded, C_{26}-C_{29} aromatic steroids degraded.

Note: the exact stage at which phenanthrene and its methylated homologues are biodegraded is unknown. Loss of these low molecular weight aromatic compounds is contiguous with the removal of the acyclic isoprenoid alkanes and occurs prior to degradation of steranes.

Table A17 Aromatic source and maturity-dependent parameters for petroleums and source rocks.

AGSO No.	Well	DNR-1 1	TNR-1 2	log 1,2,5-TMN/ log 1,3,6-TMN 3	1-MP/ 9-MP 4	log 1-MP/ log 9-MP 5	1,7DMP/ X-DMP 6	log 1,7-DMP/ log X 7	Retene/ 9-MP 8	log retene/ log 9-MP 9	MPI-1 10	Rc1 % Radke 11	Rc2 % Boreham 12	Rm reservoir %
Petroleums														
#8573	Barnett-1	5.37	1.62	-0.73	0.69	-0.16	0.34	-0.47	0.07	-1.18	0.60	0.76	0.64	0.60
#8574	Barnett-1	4.98	1.31	-0.56	0.73	-0.14	0.30	-0.52	0.18	-0.75	0.69	0.82	0.71	0.65
#439	Barnett-2	2.54	0.91	-0.74	0.69	-0.16	0.30	-0.52	0.06	-1.25	0.75	0.85	0.74	0.58
#440	Barnett-2	8.16	0.97	-0.80	0.71	-0.15	0.32	-0.49	0.08	-1.09	0.85	0.91	0.81	0.35
#441	Barnett-2	2.01	0.95	-0.77	0.73	-0.14	0.37	-0.43	0.07	-1.13	0.87	0.92	0.83	0.35
#8528	Cambridge-1	2.73	0.60	0.14	0.97	-0.01	0.51	-0.29	5.53	0.74	0.45	0.67	0.54	0.67
#8587	Lacrosse-1	3.47	0.63	-0.39	0.69	-0.16	0.42	-0.38	0.06	-1.22	0.73	0.84	0.73	0.45
#7946	Milligans-1	4.07	1.81	0.32	0.52	-0.29	0.29	-0.54	nd	nd	0.13	0.48	0.31	nd
#7976	Milligans-1	nd	nd	-0.31	0.63	-0.20	0.64	-0.19	0.17	-0.77	2.22	1.73	1.77	nd
#8571	Ningbing-1	nd	0.96	-0.10	0.75	-0.12	0.25	-0.61	nd	nd	0.30	0.58	0.43	nd
#10017	Petrel-4	9.53	1.06	-0.93	0.59	-0.23	0.22	-0.66	0.00	-0.90	0.69	0.81	0.70	nd
#382	Turtle-1	4.93	0.91	-0.82	0.75	-0.12	0.29	-0.54	0.13	-0.90	0.74	0.84	0.74	0.05
#8575	Turtle-1	2.59	1.17	-0.58	0.69	-0.16	0.33	-0.48	0.31	-0.51	0.85	0.91	0.82	0.50
#383	Turtle-2	nd	0.89	-0.55	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.38
#384	Turtle-2	nd	0.88	-0.34	0.86	-0.07	0.46	-0.34	0.12	-0.92	0.86	0.92	0.82	0.50
#10014	Turtle-2	5.24	0.77	-0.47	0.72	-0.14	0.29	-0.54	0.05	-1.30	0.88	0.93	0.83	0.50
#10068	Waggon Creek-1	4.05	1.03	-0.69	0.60	-0.22	0.25	-0.60	0.01	-1.85	0.76	0.86	0.75	nd
Source Rocks														
#7957	Bonaparte-1	2.42	2.66	0.58	0.72	-0.14	0.48	-0.32	0.03	-1.53	0.60	0.76	0.64	nd
#8580	Bonaparte-1	8.59	1.39	-0.82	0.69	-0.16	0.29	-0.54	0.01	-2.05	0.77	0.86	0.76	nd
#7970	Bonaparte-2	1.92	1.79	-0.54	0.61	-0.21	0.34	-0.47	0.01	-2.12	0.91	0.95	0.86	0.83
#7944	Milligans-1	3.60	1.07	0.05	0.62	-0.21	0.50	-0.30	0.07	-1.15	0.55	0.73	0.60	nd
#8484	Flat Top-1	6.27	1.75	0.02	0.65	-0.19	0.48	-0.32	0.05	-1.32	0.45	0.67	0.54	0.57
#8989	Kinmore-1	2.02	0.66	-0.21	0.75	-0.12	0.23	-0.65	0.25	-0.61	0.47	0.68	0.55	0.48
#8551	Lesueur-1	4.63	1.37	-0.38	0.60	-0.22	0.29	-0.54	0.17	-0.77	0.68	0.81	0.69	0.87
#7923	NBF1002	4.52	0.72	-0.16	0.38	-0.42	0.20	-0.70	0.16	-0.81	0.45	0.67	0.54	0.45
#7924	NBF1002	2.53	0.77	0.23	0.54	-0.26	0.50	-0.30	0.03	-1.57	0.64	0.78	0.67	nd
#7925	NBF1002	3.89	1.01	0.27	0.65	-0.19	0.47	-0.33	0.03	-1.49	0.65	0.79	0.67	nd
#7926	NBF1002	3.21	0.65	0.25	0.64	-0.20	0.14	-0.86	0.02	-1.76	0.55	0.73	0.60	nd
#8557	Pelican Island-1	3.19	0.99	-0.33	0.60	-0.22	0.60	-0.22	0.01	-2.20	0.47	0.68	0.55	nd
#8561	Pelican Island-1	3.04	0.67	-0.38	0.62	-0.21	0.37	-0.43	0.02	-1.80	0.52	0.71	0.58	nd
#8563	Pelican Island-1	4.23	0.90	-0.61	0.71	-0.15	0.35	-0.46	0.01	-1.97	0.64	0.78	0.67	nd
#8539	Spirit Hill-1	4.79	1.39	-0.02	0.58	-0.24	0.35	-0.45	0.02	-1.63	0.52	0.71	0.59	nd
#8544	Spirit Hill-1	4.08	1.01	-0.44	0.55	-0.26	0.32	-0.49	0.02	-1.69	0.61	0.77	0.65	nd

NOTE: the derivation and specificity of each parameter is given in Table A18.

Table A18 Key to maturity-dependent aromatic hydrocarbon parameters listed in Table A17.

	Aromatic Parameter	Onset	HC	Reference
	Methylnaphthalenes	*Oil*	*Gas*	
1	DNR-1 = (2,6-DMN+2,7-DMN) / 1,5-DMN	1.5	10	Alexander *et al.*, 1985
2	TNR-1 = 2,3,6-TMN / (1,4,6-TMN + 1,3,5-TMN)	0.5	4	Alexander *et al.*, 1985
3	log 1,2,5-TMN/ log 1,3,6-TMN			Alexander *et al.*, 1988
	Phenanthrene & Methylphenanthrenes			
4	1-MP/9-MP			
5	log 1-MP/log 9-MP			Alexander *et al.*, 1988
6	1,7-DMP/ X-DMP			Alexander *et al.*, 1988
7	log 1,7-DMP/ log X-DMP			Alexander *et al.*, 1988
8	retene / 9-MP			
9	log retene / log 9-MP			Alexander *et al.*, 1988
10	MPI-1 = {1.5 x (2-MP + 3-MP)} / {(P x 0.69) + 1-MP + 9-MP}	0.45	1	Radke & Welte, 1983
11	Rc1 = (0.6 x MPI-1) + 0.4 when 0.65 % < Rm < 1.35 %			Radke & Welte, 1983
12	Rc2 = (0.7 x MPI) + 0.22 when Rm < 1.7			Boreham *et al.*, 1988

Definitions

HC	hydrocarbons
DNR	dimethylnapthalene ratio
TNR	trimethylnapthalene ratio
Rc	calculated vitrinite reflectance
Rm	measured vitrinite reflectance

Group	**Carbon No.**	**Assignment**	**Molecular weight**
DMN	12	dimethylnaphthalene	156
TMN	13	trimethylnaphthalene	170
P	14	phenanthrene	178
MP	15	methylphenanthrene	192
DMP	16	dimethylphenenthrene	206
X	16	several co-eluting dimethylphenenthrenes	206

Blank page 24

APPENDIX B: Analytical Procedure

APPENDIX B: Analytical Procedure

B1.1 Sample Preparation

Many core and cuttings samples were stored in plastic bags. To eliminate contamination from ink on the cores, the stained areas were removed by abrasion. All core and cuttings samples were washed with methanol and air dried. The samples were then ground to a fine powder using a ring mill.

B1.2 Extraction of Samples

A weighed amount of each powdered sediment sample was placed in a pre-cleaned thimble, plugged with a pre-cleaned filter paper and extracted in Soxhlet apparatus for 48 hours with an azeotropic mixture of dichloromethane and methanol (87:13). The extractable organic matter (EOM) was concentrated using a Büchi vacuum rotary evaporator, filtered through a 0.2 μm filter and then evaporated to near dryness.

The above procedure was used to extract oil from cores and cuttings from the wells Barnett-1, Cambridge-1, Lacrosse-1, Milligans-1, Ningbing-1, Turtle-1 and 2, the only difference being that the sample was not powdered but broken up into small pieces using a mortar and pestle.

B1.3 Liquid Chromatography

Prior to liquid chromatography an aliquot (200 mg) of the whole oil was left open to the atmosphere for 24 hours and then the asphaltenes were precipitated using n-hexane. The de-asphaltened fraction was separated into saturated hydrocarbons, aromatic hydrocarbons and polars (nitrogen, sulphur and oxygen compounds), respectively by gravity-flow column chromatography using 100-200 mesh silica gel (12 g) activated at 300 °C for 48 hours prior to column chromatography. The following solvent mixtures were used to elute the above three fractions:

1. 40 ml petroleum spirit at 40-60 °C	Saturated hydrocarbon fraction
2. 50 ml petroleum spirit /dichloromethane (1:1)	Aromatic hydrocarbon fraction
3. 40 ml chloroform/methanol (1:1)	Polar fraction

Solvent was reduced in volume by rotary evaporation to 1 ml, transferred to a pre-weighed vial and the recovered fractions dried under a stream of nitrogen prior to gravimetric quantification.

The EOM from the sediments were treated as an oil sample, with the exception that asphaltenes were not precipitated from the EOM prior to liquid chromatography.

An aliquot of the saturated hydrocarbon fraction was separated into *n*-alkane (NA) and branched/cyclic alkane (SNA) fractions by filtration through a column of silicalite (Union Carbide) as documented by West *et al.* (1990). The sample (10 mg) dissolved in *n*-pentane (1 ml) was placed onto the silicalite and allowed to stand until dry. The non-adduct (SNA) was eluted with *n*-pentane (5 ml). The SNA contains the branched/cyclic alkanes however, low molecular weight *n*-alkanes (< C_{15}) also elute in this fraction. The branched/cyclic alkanes were recovered by evaporation of the solvent and the *n*-alkanes by dissolution of the silicalite in 20 % HF and extraction of the residue with *n*-hexane.

B1.4 Gas Chromatography

Samples	Saturated hydrocarbons were diluted (1:100; wt:vol) with *n*-hexane prior to injection.
Instrumentation	
Gas chromatograph	Hewlett Packard Series II 5890.
Column	Methyl silicone fused silica narrow bore capillary column (HP Ultra-1), 60 m x 0.2 mm i.d. x 0.33 µm film thickness.
Oven temperature programming	60 °C to 300 °C at 4 °C min^{-1} and held isothermal at 300 °C for 30 min.
Autosampler	HP7673 autosampler.
Injection Method	
SGE On-column injector	On-column injection at 60 °C.
Injector programming	Injector was programmed at 150 °C min^{-1} to 310 °C
Carrier gas	Hydrogen was maintained under static pressure control (15 psi) with linear flow rate of 30 cm sec^{-1} at 60 °C.
Data collection	DAPA scientific chromatography software.

B1.5 Gas Chromatography-Mass Spectrometry: Metastable Reaction Monitoring (GC-MS MRM)

Samples	Saturated hydrocarbons were diluted (1:100; wt:vol) with *n*-hexane prior to injection.
Instrumentation	
Gas chromatograph	Hewlett Packard HP 5790.
Column	Methyl silicone fused silica narrow bore capillary column (HP Ultra-1), 60 m x 0.2 mm i.d x 0.33 μm film thickness.
Carrier gas	Hydrogen at a static head pressure (25 psi).
Injection method	Split/splitless injector operated in the splitless mode at 250 °C.
Temperature programming	60 °C for 2 min. then to 150 °C at 25 °C min^{-1}, then from 150 °C to 310 °C at 3 °C min^{-1} and held isothermal at 310 °C for 21 min. Total run time was 79.9 min.
Mass Spectrometry	
Mass spectrometer	The capillary column was directly interfaced with the source of the Autospec double focussing mass spectrometer.
Conditions	Electron energy 70 eV; Emission current 200 mA; Source temperature 250 °C.
Data system	DEC 3000

In the multiple reaction monitoring mode the magnetic current and ESA voltages were switched to sequentially sample 26 selected parent-daughter transitions including two pairs for the deuterated sterane standards. Compounds were identified using the following parent-to-daughter transitions:

Function 1
Tri- and Tetracyclic Terpanes

C_{19} tricyclics	$M^{\cdot+}$ 262.265 → *m/z* 191.179
C_{20} tricyclics	$M^{\cdot+}$ 276.280 → *m/z* 191.179
C_{21} tricyclics	$M^{\cdot+}$ 290.296 → *m/z* 191.179
C_{22} tricyclics	$M^{\cdot+}$ 304.312 → *m/z* 191.179
C_{23} tricyclics	$M^{\cdot+}$ 318.328 → *m/z* 191.179
C_{24} tricyclics	$M^{\cdot+}$ 332.344 → *m/z* 191.179
C_{25} tricyclics	$M^{\cdot+}$ 346.359 → *m/z* 191.179
C_{26} tricyclics	$M^{\cdot+}$ 360.374 → *m/z* 191.179
C_{24} tetracyclics	$M^{\cdot+}$ 330.328 → *m/z* 191.179

Function 2

Tricyclic Terpanes

C_{30} tricyclics	$M^{\cdot+}$ 416.442 $\rightarrow$ *m/z* 191.179

Steranes

C_{27} desmethyl steranes	$M^{\cdot+}$ 372.376 $\rightarrow$ *m/z* 217.196
C_{28} desmethyl steranes	$M^{\cdot+}$ 386.391 $\rightarrow$ *m/z* 217.196
C_{29} desmethyl steranes	$M^{\cdot+}$ 400.407 $\rightarrow$ *m/z* 217.196
C_{30} desmethyl steranes	$M^{\cdot+}$ 414.423 $\rightarrow$ *m/z* 217.196
methyl sterane analogues	$M^{\cdot+}$ $\rightarrow$ *m/z* 231.212

Deuterated sterane standards

C_{27} D3 cholestane	$M^{\cdot+}$ 404.4321 $\rightarrow$ *m/z* 221.221

Pentacyclic Triterpanes

C_{27} hopanes	$M^{\cdot+}$ 370.359 $\rightarrow$ *m/z* 191.179
C_{28} hopanes	$M^{\cdot+}$ 384.374 $\rightarrow$ *m/z* 191.179
C_{29} hopanes	$M^{\cdot+}$ 398.390 $\rightarrow$ *m/z* 191.179
C_{30} hopanes	$M^{\cdot+}$ 412.406 $\rightarrow$ *m/z* 191.179
C_{31} hopanes	$M^{\cdot+}$ 426.421 $\rightarrow$ *m/z* 191.179
C_{34} hopanes	$M^{\cdot+}$ 468.467 $\rightarrow$ *m/z* 191.179
C_{35} hopanes	$M^{\cdot+}$ 482.482 $\rightarrow$ *m/z* 191.179
methyl hopane analogues	$M^{\cdot+}$ $\rightarrow$ *m/z* 205.194

B1.6 Gas Chromatography-Mass Spectrometry: Selected Ion Monitoring (GC-MS SIM)

Samples	Aromatic hydrocarbon were diluted (1:200; wt:vol) with dichloromethane prior to injection.
Instrumentation	
Gas chromatograph	Hewlett Packard HP 5790.
Column	Phenyl silicone fused silica narrow bore capillary column (DB-5) capillary column 30 m x 0.25 mm i.d. x 0.25 µm film thickness.
Carrier gas	Helium at a linear flow rate of 30 cm sec^{-1}.
Injection method	Split/splitless injector operated in the split mode 50:1 at a temperature of 300 °C.
Temperature programming	50 °C to 310 °C at 4 °C min. and held isothermal for 20 min.

Mass Spectrometry

Mass spectrometer	The capillary column was directly interfaced with the source of the VG 7070E double focussing mass spectrometer.
Conditions	Electron energy 70 eV; Emission current 200 mA; Source temperature 250 °C.
Data system	DEC 3000.

The following diagnostic mass fragmentograms were examined in the aromatic hydrocarbon fraction:

m/z	**Compound Type**
156.0938	dimethylnaphthalene
168.0939	methylbiphenyl
170.1095	trimethylnaphthalene
178.0782	phenanthrene and anthracene
192.0930	methylphenanthrene
198.1409	cadalene
206.1000	dimethylphenanthrene
219.1000	retene

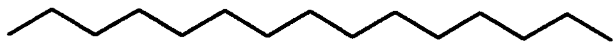
Blank page 32

APPENDIX C: Molecular Structures

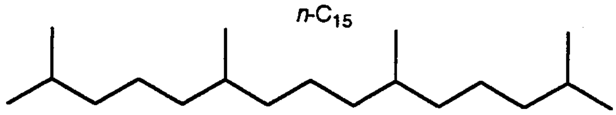
Blank page 34

APPENDIX C: Molecular Structures

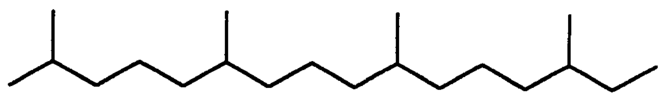
C1.1 Acyclic Alkanes



n-C_{15}

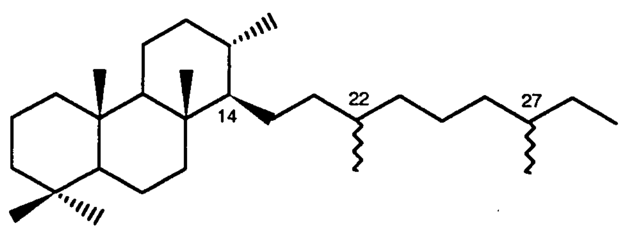


Pristane (C_{19})

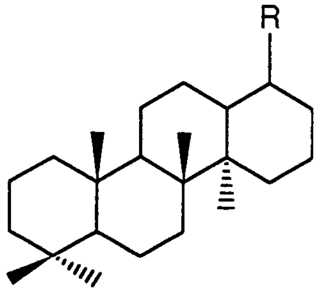


Phytane (C_{20})

C1.2 Tri- and Tetracyclic Terpanes

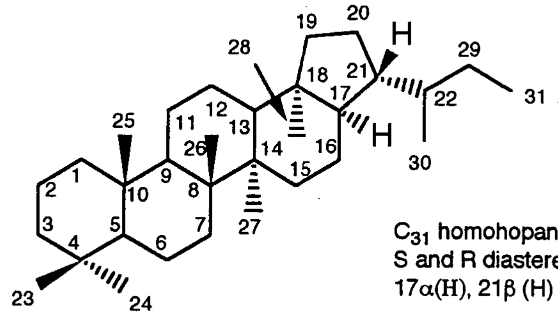


C_{30} tricyclohexaprenane (C_{19}-C_{35} cheilanthane series)

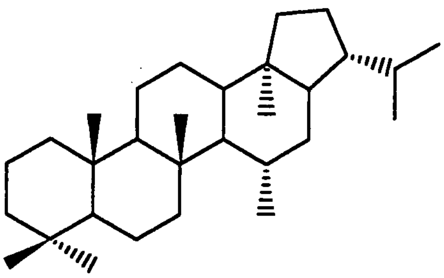


17,21-secohopane series;
C_{24} R=H, C_{25} R = me,
C_{26} R = eth and C_{27} R = propyl

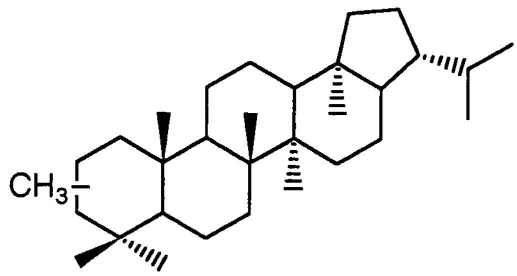
C1.3 Pentacyclic Triterpanes



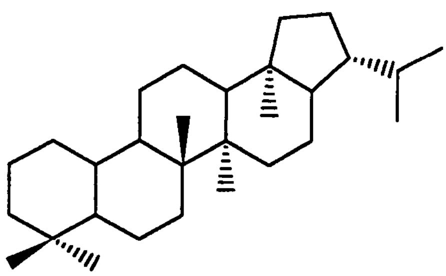
C_{31} homohopane;
S and R diastereomers at C22;
17α(H), 21β (H) configuration



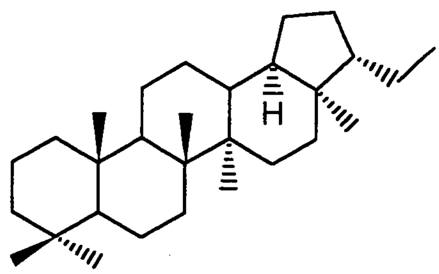
C_{30} 17α(H)-diahopane



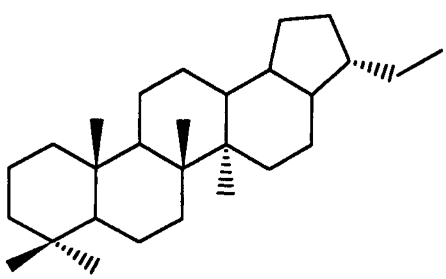
C_{31} 2α- and 3β-methylhopane



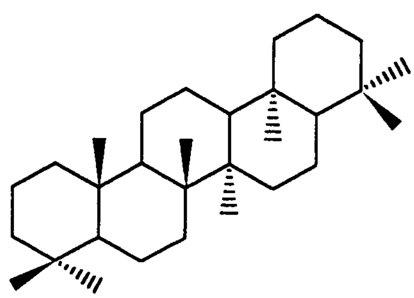
C_{29} 25-norhopane



C_{29} 18α(H)-30-norneohopane (C_{29}Ts)

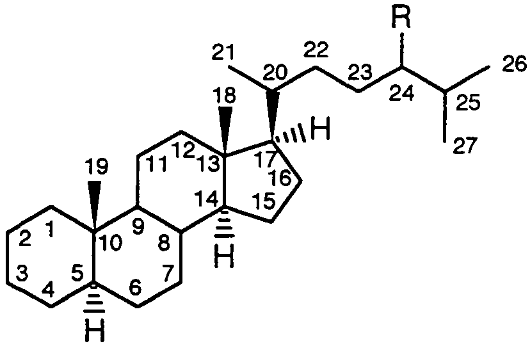


C_{28} 28,30-dinorhopane

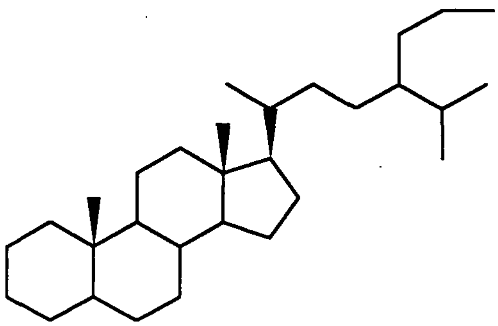


gammacerane

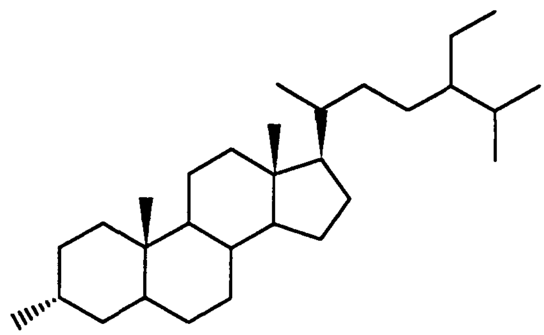
C1.4 Steranes



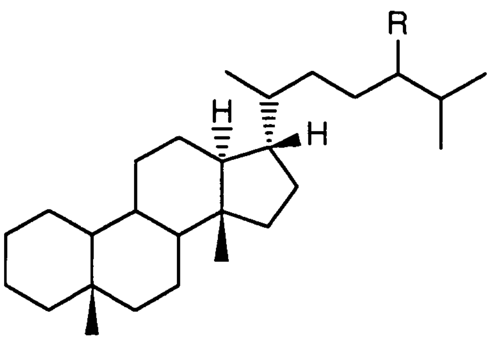
Regular sterane
C_{27} R=H; C_{28} R=Me; C_{29} R=Et; C_{30} R=*n*-Propyl;
S and R diastereoisomers at C20;
5α(H),14α(H),17α(H) -sterane



C_{30} 24-*n*-propylcholestane

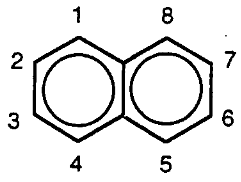


C_{30} 3β-methyl-24-ethylsterane

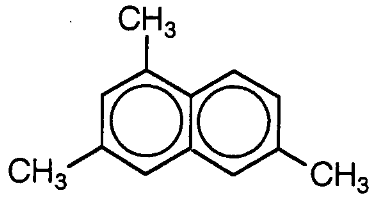


Rearranged sterane
C_{27} R=H; C_{28} R=Me; C_{29} R=Et; C_{30} R=*n*-Propyl;
S and R diastereoisomers at C20;
13α(H),17α(H) -diasterane

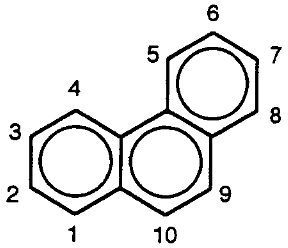
C1.5 Di- and Triaromatic Hydrocarbons



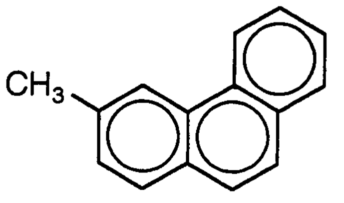
Naphthalene



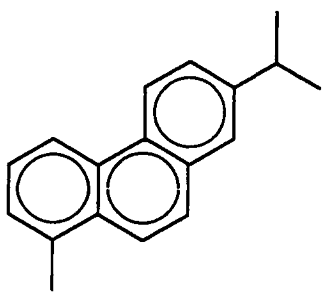
1,3,6-trimethylnaphthalene



Phenanthrene



3-methylphenanthrene



Retene

APPENDIX D: Gas Chromatograms

Blank page 40

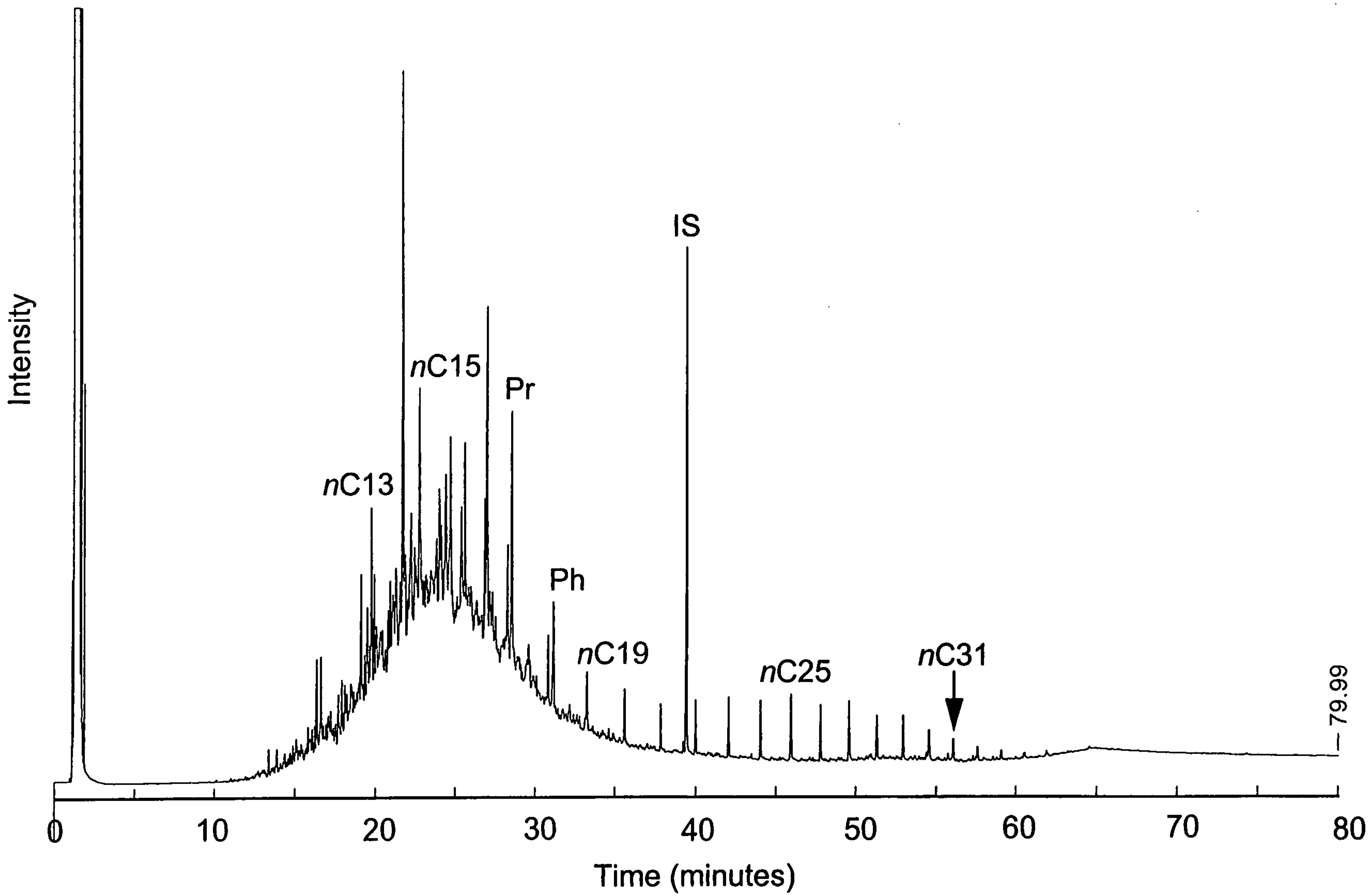
Labelling on Gas Chromatograms

Abbreviation	Annotation
IS	Internal standard 3-methylheneicosane (AC22: C22 anteiso-alkane 10 μg/μl)
17	Number of carbon atoms in the normal alkane molecule
Pr	C_{19} acyclic isoprenoid alkane (pristane)
Ph	C_{20} acyclic isoprenoid alkane (phytane)

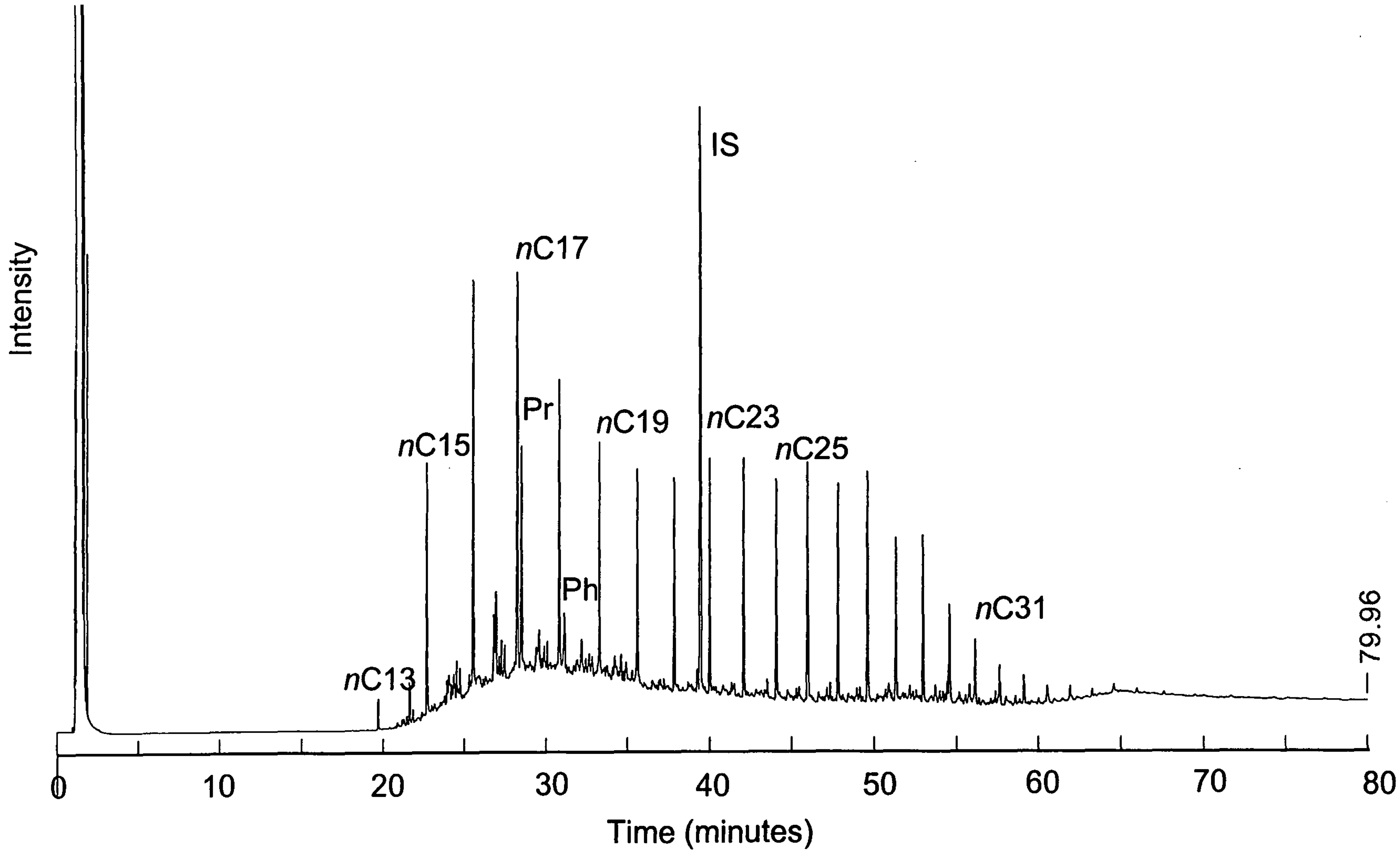
Appendix D1: Gas Chromatograms: Saturated Hydrocarbons of Petrel Sub-basin Oils

Sample Nos.	#8572	Barnett-1	1539 m	
	#8573	Barnett-1	1562 m	
	#8574	Barnett-1	2035 m	
	#440	Barnett-2	DST 3	1491-1497 m
	#441	Barnett-2	DST 4	1501-1507 m
	#439	Barnett-2	DST 1	2393-2408 m
	#8528	Cambridge-1	1445-65 m	
	#8587	Lacrosse-1	1451-54 m	
	#8588	Lacrosse-1	1588-91 m	
	#7945	Milligans-1	64-67 m	
	#7949	Milligans-1	122-126 m	
	#8571	Ningbing-1	1268 m	
	#4934	Ningbing Lst	Outcrop	
	#10017	Petrel-4	DST 4	3570-3586 m
	#382	Turtle-1	DST 5	1619-1621 m
	#4915	Turtle-2	925 m	
	#383	Turtle-2	RFT	927 m
	#4916	Turtle-2	928 m	
	#4917	Turtle-2	932 m	
	#4918	Turtle-2	1440 m	
	#4919	Turtle-2	1609 m	
	#384	Turtle-2	DST-1A	2632-2721 m
	#10014	Turtle-2	DST-1A	2632-2721 m
	#10068	Waggon Creek-1	DST-3	586-601 m

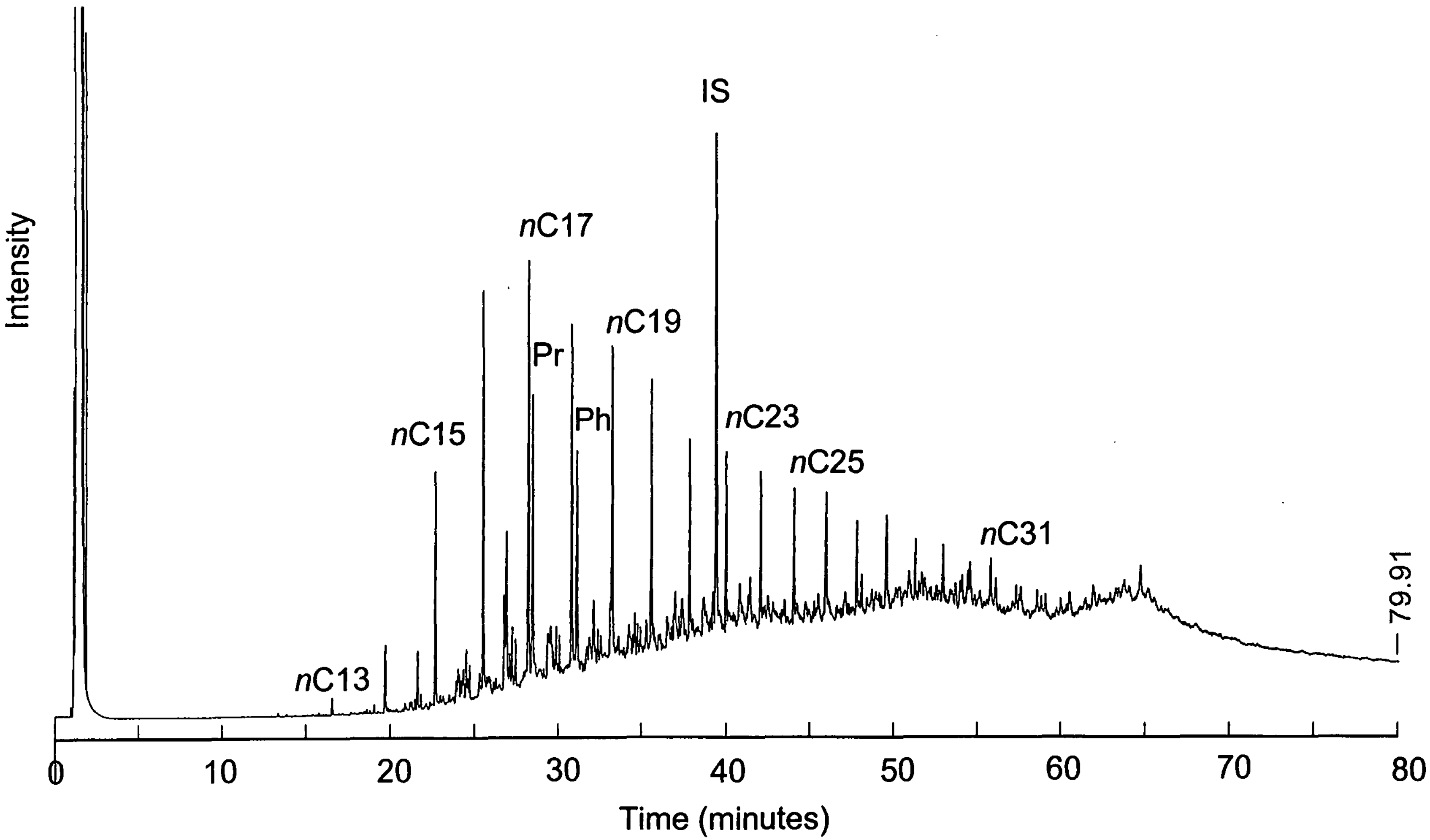
#8572 saturate fraction, Barnett-1, oil stain, 1539 m



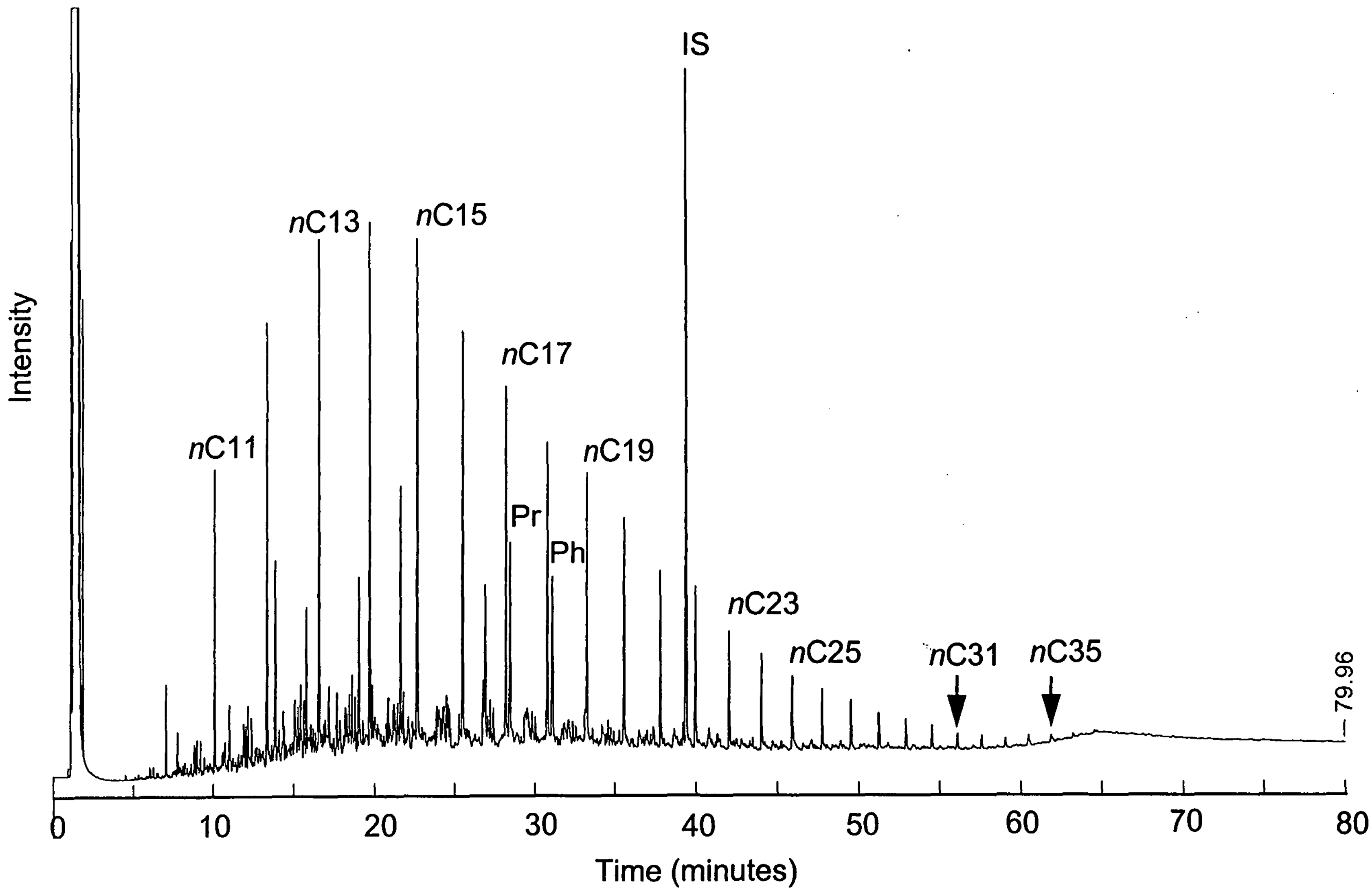
#8573 saturate fraction, Barnett-1, oil stain, 1562 m



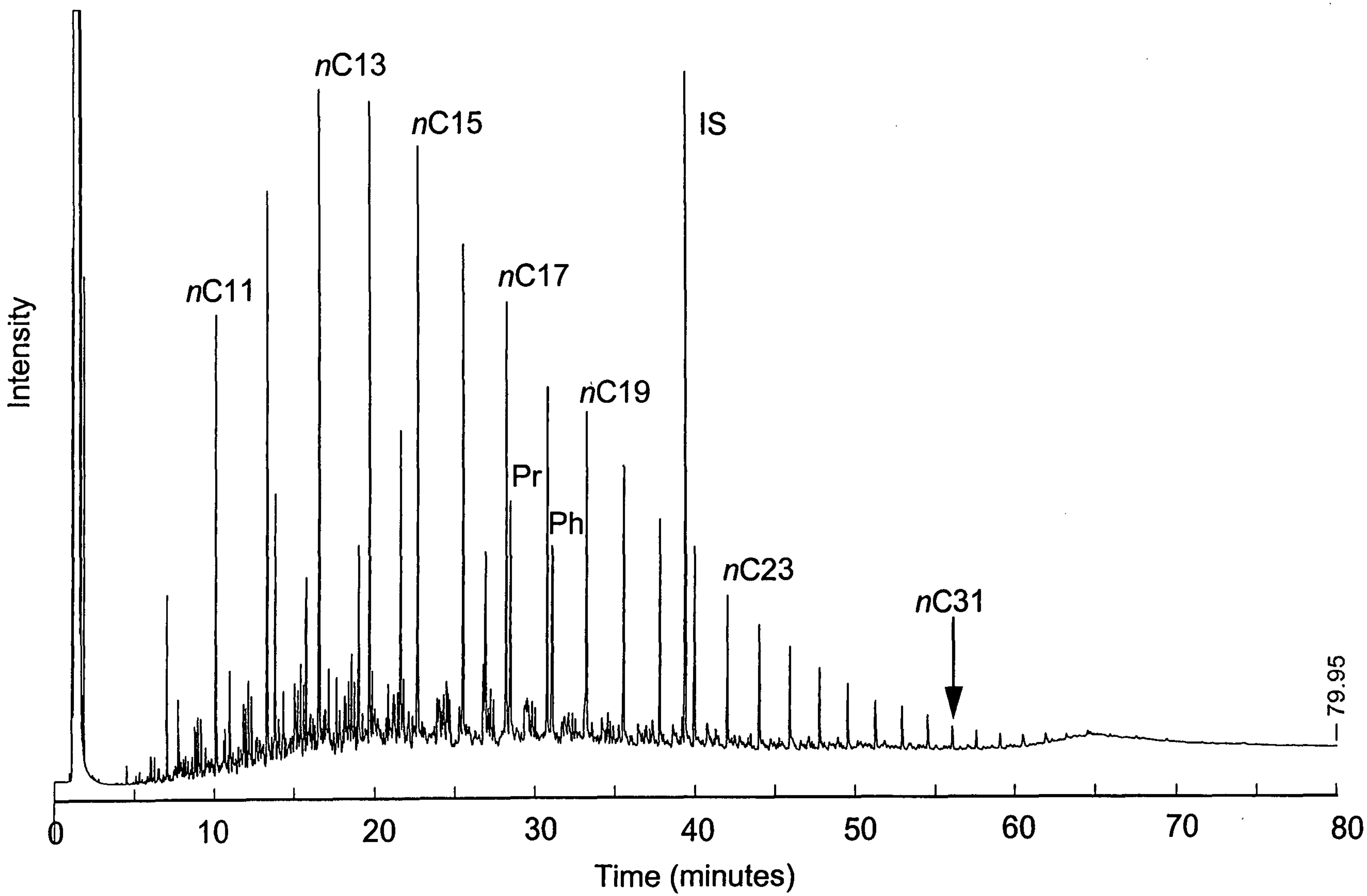
#8574 saturate fraction, Barnett-1, oil stain, 2035 m



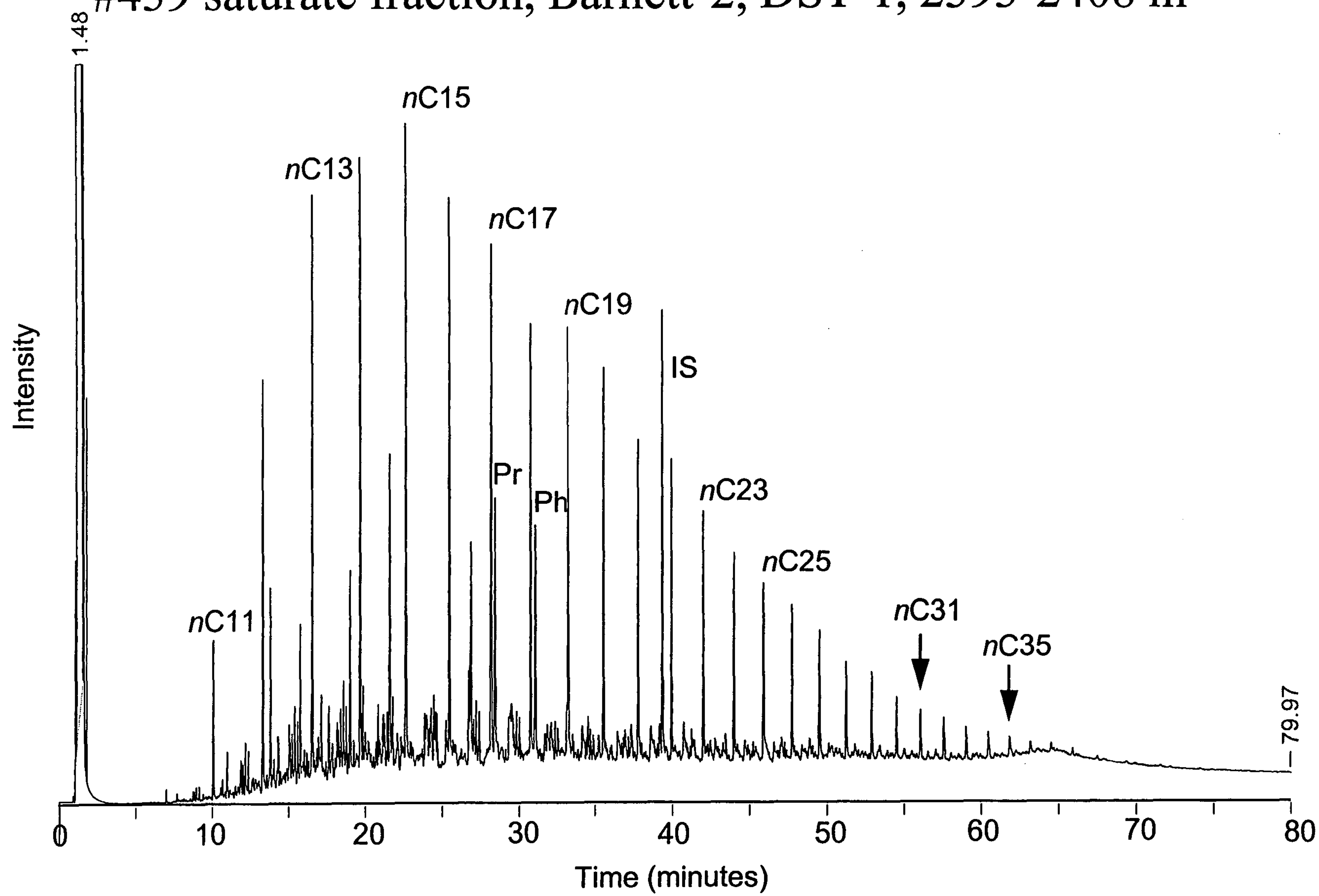
#440 saturate fraction, Barnett-2, DST-3, 1491-1497 m



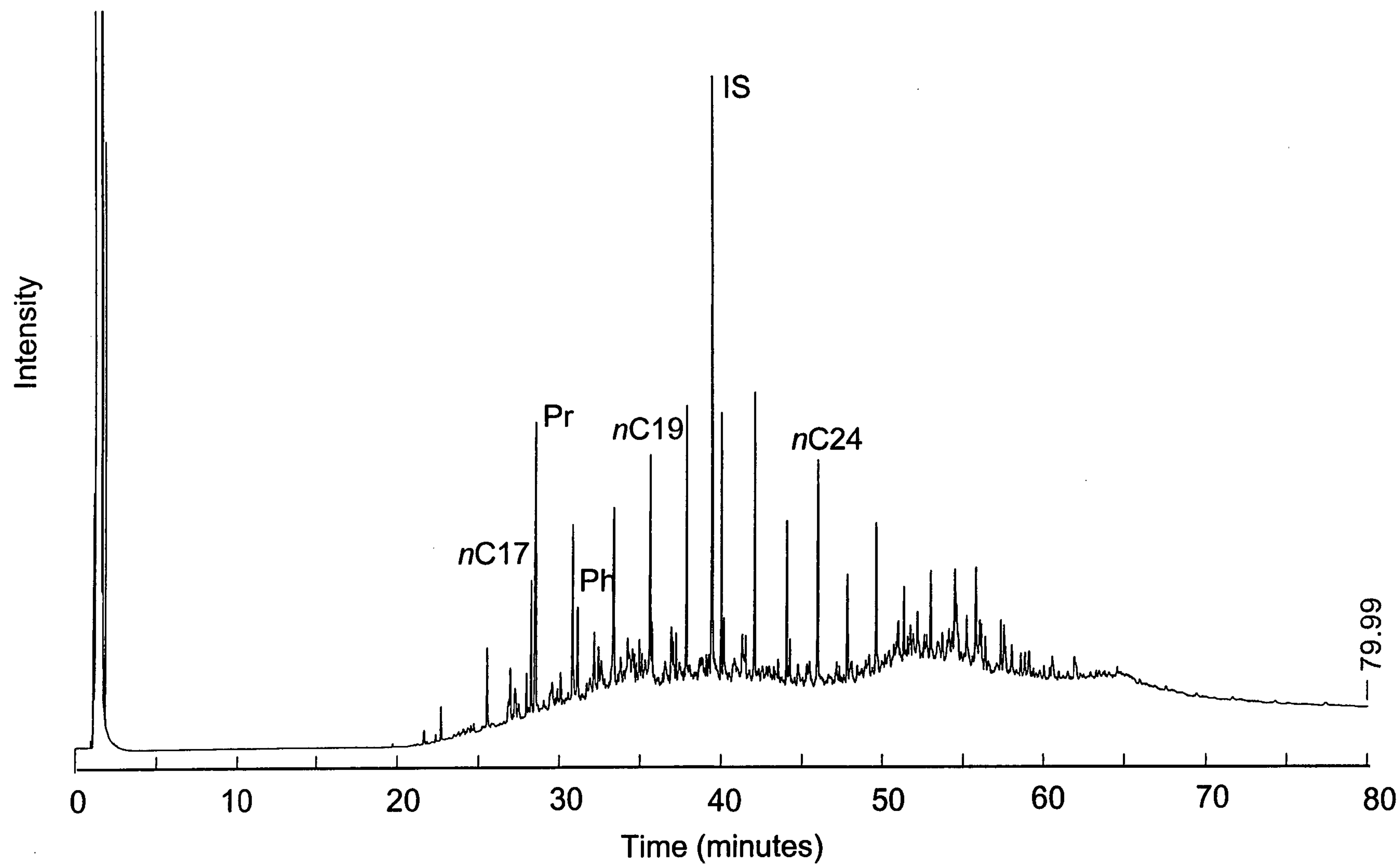
#441 saturate fraction, Barnett-2, DST-4, 1501-1507 m



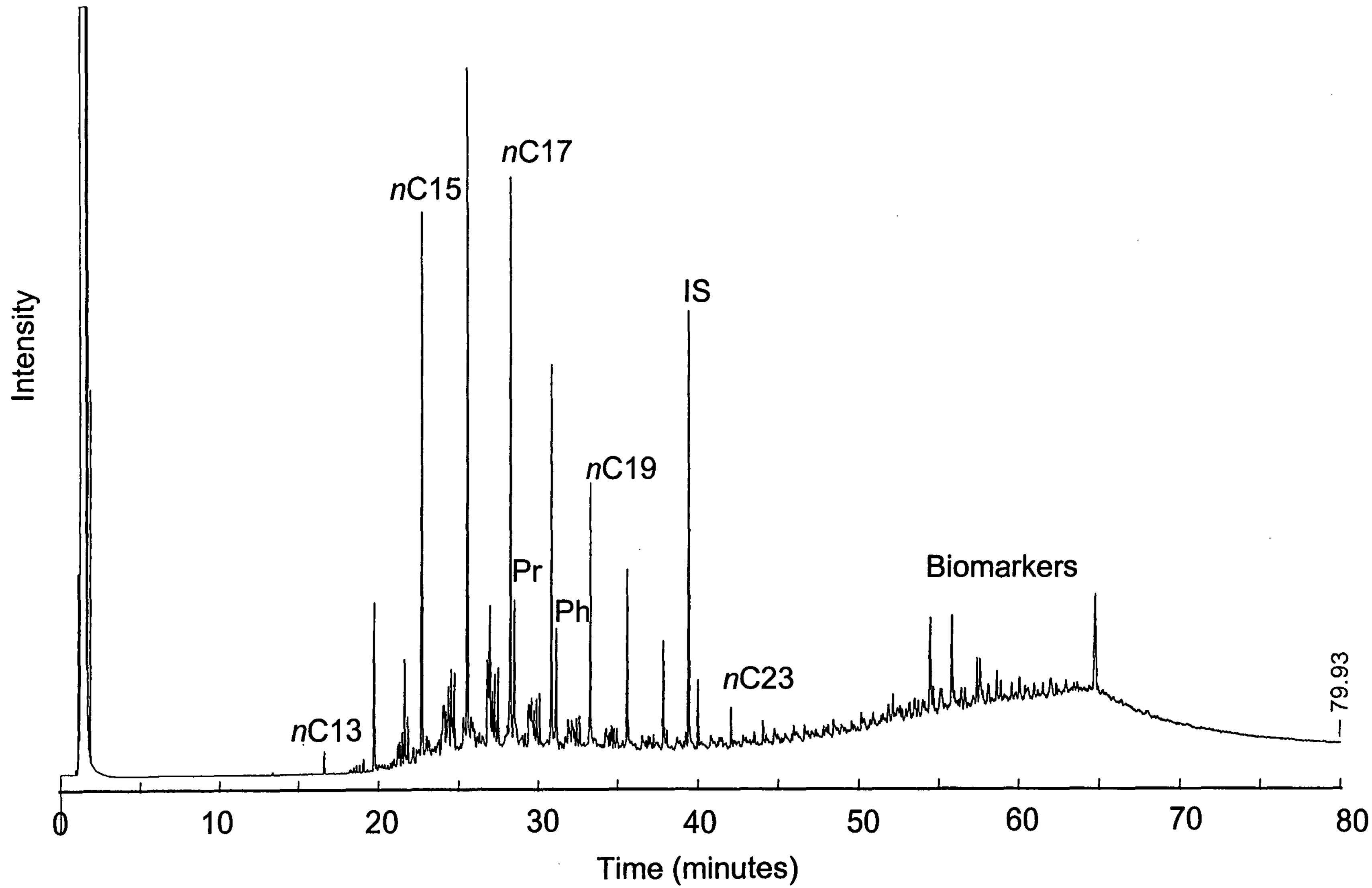
#439 saturate fraction, Barnett-2, DST-1, 2393-2408 m



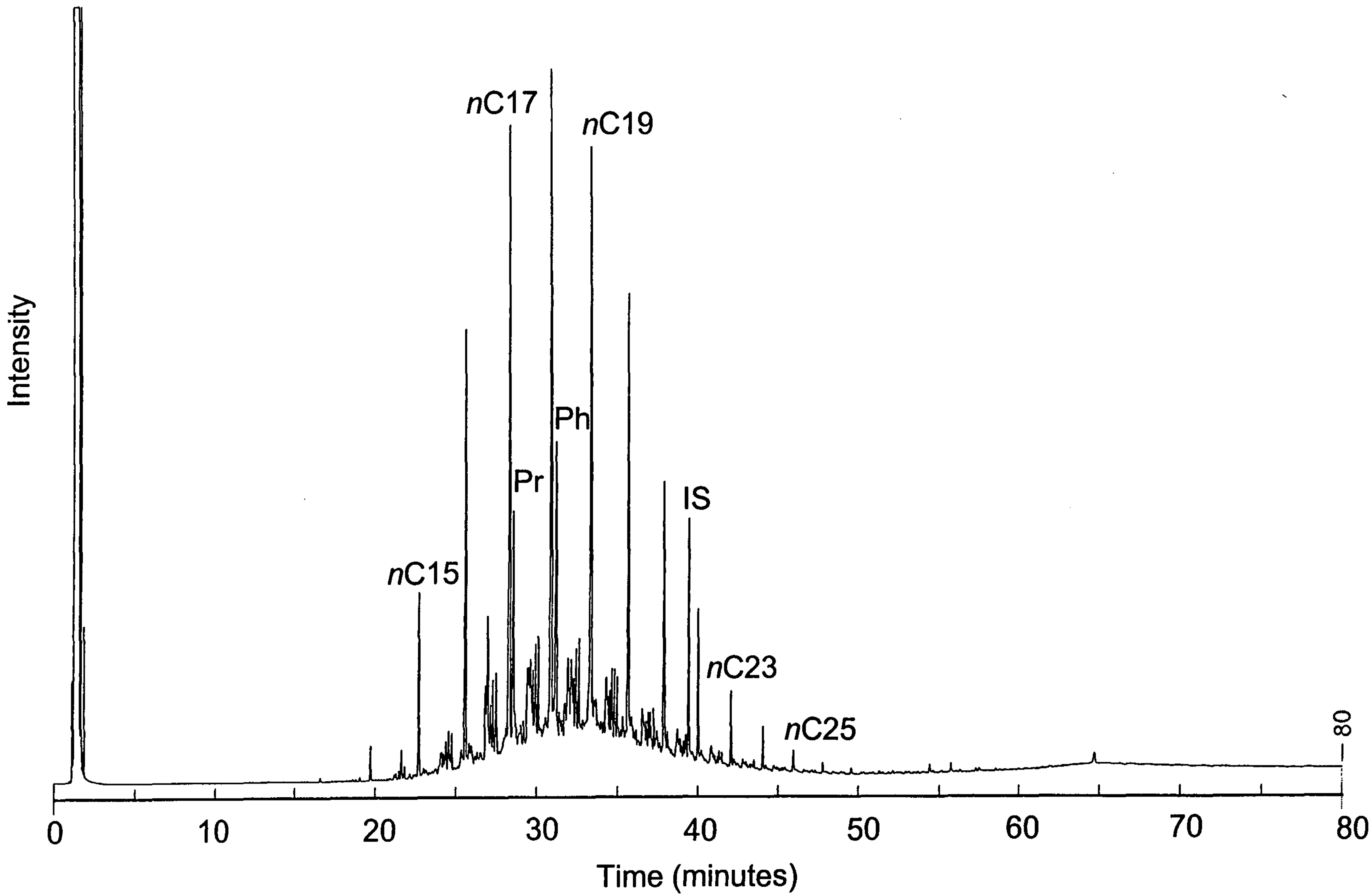
#8528 saturate fraction, Cambridge-1, oil stain, 1445-65 m



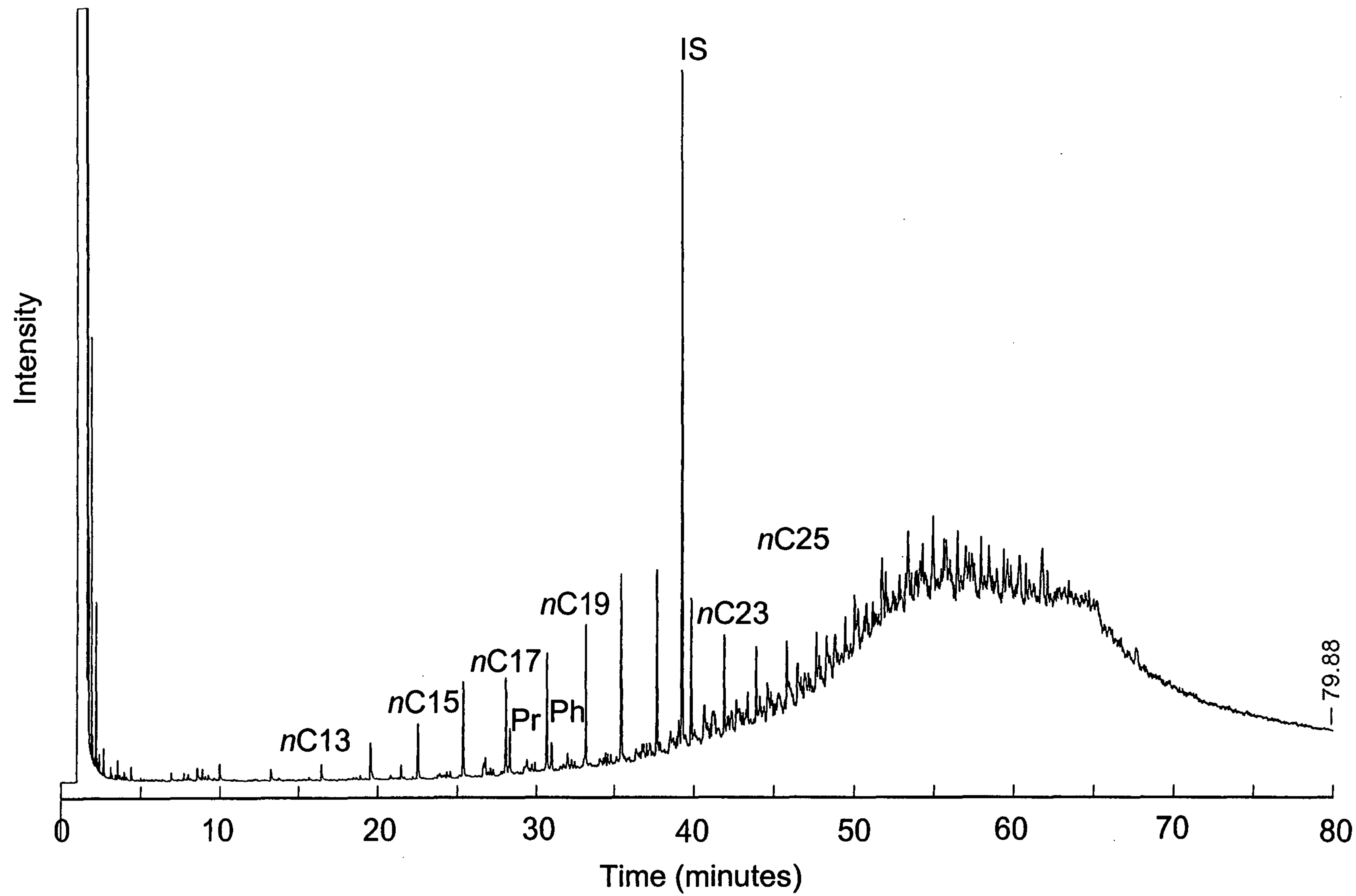
#8587 saturate fraction, Lacrosse-1 oil stain, 1451-54 m



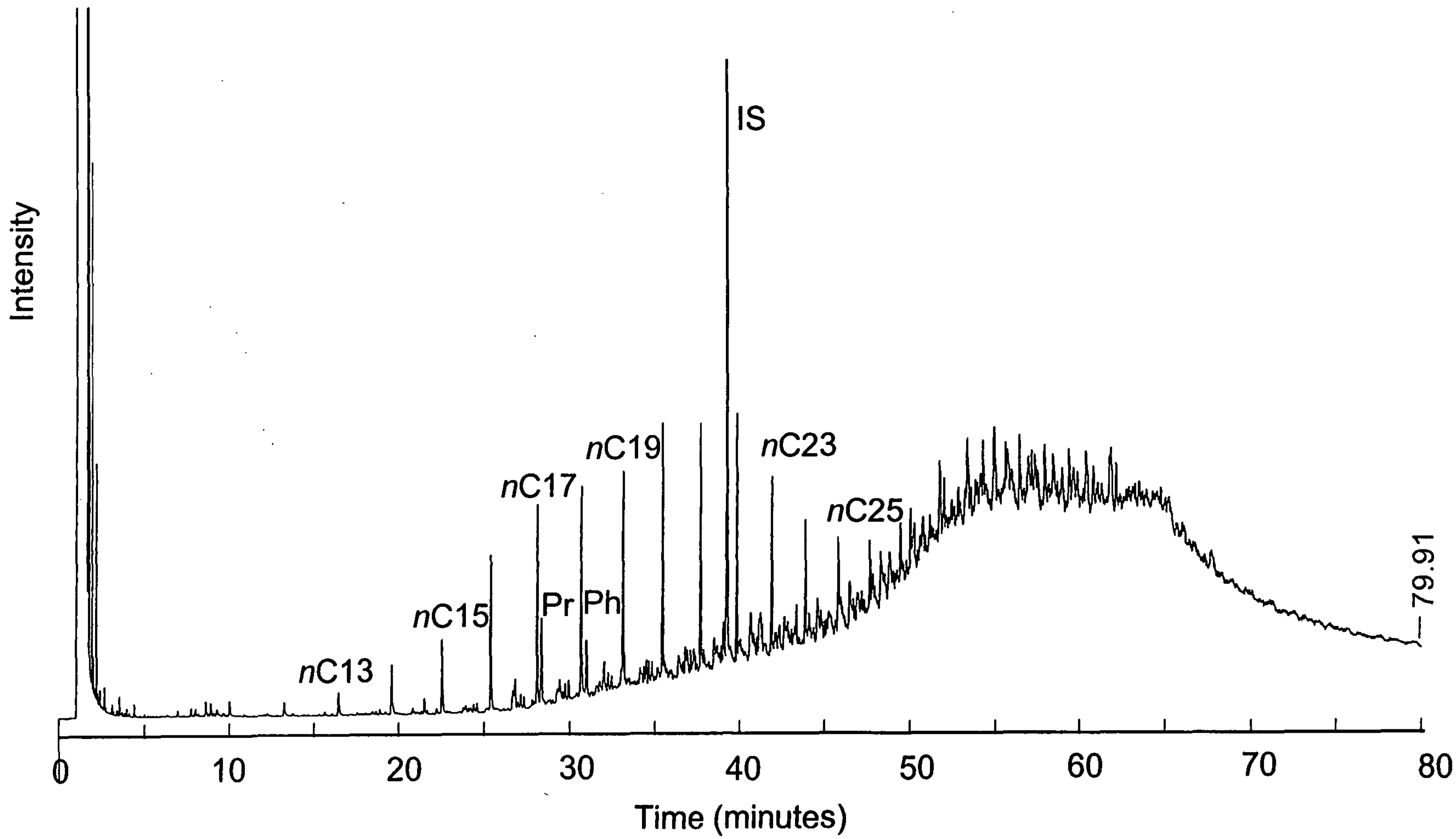
#8588 saturate fraction, Lacrosse-1, oil stain, 1588-1591 m



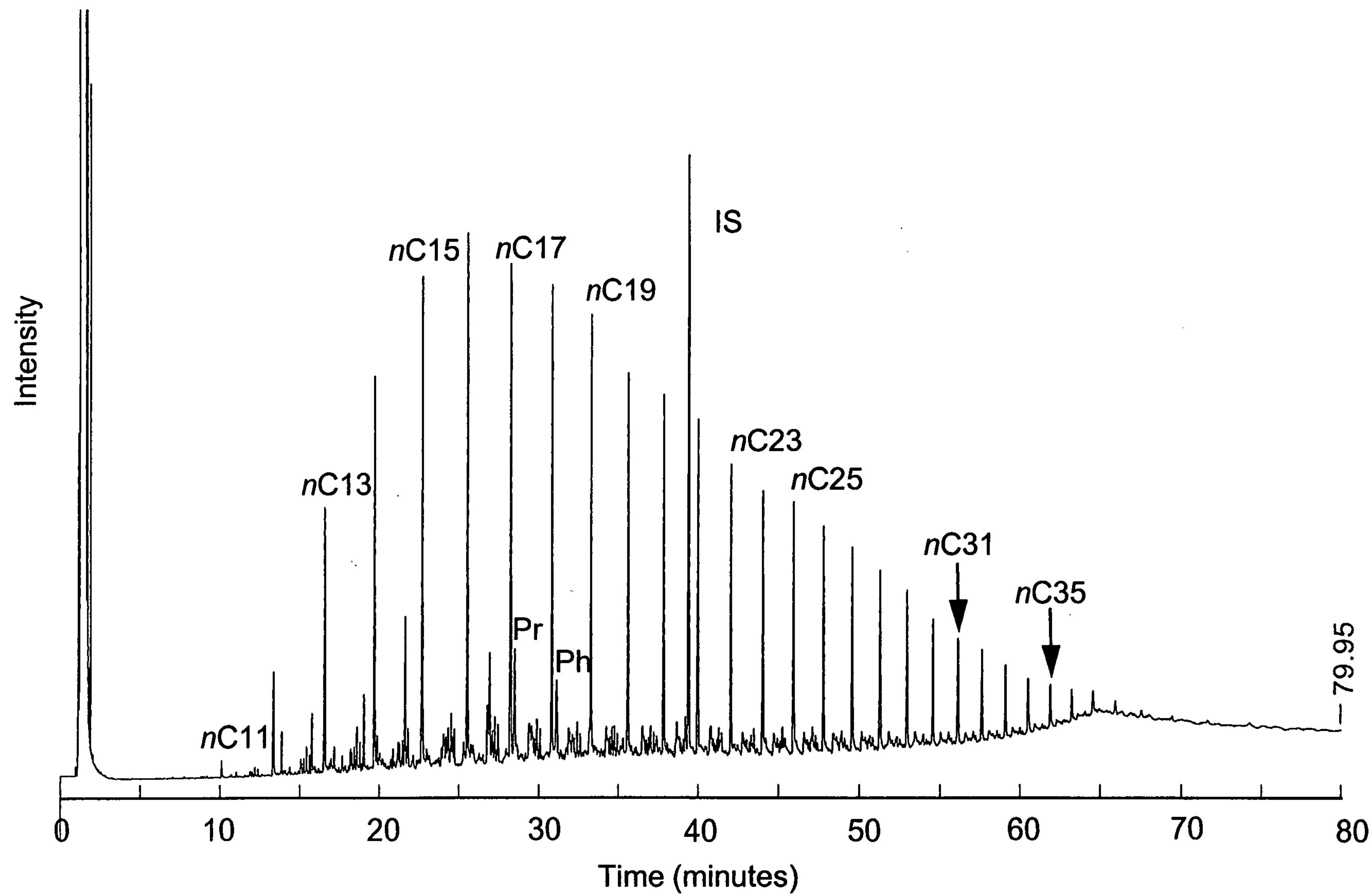
#7945 saturate fraction, Milligans-1, oil stain, 64-67 m

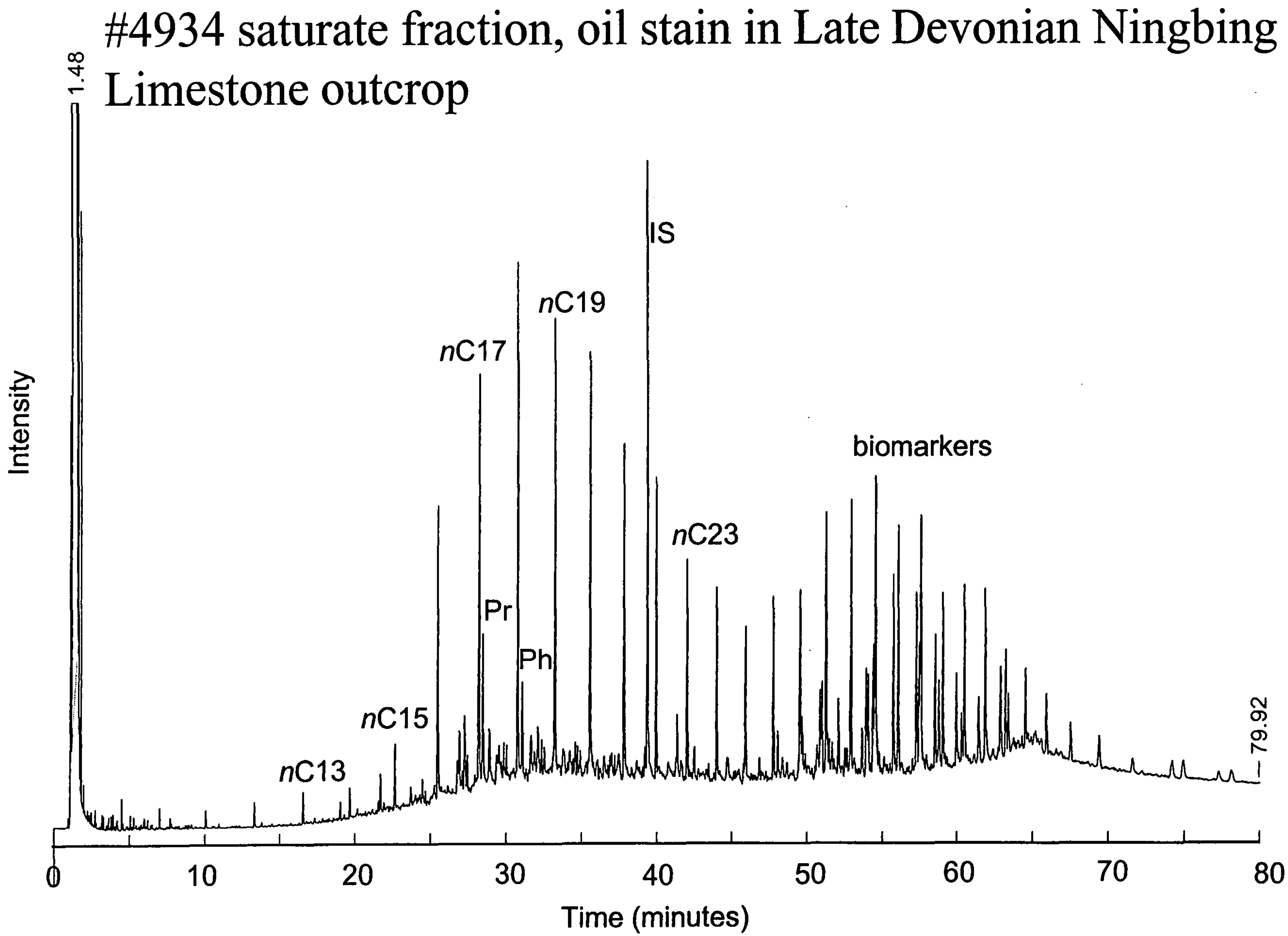


#7949 saturate fraction, Milligans-1, oil stain, 122-126 m

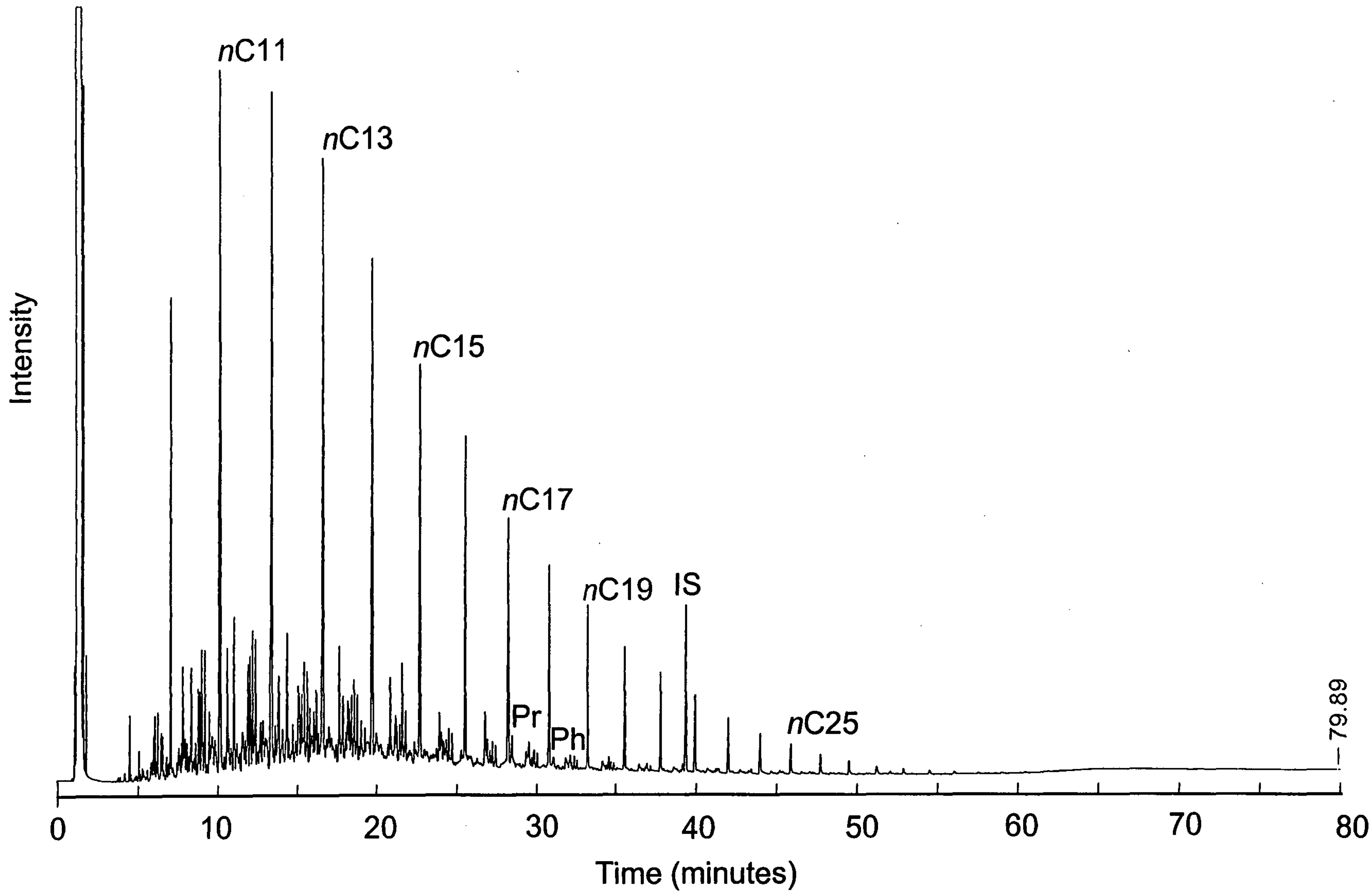


8571 saturate fraction, Ningbing-1 oil stain, 1268 m

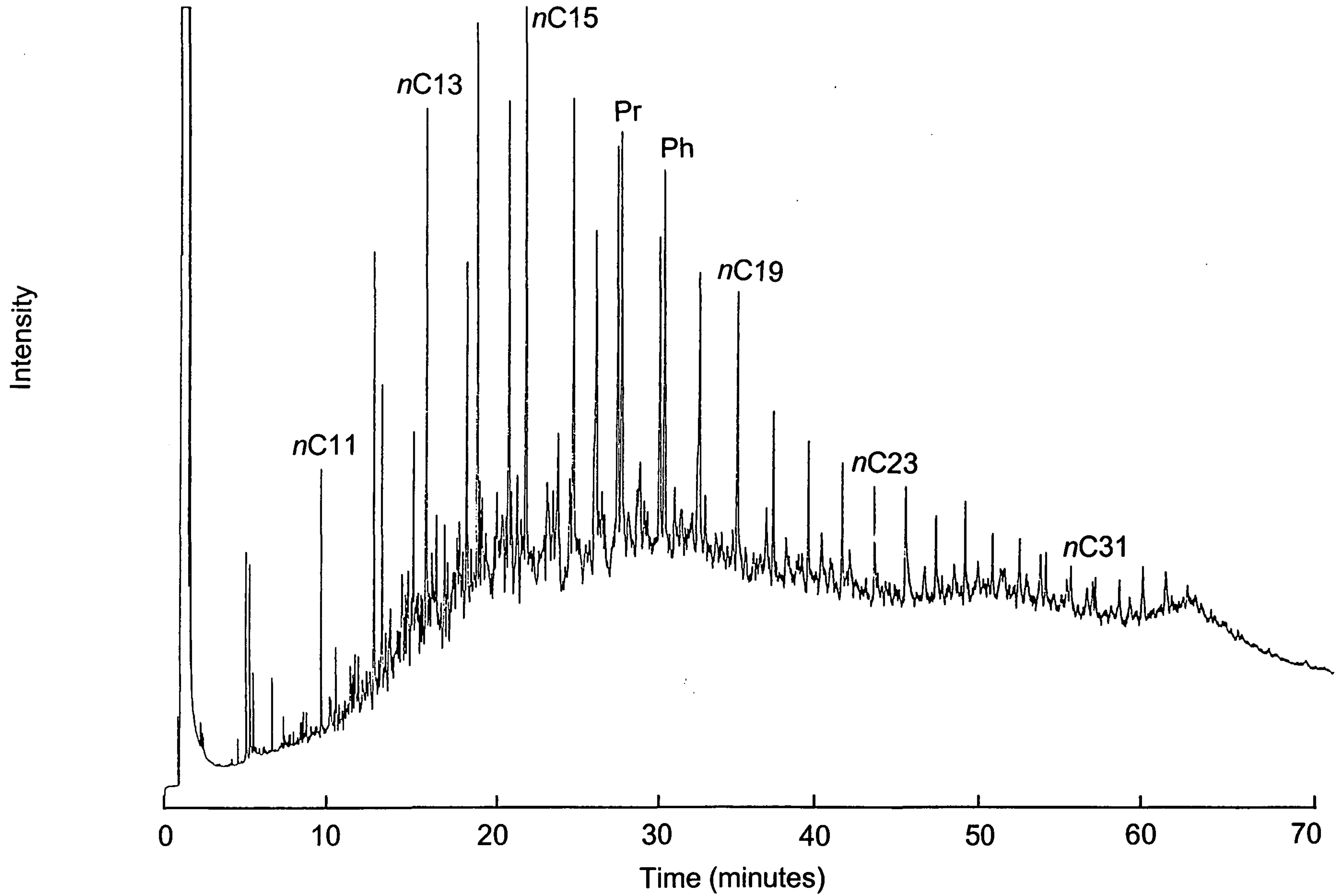



#4934 saturate fraction, oil stain in Late Devonian Ningbing Limestone outcrop
1.48
Intensity
IS
nC19
nC17
biomarkers
nC23
Pr
Ph
nC15
nC13
79.92
0
10
20
30
40
50
60
70
80
Time (minutes)

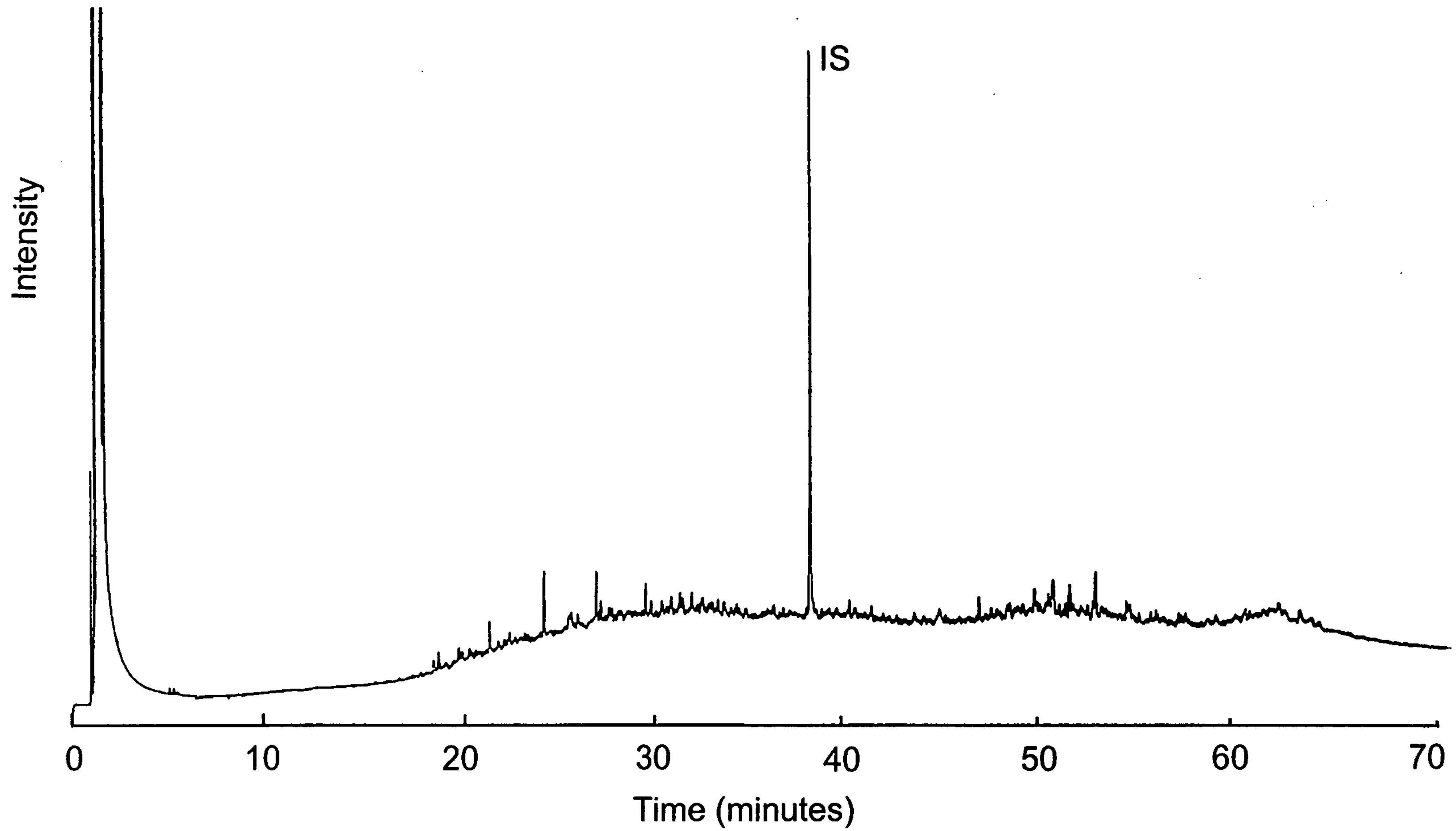
#10017 saturate fraction, Petrel-4, DST-4, 3570-3586 m



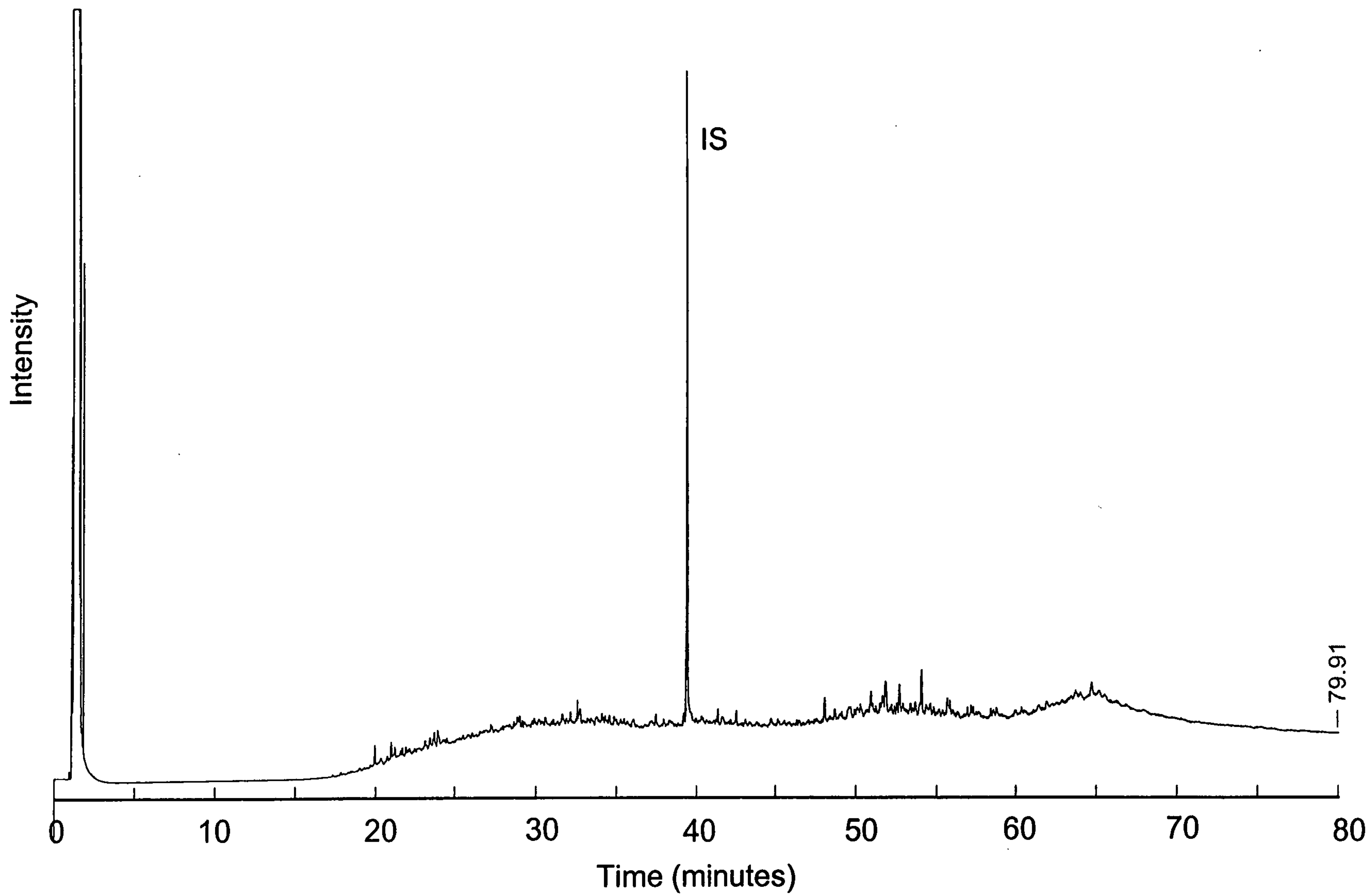
#382 saturate fraction, Turtle-1, DST-5, 1619-1621 m



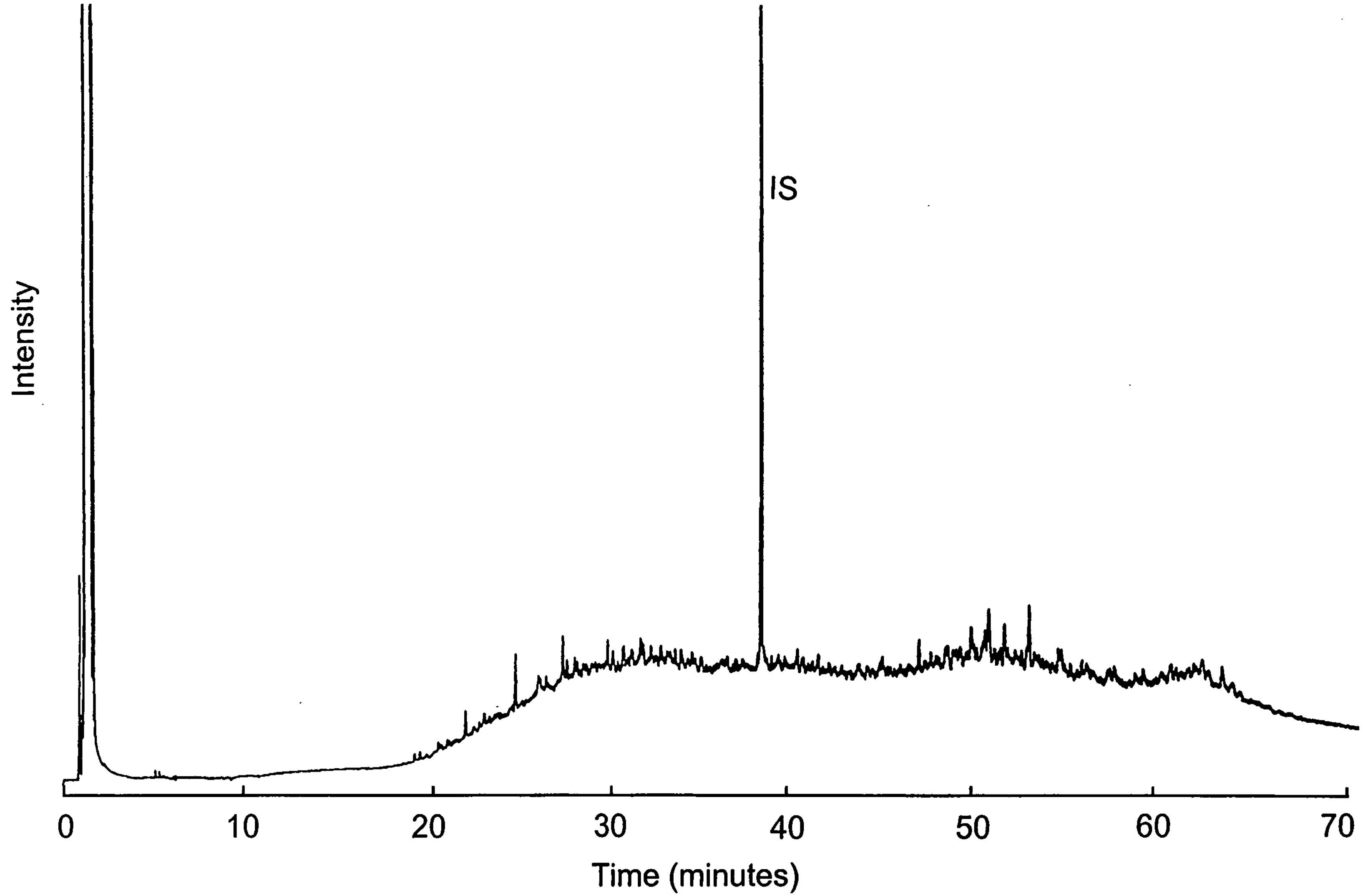
#4915 saturate fraction, Turtle-2, oil stain, 925 m



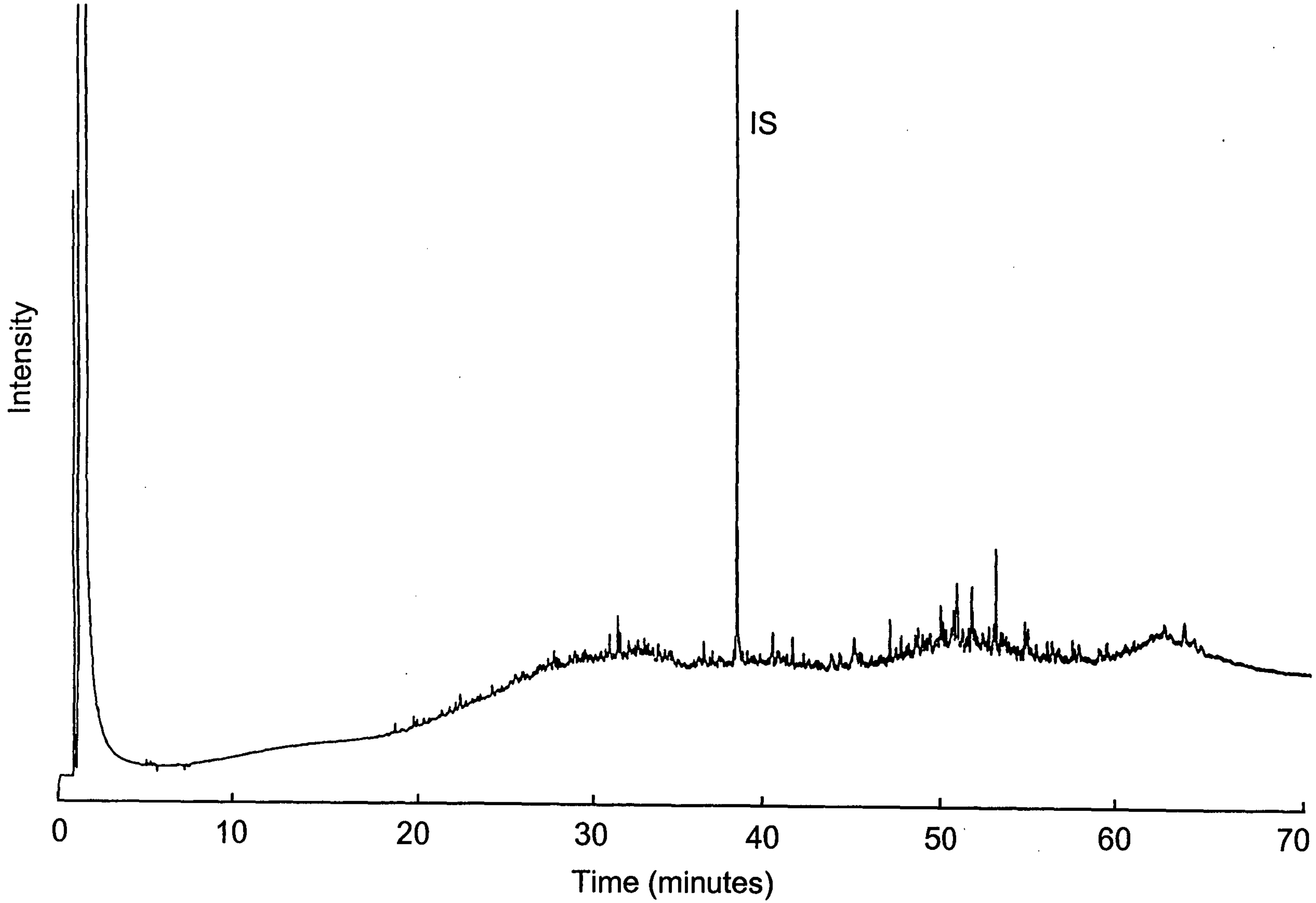
#383 saturate fraction, Turtle-2, RFT, 927 m



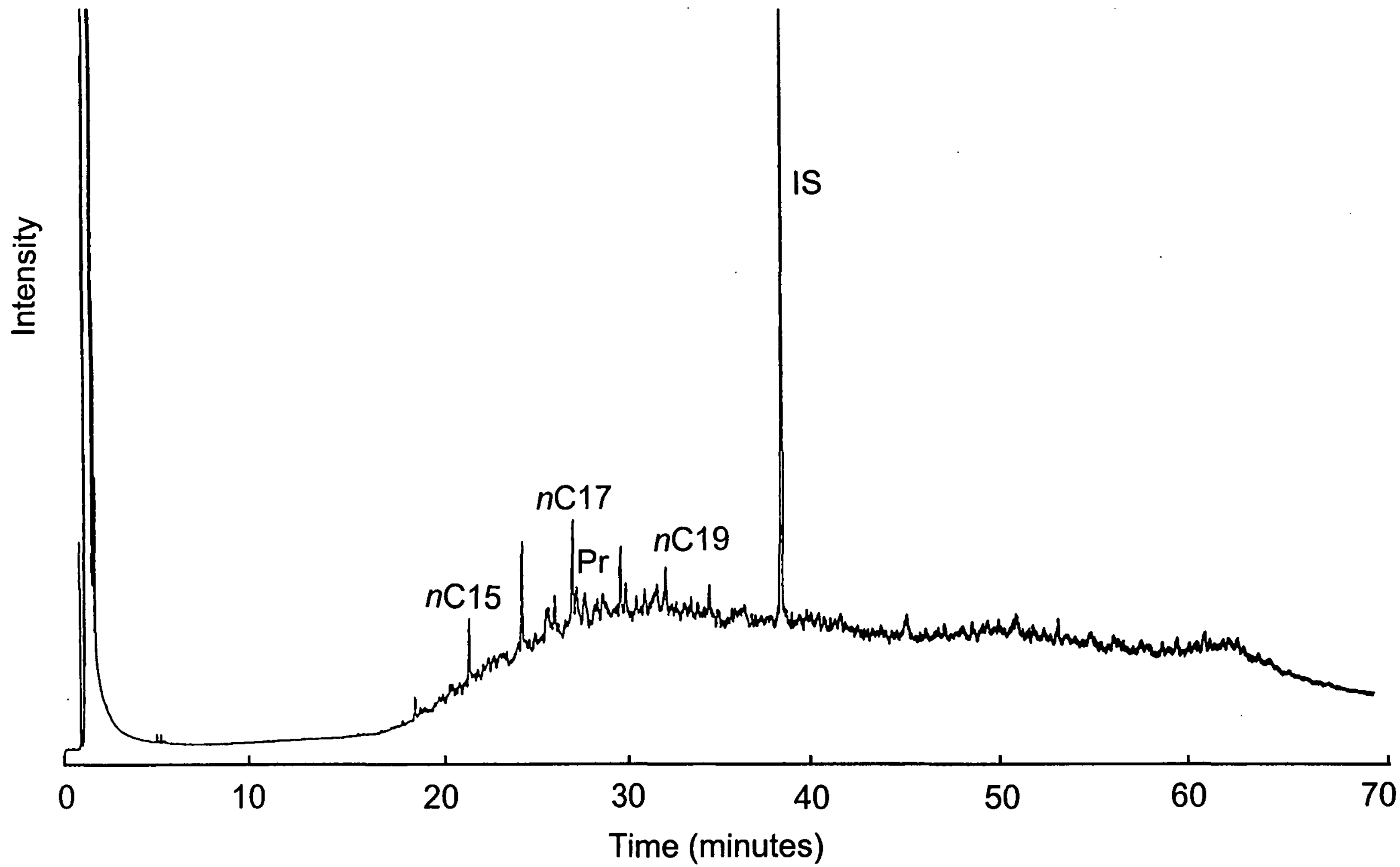
#4916 saturate fraction, Turtle-2, oil stain, 928 m



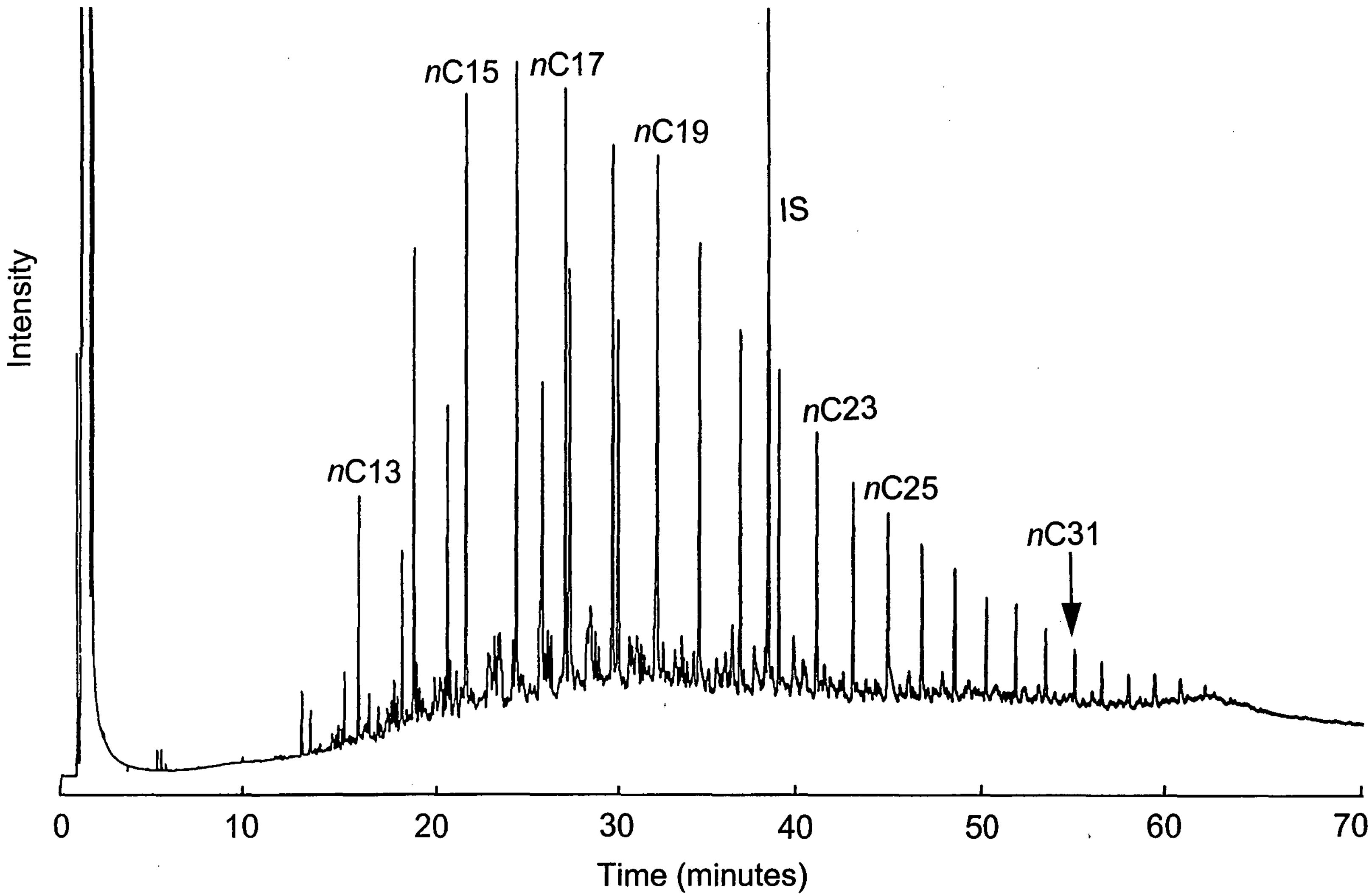
#4917 saturate fraction, Turtle-2, oil stain, 932 m



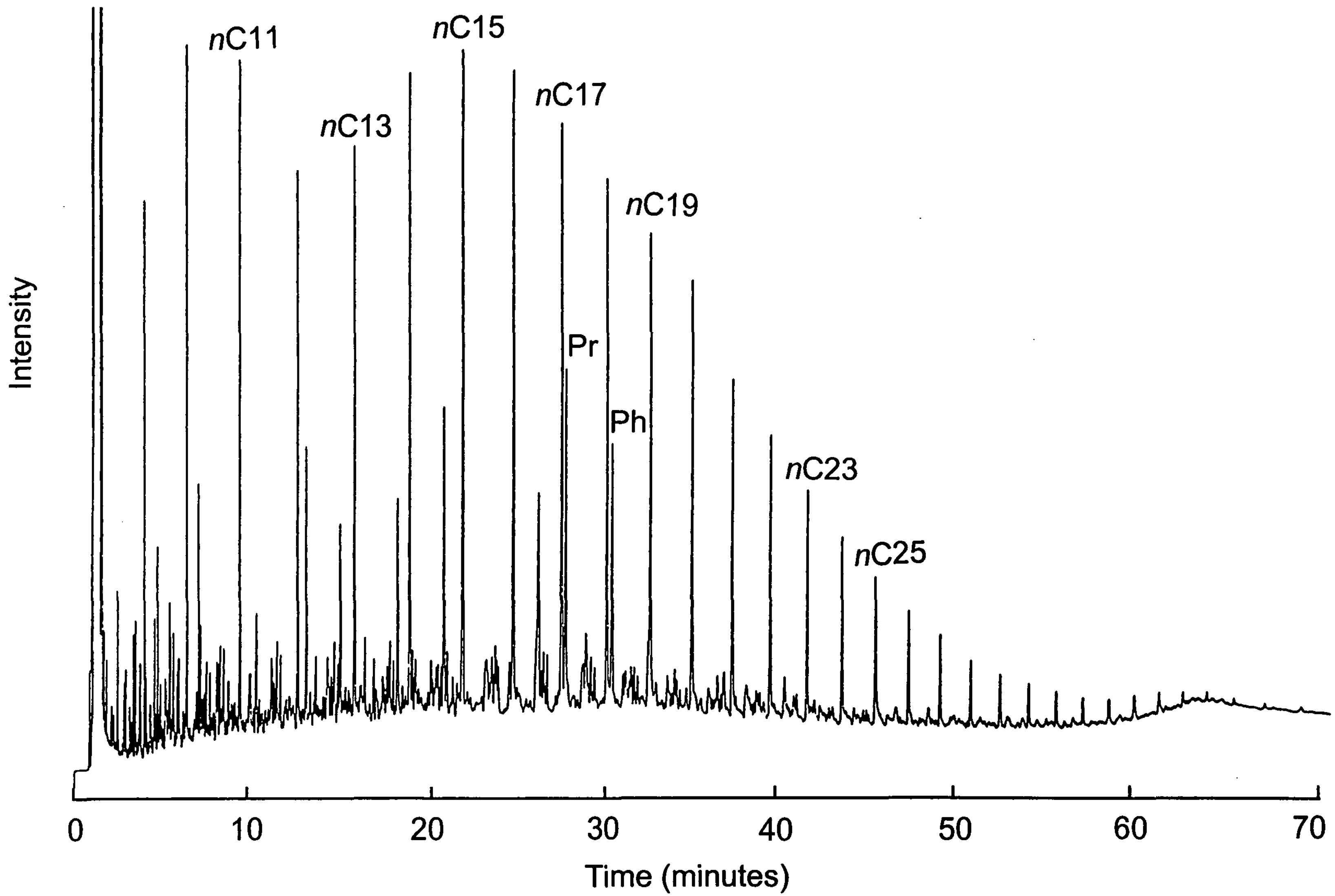
#4918 saturate fraction, Turtle-2, oil stain, 1440 m



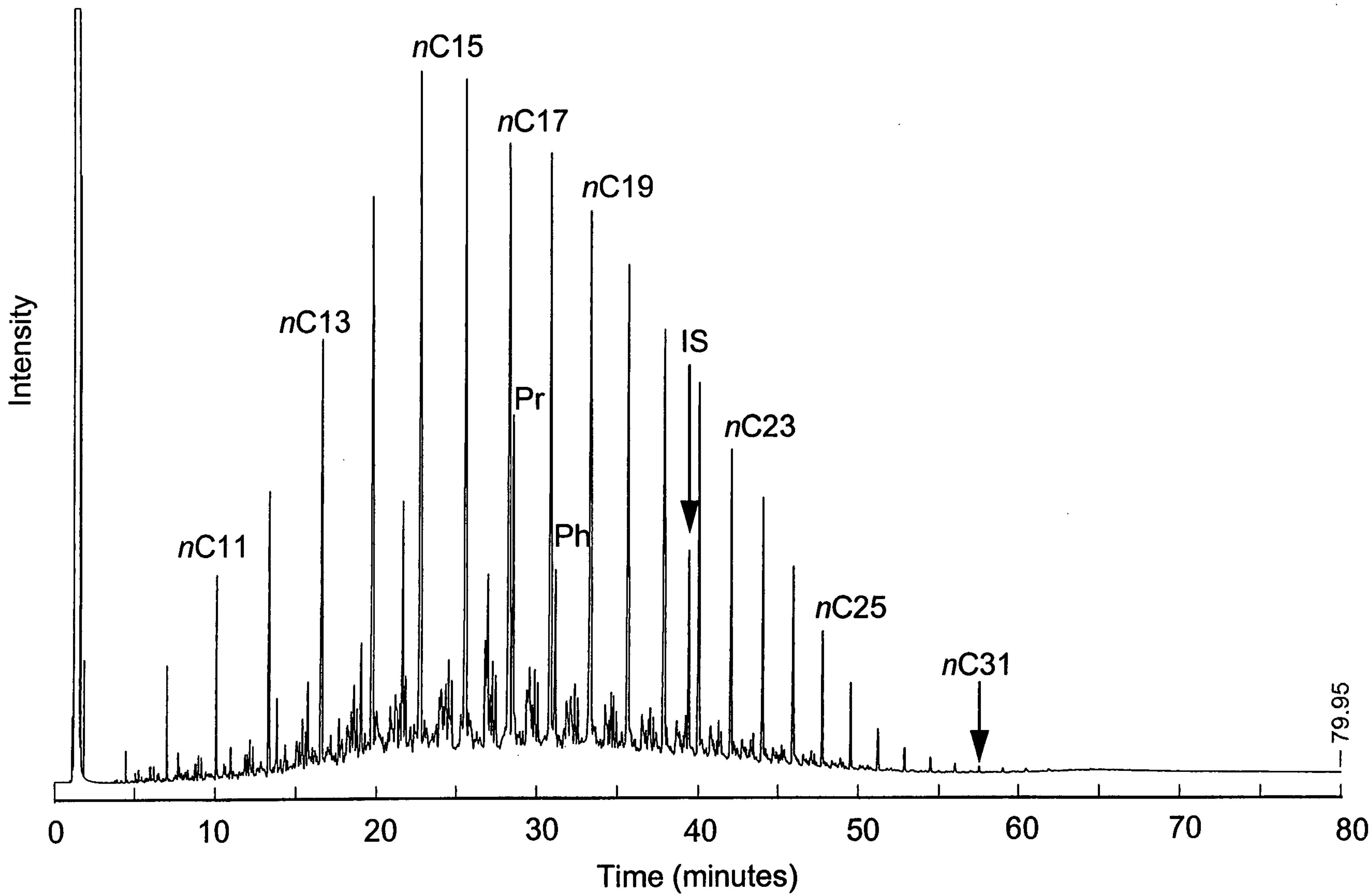
#4919 saturate fraction, Turtle-2, oil stain, 1609 m

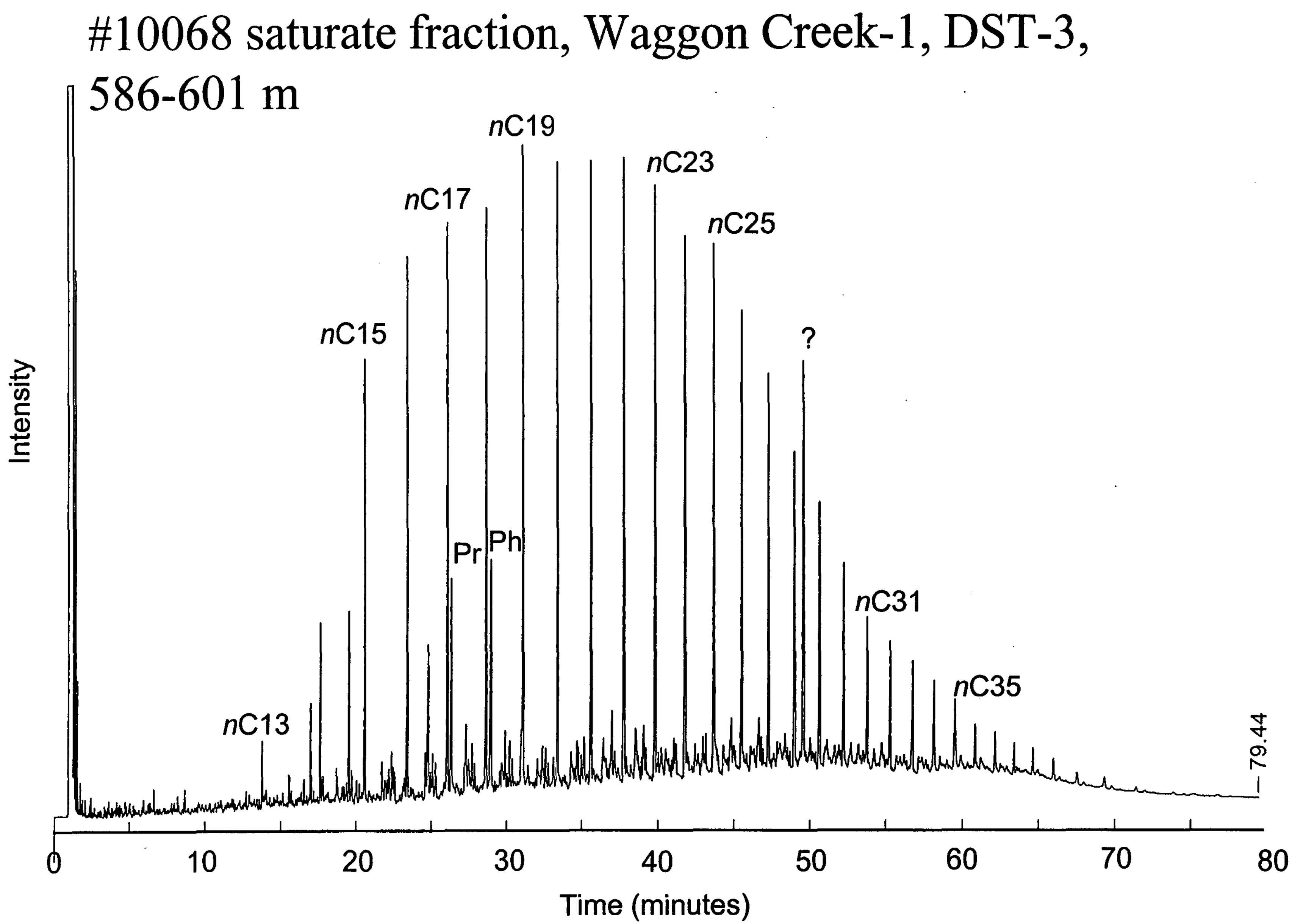


#384 saturate fraction, Turtle-2, DST-1A, 2632-2721 m



#10014 saturate fraction, Turtle-2, DST-1A, 2632-2721 m



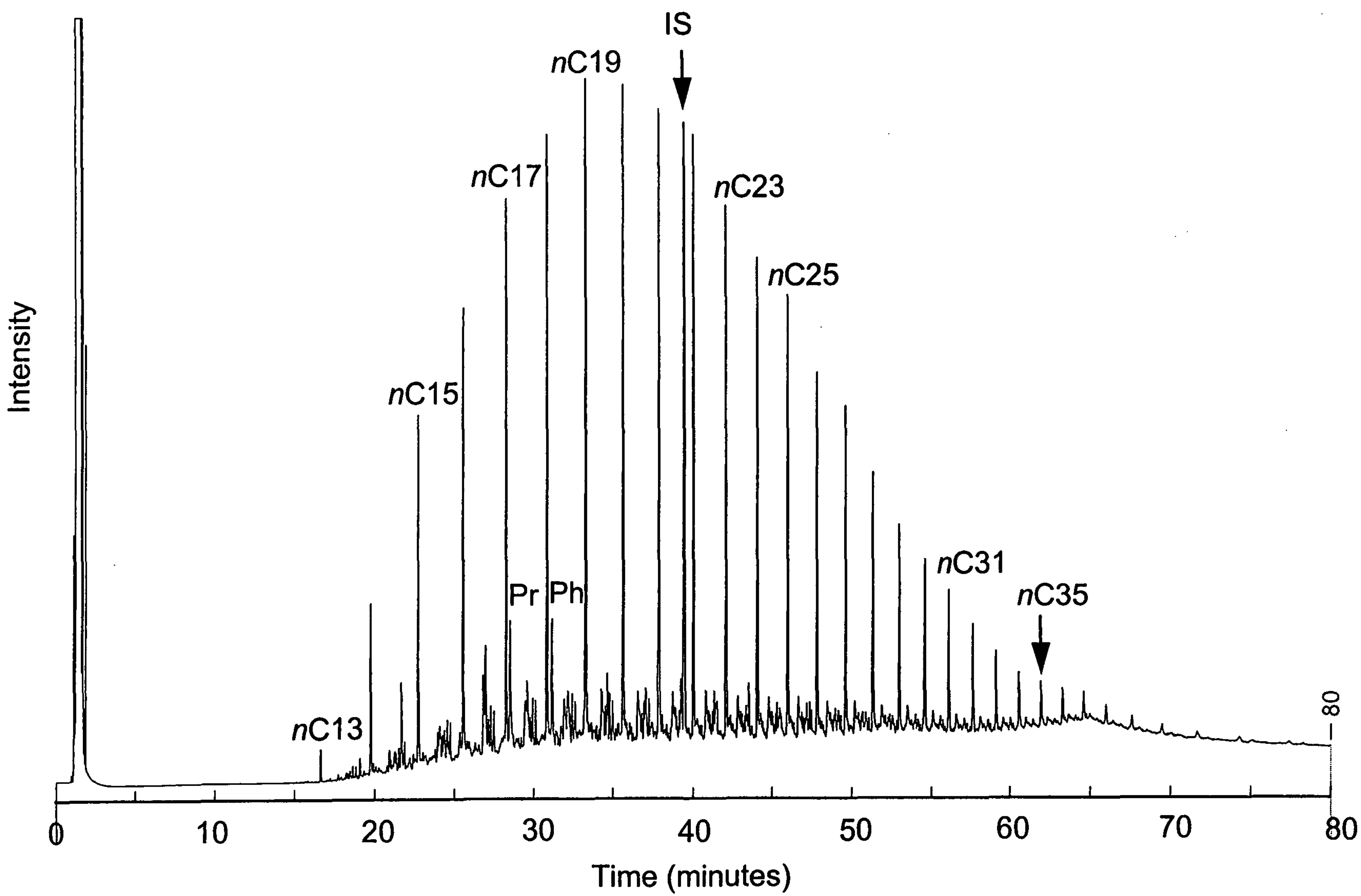

#10068 saturate fraction, Waggon Creek-1, DST-3,
586-601 m
Intensity
nC13
nC15
nC17
Pr
Ph
nC19
nC23
nC25
?
nC31
nC35
79.44
0
10
20
30
40
50
60
70
80
Time (minutes)

Appendix D2: Gas Chromatograms: Saturated Hydrocarbons of Source Rock Extracts, Petrel Sub-basin.

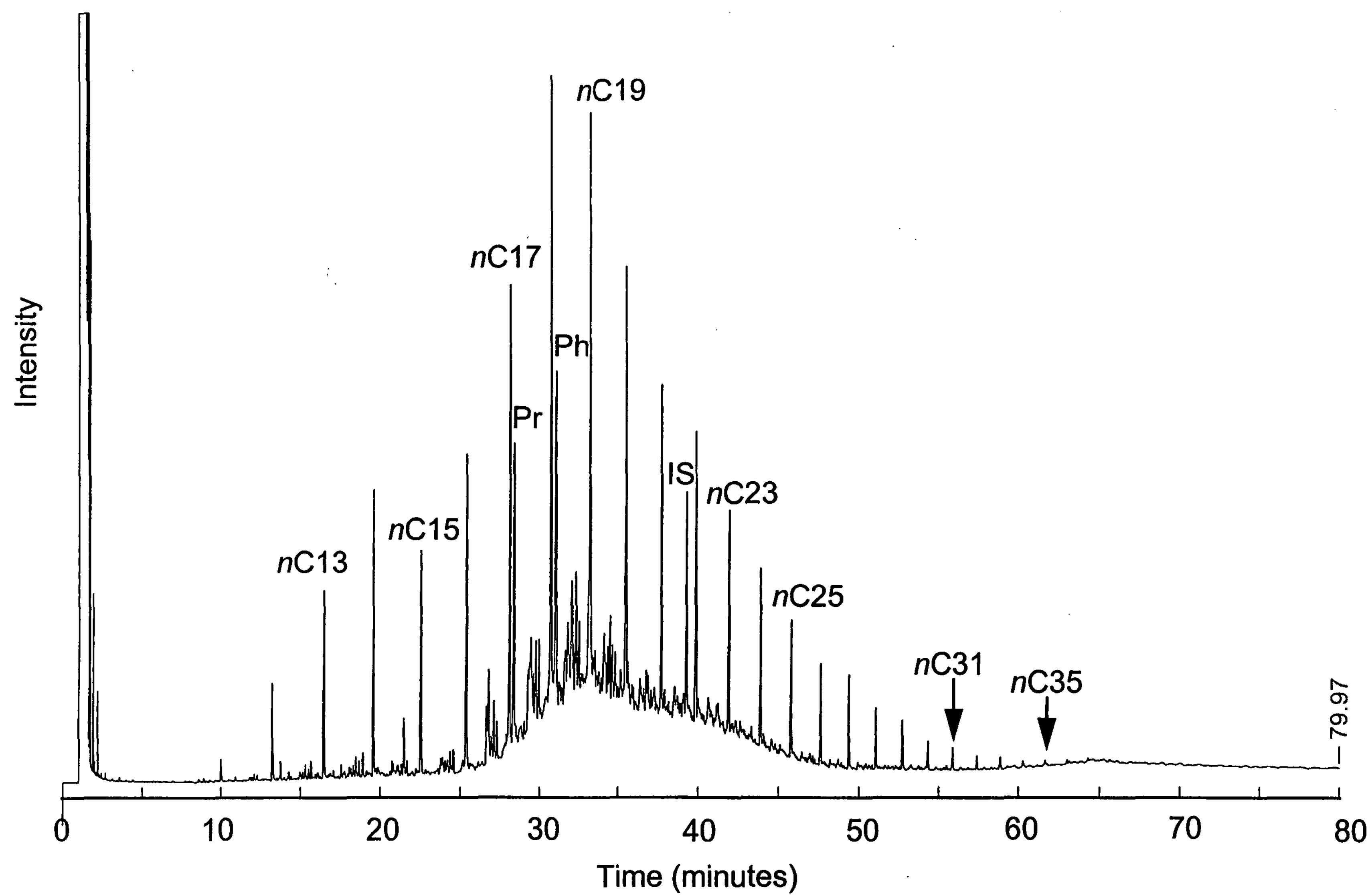
Sample Nos.

#8467	Barnett-2	Core 2	2558 m
#7957	Bonaparte-1	Core 13	1166-1167 m
#8580	Bonaparte-1	Core 18	1594 m
#7970	Bonaparte-2	Core 7	1074-1075 m
#7972	Bonaparte-2	Core 8	1201 m
#7976	Bonaparte-2	Core 12	1644 m
#8484	Flat Top-1	Cuttings	1661-1664 m
#8989	Kinmore-1	Cuttings	1470-1473 m
#8551	Lesueur-1	Cuttings	3453-3456 m
#7923	NBF1002	Core	176 m
#7924	NBF1002	Core	184 m
#7925	NBF1002	Core	208 m
#7926	NBF1002	Core	220 m
#8557	Pelican Island-1	Core 2	1438-1439 m
#8561	Pelican Island-1	Cuttings	1591-1594 m
#8563	Pelican Island-1	Cuttings	1765-1768 m
#8539	Spirit Hill-1	Core	199 m
#8544	Spirit Hill-1	Core	670-716 m
#5226	Core hole TAB	Core Beds A	71-73 m
#5227	Core hole TBA	Core Beds B	

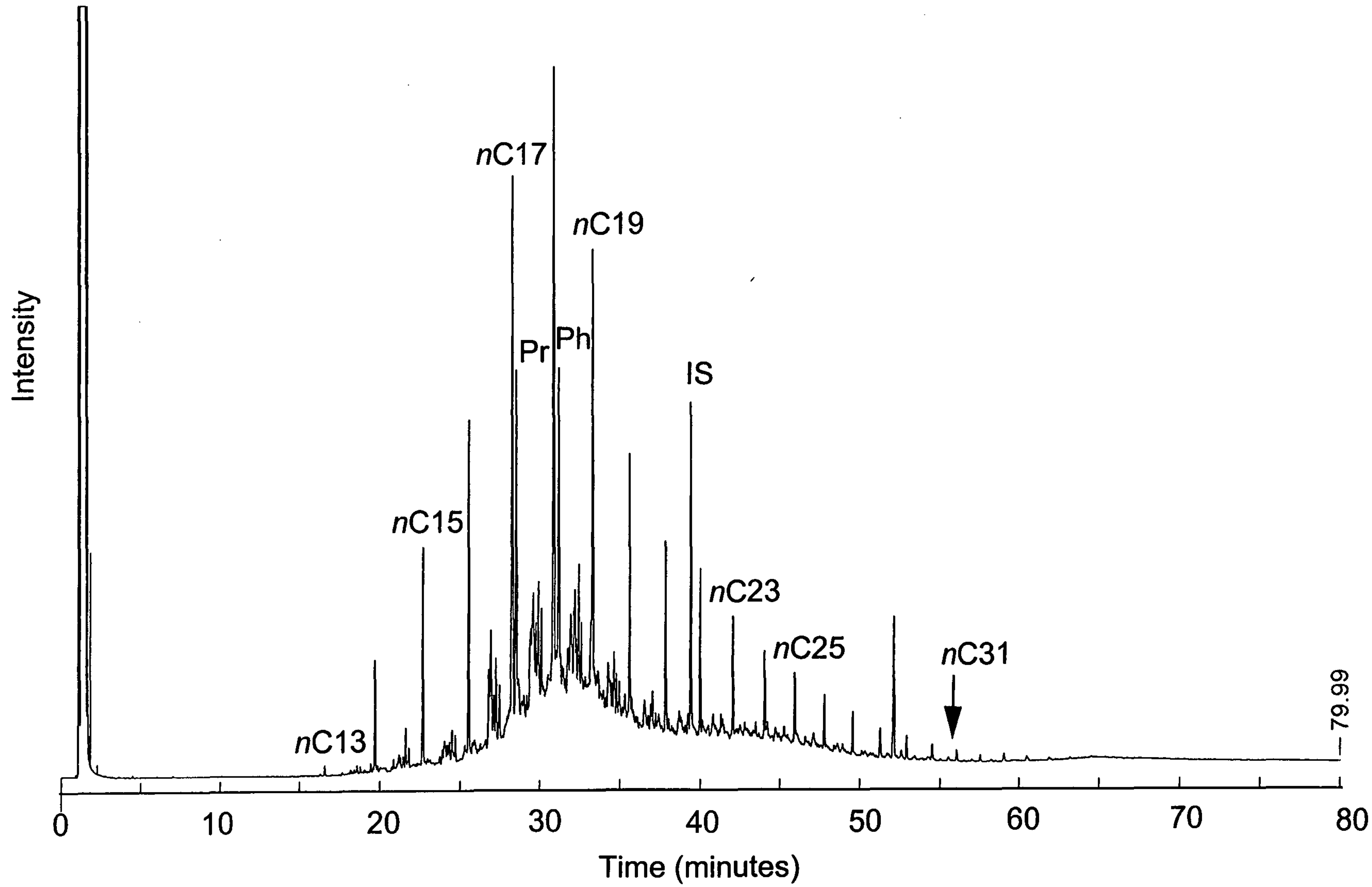
#8467 saturate fraction, Barnett-2, Milligans Supersequence



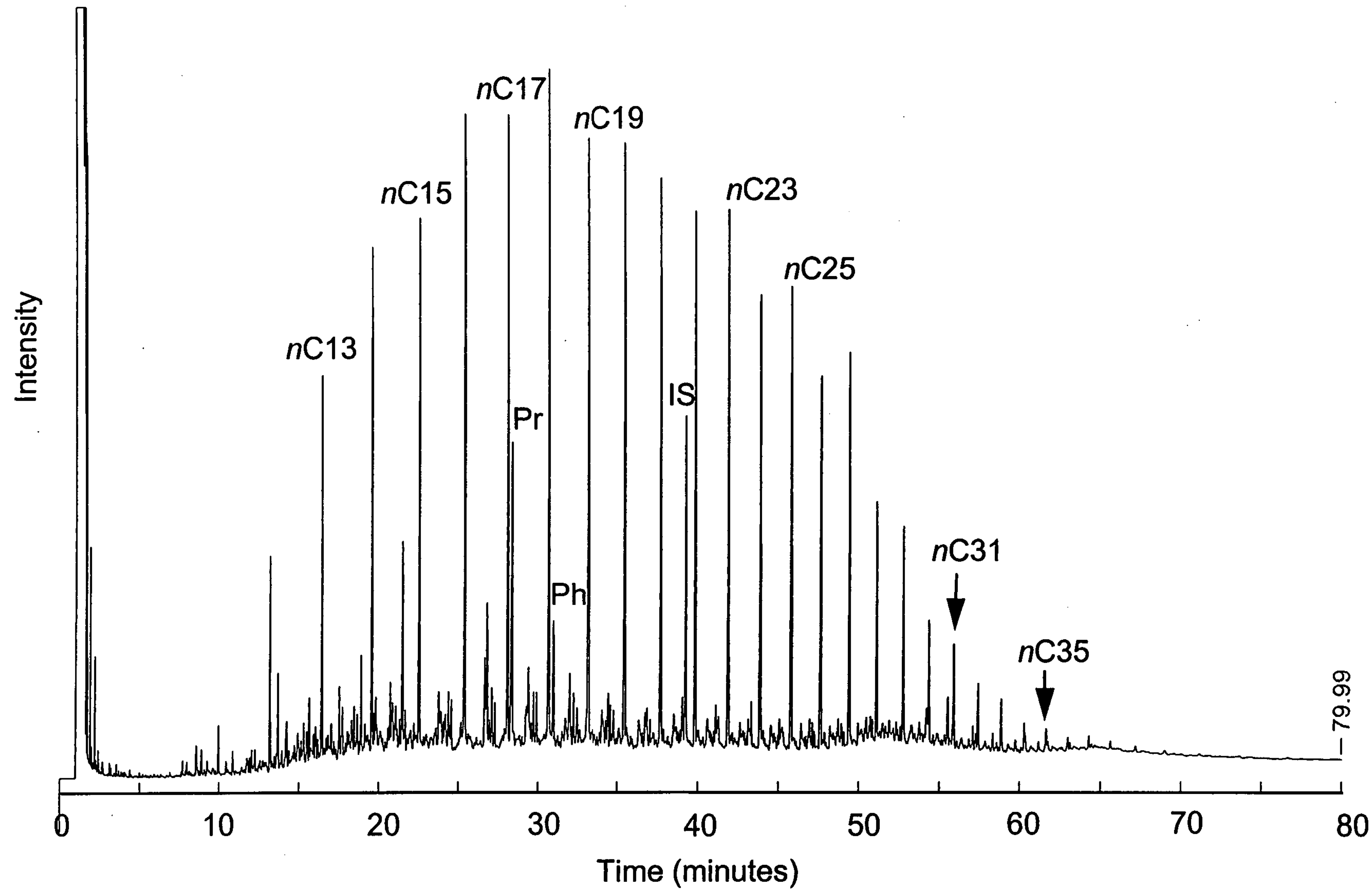
#7957 saturate fraction, Bonaparte-1, Milligans



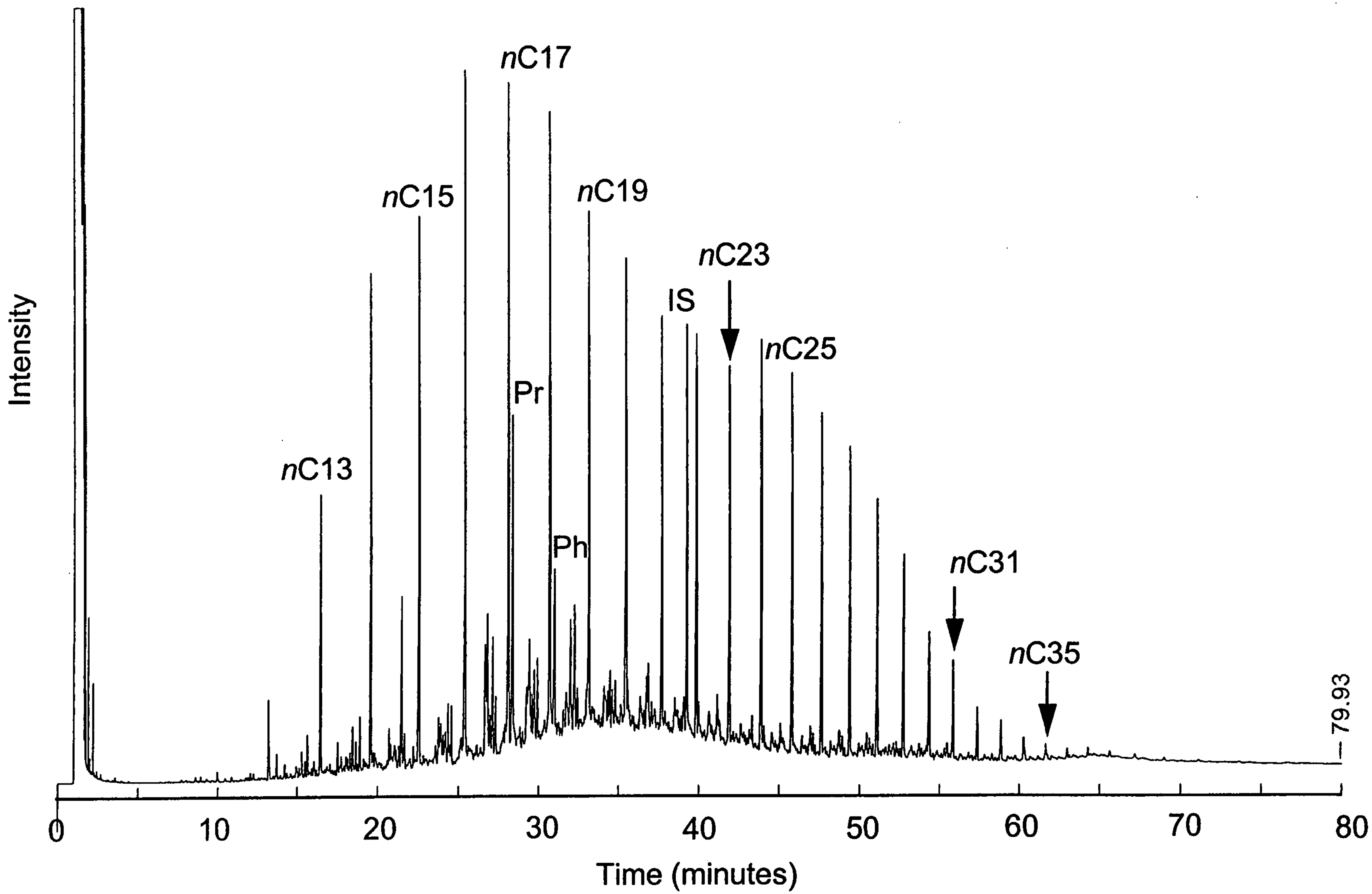
#8580 saturate fraction, Bonaparte-1, Milligans



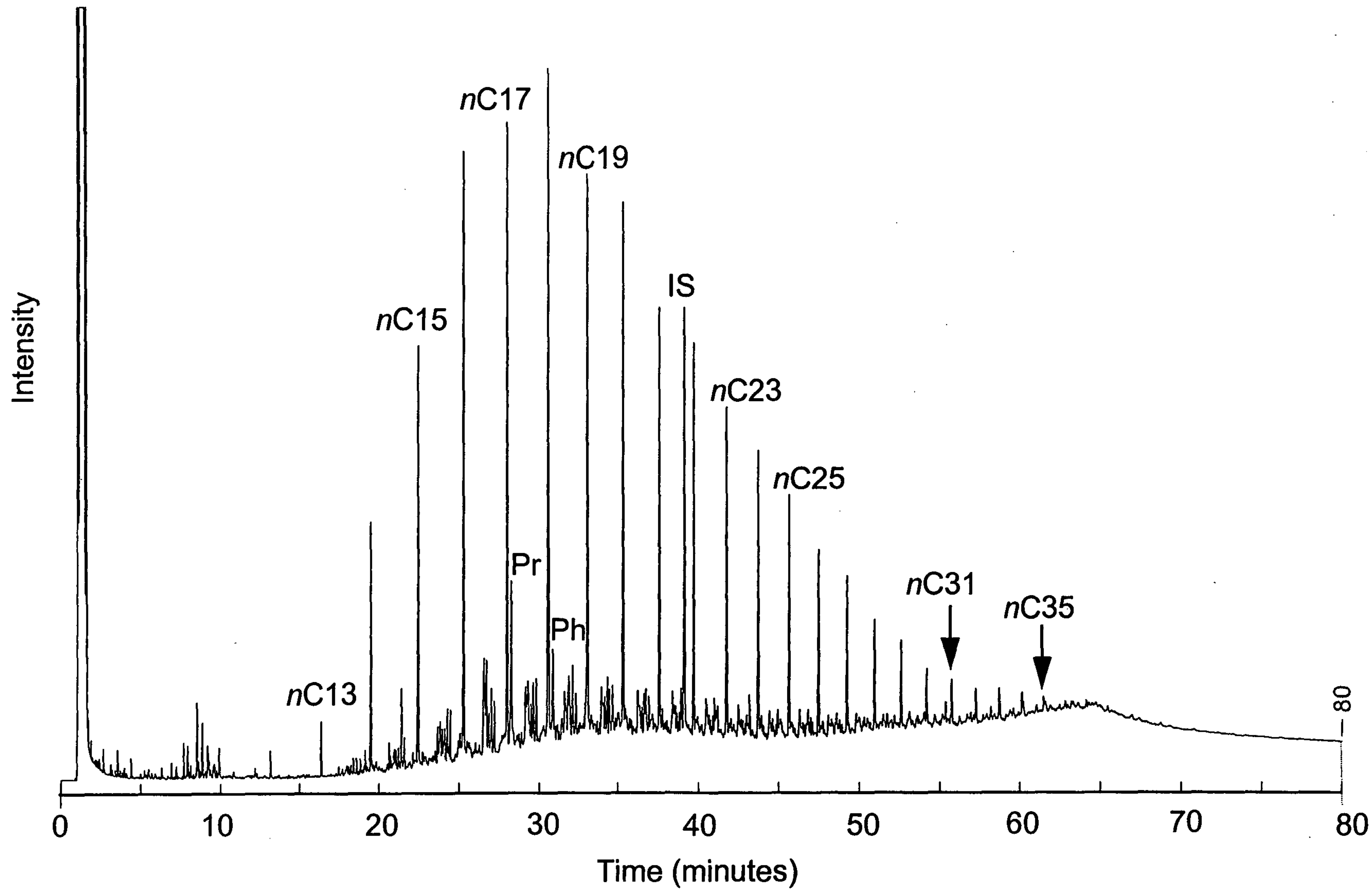
#7970 saturate fraction, Bonaparte-2, Milligans



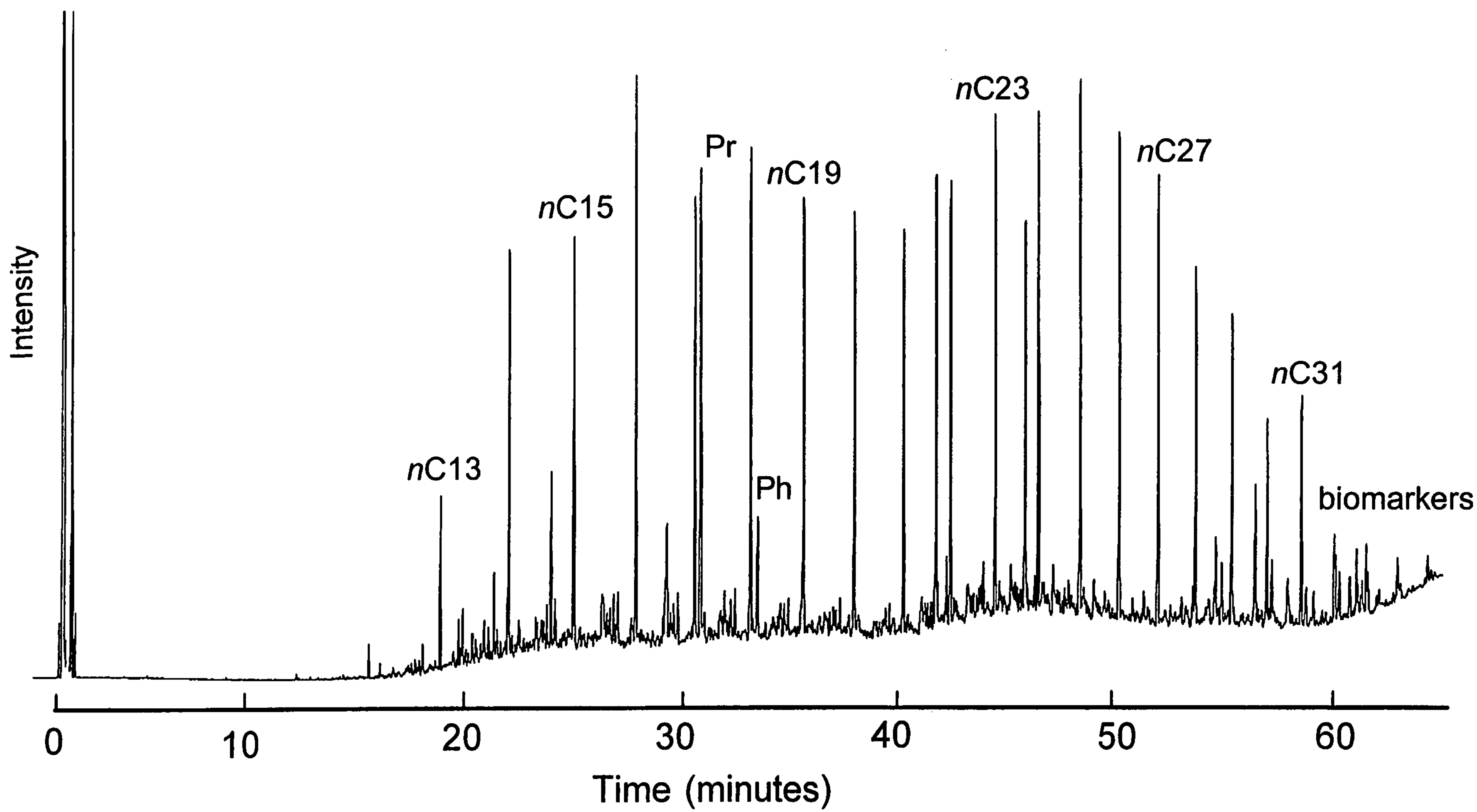
#7972 saturate fraction, Bonaparte-2, Milligans



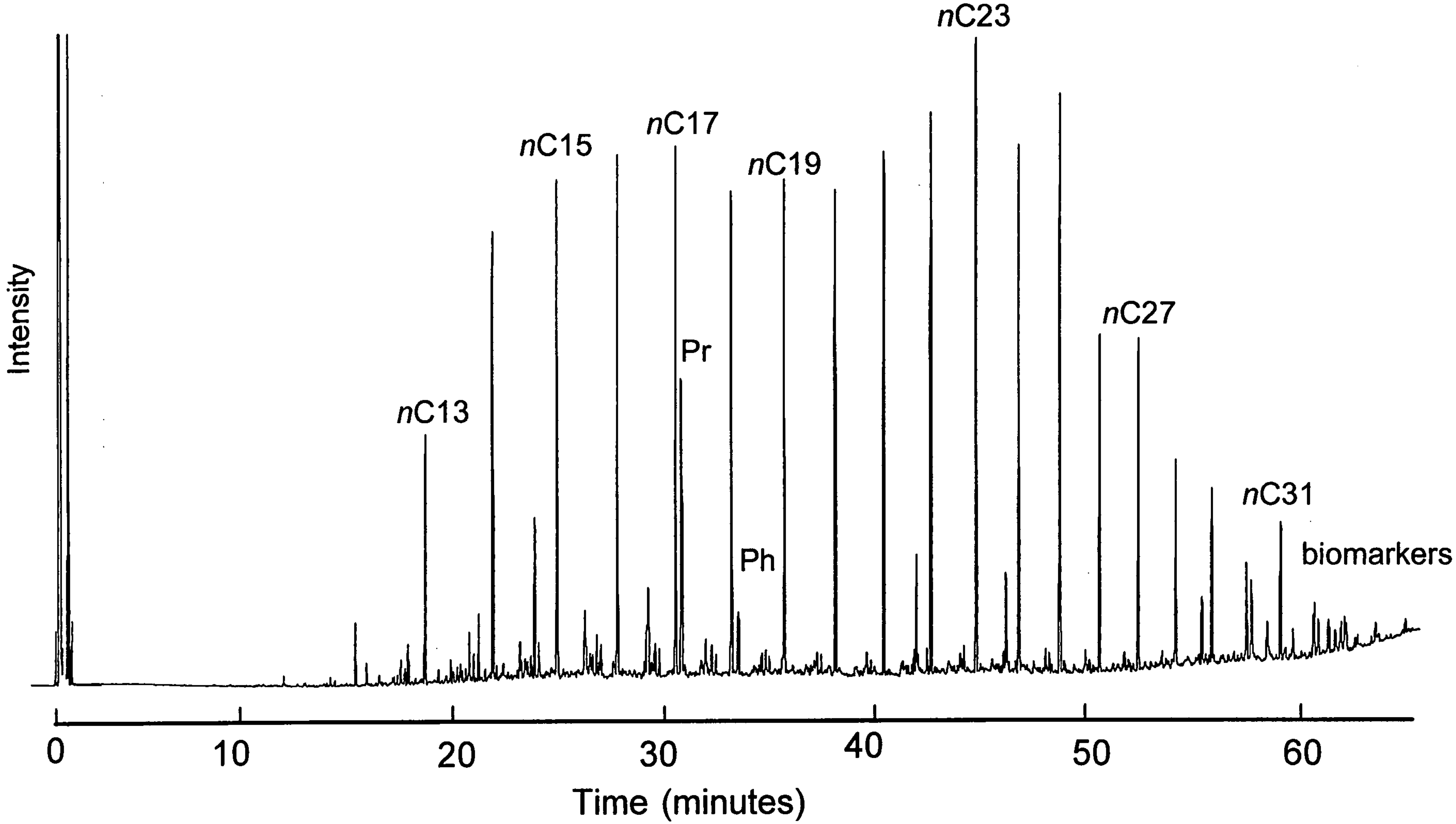
#7976 saturate fraction, Bonaparte-2, Milligans



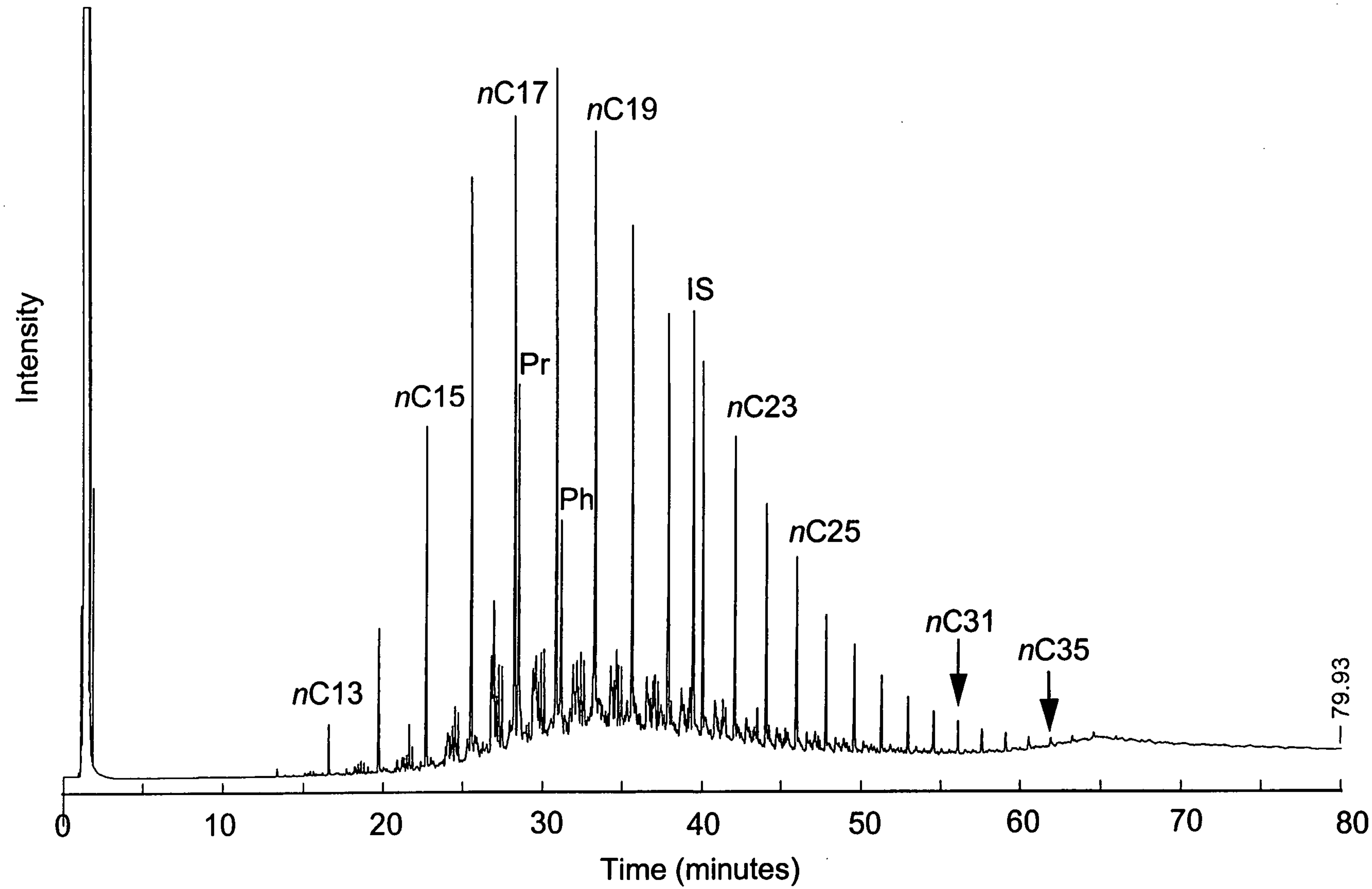
#8484 saturate fraction, Flat Top-1, Keyling



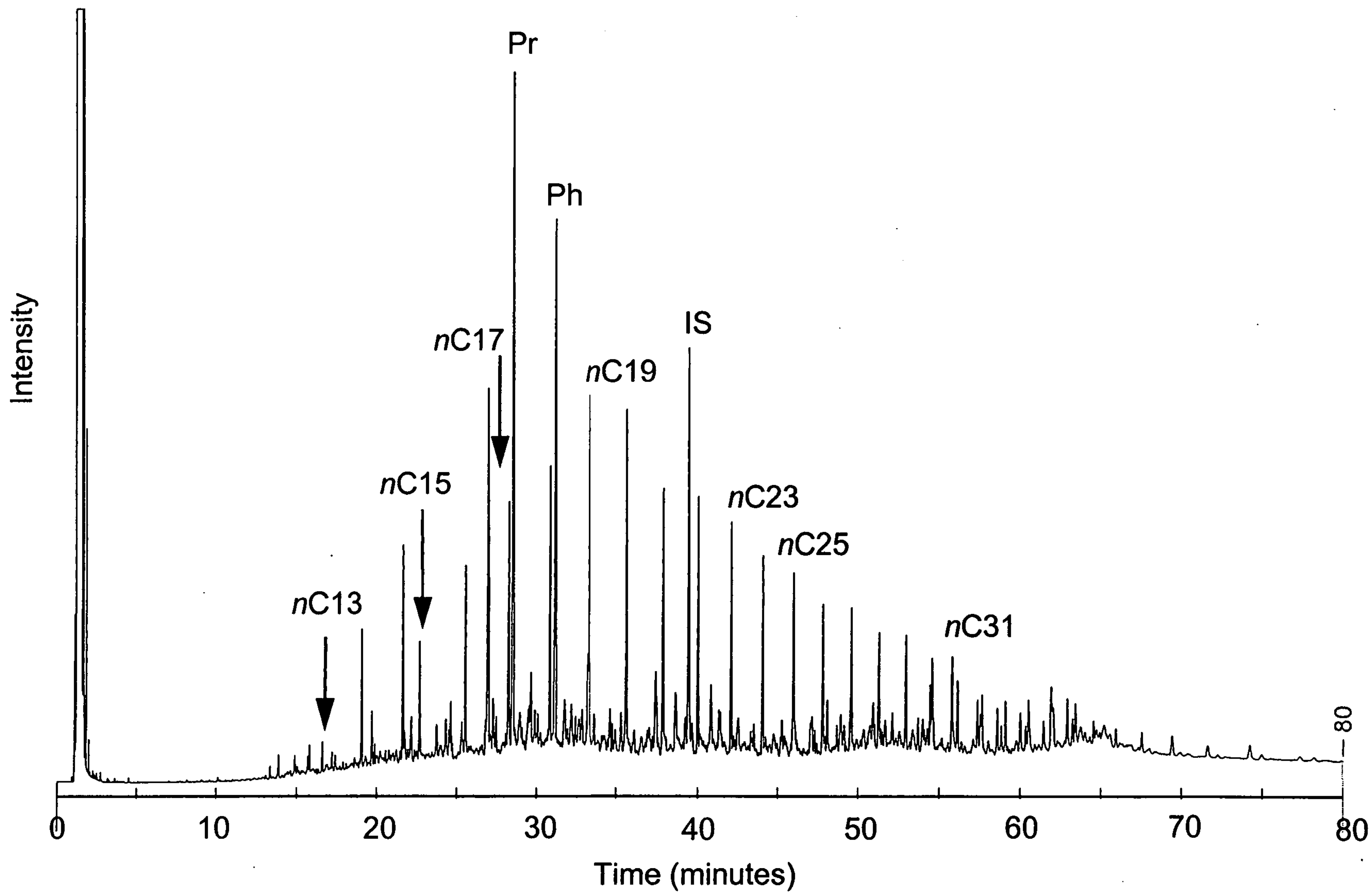
#8989 saturate fraction, Kinmore-1, Keyling



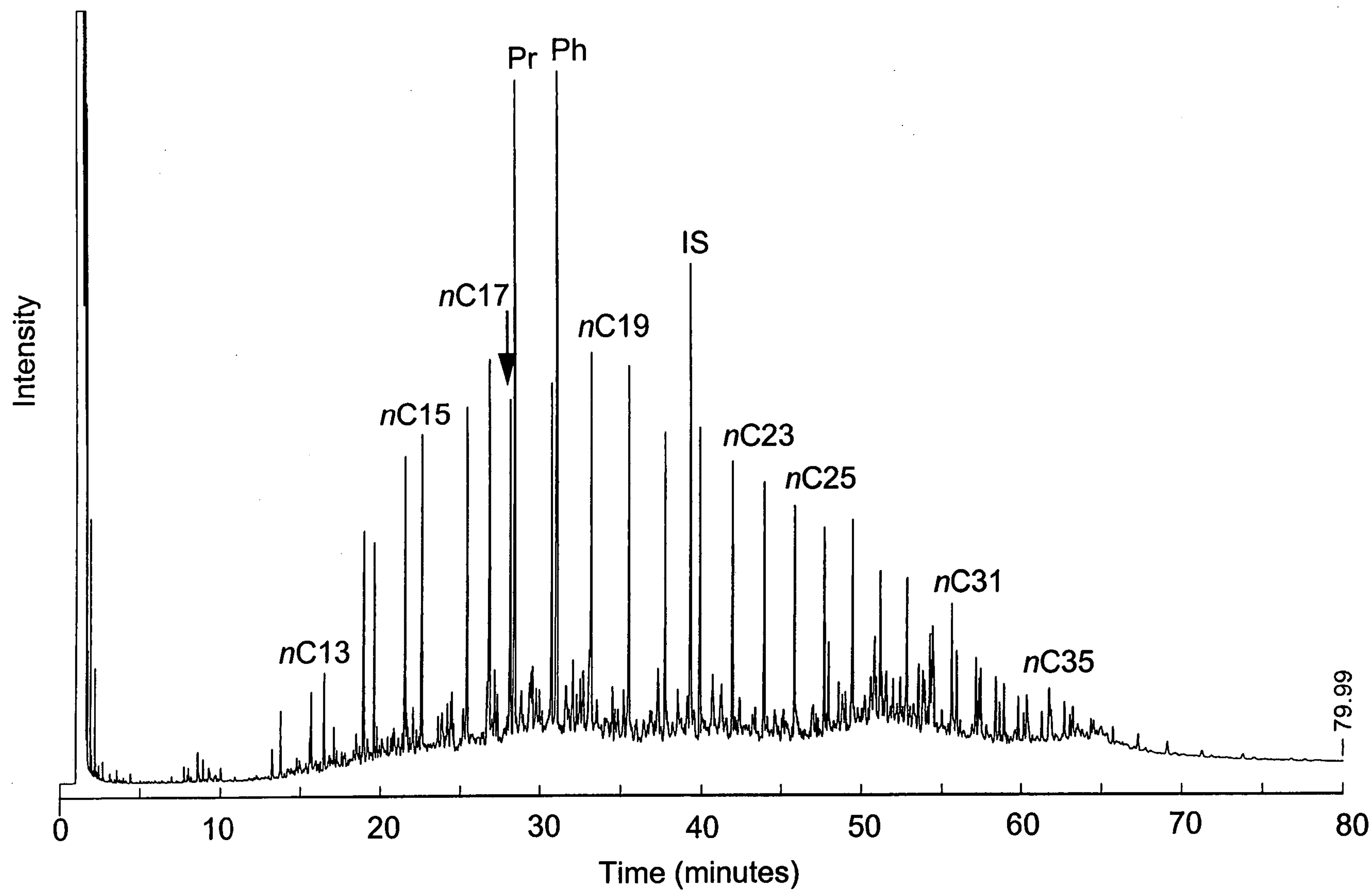
#8551 saturate fraction, Lesueur-1, Tanmurra



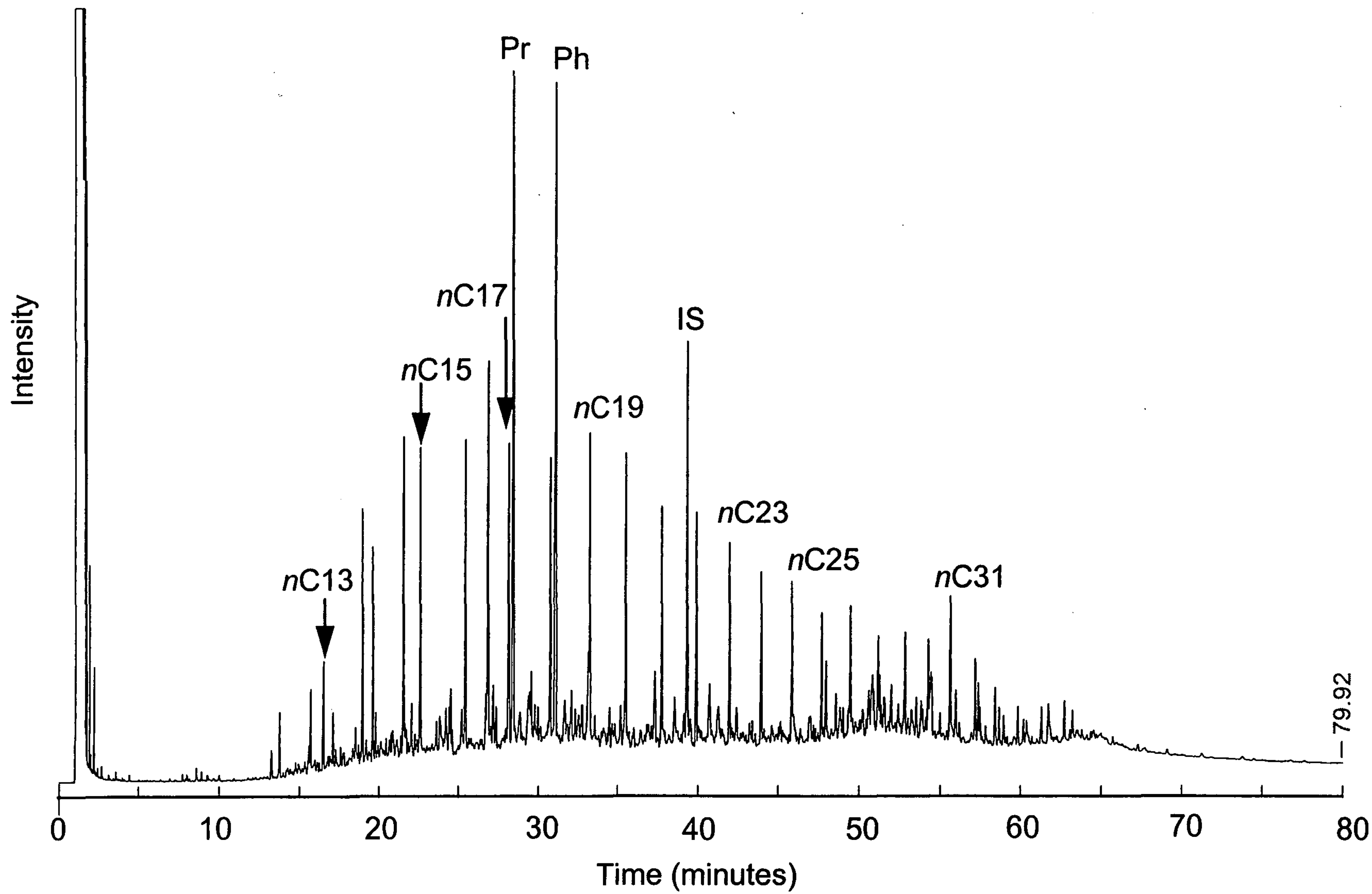
#7923 saturate fraction, NBF1002 Milligans



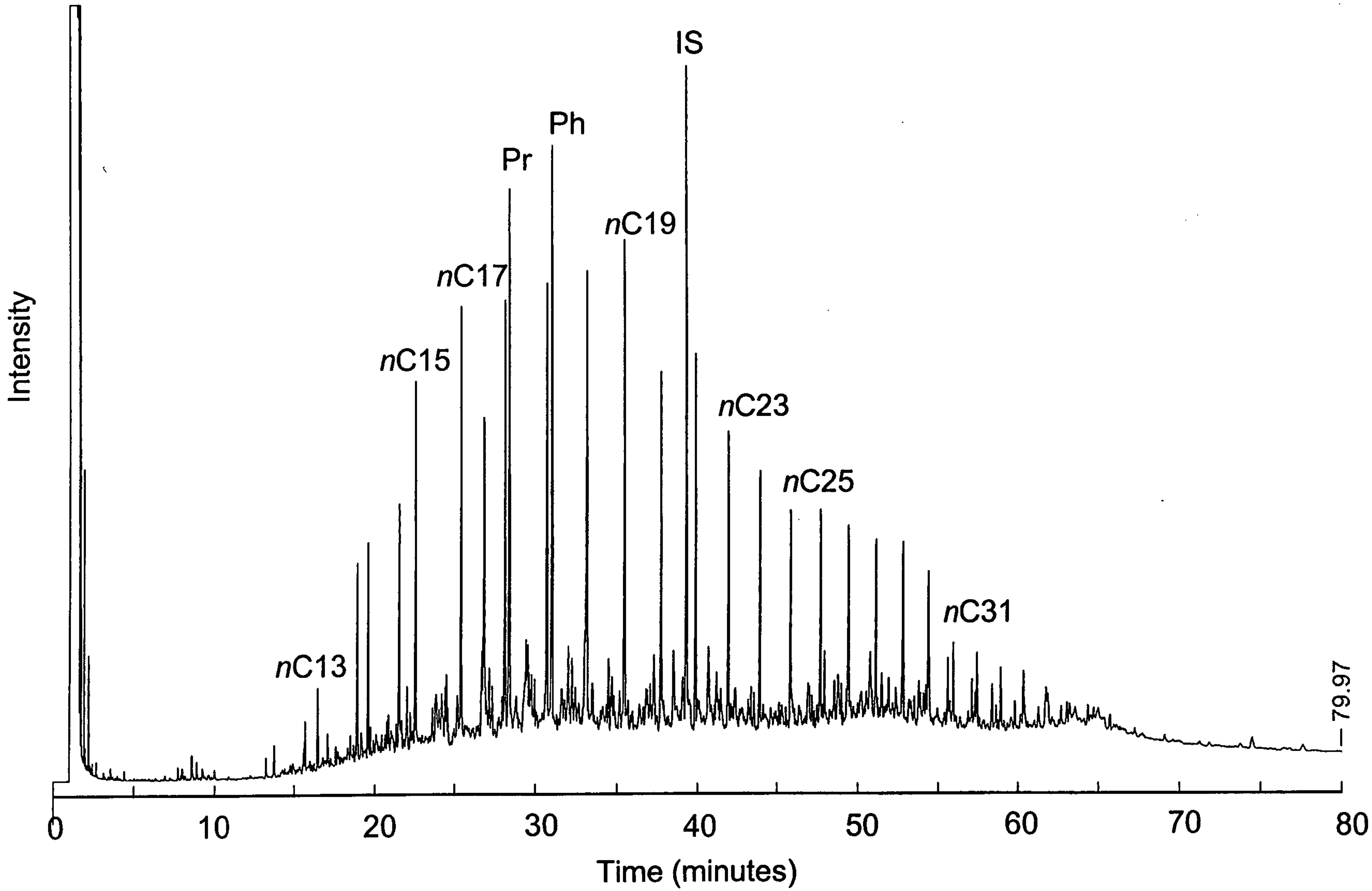
#7924 saturate fraction, NBF1002, Milligans



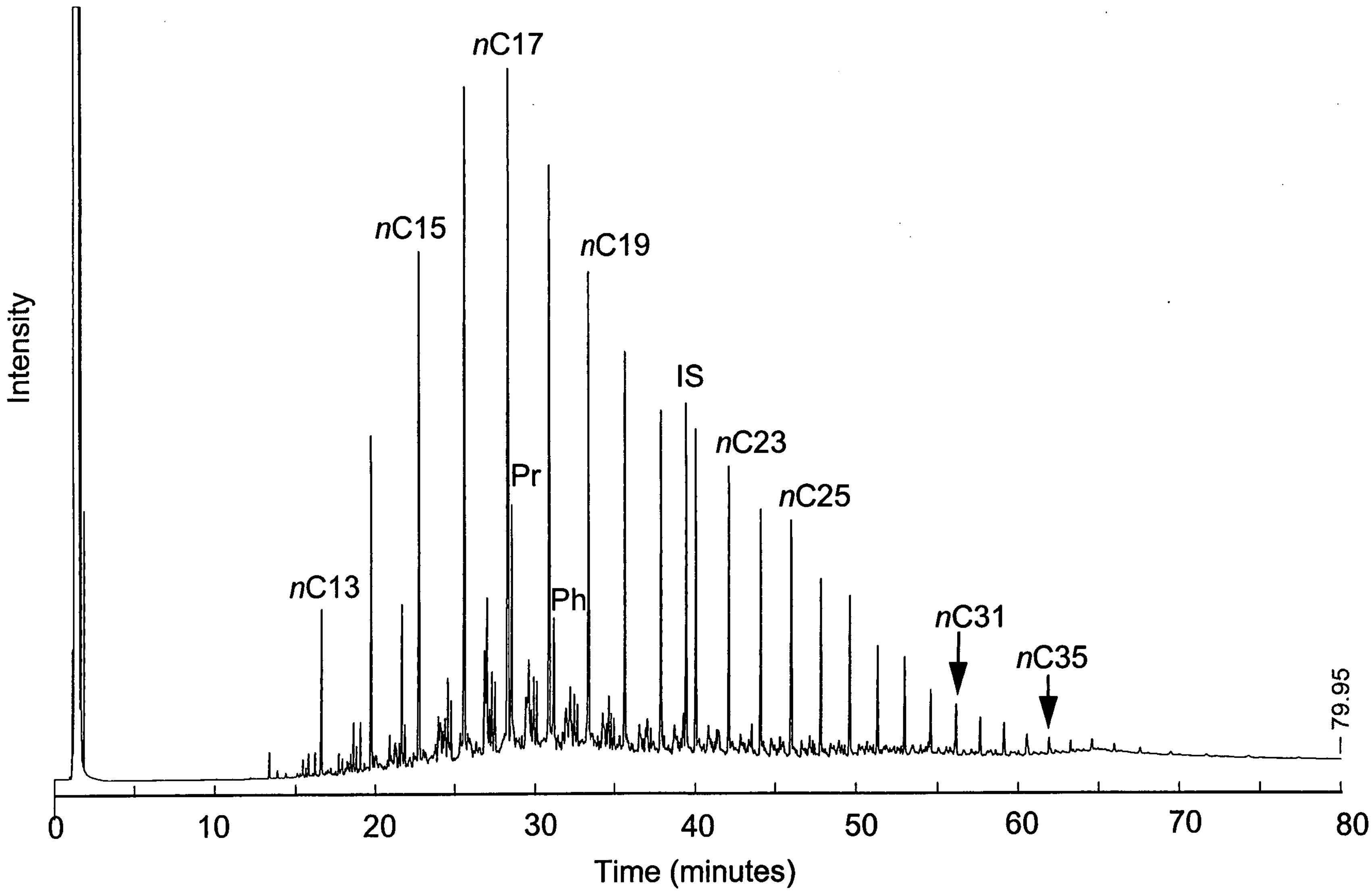
#7925 saturate fraction, NBF1002, Milligans



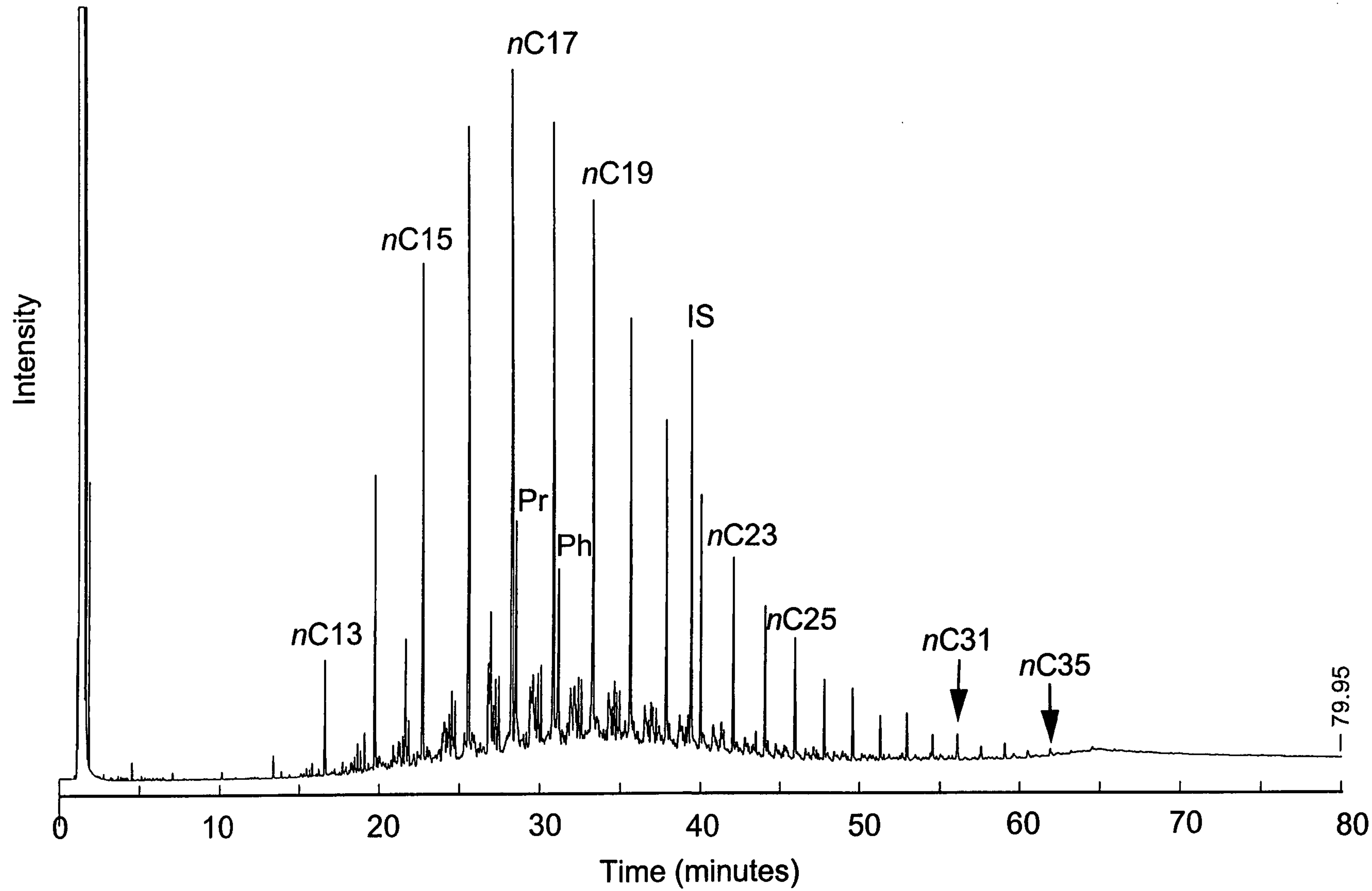
#7926 saturate fraction, NBF1002, Milligans



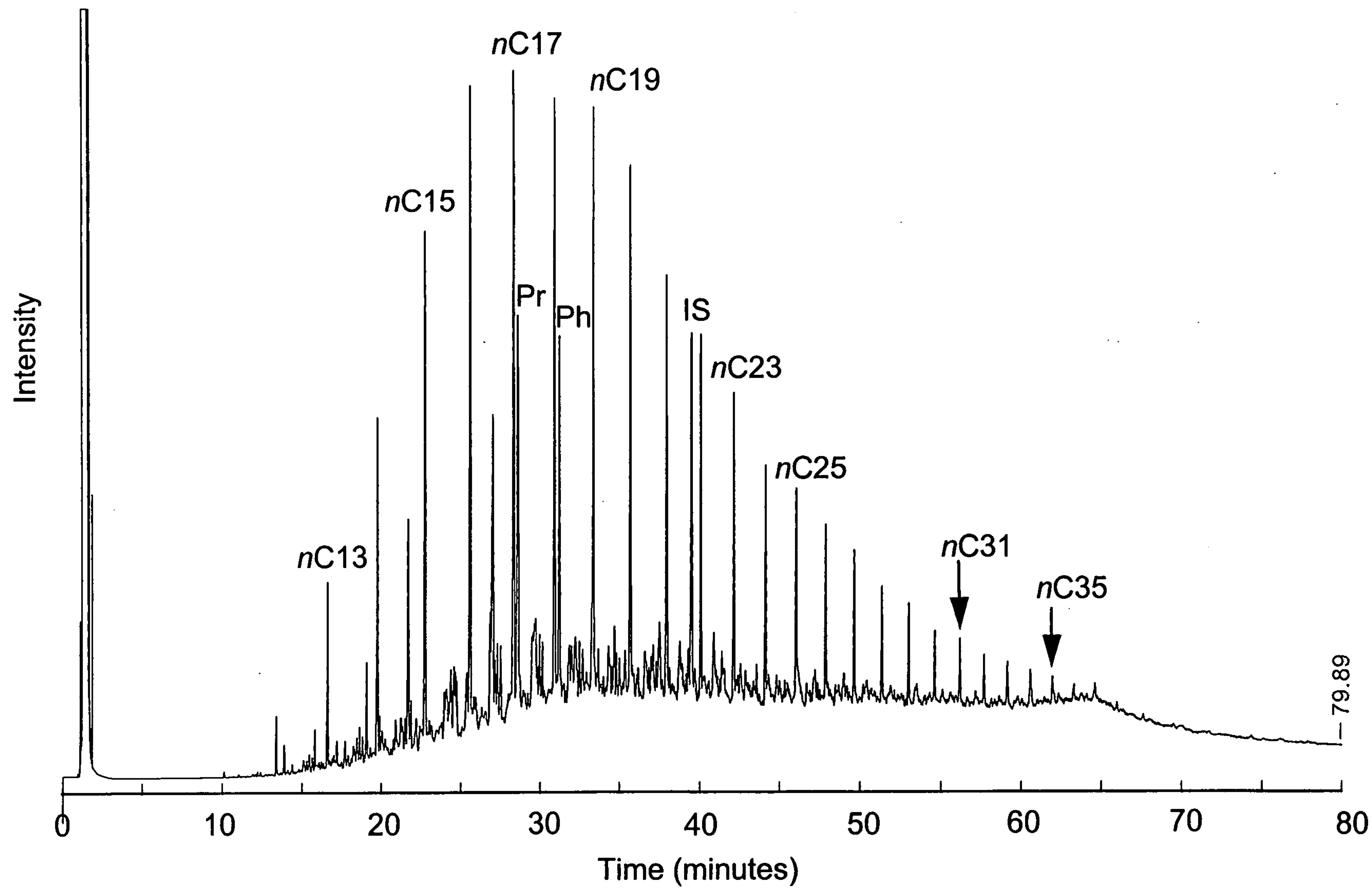
#8557 saturate fraction, Pelican Island-1, Milligans



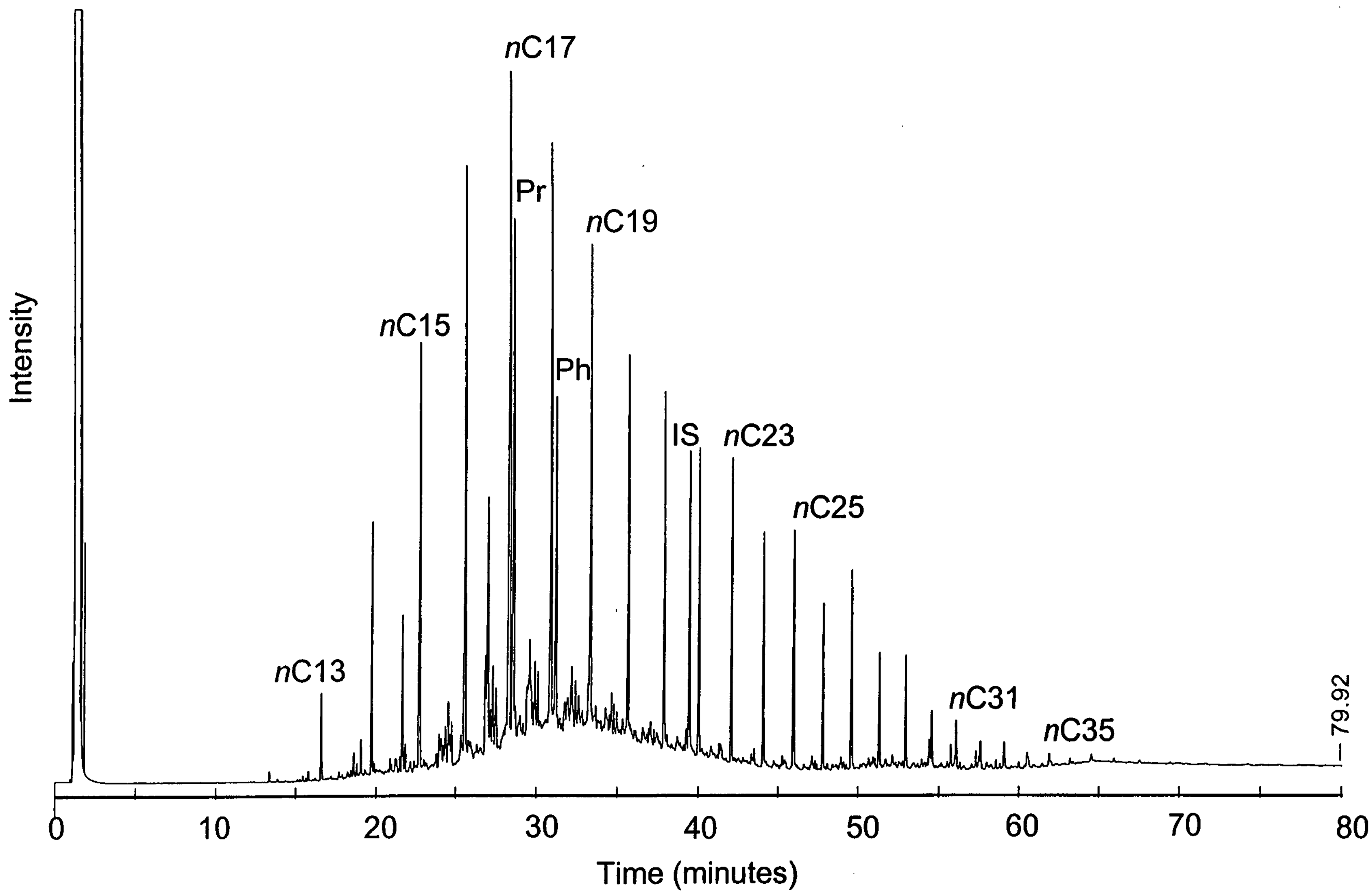
#8561 saturate fraction, Pelican Island-1, Milligans



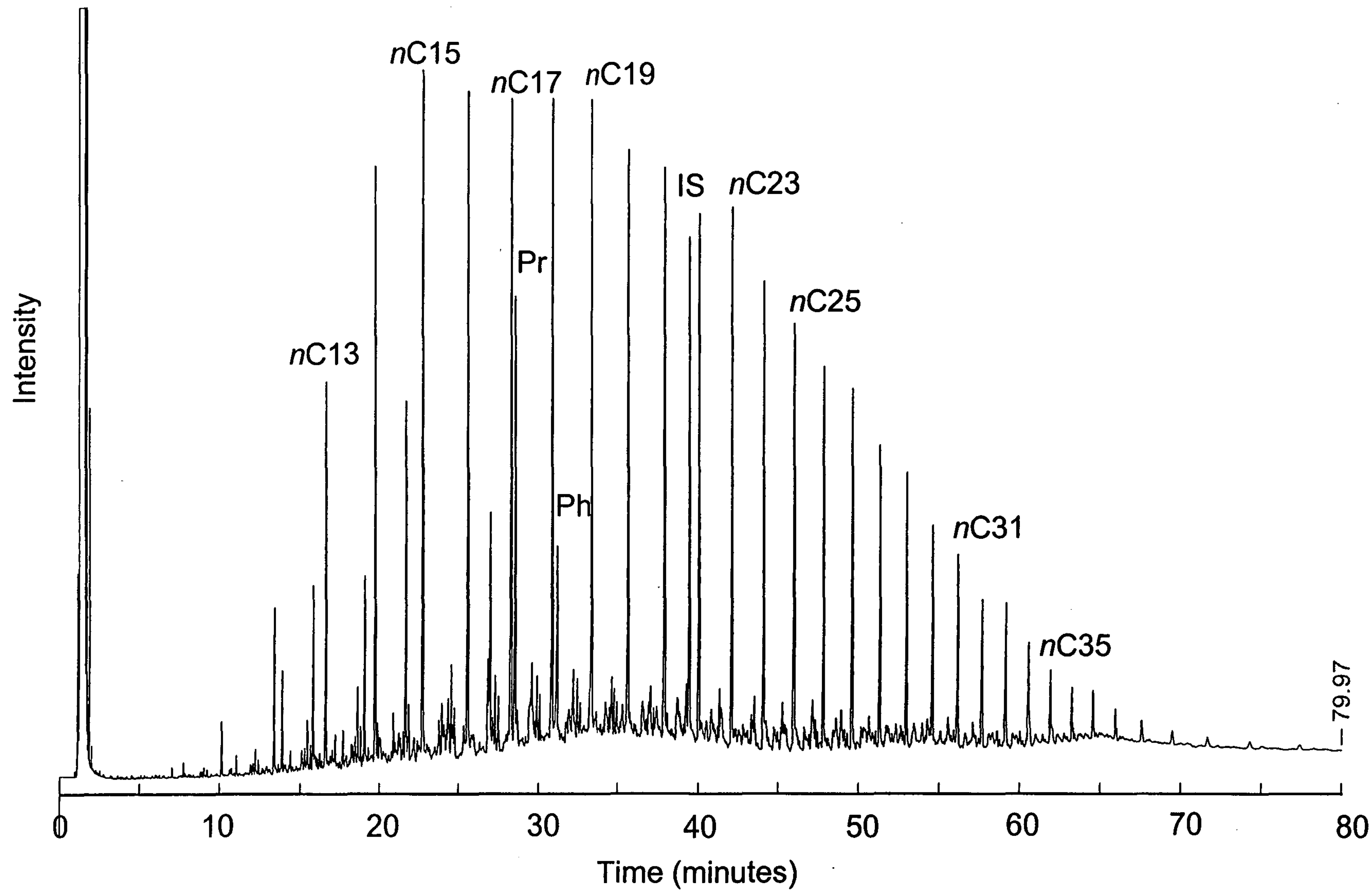
#8563 saturate fraction, Pelican Island-1, Milligans



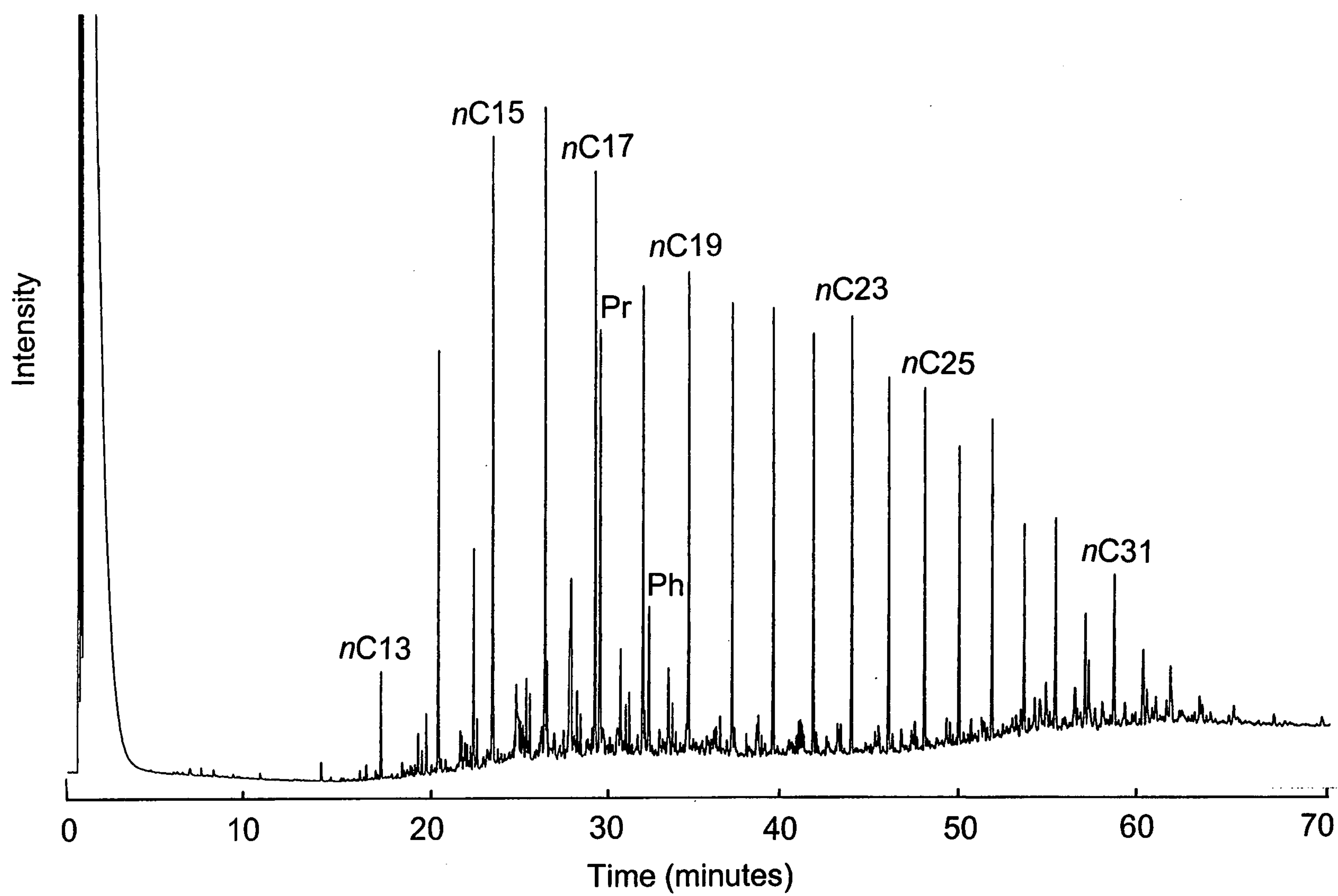
#8539 saturate fraction, Spirit Hill-1, Milligans



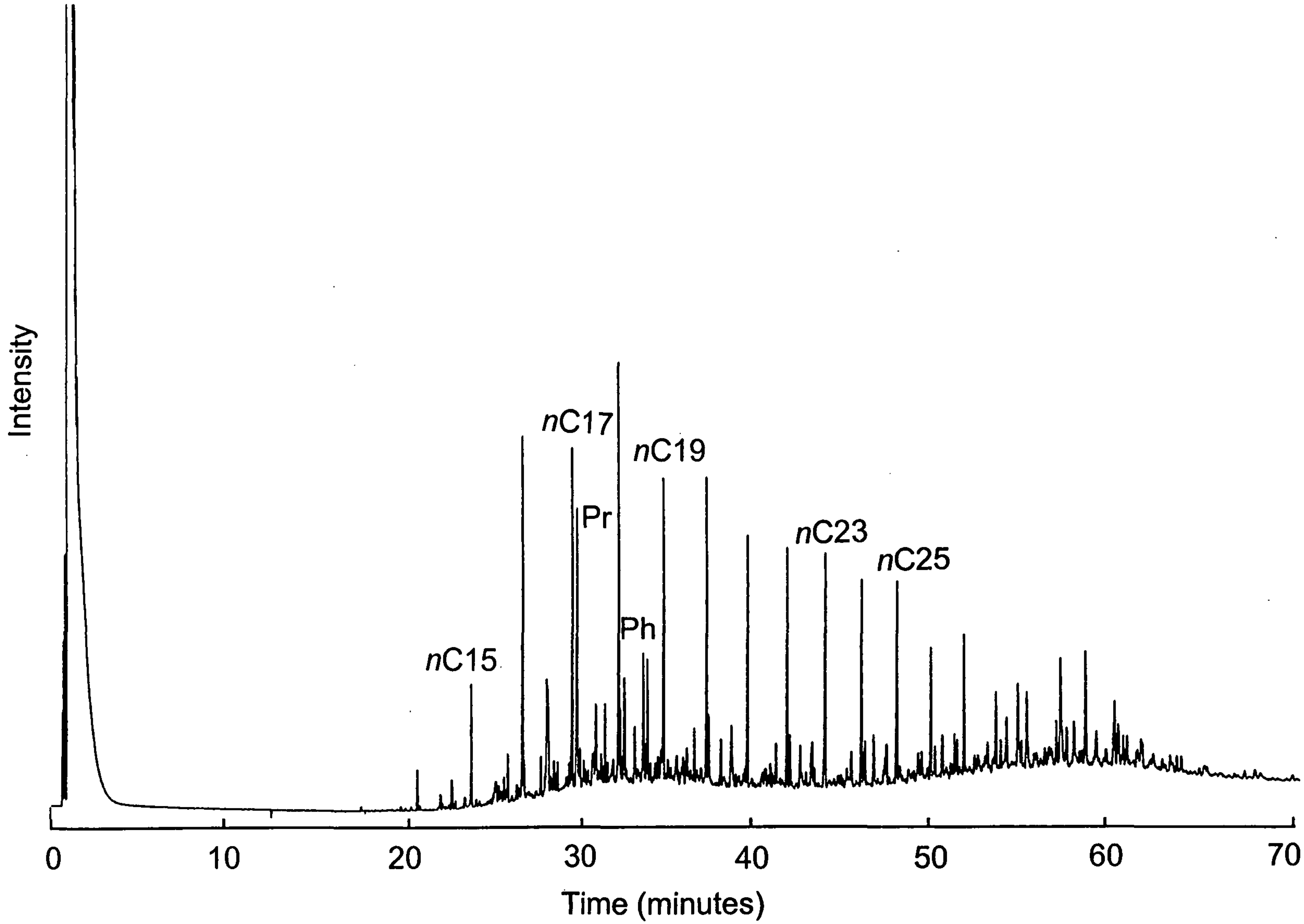
#8544 saturate fraction, Spirit Hill-1, Ningbing



#5226 saturate fraction, core, Beds A, 71-73 m, Milligans



#5227 saturate fraction, core, Beds B, Milligans



APPENDIX E: GC-MS MRM Chromatograms: Saturated Hydrocarbons of Petroleums, Petrel Sub-basin

Labelling on GC-MS MRM Chromatograms

Abbreviation	**Annotation**
Norm	Scale factor, the larger the number the more abundant the compounds shown in the particular trace, relative to the others.
IS	Internal standard, trideuterated 5α(H)-methylcholestane.
XT	Cross talk.

Sterane Nomenclature

20R and 20S	Notation for the epimeric configuration at C-20. The 20R epimer, inherited from the biological configuration, converts to the 20S isomer under thermal stress.
24R and 24S	Notation for the epimeric configuration at C-24, often resolved as two peaks in the C_{28} diasterane (20S and 20R) isomers and the C_{28} ααα 20S isomer.
ααα	Sterane stereochemistry at the 5(H), 14(H) and 17(H) positions, inherited from the biological precursor molecule.
αββ	Sterane stereochemistry at the 5(H), 14(H) and 17(H) positions, within the geological isomer.
βα	Diasterane or rearranged sterane where the ring methyl groups are attached at C-5 and C-14 instead of the usual C-10 and C-13 positions.
C_{30} sterane	C_{30} sterane with the 24-*n*-propyl side chain configuration.
2-me	2α-methyl-24-ethylcholestane.
3-me	3β-methyl-24-ethylcholestane.

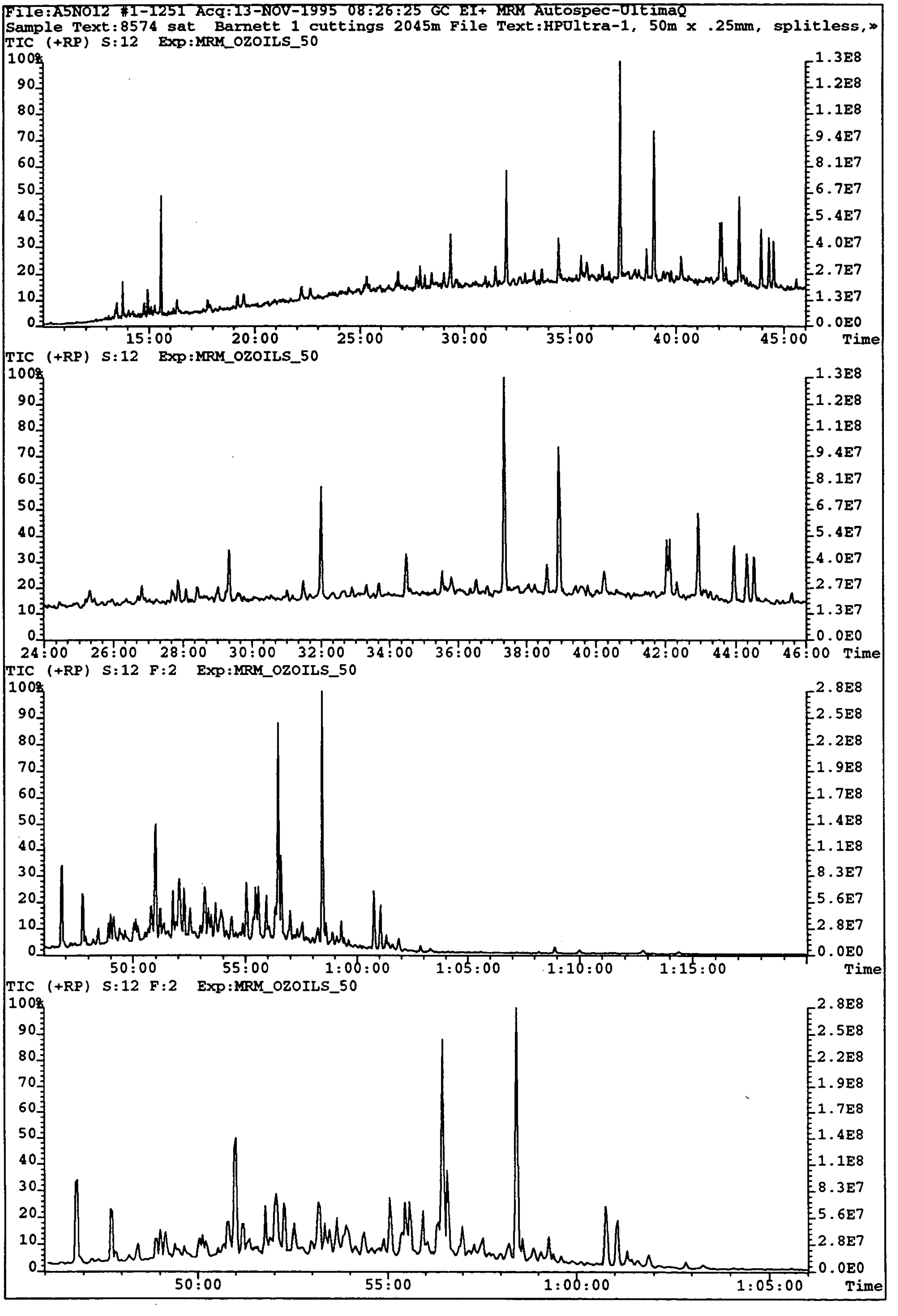
Pentacyclic Triterpane Nomenclature

22R and 22S	Notation of the epimeric configuration at C-22 in the C_{31} to C_{35} extended hopanes. The 22R epimer, with the inherited biological configuration, converts to the 22S stereoisomer with increasing maturity.
$\beta\beta$ and $\alpha\beta$	Hopane stereochemistry at the 17(H) and 21(H) positions, the $\beta\beta$ isomer is generally recognised as the biological isomer converting to the $\alpha\beta$ configuration under thermal stress.
$\beta\alpha$	Moretane stereochemistry at the 17(H) and 21(H) positions, less stable than the $\alpha\beta$ configuration.
Dia	Diahopane or rearranged hopane where the D-ring methyl group is attached at C-15 instead of the usual C-14 position.
Neo	Neohopane where the 18α(H) stereochemistry is present instead of the usual 17α(H) configuration.
25-Nor	C_{29} 25-norhopane, with loss of the methyl group occurring at C-25.
28,30 DNH	C_{28} 28,30-dinorhopane with loss of two methyl groups from C-28 and C-30 respectively.
29,30 DNH	C_{28} 29,30-dinorhopane with loss of two methyl groups from C-29 and C-30 respectively.
Ts	C_{27} 18α(H)-22,29,30-trisnorneohopane with loss of three methyl groups from C-22, C29 and C-30, respectively.
Tm	C_{27} 17α(H)-22,29,30-trisnorhopane, as above.
17β	C_{27} 17β(H)-22,29,30-trisnorhopane, as above.
2α and 3β-mehop	2α-methyl and 3β-methyl hopanes where the methyl group is substituted on the A-ring.
G	Gammacerane

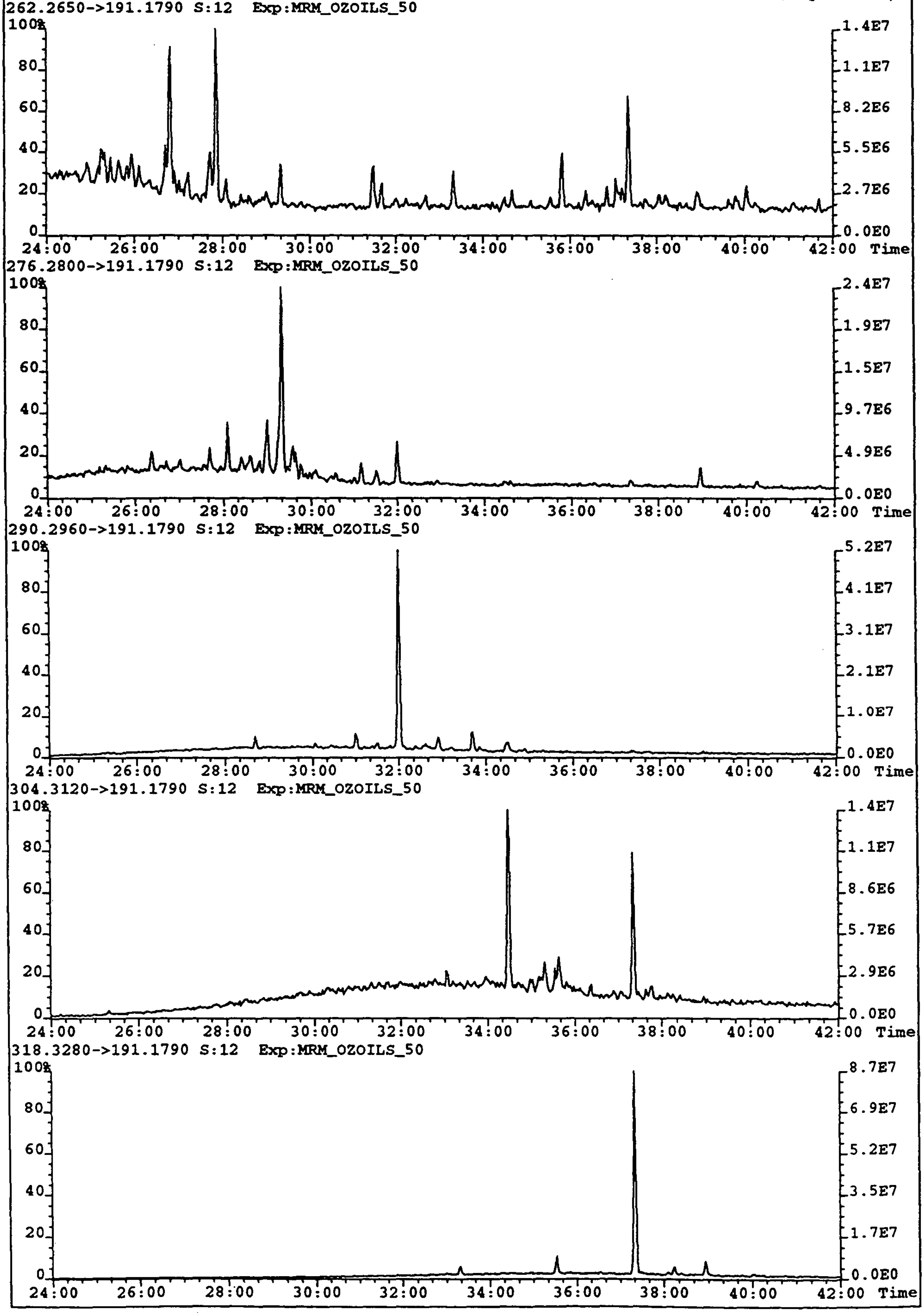
Appendix E1: MRM Chromatograms: Saturated Hydrocarbons of Oils, Petrel Sub-basin.

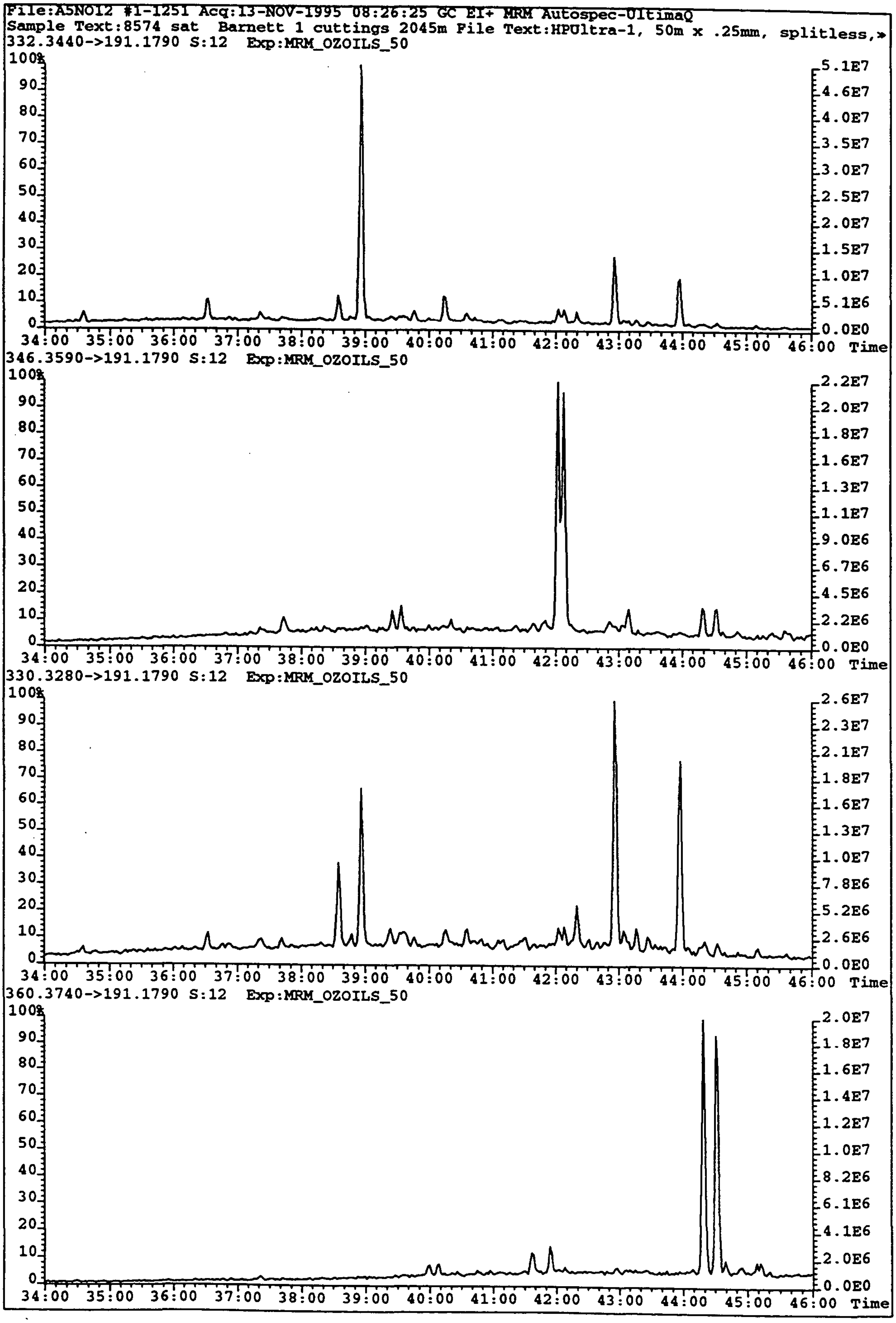
Sample Nos.

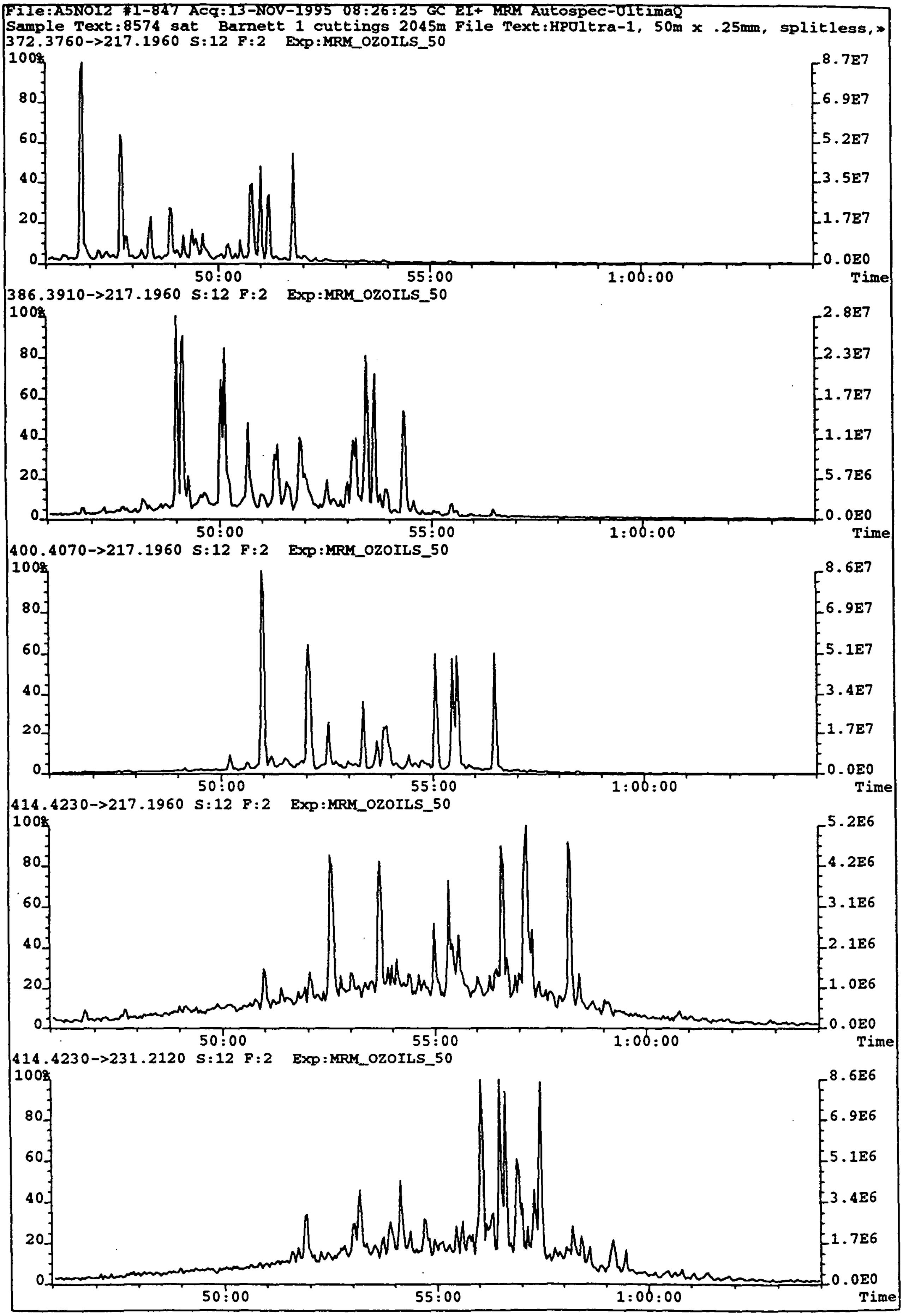
#8573	Barnett-1	1562 m
#8574	Barnett-1	2035 m
#441	Barnett-2	DST 4
#440	Barnett-2	DST 3
#439	Barnett-2	DST 1
#8528	Cambridge-1	1445-65 m
#8587	Lacrosse-1	1451-54 m
#8588	Lacrosse-1	1588-91 m
#8571	Ningbing-1	1268 m
#4939	Outcrop Ningbing Lst	
#10017	Petrel-4	DST 4
#8575	Turtle-1	1457 m
#382	Turtle-1	DST 5
#10014	Turtle-2	DST-1A
#10068	Waggon Creek-1	DST-3

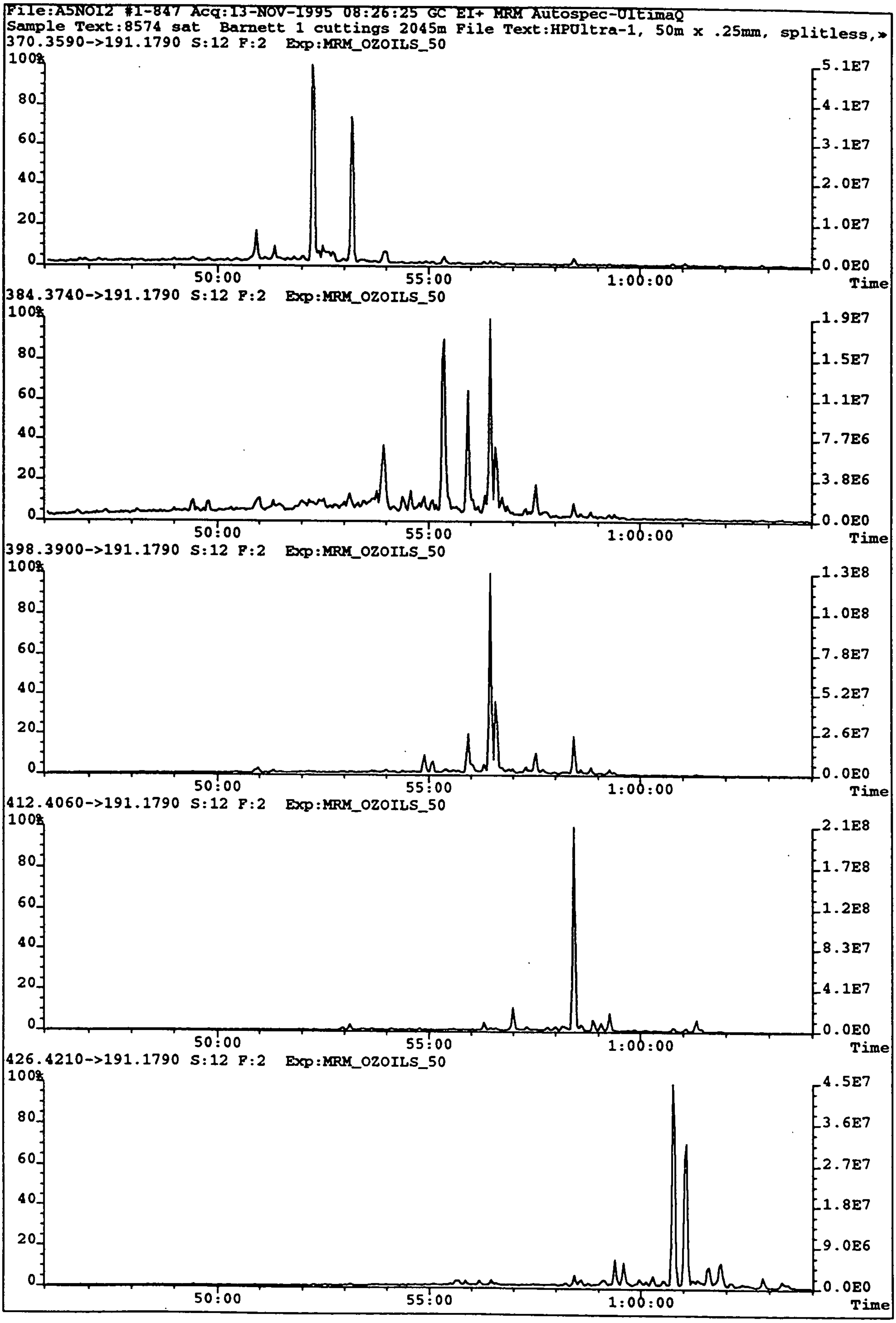

File:A5N012 #1-1251 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
TIC (+RP) S:12 Exp:MRM_OZOILS_50
TIC (+RP) S:12 Exp:MRM_OZOILS_50
TIC (+RP) S:12 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:12 F:2 Exp:MRM_OZOILS_50
Time

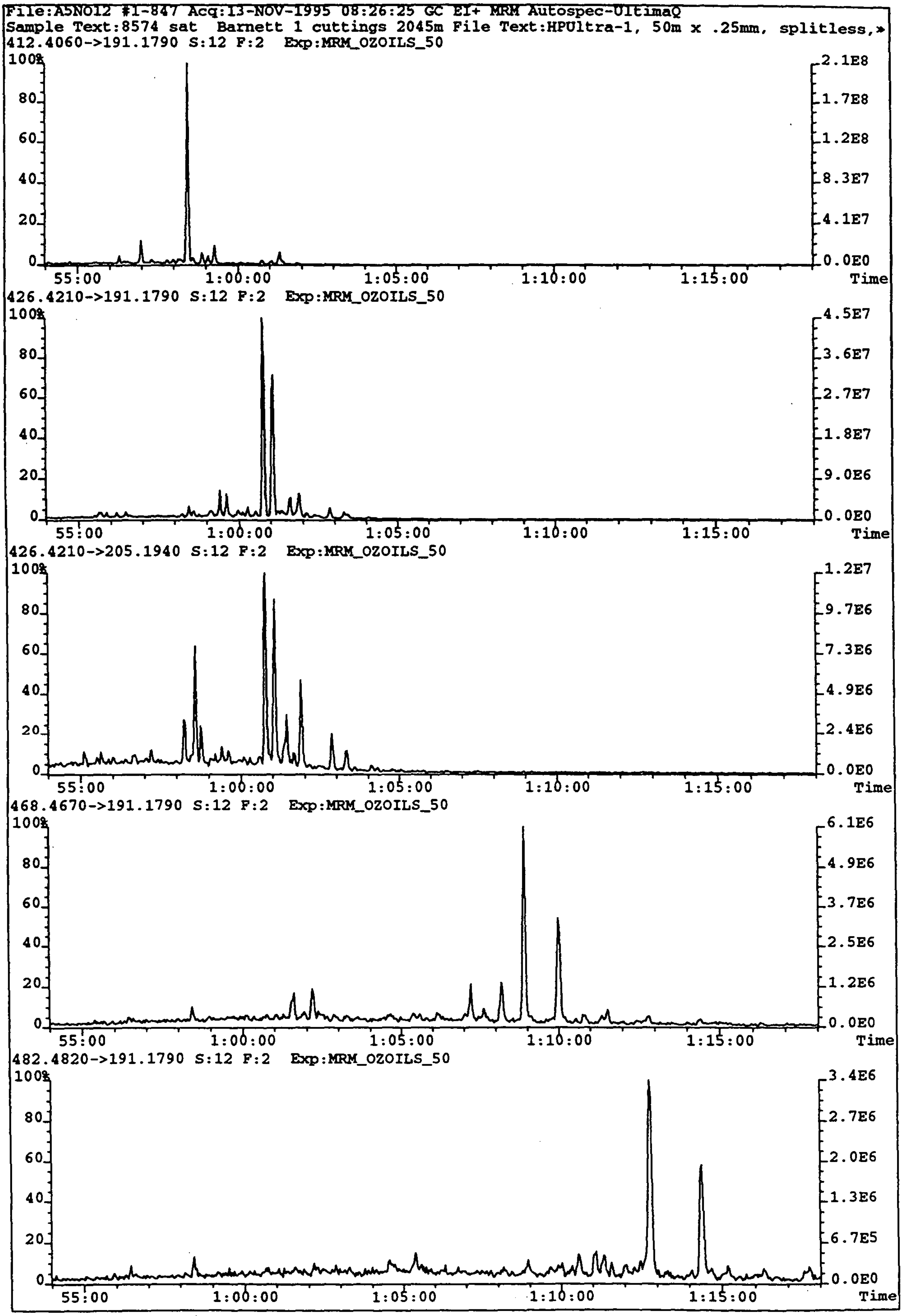
File:A5N012 #1-1251 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»

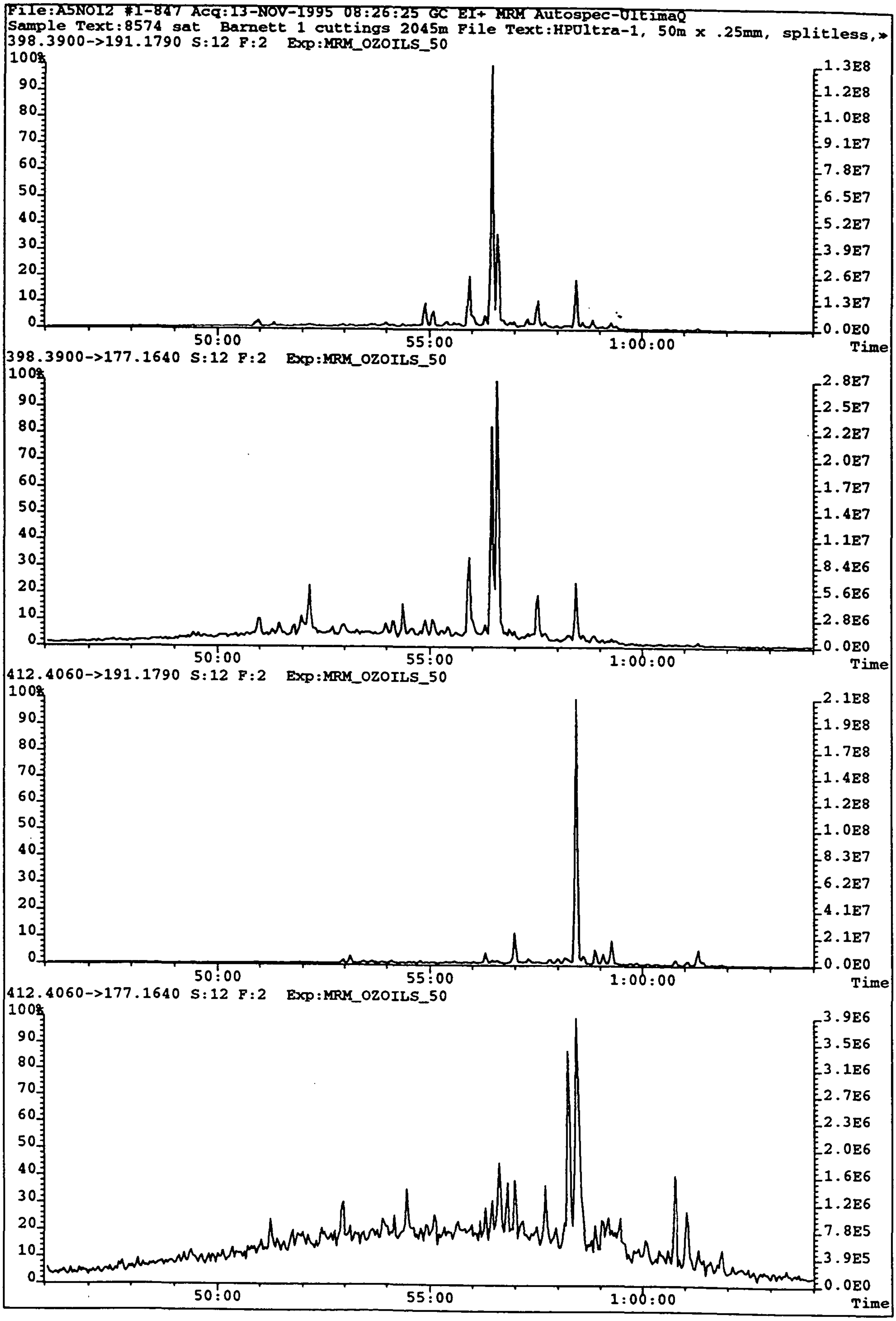


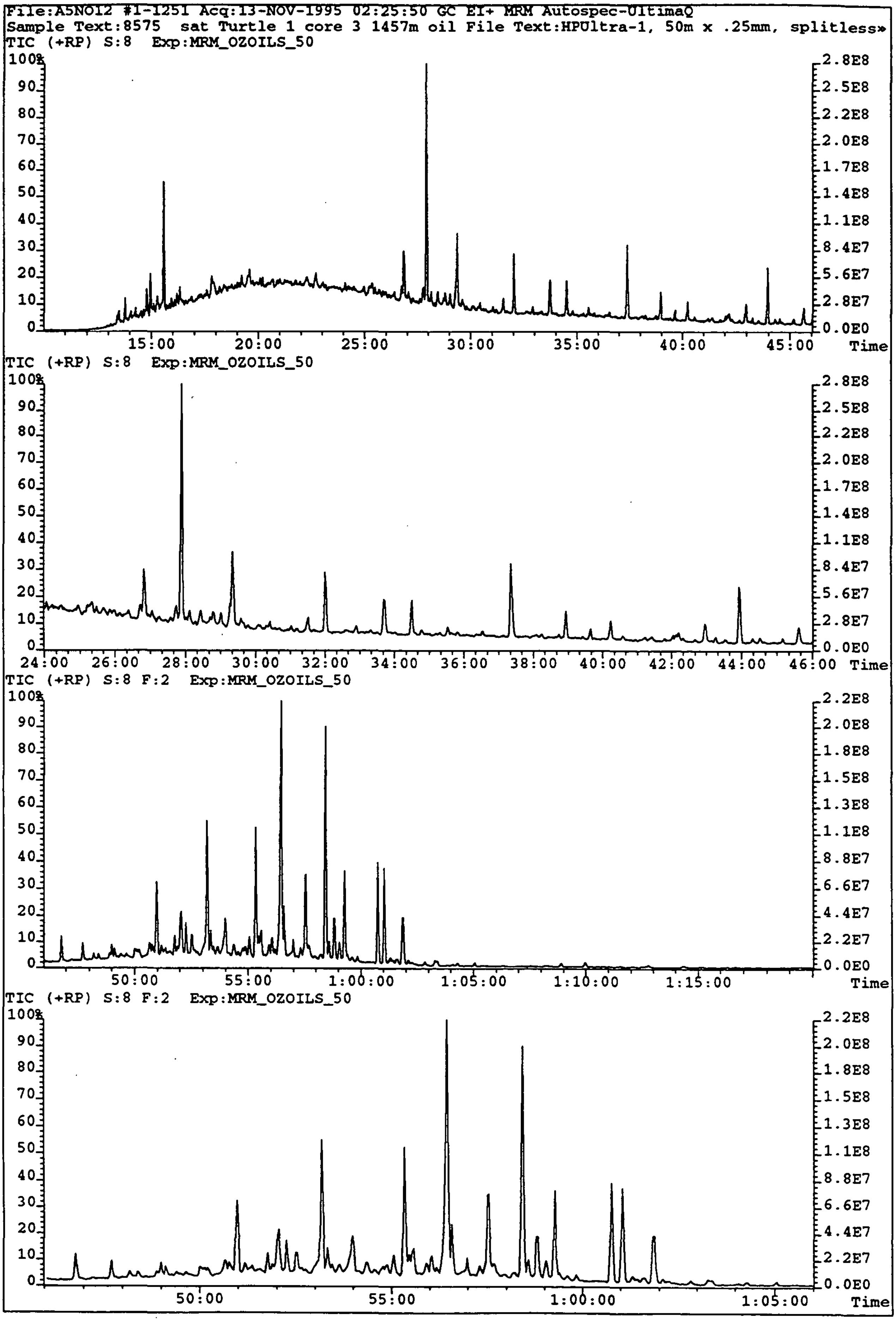

File:A5NO12 #1-1251 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
332.3440->191.1790 S:12 Exp:MRM_OZOILS_50
5.1E7
346.3590->191.1790 S:12 Exp:MRM_OZOILS_50
2.2E7
330.3280->191.1790 S:12 Exp:MRM_OZOILS_50
2.6E7
360.3740->191.1790 S:12 Exp:MRM_OZOILS_50
2.0E7
100%
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time

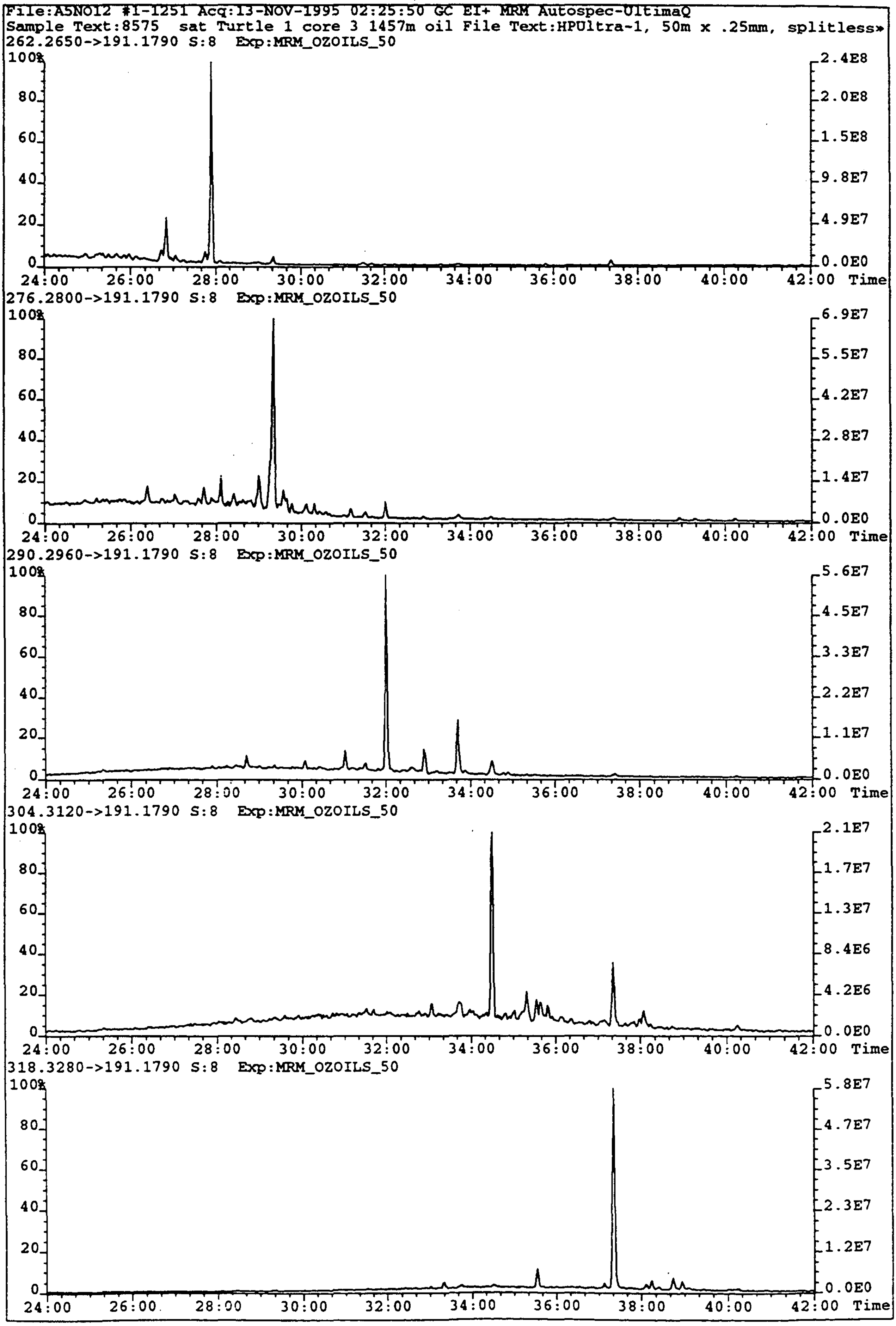

File:A5NO12 #1-847 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
372.3760->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
8.7E7
6.9E7
5.2E7
3.5E7
1.7E7
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
2.8E7
2.3E7
1.7E7
1.1E7
5.7E6
0.0E0
400.4070->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
8.6E7
6.9E7
5.1E7
3.4E7
1.7E7
0.0E0
414.4230->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
5.2E6
4.2E6
3.1E6
2.1E6
1.0E6
0.0E0
414.4230->231.2120 S:12 F:2 Exp:MRM_OZOILS_50
8.6E6
6.9E6
5.1E6
3.4E6
1.7E6
0.0E0

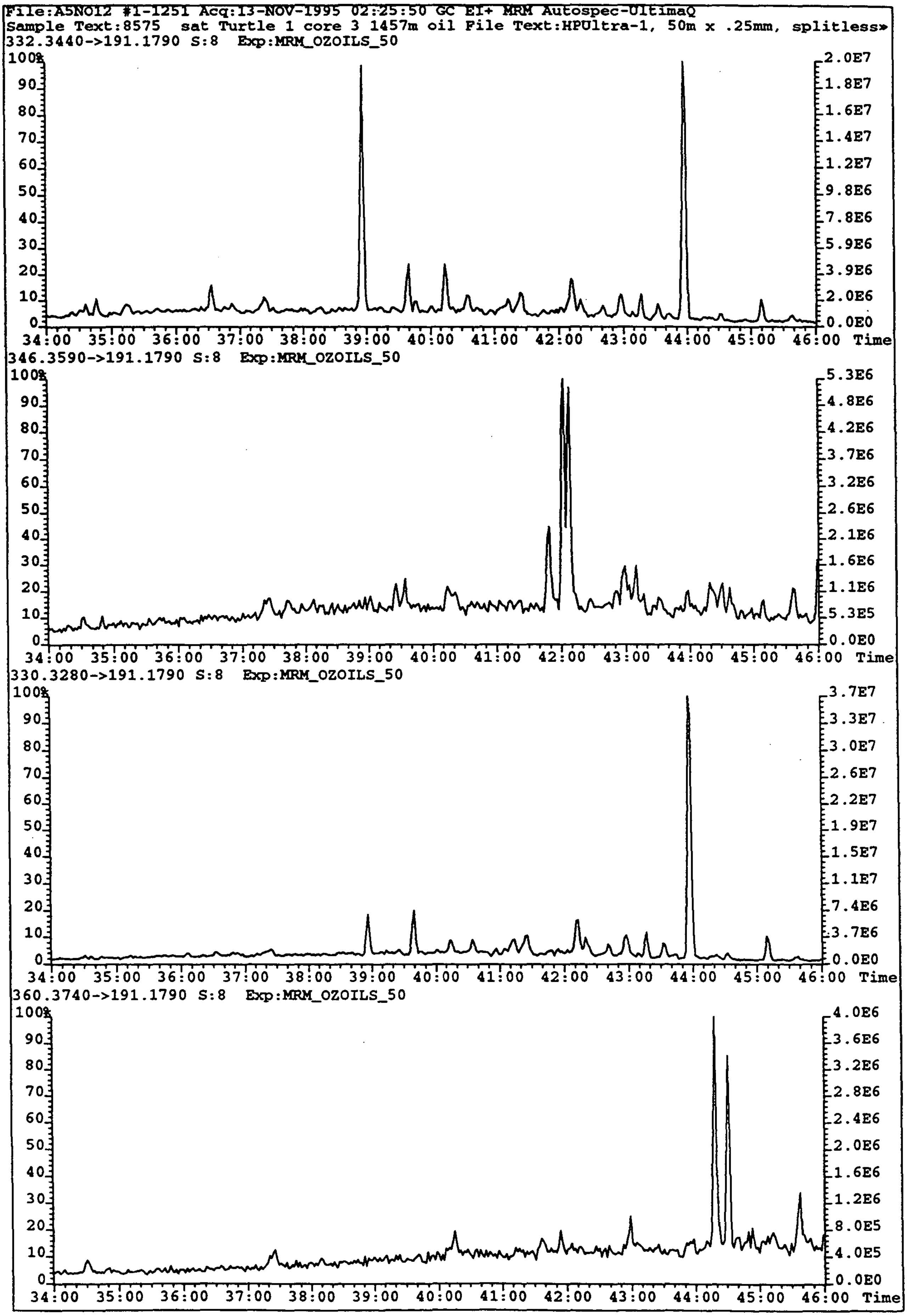

File:A5NO12 #1-847 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
370.3590->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.1E7
4.1E7
3.1E7
2.0E7
1.0E7
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
1.9E7
1.5E7
1.1E7
7.7E6
3.8E6
0.0E0
398.3900->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
1.3E8
1.0E8
7.8E7
5.2E7
2.6E7
0.0E0
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
2.1E8
1.7E8
1.2E8
8.3E7
4.1E7
0.0E0
426.4210->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
4.5E7
3.6E7
2.7E7
1.8E7
9.0E6
0.0E0

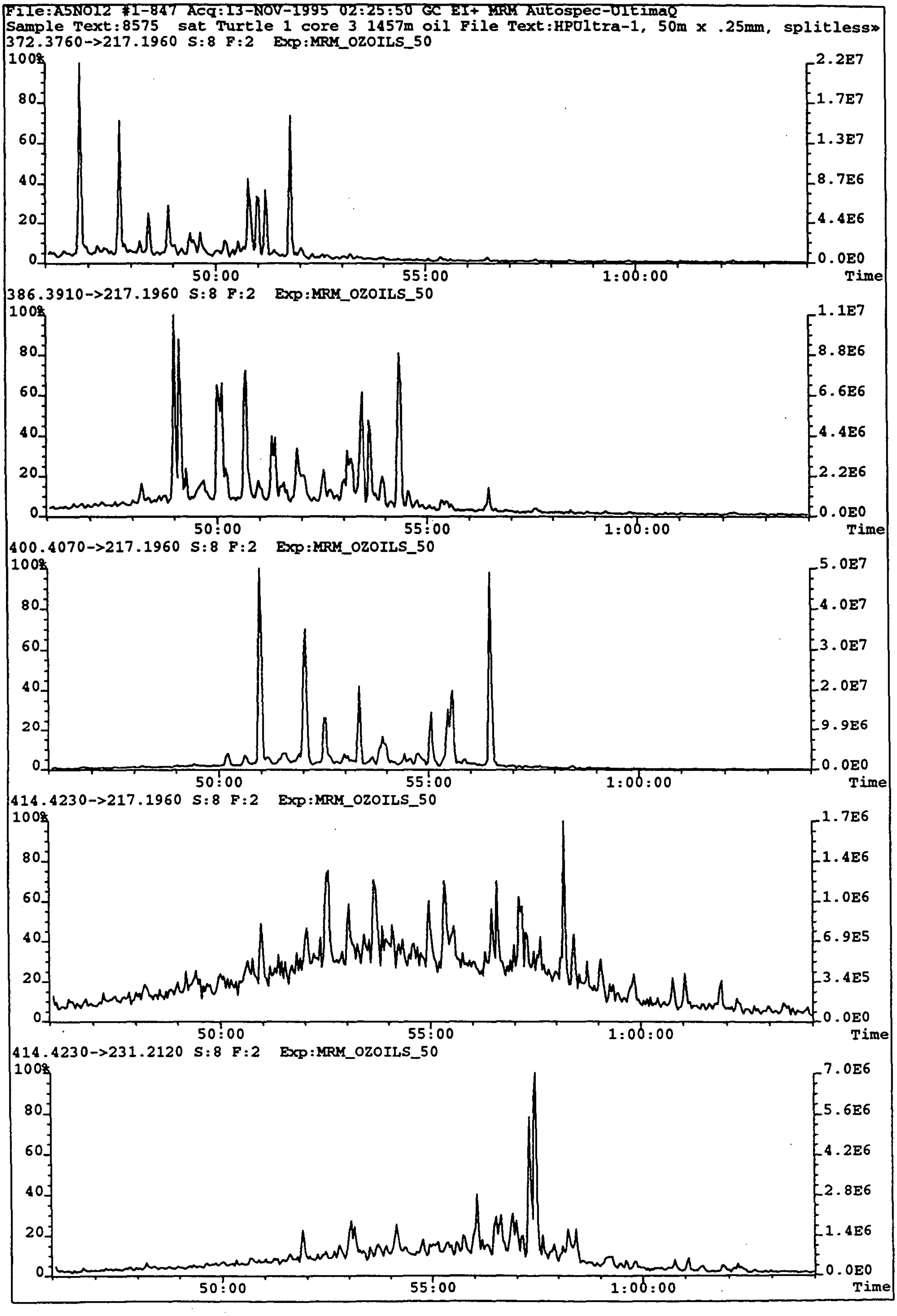

File:A5N012 #1-847 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.1E8
1.7E8
1.2E8
8.3E7
4.1E7
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
4.5E7
3.6E7
2.7E7
1.8E7
9.0E6
0.0E0
426.4210->205.1940 S:12 F:2 Exp:MRM_OZOILS_50
1.2E7
9.7E6
7.3E6
4.9E6
2.4E6
0.0E0
468.4670->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
6.1E6
4.9E6
3.7E6
2.5E6
1.2E6
0.0E0
482.4820->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
3.4E6
2.7E6
2.0E6
1.3E6
6.7E5
0.0E0

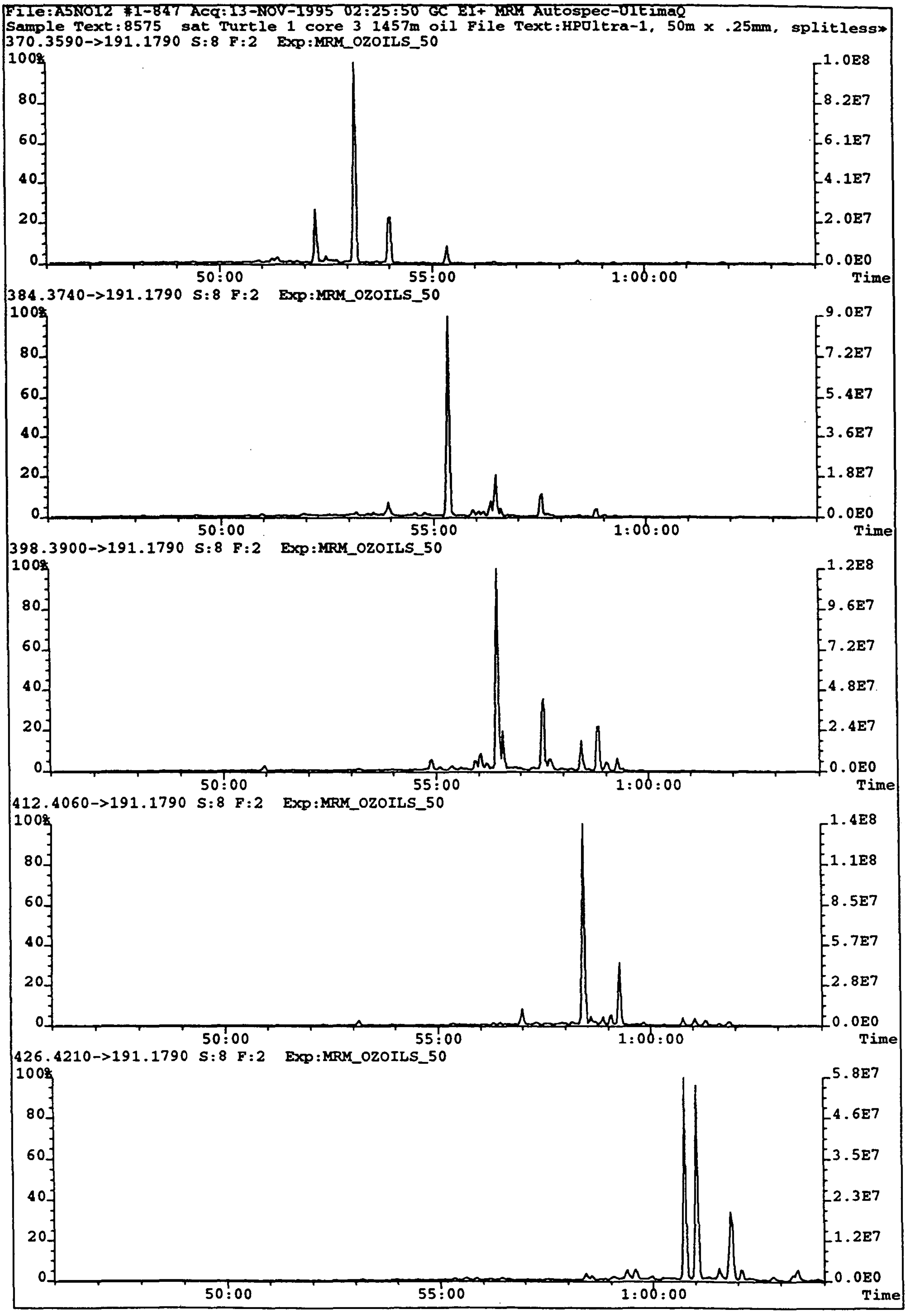

File:A5NO12 #1-847 Acq:13-NOV-1995 08:26:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8574 sat Barnett 1 cuttings 2045m File Text:HPUltra-1, 50m x .25mm, splitless,»
398.3900->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
1.3E8
1.2E8
1.0E8
9.1E7
7.8E7
6.5E7
5.2E7
3.9E7
2.6E7
1.3E7
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:12 F:2 Exp:MRM_OZOILS_50
2.8E7
2.5E7
2.2E7
2.0E7
1.7E7
1.4E7
1.1E7
8.4E6
5.6E6
2.8E6
0.0E0
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
2.1E8
1.9E8
1.7E8
1.4E8
1.2E8
1.0E8
8.3E7
6.2E7
4.1E7
2.1E7
0.0E0
412.4060->177.1640 S:12 F:2 Exp:MRM_OZOILS_50
3.9E6
3.5E6
3.1E6
2.7E6
2.3E6
2.0E6
1.6E6
1.2E6
7.8E5
3.9E5
0.0E0


File:A5N012 #1-1251 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
TIC (+RP) S:8 Exp:MRM_OZOILS_50
TIC (+RP) S:8 Exp:MRM_OZOILS_50
TIC (+RP) S:8 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:8 F:2 Exp:MRM_OZOILS_50
Time

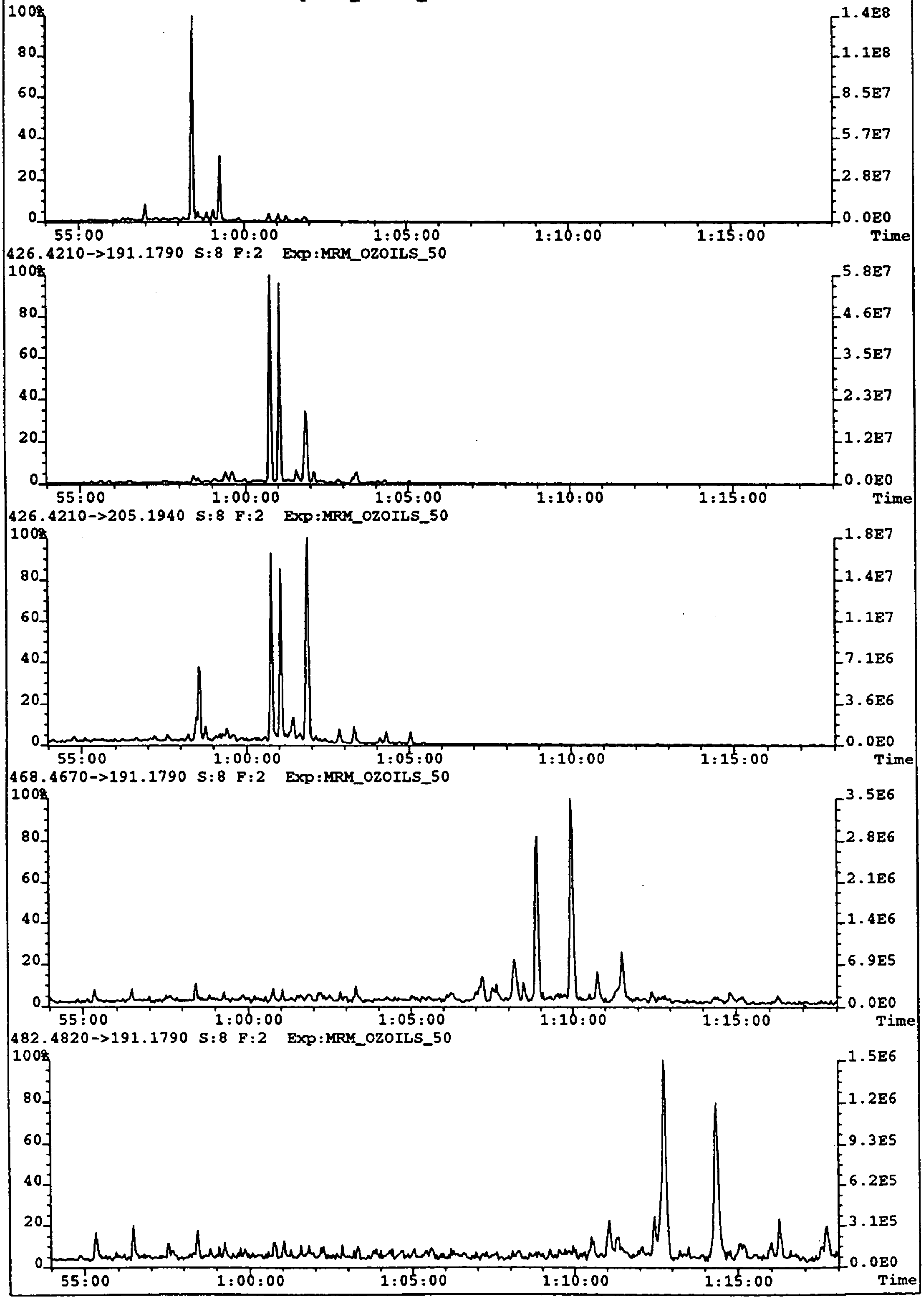

File:A5N012 #1-1251 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
262.2650->191.1790 S:8 Exp:MRM_OZOILS_50
276.2800->191.1790 S:8 Exp:MRM_OZOILS_50
290.2960->191.1790 S:8 Exp:MRM_OZOILS_50
304.3120->191.1790 S:8 Exp:MRM_OZOILS_50
318.3280->191.1790 S:8 Exp:MRM_OZOILS_50
100%
Time
2.4E8
6.9E7
5.6E7
2.1E7
5.8E7

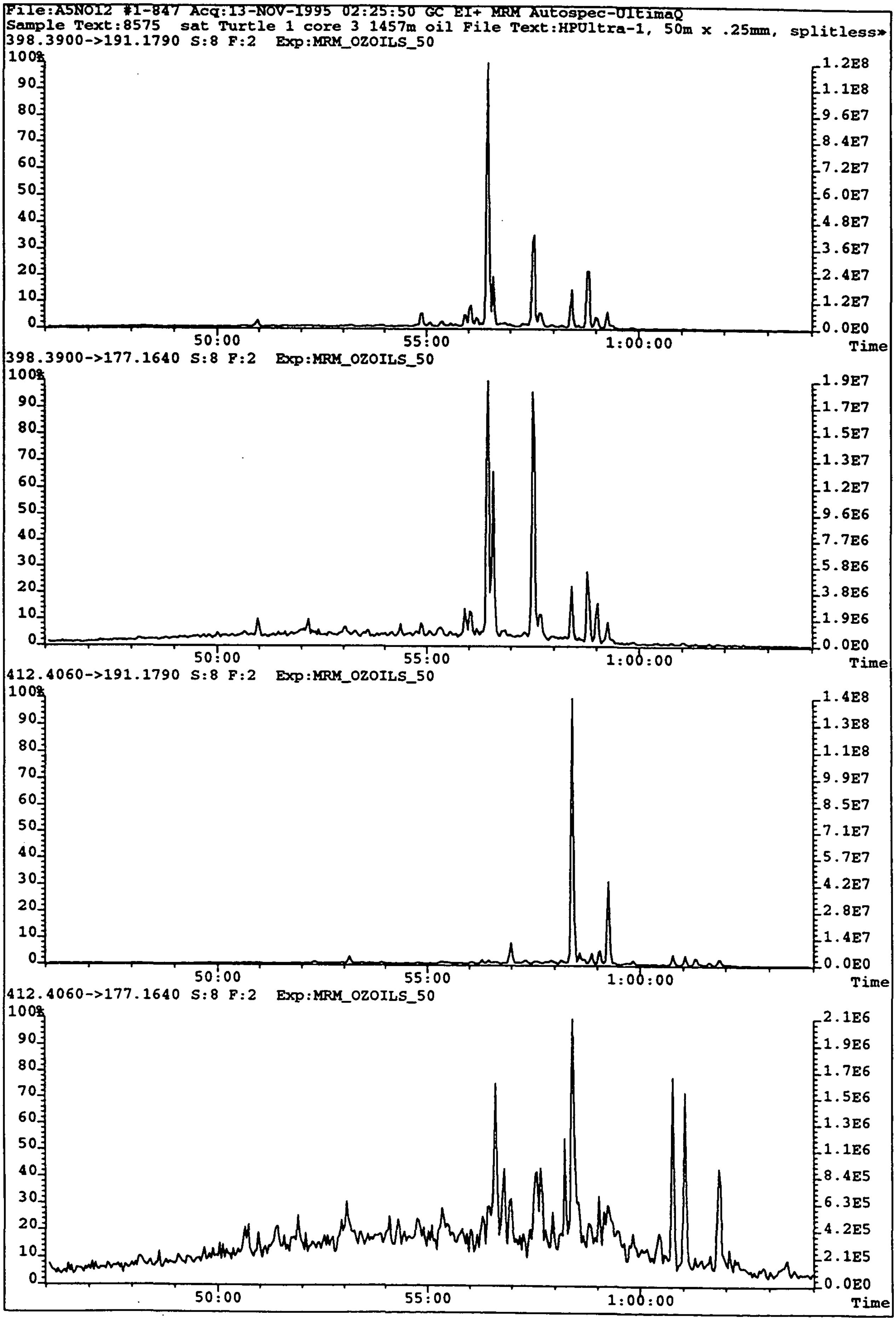

File:A5N012 #1-1251 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
332.3440->191.1790 S:8 Exp:MRM_OZOILS_50
346.3590->191.1790 S:8 Exp:MRM_OZOILS_50
330.3280->191.1790 S:8 Exp:MRM_OZOILS_50
360.3740->191.1790 S:8 Exp:MRM_OZOILS_50
Time

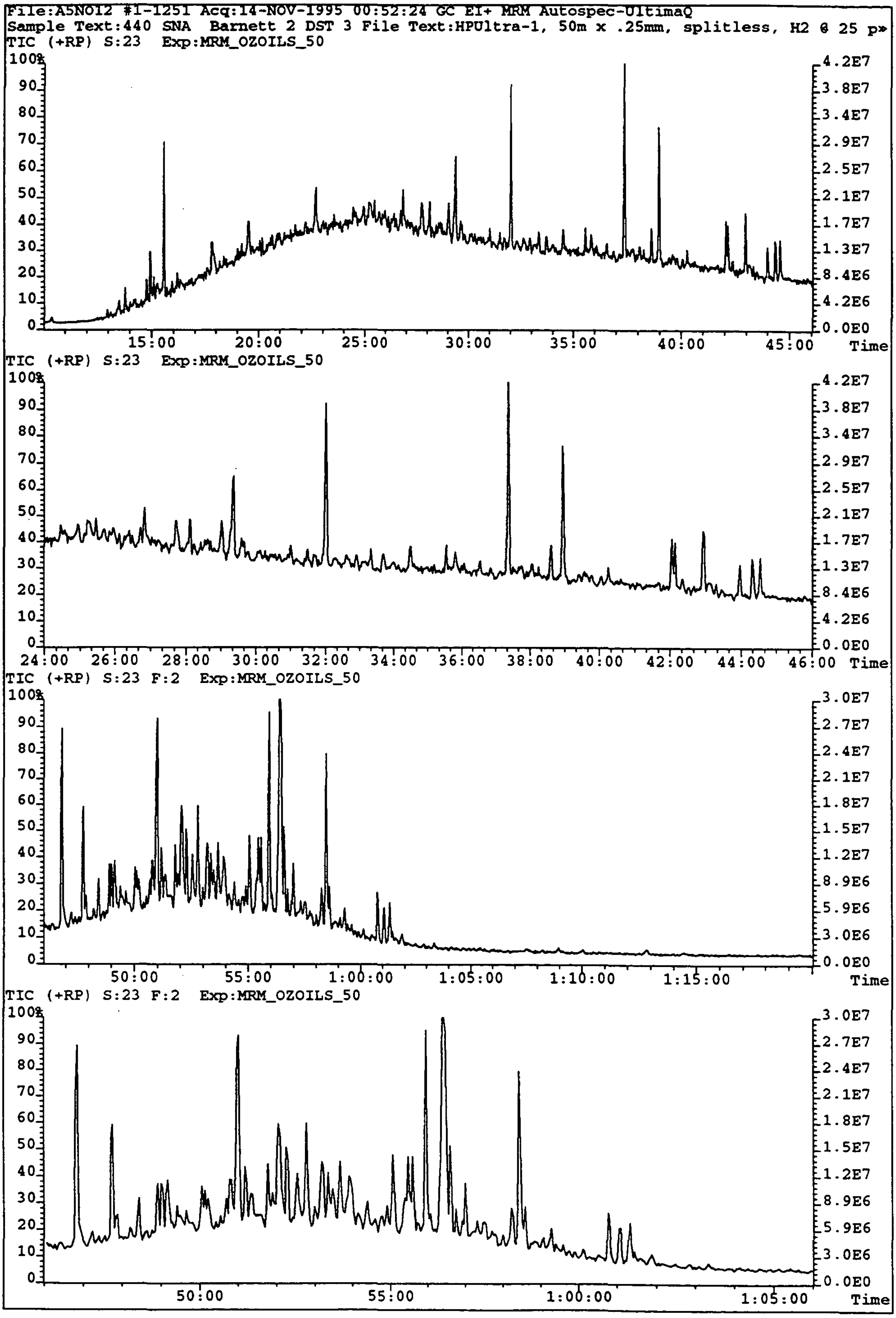

File:A5NO12 #1-847 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
372.3760->217.1960 S:8 F:2 Exp:MRM_OZOILS_50
386.3910->217.1960 S:8 F:2 Exp:MRM_OZOILS_50
400.4070->217.1960 S:8 F:2 Exp:MRM_OZOILS_50
414.4230->217.1960 S:8 F:2 Exp:MRM_OZOILS_50
414.4230->231.2120 S:8 F:2 Exp:MRM_OZOILS_50
Time

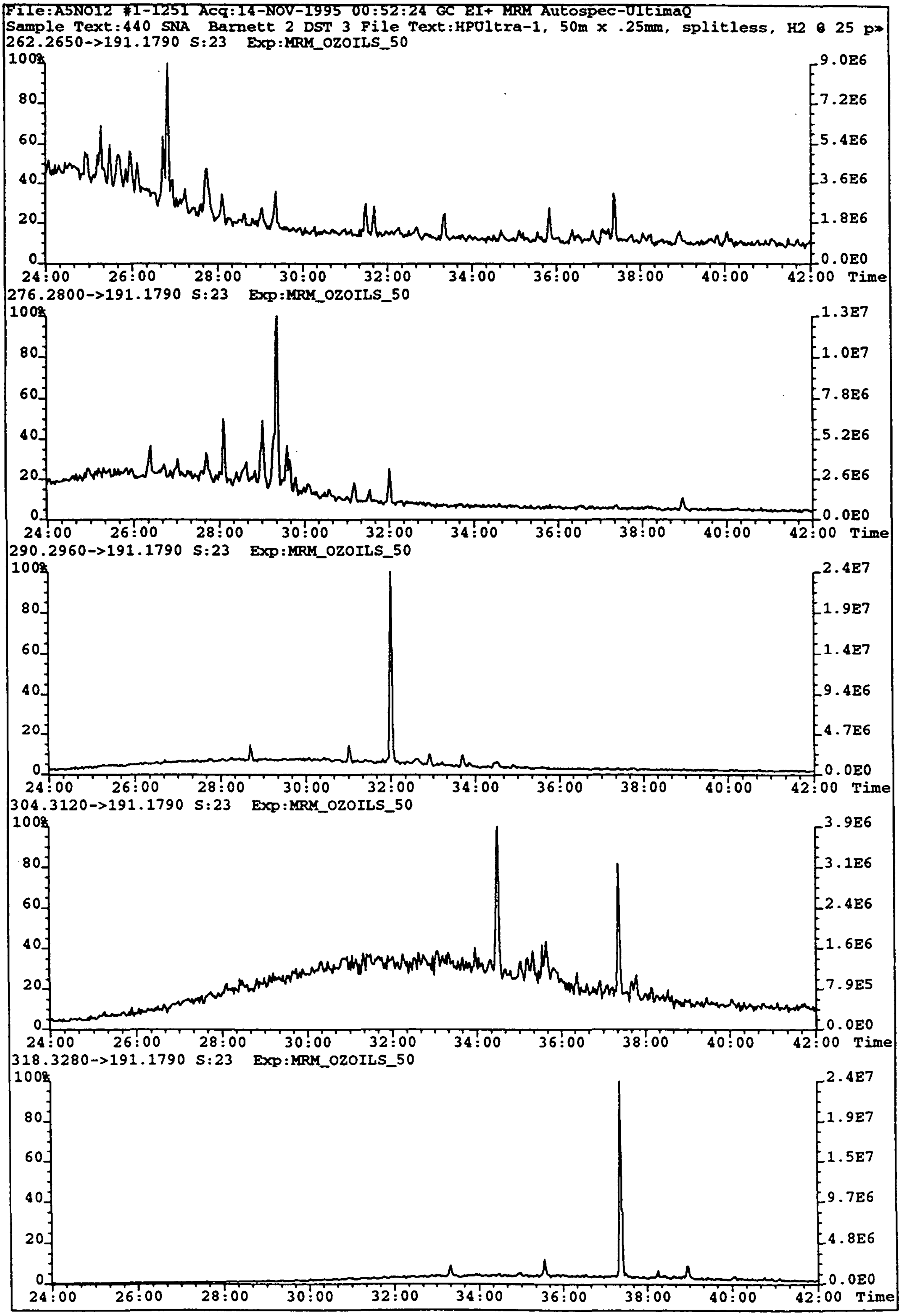

File:A5NO12 #1-847 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
370.3590->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
Time

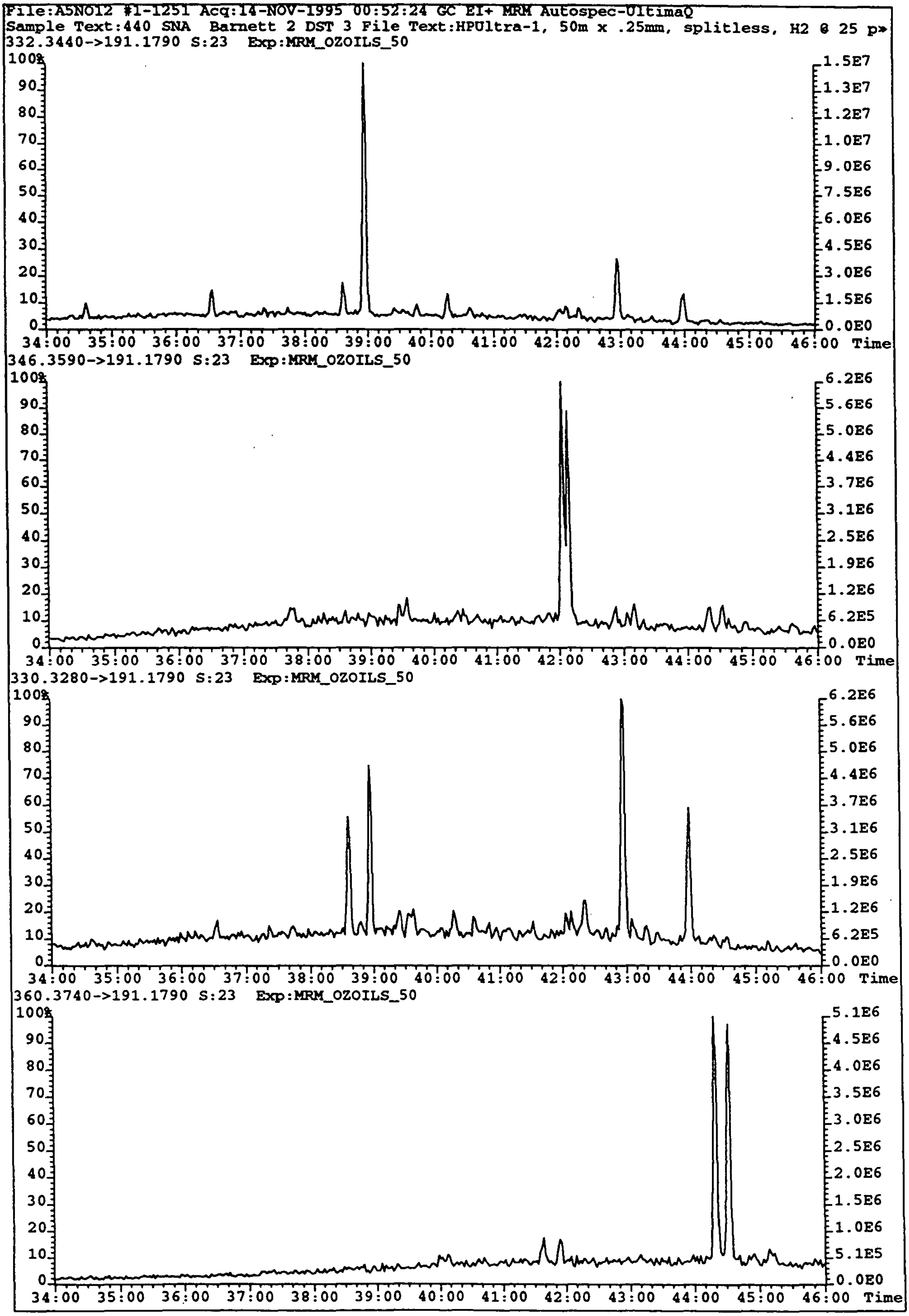
File:A5N012 #1-847 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
412.4060->191.1790 S:8 F:2 Exp:MRM_OZOILS_50

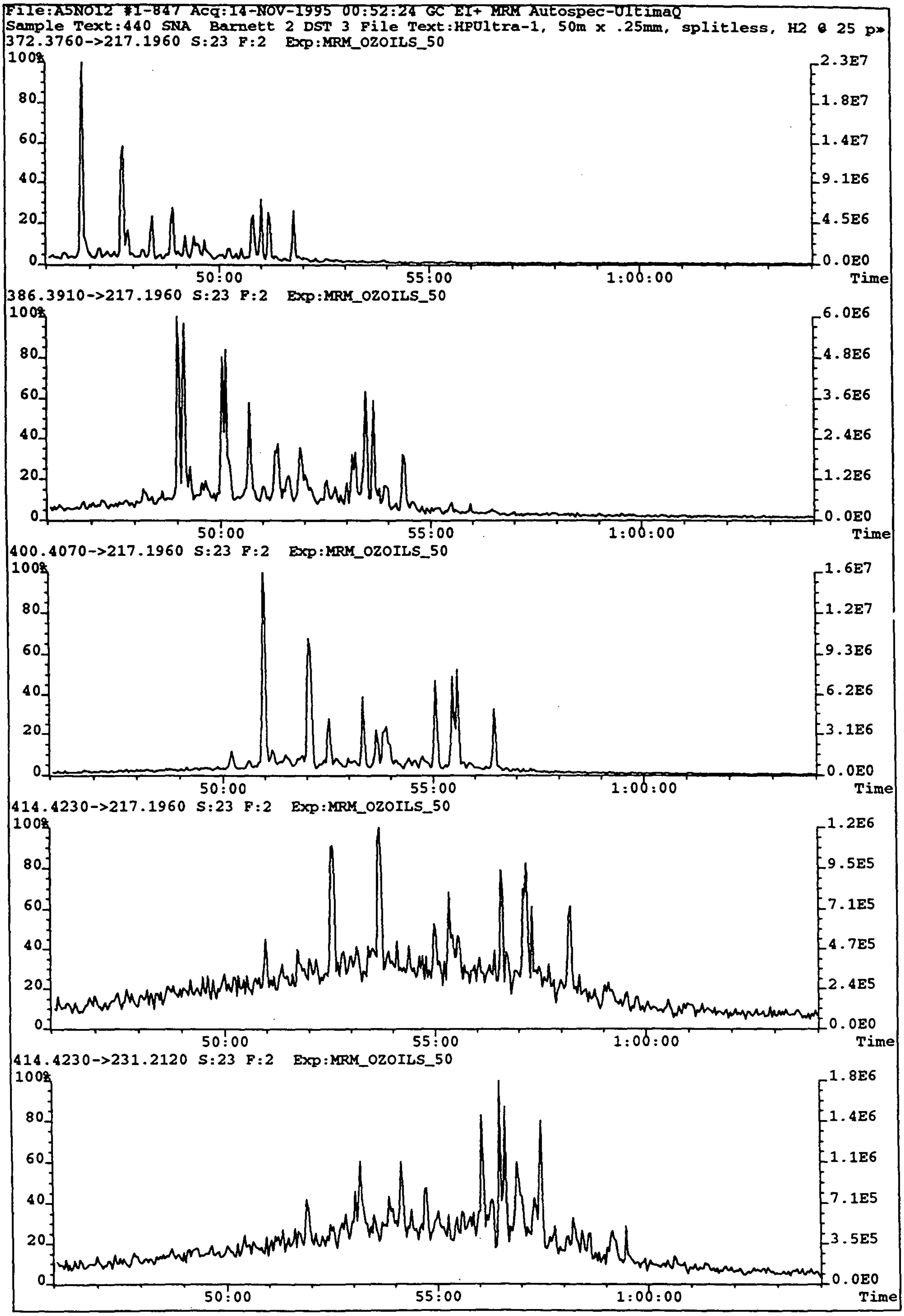


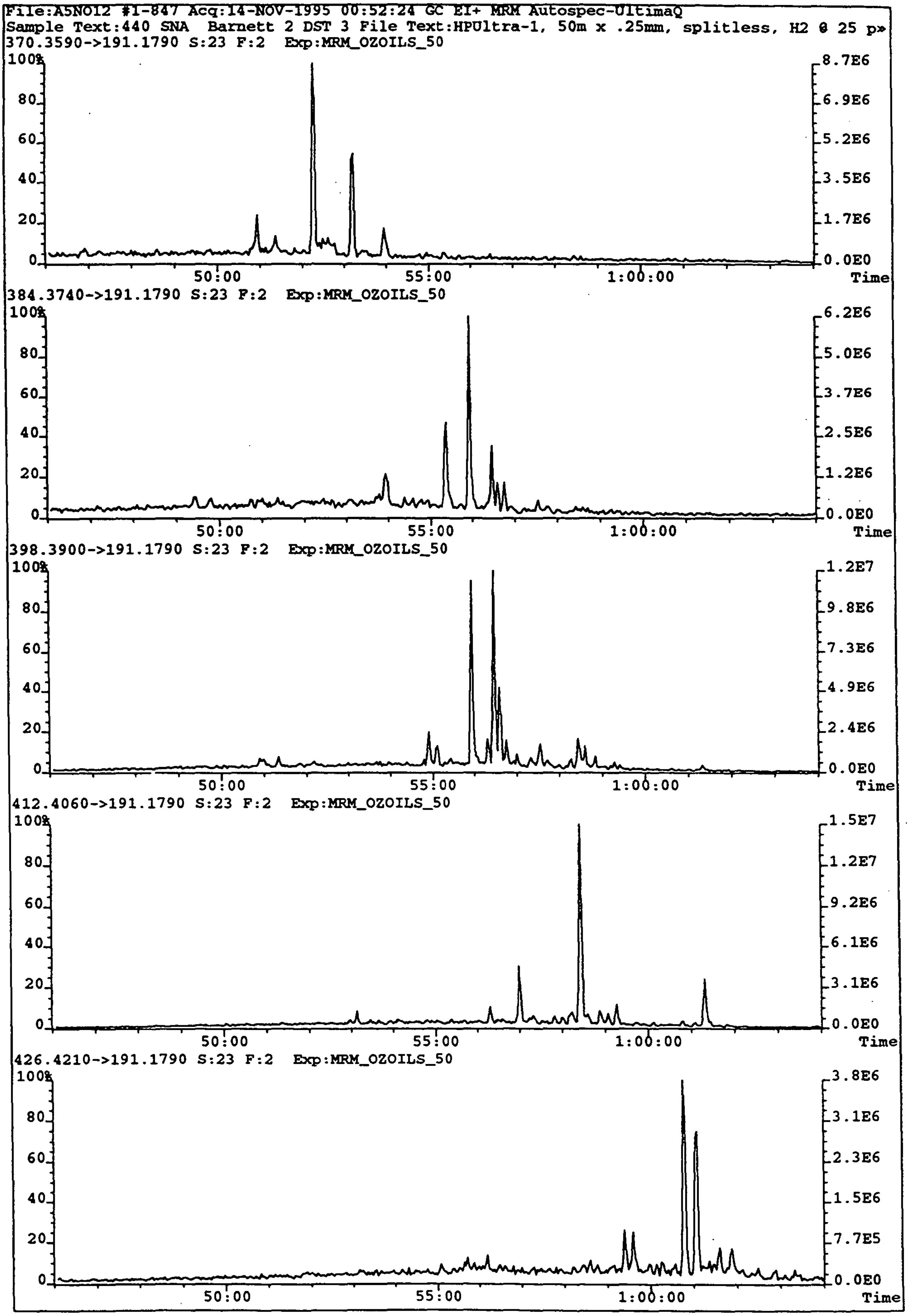

File:A5NO12 #1-847 Acq:13-NOV-1995 02:25:50 GC EI+ MRM Autospec-UltimaQ
Sample Text:8575 sat Turtle 1 core 3 1457m oil File Text:HPUltra-1, 50m x .25mm, splitless»
398.3900->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:8 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:8 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:8 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time
1.2E8
1.4E8
1.9E7
2.1E6


File:A5N012 #1-1251 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
TIC (+RP) S:23 Exp:MRM_OZOILS_50
TIC (+RP) S:23 Exp:MRM_OZOILS_50
TIC (+RP) S:23 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:23 F:2 Exp:MRM_OZOILS_50
Time

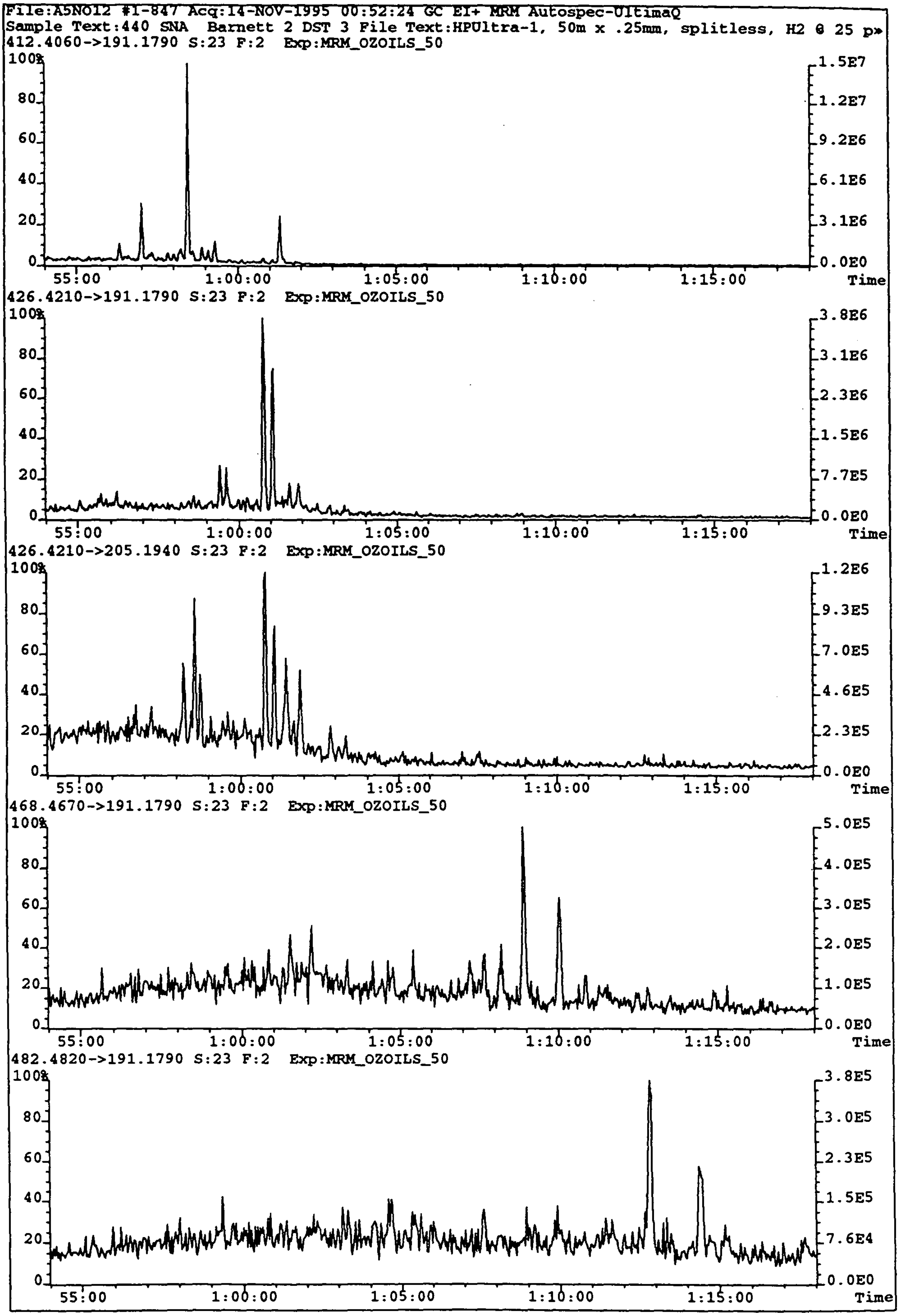

File:A5NO12 #1-1251 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
262.2650->191.1790 S:23 Exp:MRM_OZOILS_50
276.2800->191.1790 S:23 Exp:MRM_OZOILS_50
290.2960->191.1790 S:23 Exp:MRM_OZOILS_50
304.3120->191.1790 S:23 Exp:MRM_OZOILS_50
318.3280->191.1790 S:23 Exp:MRM_OZOILS_50
Time

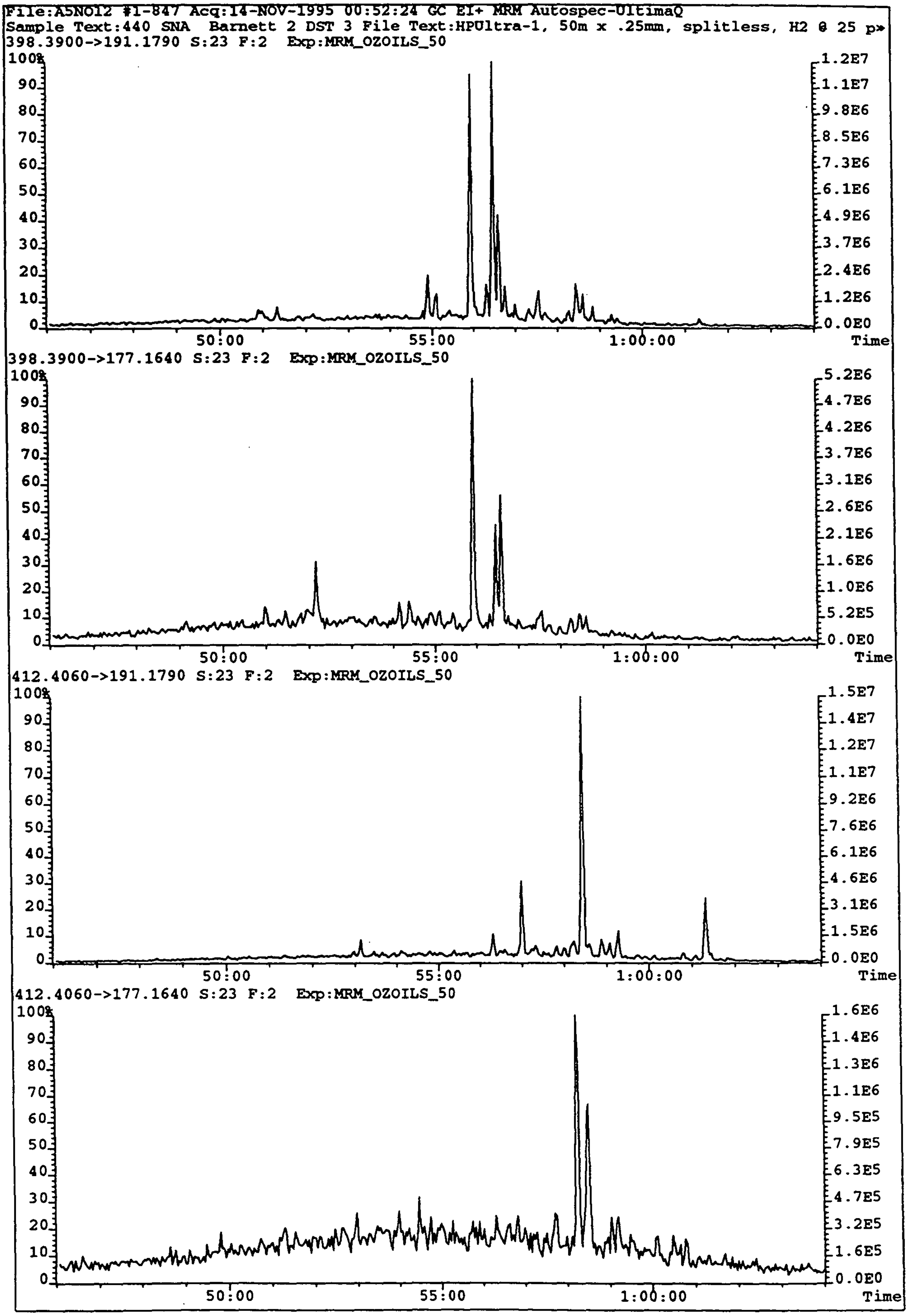

File:A5N012 #1-1251 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
332.3440->191.1790 S:23 Exp:MRM_OZOILS_50
346.3590->191.1790 S:23 Exp:MRM_OZOILS_50
330.3280->191.1790 S:23 Exp:MRM_OZOILS_50
360.3740->191.1790 S:23 Exp:MRM_OZOILS_50
100%
1.5E7
6.2E6
5.1E6
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time

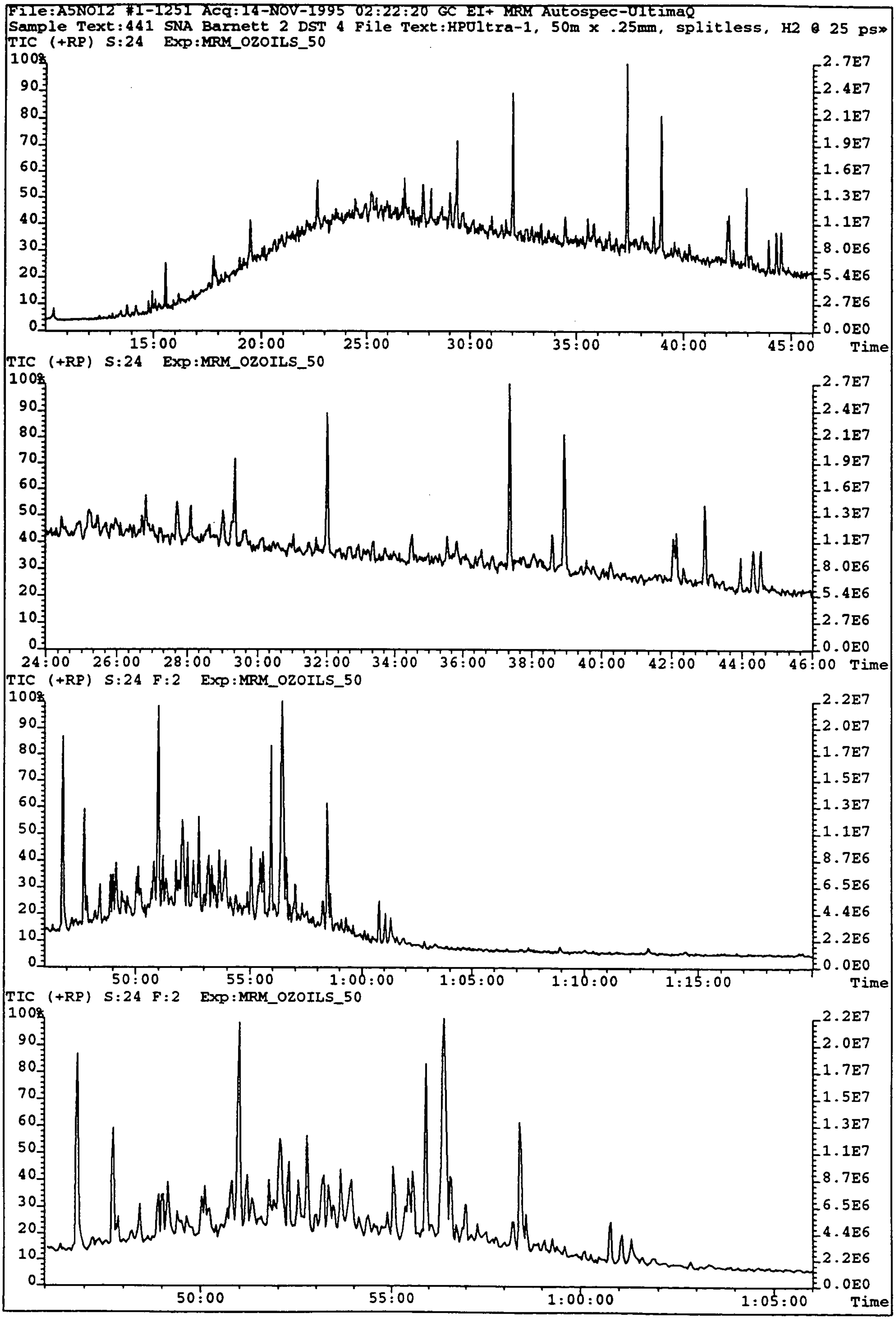

File:A5NO12 #1-847 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
372.3760->217.1960 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.3E7
1.8E7
1.4E7
9.1E6
4.5E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
6.0E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
50:00
55:00
1:00:00
Time
400.4070->217.1960 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.6E7
1.2E7
9.3E6
6.2E6
3.1E6
0.0E0
50:00
55:00
1:00:00
Time
414.4230->217.1960 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E6
9.5E5
7.1E5
4.7E5
2.4E5
0.0E0
50:00
55:00
1:00:00
Time
414.4230->231.2120 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.8E6
1.4E6
1.1E6
7.1E5
3.5E5
0.0E0
50:00
55:00
1:00:00
Time

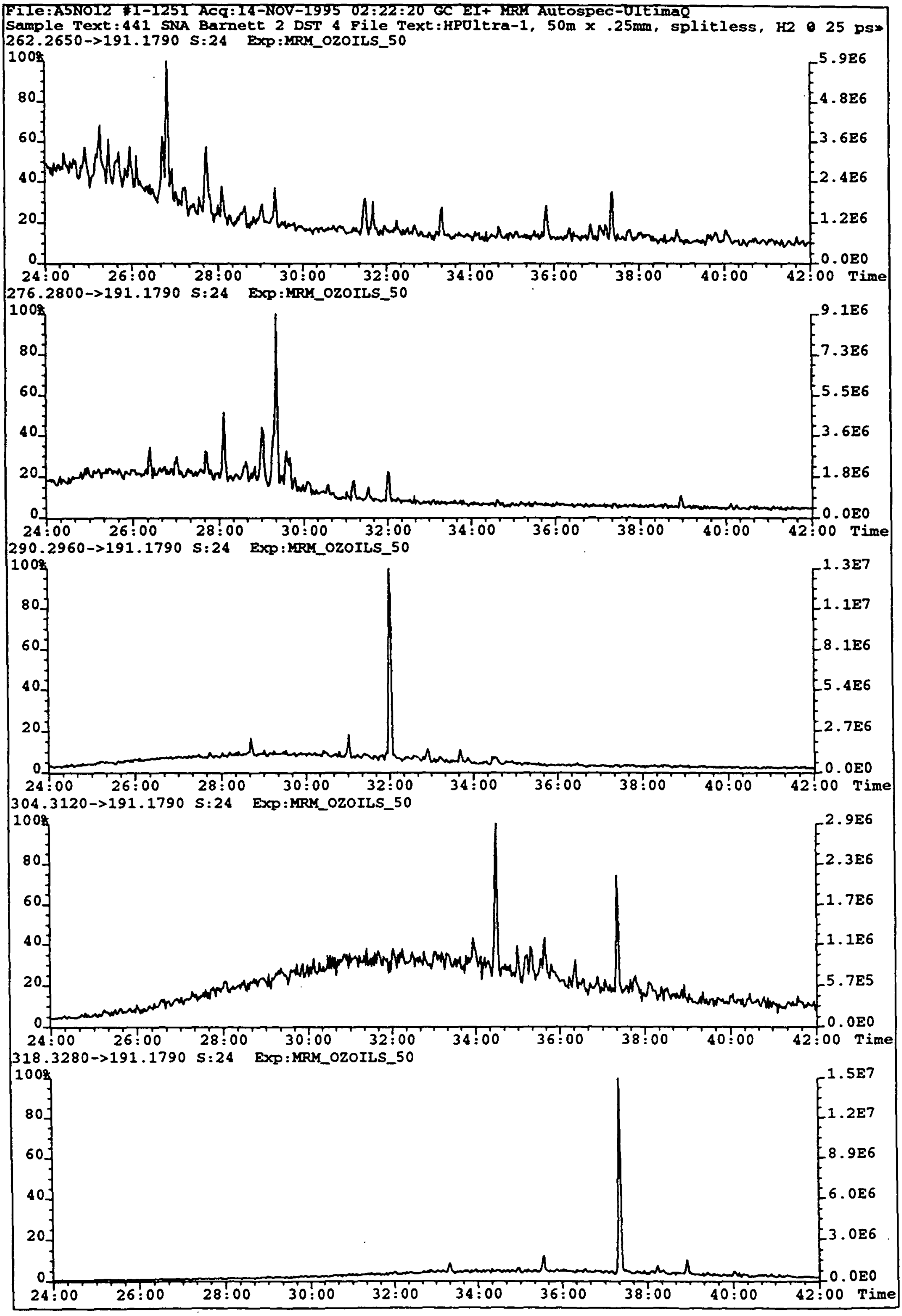


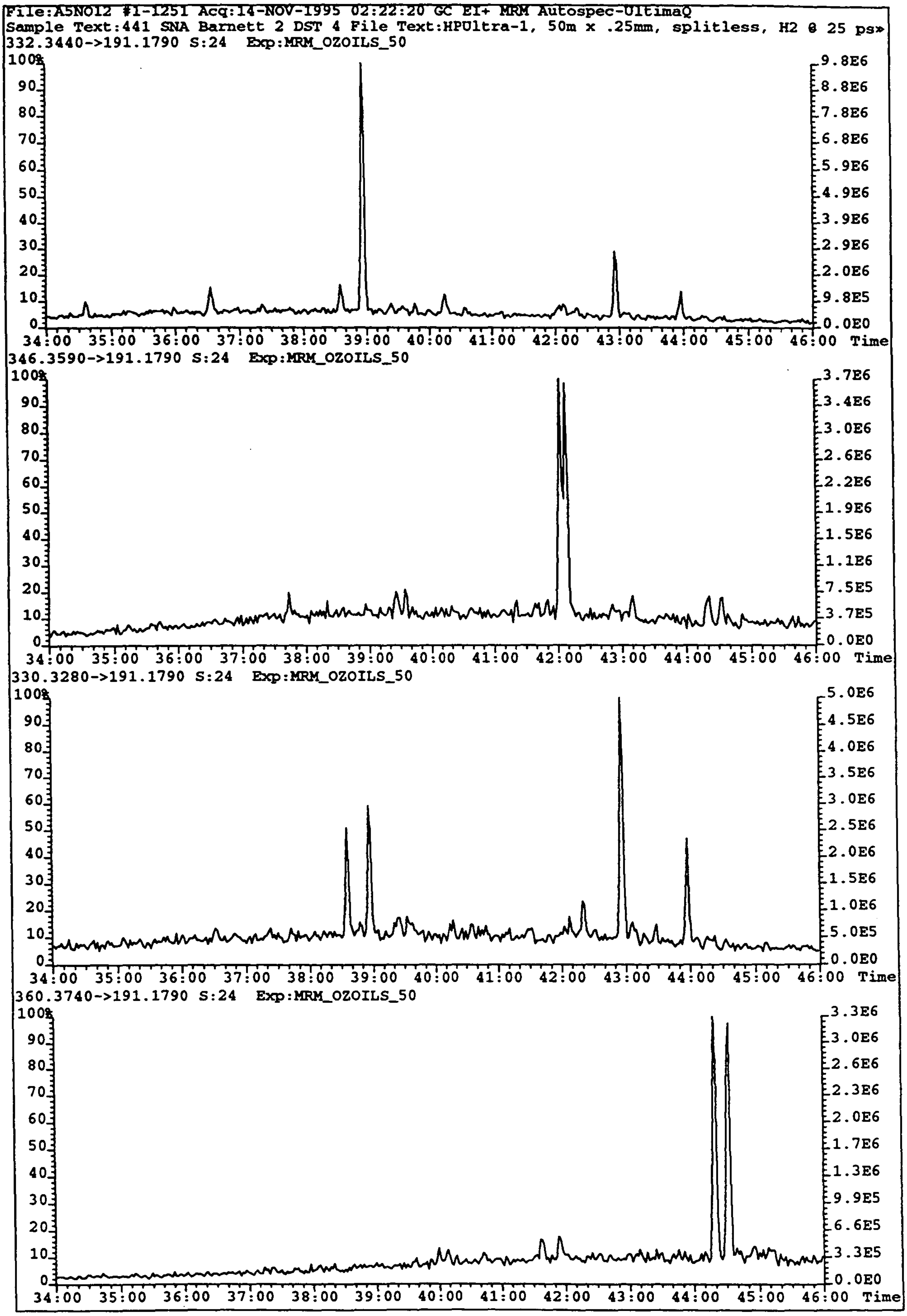
File:A5N012 #1-847 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
370.3590->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
8.7E6
6.9E6
5.2E6
3.5E6
1.7E6
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
6.2E6
5.0E6
3.7E6
2.5E6
1.2E6
0.0E0
50:00
55:00
1:00:00
Time
398.3900->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E7
9.8E6
7.3E6
4.9E6
2.4E6
0.0E0
50:00
55:00
1:00:00
Time
412.4060->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.5E7
1.2E7
9.2E6
6.1E6
3.1E6
0.0E0
50:00
55:00
1:00:00
Time
426.4210->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.8E6
3.1E6
2.3E6
1.5E6
7.7E5
0.0E0
50:00
55:00
1:00:00
Time

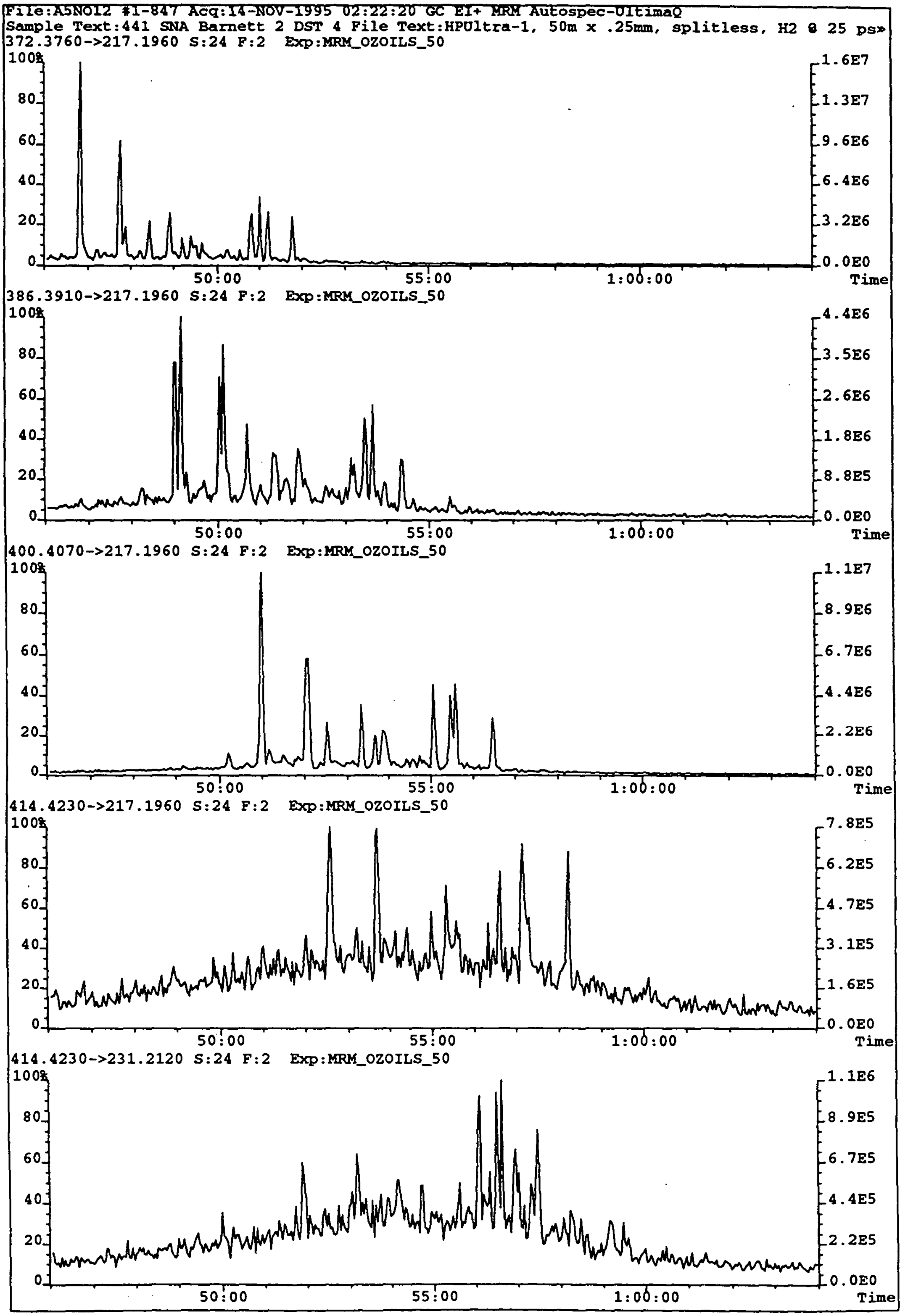

File:A5NO12 #1-847 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
412.4060->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
426.4210->205.1940 S:23 F:2 Exp:MRM_OZOILS_50
468.4670->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
482.4820->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
1.5E7
1.2E7
9.2E6
6.1E6
3.1E6
0.0E0
3.8E6
3.1E6
2.3E6
1.5E6
7.7E5
1.2E6
9.3E5
7.0E5
4.6E5
2.3E5
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
3.8E5
3.0E5
2.3E5
1.5E5
7.6E4

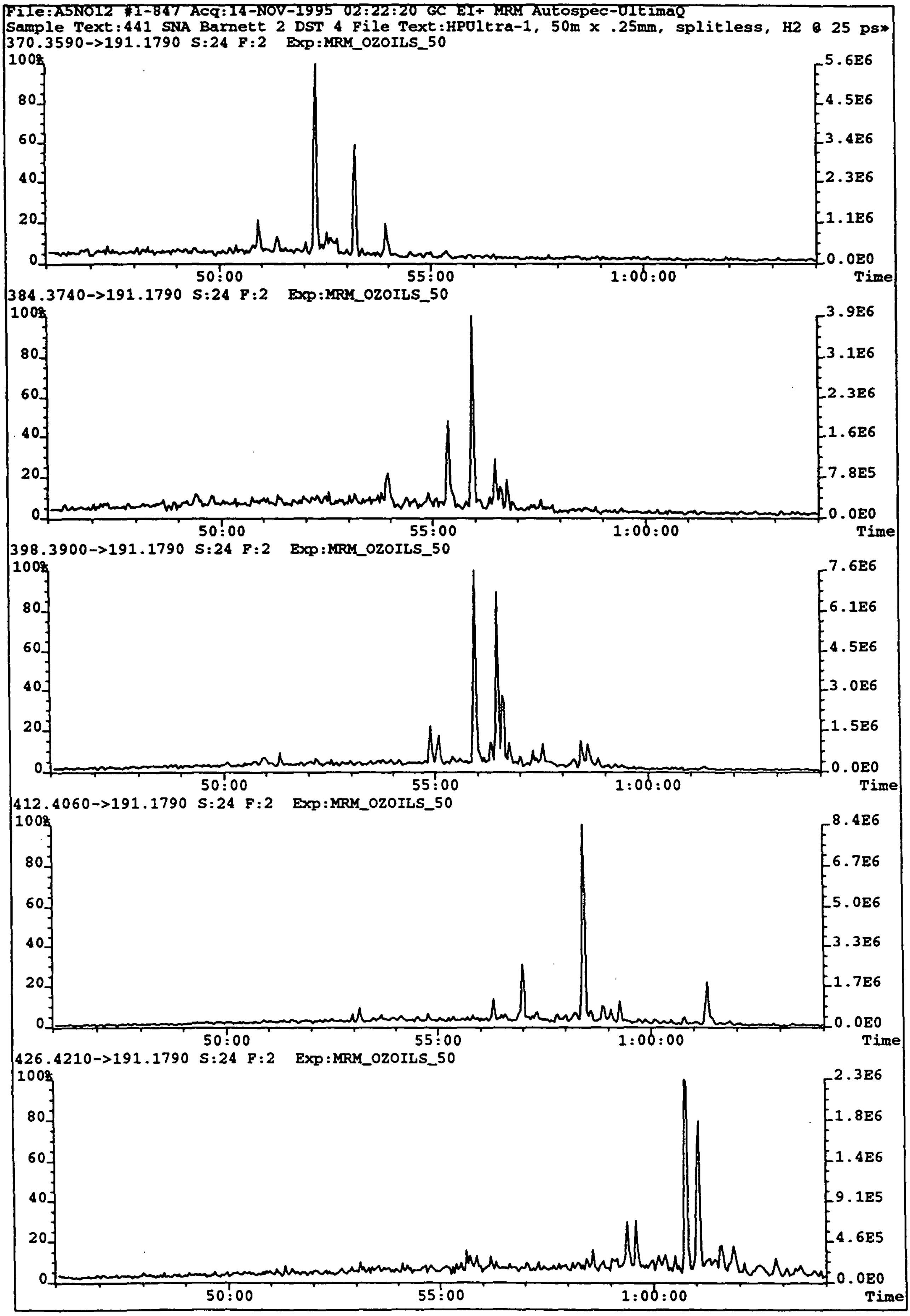

File:A5NO12 #1-847 Acq:14-NOV-1995 00:52:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:440 SNA Barnett 2 DST 3 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
398.3900->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:23 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:23 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:23 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

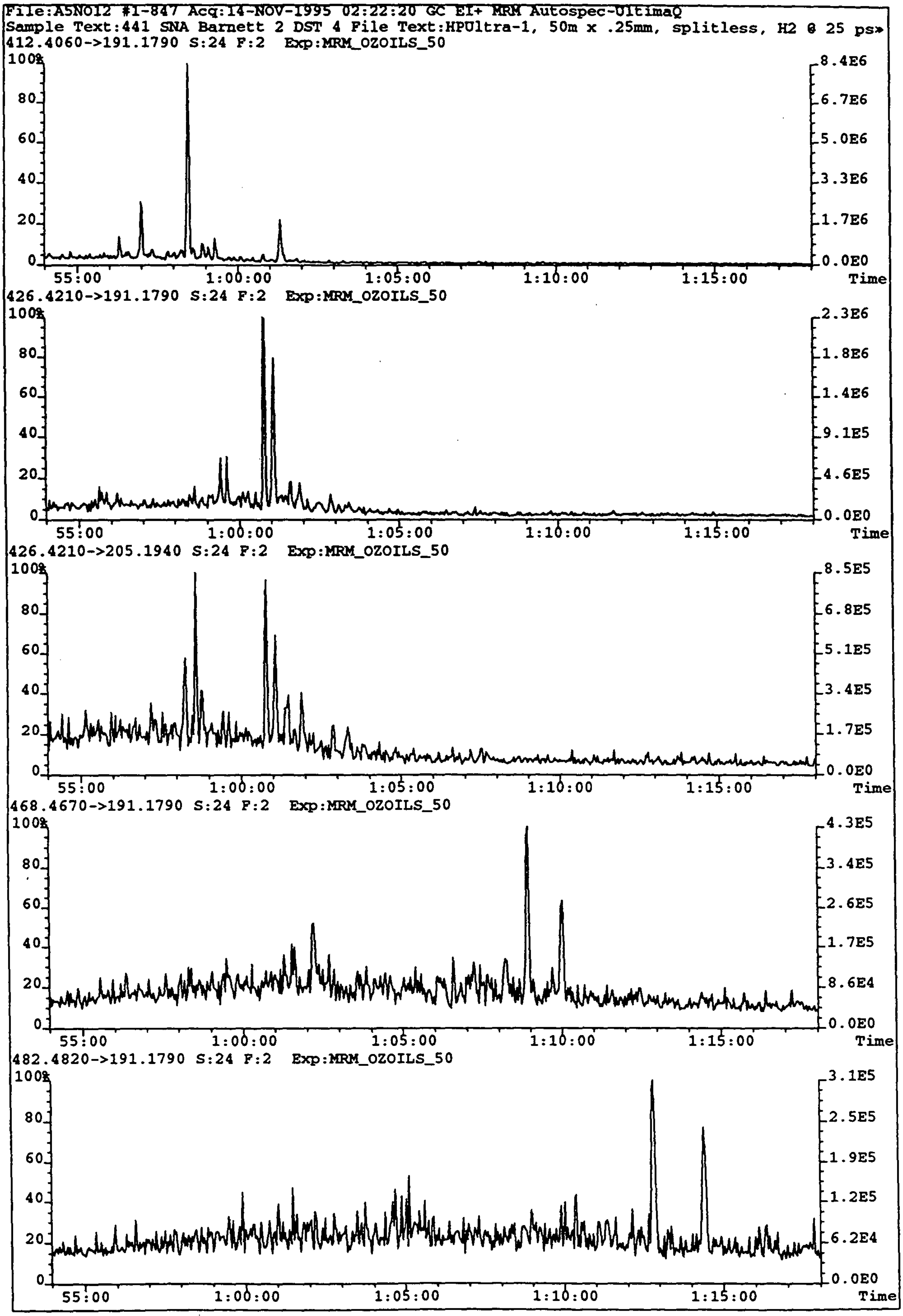

File:A5NO12 #1-1251 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
TIC (+RP) S:24 Exp:MRM_OZOILS_50
100%
2.7E7
Time
TIC (+RP) S:24 Exp:MRM_OZOILS_50
TIC (+RP) S:24 F:2 Exp:MRM_OZOILS_50
2.2E7
TIC (+RP) S:24 F:2 Exp:MRM_OZOILS_50

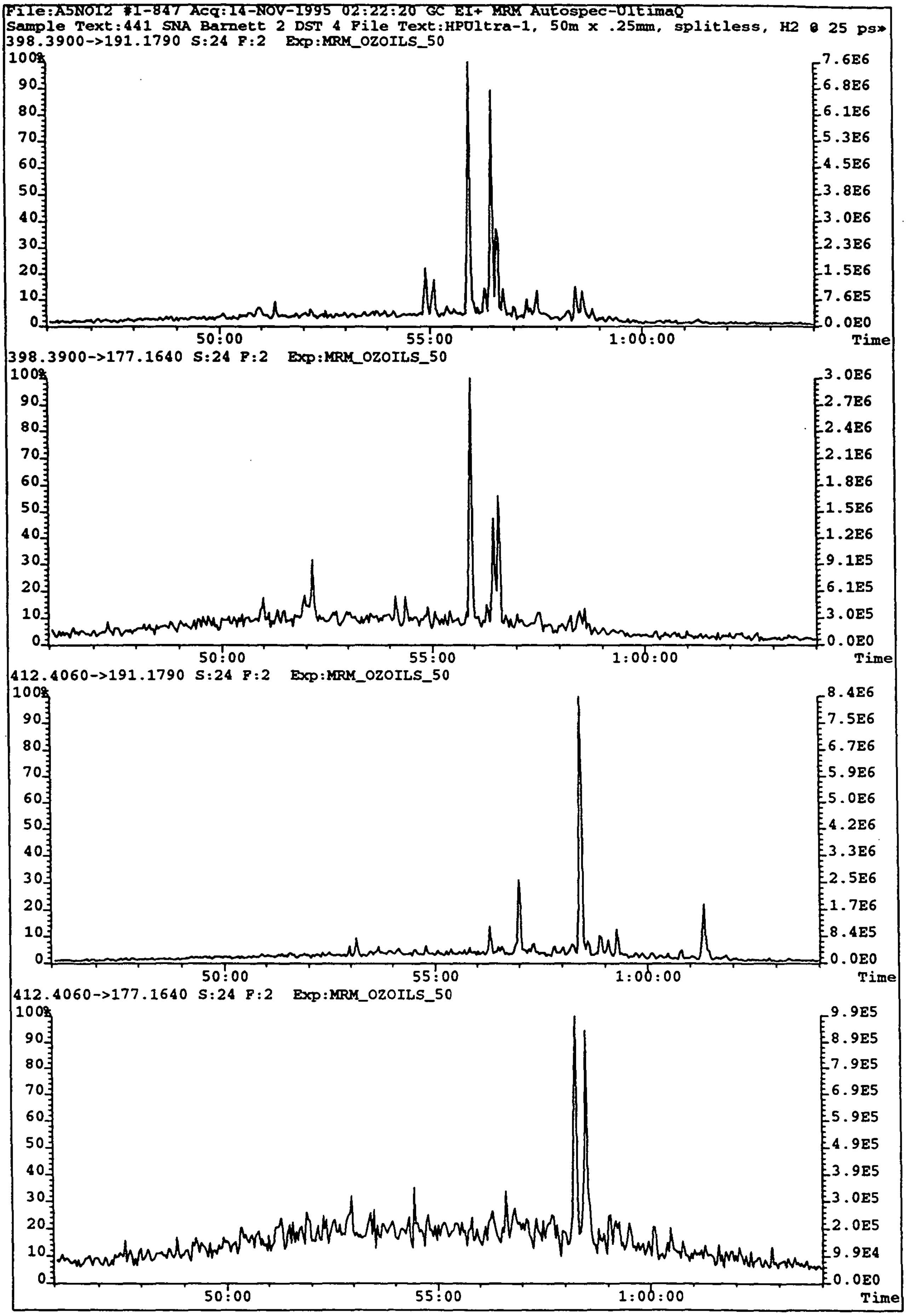

File:A5N012 #1-1251 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
262.2650->191.1790 S:24 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.9E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
276.2800->191.1790 S:24 Exp:MRM_OZOILS_50
9.1E6
7.3E6
5.5E6
3.6E6
1.8E6
0.0E0
290.2960->191.1790 S:24 Exp:MRM_OZOILS_50
1.3E7
1.1E7
8.1E6
5.4E6
2.7E6
0.0E0
304.3120->191.1790 S:24 Exp:MRM_OZOILS_50
2.9E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
318.3280->191.1790 S:24 Exp:MRM_OZOILS_50
1.5E7
1.2E7
8.9E6
6.0E6
3.0E6
0.0E0

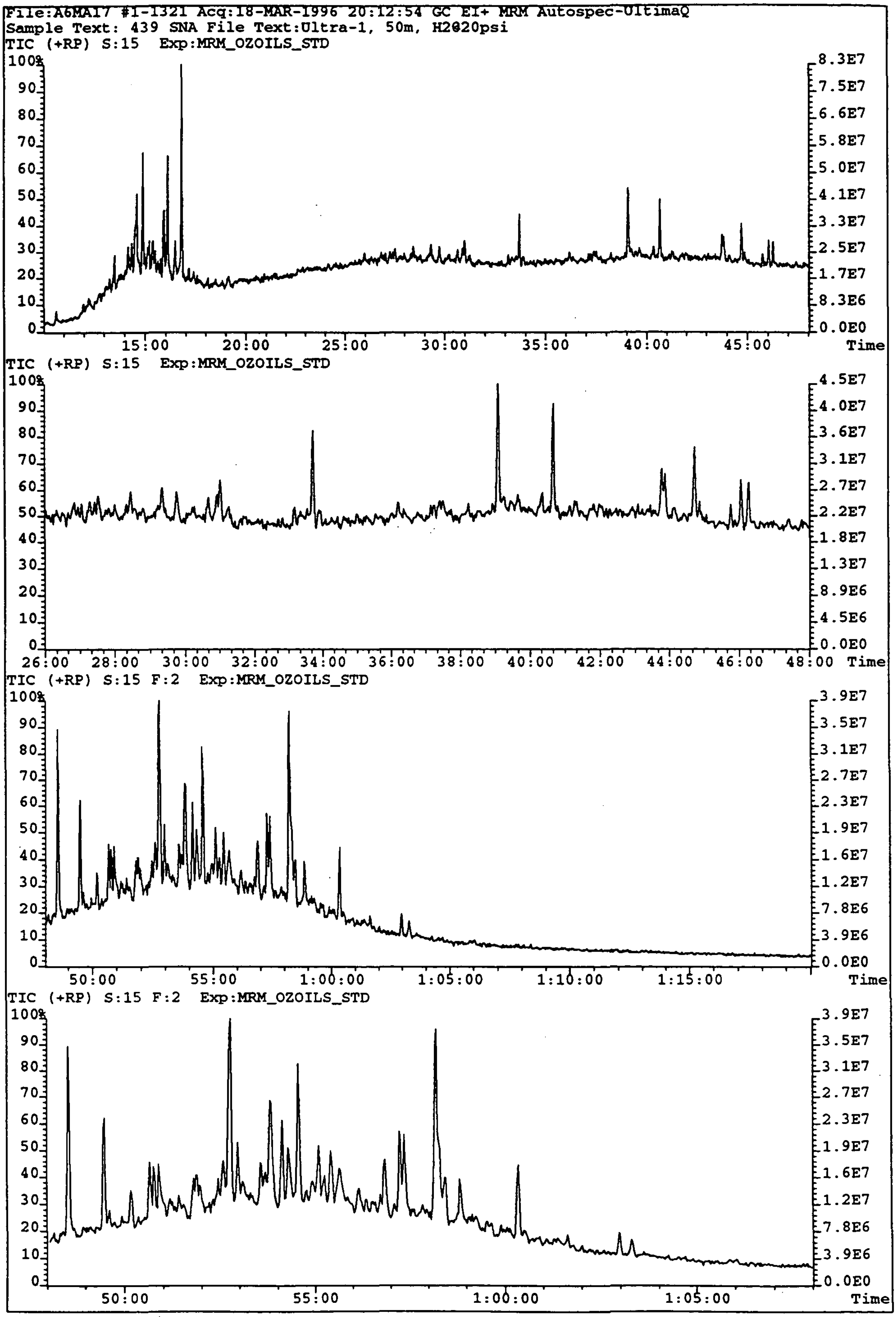

File:A5NO12 #1-1251 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
332.3440->191.1790 S:24 Exp:MRM_OZOILS_50
9.8E6
346.3590->191.1790 S:24 Exp:MRM_OZOILS_50
3.7E6
330.3280->191.1790 S:24 Exp:MRM_OZOILS_50
5.0E6
360.3740->191.1790 S:24 Exp:MRM_OZOILS_50
3.3E6
Time

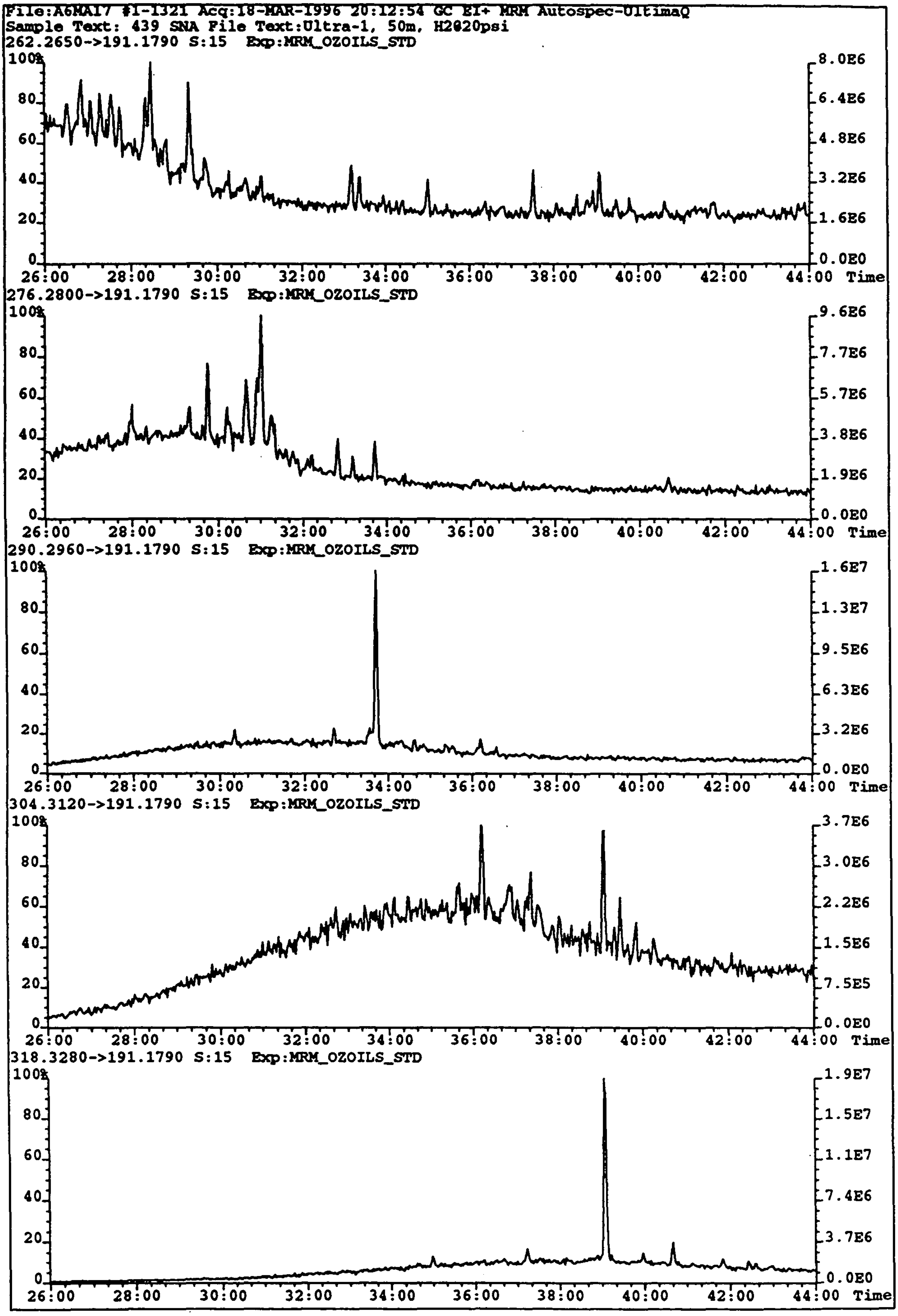

File:A5NO12 #1-847 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
372.3760->217.1960 S:24 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.6E7
1.3E7
9.6E6
6.4E6
3.2E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:24 F:2 Exp:MRM_OZOILS_50
4.4E6
3.5E6
2.6E6
1.8E6
8.8E5
0.0E0
400.4070->217.1960 S:24 F:2 Exp:MRM_OZOILS_50
1.1E7
8.9E6
6.7E6
4.4E6
2.2E6
0.0E0
414.4230->217.1960 S:24 F:2 Exp:MRM_OZOILS_50
7.8E5
6.2E5
4.7E5
3.1E5
1.6E5
0.0E0
414.4230->231.2120 S:24 F:2 Exp:MRM_OZOILS_50
1.1E6
8.9E5
6.7E5
4.4E5
2.2E5
0.0E0


File:A5NO12 #1-847 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
370.3590->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
5.6E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
384.3740->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
3.9E6
3.1E6
2.3E6
1.6E6
7.8E5
0.0E0
398.3900->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
7.6E6
6.1E6
4.5E6
3.0E6
1.5E6
0.0E0
412.4060->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
8.4E6
6.7E6
5.0E6
3.3E6
1.7E6
0.0E0
426.4210->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
2.3E6
1.8E6
1.4E6
9.1E5
4.6E5
0.0E0
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time

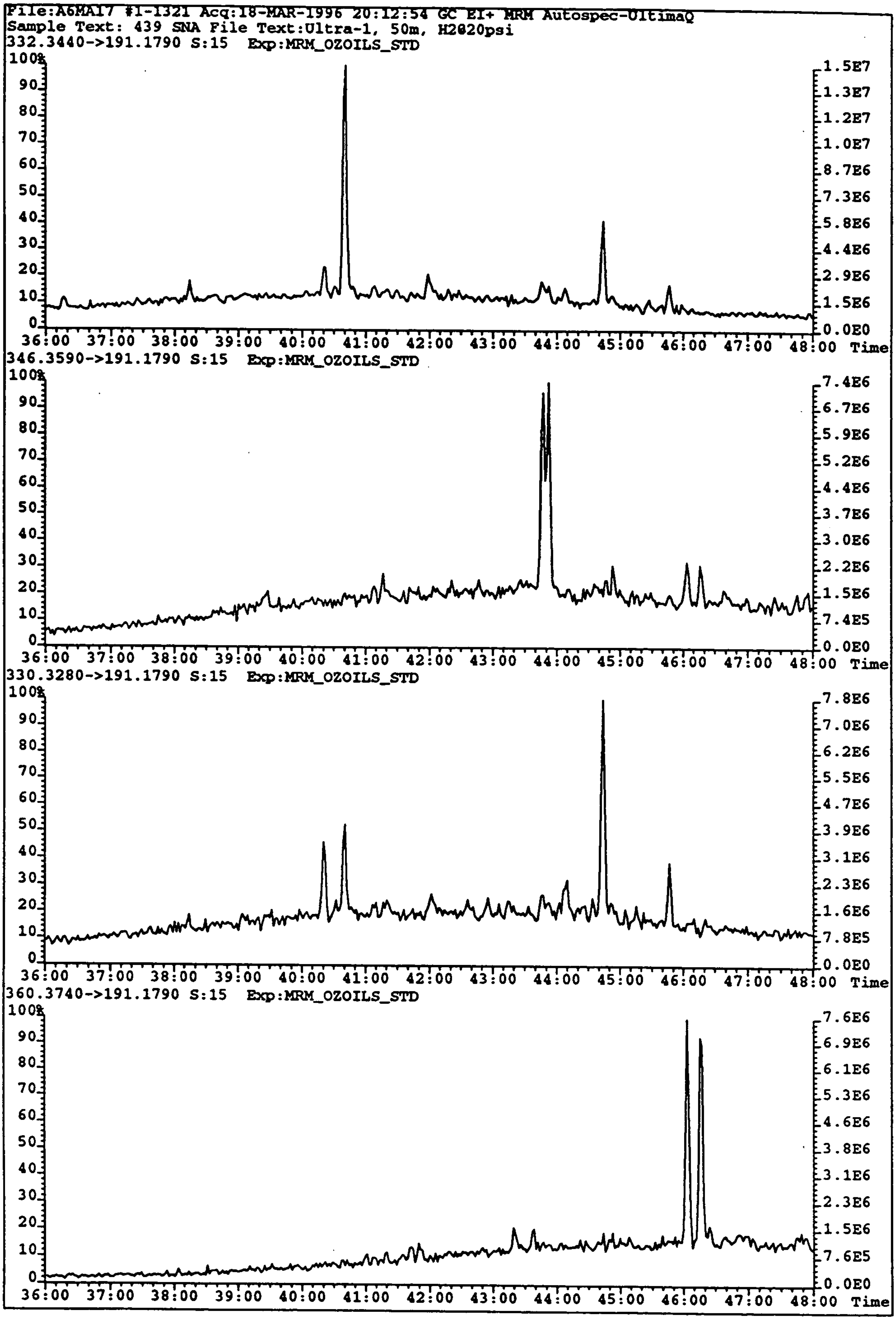

File:A5NO12 #1-847 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
412.4060->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
8.4E6
6.7E6
5.0E6
3.3E6
1.7E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
2.3E6
1.8E6
1.4E6
9.1E5
4.6E5
0.0E0
426.4210->205.1940 S:24 F:2 Exp:MRM_OZOILS_50
8.5E5
6.8E5
5.1E5
3.4E5
1.7E5
0.0E0
468.4670->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
4.3E5
3.4E5
2.6E5
1.7E5
8.6E4
0.0E0
482.4820->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
3.1E5
2.5E5
1.9E5
1.2E5
6.2E4
0.0E0


File:A5NO12 #1-847 Acq:14-NOV-1995 02:22:20 GC EI+ MRM Autospec-UltimaQ
Sample Text:441 SNA Barnett 2 DST 4 File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 ps»
398.3900->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
100%
7.6E6
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:24 F:2 Exp:MRM_OZOILS_50
3.0E6
0.0E0
412.4060->191.1790 S:24 F:2 Exp:MRM_OZOILS_50
8.4E6
0.0E0
412.4060->177.1640 S:24 F:2 Exp:MRM_OZOILS_50
9.9E5
0.0E0

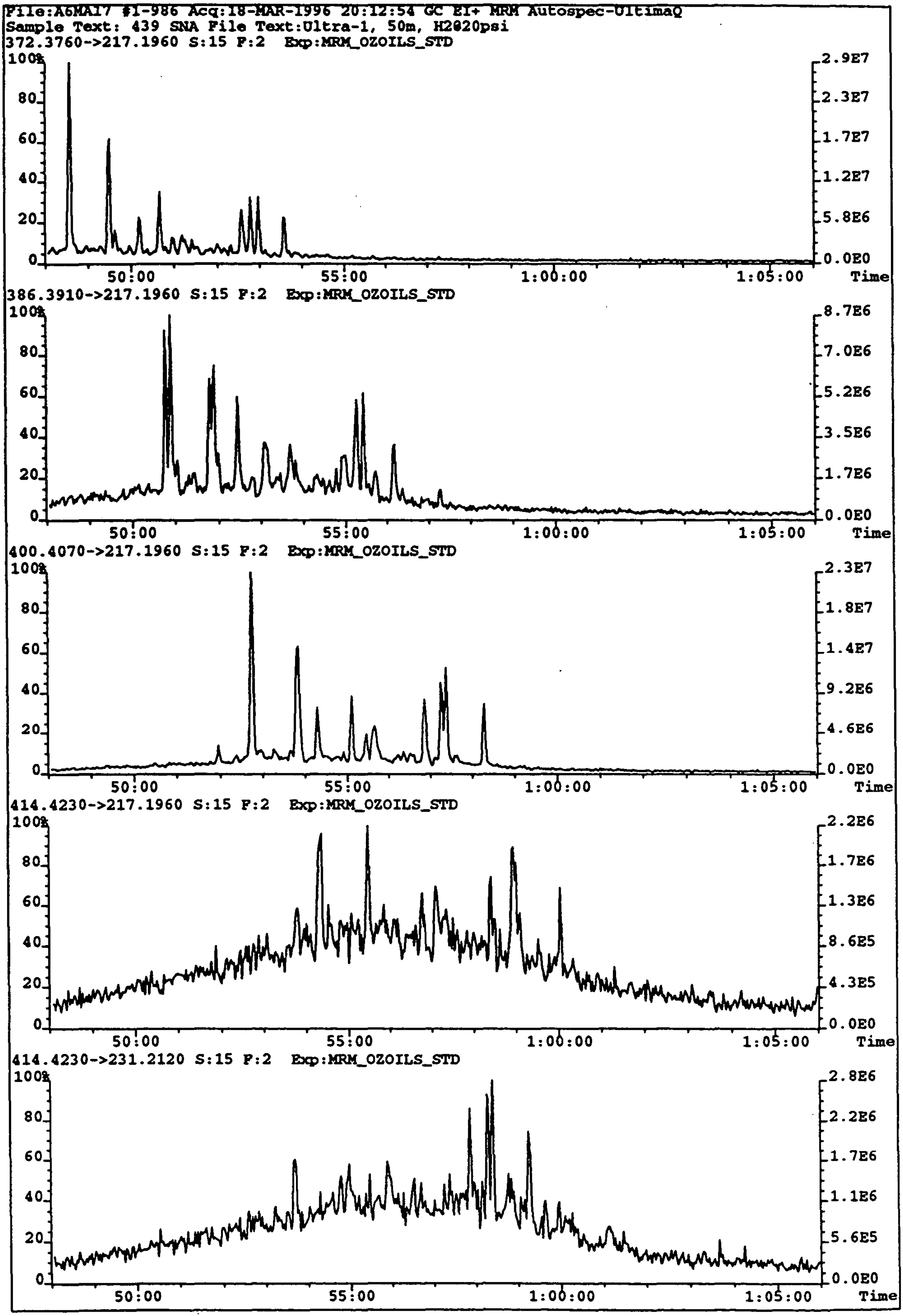

File:A6MA17 #1-1321 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2@20psi
TIC (+RP) S:15 Exp:MRM_OZOILS_STD
TIC (+RP) S:15 Exp:MRM_OZOILS_STD
TIC (+RP) S:15 F:2 Exp:MRM_OZOILS_STD
TIC (+RP) S:15 F:2 Exp:MRM_OZOILS_STD
Time



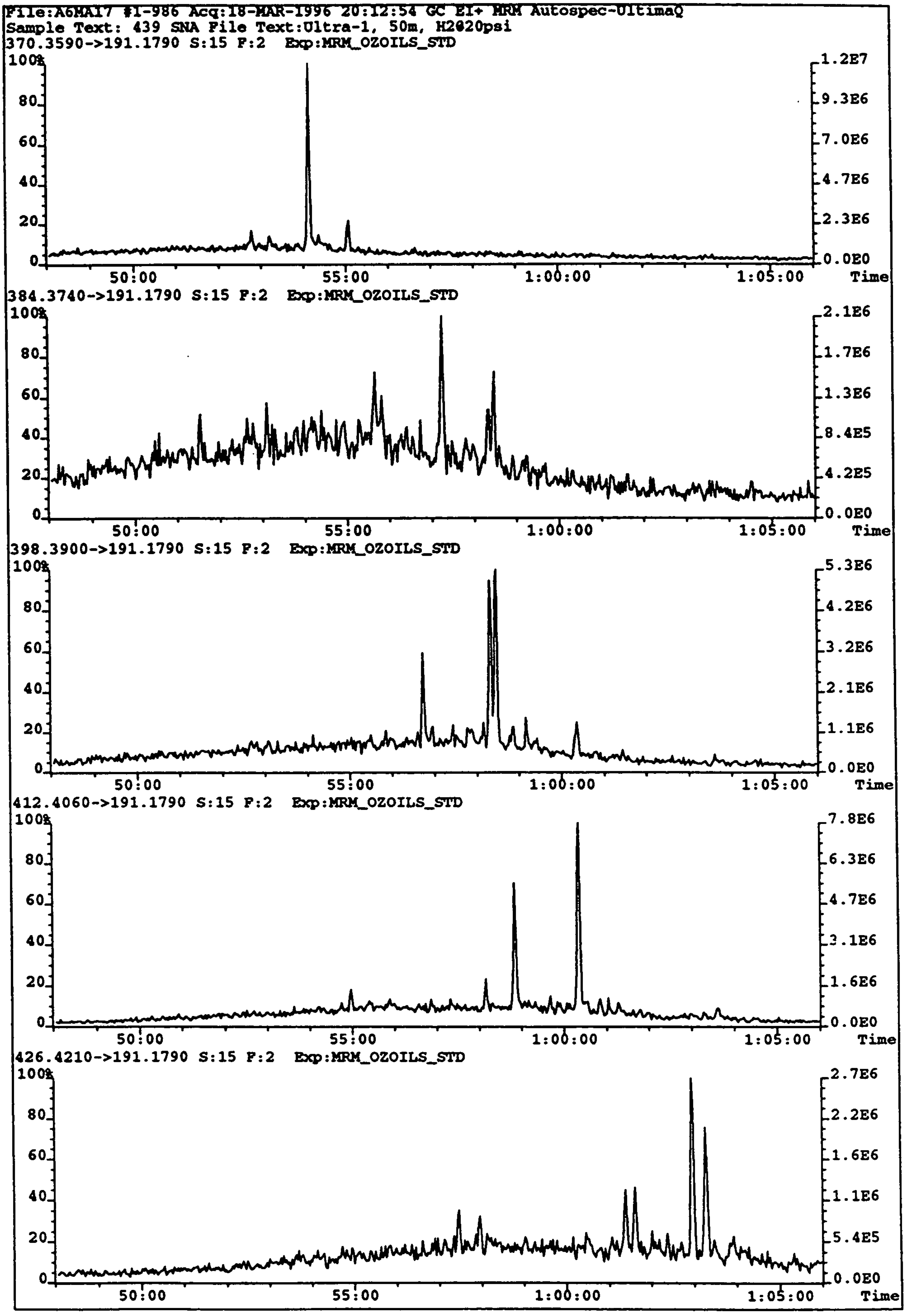
File:A6MA17 #1-1321 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2020psi
262.2650->191.1790 S:15 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
Time
276.2800->191.1790 S:15 Exp:MRM_OZOILS_STD
9.6E6
7.7E6
5.7E6
3.8E6
1.9E6
0.0E0
290.2960->191.1790 S:15 Exp:MRM_OZOILS_STD
1.6E7
1.3E7
9.5E6
6.3E6
3.2E6
0.0E0
304.3120->191.1790 S:15 Exp:MRM_OZOILS_STD
3.7E6
3.0E6
2.2E6
1.5E6
7.5E5
0.0E0
318.3280->191.1790 S:15 Exp:MRM_OZOILS_STD
1.9E7
1.5E7
1.1E7
7.4E6
3.7E6
0.0E0

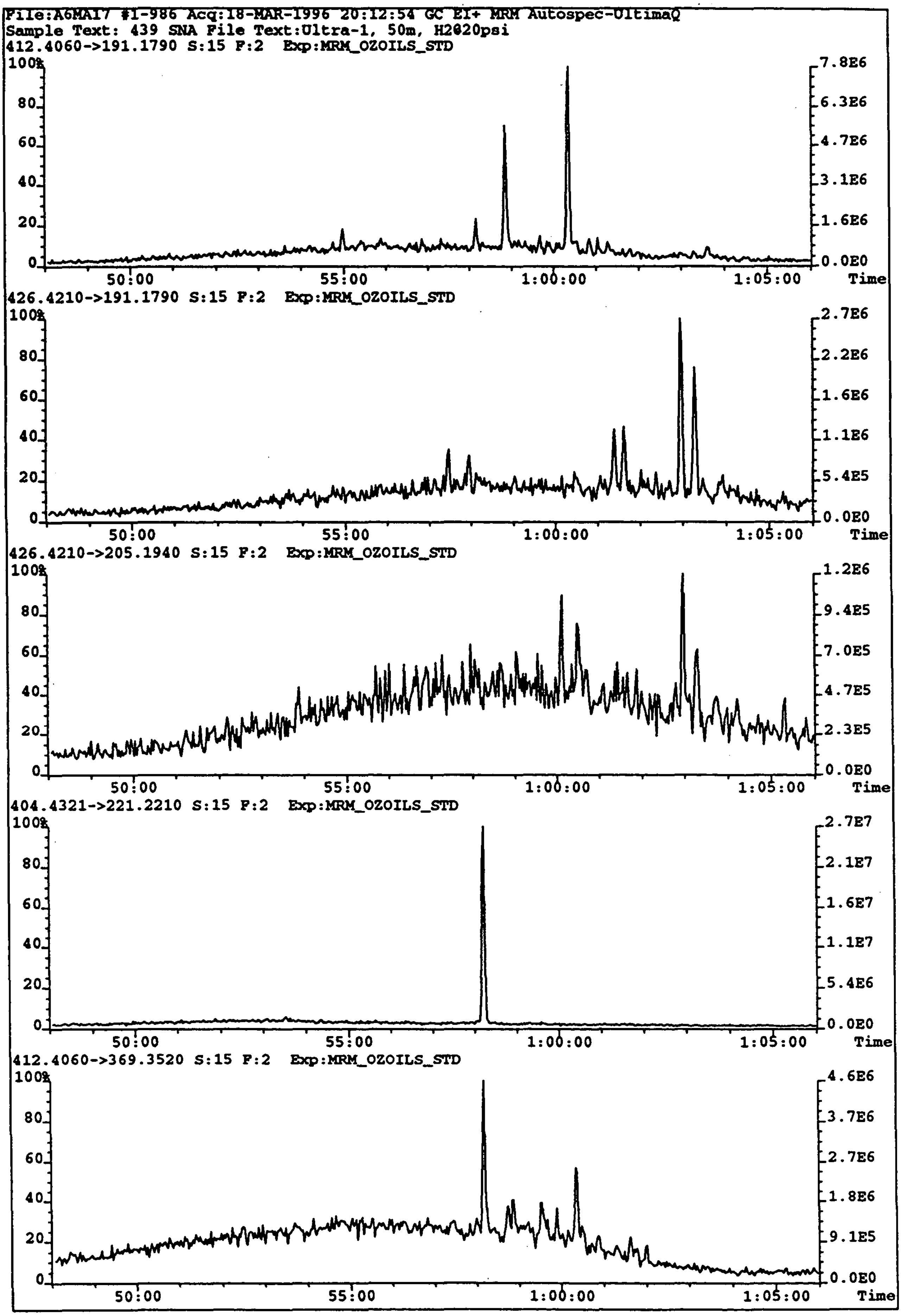


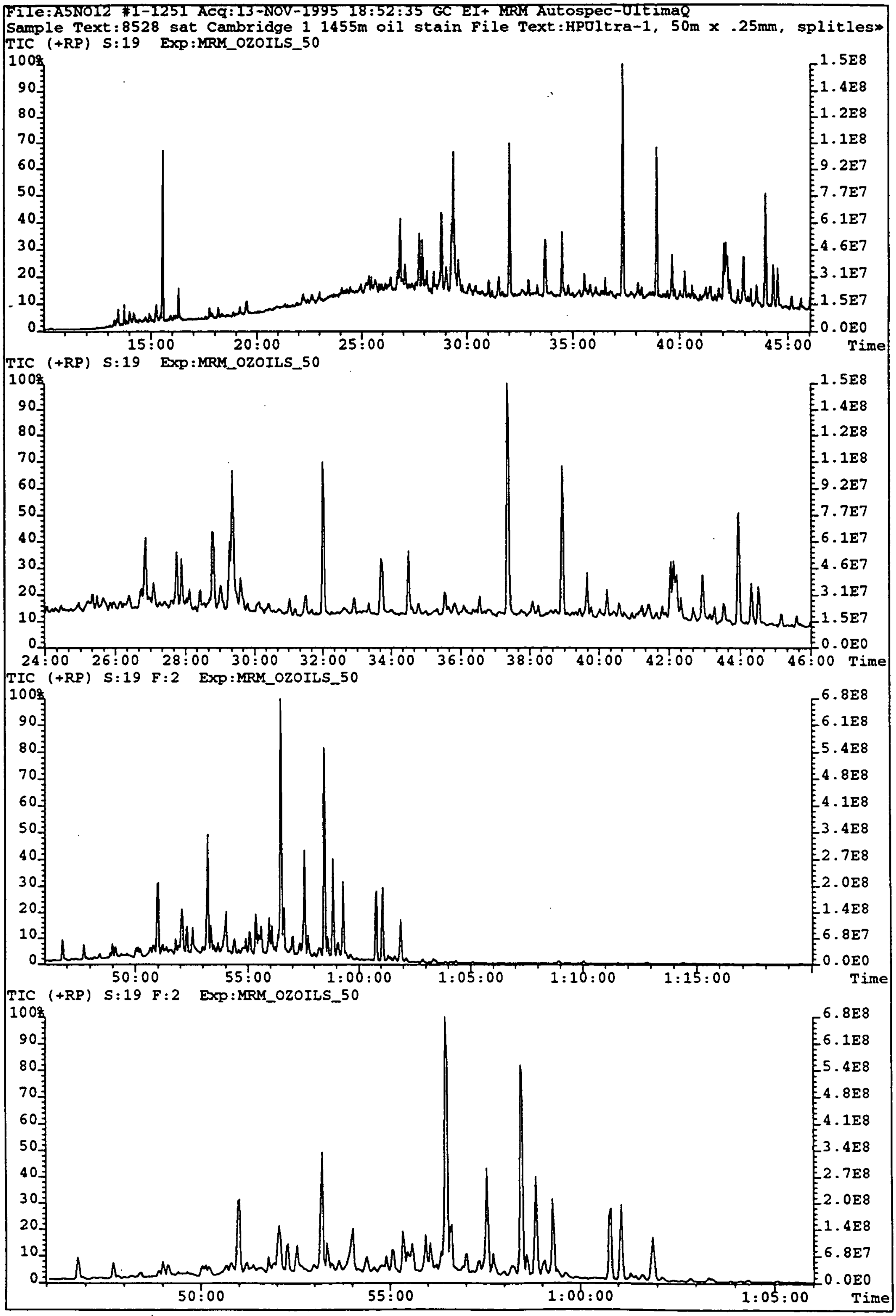
File:A6MA17 #1-1321 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2@20psi
332.3440->191.1790 S:15 Exp:MRM_OZOILS_STD
346.3590->191.1790 S:15 Exp:MRM_OZOILS_STD
330.3280->191.1790 S:15 Exp:MRM_OZOILS_STD
360.3740->191.1790 S:15 Exp:MRM_OZOILS_STD
Time



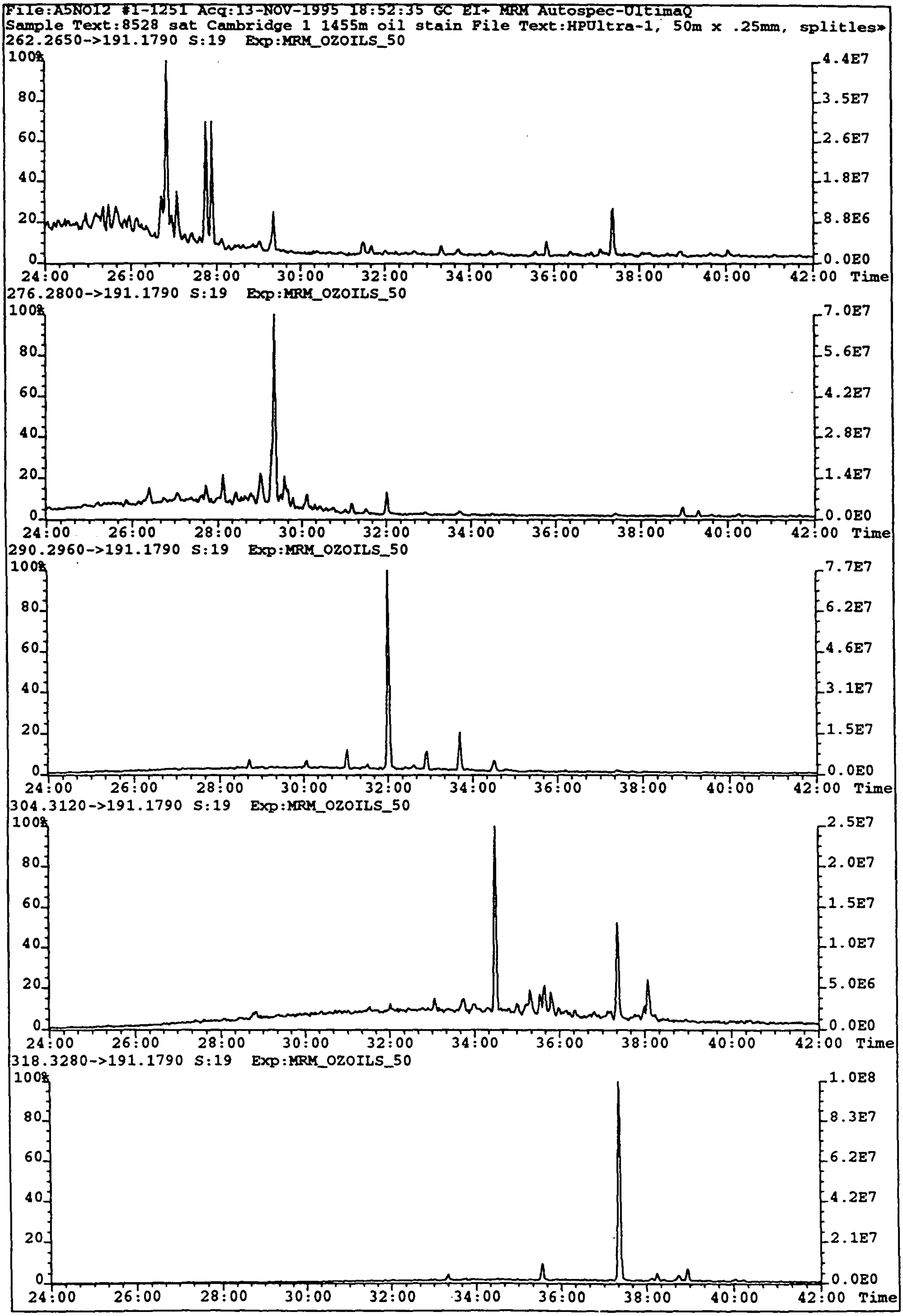
File:A6MA17 #1-986 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2020psi
372.3760->217.1960 S:15 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
2.9E7
2.3E7
1.7E7
1.2E7
5.8E6
0.0E0
50:00
55:00
1:00:00
1:05:00
Time
386.3910->217.1960 S:15 F:2 Exp:MRM_OZOILS_STD
8.7E6
7.0E6
5.2E6
3.5E6
1.7E6
0.0E0
400.4070->217.1960 S:15 F:2 Exp:MRM_OZOILS_STD
2.3E7
1.8E7
1.4E7
9.2E6
4.6E6
0.0E0
414.4230->217.1960 S:15 F:2 Exp:MRM_OZOILS_STD
2.2E6
1.7E6
1.3E6
8.6E5
4.3E5
0.0E0
414.4230->231.2120 S:15 F:2 Exp:MRM_OZOILS_STD
2.8E6
2.2E6
1.7E6
1.1E6
5.6E5
0.0E0

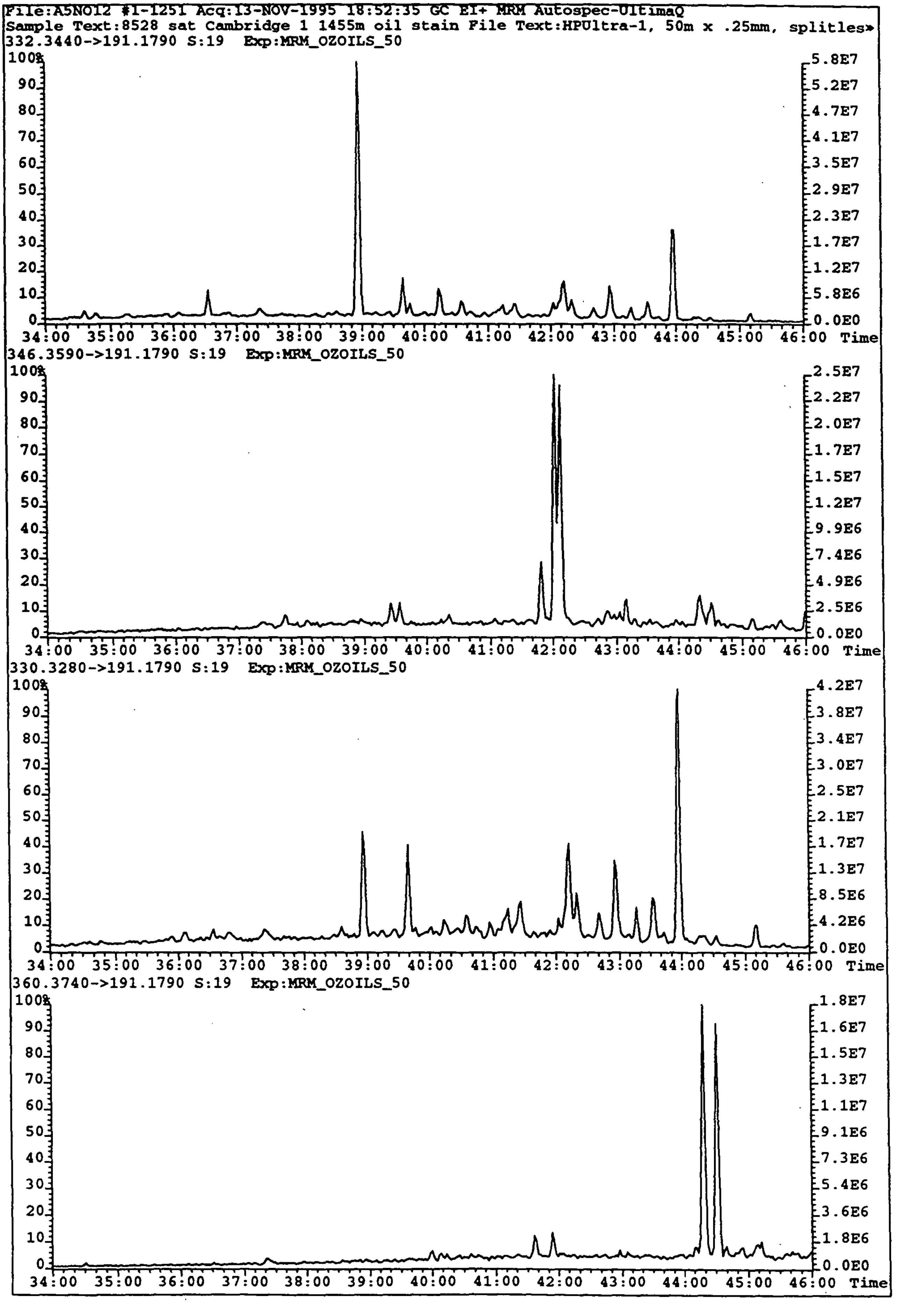

File:A6MA17 #1-986 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2020psi
370.3590->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
1.2E7
384.3740->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
2.1E6
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
5.3E6
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
7.8E6
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
2.7E6
50:00
55:00
1:00:00
1:05:00
Time

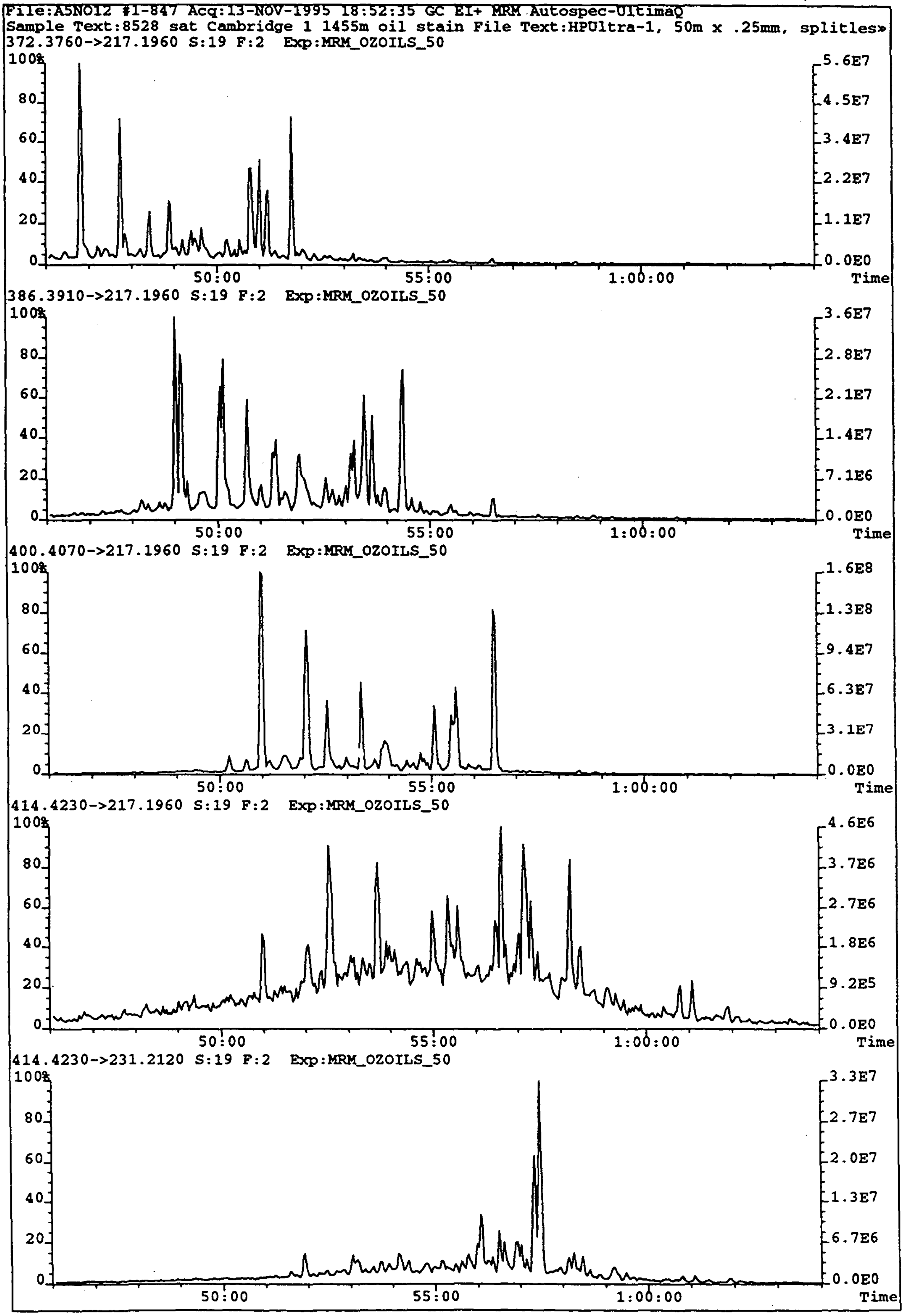

File:A6MA17 #1-986 Acq:18-MAR-1996 20:12:54 GC EI+ MRM Autospec-UltimaQ
Sample Text: 439 SNA File Text:Ultra-1, 50m, H2@20psi
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_STD
426.4210->205.1940 S:15 F:2 Exp:MRM_OZOILS_STD
404.4321->221.2210 S:15 F:2 Exp:MRM_OZOILS_STD
412.4060->369.3520 S:15 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
50:00
55:00
1:00:00
1:05:00
Time
7.8E6
6.3E6
4.7E6
3.1E6
1.6E6
0.0E0
2.7E6
2.2E6
1.6E6
1.1E6
5.4E5
1.2E6
9.4E5
7.0E5
4.7E5
2.3E5
2.7E7
2.1E7
1.6E7
1.1E7
5.4E6
4.6E6
3.7E6
2.7E6
1.8E6
9.1E5



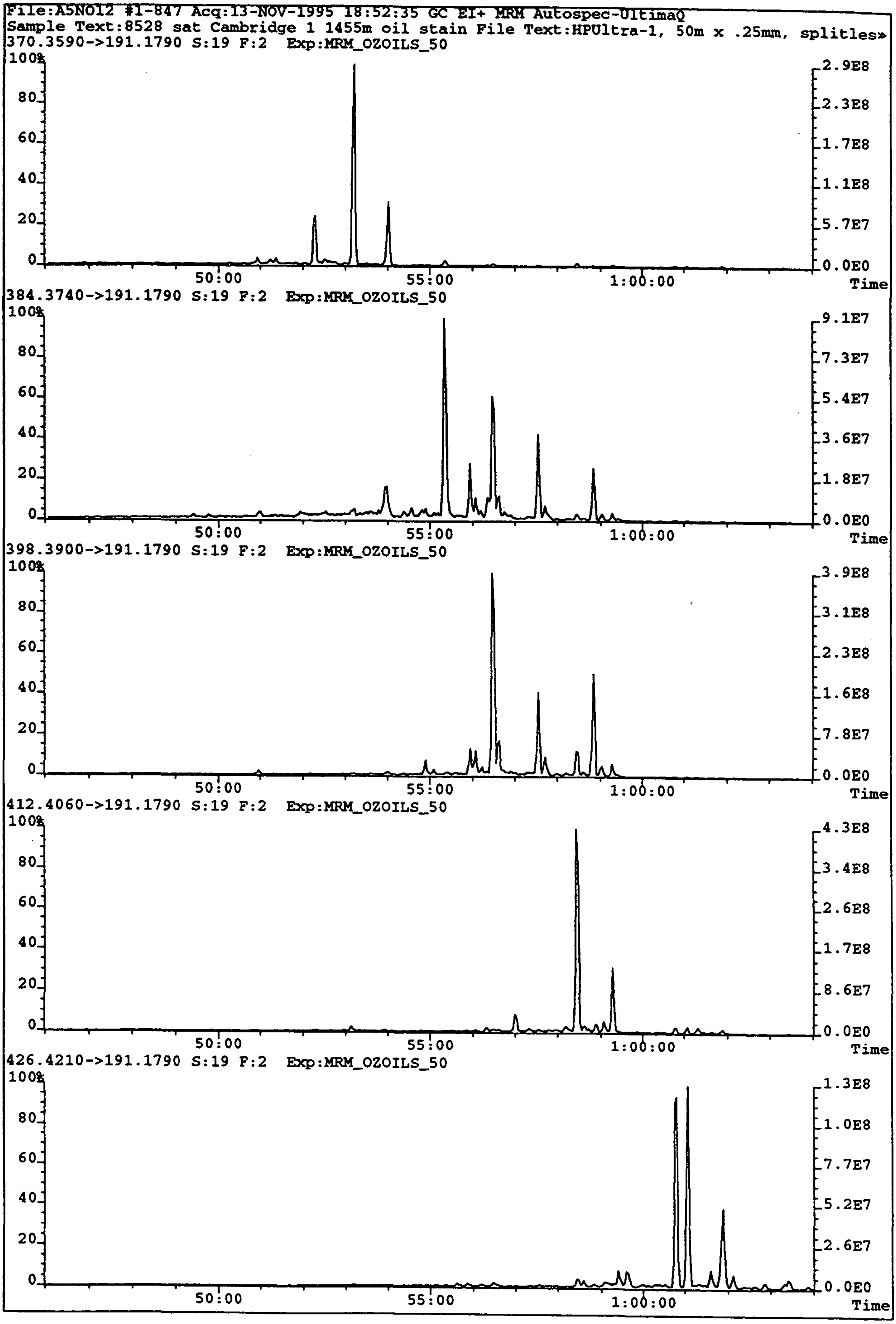
File:A5N012 #1-1251 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
TIC (+RP) S:19 Exp:MRM_OZOILS_50
TIC (+RP) S:19 Exp:MRM_OZOILS_50
TIC (+RP) S:19 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:19 F:2 Exp:MRM_OZOILS_50
Time

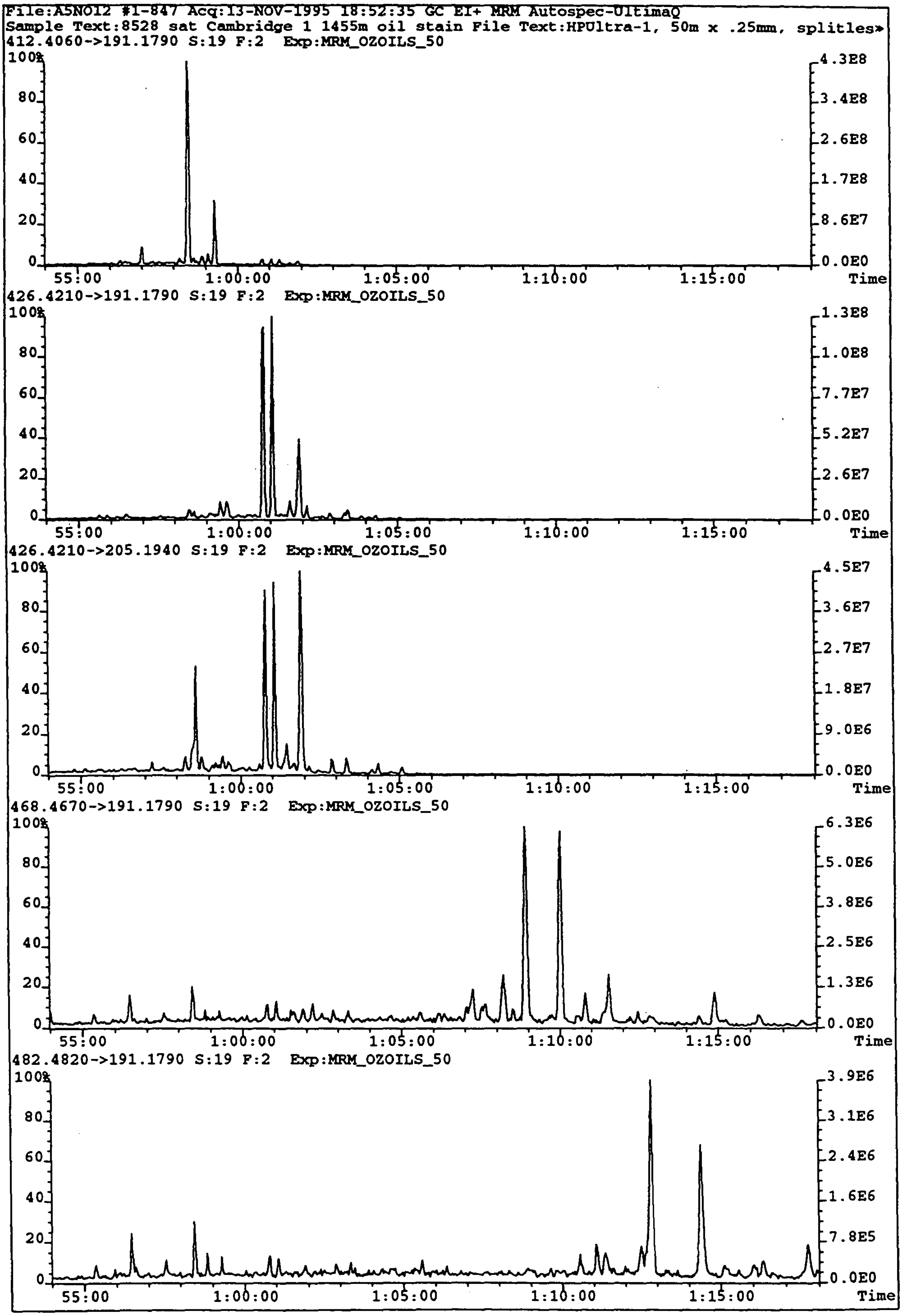

File:A5NO12 #1-1251 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
262.2650->191.1790 S:19 Exp:MRM_OZOILS_50
276.2800->191.1790 S:19 Exp:MRM_OZOILS_50
290.2960->191.1790 S:19 Exp:MRM_OZOILS_50
304.3120->191.1790 S:19 Exp:MRM_OZOILS_50
318.3280->191.1790 S:19 Exp:MRM_OZOILS_50
Time

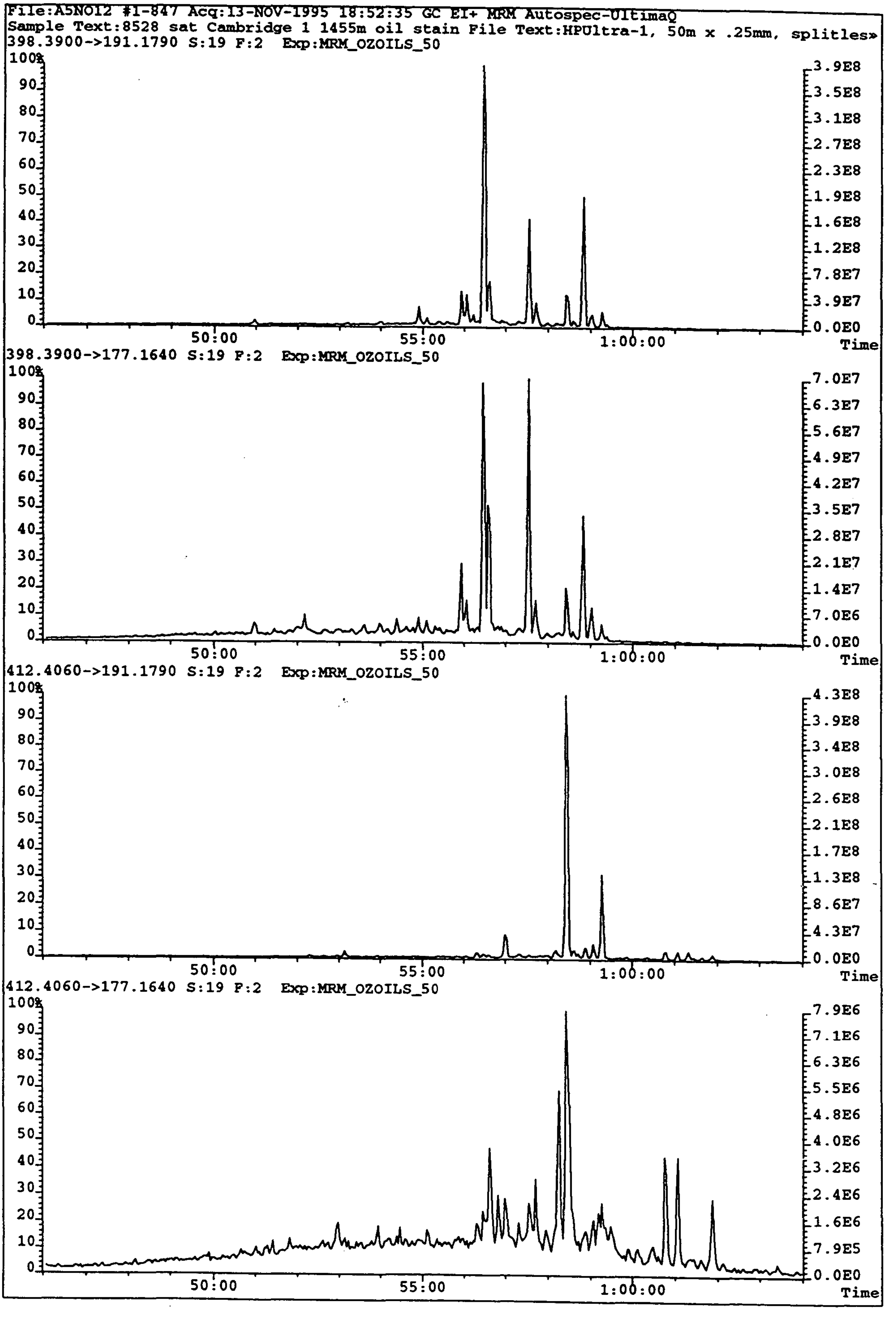

File:A5NO12 #1-1251 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
332.3440->191.1790 S:19 Exp:MRM_OZOILS_50
346.3590->191.1790 S:19 Exp:MRM_OZOILS_50
330.3280->191.1790 S:19 Exp:MRM_OZOILS_50
360.3740->191.1790 S:19 Exp:MRM_OZOILS_50
Time

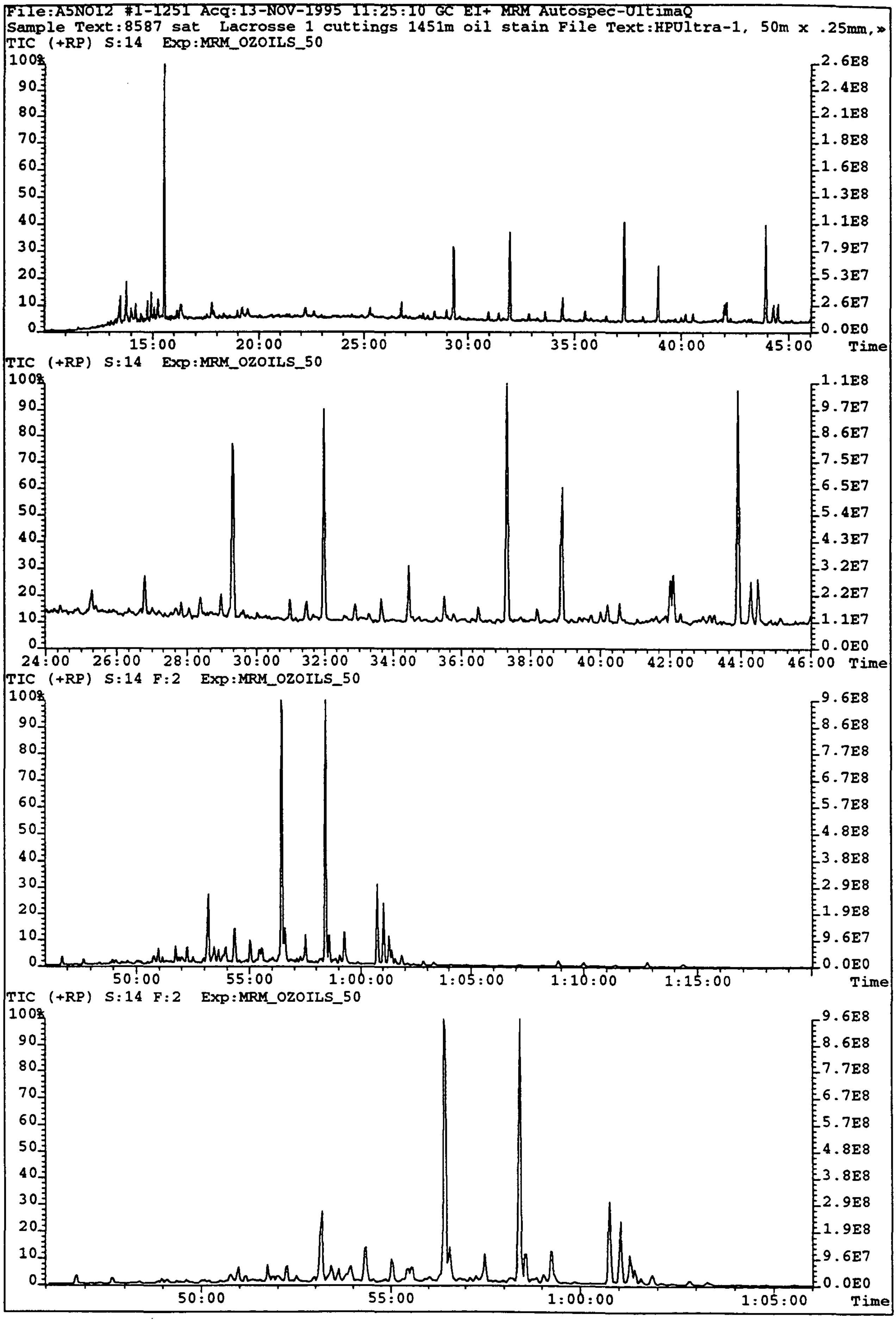


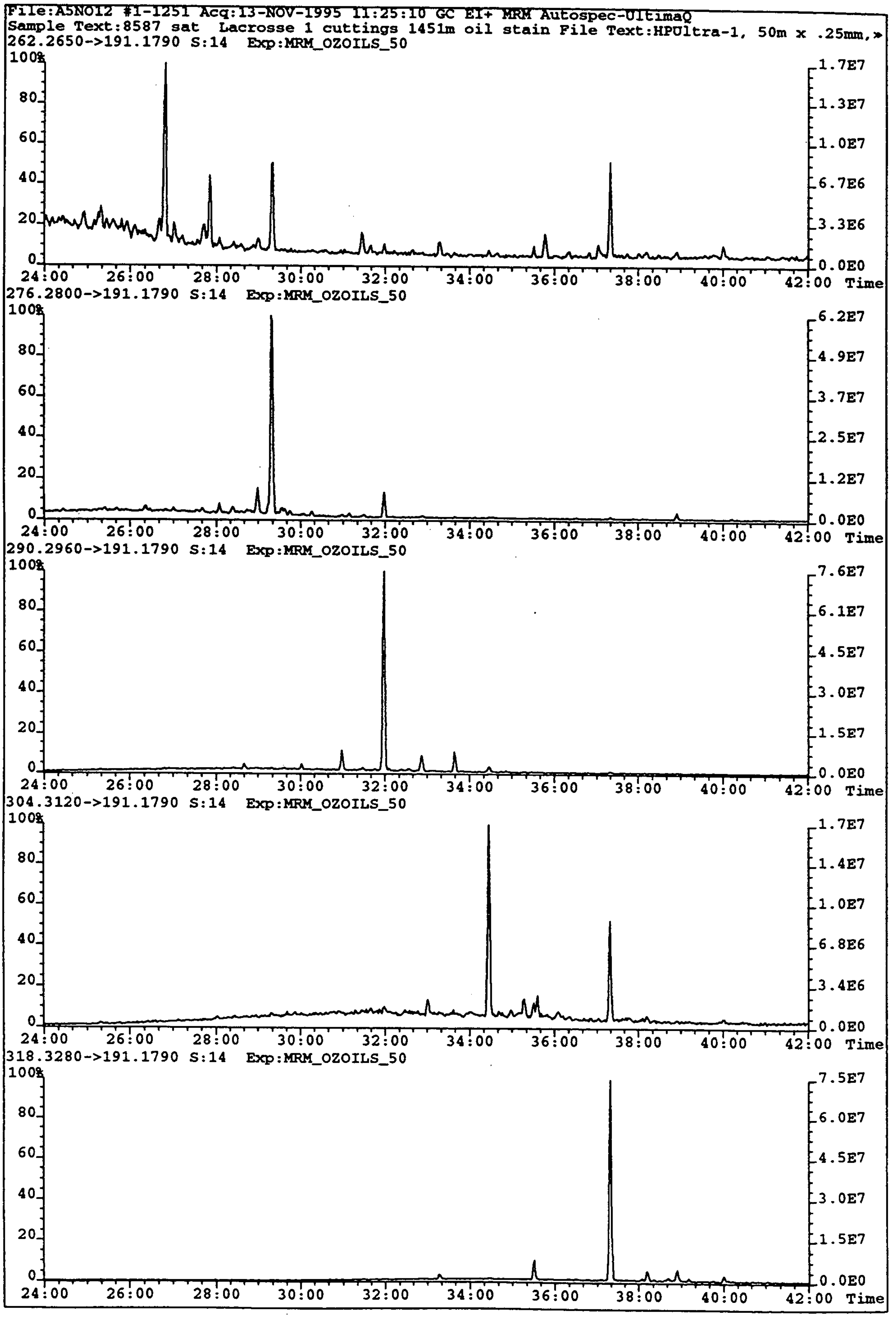
File:A5NO12 #1-847 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
372.3760->217.1960 S:19 F:2 Exp:MRM_OZOILS_50
386.3910->217.1960 S:19 F:2 Exp:MRM_OZOILS_50
400.4070->217.1960 S:19 F:2 Exp:MRM_OZOILS_50
414.4230->217.1960 S:19 F:2 Exp:MRM_OZOILS_50
414.4230->231.2120 S:19 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
5.6E7
4.5E7
3.4E7
2.2E7
1.1E7
0.0E0
3.6E7
2.8E7
2.1E7
1.4E7
7.1E6
1.6E8
1.3E8
9.4E7
6.3E7
3.1E7
4.6E6
3.7E6
2.7E6
1.8E6
9.2E5
3.3E7
2.7E7
2.0E7
1.3E7
6.7E6

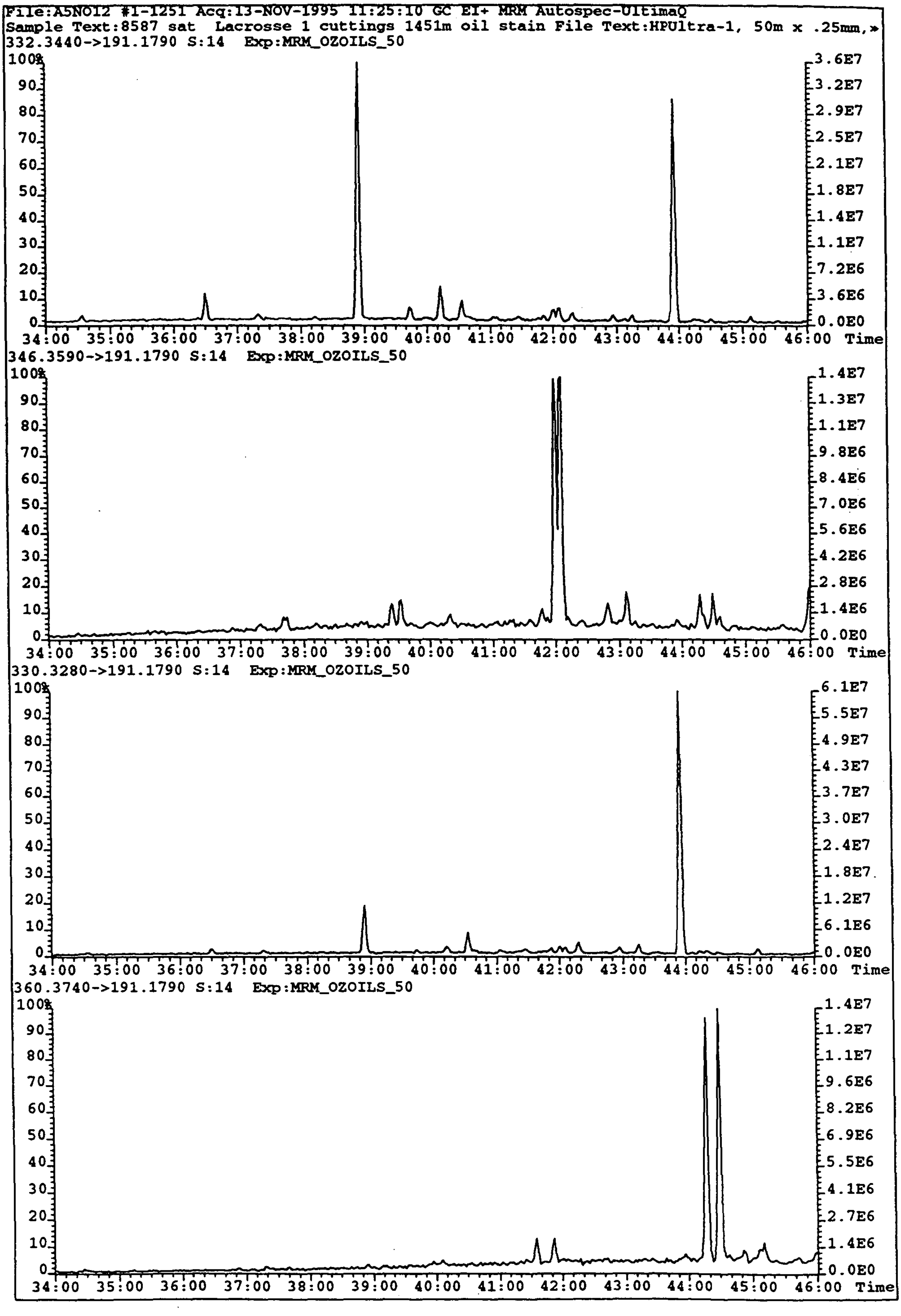

File:A5NO12 #1-847 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
370.3590->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
2.9E8
2.3E8
1.7E8
1.1E8
5.7E7
0.0E0
384.3740->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
9.1E7
7.3E7
5.4E7
3.6E7
1.8E7
0.0E0
398.3900->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
3.9E8
3.1E8
2.3E8
1.6E8
7.8E7
0.0E0
412.4060->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
4.3E8
3.4E8
2.6E8
1.7E8
8.6E7
0.0E0
426.4210->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
1.3E8
1.0E8
7.7E7
5.2E7
2.6E7
0.0E0
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time

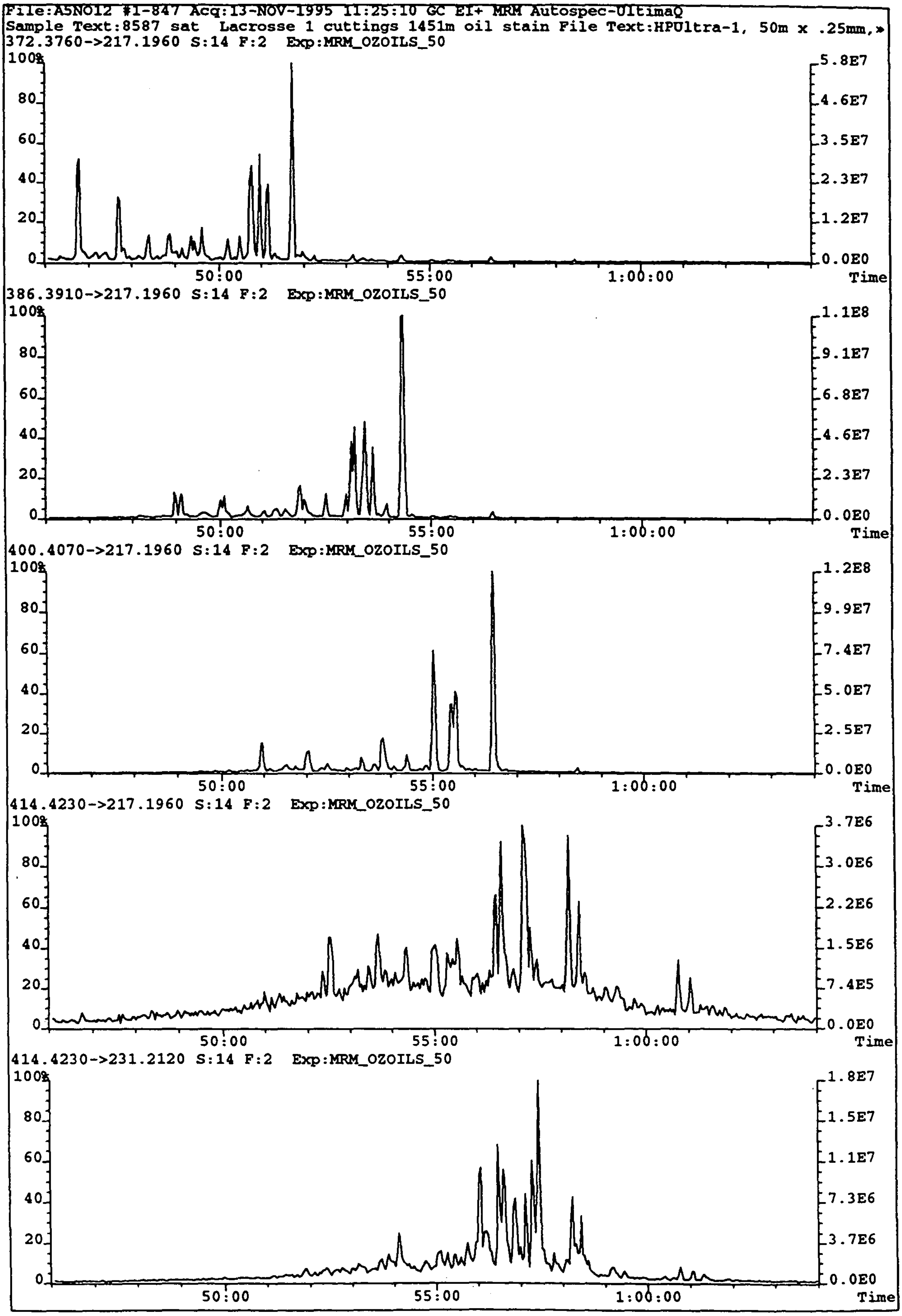

File:A5NO12 #1-847 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
412.4060->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
426.4210->205.1940 S:19 F:2 Exp:MRM_OZOILS_50
468.4670->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
482.4820->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
Time

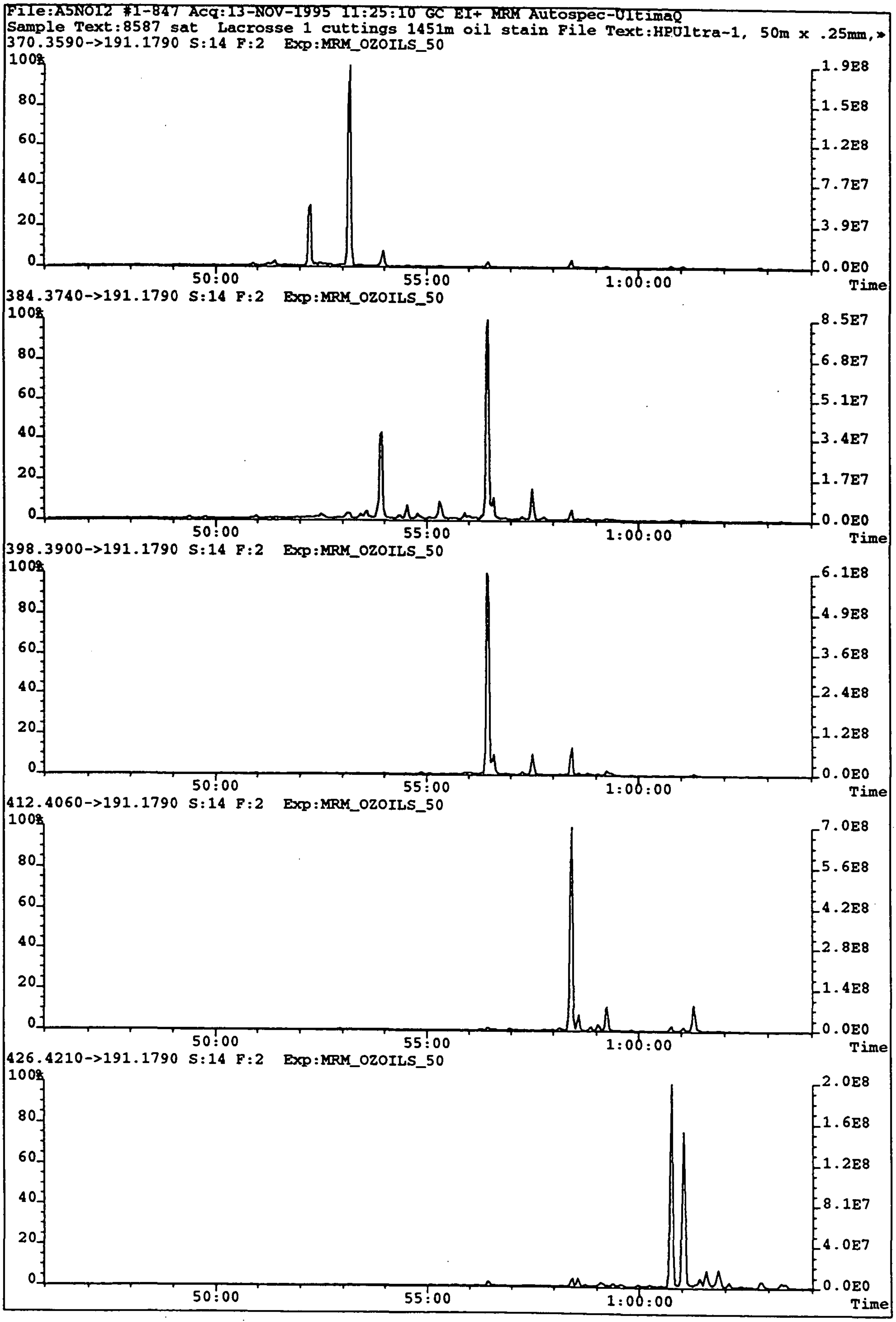

File:A5NO12 #1-847 Acq:13-NOV-1995 18:52:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8528 sat Cambridge 1 1455m oil stain File Text:HPUltra-1, 50m x .25mm, splitles»
398.3900->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
3.9E8
3.5E8
3.1E8
2.7E8
2.3E8
1.9E8
1.6E8
1.2E8
7.8E7
3.9E7
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:19 F:2 Exp:MRM_OZOILS_50
7.0E7
6.3E7
5.6E7
4.9E7
4.2E7
3.5E7
2.8E7
2.1E7
1.4E7
7.0E6
0.0E0
412.4060->191.1790 S:19 F:2 Exp:MRM_OZOILS_50
4.3E8
3.9E8
3.4E8
3.0E8
2.6E8
2.1E8
1.7E8
1.3E8
8.6E7
4.3E7
0.0E0
412.4060->177.1640 S:19 F:2 Exp:MRM_OZOILS_50
7.9E6
7.1E6
6.3E6
5.5E6
4.8E6
4.0E6
3.2E6
2.4E6
1.6E6
7.9E5
0.0E0

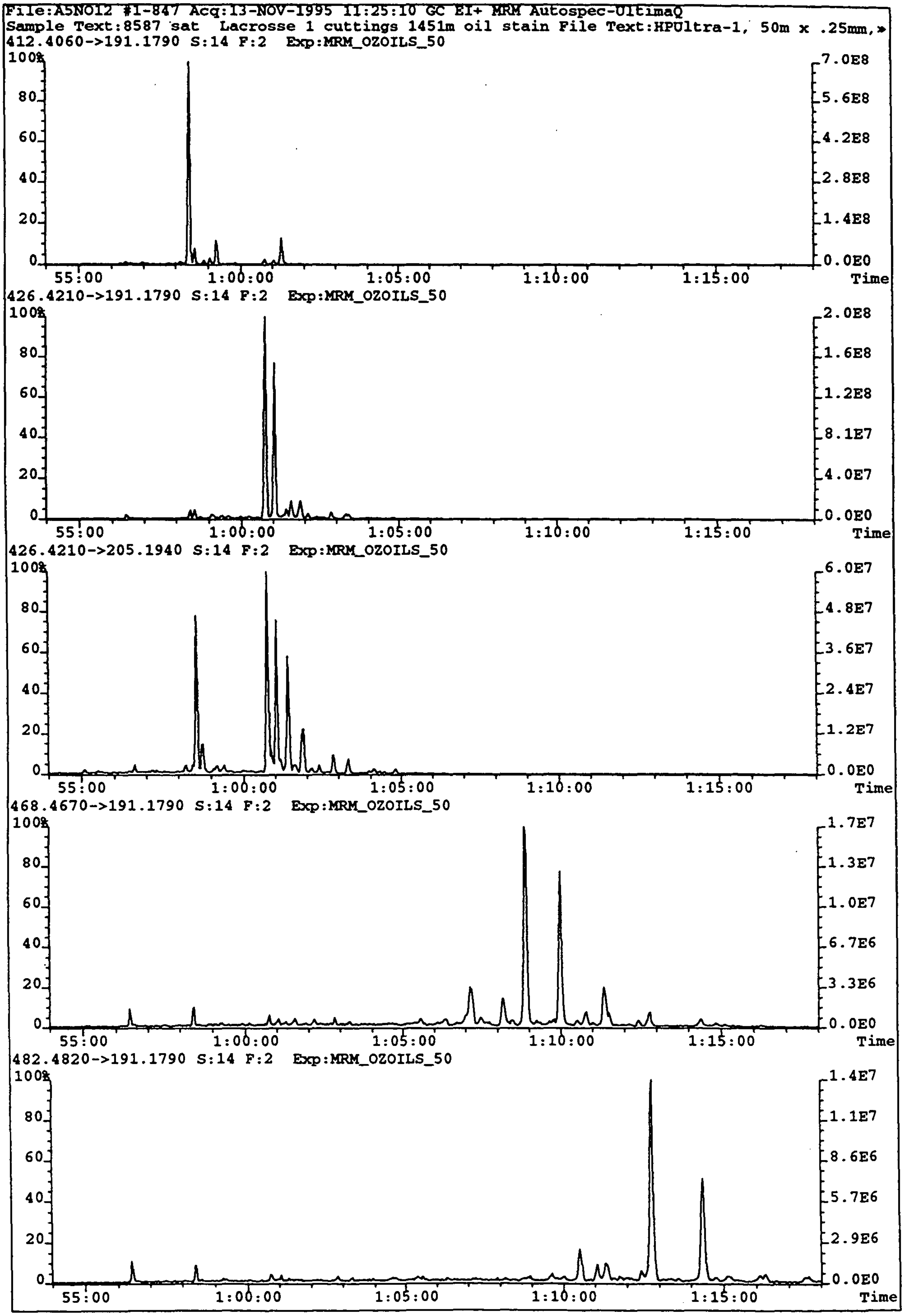

File:A5NO12 #1-1251 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
TIC (+RP) S:14 Exp:MRM_OZOILS_50
TIC (+RP) S:14 Exp:MRM_OZOILS_50
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
Time

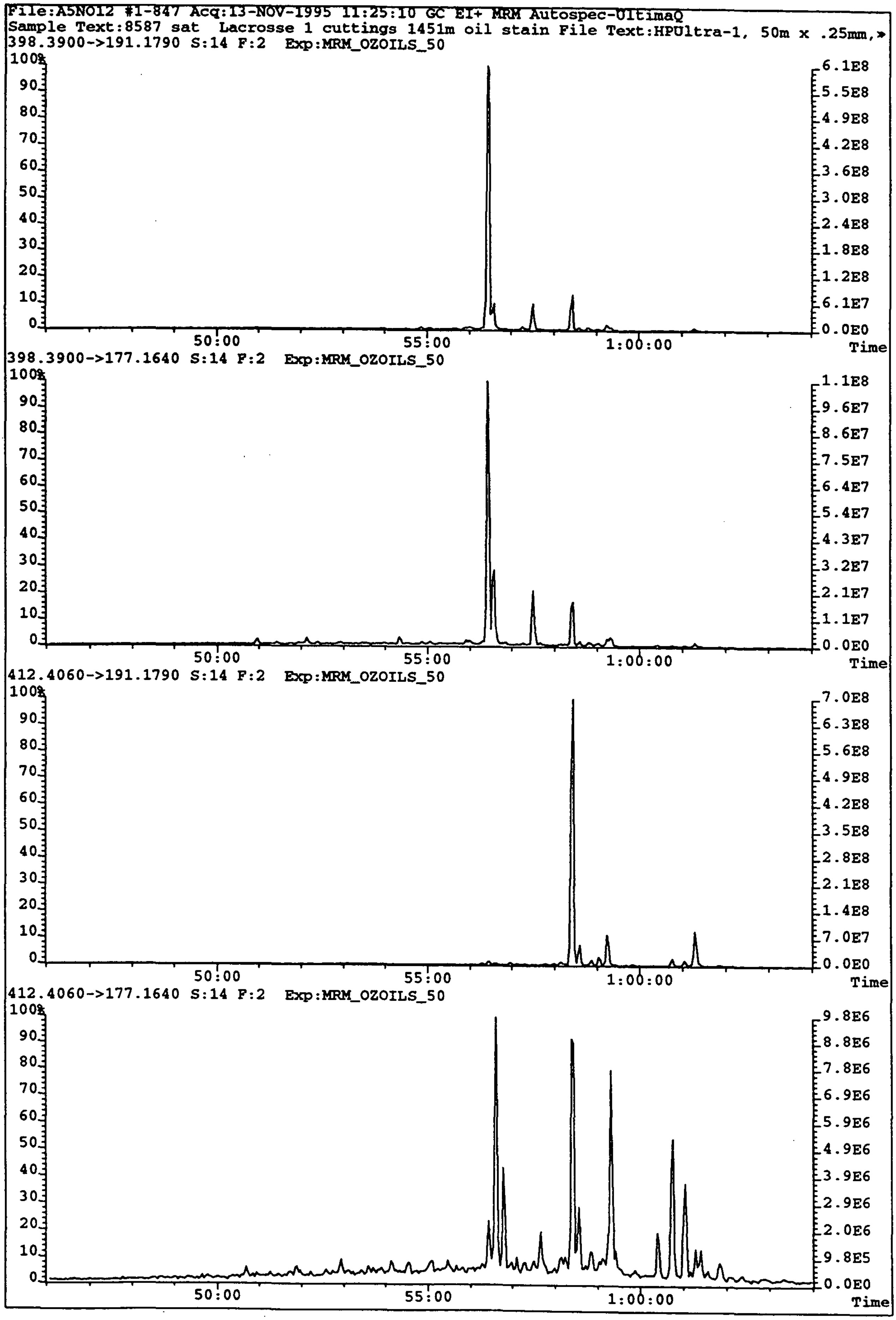

File:A5N012 #1-1251 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
262.2650->191.1790 S:14 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.7E7
1.3E7
1.0E7
6.7E6
3.3E6
0.0E0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
276.2800->191.1790 S:14 Exp:MRM_OZOILS_50
6.2E7
4.9E7
3.7E7
2.5E7
1.2E7
0.0E0
290.2960->191.1790 S:14 Exp:MRM_OZOILS_50
7.6E7
6.1E7
4.5E7
3.0E7
1.5E7
0.0E0
304.3120->191.1790 S:14 Exp:MRM_OZOILS_50
1.7E7
1.4E7
1.0E7
6.8E6
3.4E6
0.0E0
318.3280->191.1790 S:14 Exp:MRM_OZOILS_50
7.5E7
6.0E7
4.5E7
3.0E7
1.5E7
0.0E0

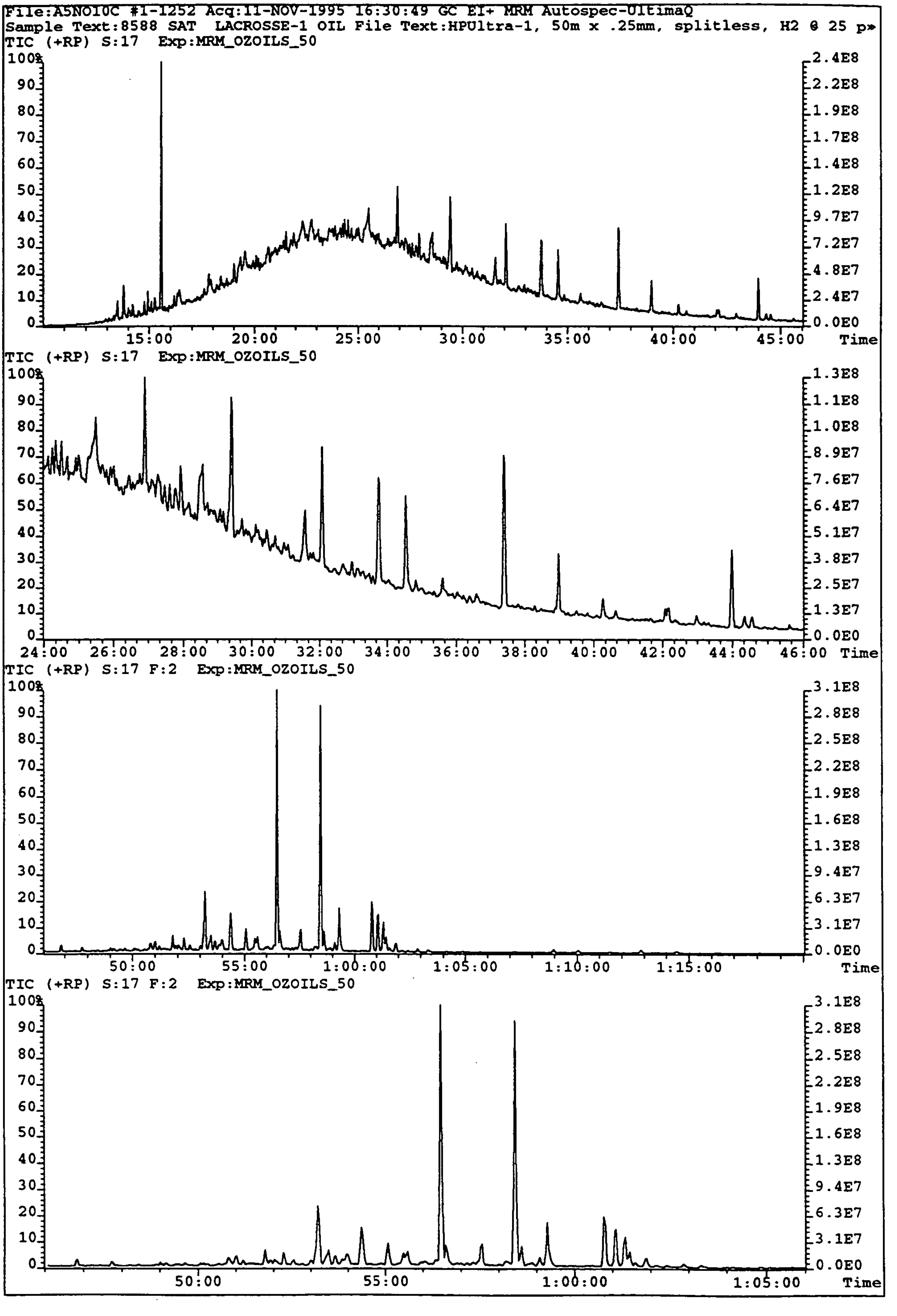

File:A5NO12 #1-1251 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
332.3440->191.1790 S:14 Exp:MRM_OZOILS_50
346.3590->191.1790 S:14 Exp:MRM_OZOILS_50
330.3280->191.1790 S:14 Exp:MRM_OZOILS_50
360.3740->191.1790 S:14 Exp:MRM_OZOILS_50
Time


File:A5NO12 #1-847 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
372.3760->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.8E7
4.6E7
3.5E7
2.3E7
1.2E7
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.1E8
9.1E7
6.8E7
4.6E7
2.3E7
0.0E0
50:00
55:00
1:00:00
Time
400.4070->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E8
9.9E7
7.4E7
5.0E7
2.5E7
0.0E0
50:00
55:00
1:00:00
Time
414.4230->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.7E6
3.0E6
2.2E6
1.5E6
7.4E5
0.0E0
50:00
55:00
1:00:00
Time
414.4230->231.2120 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.8E7
1.5E7
1.1E7
7.3E6
3.7E6
0.0E0
50:00
55:00
1:00:00
Time

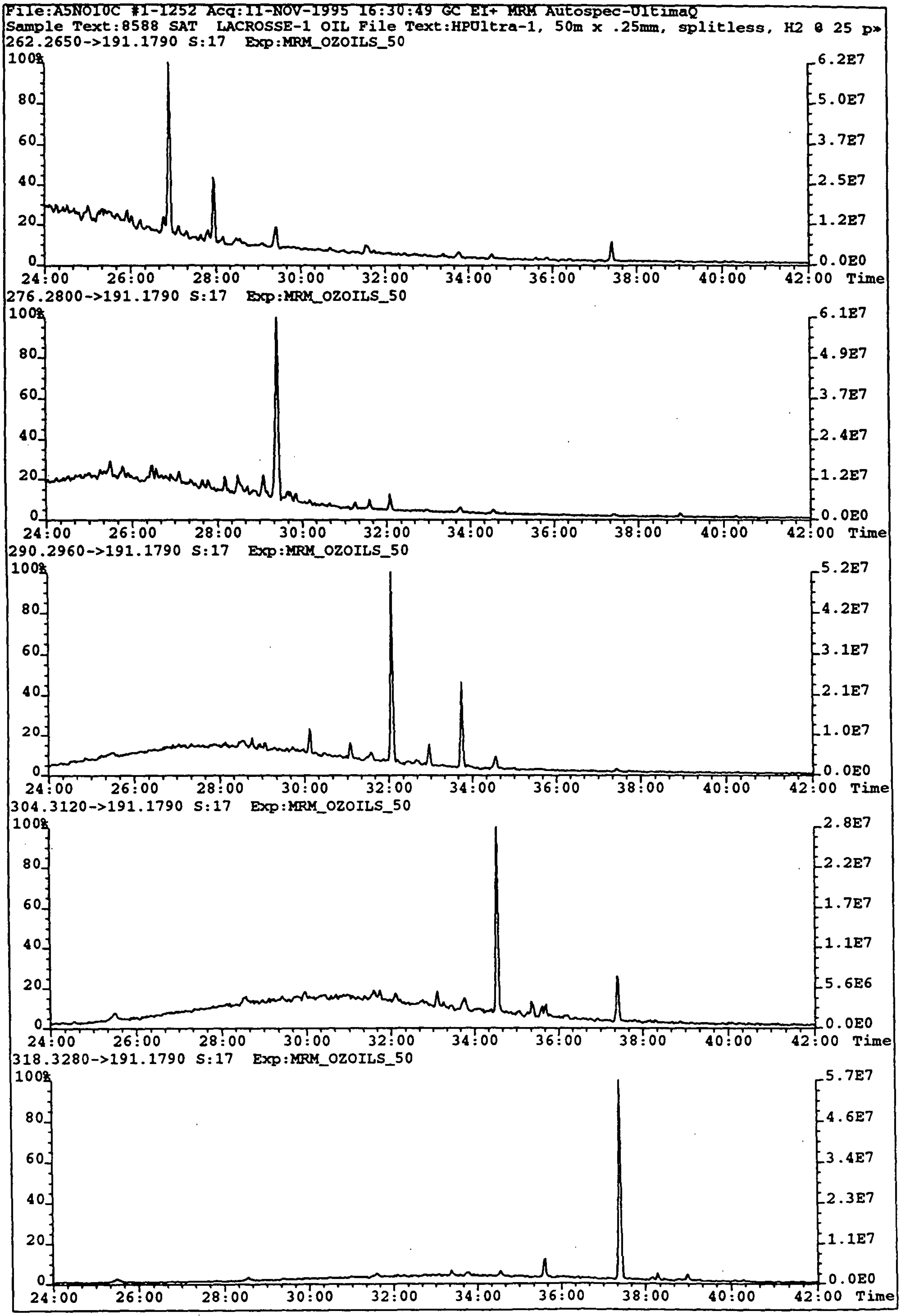

File:A5N012 #1-847 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
370.3590->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.9E8
1.5E8
1.2E8
7.7E7
3.9E7
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
8.5E7
6.8E7
5.1E7
3.4E7
1.7E7
0.0E0
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
6.1E8
4.9E8
3.6E8
2.4E8
1.2E8
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
7.0E8
5.6E8
4.2E8
2.8E8
1.4E8
0.0E0
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.0E8
1.6E8
1.2E8
8.1E7
4.0E7
0.0E0

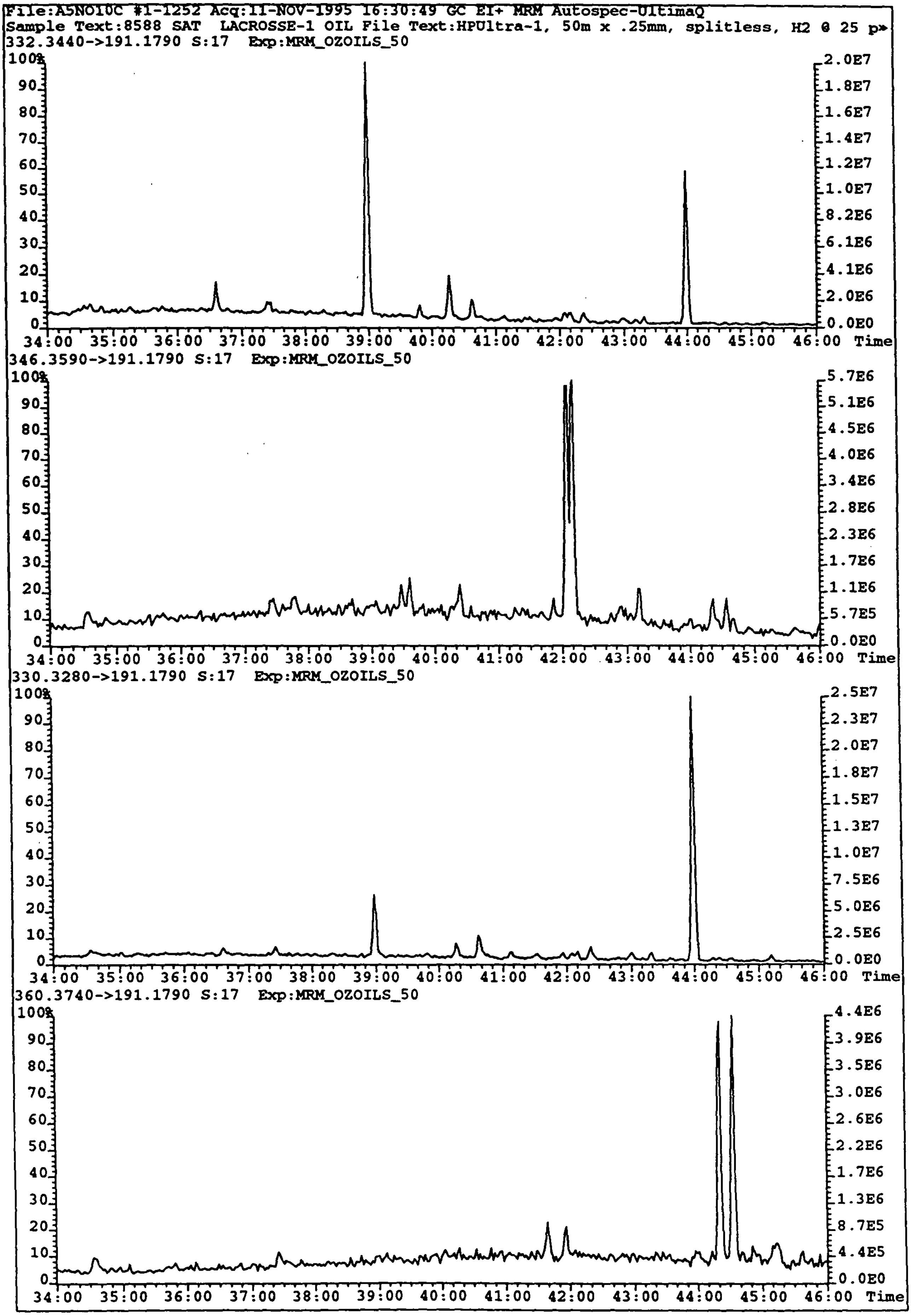

File:A5NO12 #1-847 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
7.0E8
5.6E8
4.2E8
2.8E8
1.4E8
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.0E8
1.6E8
1.2E8
8.1E7
4.0E7
0.0E0
426.4210->205.1940 S:14 F:2 Exp:MRM_OZOILS_50
6.0E7
4.8E7
3.6E7
2.4E7
1.2E7
0.0E0
468.4670->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.7E7
1.3E7
1.0E7
6.7E6
3.3E6
0.0E0
482.4820->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.4E7
1.1E7
8.6E6
5.7E6
2.9E6
0.0E0

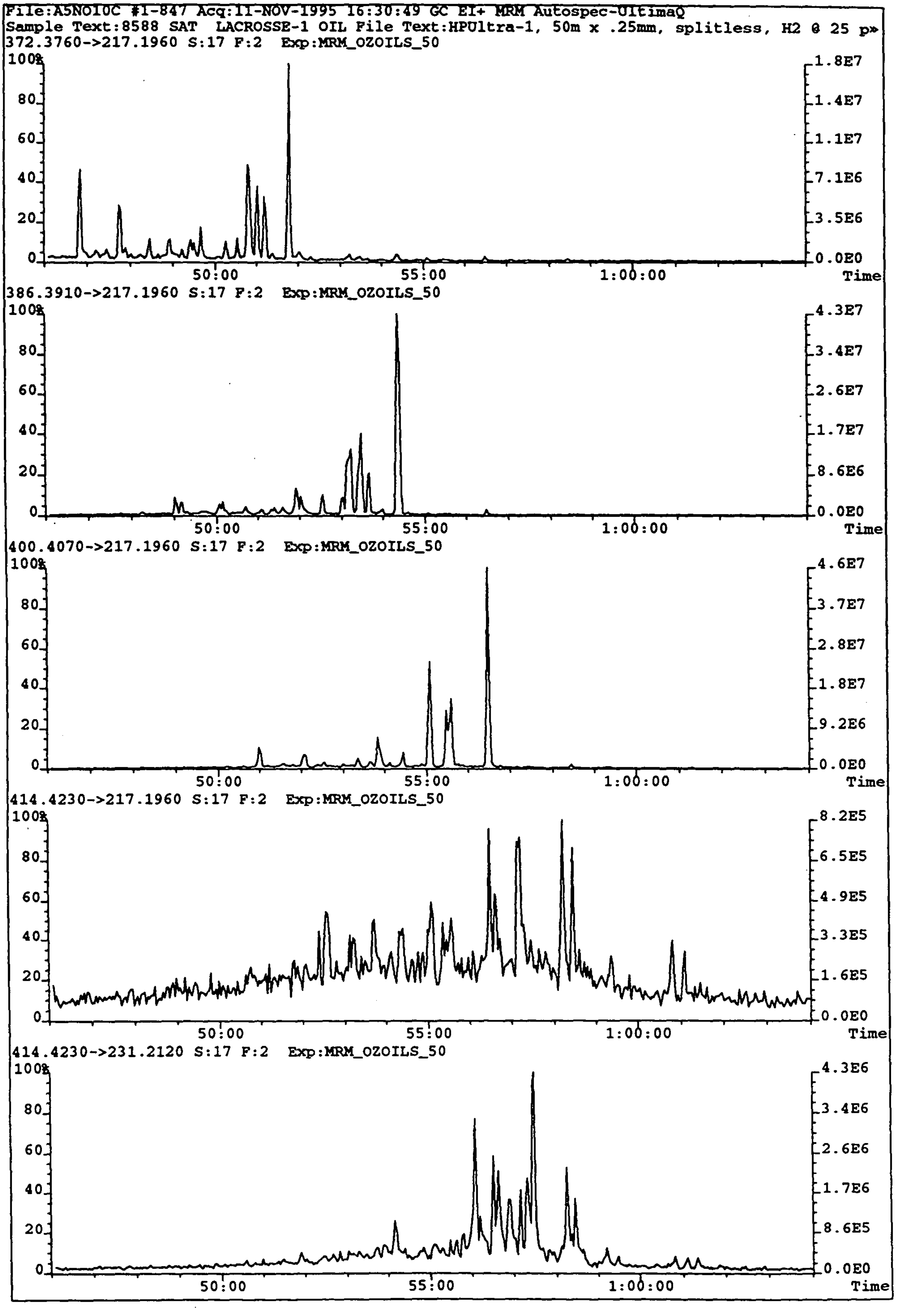

File:A5NO12 #1-847 Acq:13-NOV-1995 11:25:10 GC EI+ MRM Autospec-UltimaQ
Sample Text:8587 sat Lacrosse 1 cuttings 1451m oil stain File Text:HPUltra-1, 50m x .25mm,»
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
6.1E8
5.5E8
4.9E8
4.2E8
3.6E8
3.0E8
2.4E8
1.8E8
1.2E8
6.1E7
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
1.1E8
9.6E7
8.6E7
7.5E7
6.4E7
5.4E7
4.3E7
3.2E7
2.1E7
1.1E7
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
7.0E8
6.3E8
5.6E8
4.9E8
4.2E8
3.5E8
2.8E8
2.1E8
1.4E8
7.0E7
0.0E0
412.4060->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
9.8E6
8.8E6
7.8E6
6.9E6
5.9E6
4.9E6
3.9E6
2.9E6
2.0E6
9.8E5
0.0E0



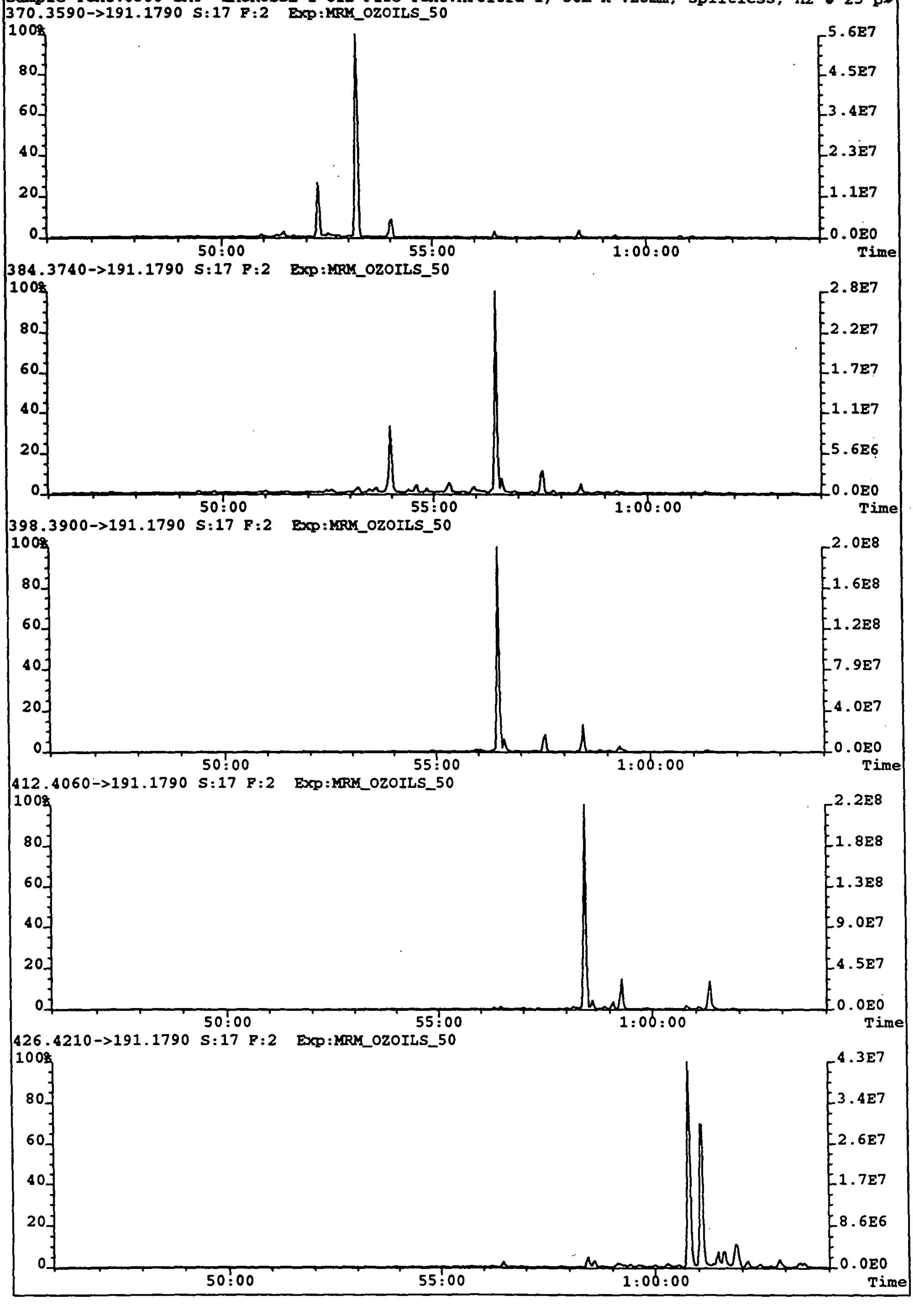
File:A5NO10C #1-1252 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
TIC (+RP) S:17 Exp:MRM_OZOILS_50
TIC (+RP) S:17 Exp:MRM_OZOILS_50
TIC (+RP) S:17 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:17 F:2 Exp:MRM_OZOILS_50
Time

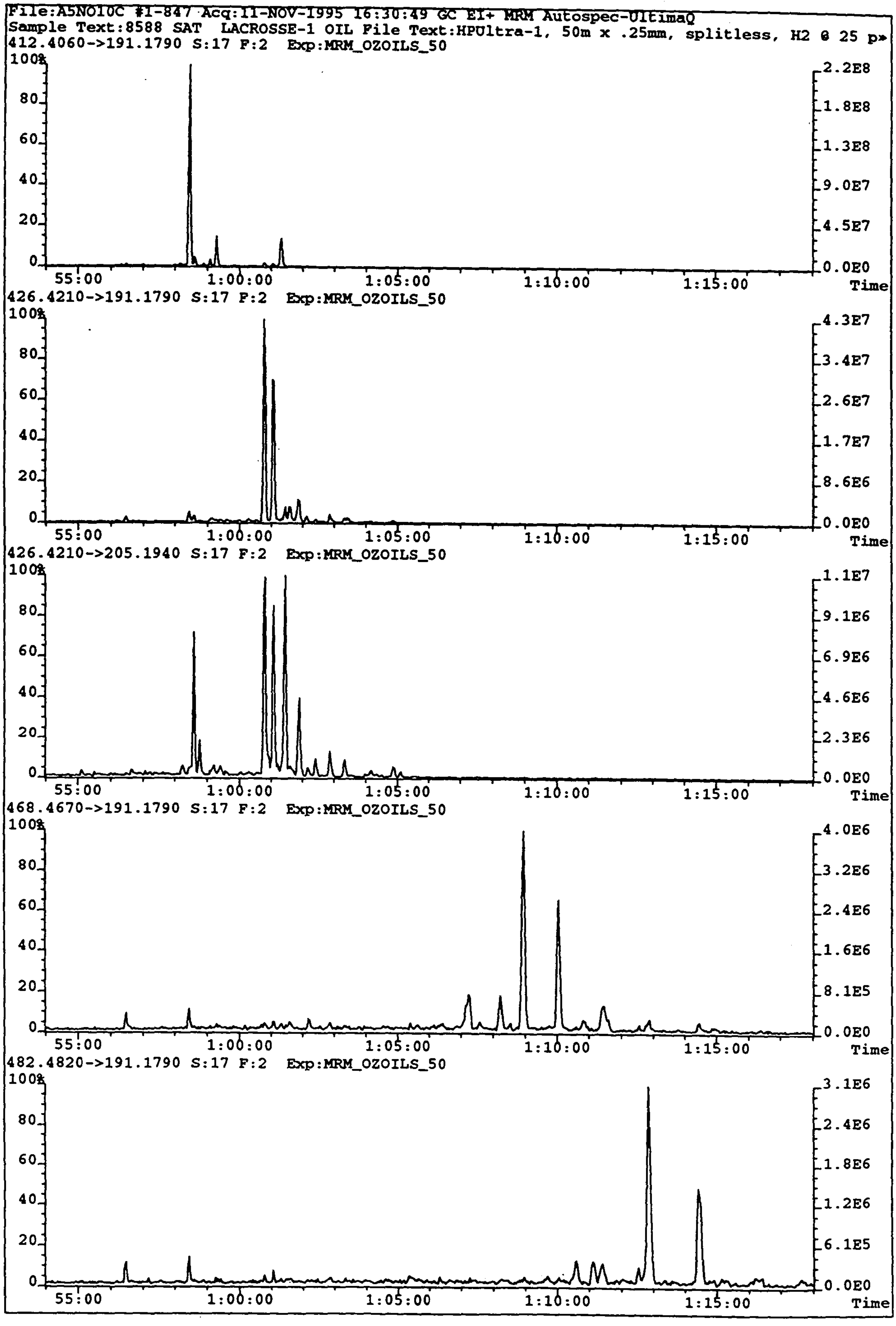

File:A5N010C #1-1252 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
262.2650->191.1790 S:17 Exp:MRM_OZOILS_50
6.2E7
276.2800->191.1790 S:17 Exp:MRM_OZOILS_50
6.1E7
290.2960->191.1790 S:17 Exp:MRM_OZOILS_50
5.2E7
304.3120->191.1790 S:17 Exp:MRM_OZOILS_50
2.8E7
318.3280->191.1790 S:17 Exp:MRM_OZOILS_50
5.7E7
Time

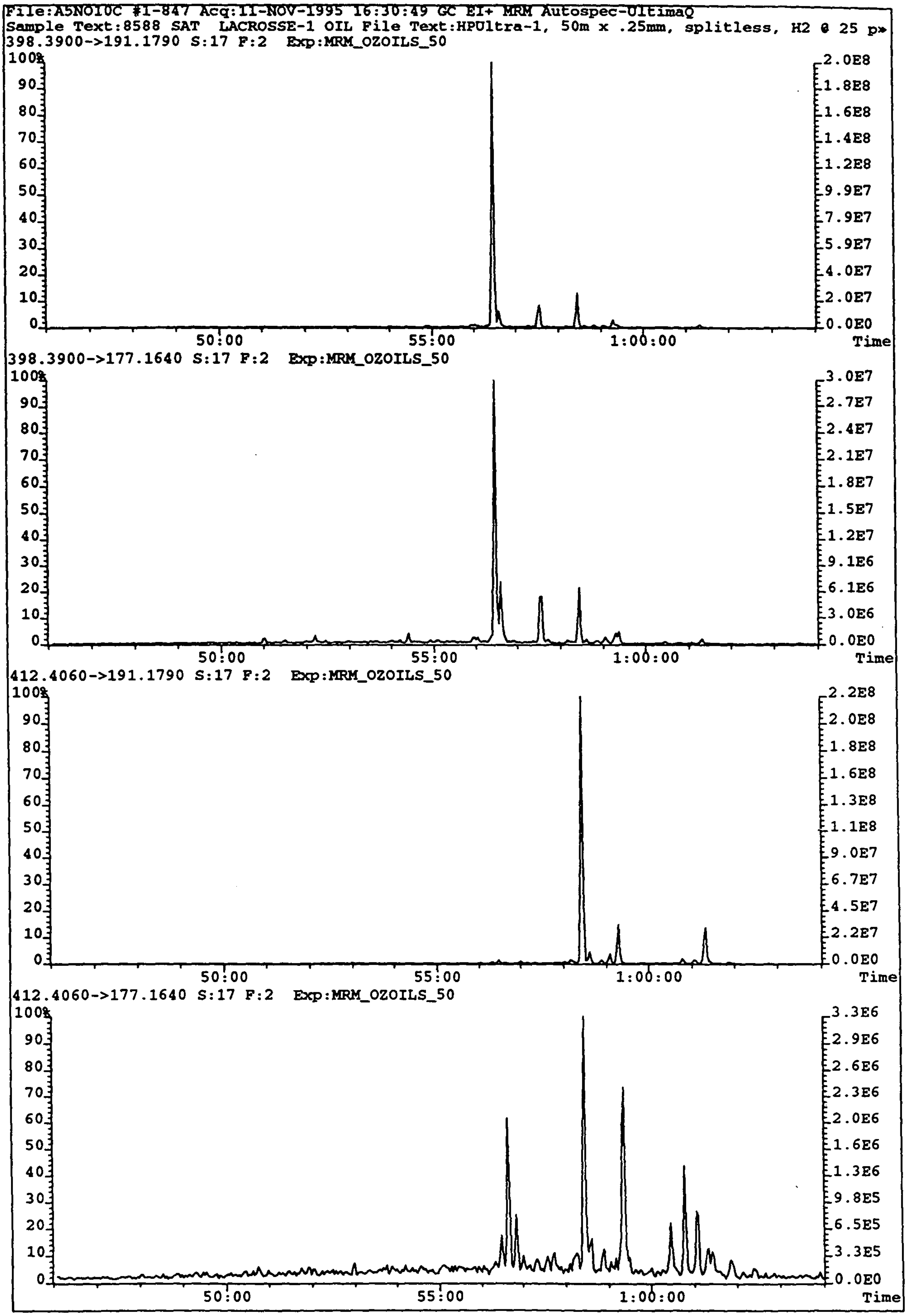

File:A5NO10C #1-1252 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
332.3440->191.1790 S:17 Exp:MRM_OZOILS_50
346.3590->191.1790 S:17 Exp:MRM_OZOILS_50
330.3280->191.1790 S:17 Exp:MRM_OZOILS_50
360.3740->191.1790 S:17 Exp:MRM_OZOILS_50
Time

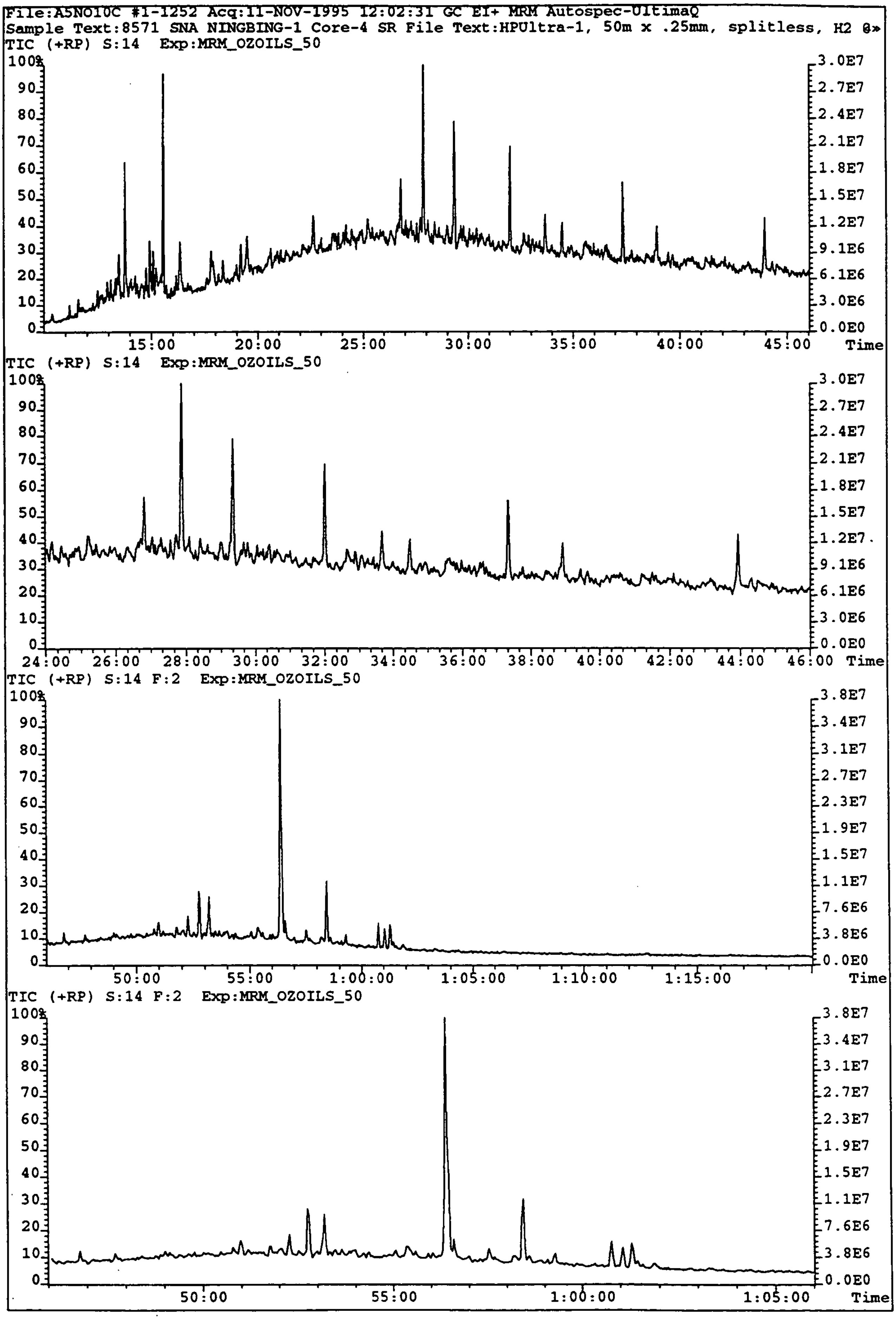

File:A5NO10C #1-847 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
372.3760->217.1960 S:17 F:2 Exp:MRM_OZOILS_50
1.8E7
1.4E7
1.1E7
7.1E6
3.5E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:17 F:2 Exp:MRM_OZOILS_50
4.3E7
3.4E7
2.6E7
1.7E7
8.6E6
0.0E0
400.4070->217.1960 S:17 F:2 Exp:MRM_OZOILS_50
4.6E7
3.7E7
2.8E7
1.8E7
9.2E6
0.0E0
414.4230->217.1960 S:17 F:2 Exp:MRM_OZOILS_50
8.2E5
6.5E5
4.9E5
3.3E5
1.6E5
0.0E0
414.4230->231.2120 S:17 F:2 Exp:MRM_OZOILS_50
4.3E6
3.4E6
2.6E6
1.7E6
8.6E5
0.0E0

File:A5N010C #1-847 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»

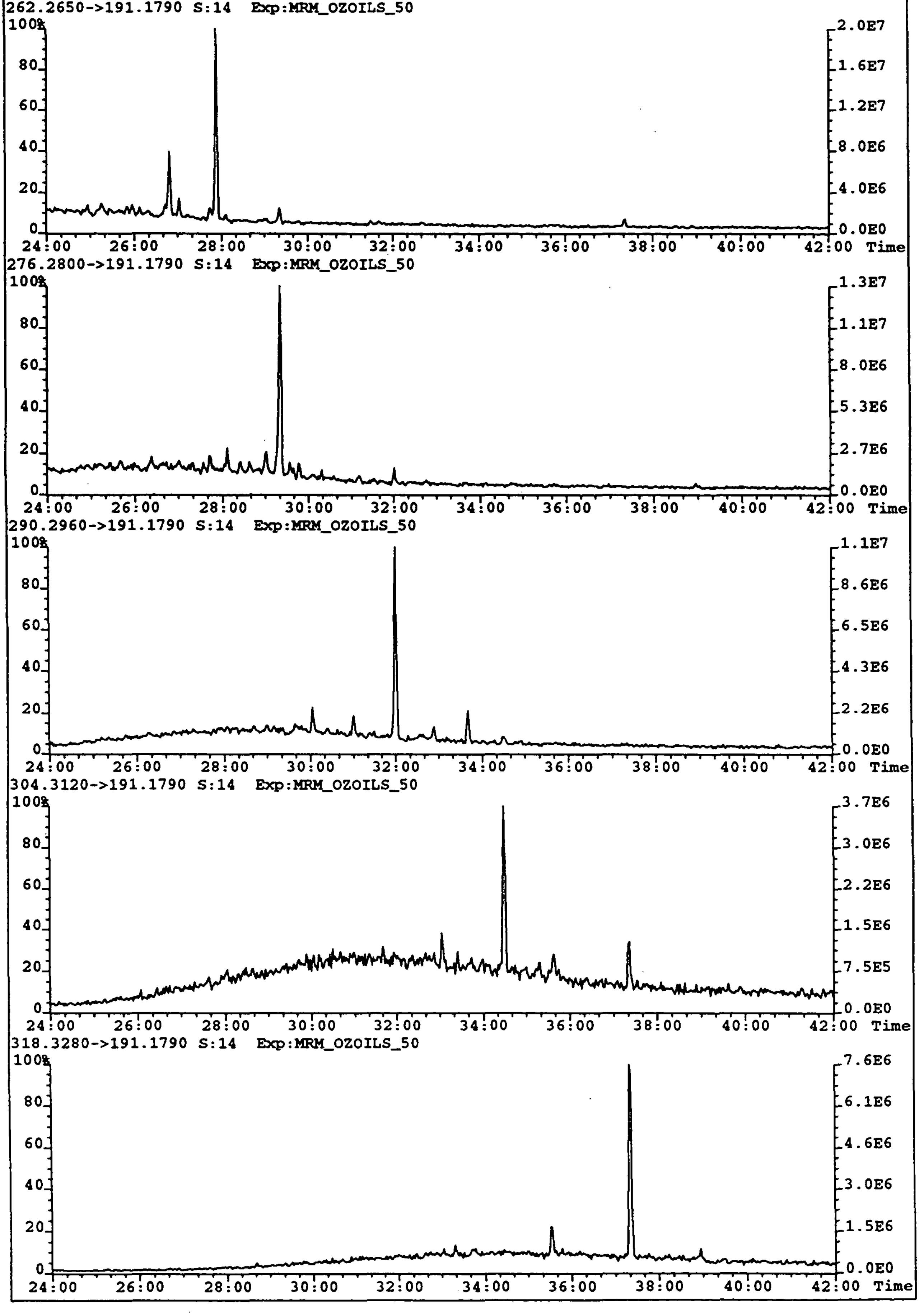


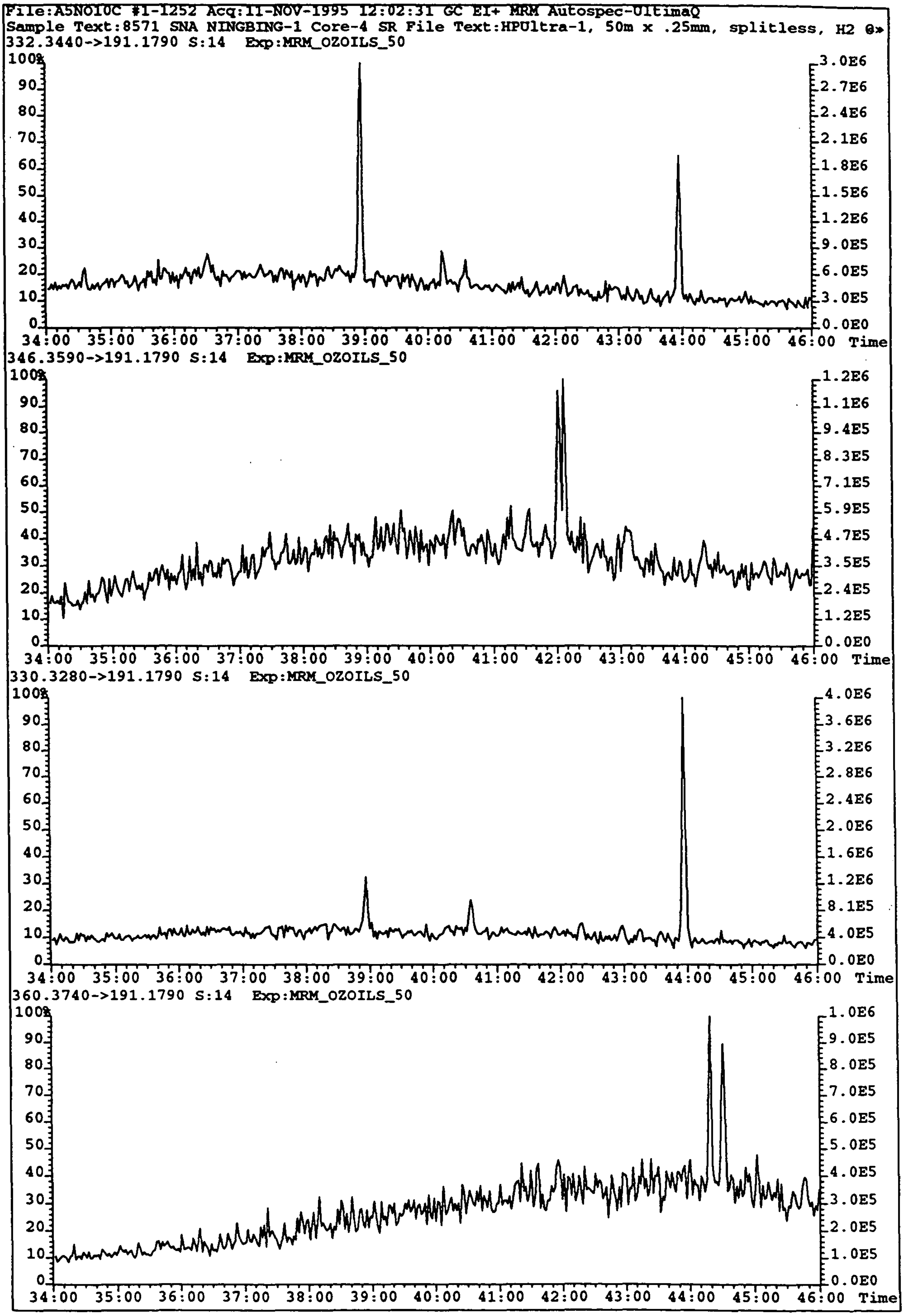

File:A5NO10C #1-847 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
412.4060->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.2E8
1.8E8
1.3E8
9.0E7
4.5E7
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
4.3E7
3.4E7
2.6E7
1.7E7
8.6E6
0.0E0
426.4210->205.1940 S:17 F:2 Exp:MRM_OZOILS_50
1.1E7
9.1E6
6.9E6
4.6E6
2.3E6
0.0E0
468.4670->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
4.0E6
3.2E6
2.4E6
1.6E6
8.1E5
0.0E0
482.4820->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
3.1E6
2.4E6
1.8E6
1.2E6
6.1E5
0.0E0

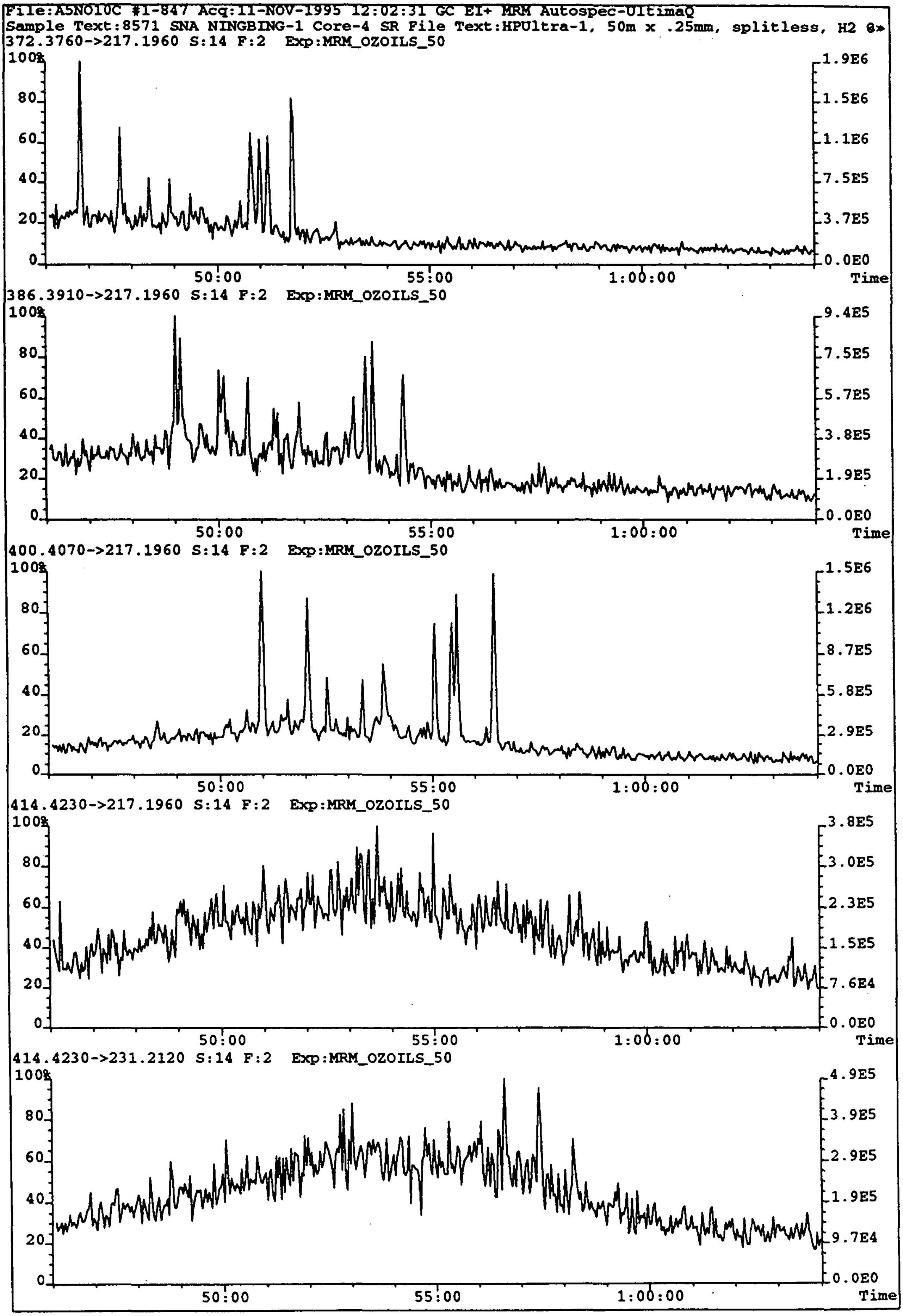

File:A5NO10C #1-847 Acq:11-NOV-1995 16:30:49 GC EI+ MRM Autospec-UltimaQ
Sample Text:8588 SAT LACROSSE-1 OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 p»
398.3900->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:17 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:17 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:17 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

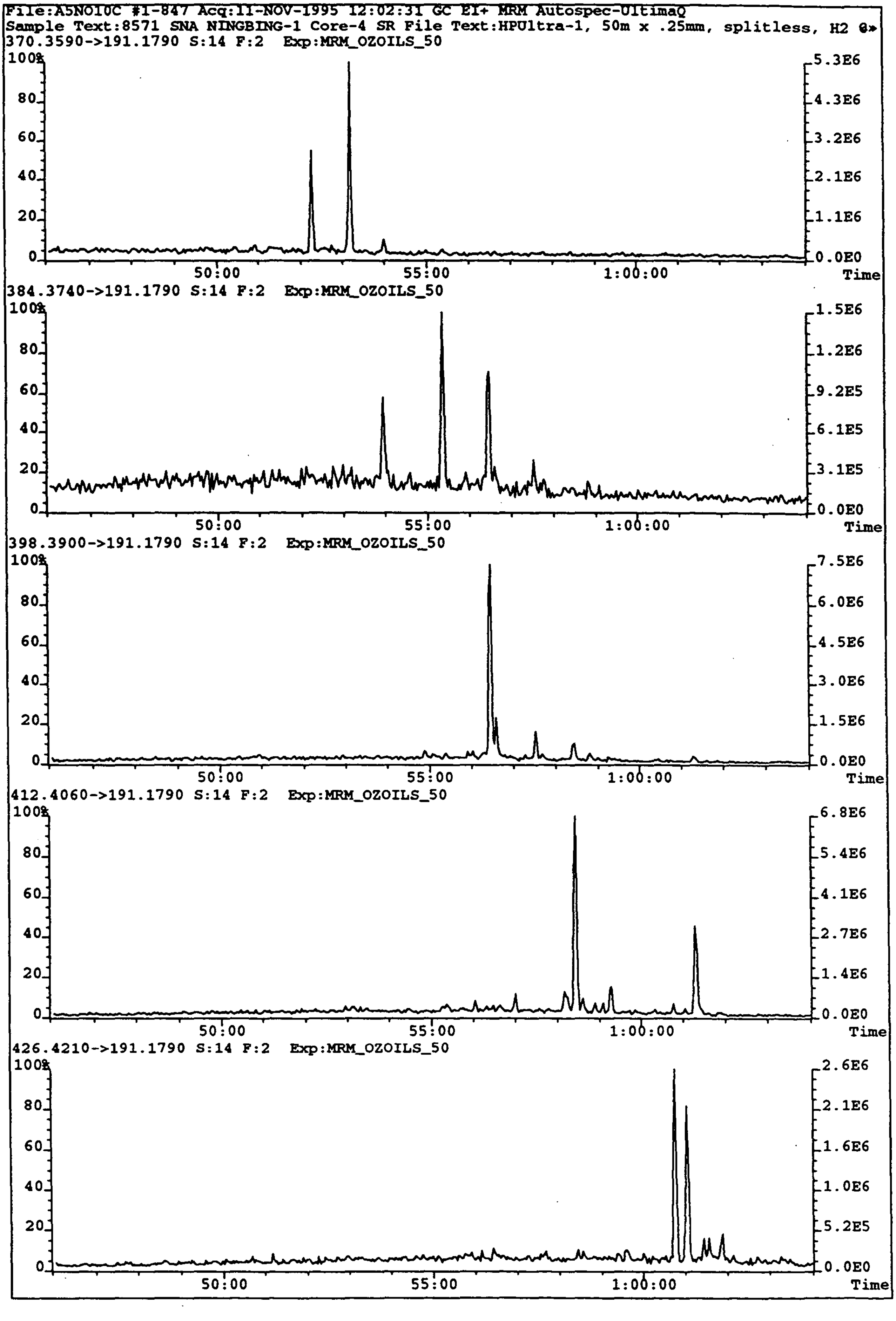

File:A5NO10C #1-1252 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
TIC (+RP) S:14 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:14 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
Time

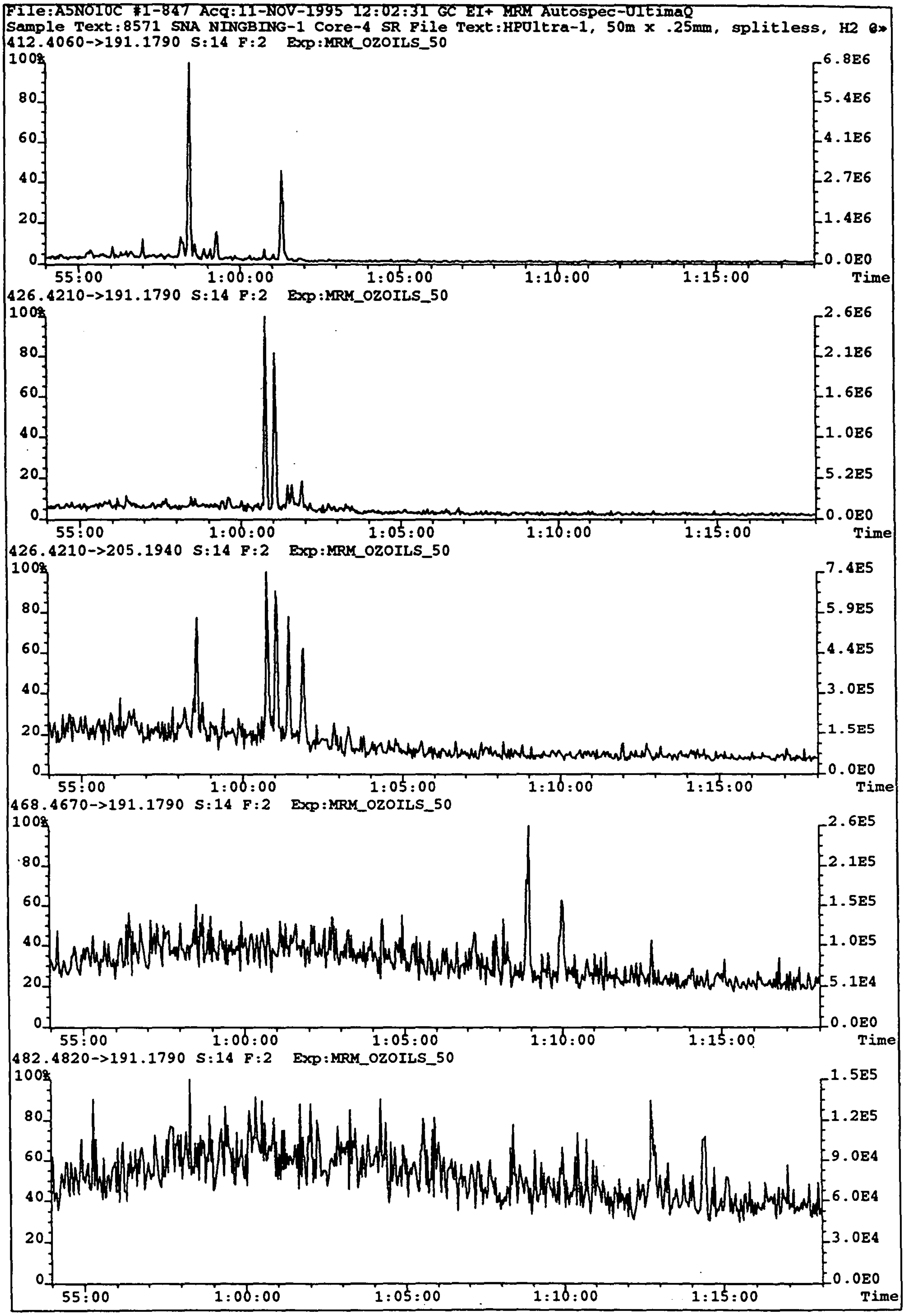
File:A5NO10C #1-1252 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»

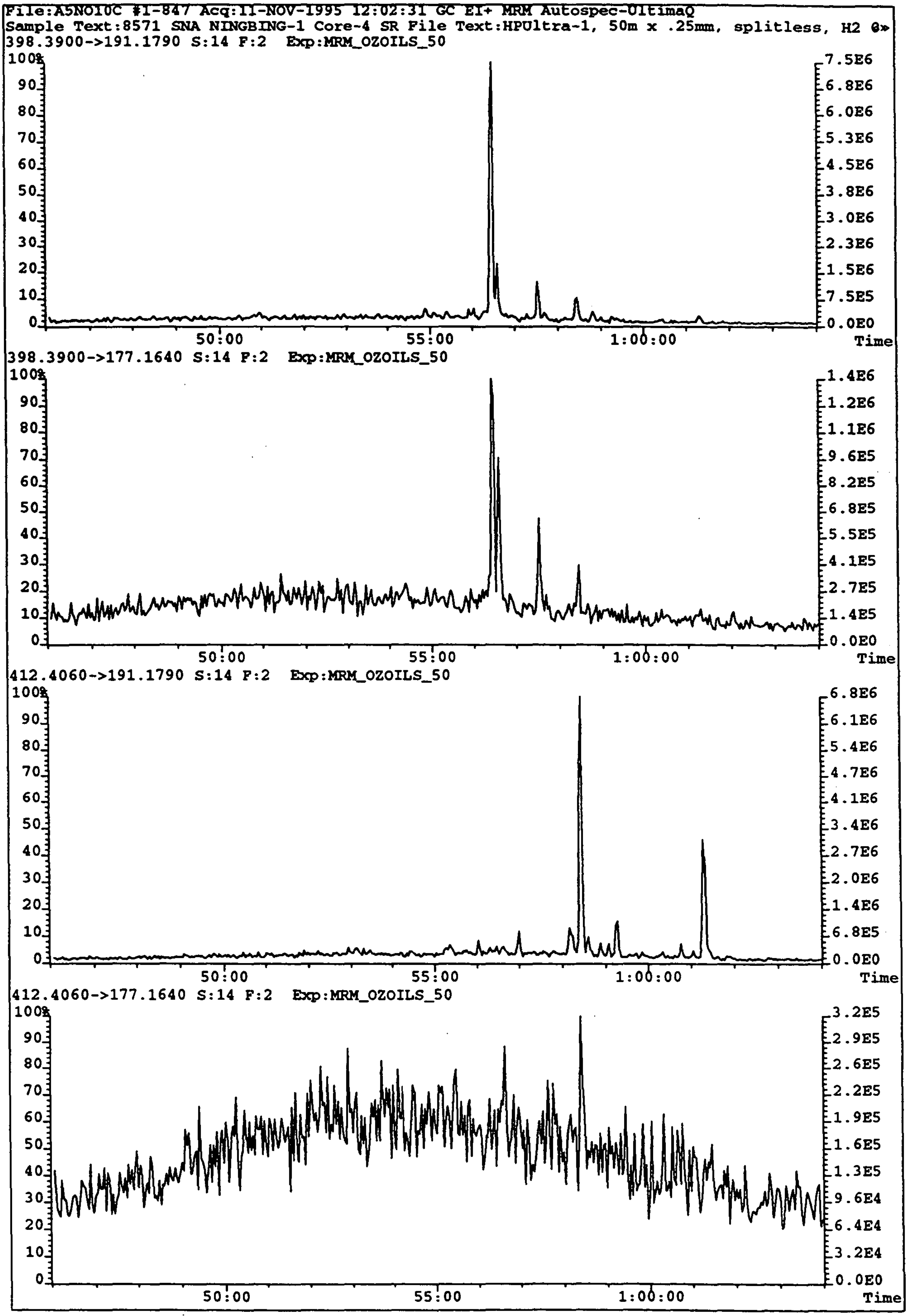


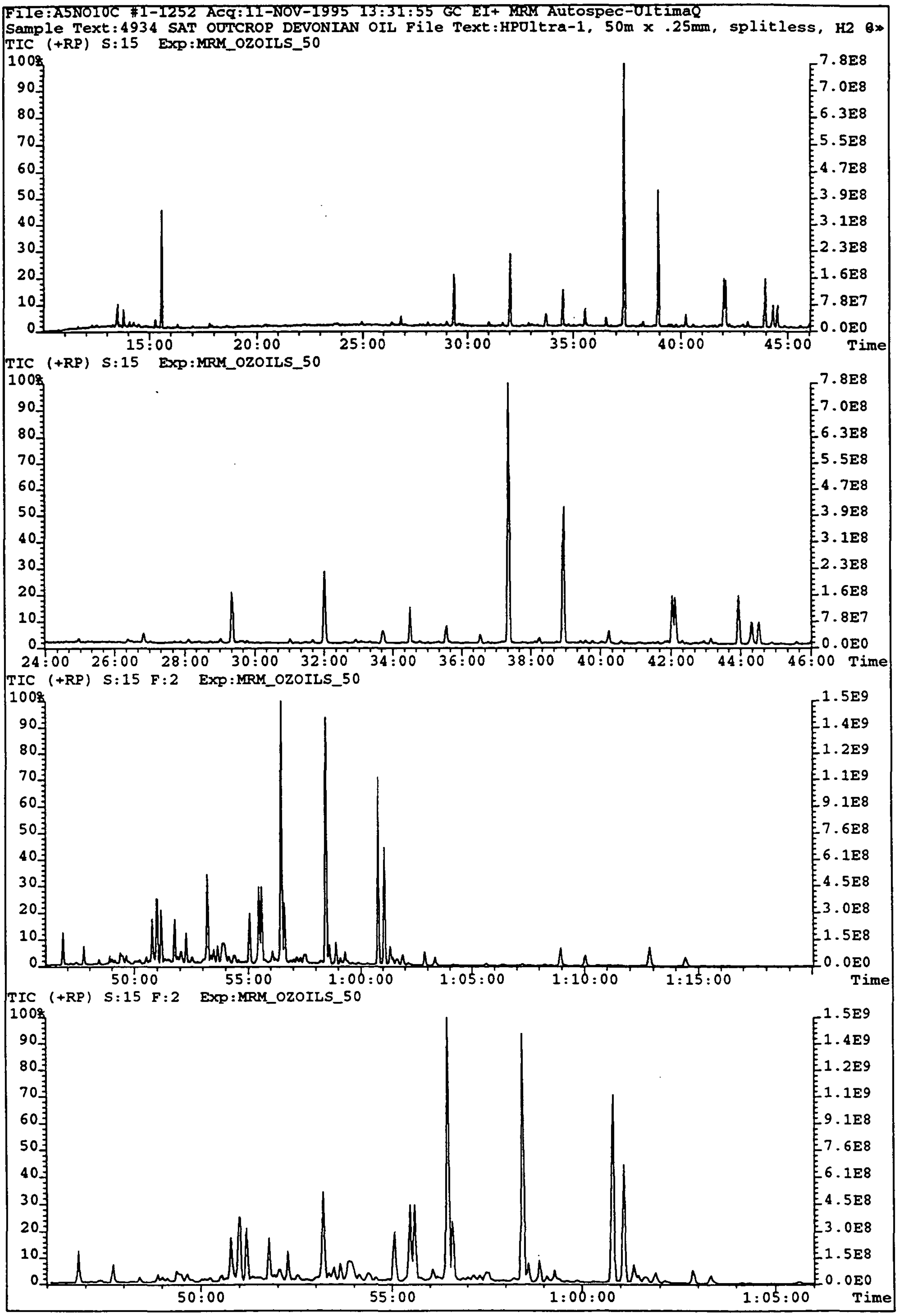

File:A5NO10C #1-1252 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
332.3440->191.1790 S:14 Exp:MRM_OZOILS_50
346.3590->191.1790 S:14 Exp:MRM_OZOILS_50
330.3280->191.1790 S:14 Exp:MRM_OZOILS_50
360.3740->191.1790 S:14 Exp:MRM_OZOILS_50
Time


File:A5NO10C #1-847 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
372.3760->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
1.9E6
386.3910->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
9.4E5
400.4070->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
1.5E6
414.4230->217.1960 S:14 F:2 Exp:MRM_OZOILS_50
3.8E5
414.4230->231.2120 S:14 F:2 Exp:MRM_OZOILS_50
4.9E5
50:00
55:00
1:00:00
Time

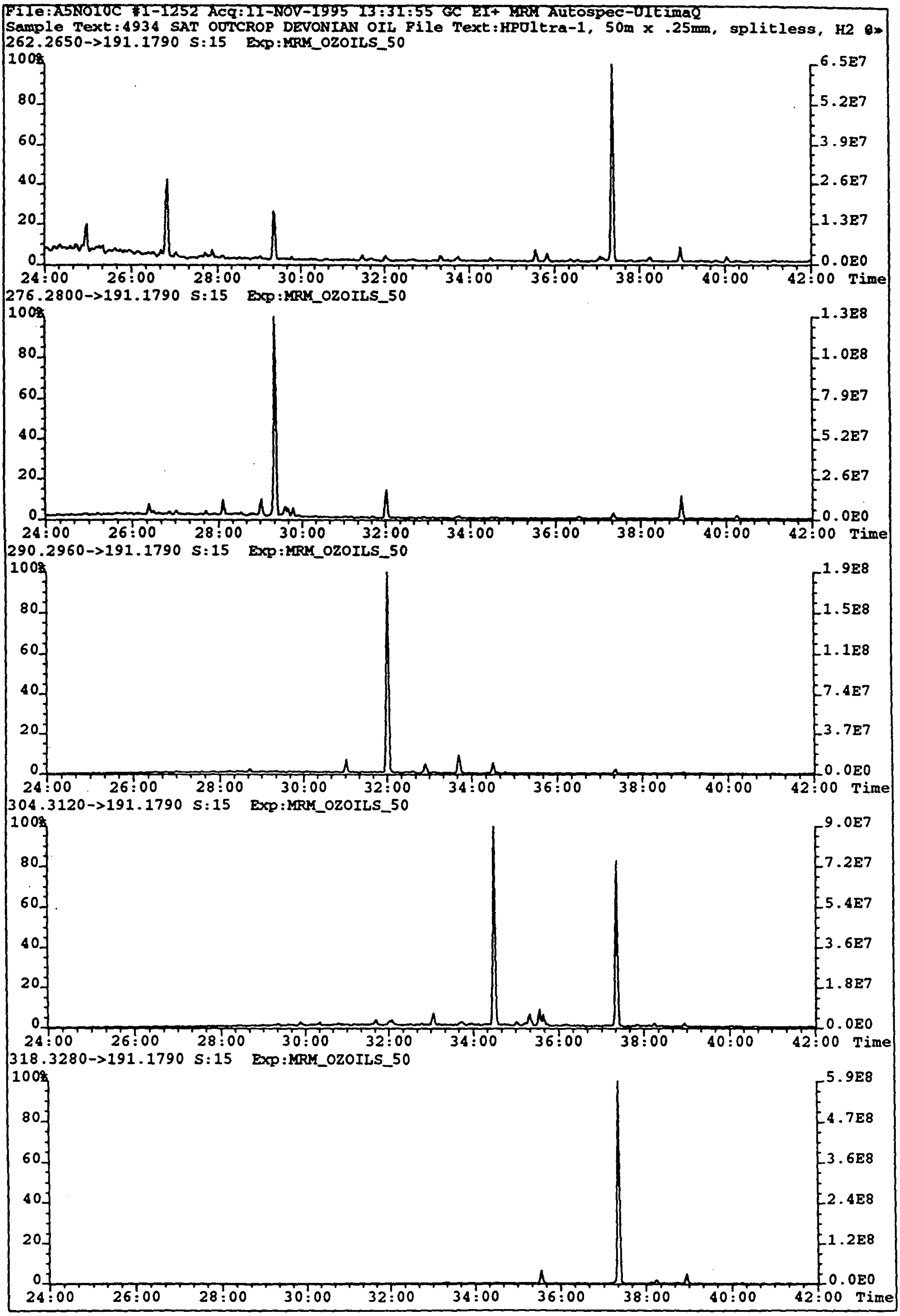

File:A5NO10C #1-847 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
370.3590->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.3E6
4.3E6
3.2E6
2.1E6
1.1E6
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.5E6
1.2E6
9.2E5
6.1E5
3.1E5
0.0E0
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
7.5E6
6.0E6
4.5E6
3.0E6
1.5E6
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
6.8E6
5.4E6
4.1E6
2.7E6
1.4E6
0.0E0
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.6E6
2.1E6
1.6E6
1.0E6
5.2E5
0.0E0

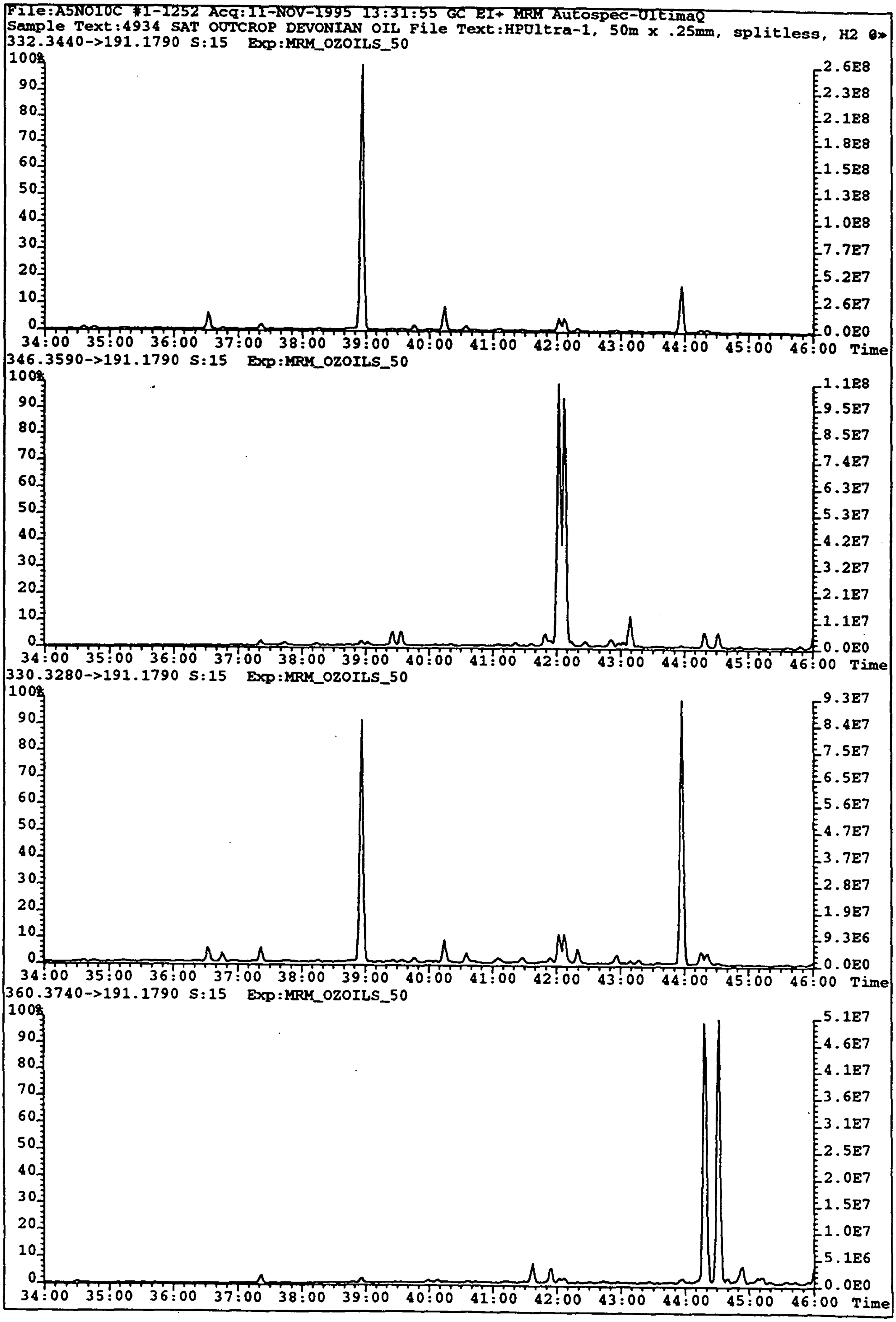

File:A5N010C #1-847 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
6.8E6
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.6E6
426.4210->205.1940 S:14 F:2 Exp:MRM_OZOILS_50
7.4E5
468.4670->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.6E5
482.4820->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.5E5
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time

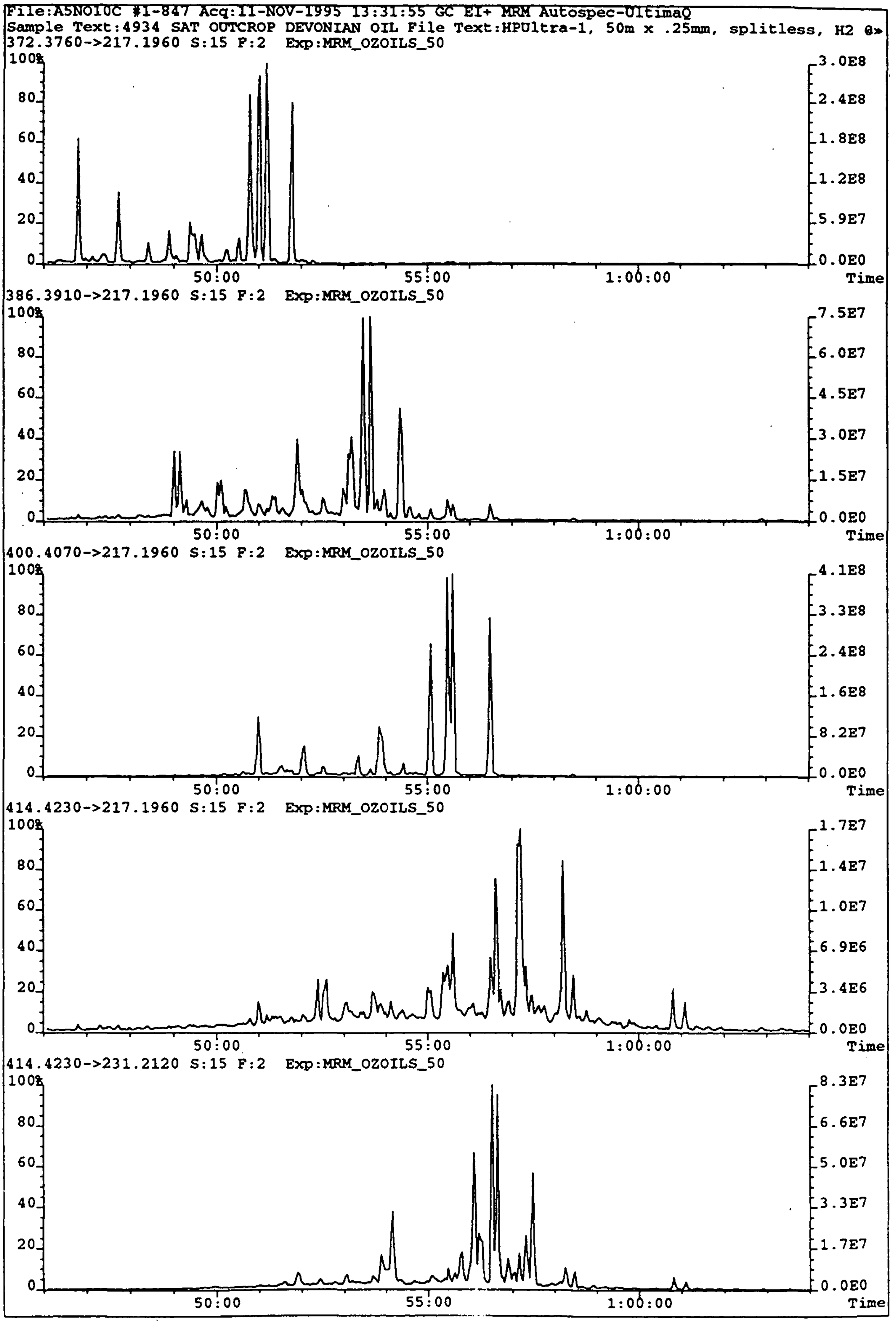

File:A5NO10C #1-847 Acq:11-NOV-1995 12:02:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:8571 SNA NINGBING-1 Core-4 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
7.5E6
6.8E6
6.0E6
5.3E6
4.5E6
3.8E6
3.0E6
2.3E6
1.5E6
7.5E5
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
1.4E6
1.2E6
1.1E6
9.6E5
8.2E5
6.8E5
5.5E5
4.1E5
2.7E5
1.4E5
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
6.8E6
6.1E6
5.4E6
4.7E6
4.1E6
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
412.4060->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
3.2E5
2.9E5
2.6E5
2.2E5
1.9E5
1.6E5
1.3E5
9.6E4
6.4E4
3.2E4
0.0E0

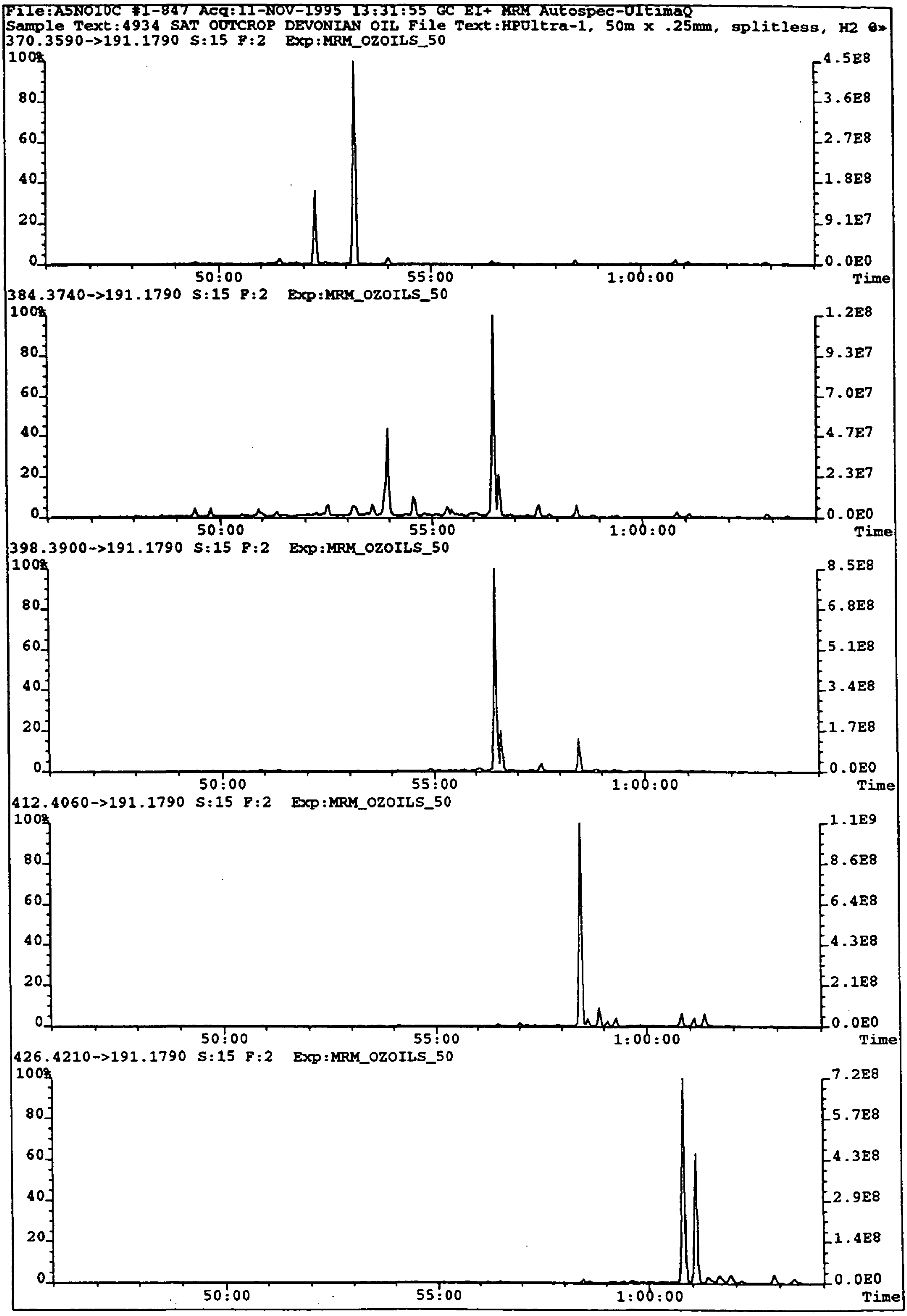


File:A5NO10C #1-1252 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
TIC (+RP) S:15 Exp:MRM_OZOILS_50
TIC (+RP) S:15 Exp:MRM_OZOILS_50
TIC (+RP) S:15 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:15 F:2 Exp:MRM_OZOILS_50
Time

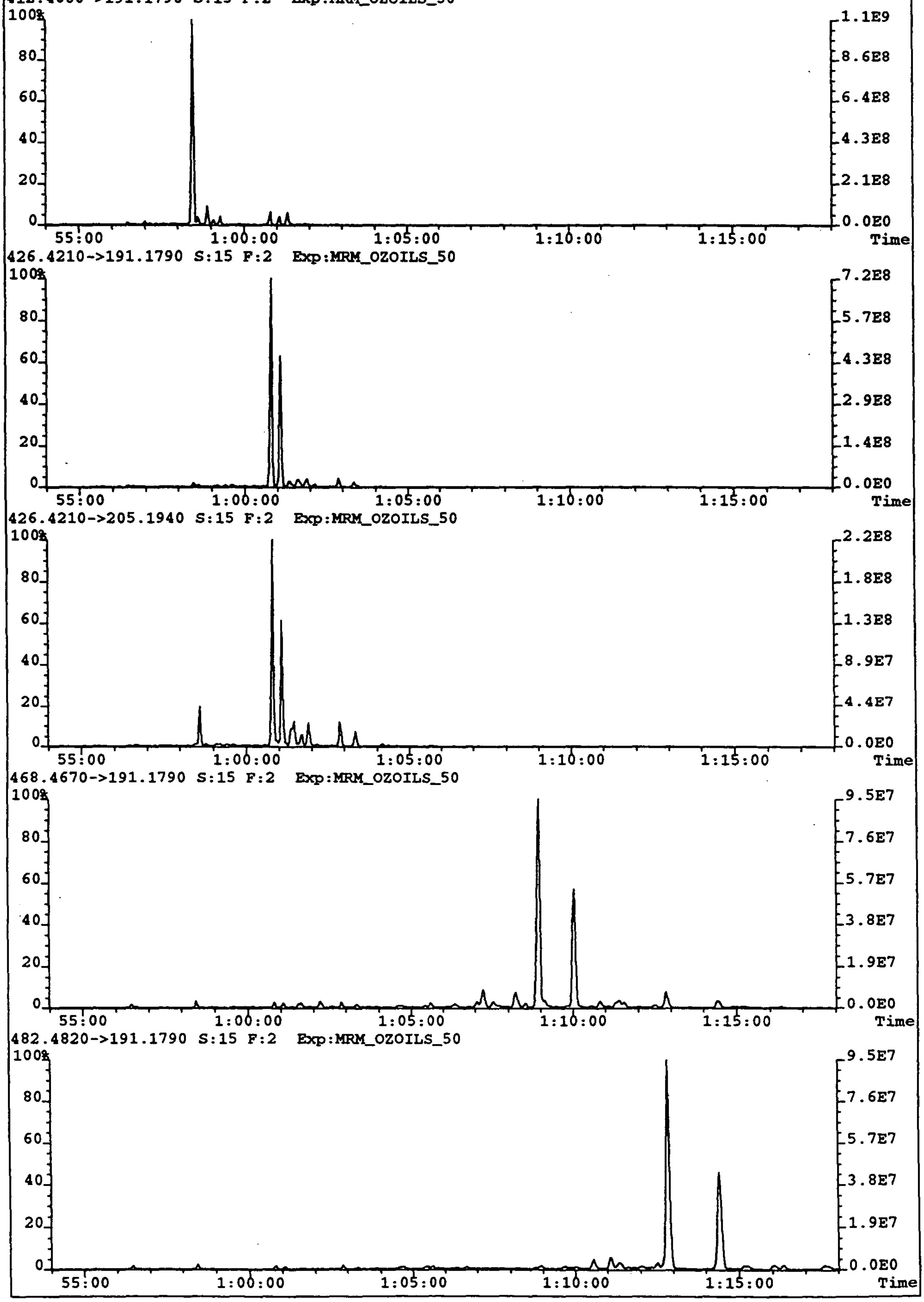

File:A5NO10C #1-1252 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
262.2650->191.1790 S:15 Exp:MRM_OZOILS_50
276.2800->191.1790 S:15 Exp:MRM_OZOILS_50
290.2960->191.1790 S:15 Exp:MRM_OZOILS_50
304.3120->191.1790 S:15 Exp:MRM_OZOILS_50
318.3280->191.1790 S:15 Exp:MRM_OZOILS_50
Time

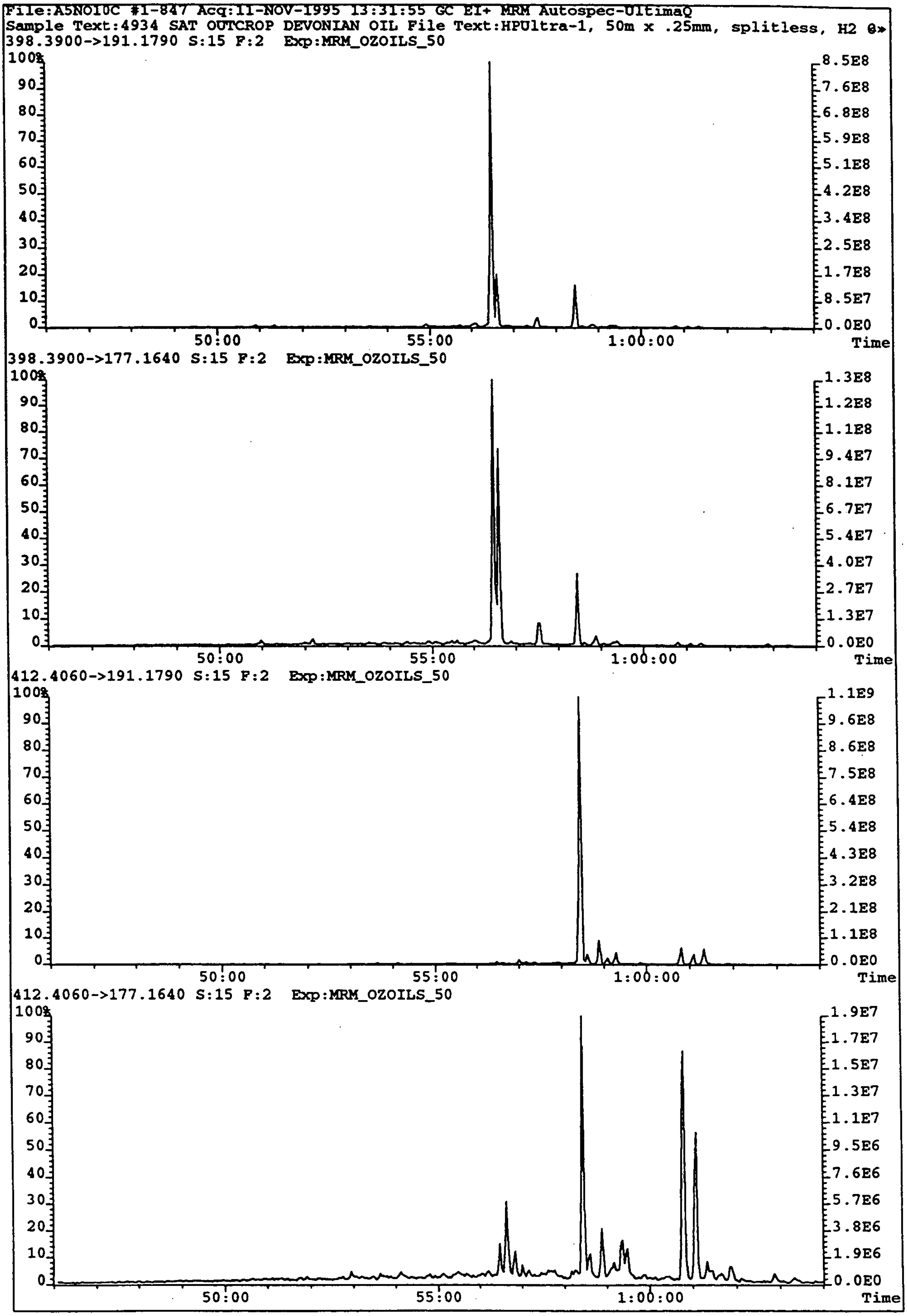

File:A5NO10C #1-1252 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
332.3440->191.1790 S:15 Exp:MRM_OZOILS_50
346.3590->191.1790 S:15 Exp:MRM_OZOILS_50
330.3280->191.1790 S:15 Exp:MRM_OZOILS_50
360.3740->191.1790 S:15 Exp:MRM_OZOILS_50
100%
Time
34:00
35:00
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
2.6E8
1.1E8
9.3E7
5.1E7
0.0E0

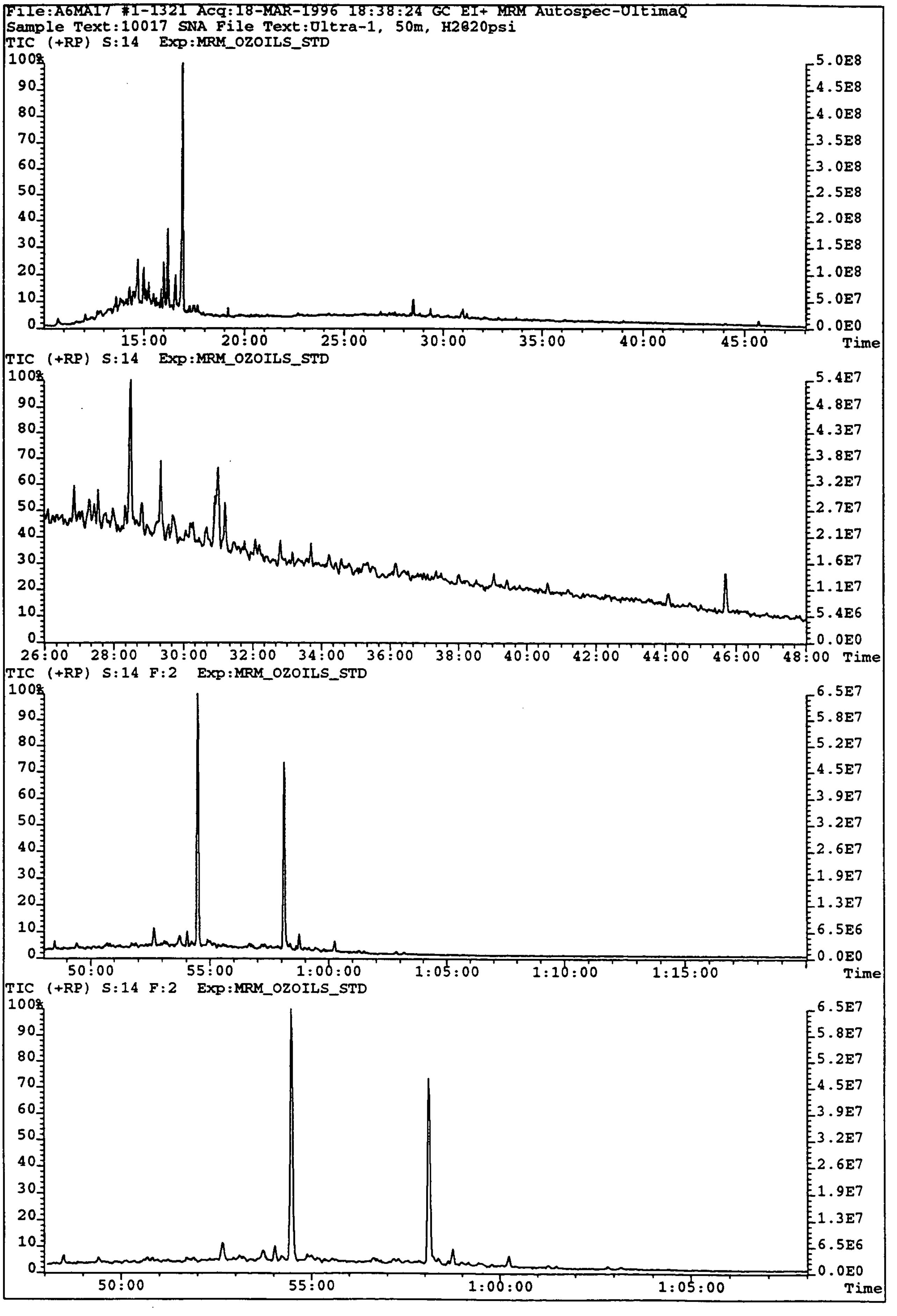

File:A5NO10C #1-847 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
372.3760->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
386.3910->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
400.4070->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
414.4230->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
414.4230->231.2120 S:15 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time
100%
3.0E8
7.5E7
4.1E8
1.7E7
8.3E7

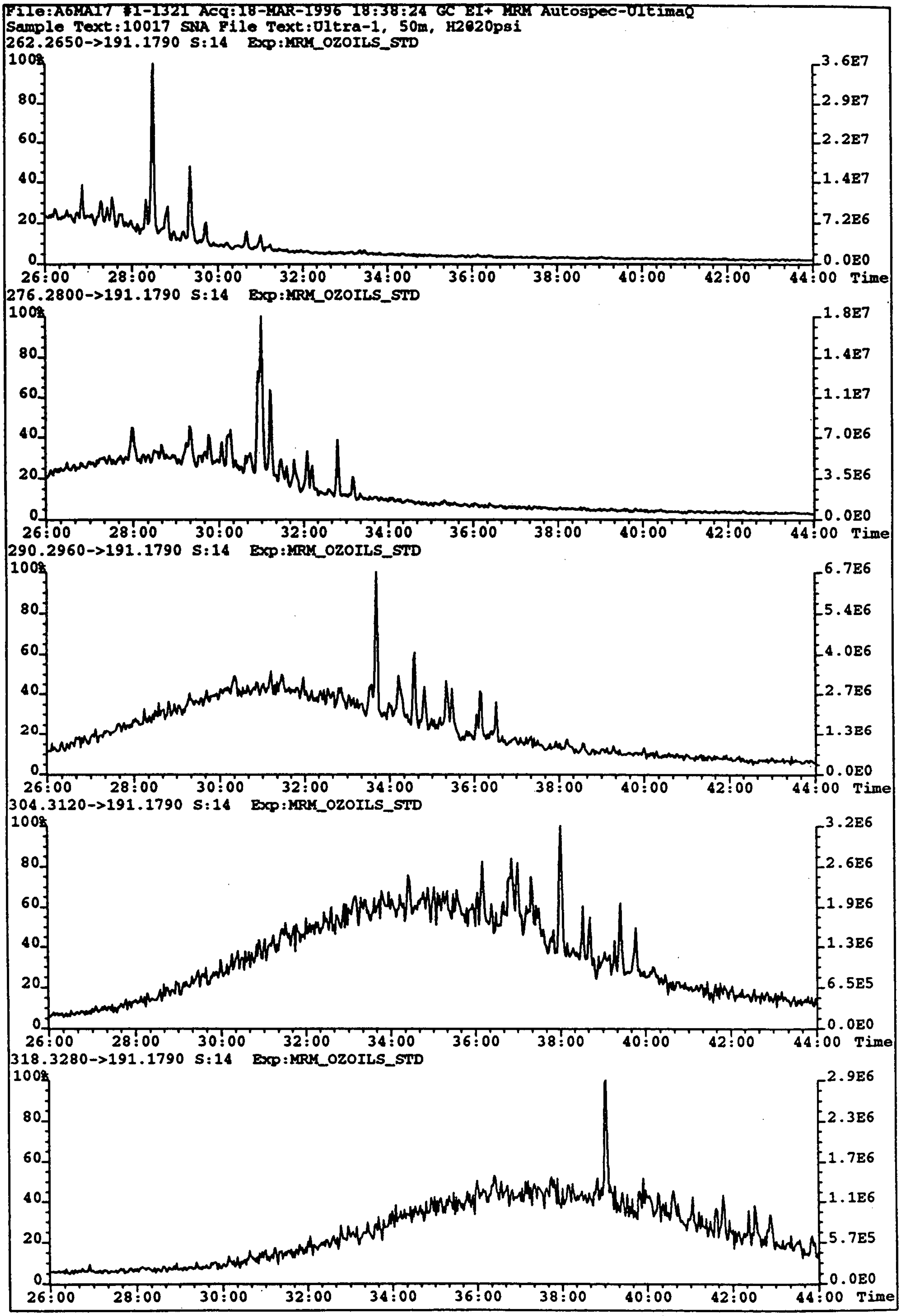

File:A5NO10C #1-847 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
370.3590->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
4.5E8
3.6E8
2.7E8
1.8E8
9.1E7
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.2E8
9.3E7
7.0E7
4.7E7
2.3E7
0.0E0
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
8.5E8
6.8E8
5.1E8
3.4E8
1.7E8
0.0E0
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.1E9
8.6E8
6.4E8
4.3E8
2.1E8
0.0E0
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
7.2E8
5.7E8
4.3E8
2.9E8
1.4E8
0.0E0

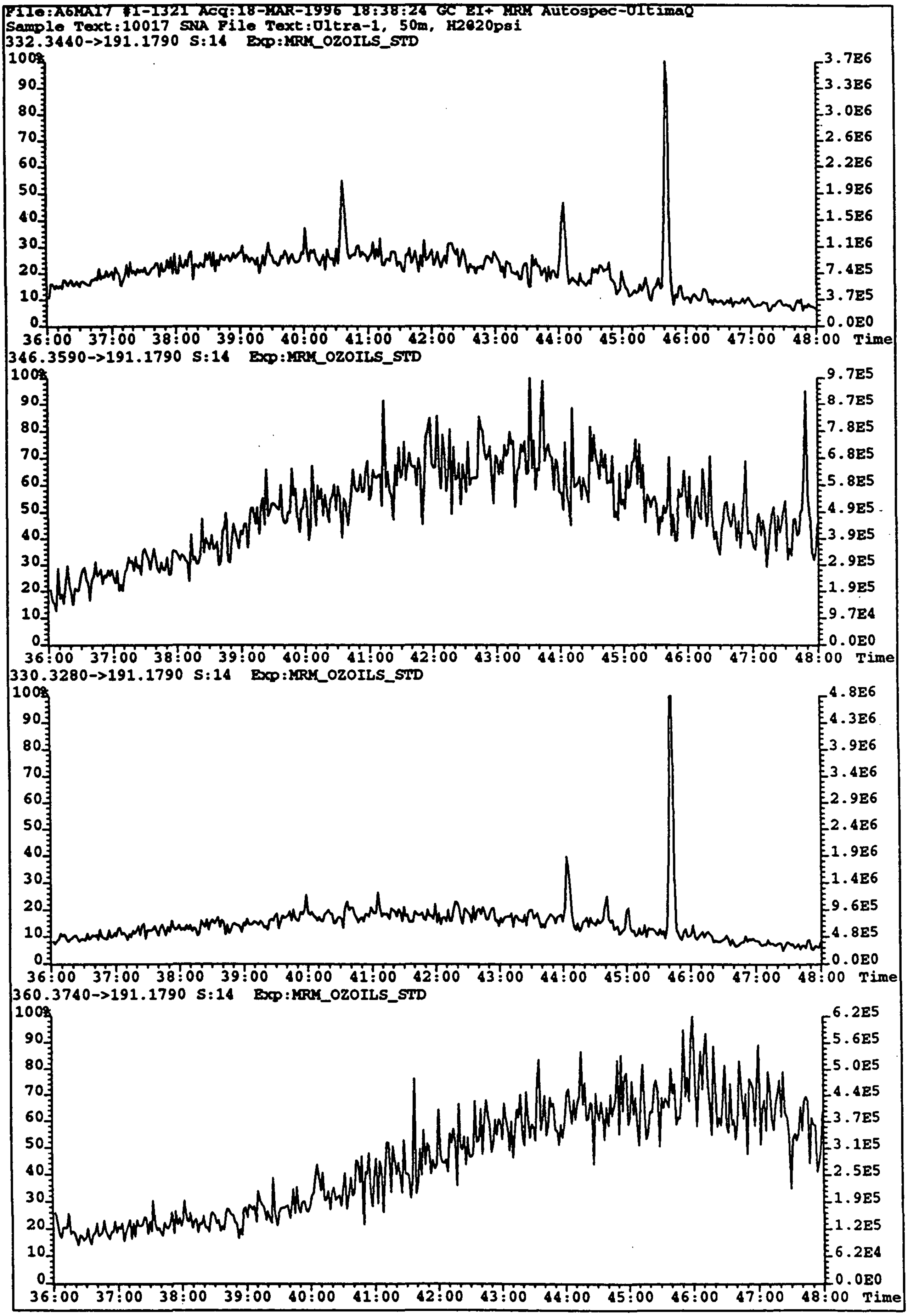
File:A5NO10C #1-847 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50

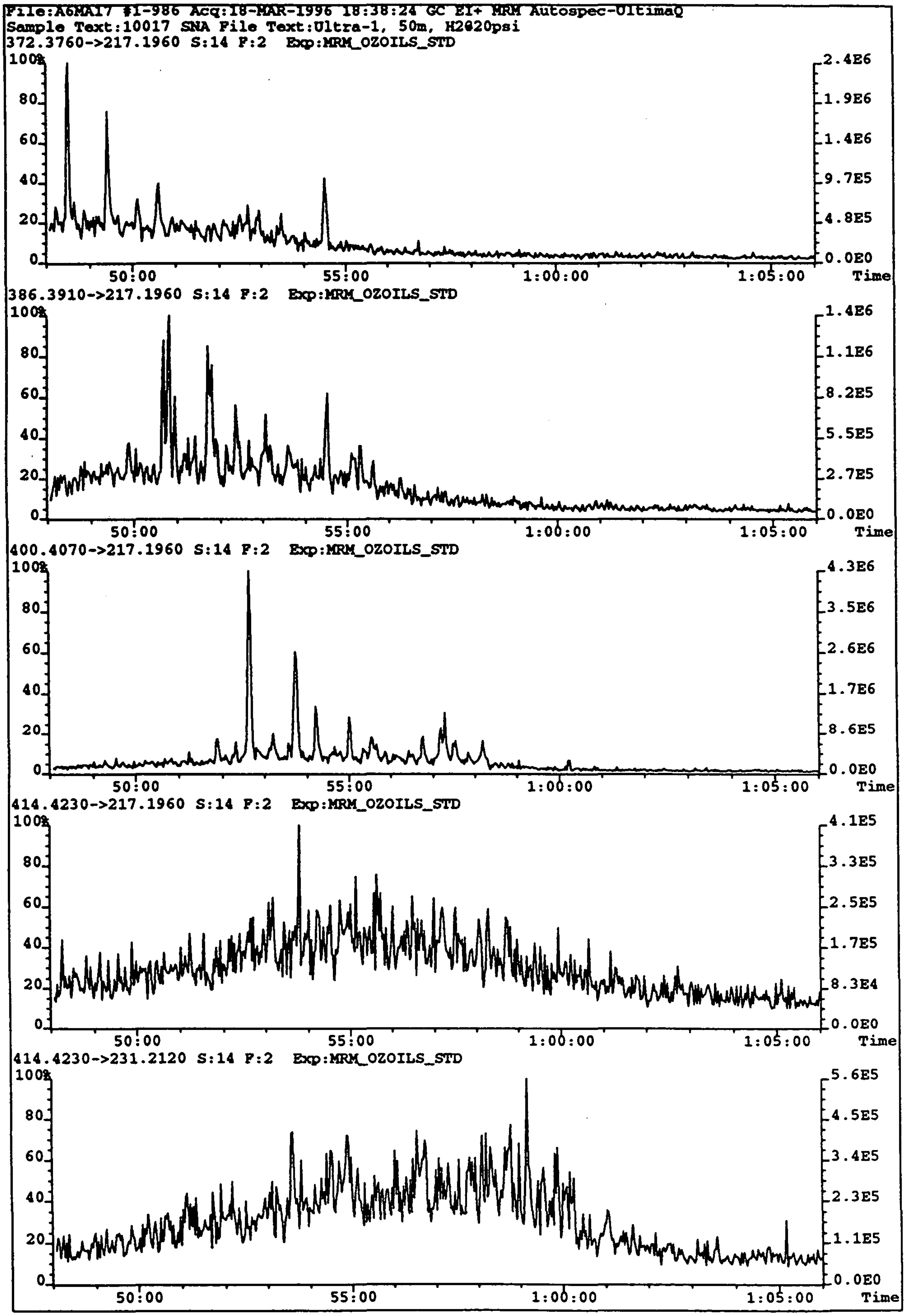


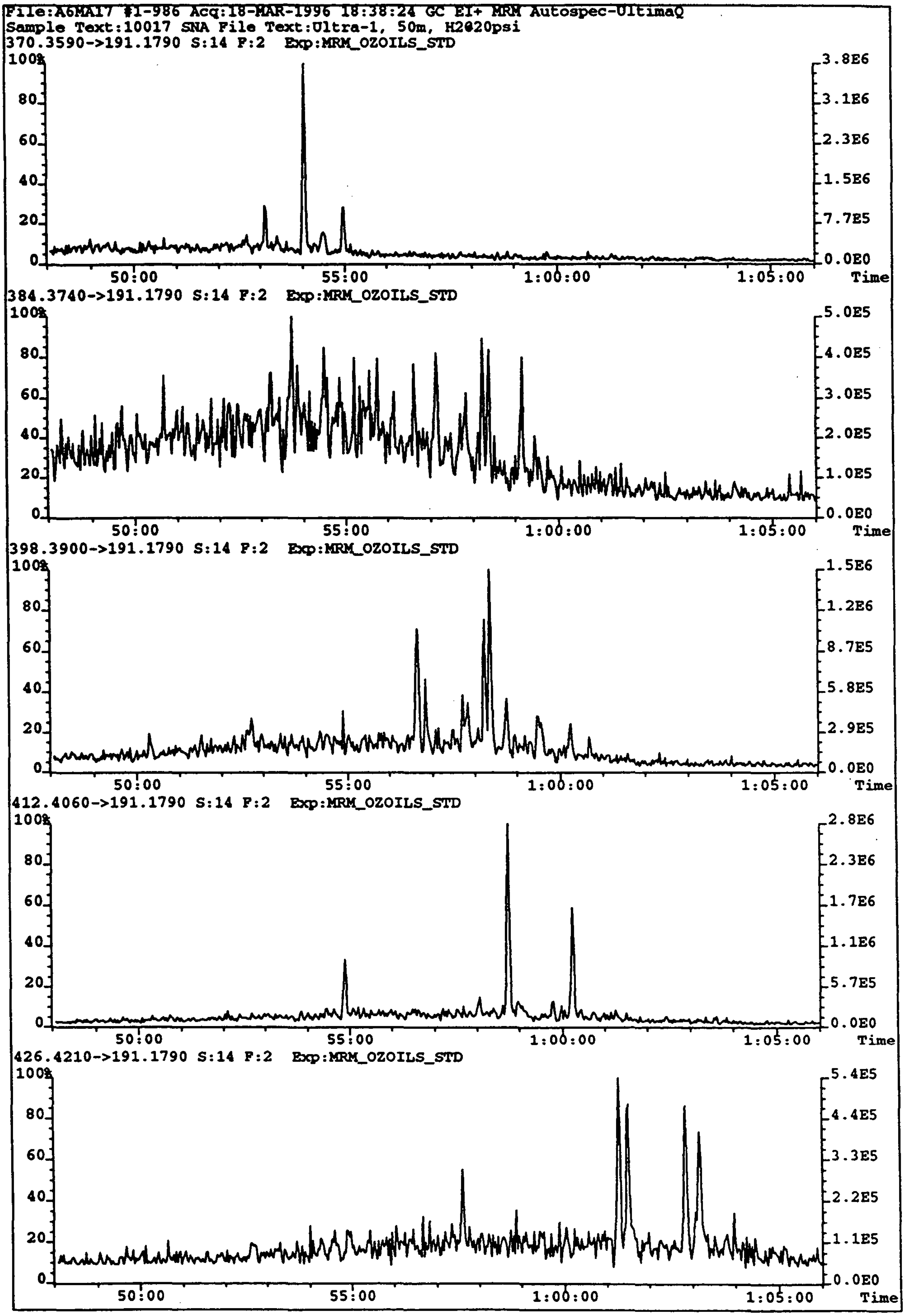

File:A5NO10C #1-847 Acq:11-NOV-1995 13:31:55 GC EI+ MRM Autospec-UltimaQ
Sample Text:4934 SAT OUTCROP DEVONIAN OIL File Text:HPUltra-1, 50m x .25mm, splitless, H2 @»
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

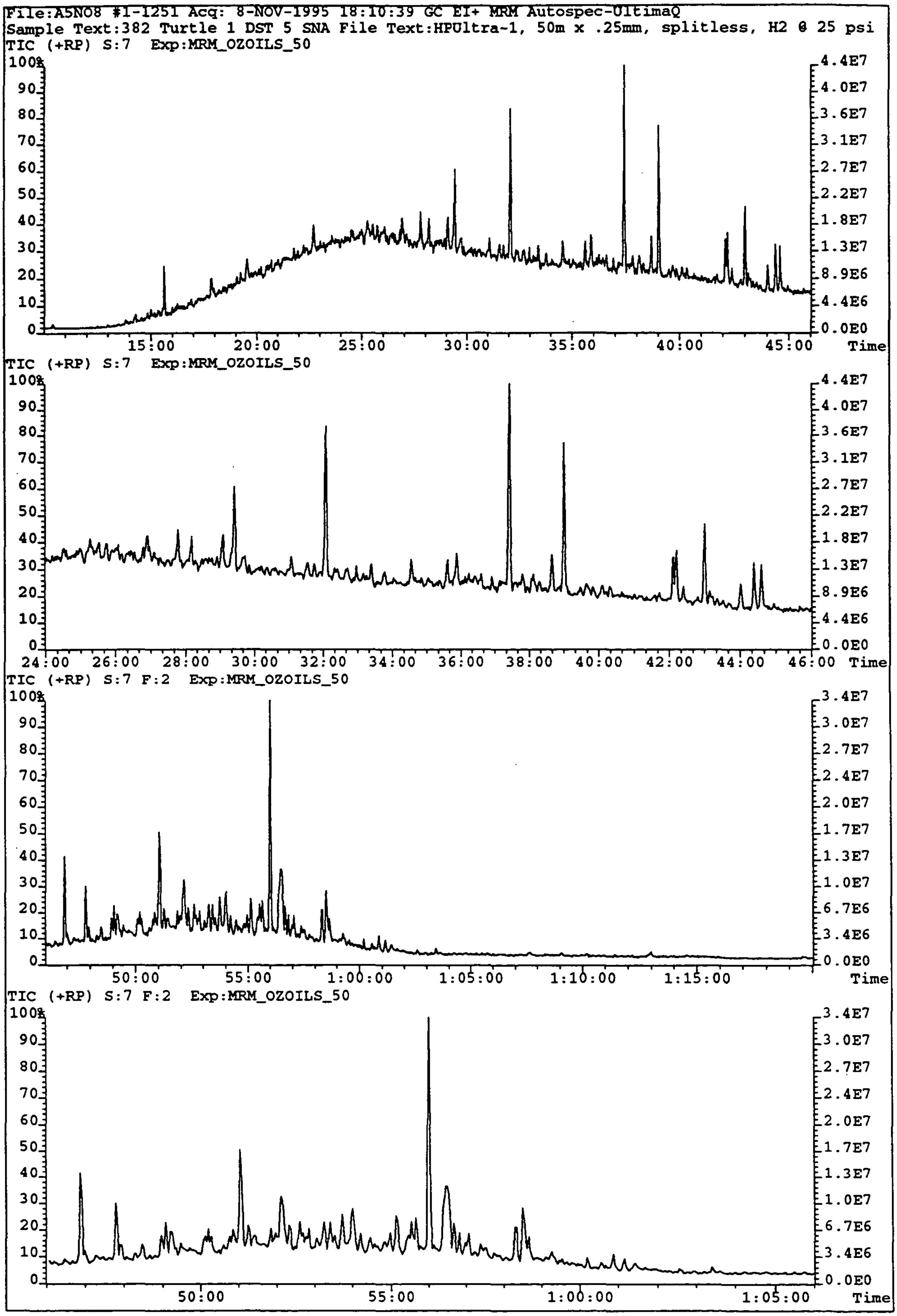

File:A6MA17 #1-1321 Acq:18-MAR-1996 18:38:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:10017 SNA File Text:Ultra-1, 50m, H2@20psi
TIC (+RP) S:14 Exp:MRM_OZOILS_STD
TIC (+RP) S:14 Exp:MRM_OZOILS_STD
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_STD
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_STD
Time


File:A6MA17 #1-1321 Acq:18-MAR-1996 18:38:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:10017 SNA File Text:Ultra-1, 50m, H2020psi
262.2650->191.1790 S:14 Exp:MRM_OZOILS_STD
3.6E7
276.2800->191.1790 S:14 Exp:MRM_OZOILS_STD
1.8E7
290.2960->191.1790 S:14 Exp:MRM_OZOILS_STD
6.7E6
304.3120->191.1790 S:14 Exp:MRM_OZOILS_STD
3.2E6
318.3280->191.1790 S:14 Exp:MRM_OZOILS_STD
2.9E6
Time

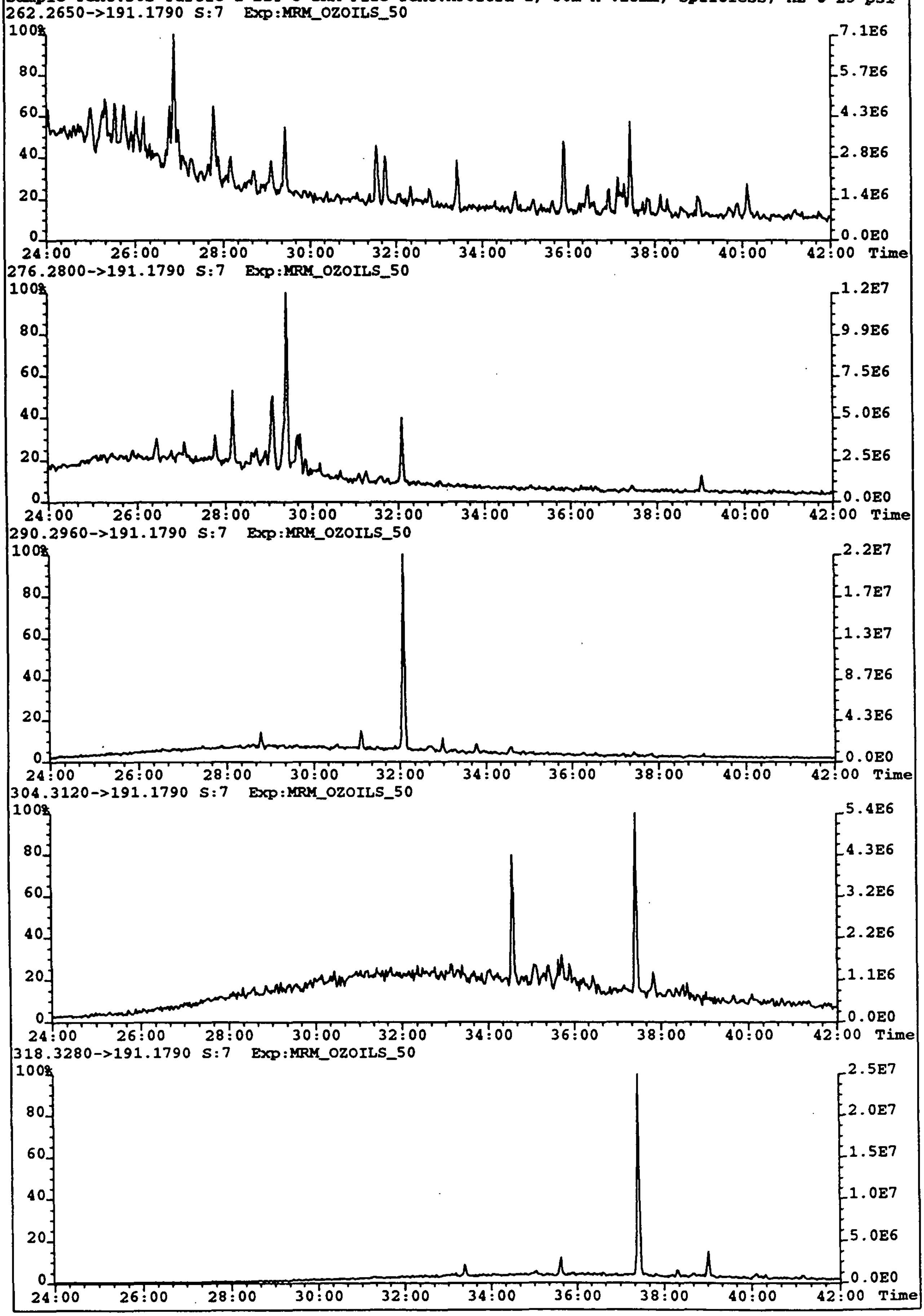

File:A6MA17 #1-1321 Acq:18-MAR-1996 18:38:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:10017 SNA File Text:Ultra-1, 50m, H2020psi
332.3440->191.1790 S:14 Exp:MRM_OZOILS_STD
3.7E6
346.3590->191.1790 S:14 Exp:MRM_OZOILS_STD
9.7E5
330.3280->191.1790 S:14 Exp:MRM_OZOILS_STD
4.8E6
360.3740->191.1790 S:14 Exp:MRM_OZOILS_STD
6.2E5
Time

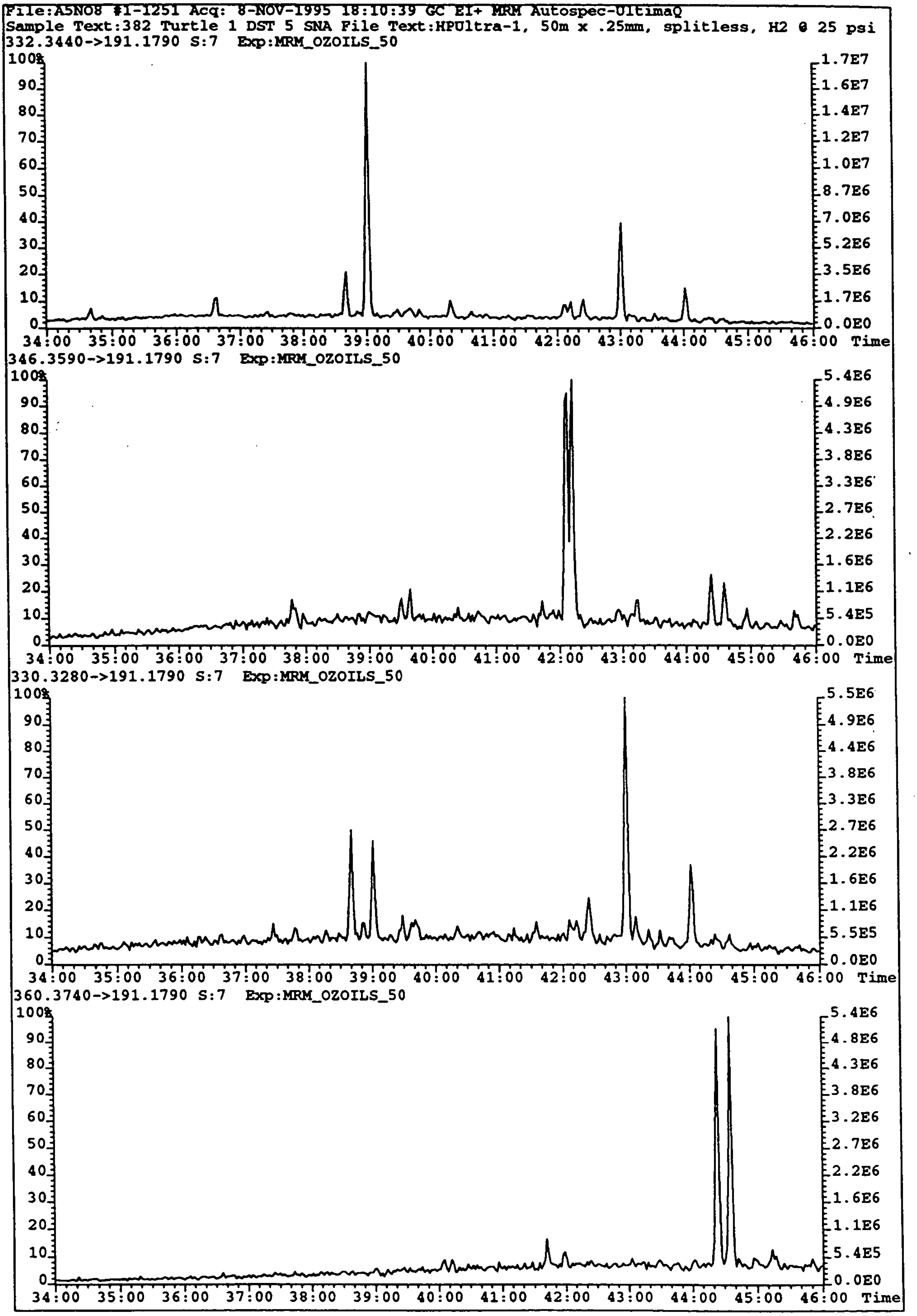

File:A6MA17 #1-986 Acq:18-MAR-1996 18:38:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:10017 SNA File Text:Ultra-1, 50m, H2020psi
372.3760->217.1960 S:14 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
2.4E6
1.9E6
1.4E6
9.7E5
4.8E5
0.0E0
50:00
55:00
1:00:00
1:05:00
Time
386.3910->217.1960 S:14 F:2 Exp:MRM_OZOILS_STD
1.4E6
1.1E6
8.2E5
5.5E5
2.7E5
0.0E0
400.4070->217.1960 S:14 F:2 Exp:MRM_OZOILS_STD
4.3E6
3.5E6
2.6E6
1.7E6
8.6E5
0.0E0
414.4230->217.1960 S:14 F:2 Exp:MRM_OZOILS_STD
4.1E5
3.3E5
2.5E5
1.7E5
8.3E4
0.0E0
414.4230->231.2120 S:14 F:2 Exp:MRM_OZOILS_STD
5.6E5
4.5E5
3.4E5
2.3E5
1.1E5
0.0E0

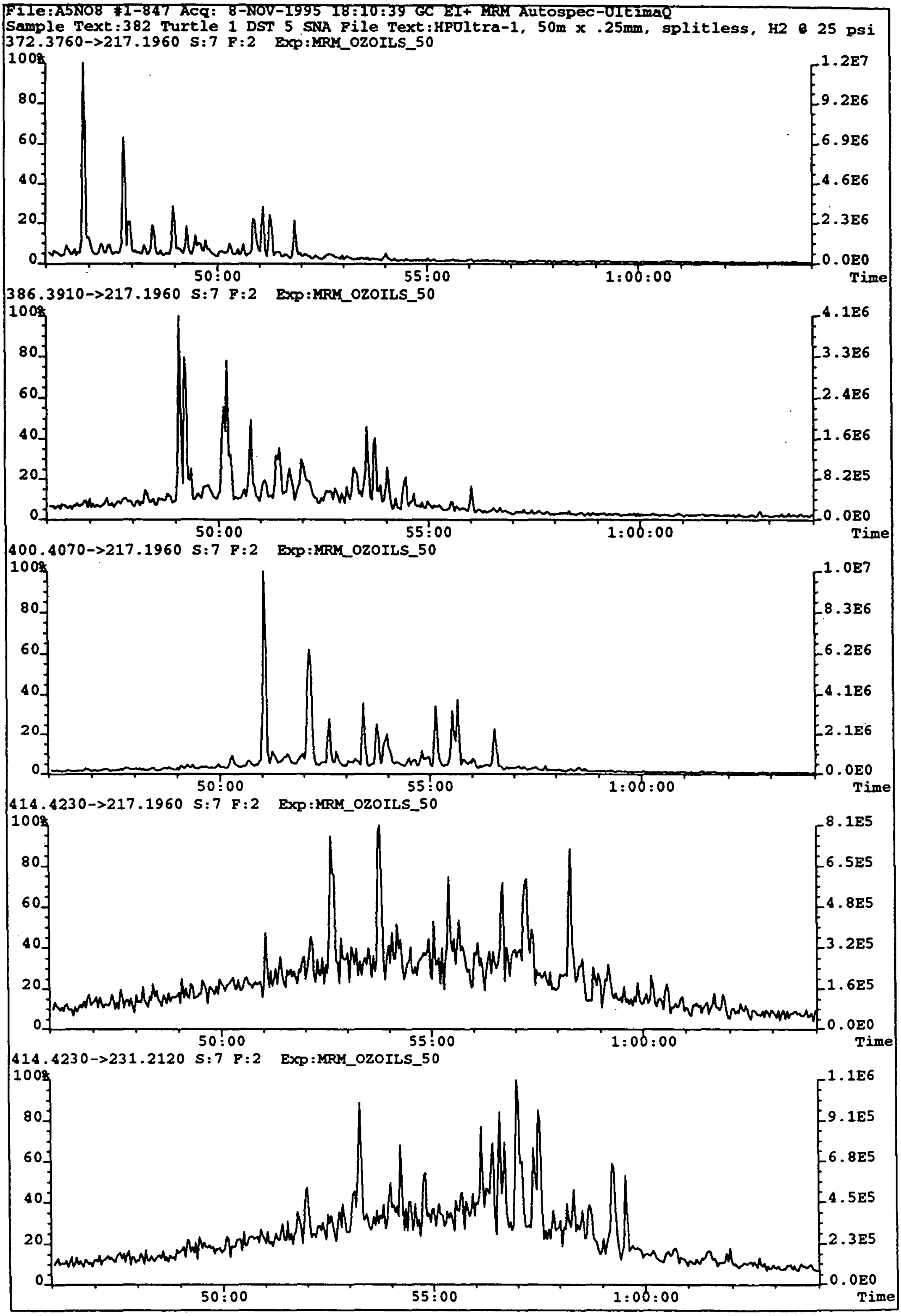

File:A6MA17 #1-986 Acq:18-MAR-1996 18:38:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:10017 SNA File Text:Ultra-1, 50m, H2@20psi
370.3590->191.1790 S:14 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
3.8E6
3.1E6
2.3E6
1.5E6
7.7E5
0.0E0
50:00
55:00
1:00:00
1:05:00
Time
384.3740->191.1790 S:14 F:2 Exp:MRM_OZOILS_STD
5.0E5
4.0E5
3.0E5
2.0E5
1.0E5
0.0E0
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_STD
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_STD
2.8E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_STD
5.4E5
4.4E5
3.3E5
2.2E5
1.1E5
0.0E0


File:A5NO8 #1-1251 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
TIC (+RP) S:7 Exp:MRM_OZOILS_50
TIC (+RP) S:7 Exp:MRM_OZOILS_50
TIC (+RP) S:7 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:7 F:2 Exp:MRM_OZOILS_50
Time

File:A5N08 #1-1251 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi



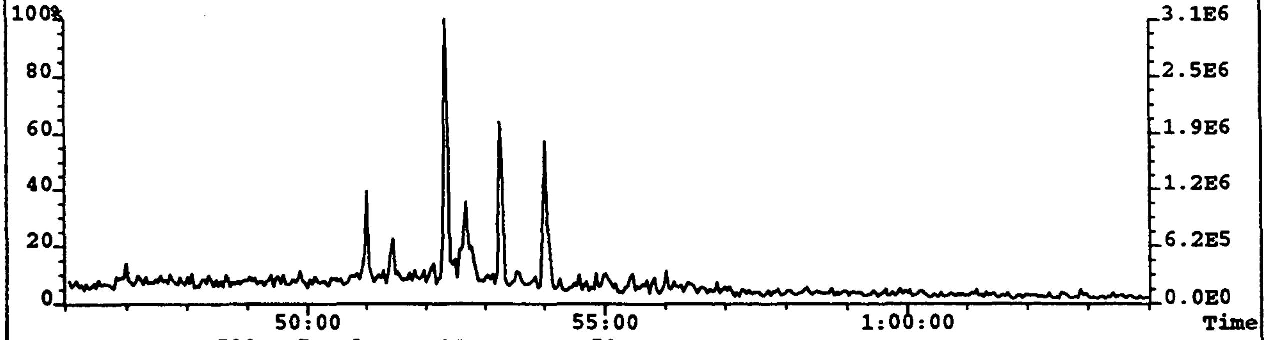

File:A5NO8 #1-1251 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
332.3440->191.1790 S:7 Exp:MRM_OZOILS_50
100%
1.7E7
346.3590->191.1790 S:7 Exp:MRM_OZOILS_50
5.4E6
330.3280->191.1790 S:7 Exp:MRM_OZOILS_50
5.5E6
360.3740->191.1790 S:7 Exp:MRM_OZOILS_50
5.4E6
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time



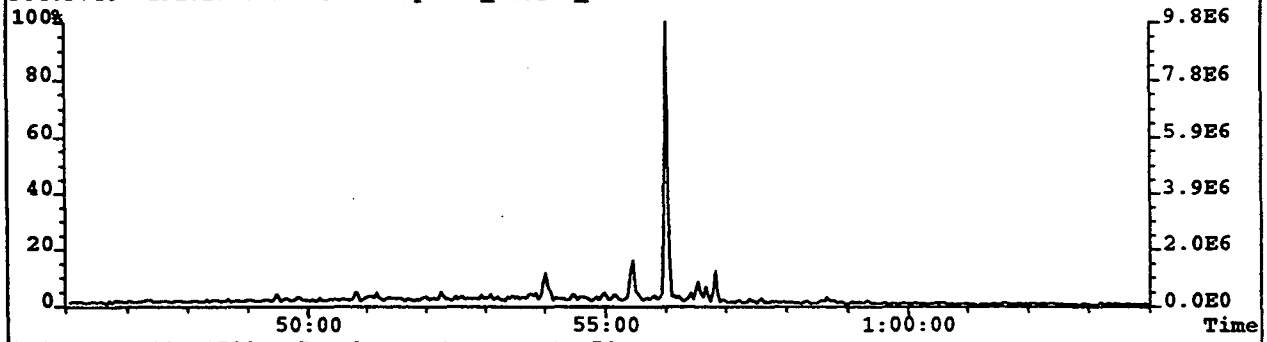
File:A5NO8 #1-847 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
372.3760->217.1960 S:7 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:7 F:2 Exp:MRM_OZOILS_50
4.1E6
3.3E6
2.4E6
1.6E6
8.2E5
0.0E0
400.4070->217.1960 S:7 F:2 Exp:MRM_OZOILS_50
1.0E7
8.3E6
6.2E6
4.1E6
2.1E6
0.0E0
414.4230->217.1960 S:7 F:2 Exp:MRM_OZOILS_50
8.1E5
6.5E5
4.8E5
3.2E5
1.6E5
0.0E0
414.4230->231.2120 S:7 F:2 Exp:MRM_OZOILS_50
1.1E6
9.1E5
6.8E5
4.5E5
2.3E5
0.0E0

File:A5N08 #1-847 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

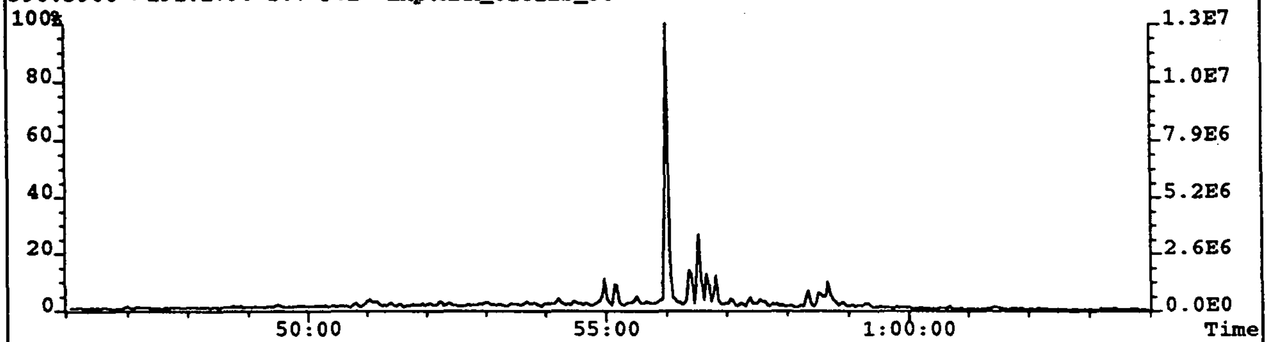
370.3590->191.1790 S:7 F:2 Exp:MRM_OZOILS_50



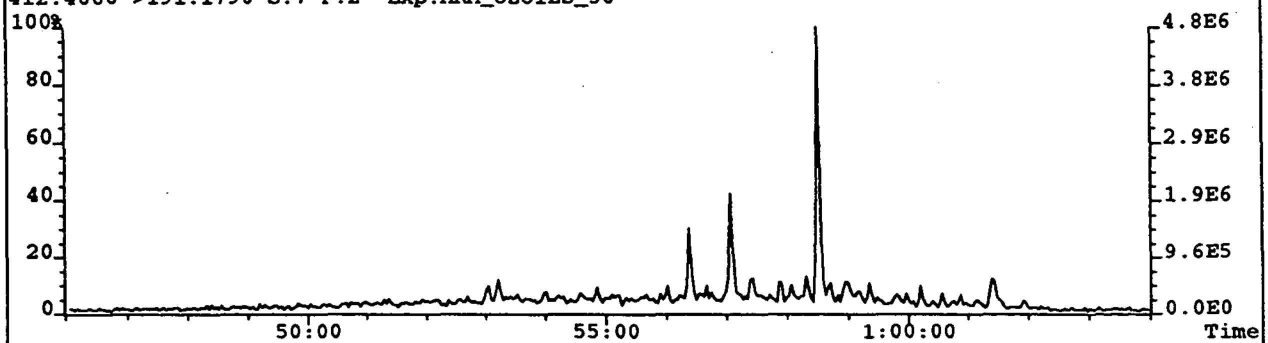
384.3740->191.1790 S:7 F:2 Exp:MRM_OZOILS_50



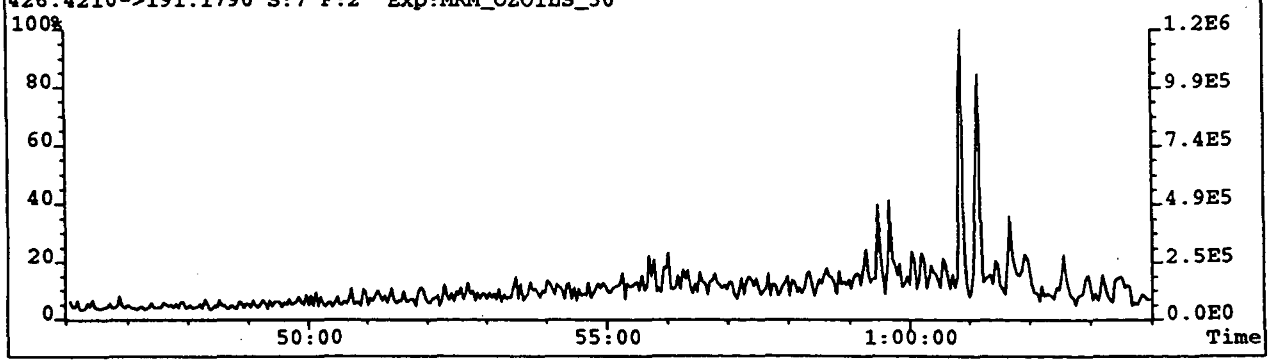
398.3900->191.1790 S:7 F:2 Exp:MRM_OZOILS_50

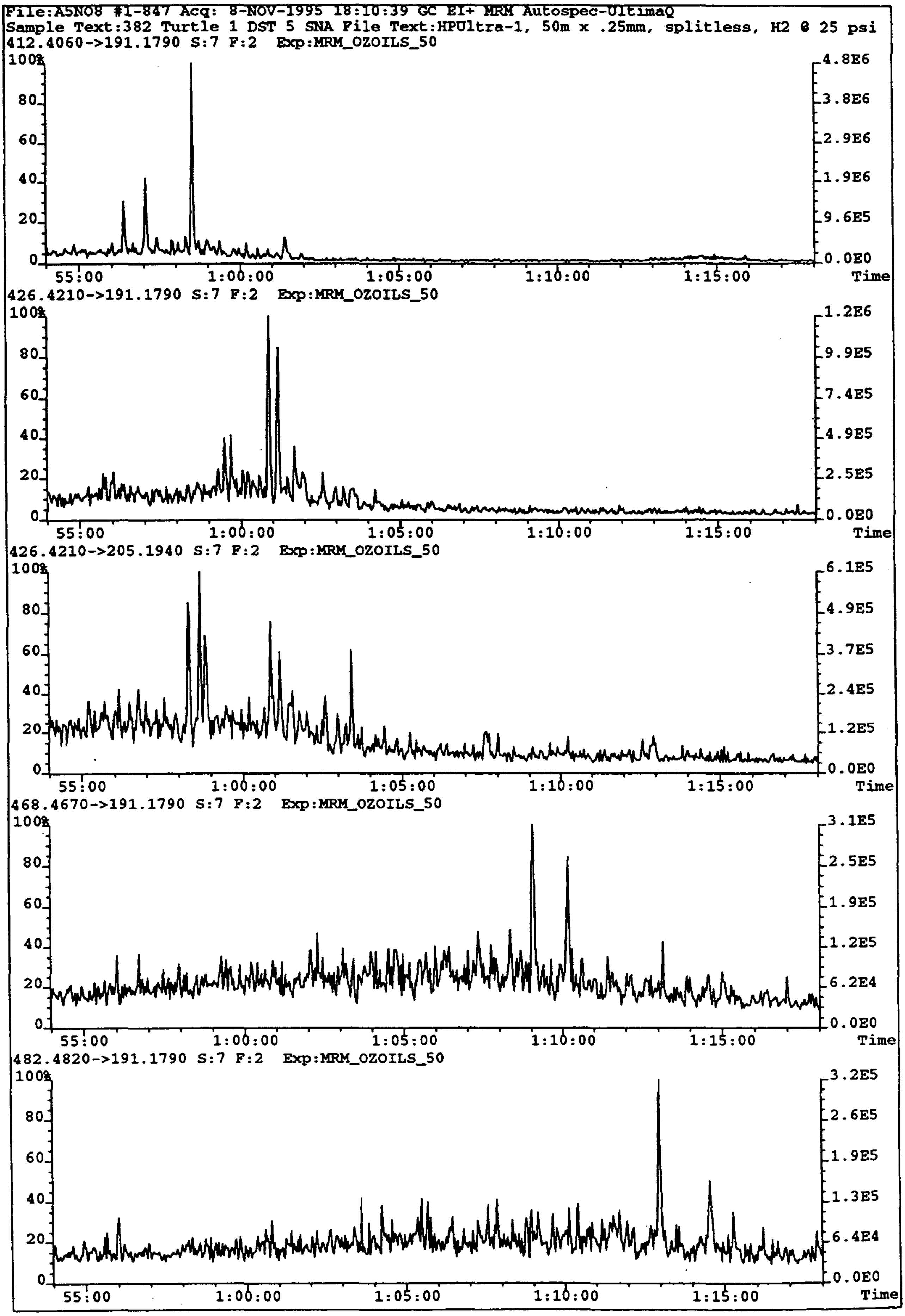


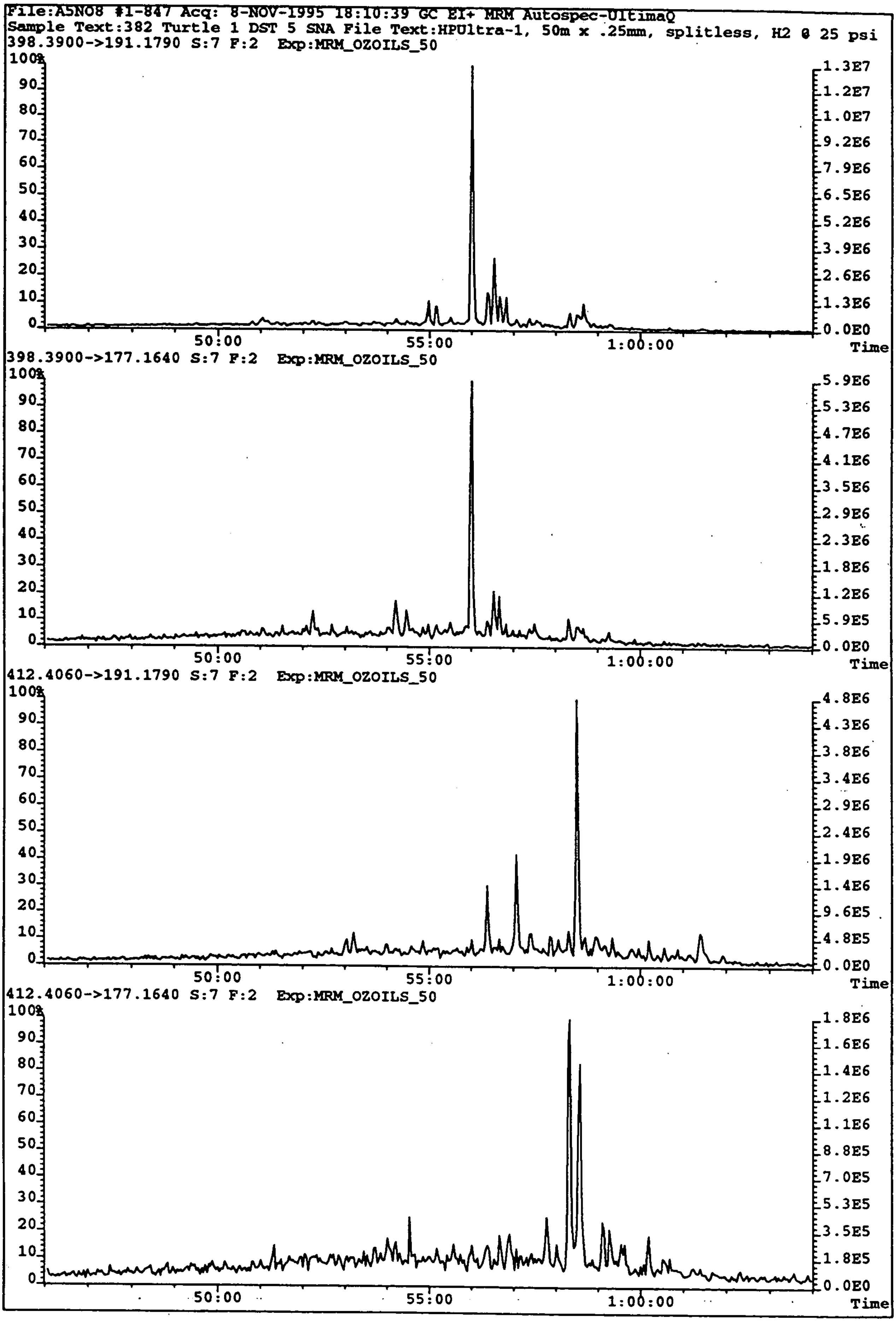
412.4060->191.1790 S:7 F:2 Exp:MRM_OZOILS_50

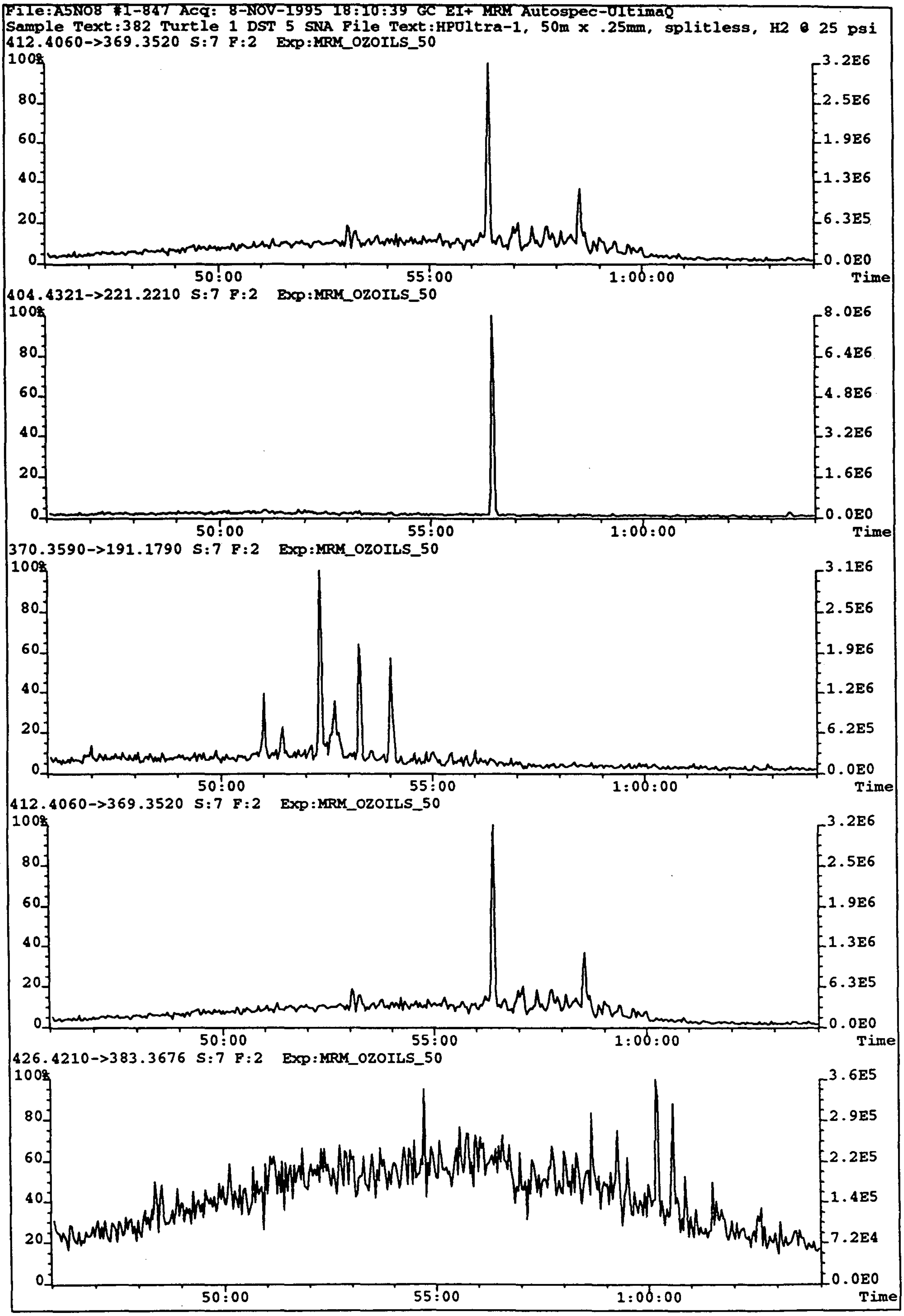


426.4210->191.1790 S:7 F:2 Exp:MRM_OZOILS_50

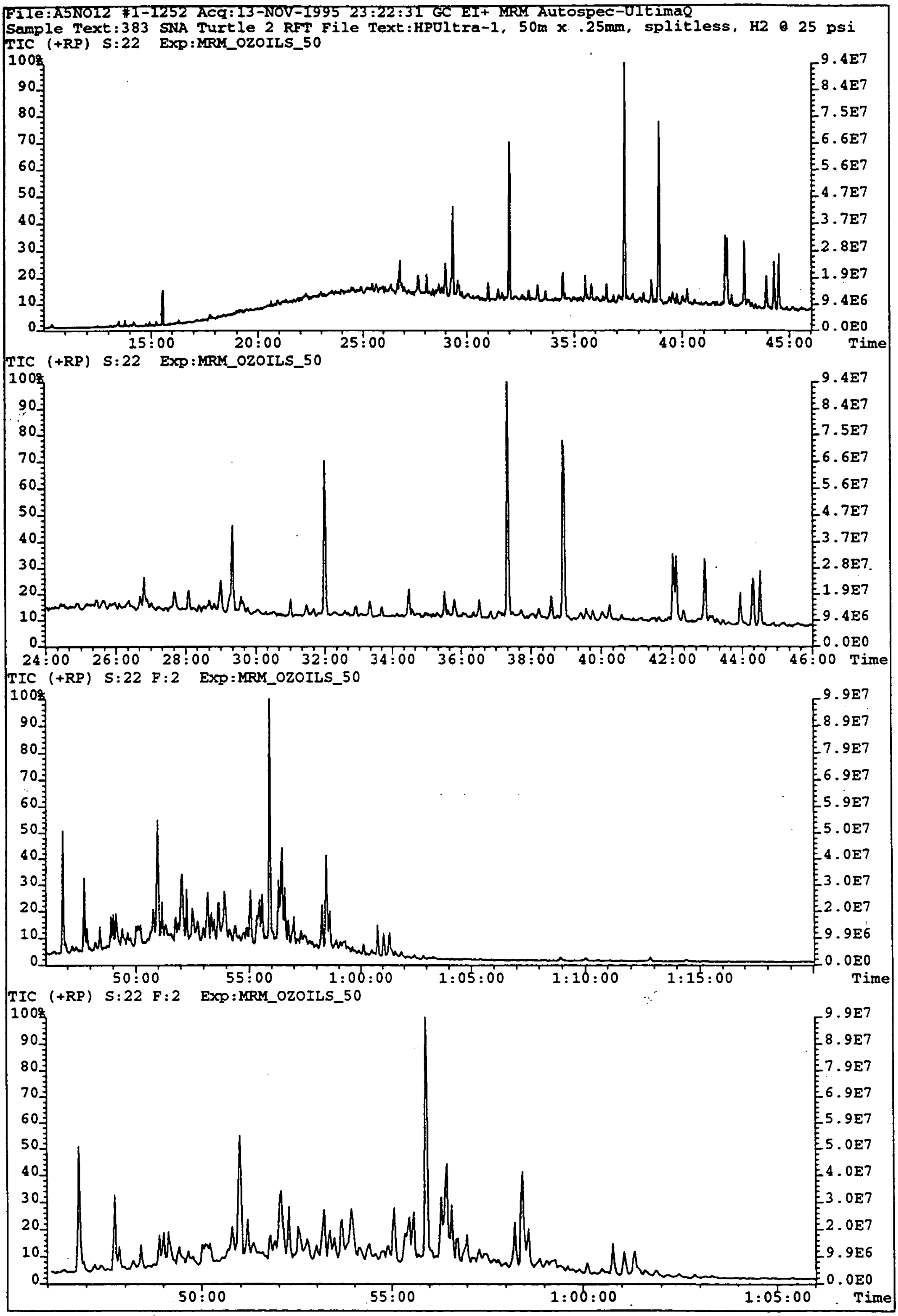


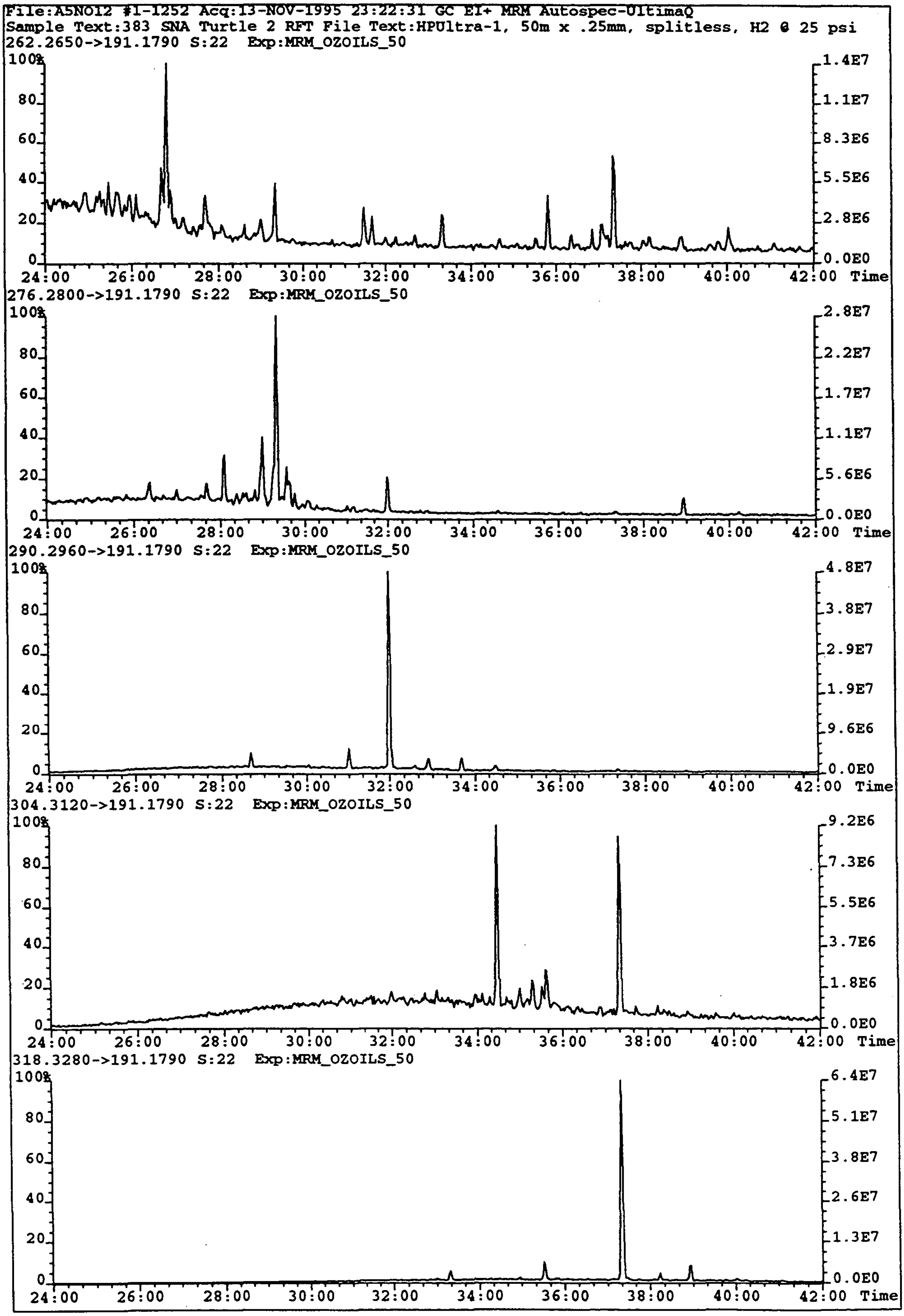

File:A5NO8 #1-847 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
4.8E6
3.8E6
2.9E6
1.9E6
9.6E5
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
1.2E6
9.9E5
7.4E5
4.9E5
2.5E5
0.0E0
426.4210->205.1940 S:7 F:2 Exp:MRM_OZOILS_50
6.1E5
4.9E5
3.7E5
2.4E5
1.2E5
0.0E0
468.4670->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
3.1E5
2.5E5
1.9E5
1.2E5
6.2E4
0.0E0
482.4820->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
3.2E5
2.6E5
1.9E5
1.3E5
6.4E4
0.0E0

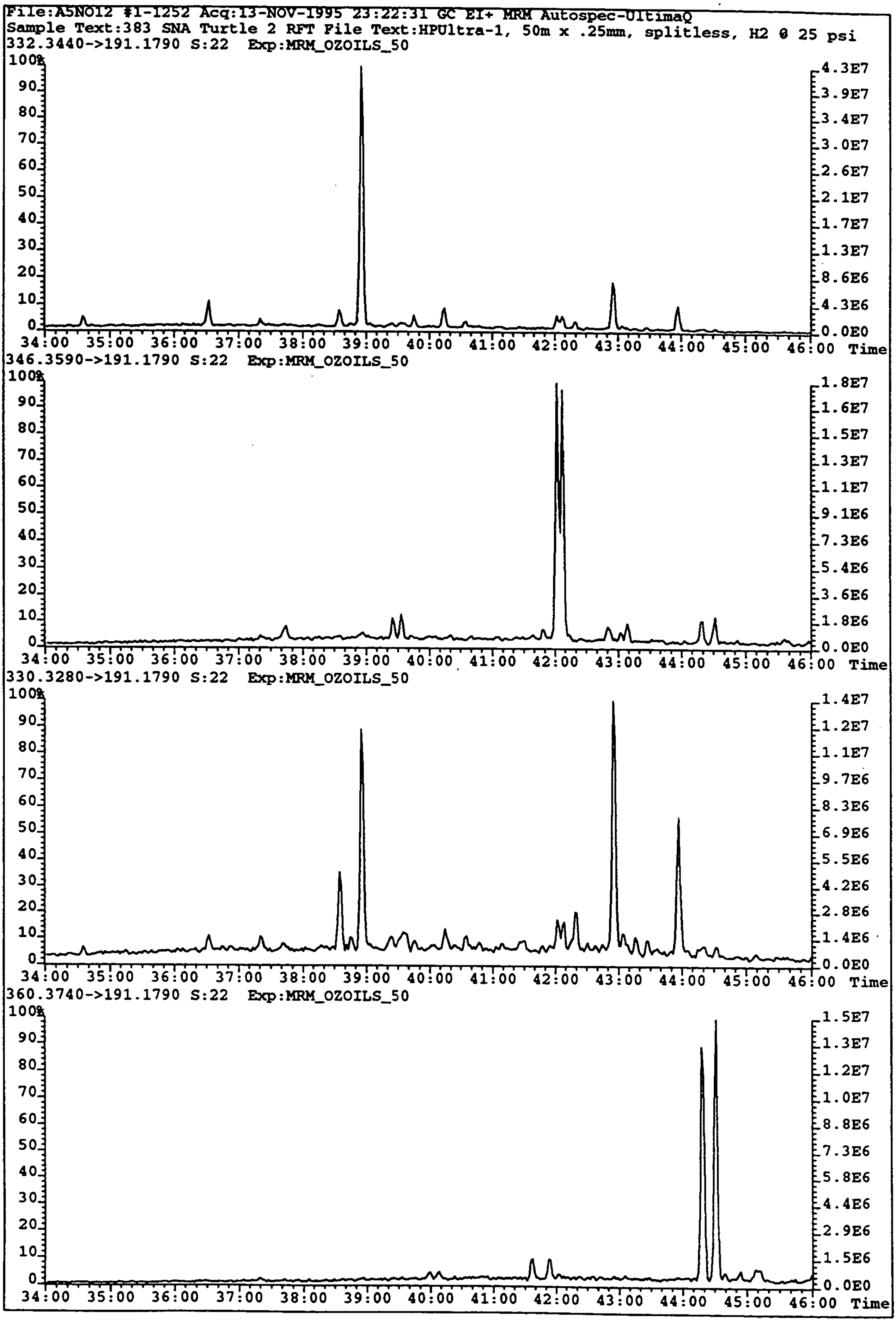

File:A5N08 #1-847 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
398.3900->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:7 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:7 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

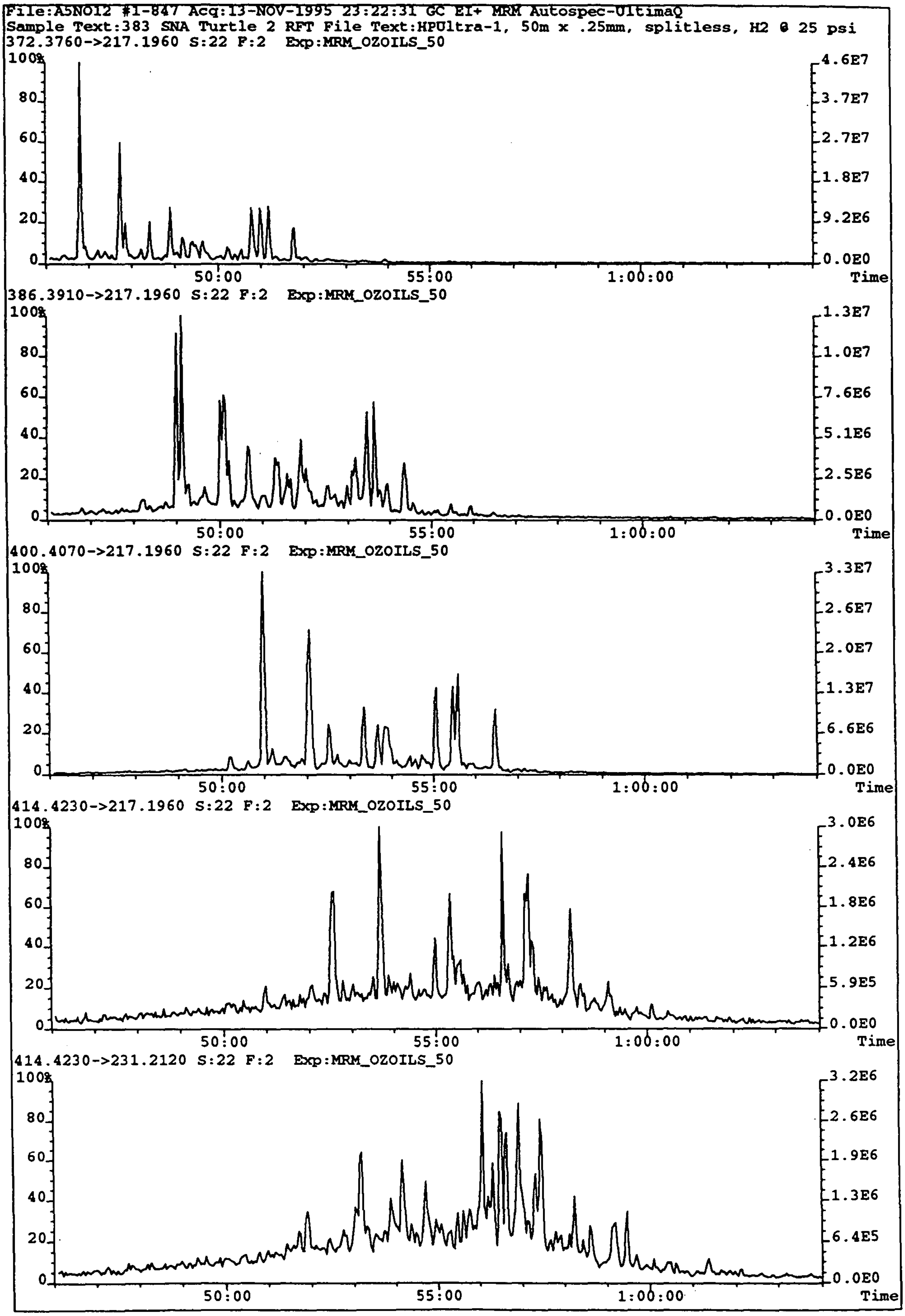


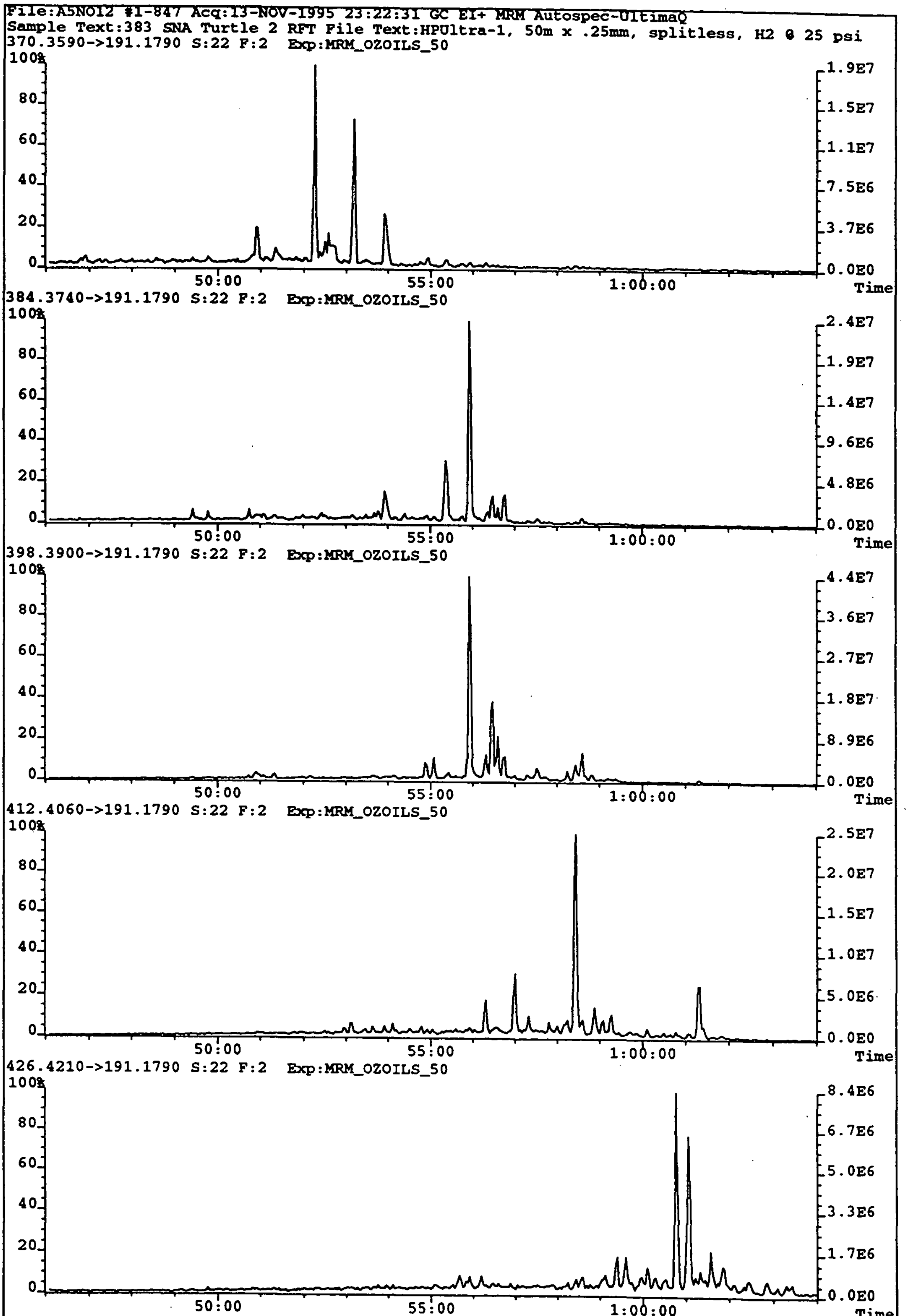
File:A5NO8 #1-847 Acq: 8-NOV-1995 18:10:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:382 Turtle 1 DST 5 SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->369.3520 S:7 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:7 F:2 Exp:MRM_OZOILS_50
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
370.3590->191.1790 S:7 F:2 Exp:MRM_OZOILS_50
3.1E6
2.5E6
1.9E6
1.2E6
6.2E5
0.0E0
412.4060->369.3520 S:7 F:2 Exp:MRM_OZOILS_50
3.2E6
2.5E6
1.9E6
1.3E6
6.3E5
0.0E0
426.4210->383.3676 S:7 F:2 Exp:MRM_OZOILS_50
3.6E5
2.9E5
2.2E5
1.4E5
7.2E4
0.0E0


File:A5NO12 #1-1252 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
TIC (+RP) S:22 Exp:MRM_OZOILS_50
100%
9.4E7
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:22 Exp:MRM_OZOILS_50
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:22 F:2 Exp:MRM_OZOILS_50
9.9E7
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:22 F:2 Exp:MRM_OZOILS_50
9.9E7
50:00
55:00
1:00:00
1:05:00
Time

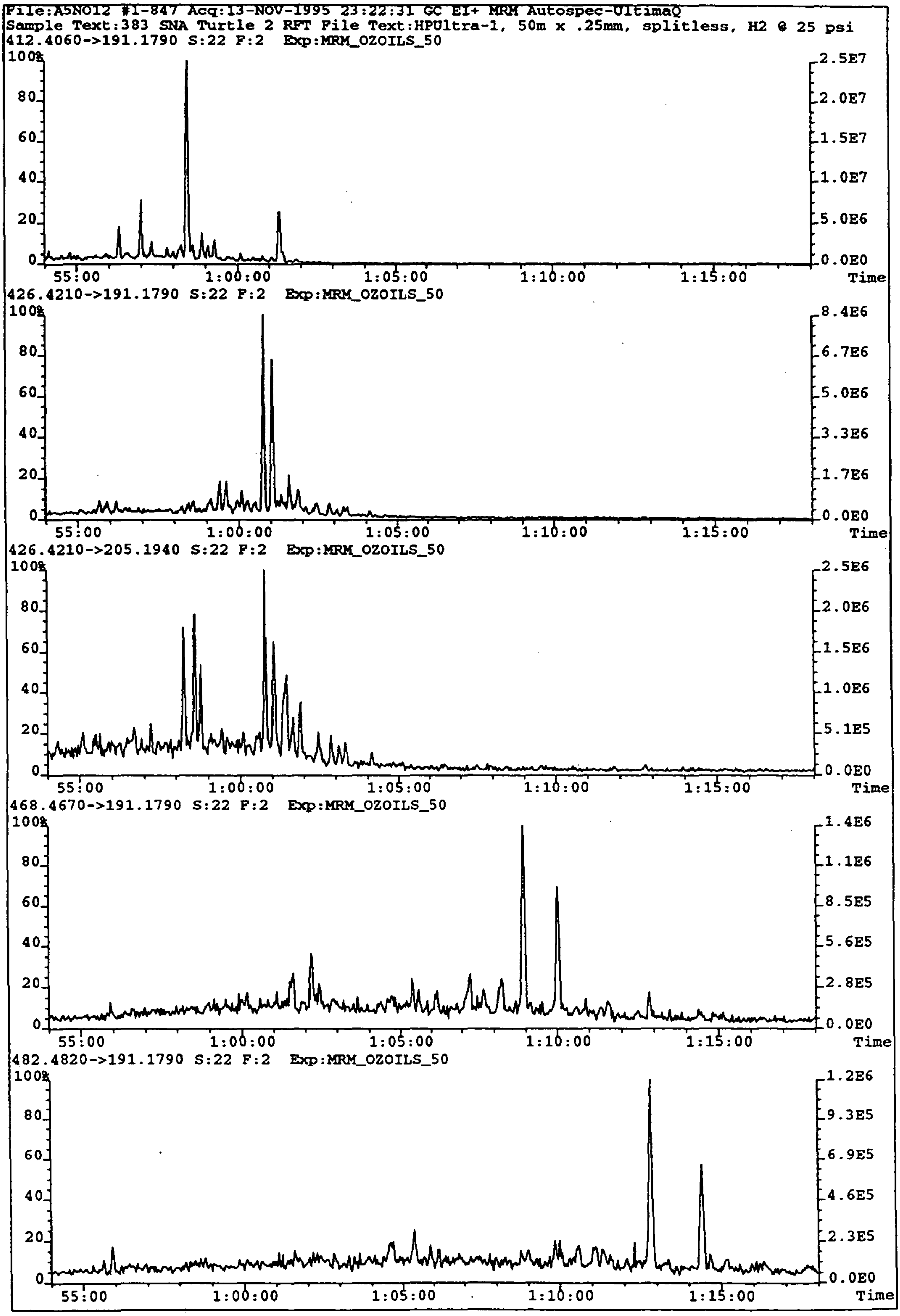

File:A5NO12 #1-1252 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
262.2650->191.1790 S:22 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.4E7
1.1E7
8.3E6
5.5E6
2.8E6
0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
276.2800->191.1790 S:22 Exp:MRM_OZOILS_50
2.8E7
2.2E7
1.7E7
1.1E7
5.6E6
0.0E0
290.2960->191.1790 S:22 Exp:MRM_OZOILS_50
4.8E7
3.8E7
2.9E7
1.9E7
9.6E6
0.0E0
304.3120->191.1790 S:22 Exp:MRM_OZOILS_50
9.2E6
7.3E6
5.5E6
3.7E6
1.8E6
0.0E0
318.3280->191.1790 S:22 Exp:MRM_OZOILS_50
6.4E7
5.1E7
3.8E7
2.6E7
1.3E7
0.0E0

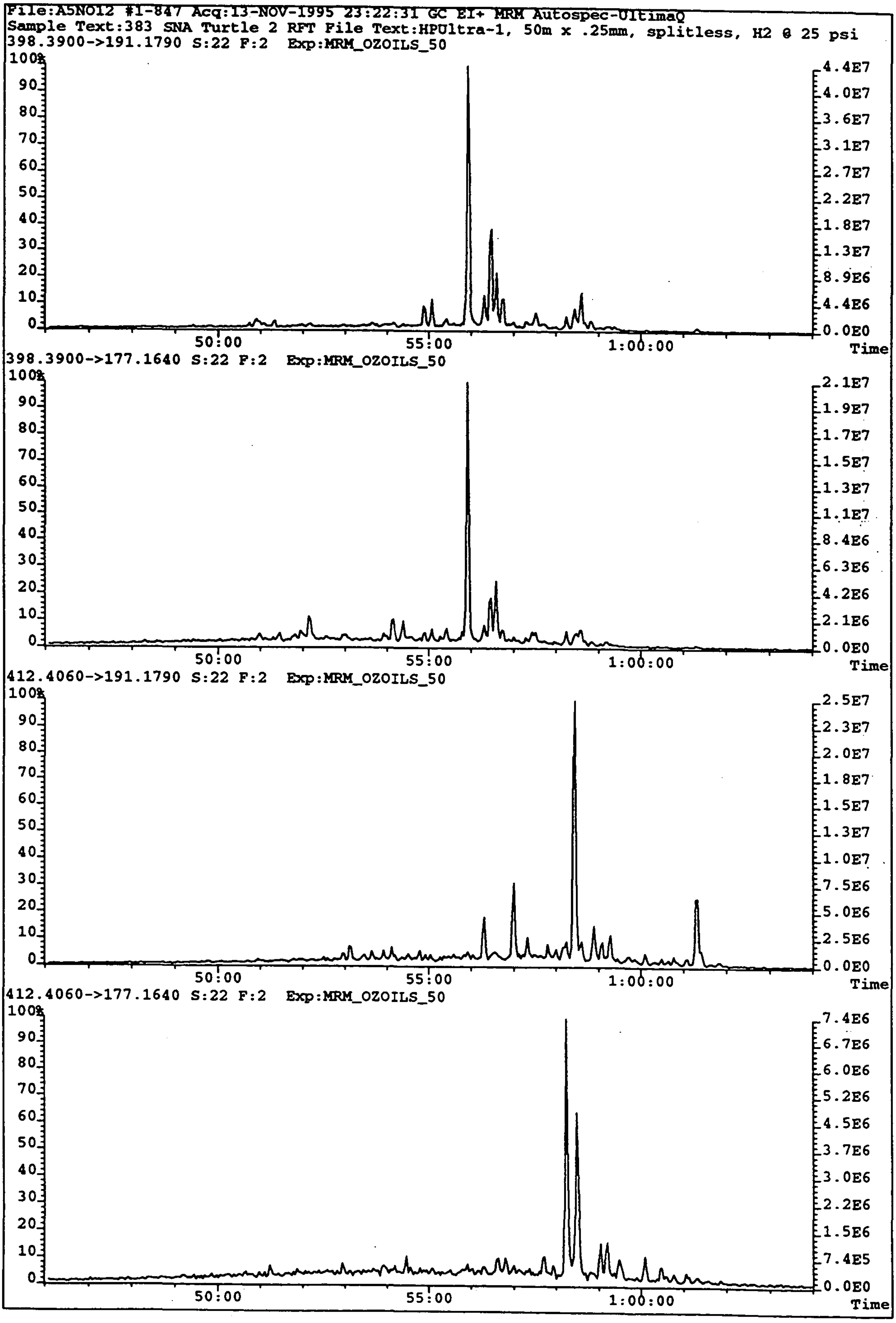

File:A5N012 #1-1252 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
332.3440->191.1790 S:22 Exp:MRM_OZOILS_50
346.3590->191.1790 S:22 Exp:MRM_OZOILS_50
330.3280->191.1790 S:22 Exp:MRM_OZOILS_50
360.3740->191.1790 S:22 Exp:MRM_OZOILS_50
Time

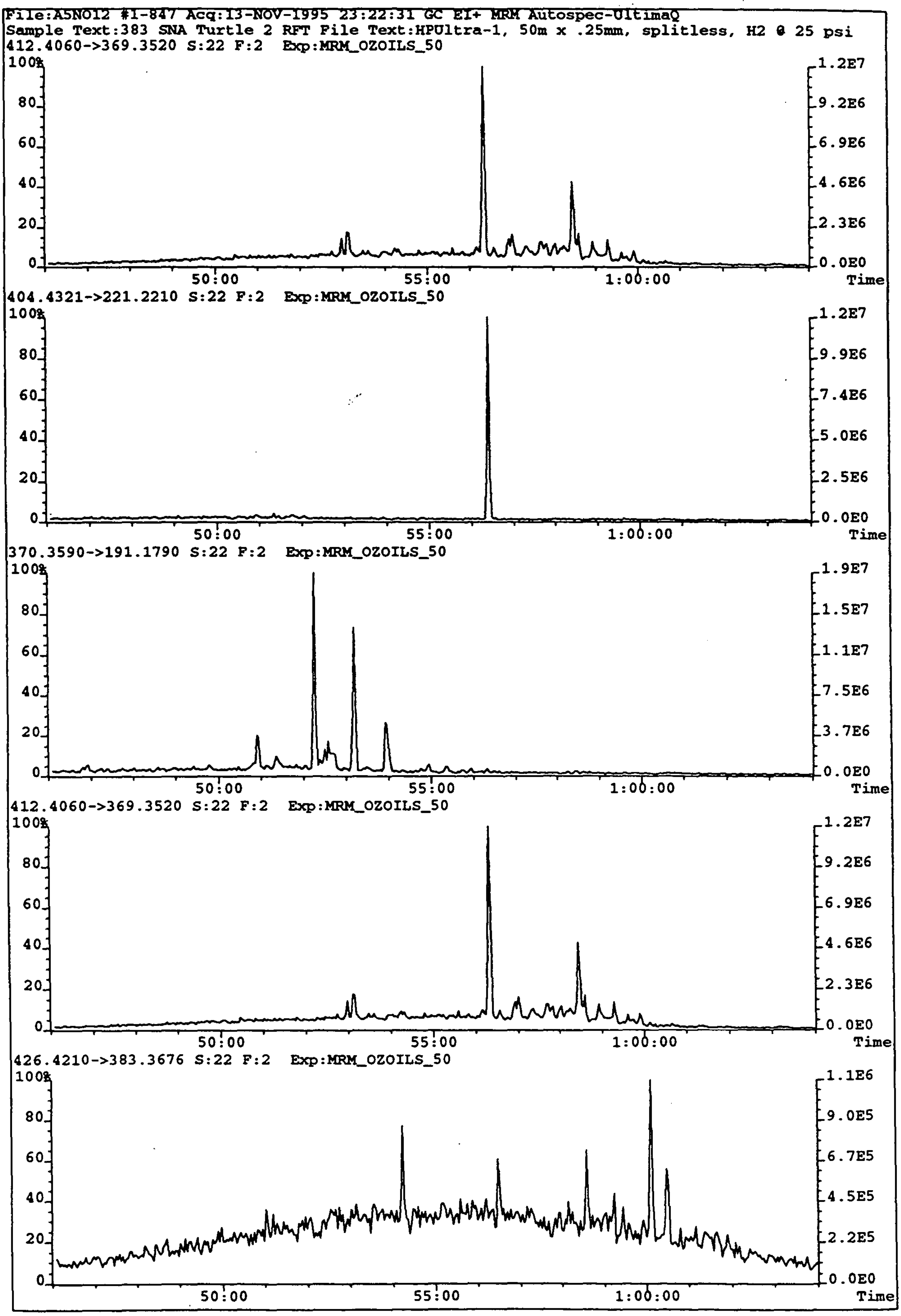

File:A5N012 #1-847 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
372.3760->217.1960 S:22 F:2 Exp:MRM_OZOILS_50
386.3910->217.1960 S:22 F:2 Exp:MRM_OZOILS_50
400.4070->217.1960 S:22 F:2 Exp:MRM_OZOILS_50
414.4230->217.1960 S:22 F:2 Exp:MRM_OZOILS_50
414.4230->231.2120 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
4.6E7
3.7E7
2.7E7
1.8E7
9.2E6
0.0E0
1.3E7
1.0E7
7.6E6
5.1E6
2.5E6
3.3E7
2.6E7
2.0E7
1.3E7
6.6E6
3.0E6
2.4E6
1.8E6
1.2E6
5.9E5
3.2E6
2.6E6
1.9E6
1.3E6
6.4E5

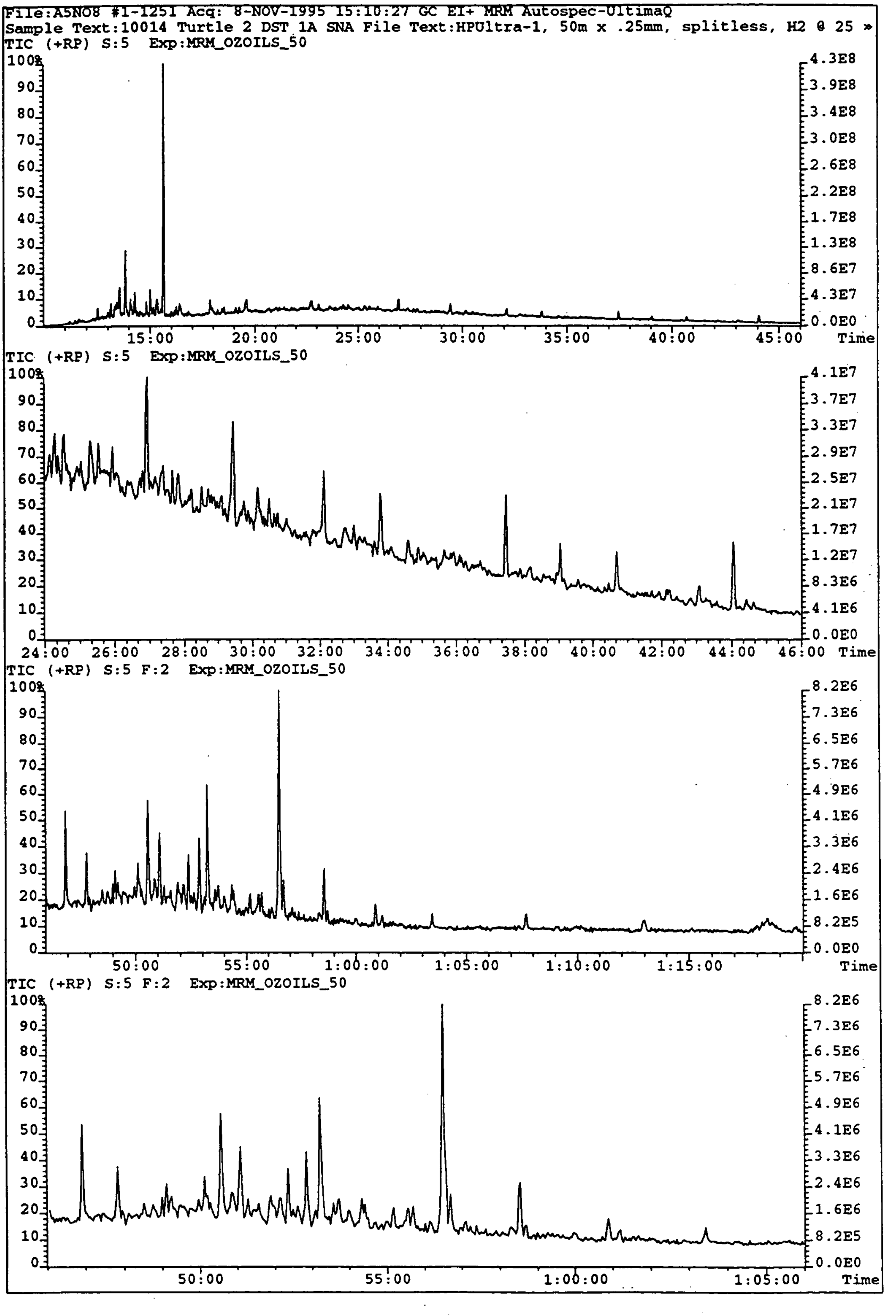


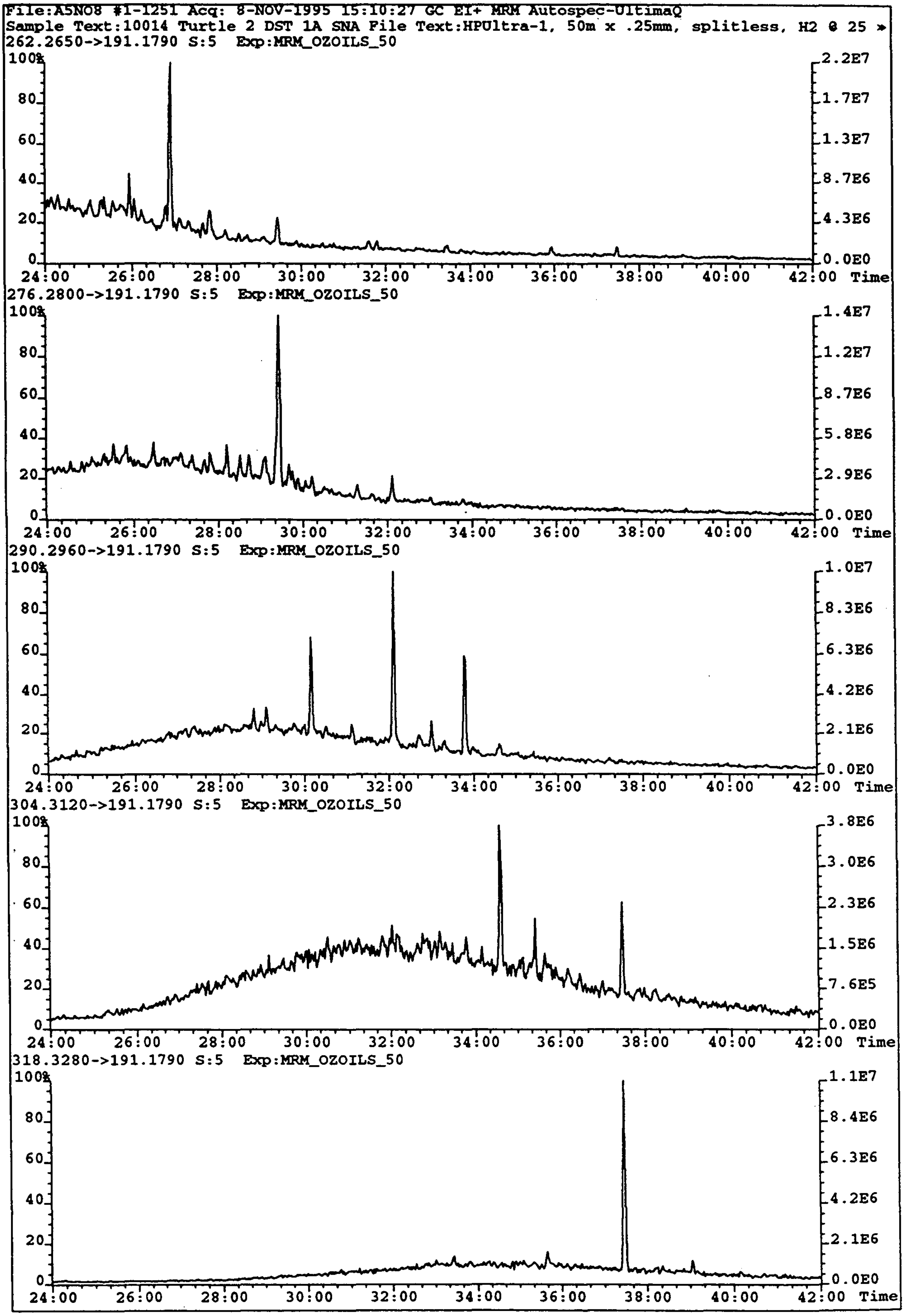
File:A5N012 #1-847 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
370.3590->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
2.4E7
1.9E7
1.4E7
9.6E6
4.8E6
4.4E7
3.6E7
2.7E7
1.8E7
8.9E6
2.5E7
2.0E7
1.5E7
1.0E7
5.0E6
8.4E6
6.7E6
5.0E6
3.3E6
1.7E6

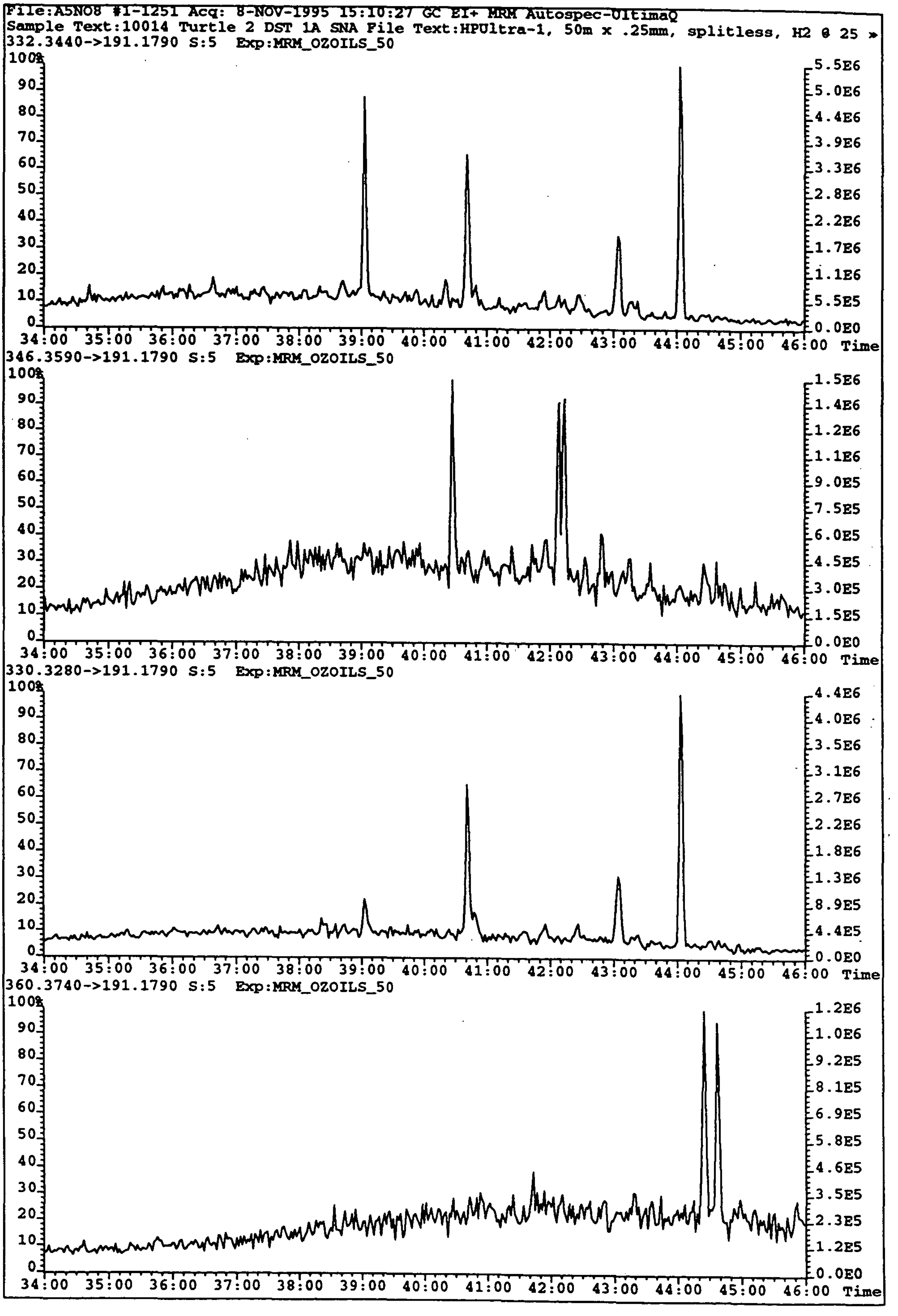

File:A5NO12 #1-847 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
426.4210->205.1940 S:22 F:2 Exp:MRM_OZOILS_50
468.4670->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
482.4820->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
2.5E7
2.0E7
1.5E7
1.0E7
5.0E6
0.0E0
8.4E6
6.7E6
5.0E6
3.3E6
1.7E6
2.5E6
2.0E6
1.5E6
1.0E6
5.1E5
1.4E6
1.1E6
8.5E5
5.6E5
2.8E5
1.2E6
9.3E5
6.9E5
4.6E5
2.3E5


File:A5N012 #1-847 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
398.3900->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
4.4E7
4.0E7
3.6E7
3.1E7
2.7E7
2.2E7
1.8E7
1.3E7
8.9E6
4.4E6
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:22 F:2 Exp:MRM_OZOILS_50
2.1E7
1.9E7
1.7E7
1.5E7
1.3E7
1.1E7
8.4E6
6.3E6
4.2E6
2.1E6
0.0E0
412.4060->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
2.5E7
2.3E7
2.0E7
1.8E7
1.5E7
1.3E7
1.0E7
7.5E6
5.0E6
2.5E6
0.0E0
412.4060->177.1640 S:22 F:2 Exp:MRM_OZOILS_50
7.4E6
6.7E6
6.0E6
5.2E6
4.5E6
3.7E6
3.0E6
2.2E6
1.5E6
7.4E5
0.0E0


File:A5N012 #1-847 Acq:13-NOV-1995 23:22:31 GC EI+ MRM Autospec-UltimaQ
Sample Text:383 SNA Turtle 2 RFT File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->369.3520 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E7
9.9E6
7.4E6
5.0E6
2.5E6
0.0E0
50:00
55:00
1:00:00
Time
370.3590->191.1790 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
50:00
55:00
1:00:00
Time
412.4060->369.3520 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0
50:00
55:00
1:00:00
Time
426.4210->383.3676 S:22 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.1E6
9.0E5
6.7E5
4.5E5
2.2E5
0.0E0
50:00
55:00
1:00:00
Time

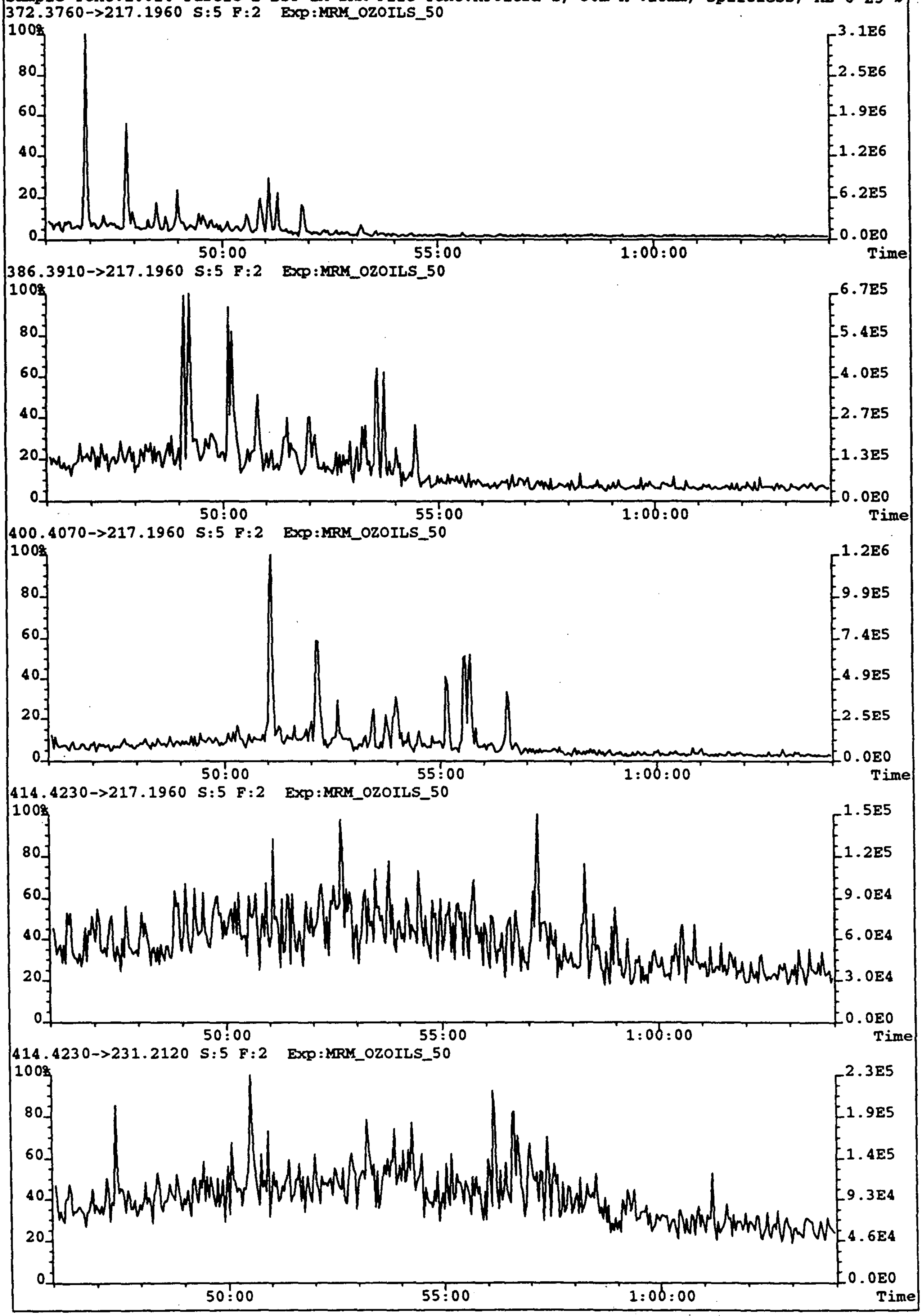

File:A5NO8 #1-1251 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
TIC (+RP) S:5 Exp:MRM_OZOILS_50
TIC (+RP) S:5 Exp:MRM_OZOILS_50
TIC (+RP) S:5 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:5 F:2 Exp:MRM_OZOILS_50
Time

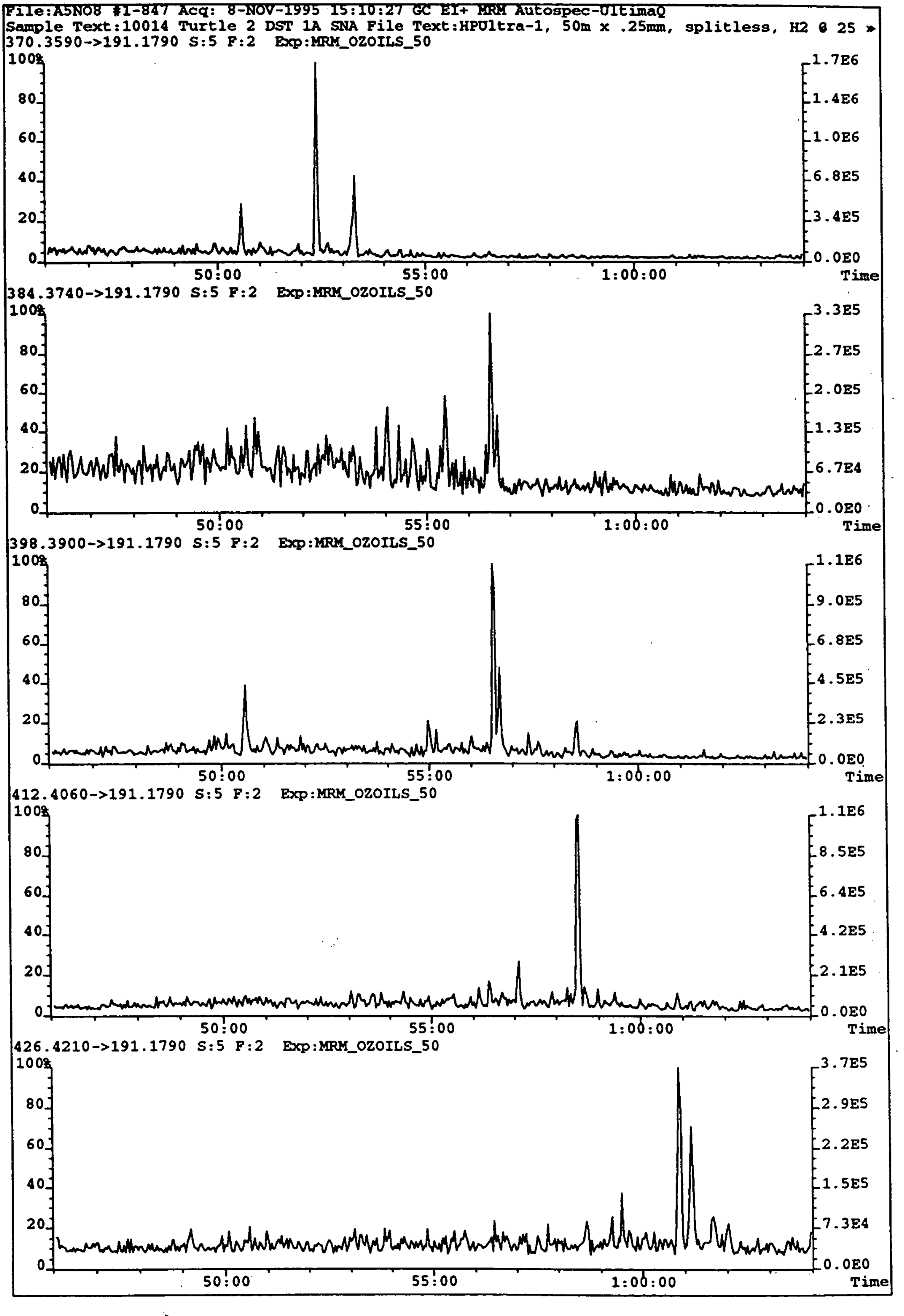

File:A5NO8 #1-1251 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
262.2650->191.1790 S:5 Exp:MRM_OZOILS_50
2.2E7
276.2800->191.1790 S:5 Exp:MRM_OZOILS_50
1.4E7
290.2960->191.1790 S:5 Exp:MRM_OZOILS_50
1.0E7
304.3120->191.1790 S:5 Exp:MRM_OZOILS_50
3.8E6
318.3280->191.1790 S:5 Exp:MRM_OZOILS_50
1.1E7
Time

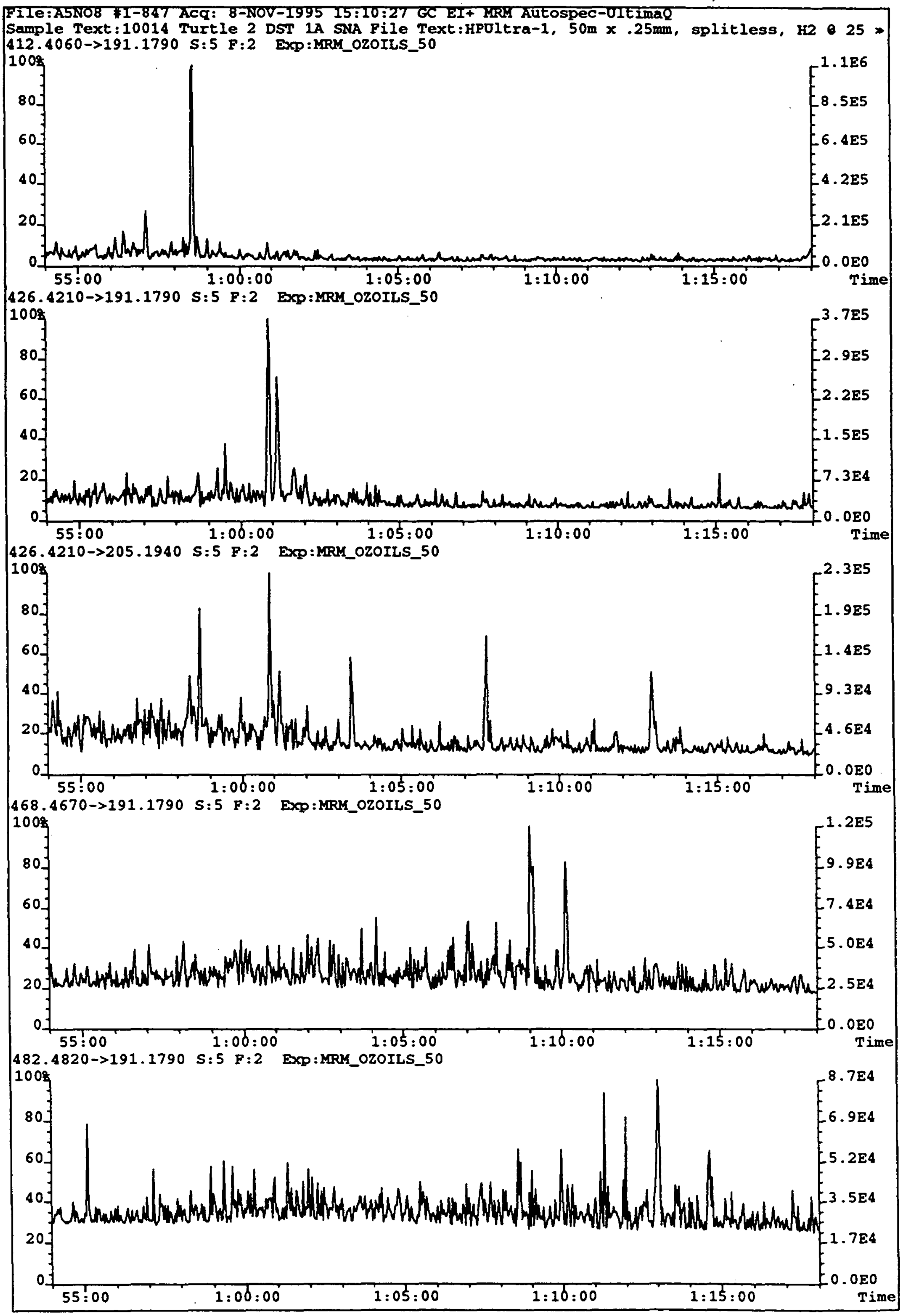


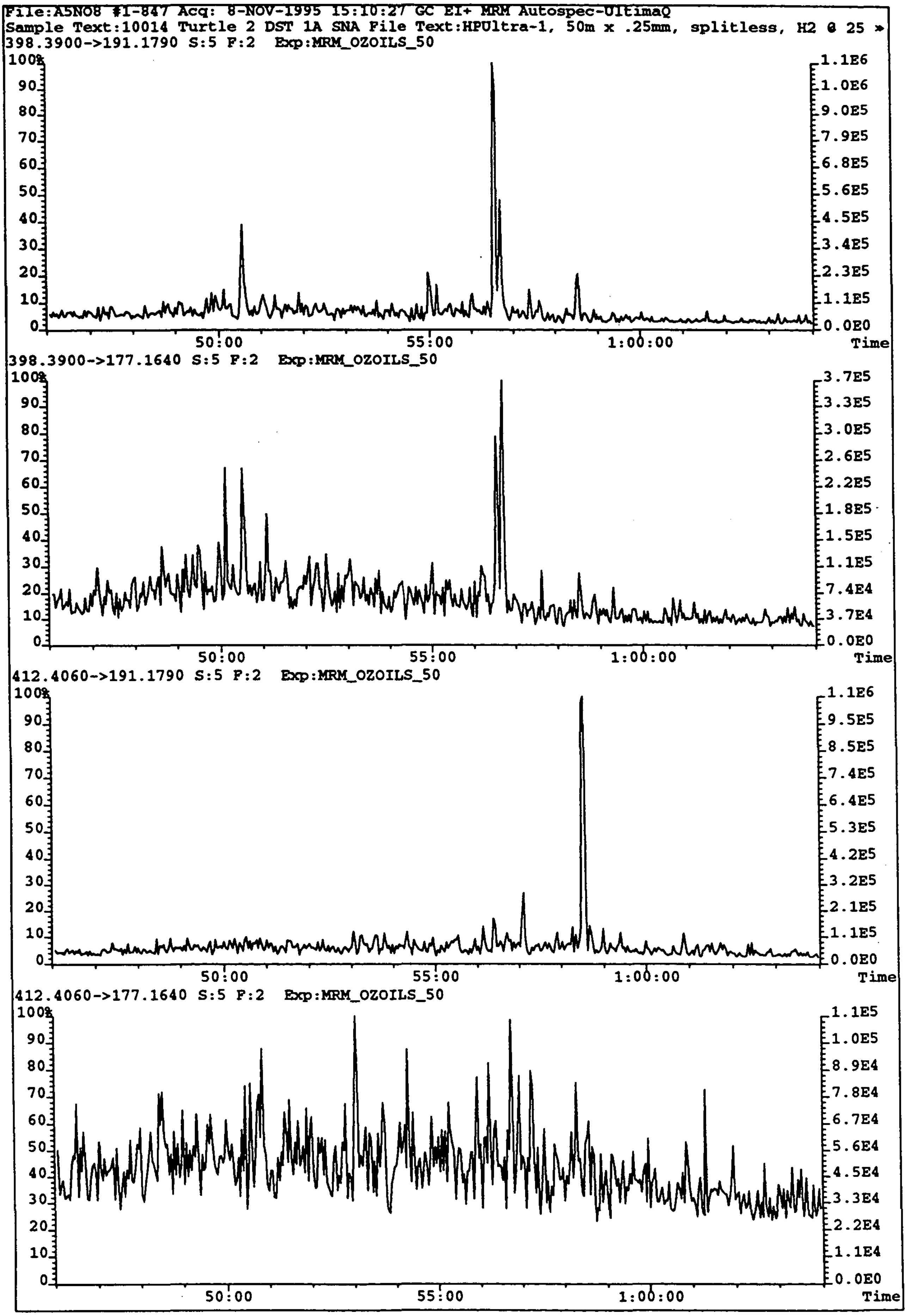
File:A5NO8 #1-1251 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
332.3440->191.1790 S:5 Exp:MRM_OZOILS_50
346.3590->191.1790 S:5 Exp:MRM_OZOILS_50
330.3280->191.1790 S:5 Exp:MRM_OZOILS_50
360.3740->191.1790 S:5 Exp:MRM_OZOILS_50
Time

File:A5NO8 #1-847 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »

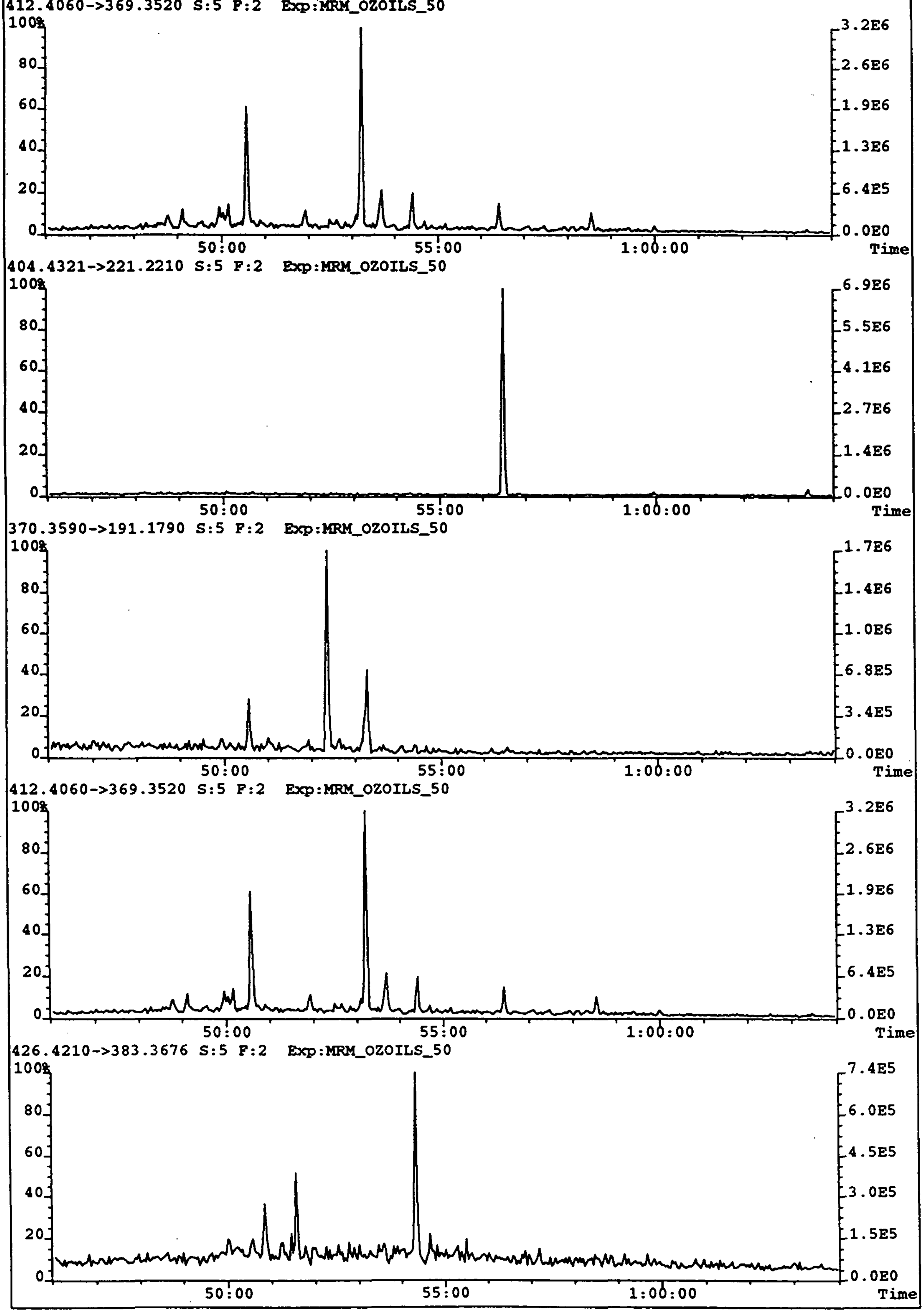


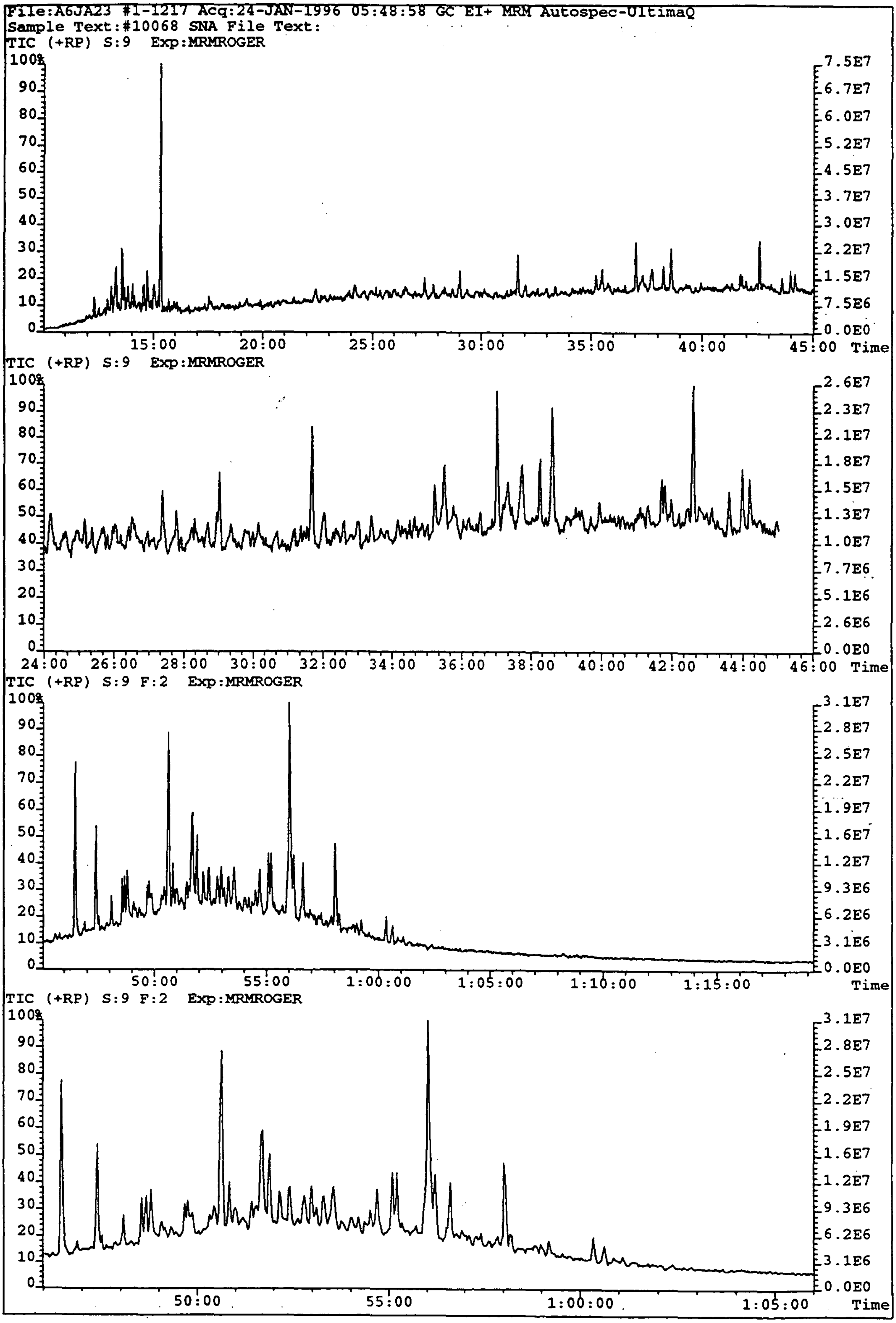

File:A5N08 #1-847 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
370.3590->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
1.7E6
1.4E6
1.0E6
6.8E5
3.4E5
0.0E0
3.3E5
2.7E5
2.0E5
1.3E5
6.7E4
1.1E6
9.0E5
6.8E5
4.5E5
2.3E5
8.5E5
6.4E5
4.2E5
2.1E5
3.7E5
2.9E5
2.2E5
1.5E5
7.3E4

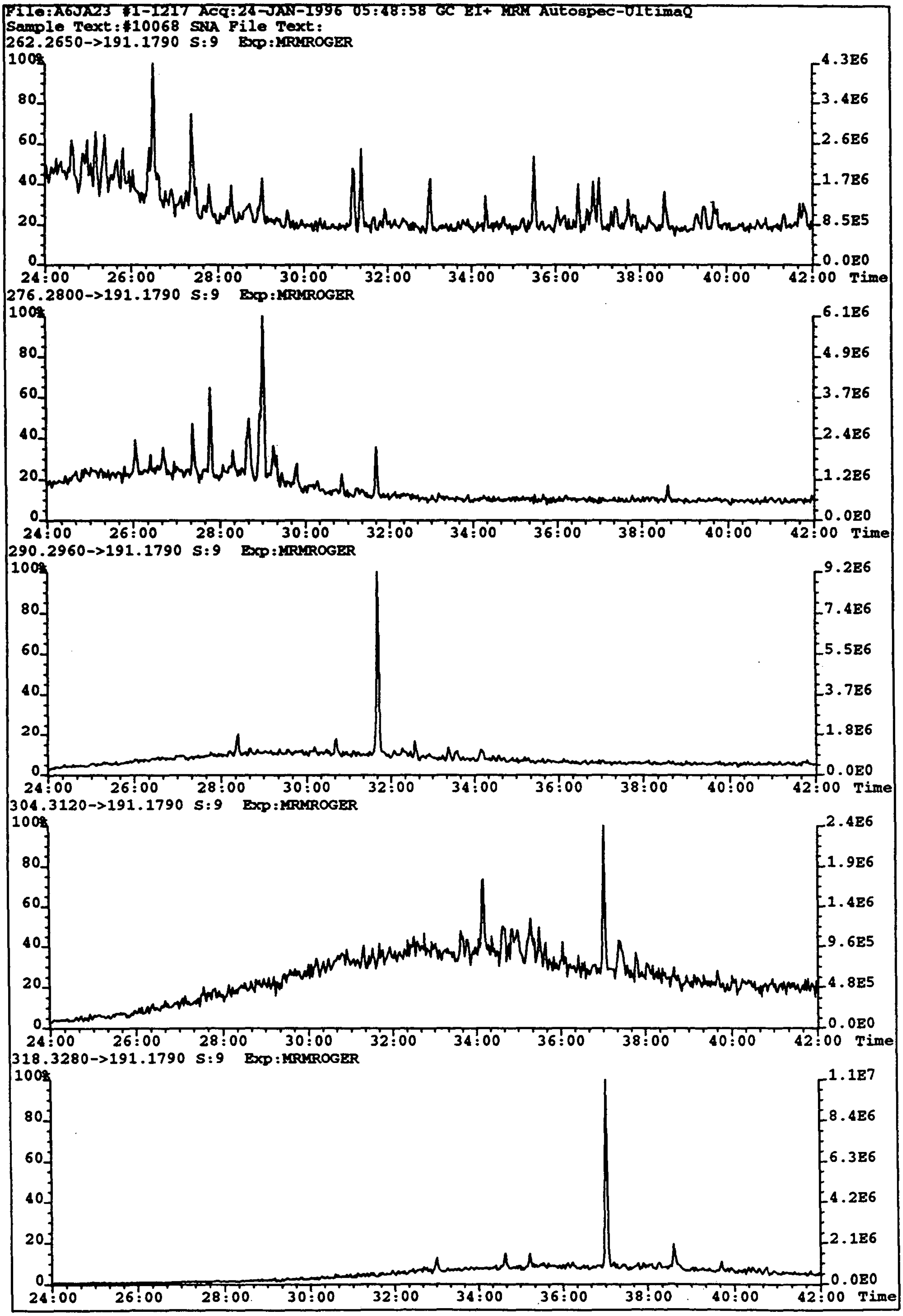

File:A5N08 #1-847 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
412.4060->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.1E6
8.5E5
6.4E5
4.2E5
2.1E5
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
3.7E5
2.9E5
2.2E5
1.5E5
7.3E4
0.0E0
426.4210->205.1940 S:5 F:2 Exp:MRM_OZOILS_50
2.3E5
1.9E5
1.4E5
9.3E4
4.6E4
0.0E0
468.4670->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
1.2E5
9.9E4
7.4E4
5.0E4
2.5E4
0.0E0
482.4820->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
8.7E4
6.9E4
5.2E4
3.5E4
1.7E4
0.0E0

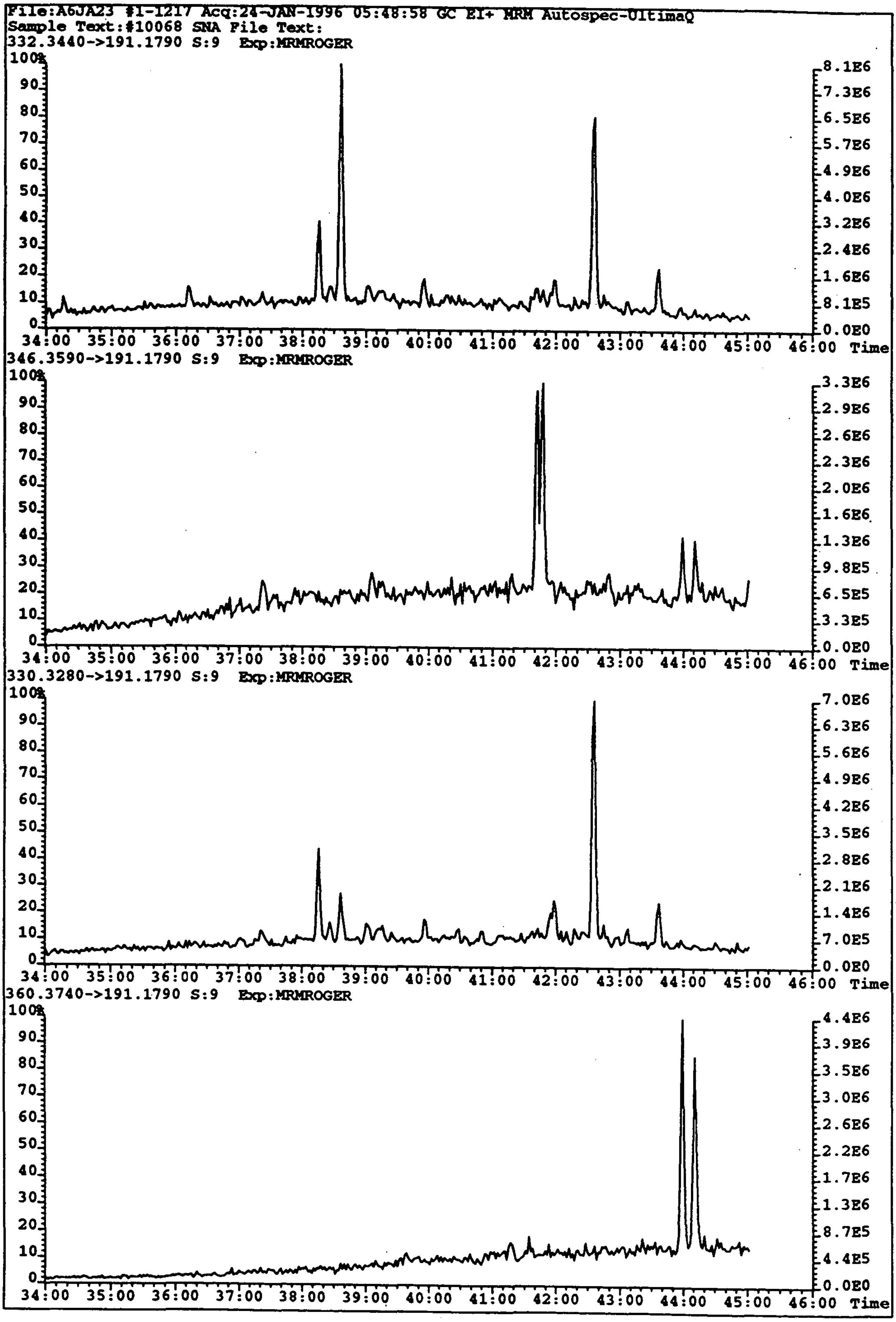

File:A5NO8 #1-847 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
398.3900->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:5 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:5 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

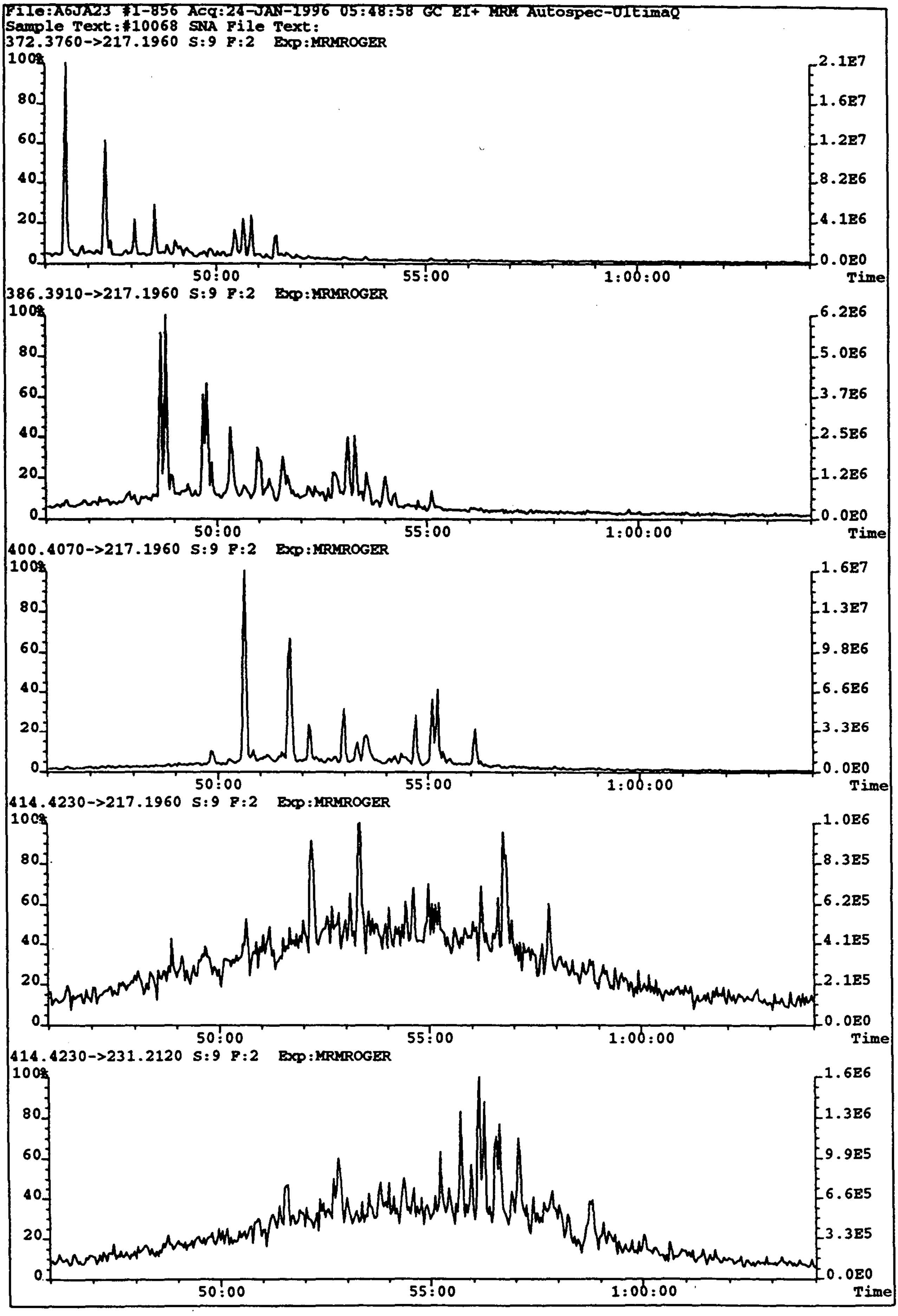
File:A5N08 #1-847 Acq: 8-NOV-1995 15:10:27 GC EI+ MRM Autospec-UltimaQ
Sample Text:10014 Turtle 2 DST 1A SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »



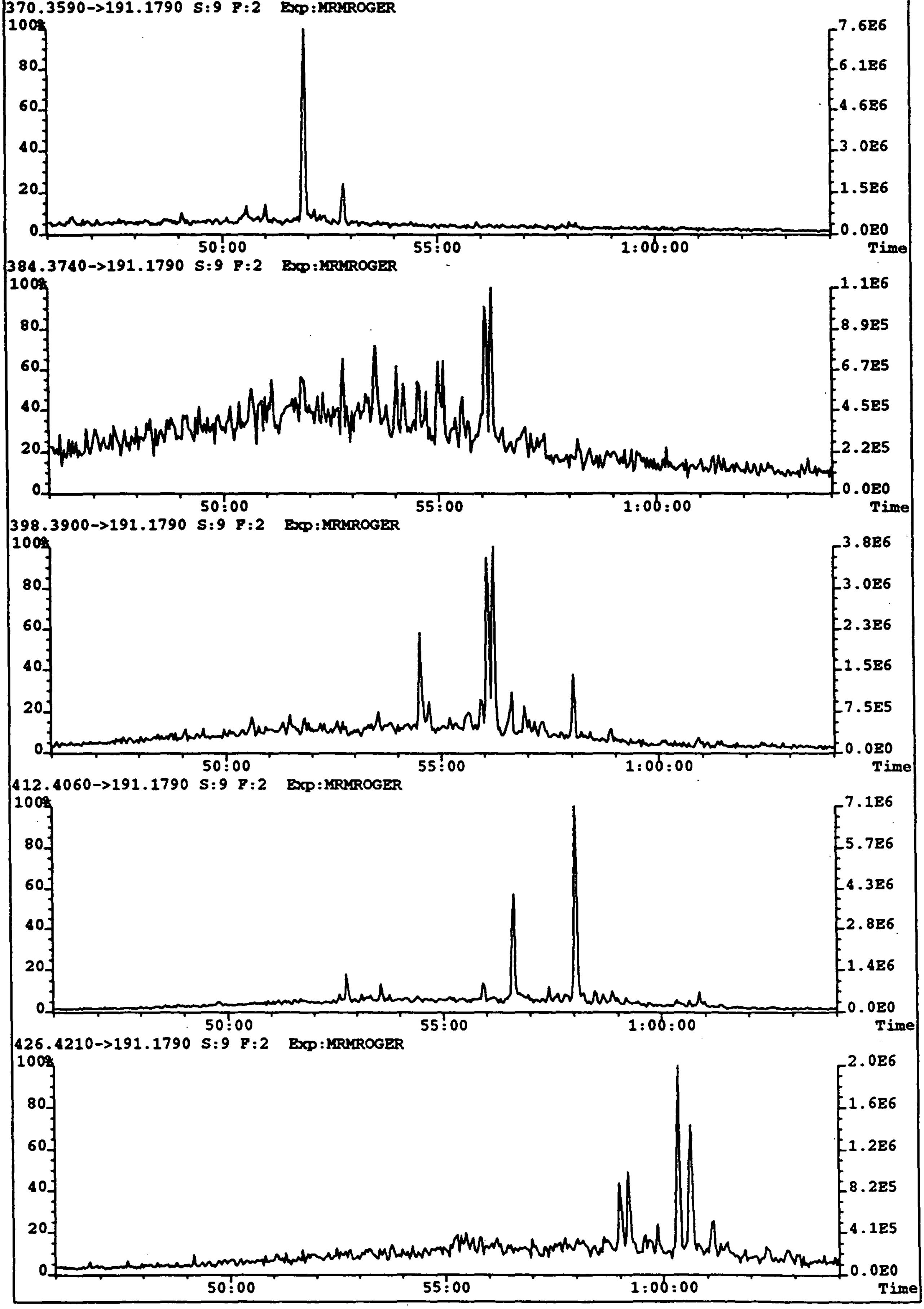

File:A6JA23 #1-1217 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
TIC (+RP) S:9 Exp:MRMROGER
100%
7.5E7
15:00 20:00 25:00 30:00 35:00 40:00 45:00 Time
TIC (+RP) S:9 Exp:MRMROGER
2.6E7
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 44:00 46:00 Time
TIC (+RP) S:9 F:2 Exp:MRMROGER
3.1E7
50:00 55:00 1:00:00 1:05:00 1:10:00 1:15:00 Time
TIC (+RP) S:9 F:2 Exp:MRMROGER
3.1E7
50:00 55:00 1:00:00 1:05:00 Time

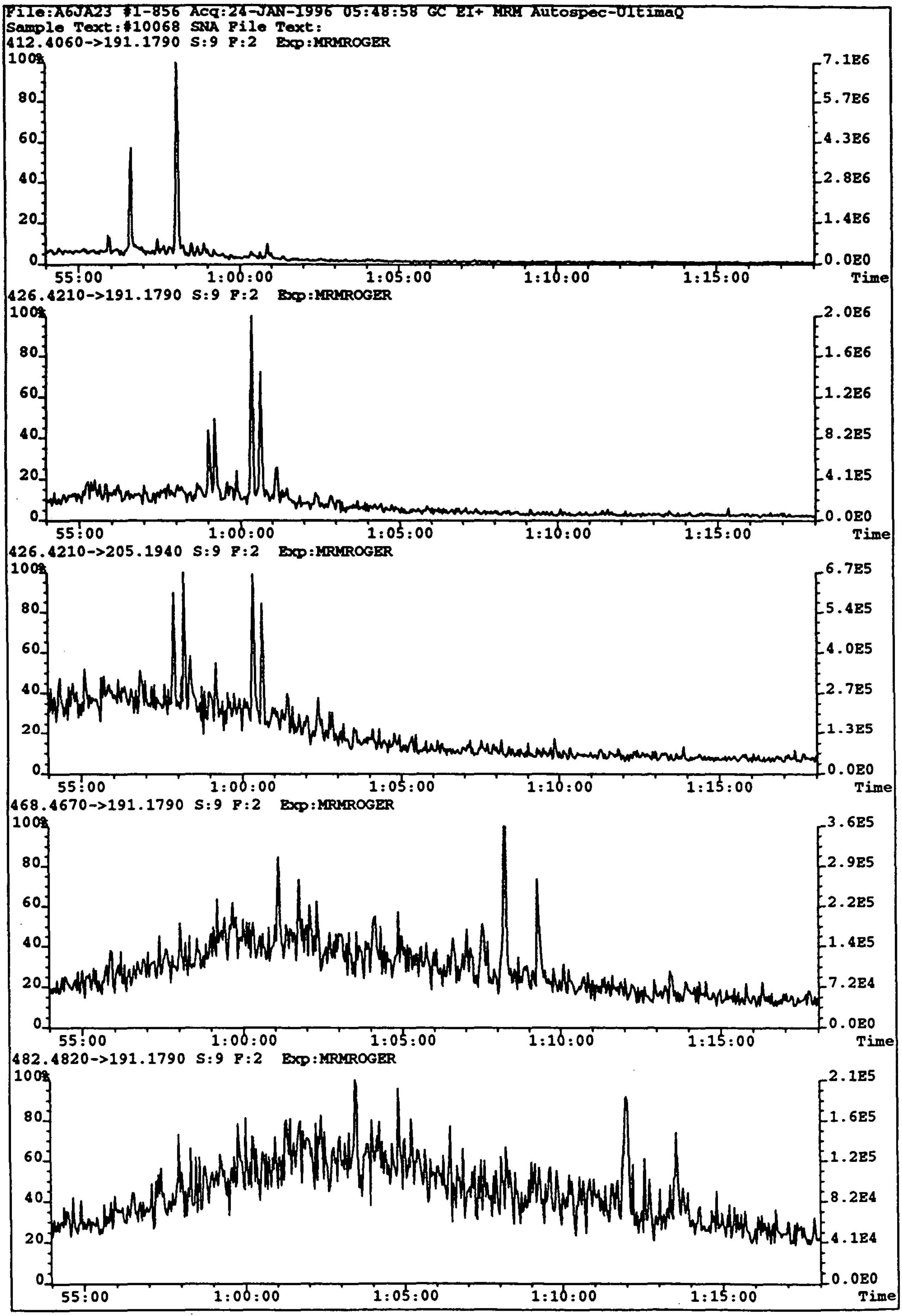

File:A6JA23 #1-1217 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
262.2650->191.1790 S:9 Exp:MRMROGER
4.3E6
3.4E6
2.6E6
1.7E6
8.5E5
0.0E0
276.2800->191.1790 S:9 Exp:MRMROGER
6.1E6
4.9E6
3.7E6
2.4E6
1.2E6
0.0E0
290.2960->191.1790 S:9 Exp:MRMROGER
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6
0.0E0
304.3120->191.1790 S:9 Exp:MRMROGER
2.4E6
1.9E6
1.4E6
9.6E5
4.8E5
0.0E0
318.3280->191.1790 S:9 Exp:MRMROGER
1.1E7
8.4E6
6.3E6
4.2E6
2.1E6
0.0E0
100%
80
60
40
20
0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time


File:A6JA23 #1-1217 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
332.3440->191.1790 S:9 Exp:MRMROGER
100%
90
80
70
60
50
40
30
20
10
0
8.1E6
7.3E6
6.5E6
5.7E6
4.9E6
4.0E6
3.2E6
2.4E6
1.6E6
8.1E5
0.0E0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time
346.3590->191.1790 S:9 Exp:MRMROGER
3.3E6
2.9E6
2.6E6
2.3E6
2.0E6
1.6E6
1.3E6
9.8E5
6.5E5
3.3E5
0.0E0
330.3280->191.1790 S:9 Exp:MRMROGER
7.0E6
6.3E6
5.6E6
4.9E6
4.2E6
3.5E6
2.8E6
2.1E6
1.4E6
7.0E5
0.0E0
360.3740->191.1790 S:9 Exp:MRMROGER
4.4E6
3.9E6
3.5E6
3.0E6
2.6E6
2.2E6
1.7E6
1.3E6
8.7E5
4.4E5
0.0E0

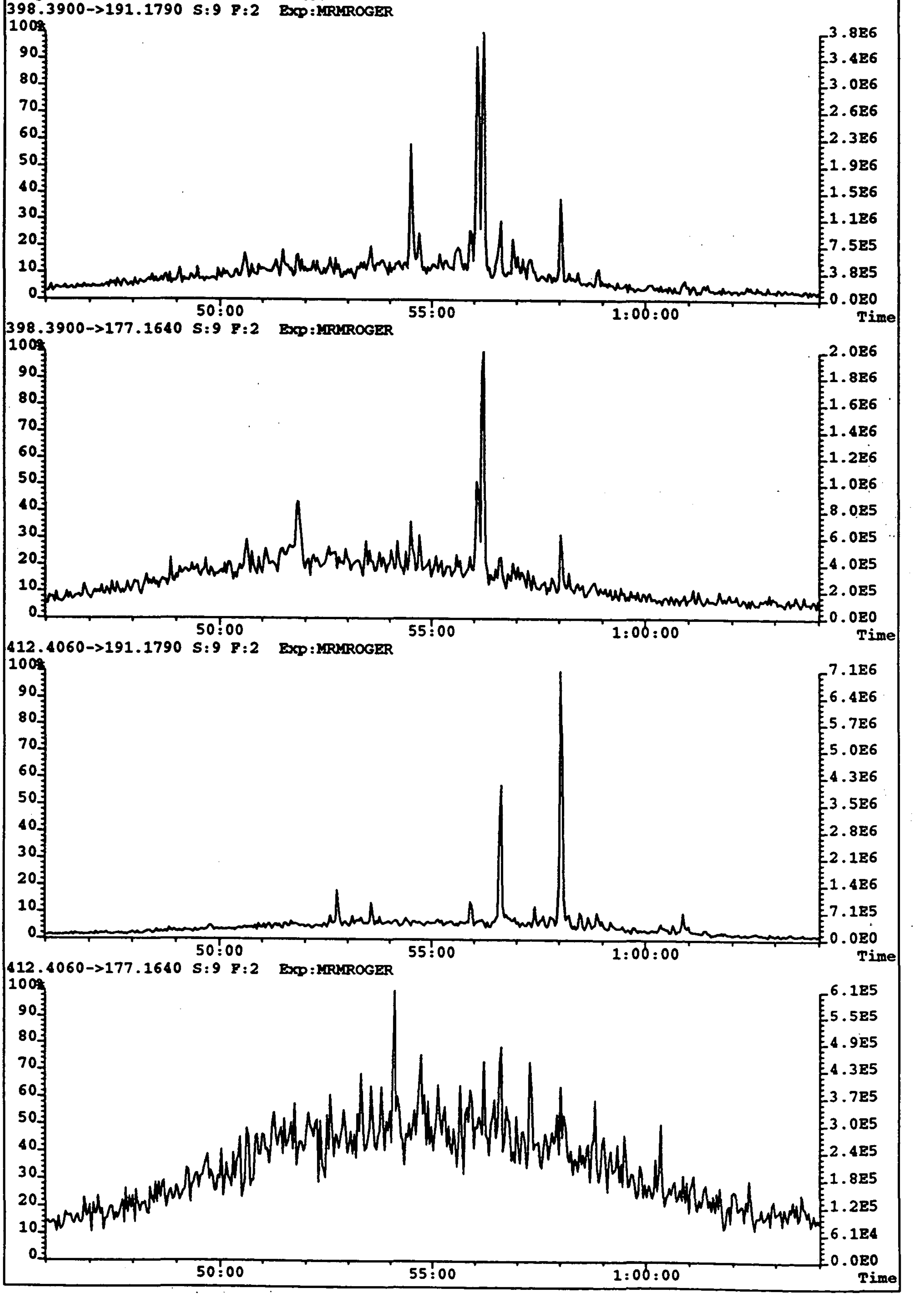

File:A6JA23 #1-856 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
372.3760->217.1960 S:9 F:2 Exp:MRMROGER
2.1E7
386.3910->217.1960 S:9 F:2 Exp:MRMROGER
6.2E6
400.4070->217.1960 S:9 F:2 Exp:MRMROGER
1.6E7
414.4230->217.1960 S:9 F:2 Exp:MRMROGER
1.0E6
414.4230->231.2120 S:9 F:2 Exp:MRMROGER
1.6E6
50:00
55:00
1:00:00
Time

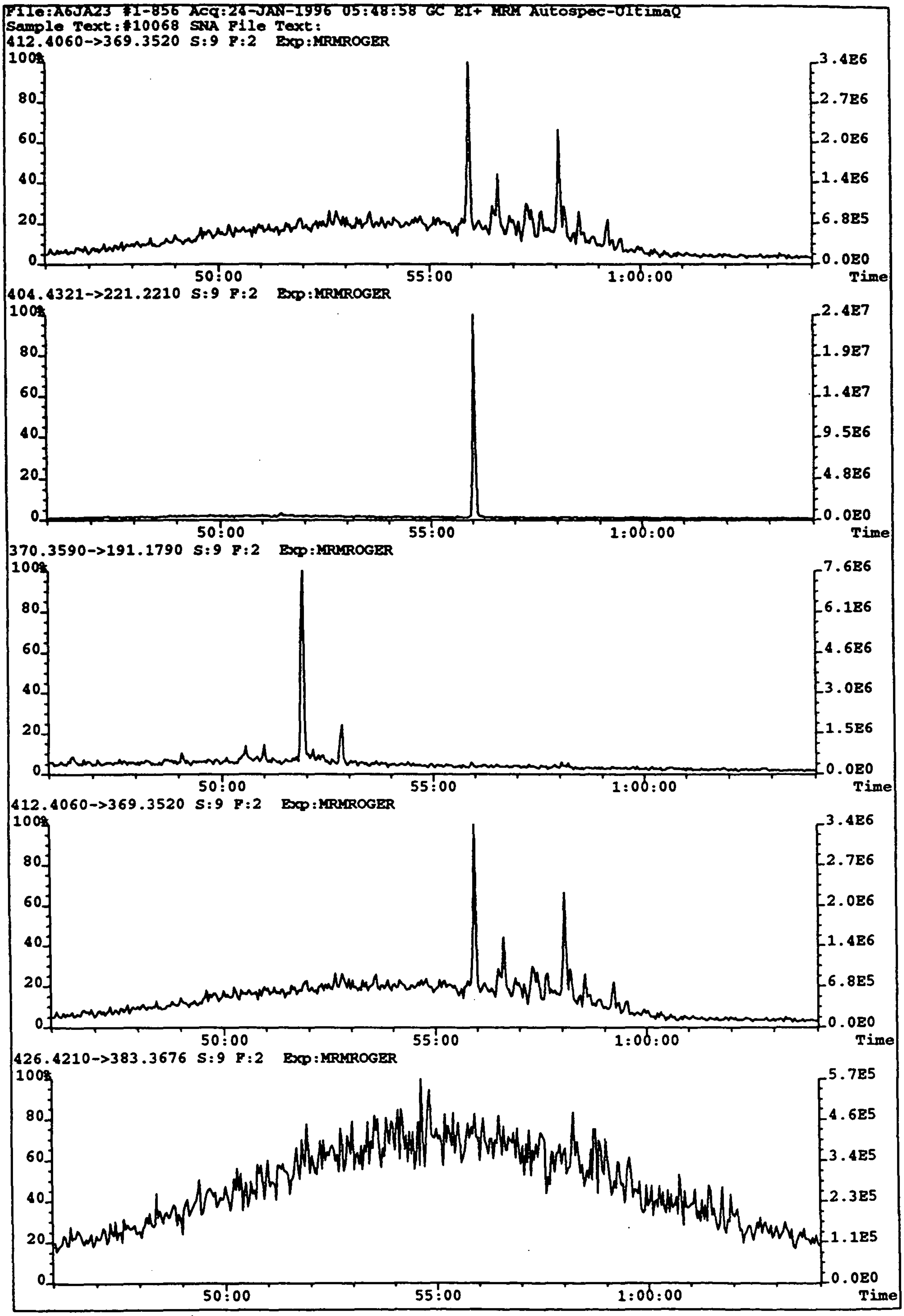
File:A6JA23 #1-856 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:




File:A6JA23 #1-856 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
412.4060->191.1790 S:9 F:2 Exp:MRMROGER
7.1E6
5.7E6
4.3E6
2.8E6
1.4E6
0.0E0
426.4210->191.1790 S:9 F:2 Exp:MRMROGER
2.0E6
1.6E6
1.2E6
8.2E5
4.1E5
0.0E0
426.4210->205.1940 S:9 F:2 Exp:MRMROGER
6.7E5
5.4E5
4.0E5
2.7E5
1.3E5
0.0E0
468.4670->191.1790 S:9 F:2 Exp:MRMROGER
3.6E5
2.9E5
2.2E5
1.4E5
7.2E4
0.0E0
482.4820->191.1790 S:9 F:2 Exp:MRMROGER
2.1E5
1.6E5
1.2E5
8.2E4
4.1E4
0.0E0
100%
80
60
40
20
0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time

File:A6JA23 #1-856 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:





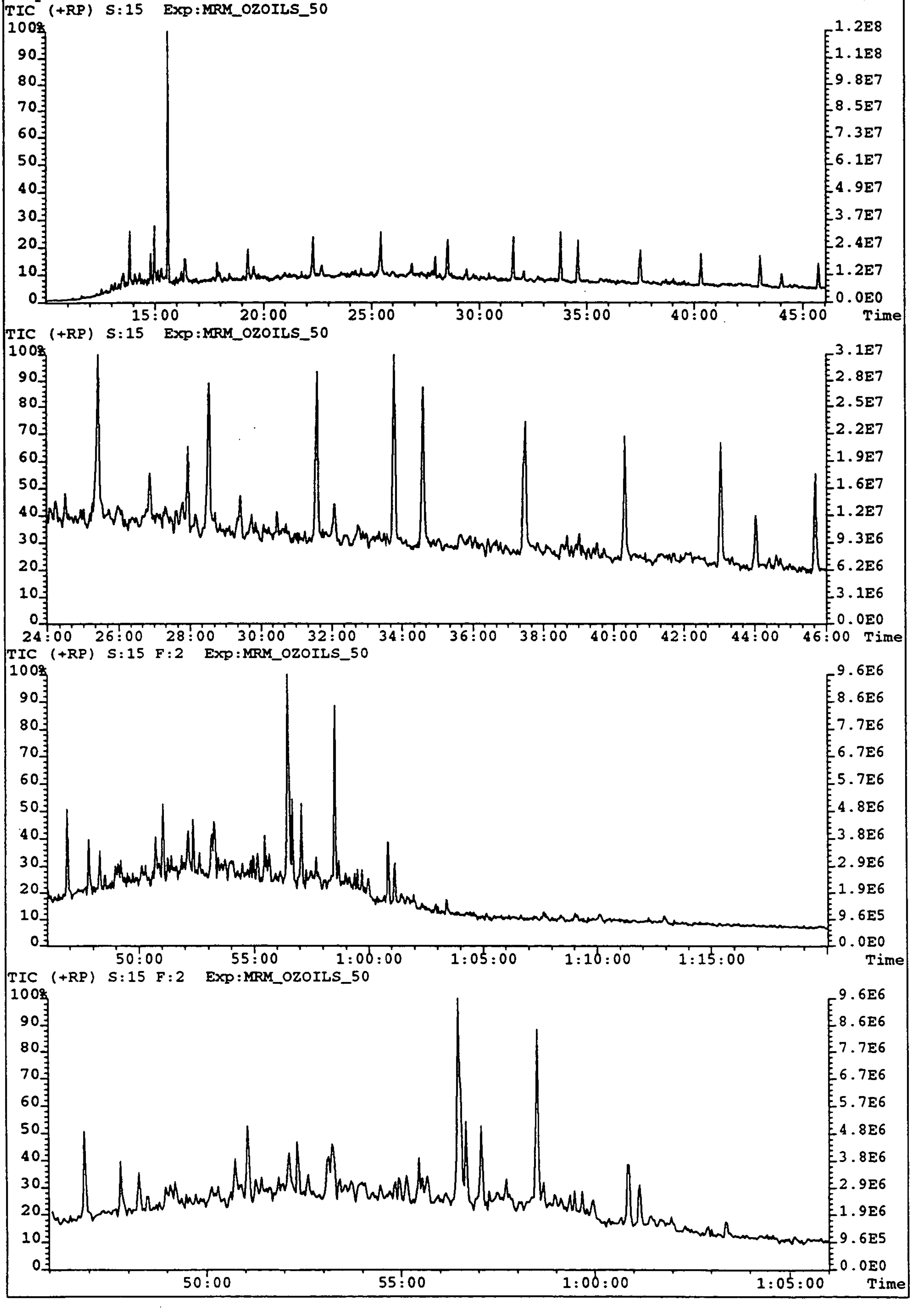
File:A6JA23 #1-856 Acq:24-JAN-1996 05:48:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:#10068 SNA File Text:
412.4060->369.3520 S:9 F:2 Exp:MRMROGER
100%
80
60
40
20
0
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:9 F:2 Exp:MRMROGER
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
0.0E0
370.3590->191.1790 S:9 F:2 Exp:MRMROGER
7.6E6
6.1E6
4.6E6
3.0E6
1.5E6
0.0E0
412.4060->369.3520 S:9 F:2 Exp:MRMROGER
3.4E6
2.7E6
2.0E6
1.4E6
6.8E5
0.0E0
426.4210->383.3676 S:9 F:2 Exp:MRMROGER
5.7E5
4.6E5
3.4E5
2.3E5
1.1E5
0.0E0

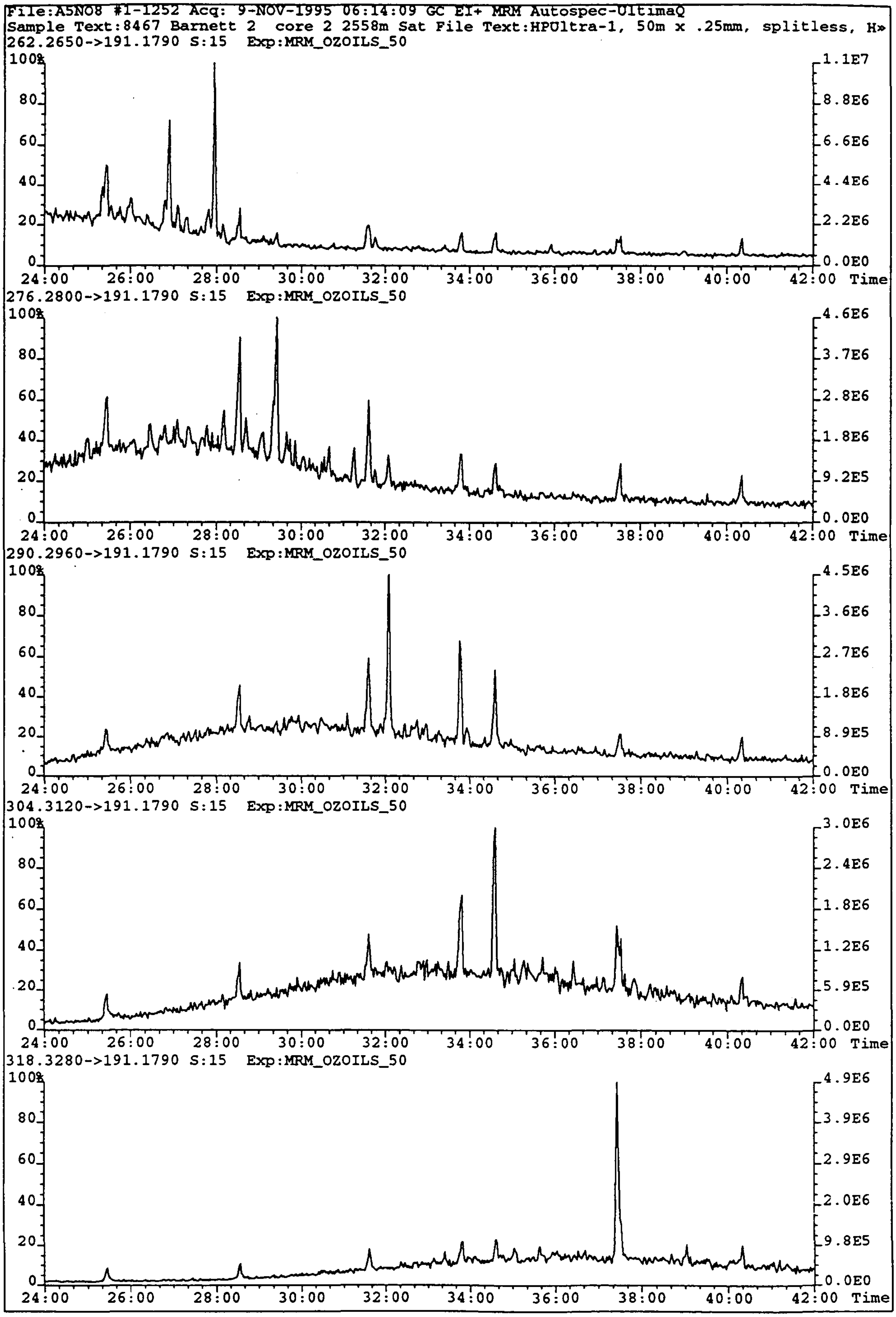
Appendix E2: MRM Chromatograms: Saturated Hydrocarbons of Source Rock Extracts, Petrel Sub-basin.

Sample Nos.

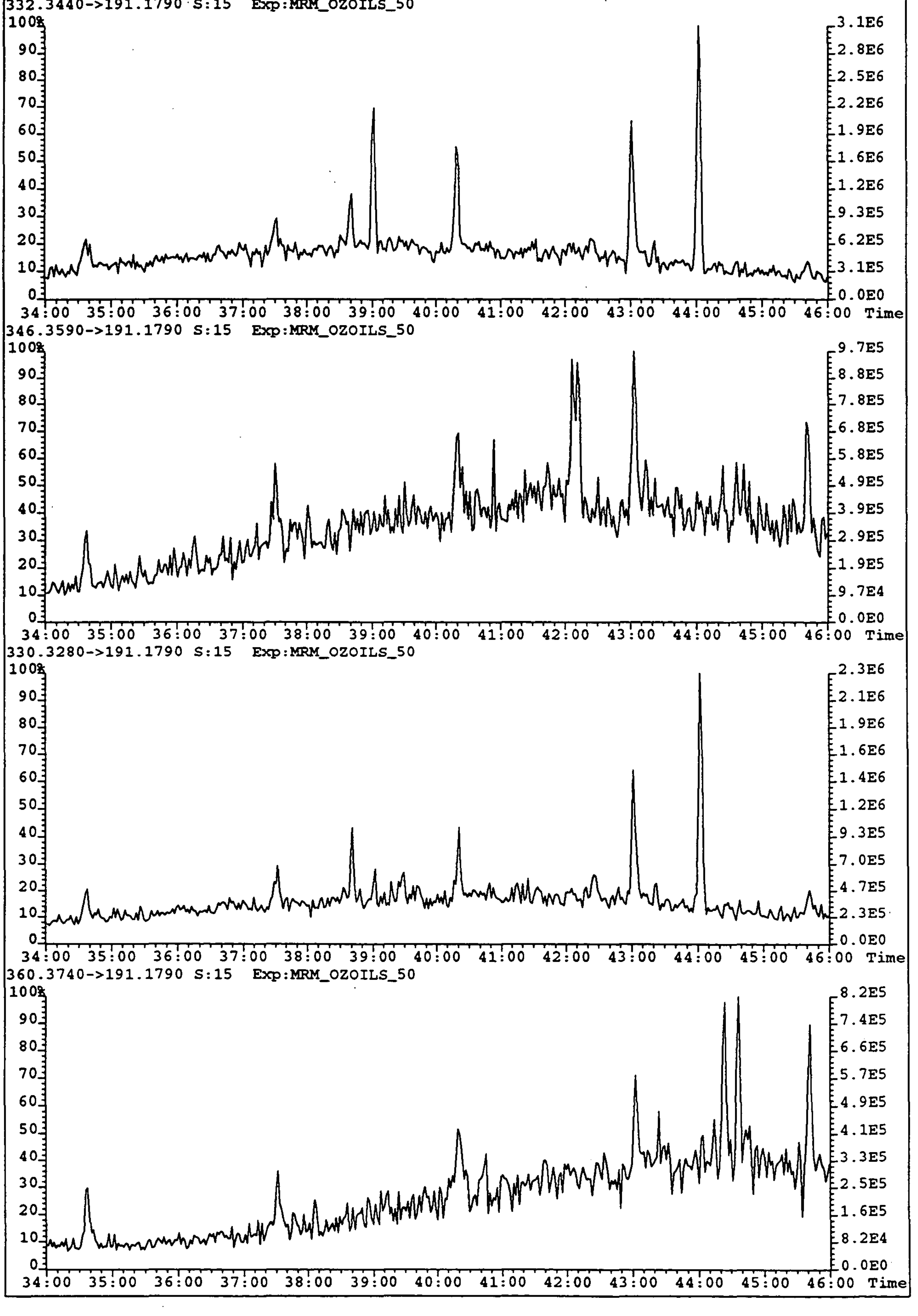
8467	Barnett-2	Core 2	2558 m
7957	Bonaparte-1	Core 13	1166-67 m
8580	Bonaparte-1	Core 18	1594 m
7970	Bonaparte-2	Core 7	1074-75 m
7972	Bonaparte-2	Core 8	1201 m
8484	Flat Top-1	Cuttings	1661-64 m
8989	Kinmore-1	Cuttings	1470-73 m
8551	Lesueur-1	Cuttings	3453-56 m
7923	NBF1002	Core	176 m
7924	NBF1002	Core	184 m
7925	NBF1002	Core	208 m
7926	NBF1002	Core	220 m
8557	Pelican Island-1	Core 2	1438-39 m
8561	Pelican Island-1	Cuttings	1591-94 m
8563	Pelican Island-1	Cuttings	1765-68 m
8539	Spirit Hill-1	Core	199 m
8544	Spirit Hill-1	Core	670-716 m

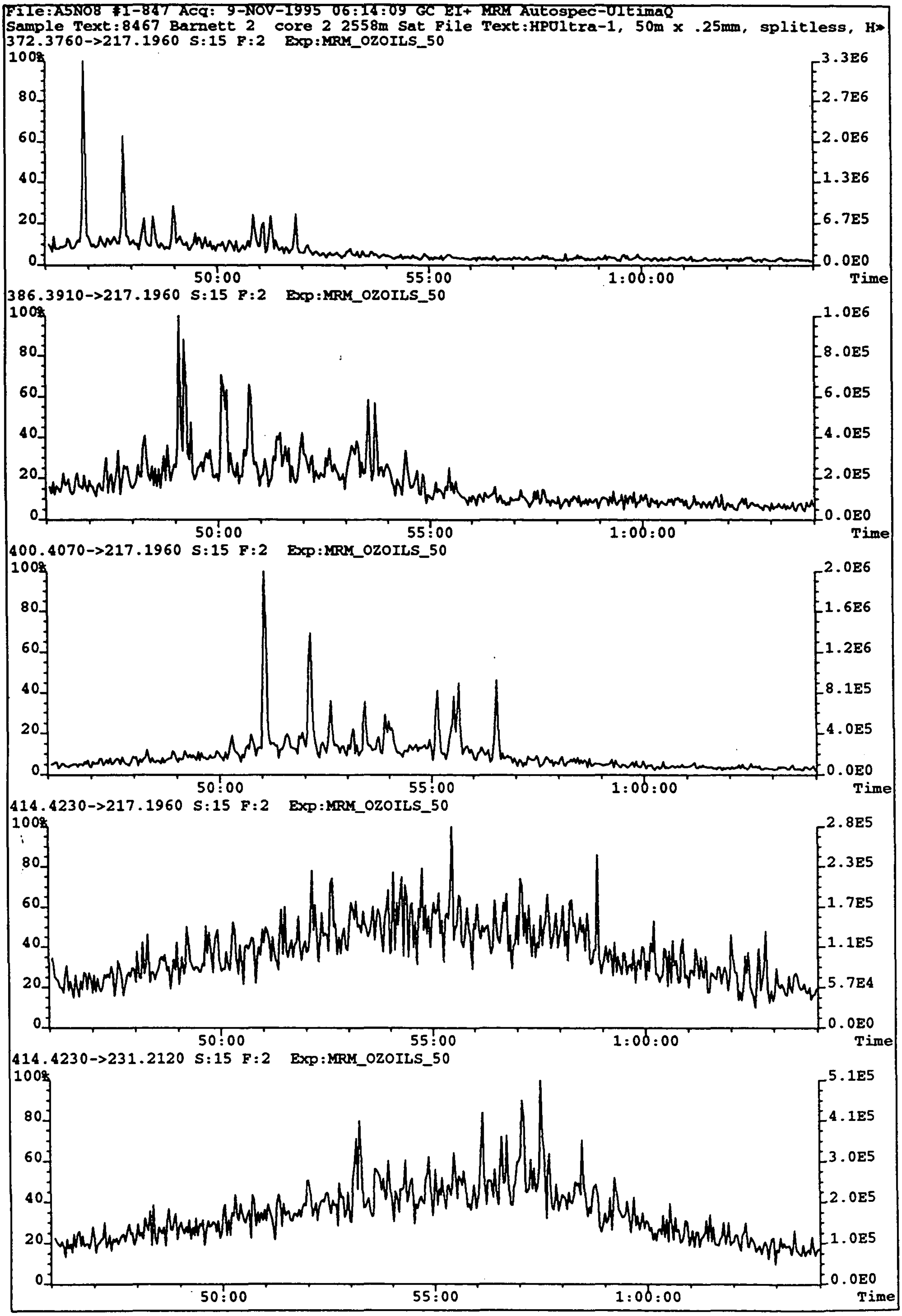
File:A5N08 #1-1252 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»

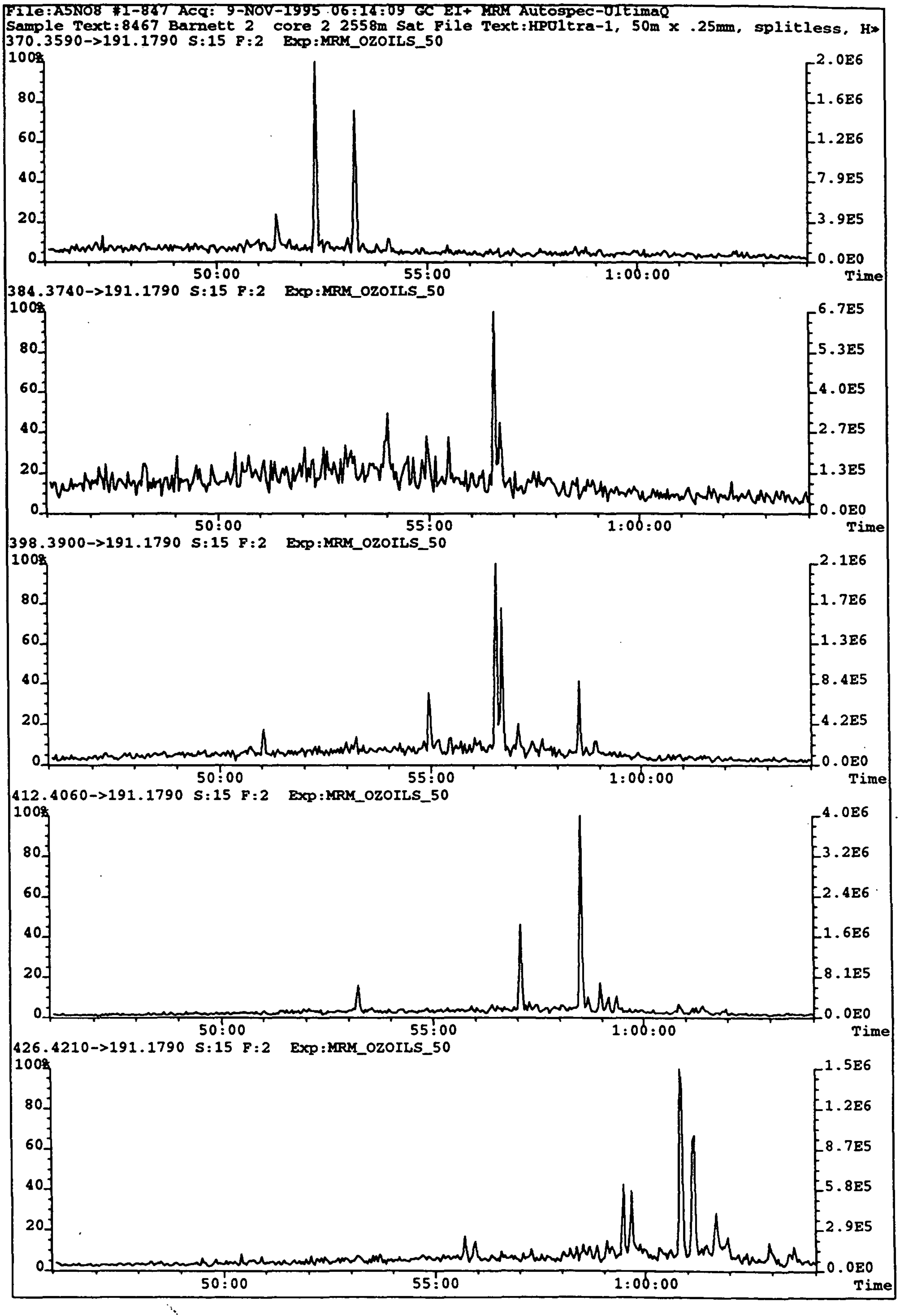


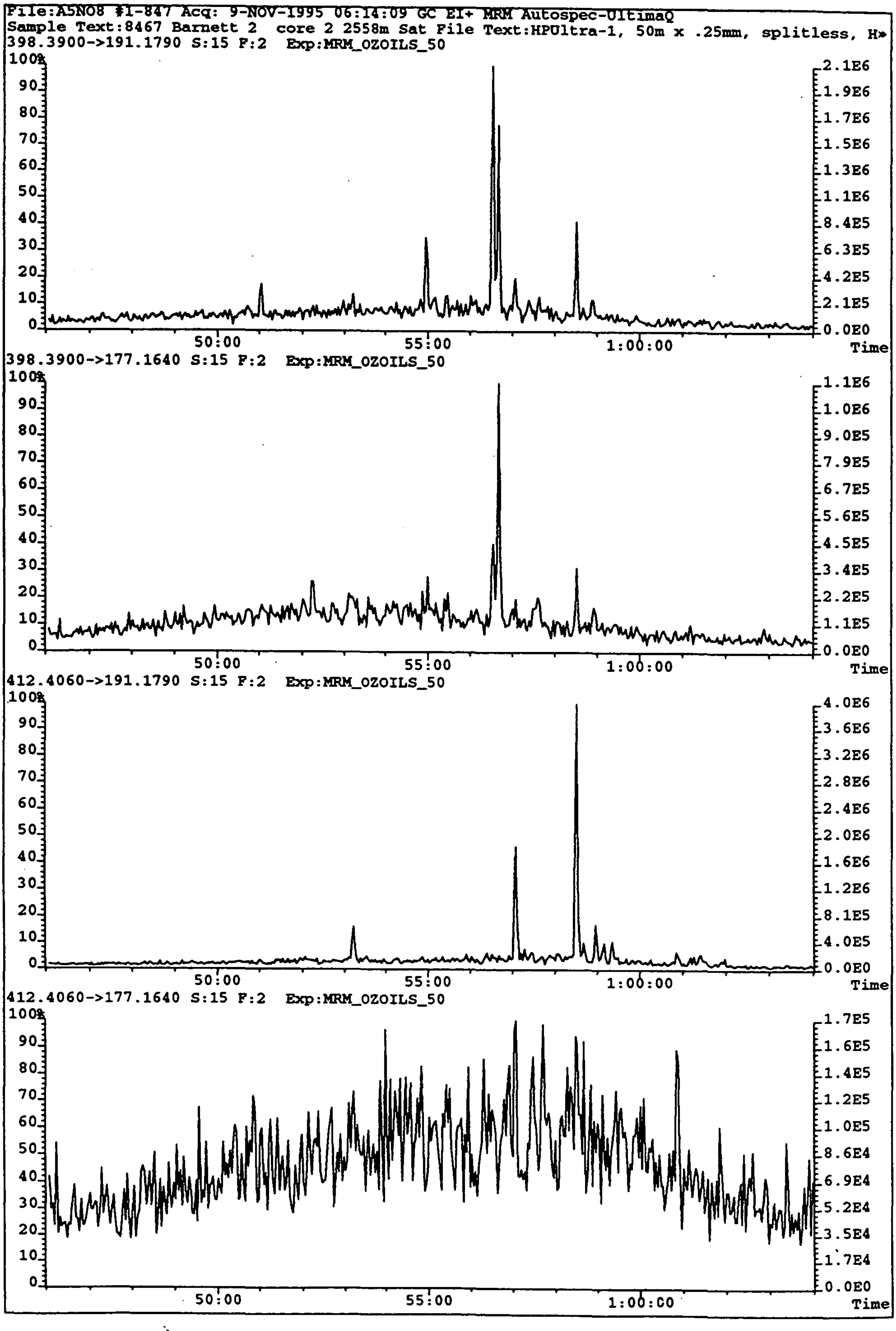

File:A5NO8 #1-1252 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
262.2650->191.1790 S:15 Exp:MRM_OZOILS_50
276.2800->191.1790 S:15 Exp:MRM_OZOILS_50
290.2960->191.1790 S:15 Exp:MRM_OZOILS_50
304.3120->191.1790 S:15 Exp:MRM_OZOILS_50
318.3280->191.1790 S:15 Exp:MRM_OZOILS_50
100%
1.1E7
4.6E6
4.5E6
3.0E6
4.9E6
Time

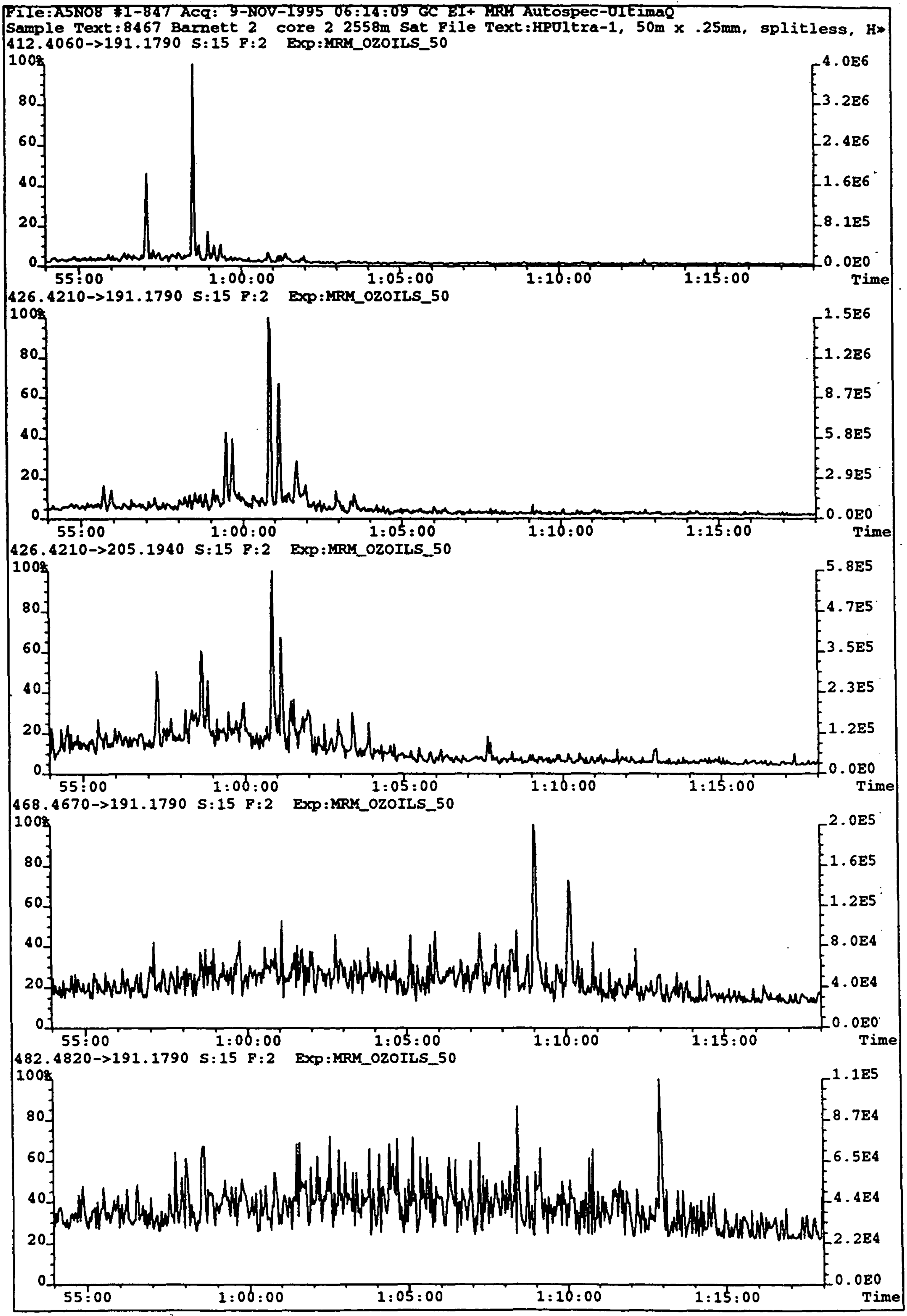
File:A5NO8 #1-1252 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»

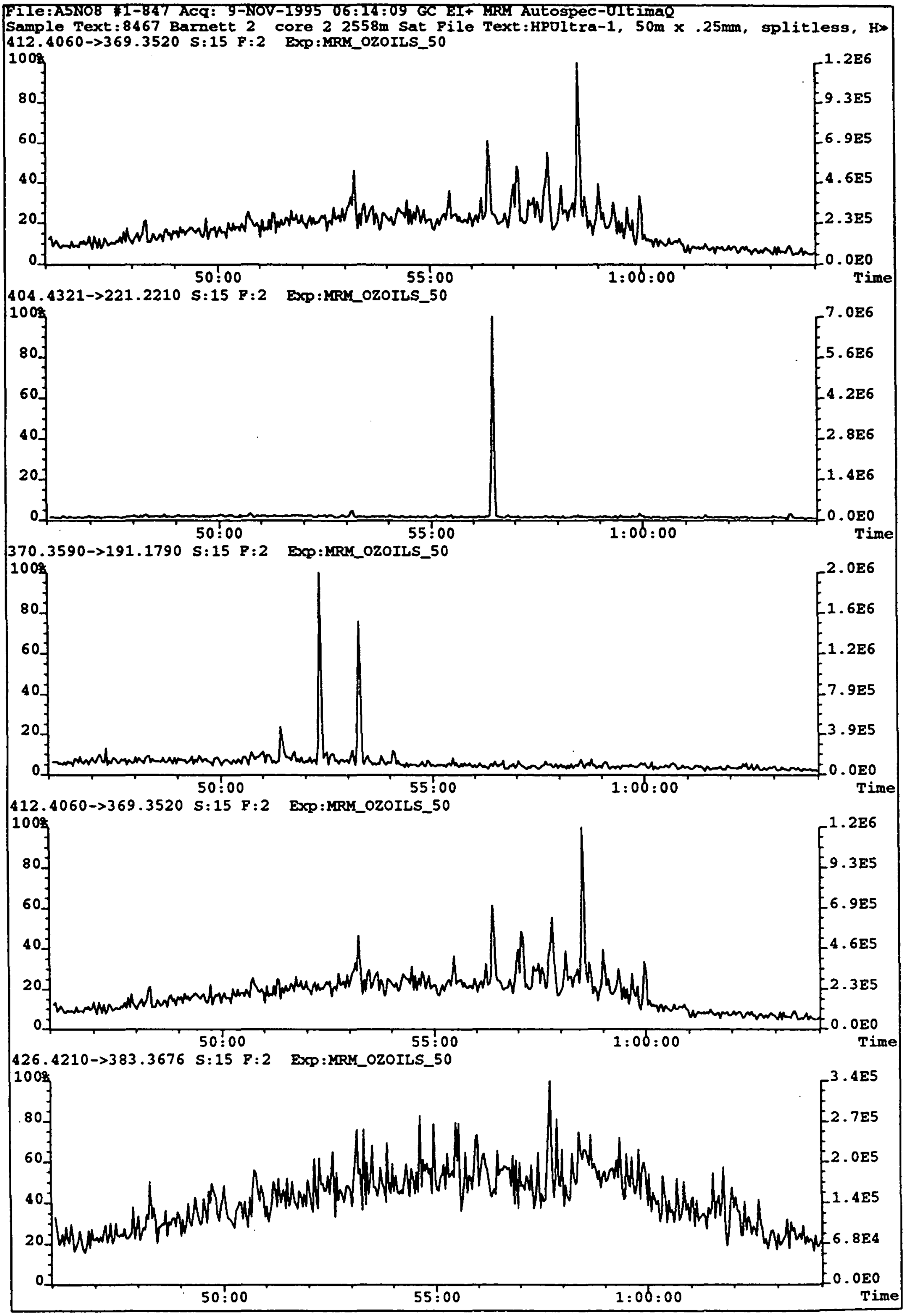


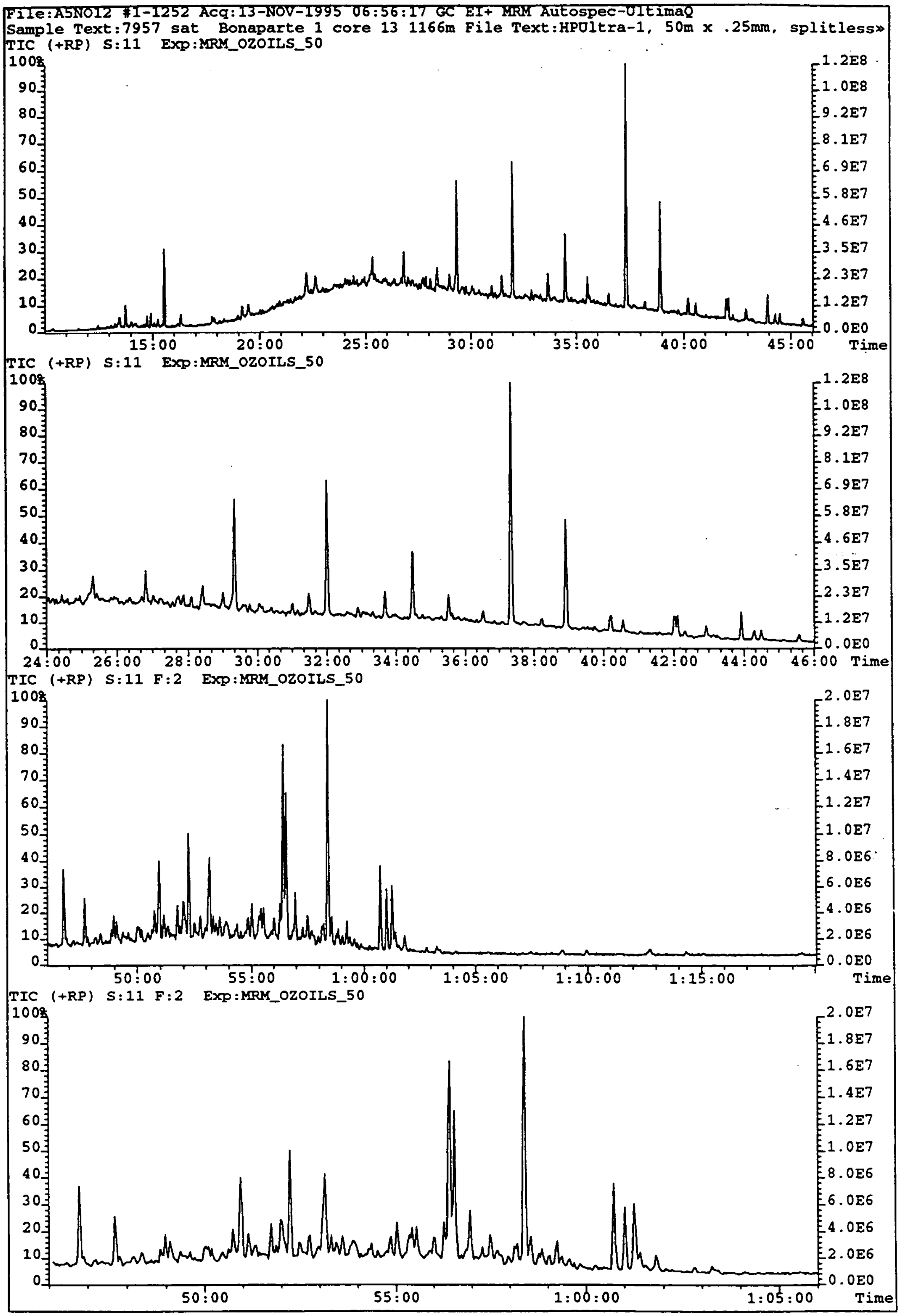

File:A5N08 #1-847 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
372.3760->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.3E6
2.7E6
2.0E6
1.3E6
6.7E5
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
1.0E6
8.0E5
6.0E5
4.0E5
2.0E5
0.0E0
400.4070->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
2.0E6
1.6E6
1.2E6
8.1E5
4.0E5
0.0E0
414.4230->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
2.8E5
2.3E5
1.7E5
1.1E5
5.7E4
0.0E0
414.4230->231.2120 S:15 F:2 Exp:MRM_OZOILS_50
5.1E5
4.1E5
3.0E5
2.0E5
1.0E5
0.0E0

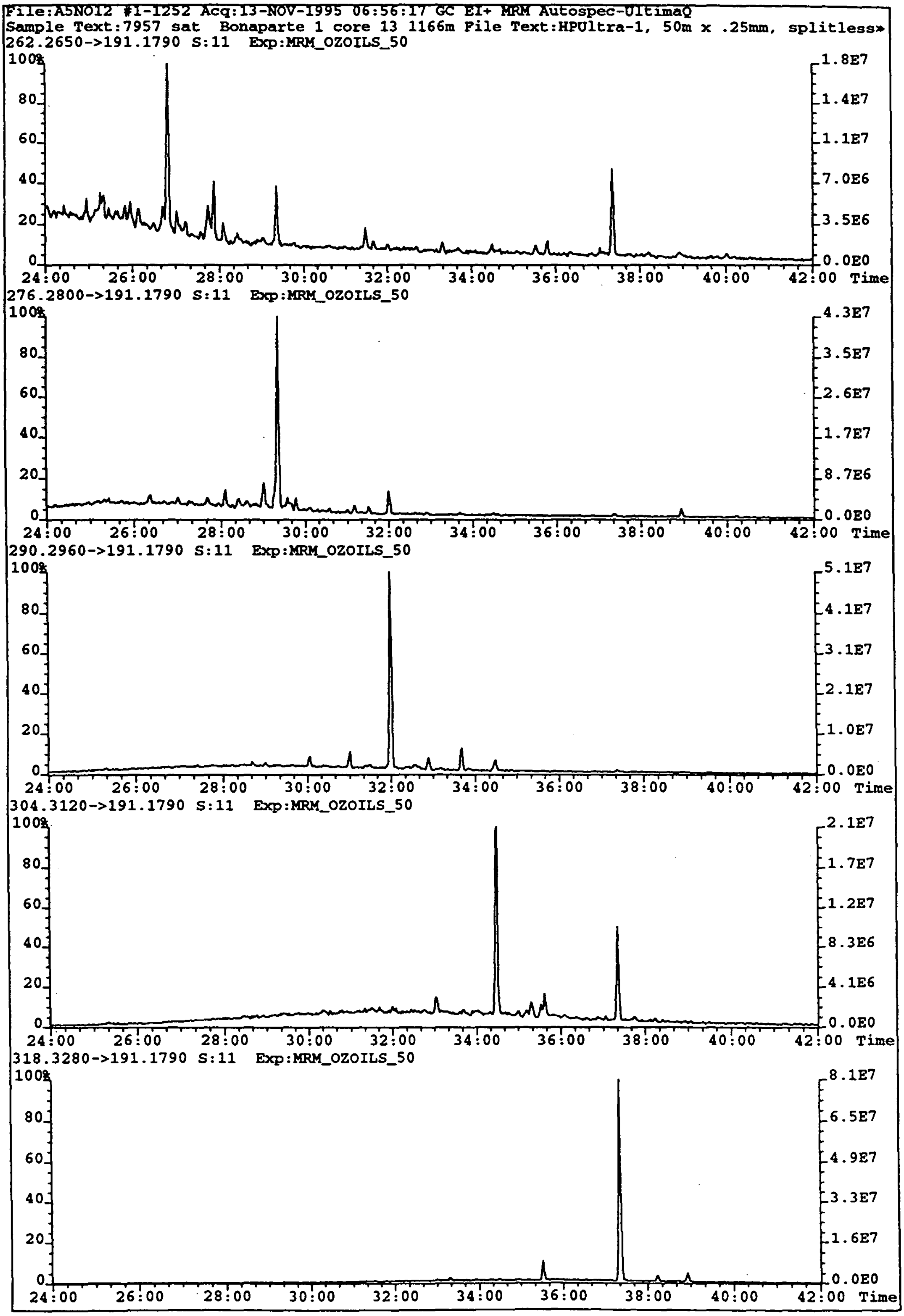

File:A5N08 #1-847 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
370.3590->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.0E6
1.6E6
1.2E6
7.9E5
3.9E5
0.0E0
6.7E5
5.3E5
4.0E5
2.7E5
1.3E5
2.1E6
1.7E6
1.3E6
8.4E5
4.2E5
4.0E6
3.2E6
2.4E6
1.6E6
8.1E5
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
50:00
55:00
1:00:00
Time

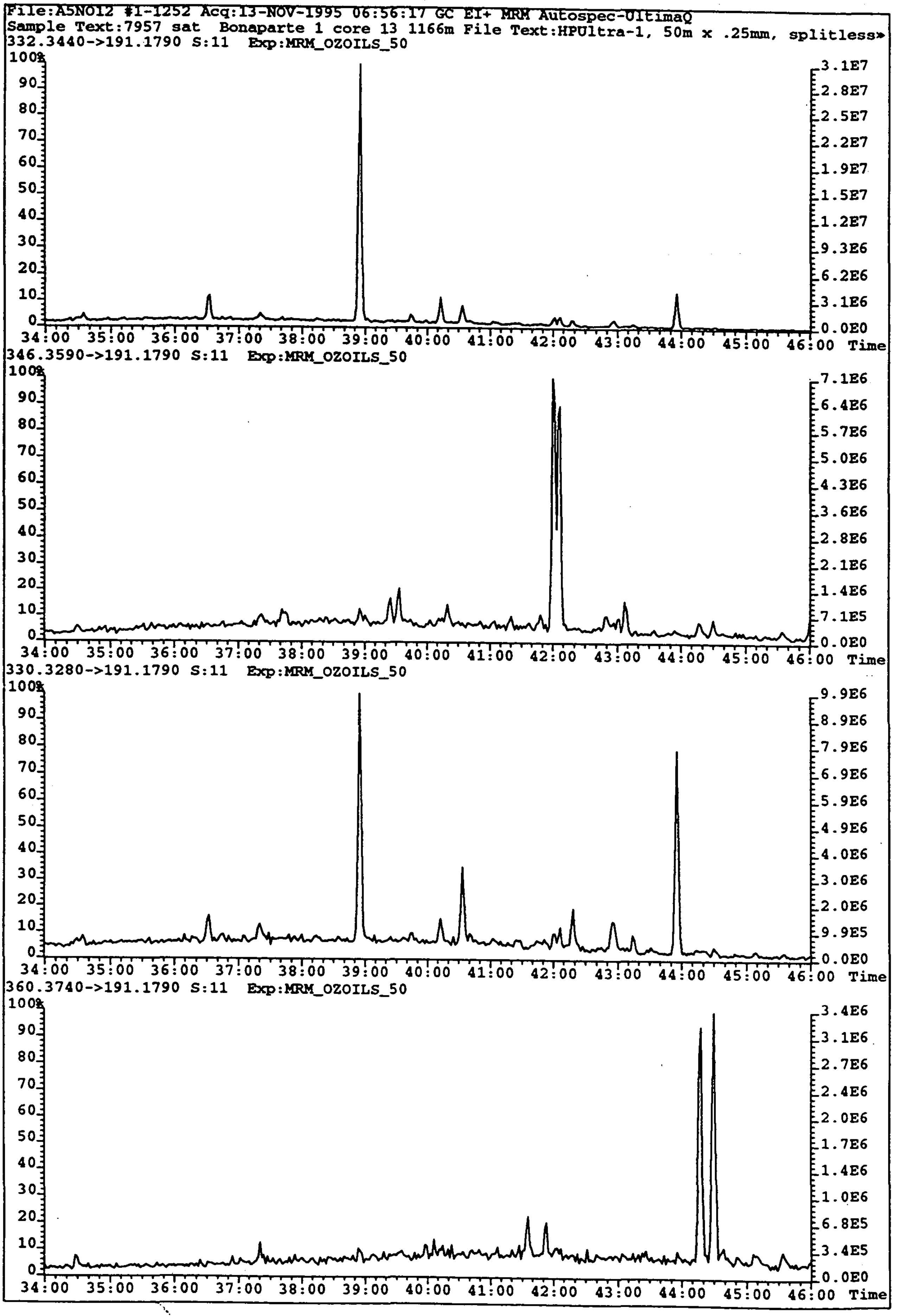

File:A5N08 #1-847 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time
100%
2.1E6
1.1E6
4.0E6
1.7E5

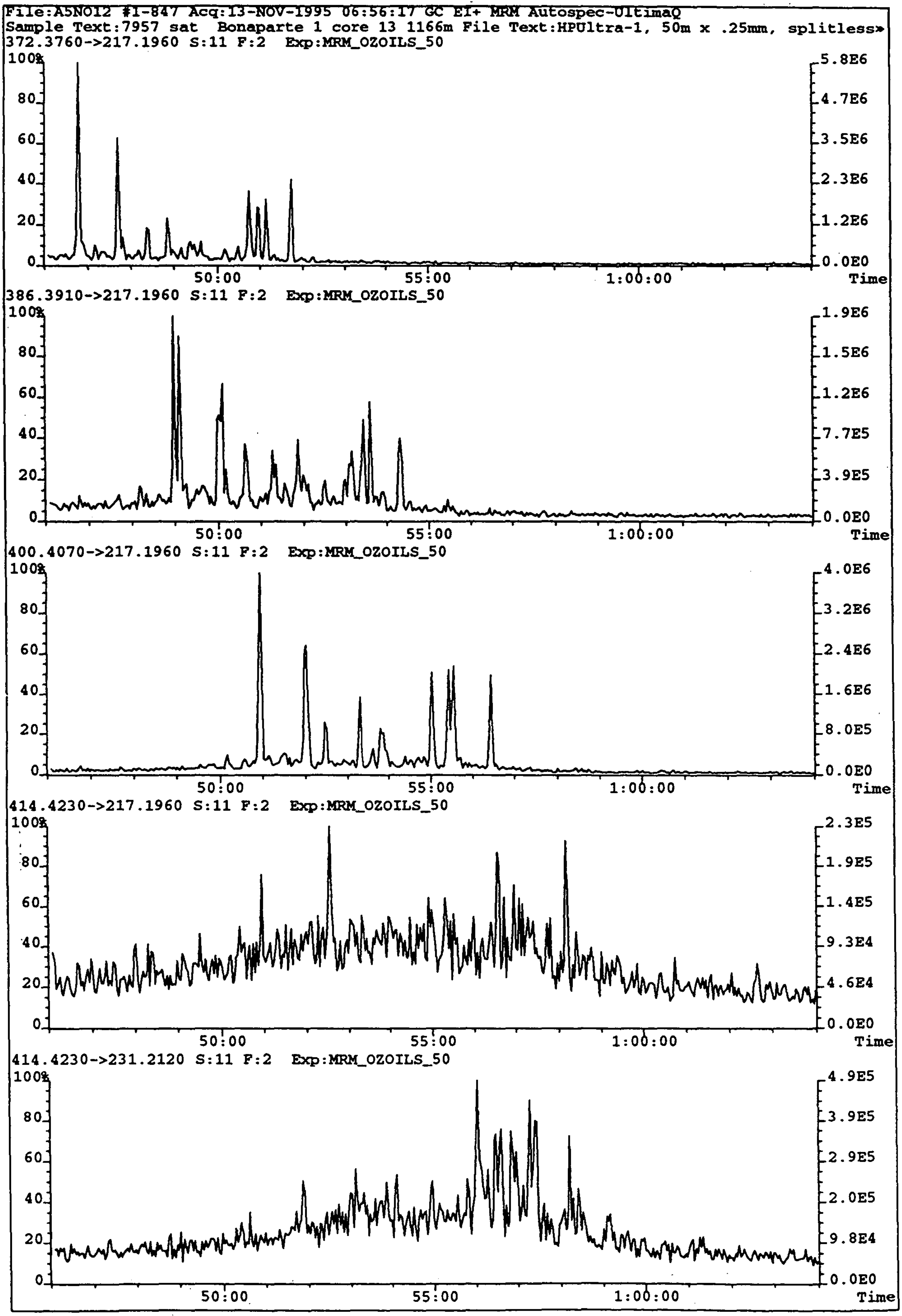

File:A5NO8 #1-847 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
4.0E6
3.2E6
2.4E6
1.6E6
8.1E5
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.5E6
1.2E6
8.7E5
5.8E5
2.9E5
0.0E0
426.4210->205.1940 S:15 F:2 Exp:MRM_OZOILS_50
5.8E5
4.7E5
3.5E5
2.3E5
1.2E5
0.0E0
468.4670->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
2.0E5
1.6E5
1.2E5
8.0E4
4.0E4
0.0E0
482.4820->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.1E5
8.7E4
6.5E4
4.4E4
2.2E4
0.0E0


File:A5N08 #1-847 Acq: 9-NOV-1995 06:14:09 GC EI+ MRM Autospec-UltimaQ
Sample Text:8467 Barnett 2 core 2 2558m Sat File Text:HPUltra-1, 50m x .25mm, splitless, H»
412.4060->369.3520 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.2E6
9.3E5
6.9E5
4.6E5
2.3E5
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:15 F:2 Exp:MRM_OZOILS_50
7.0E6
5.6E6
4.2E6
2.8E6
1.4E6
0.0E0
370.3590->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
2.0E6
1.6E6
1.2E6
7.9E5
3.9E5
0.0E0
412.4060->369.3520 S:15 F:2 Exp:MRM_OZOILS_50
1.2E6
9.3E5
6.9E5
4.6E5
2.3E5
0.0E0
426.4210->383.3676 S:15 F:2 Exp:MRM_OZOILS_50
3.4E5
2.7E5
2.0E5
1.4E5
6.8E4
0.0E0

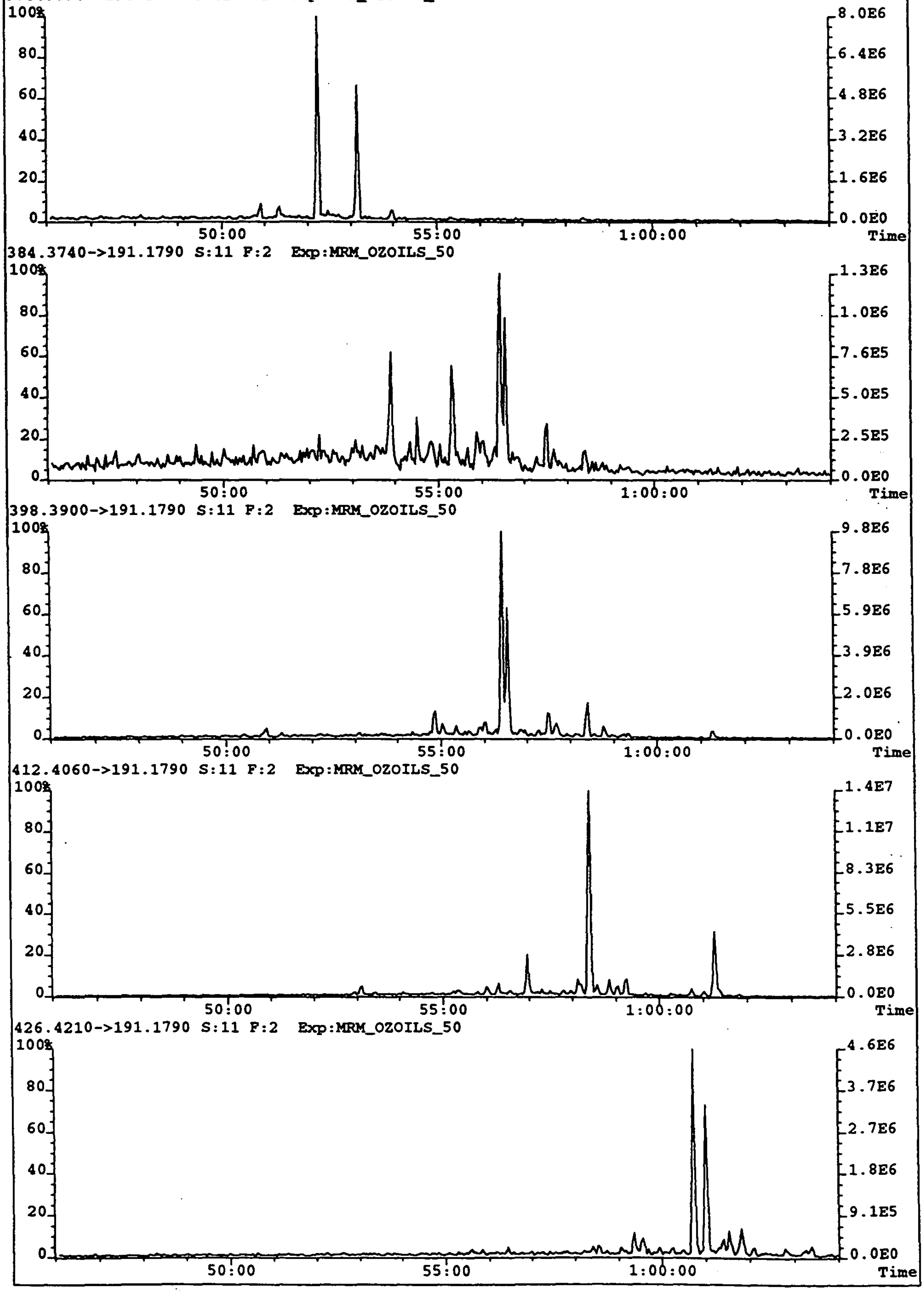

File:A5NO12 #1-1252 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
TIC (+RP) S:11 Exp:MRM_OZOILS_50
TIC (+RP) S:11 Exp:MRM_OZOILS_50
TIC (+RP) S:11 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:11 F:2 Exp:MRM_OZOILS_50
Time

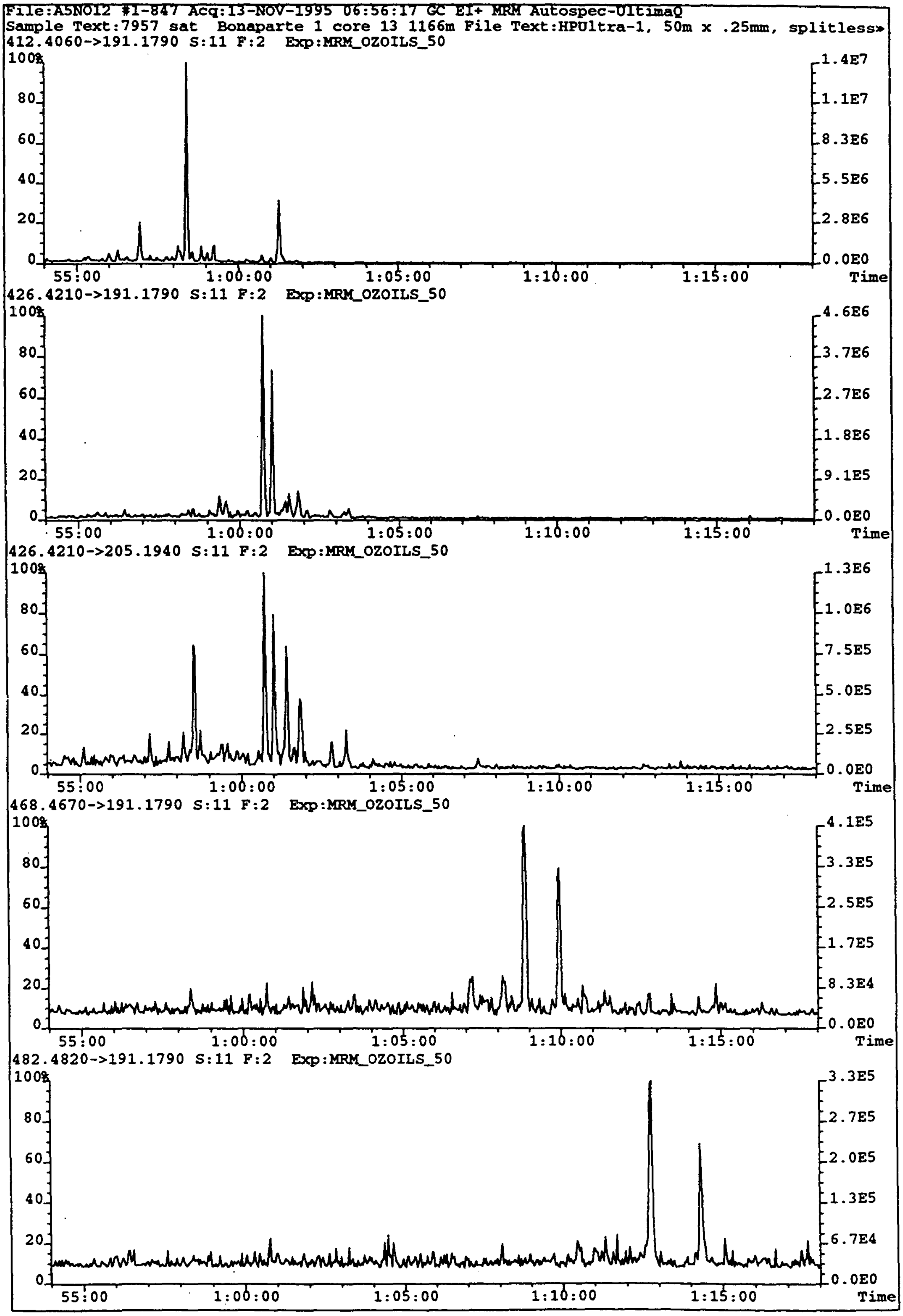

File:A5NO12 #1-1252 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
262.2650->191.1790 S:11 Exp:MRM_OZOILS_50
276.2800->191.1790 S:11 Exp:MRM_OZOILS_50
290.2960->191.1790 S:11 Exp:MRM_OZOILS_50
304.3120->191.1790 S:11 Exp:MRM_OZOILS_50
318.3280->191.1790 S:11 Exp:MRM_OZOILS_50
Time


File:A5N012 #1-1252 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
332.3440->191.1790 S:11 Exp:MRM_OZOILS_50
346.3590->191.1790 S:11 Exp:MRM_OZOILS_50
330.3280->191.1790 S:11 Exp:MRM_OZOILS_50
360.3740->191.1790 S:11 Exp:MRM_OZOILS_50
Time

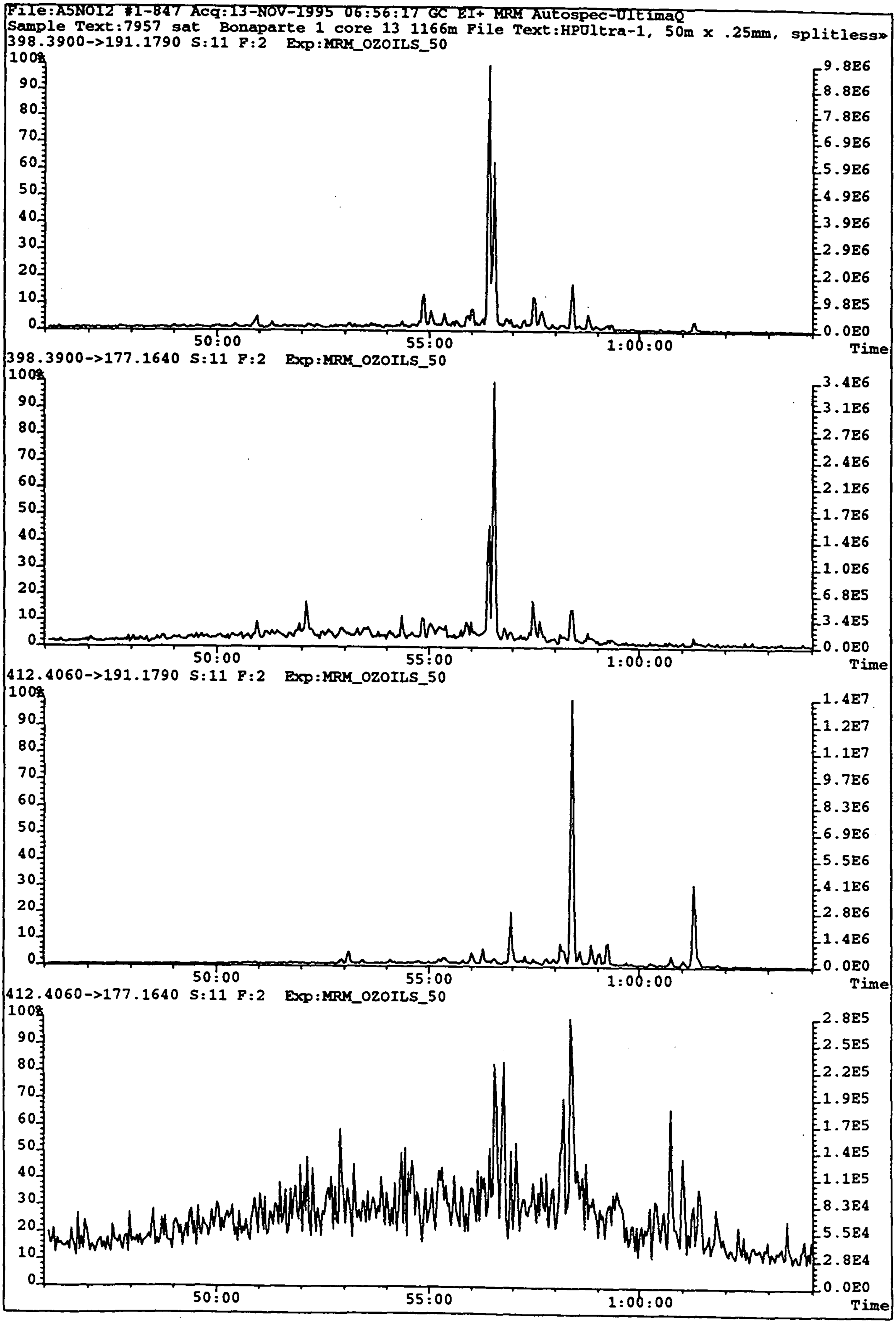

File:A5NO12 #1-847 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
372.3760->217.1960 S:11 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.8E6
4.7E6
3.5E6
2.3E6
1.2E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:11 F:2 Exp:MRM_OZOILS_50
1.9E6
1.5E6
1.2E6
7.7E5
3.9E5
0.0E0
400.4070->217.1960 S:11 F:2 Exp:MRM_OZOILS_50
4.0E6
3.2E6
2.4E6
1.6E6
8.0E5
0.0E0
414.4230->217.1960 S:11 F:2 Exp:MRM_OZOILS_50
2.3E5
1.9E5
1.4E5
9.3E4
4.6E4
0.0E0
414.4230->231.2120 S:11 F:2 Exp:MRM_OZOILS_50
4.9E5
3.9E5
2.9E5
2.0E5
9.8E4
0.0E0

File:A5N012 #1-847 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»

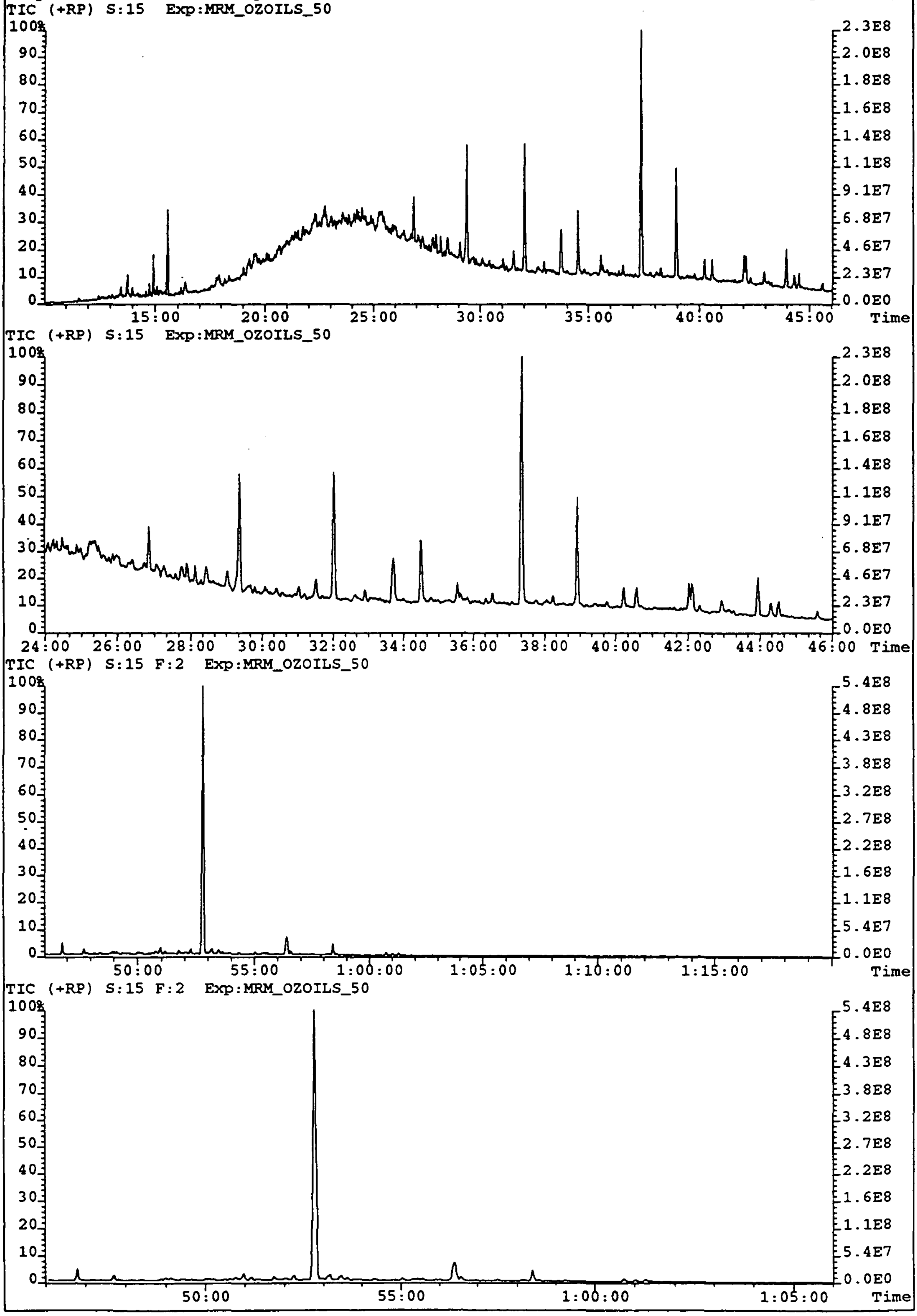




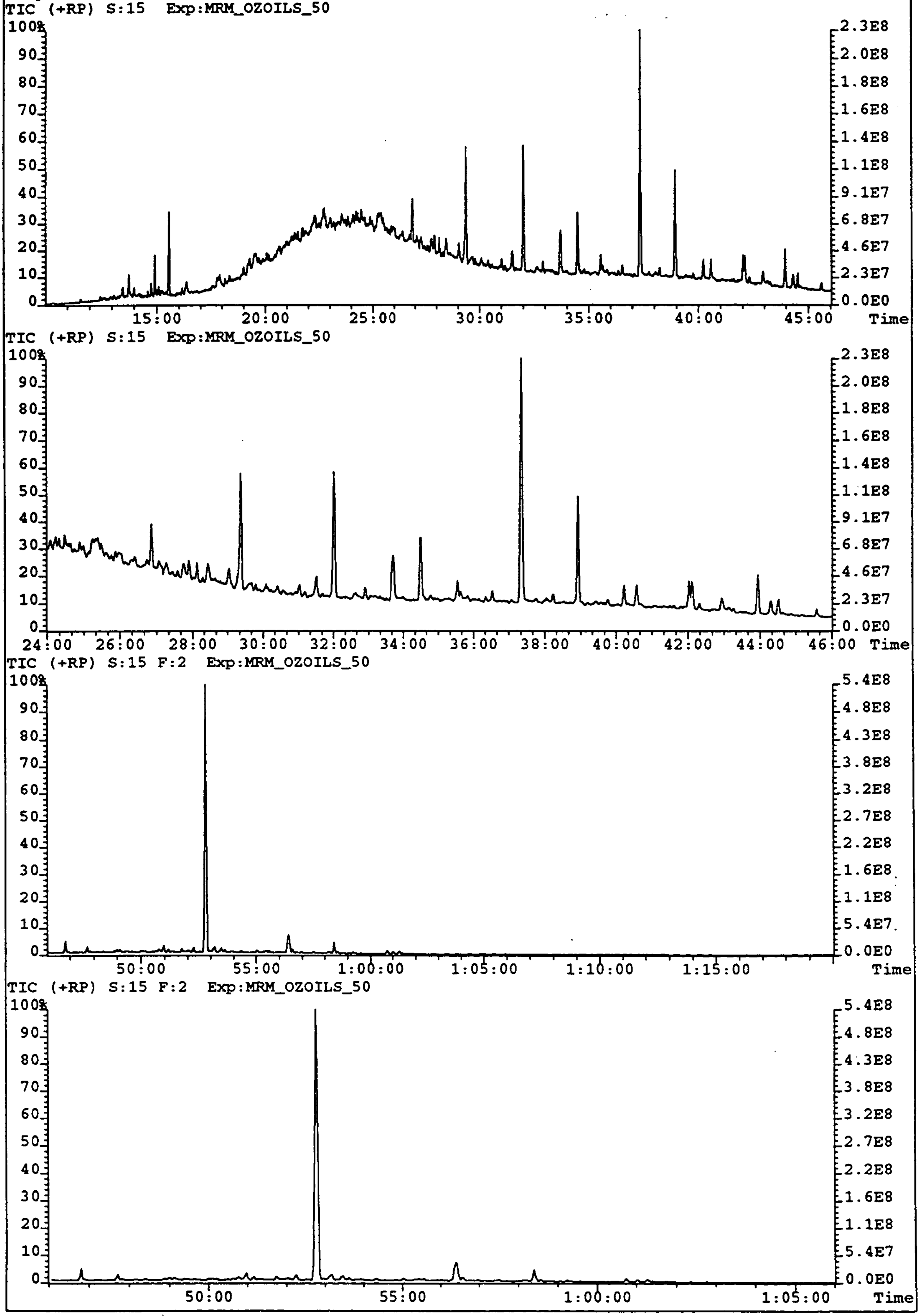
File:A5NO12 #1-847 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
412.4060->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.4E7
1.1E7
8.3E6
5.5E6
2.8E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
4.6E6
3.7E6
2.7E6
1.8E6
9.1E5
0.0E0
426.4210->205.1940 S:11 F:2 Exp:MRM_OZOILS_50
1.3E6
1.0E6
7.5E5
5.0E5
2.5E5
0.0E0
468.4670->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
4.1E5
3.3E5
2.5E5
1.7E5
8.3E4
0.0E0
482.4820->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
3.3E5
2.7E5
2.0E5
1.3E5
6.7E4
0.0E0

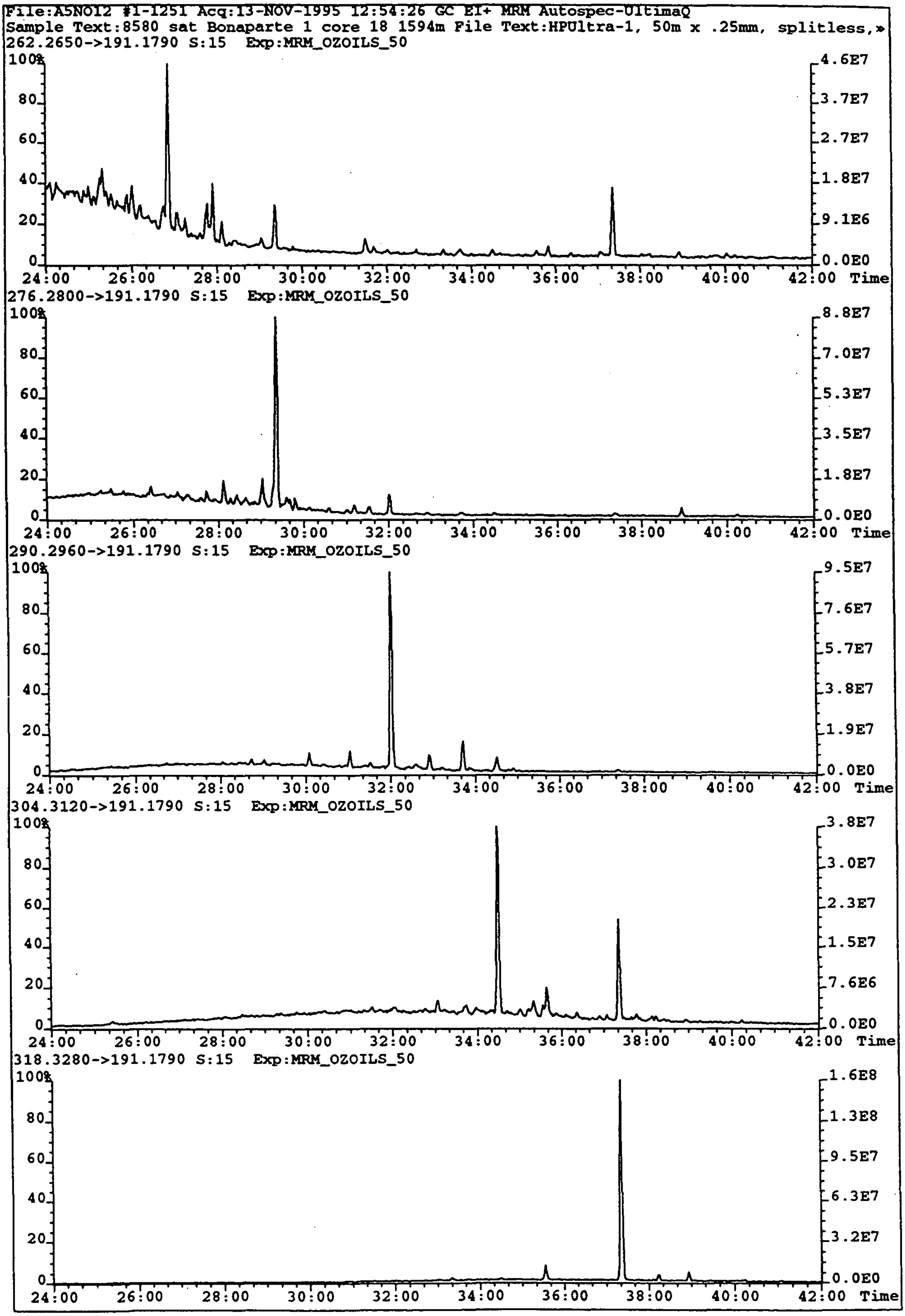

File:A5NO12 #1-847 Acq:13-NOV-1995 06:56:17 GC EI+ MRM Autospec-UltimaQ
Sample Text:7957 sat Bonaparte 1 core 13 1166m File Text:HPUltra-1, 50m x .25mm, splitless»
398.3900->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
9.8E6
Time
398.3900->177.1640 S:11 F:2 Exp:MRM_OZOILS_50
3.4E6
412.4060->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
1.4E7
412.4060->177.1640 S:11 F:2 Exp:MRM_OZOILS_50
2.8E5
50:00
55:00
1:00:00
Time

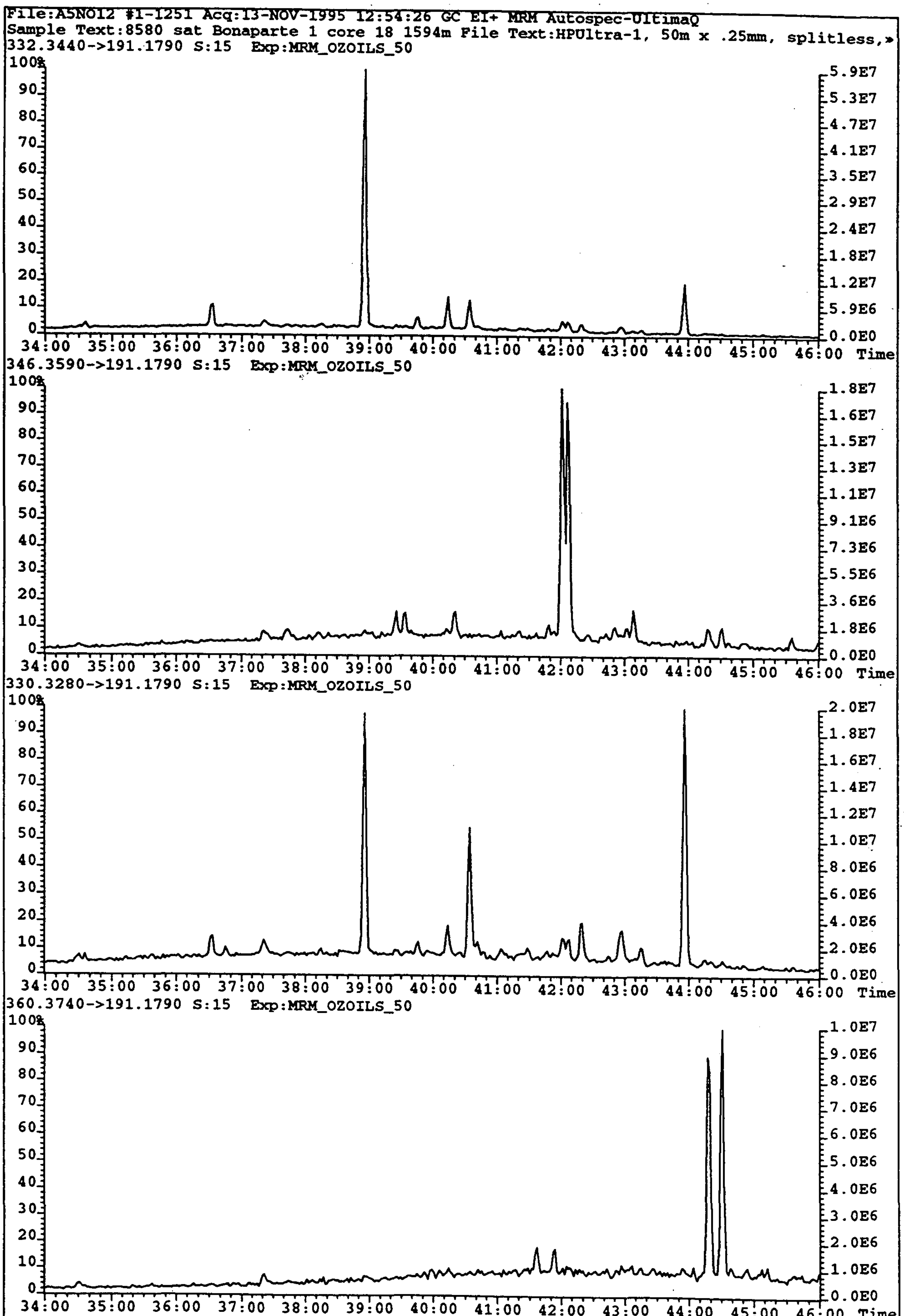
File:A5NO12 #1-1251 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»

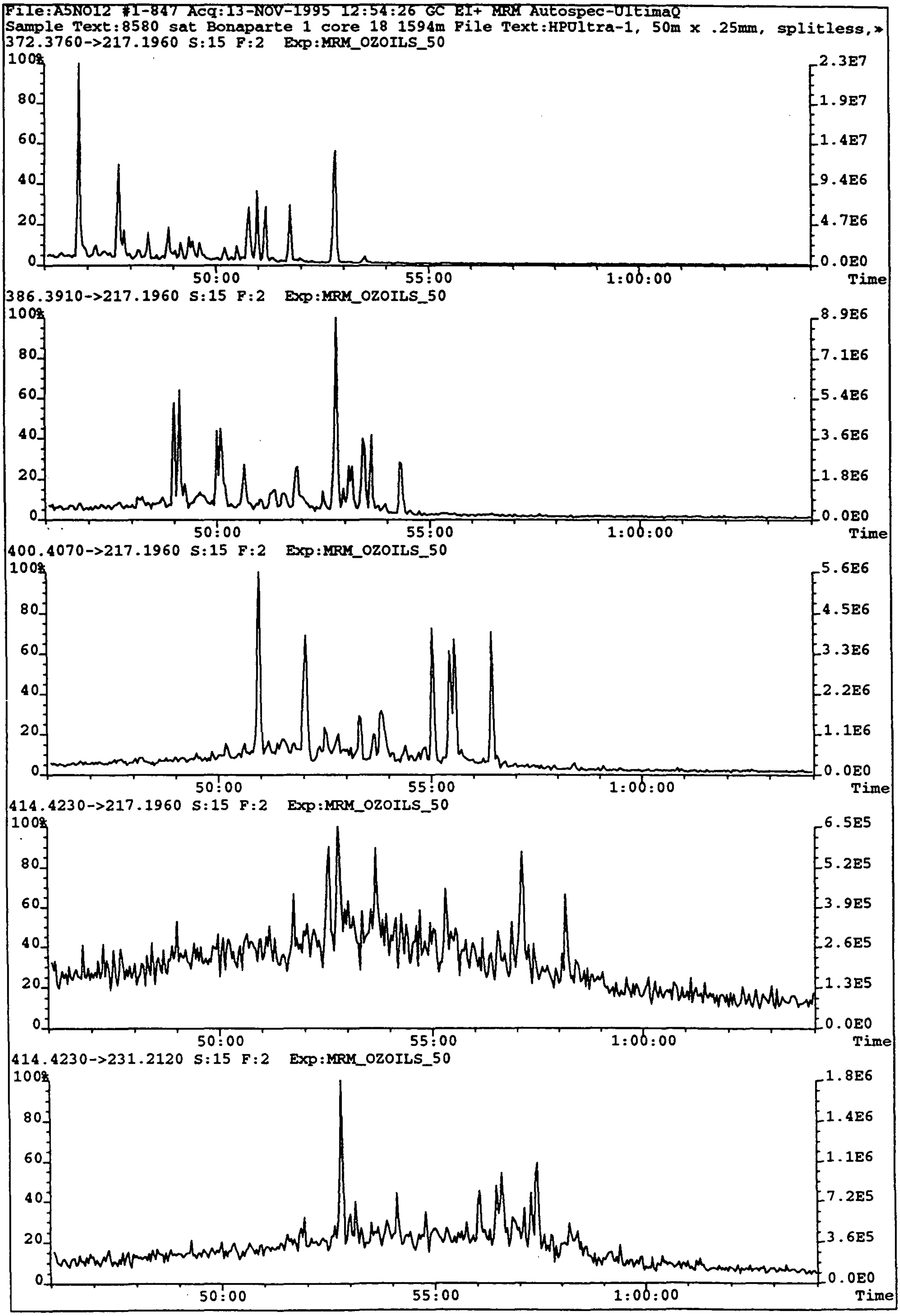


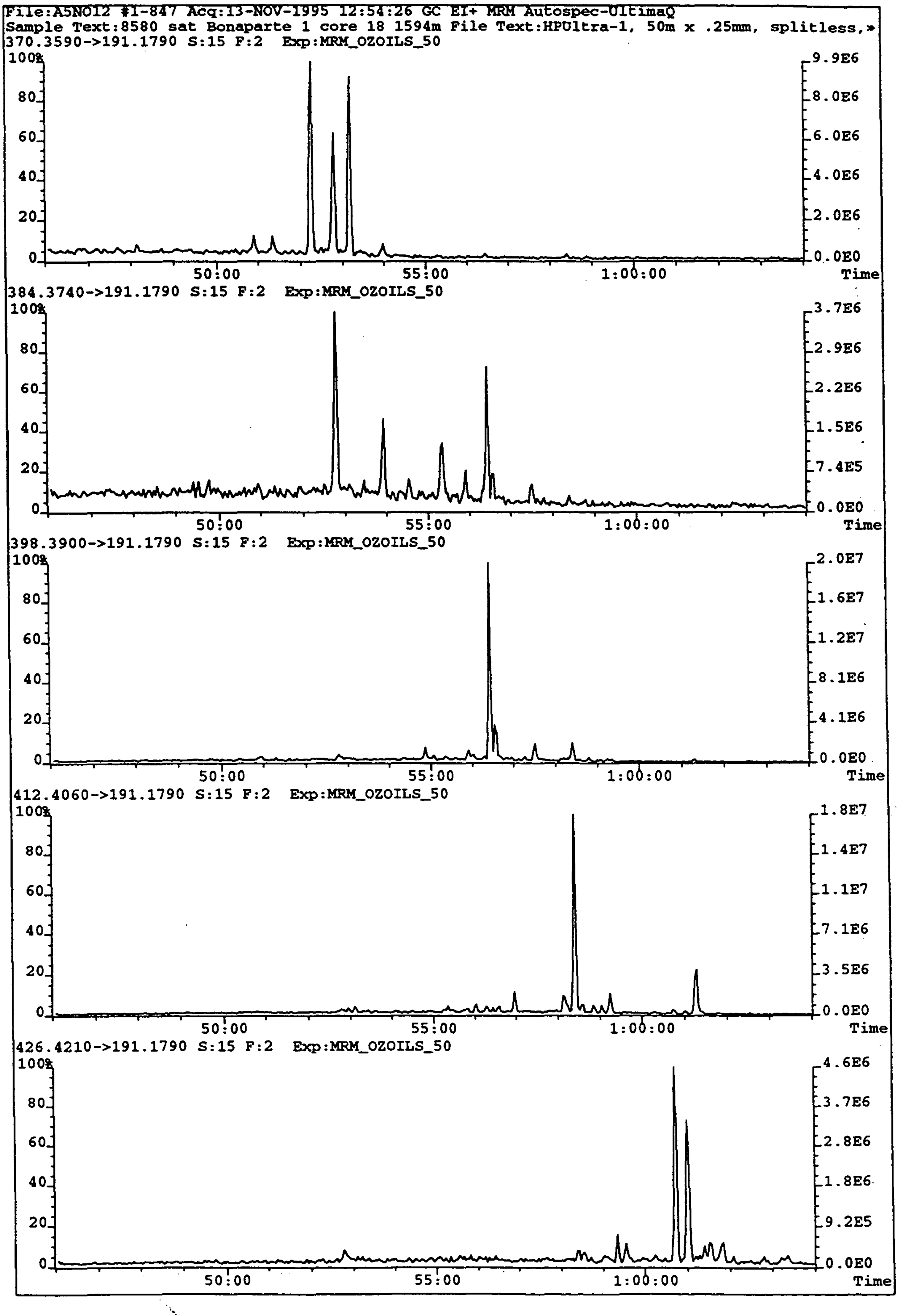
File:A5NO12 #1-1251 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»

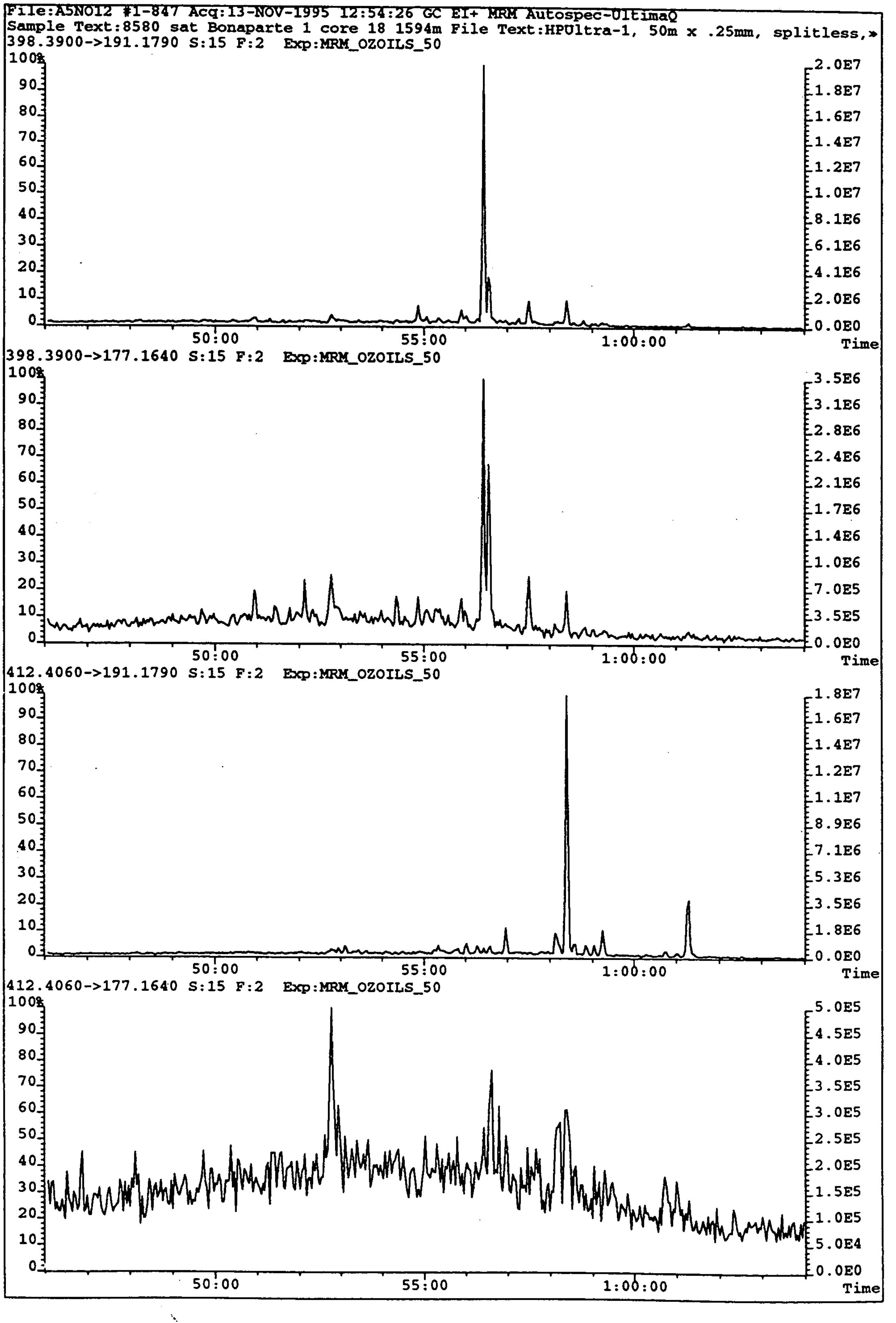


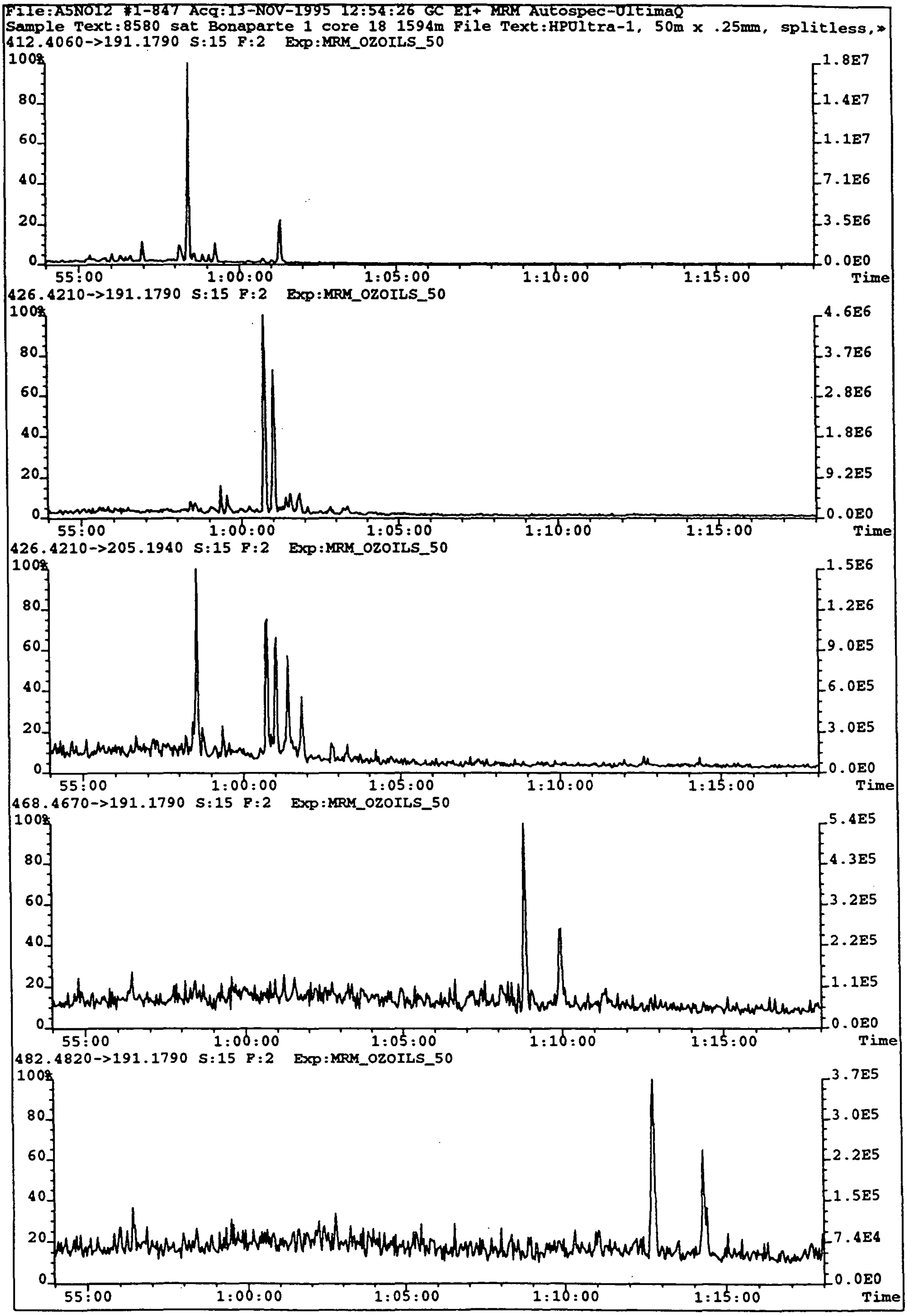

File:A5NO12 #1-1251 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
262.2650->191.1790 S:15 Exp:MRM_OZOILS_50
276.2800->191.1790 S:15 Exp:MRM_OZOILS_50
290.2960->191.1790 S:15 Exp:MRM_OZOILS_50
304.3120->191.1790 S:15 Exp:MRM_OZOILS_50
318.3280->191.1790 S:15 Exp:MRM_OZOILS_50
Time

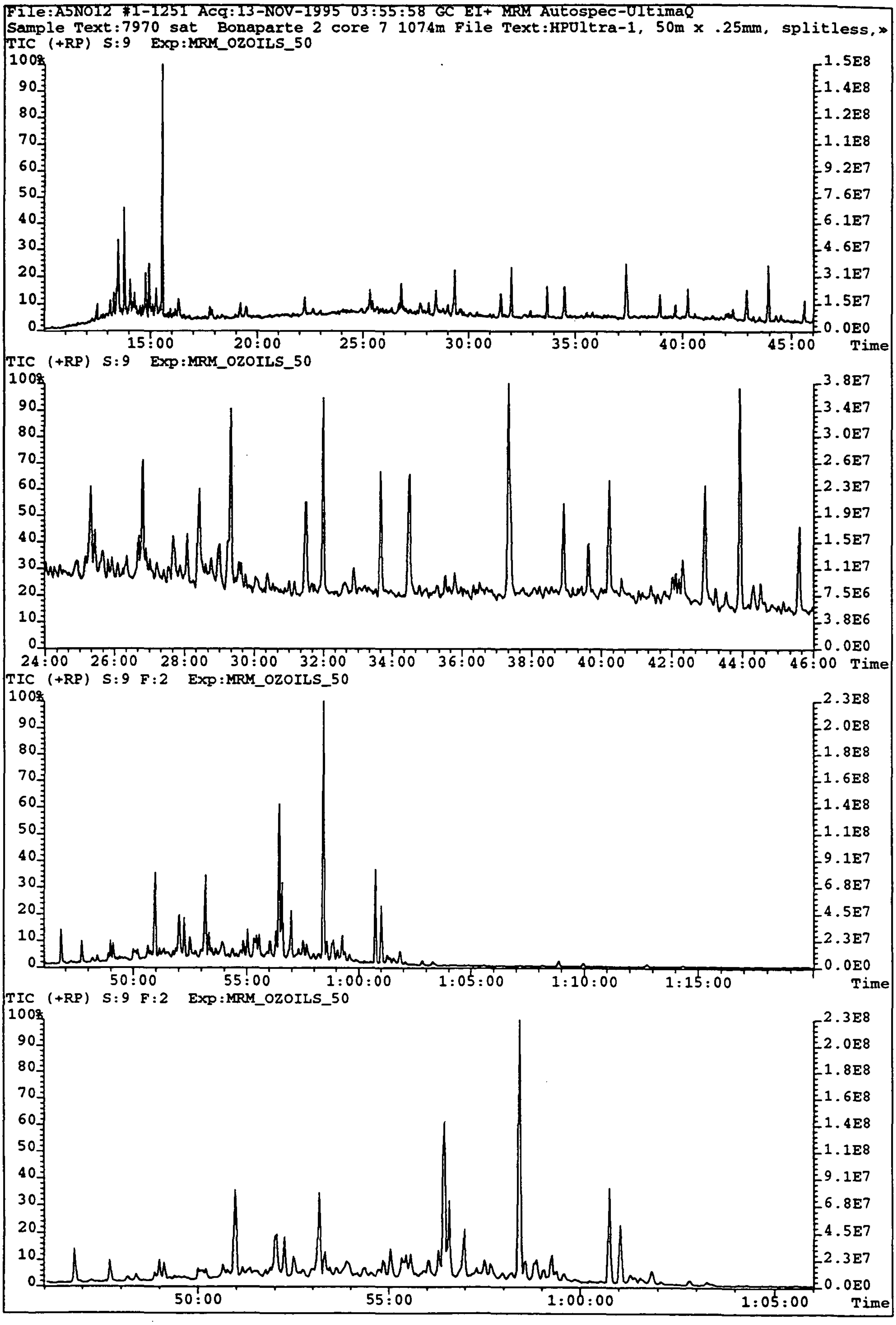

File:A5NO12 #1-1251 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
332.3440->191.1790 S:15 Exp:MRM_OZOILS_50
346.3590->191.1790 S:15 Exp:MRM_OZOILS_50
330.3280->191.1790 S:15 Exp:MRM_OZOILS_50
360.3740->191.1790 S:15 Exp:MRM_OZOILS_50
Time

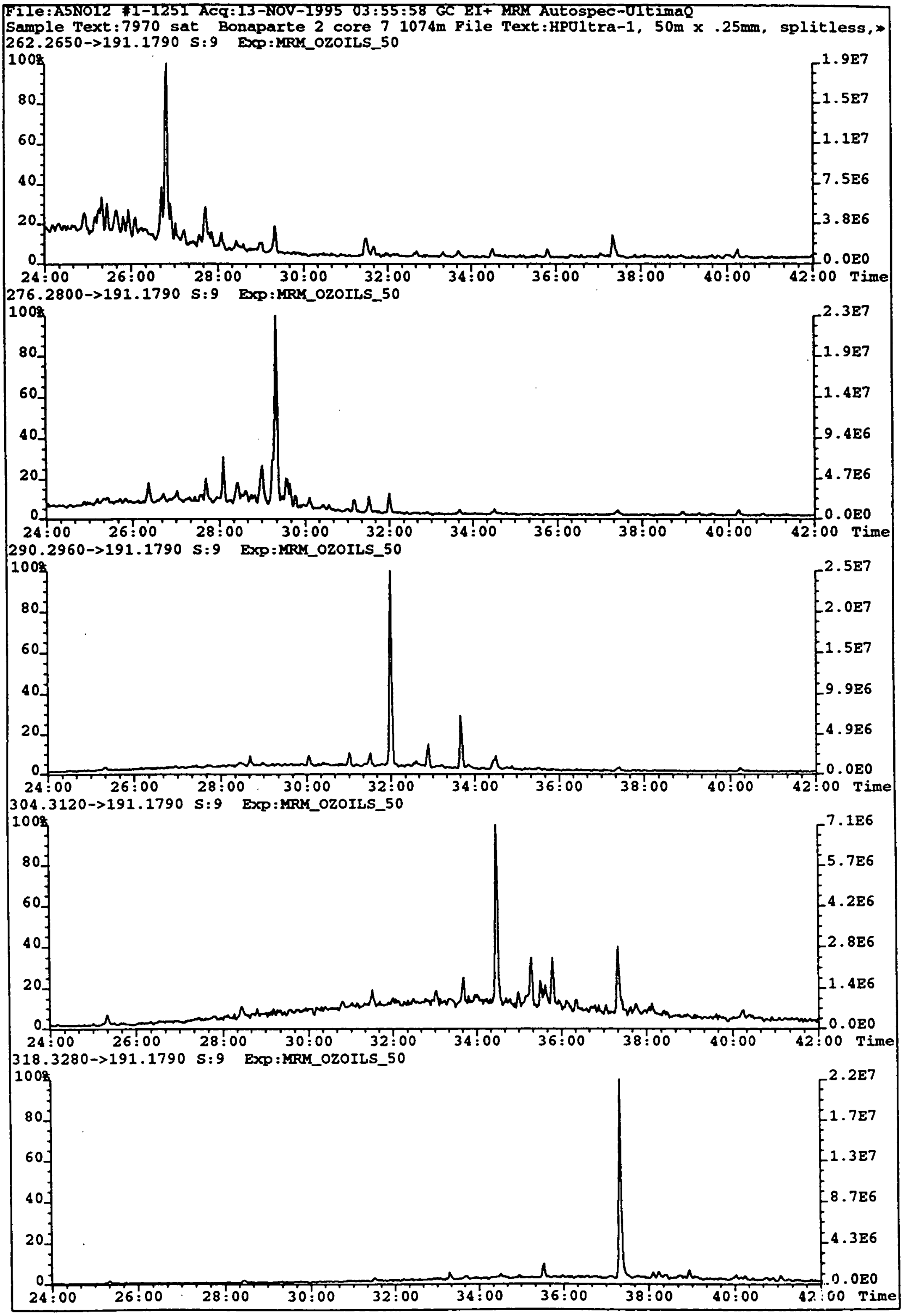

File:A5NO12 #1-847 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
372.3760->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.3E7
1.9E7
1.4E7
9.4E6
4.7E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
8.9E6
7.1E6
5.4E6
3.6E6
1.8E6
0.0E0
400.4070->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
5.6E6
4.5E6
3.3E6
2.2E6
1.1E6
0.0E0
414.4230->217.1960 S:15 F:2 Exp:MRM_OZOILS_50
6.5E5
5.2E5
3.9E5
2.6E5
1.3E5
0.0E0
414.4230->231.2120 S:15 F:2 Exp:MRM_OZOILS_50
1.8E6
1.4E6
1.1E6
7.2E5
3.6E5
0.0E0


File:A5NO12 #1-847 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
370.3590->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
9.9E6
384.3740->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
3.7E6
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
2.0E7
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.8E7
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
4.6E6
50:00
55:00
1:00:00
Time


File:A5NO12 #1-847 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
398.3900->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
2.0E7
1.8E7
1.6E7
1.4E7
1.2E7
1.0E7
8.1E6
6.1E6
4.1E6
2.0E6
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
3.5E6
3.1E6
2.8E6
2.4E6
2.1E6
1.7E6
1.4E6
1.0E6
7.0E5
3.5E5
0.0E0
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
1.8E7
1.6E7
1.4E7
1.2E7
1.1E7
8.9E6
7.1E6
5.3E6
3.5E6
1.8E6
0.0E0
412.4060->177.1640 S:15 F:2 Exp:MRM_OZOILS_50
5.0E5
4.5E5
4.0E5
3.5E5
3.0E5
2.5E5
2.0E5
1.5E5
1.0E5
5.0E4
0.0E0

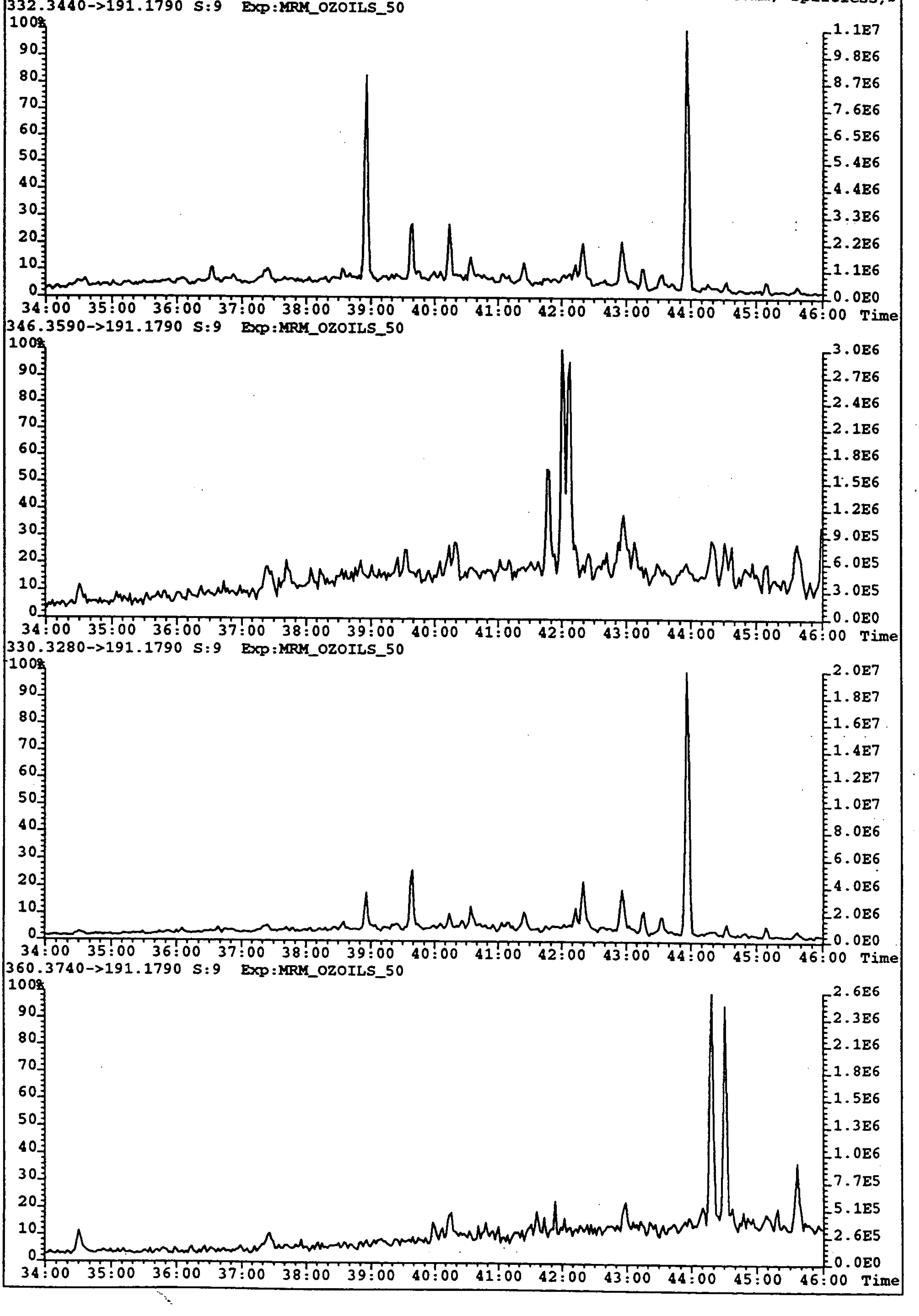

File:A5N012 #1-847 Acq:13-NOV-1995 12:54:26 GC EI+ MRM Autospec-UltimaQ
Sample Text:8580 sat Bonaparte 1 core 18 1594m File Text:HPUltra-1, 50m x .25mm, splitless,»
412.4060->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.8E7
1.4E7
1.1E7
7.1E6
3.5E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
4.6E6
3.7E6
2.8E6
1.8E6
9.2E5
0.0E0
426.4210->205.1940 S:15 F:2 Exp:MRM_OZOILS_50
1.5E6
1.2E6
9.0E5
6.0E5
3.0E5
0.0E0
468.4670->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
5.4E5
4.3E5
3.2E5
2.2E5
1.1E5
0.0E0
482.4820->191.1790 S:15 F:2 Exp:MRM_OZOILS_50
3.7E5
3.0E5
2.2E5
1.5E5
7.4E4
0.0E0

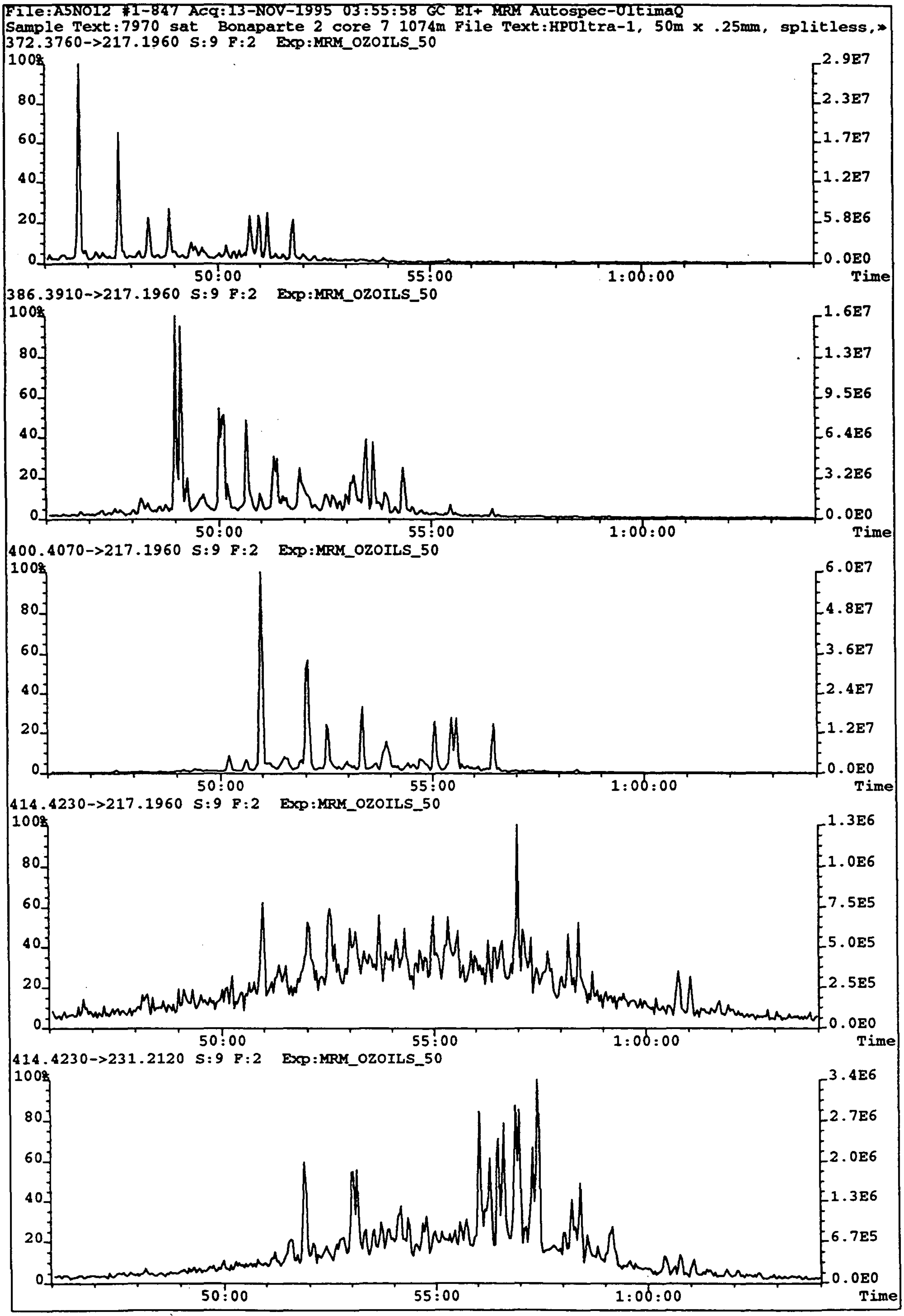

File:A5N012 #1-1251 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
TIC (+RP) S:9 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:9 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:9 F:2 Exp:MRM_OZOILS_50
Time
TIC (+RP) S:9 F:2 Exp:MRM_OZOILS_50
Time



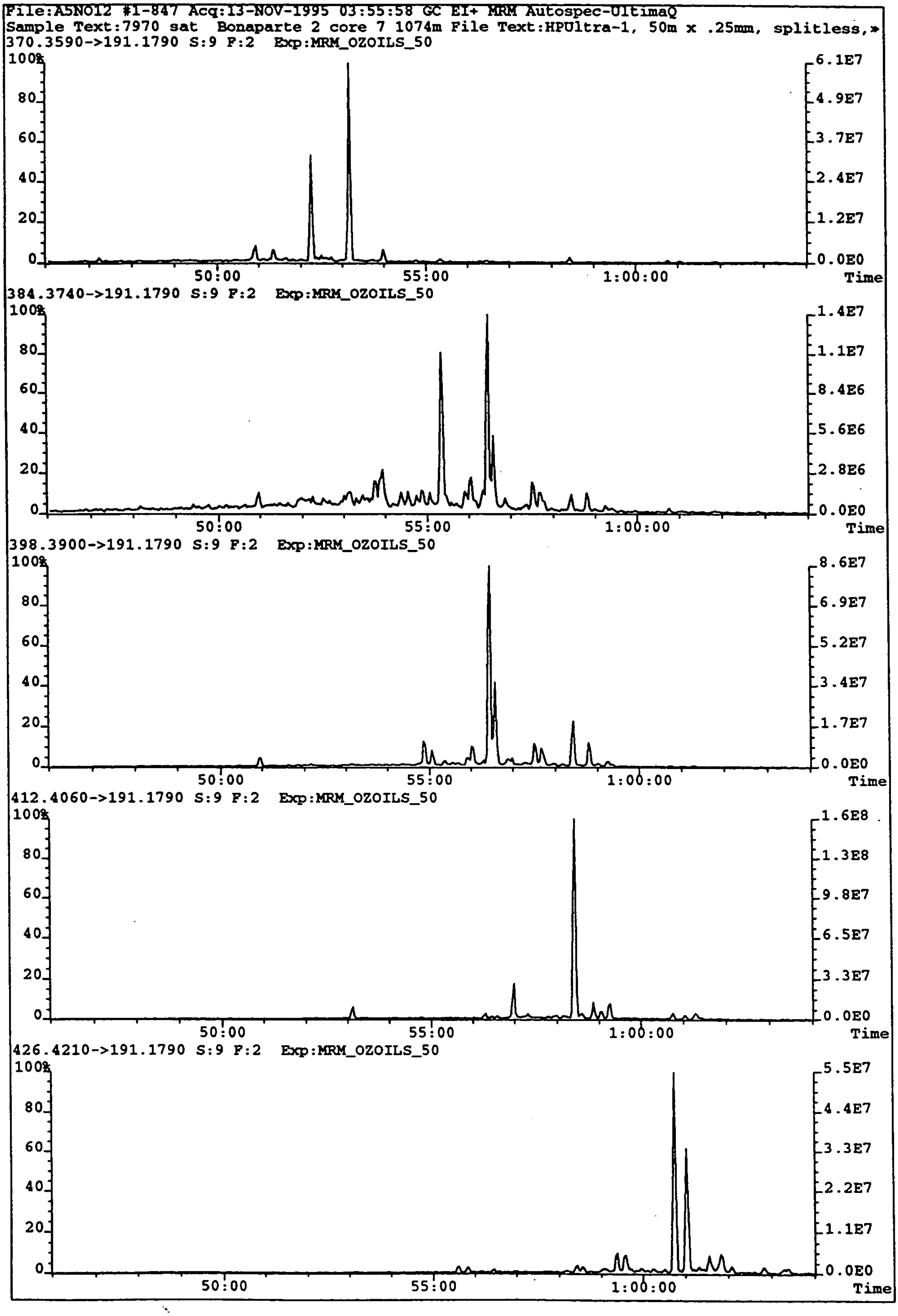
File:A5NO12 #1-1251 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
262.2650->191.1790 S:9 Exp:MRM_OZOILS_50
100% 80 60 40 20 0
1.9E7 1.5E7 1.1E7 7.5E6 3.8E6 0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
276.2800->191.1790 S:9 Exp:MRM_OZOILS_50
100% 80 60 40 20 0
2.3E7 1.9E7 1.4E7 9.4E6 4.7E6 0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
290.2960->191.1790 S:9 Exp:MRM_OZOILS_50
100% 80 60 40 20 0
2.5E7 2.0E7 1.5E7 9.9E6 4.9E6 0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
304.3120->191.1790 S:9 Exp:MRM_OZOILS_50
100% 80 60 40 20 0
7.1E6 5.7E6 4.2E6 2.8E6 1.4E6 0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
318.3280->191.1790 S:9 Exp:MRM_OZOILS_50
100% 80 60 40 20 0
2.2E7 1.7E7 1.3E7 8.7E6 4.3E6 0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time

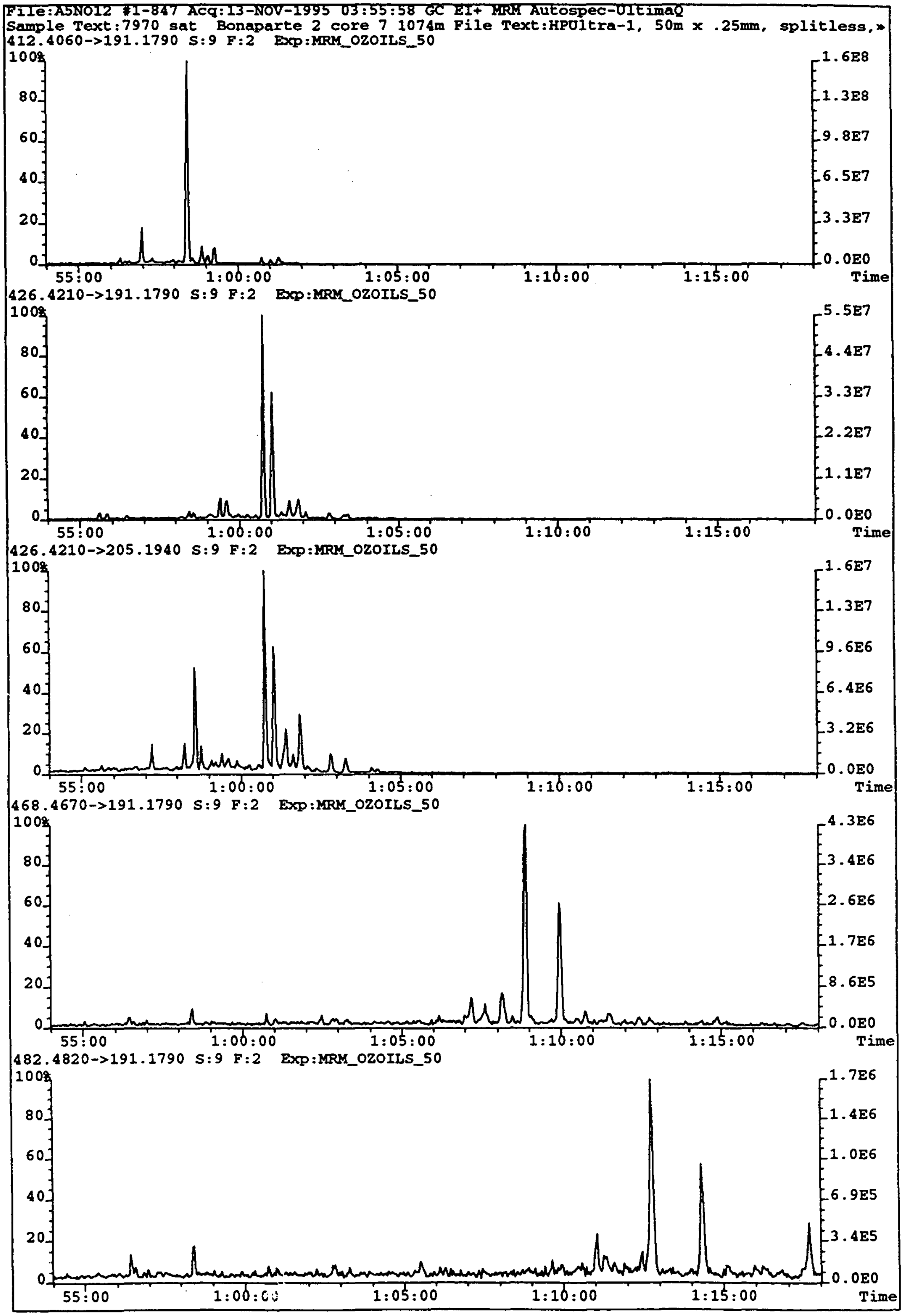
File:A5NO12 #1-1251 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»



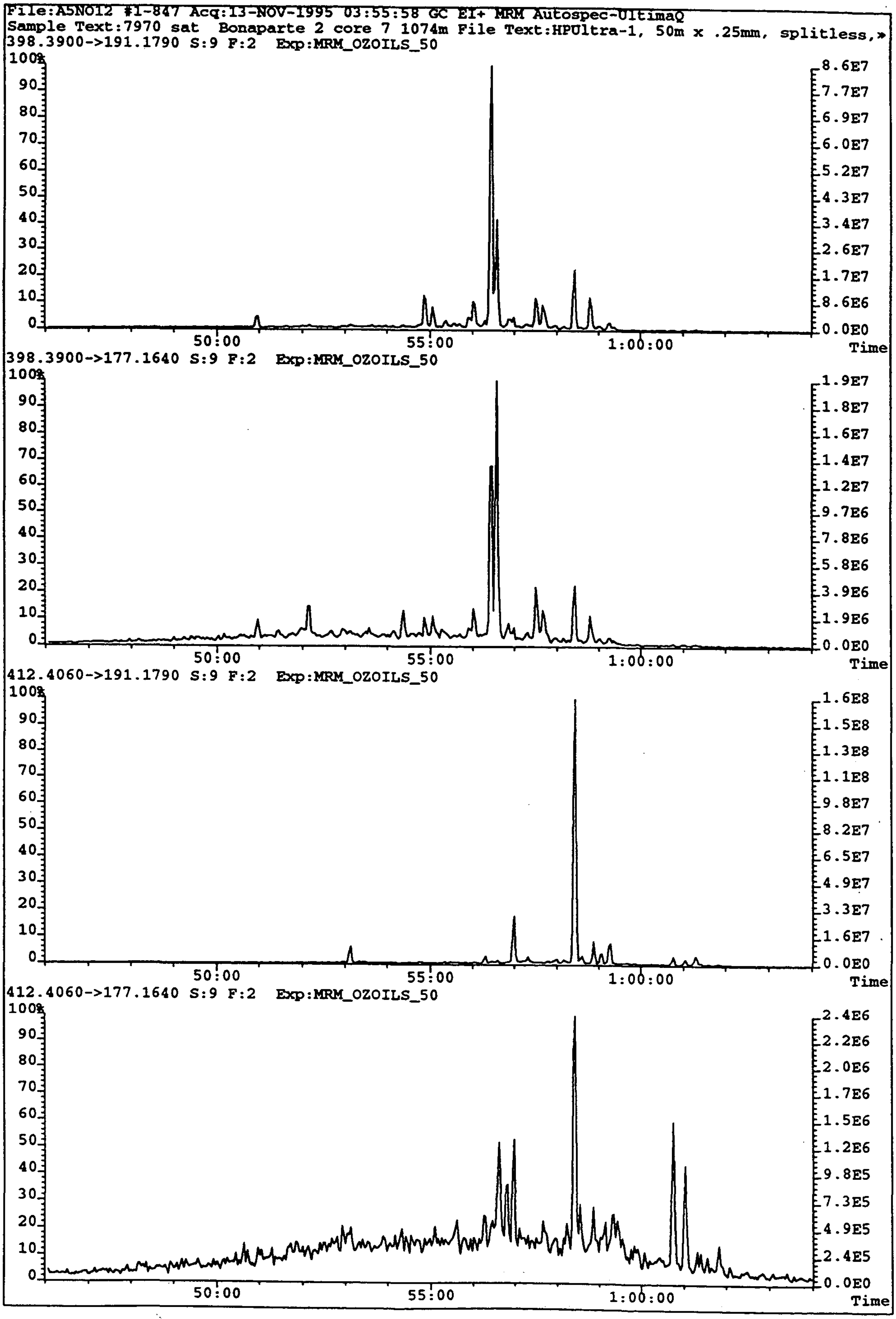


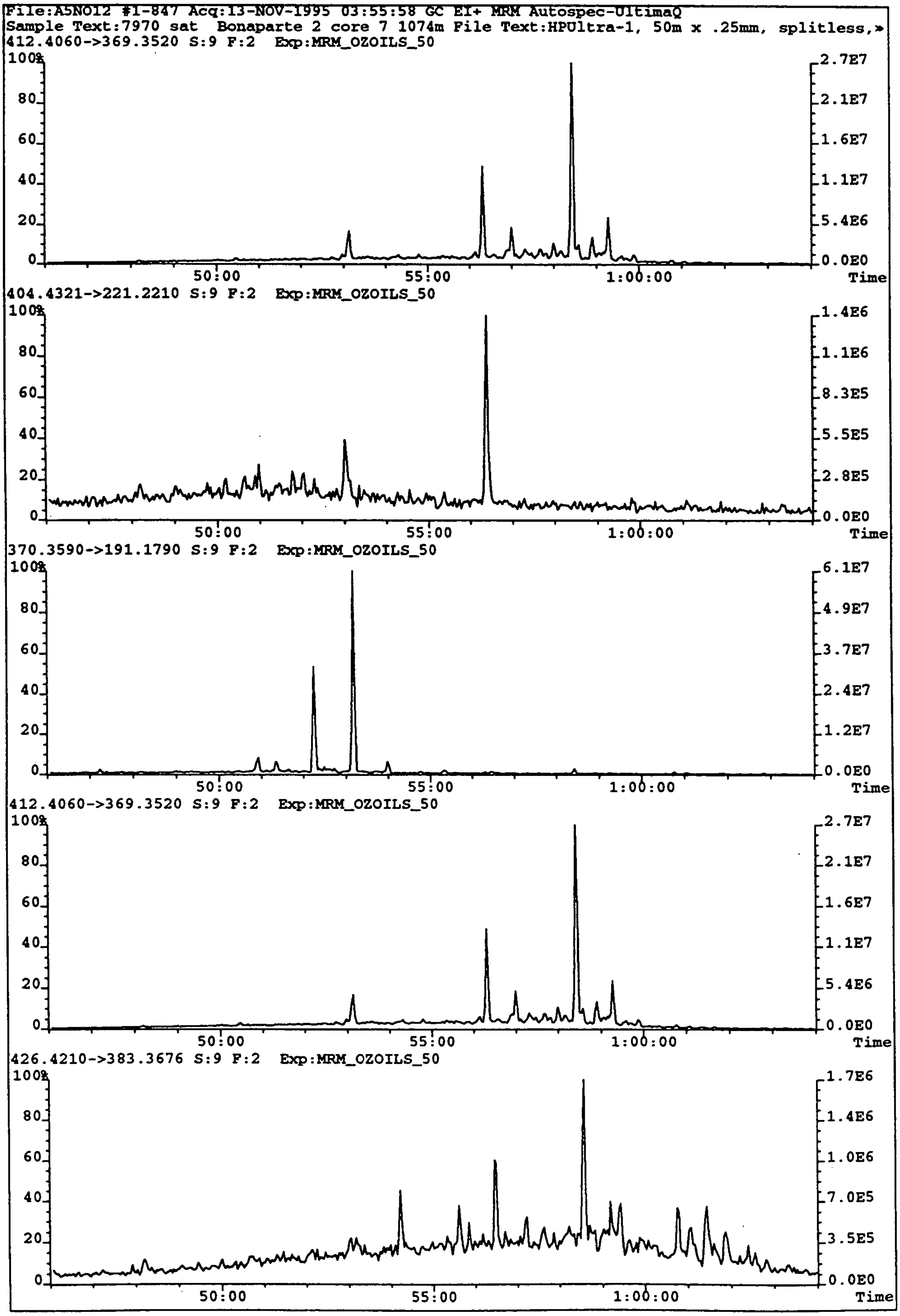
File:A5N012 #1-847 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
372.3760->217.1960 S:9 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.9E7
2.3E7
1.7E7
1.2E7
5.8E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:9 F:2 Exp:MRM_OZOILS_50
1.6E7
1.3E7
9.5E6
6.4E6
3.2E6
0.0E0
400.4070->217.1960 S:9 F:2 Exp:MRM_OZOILS_50
6.0E7
4.8E7
3.6E7
2.4E7
1.2E7
0.0E0
414.4230->217.1960 S:9 F:2 Exp:MRM_OZOILS_50
1.3E6
1.0E6
7.5E5
5.0E5
2.5E5
0.0E0
414.4230->231.2120 S:9 F:2 Exp:MRM_OZOILS_50
3.4E6
2.7E6
2.0E6
1.3E6
6.7E5
0.0E0

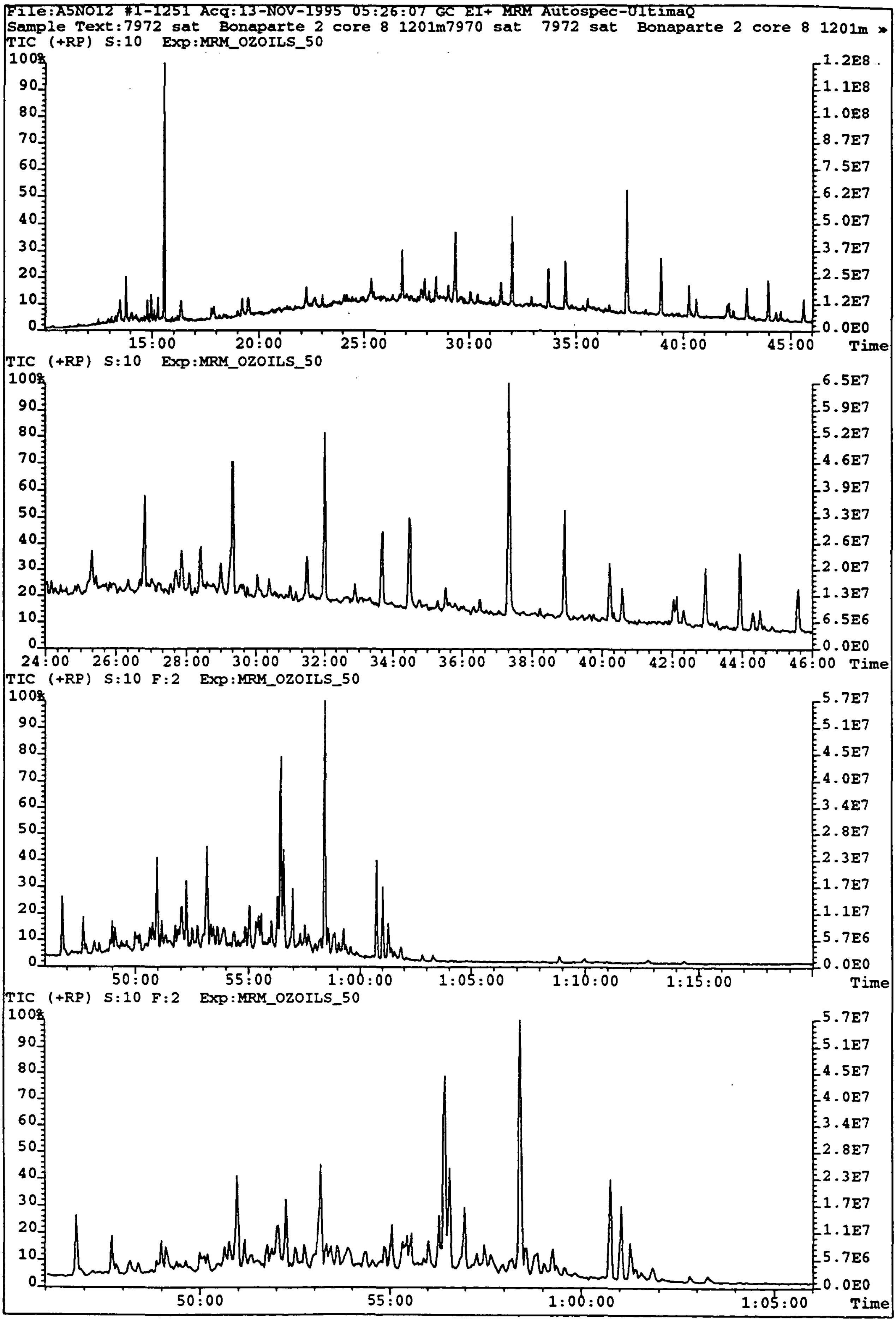

File:A5NO12 #1-847 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
370.3590->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
6.1E7
384.3740->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
1.4E7
398.3900->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
8.6E7
412.4060->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
1.6E8
426.4210->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
5.5E7
50:00
55:00
1:00:00
Time

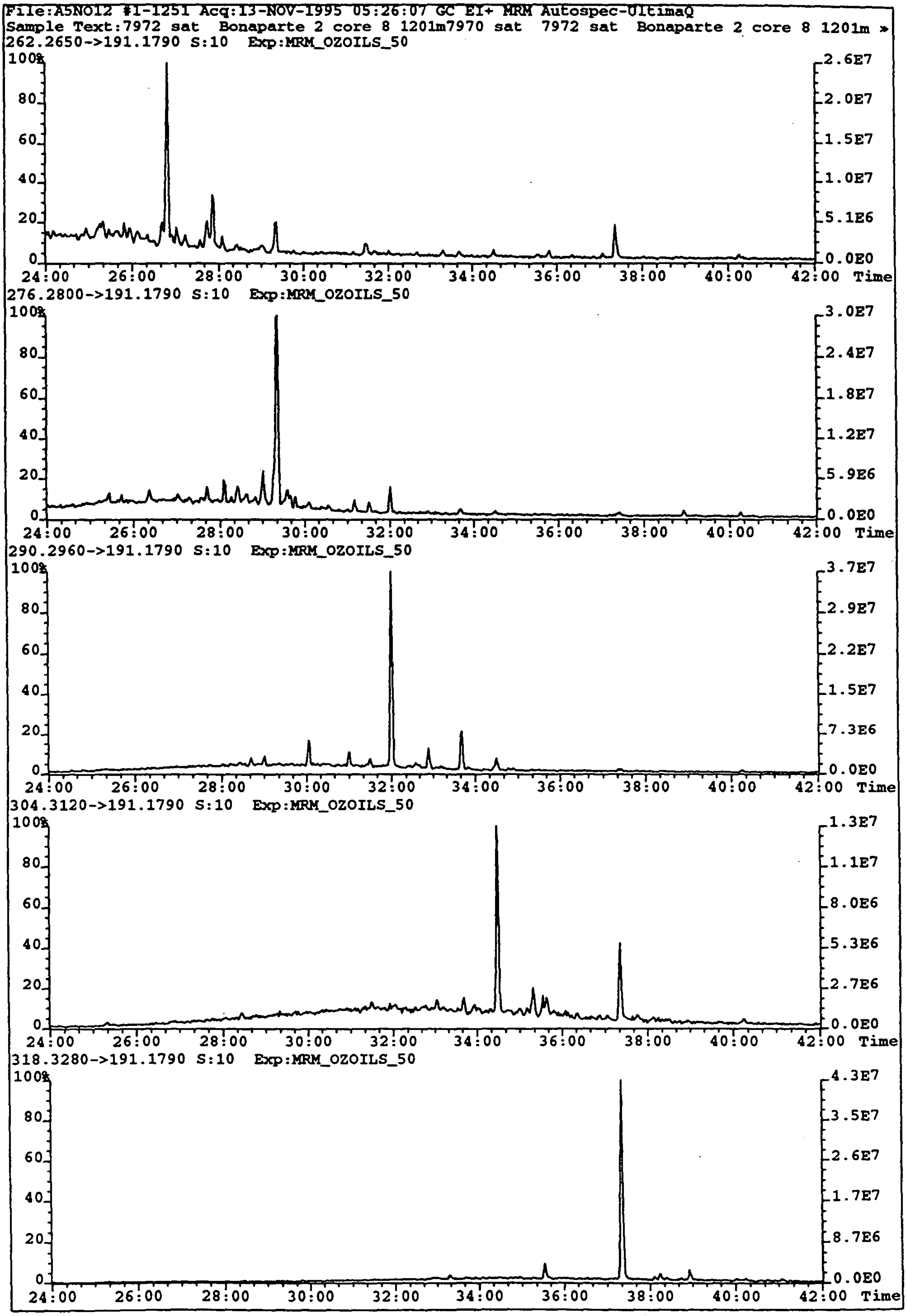


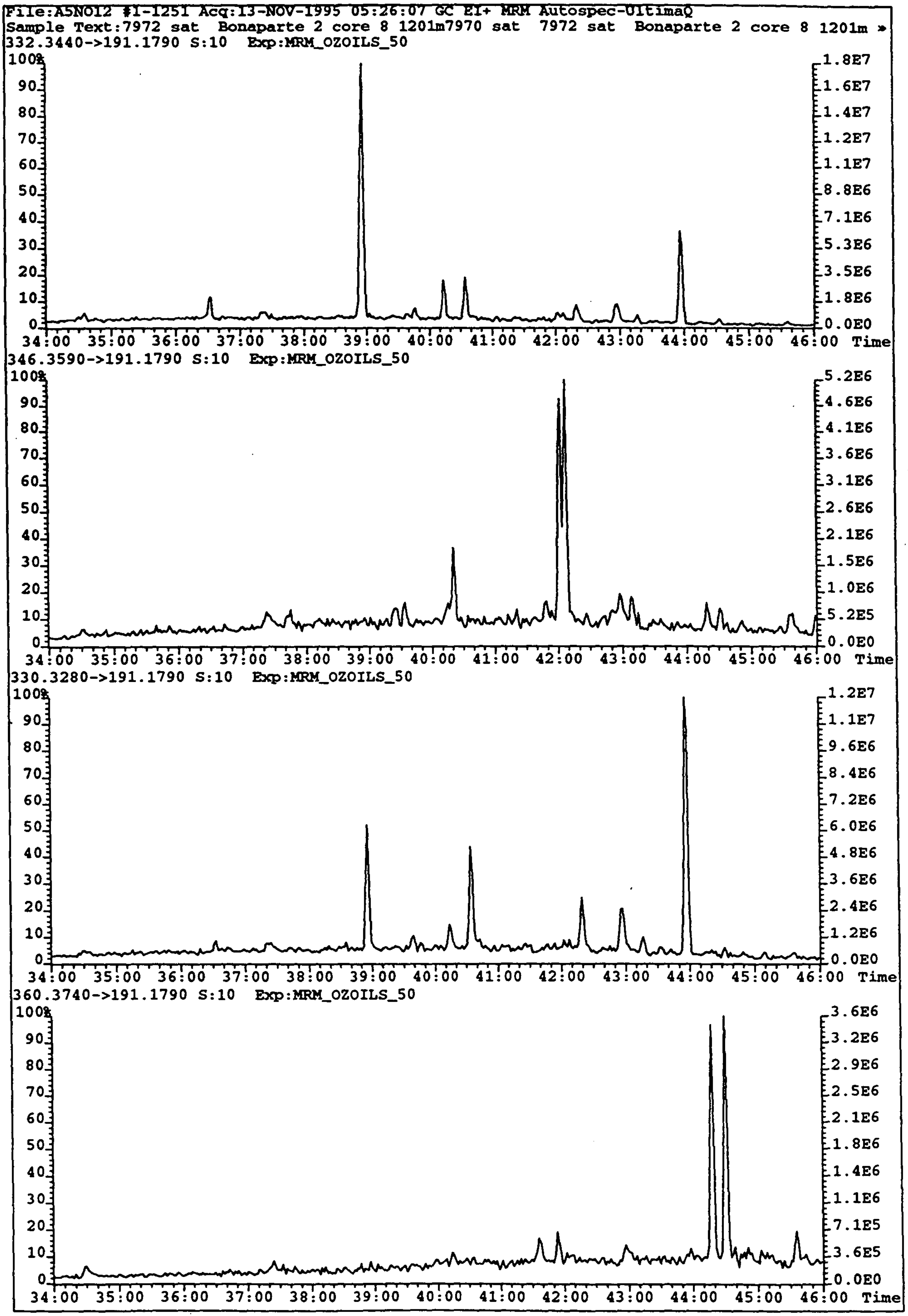
File:A5NO12 #1-847 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
412.4060->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
1.6E8
1.3E8
9.8E7
6.5E7
3.3E7
0.0E0
426.4210->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
5.5E7
4.4E7
3.3E7
2.2E7
1.1E7
0.0E0
426.4210->205.1940 S:9 F:2 Exp:MRM_OZOILS_50
1.6E7
1.3E7
9.6E6
6.4E6
3.2E6
0.0E0
468.4670->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
4.3E6
3.4E6
2.6E6
1.7E6
8.6E5
0.0E0
482.4820->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
1.7E6
1.4E6
1.0E6
6.9E5
3.4E5
0.0E0
100%
80
60
40
20
0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time

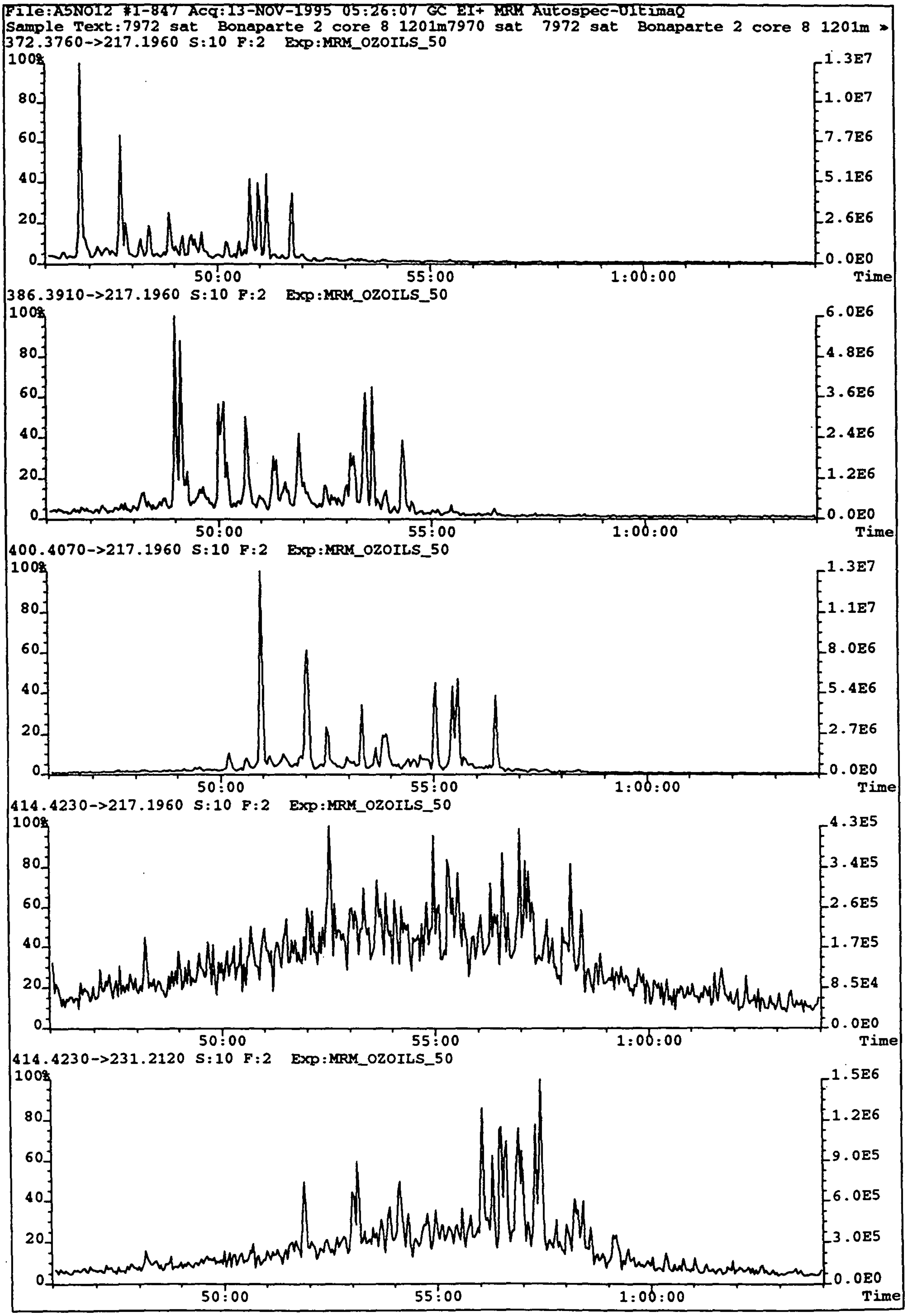

File:A5N012 #1-847 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
398.3900->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:9 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:9 F:2 Exp:MRM_OZOILS_50
100%
Time
50:00
55:00
1:00:00
8.6E7
1.9E7
1.6E8
2.4E6

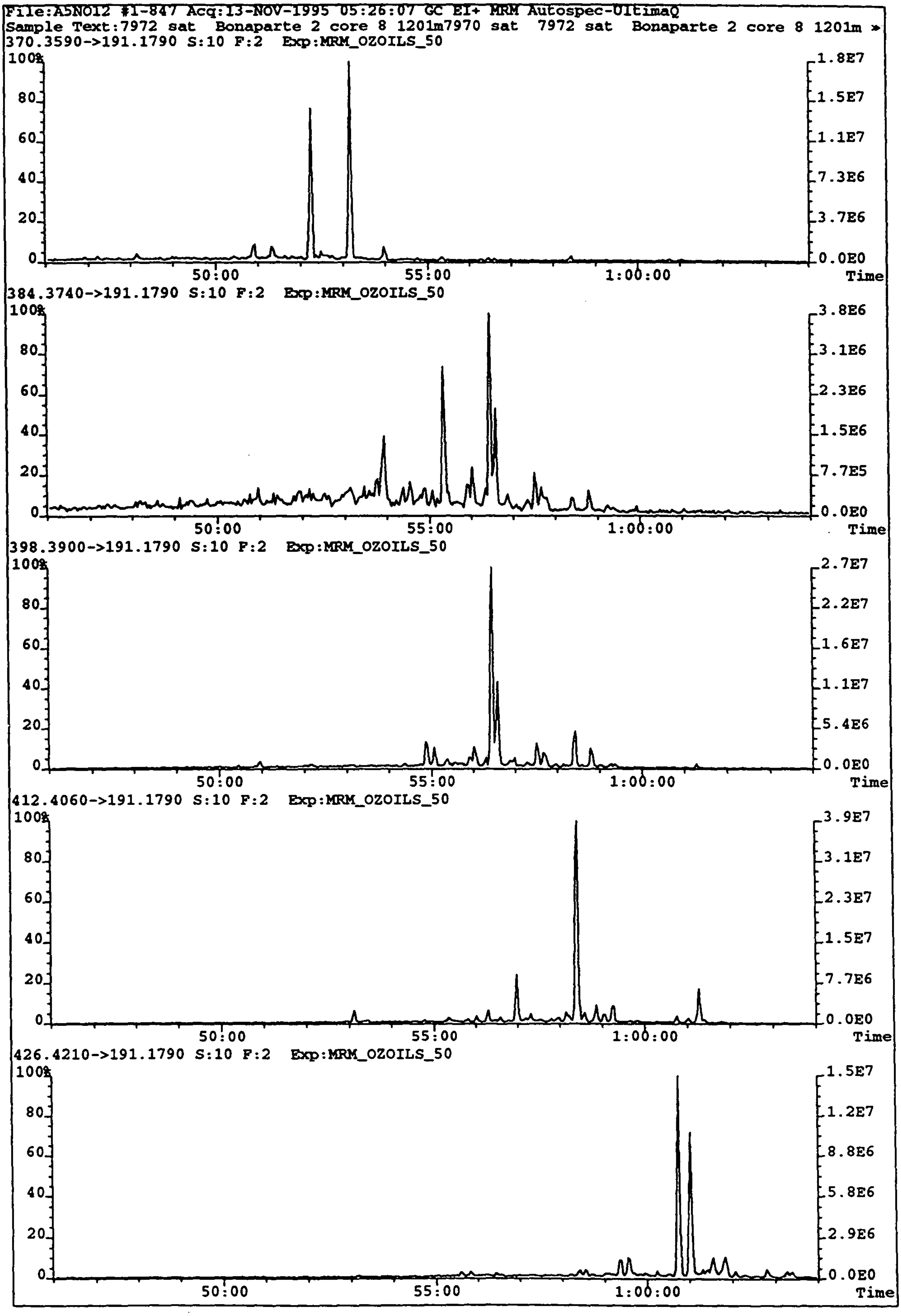

File:A5NO12 #1-847 Acq:13-NOV-1995 03:55:58 GC EI+ MRM Autospec-UltimaQ
Sample Text:7970 sat Bonaparte 2 core 7 1074m File Text:HPUltra-1, 50m x .25mm, splitless,»
412.4060->369.3520 S:9 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.7E7
2.1E7
1.6E7
1.1E7
5.4E6
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:9 F:2 Exp:MRM_OZOILS_50
1.4E6
1.1E6
8.3E5
5.5E5
2.8E5
0.0E0
370.3590->191.1790 S:9 F:2 Exp:MRM_OZOILS_50
6.1E7
4.9E7
3.7E7
2.4E7
1.2E7
0.0E0
412.4060->369.3520 S:9 F:2 Exp:MRM_OZOILS_50
2.7E7
2.1E7
1.6E7
1.1E7
5.4E6
0.0E0
426.4210->383.3676 S:9 F:2 Exp:MRM_OZOILS_50
1.7E6
1.4E6
1.0E6
7.0E5
3.5E5
0.0E0

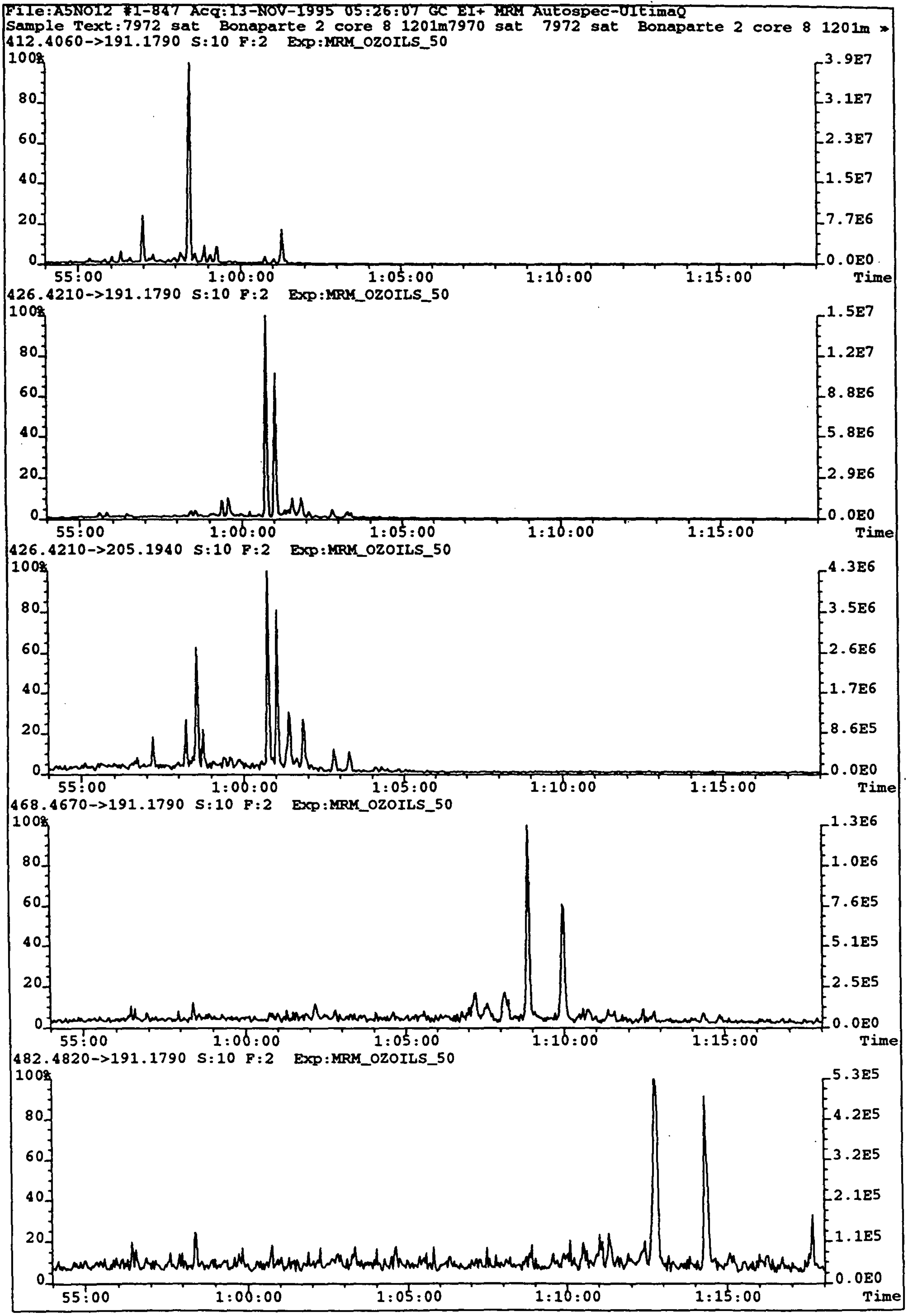

File:A5NO12 #1-1251 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
TIC (+RP) S:10 Exp:MRM_OZOILS_50
TIC (+RP) S:10 Exp:MRM_OZOILS_50
TIC (+RP) S:10 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:10 F:2 Exp:MRM_OZOILS_50
Time

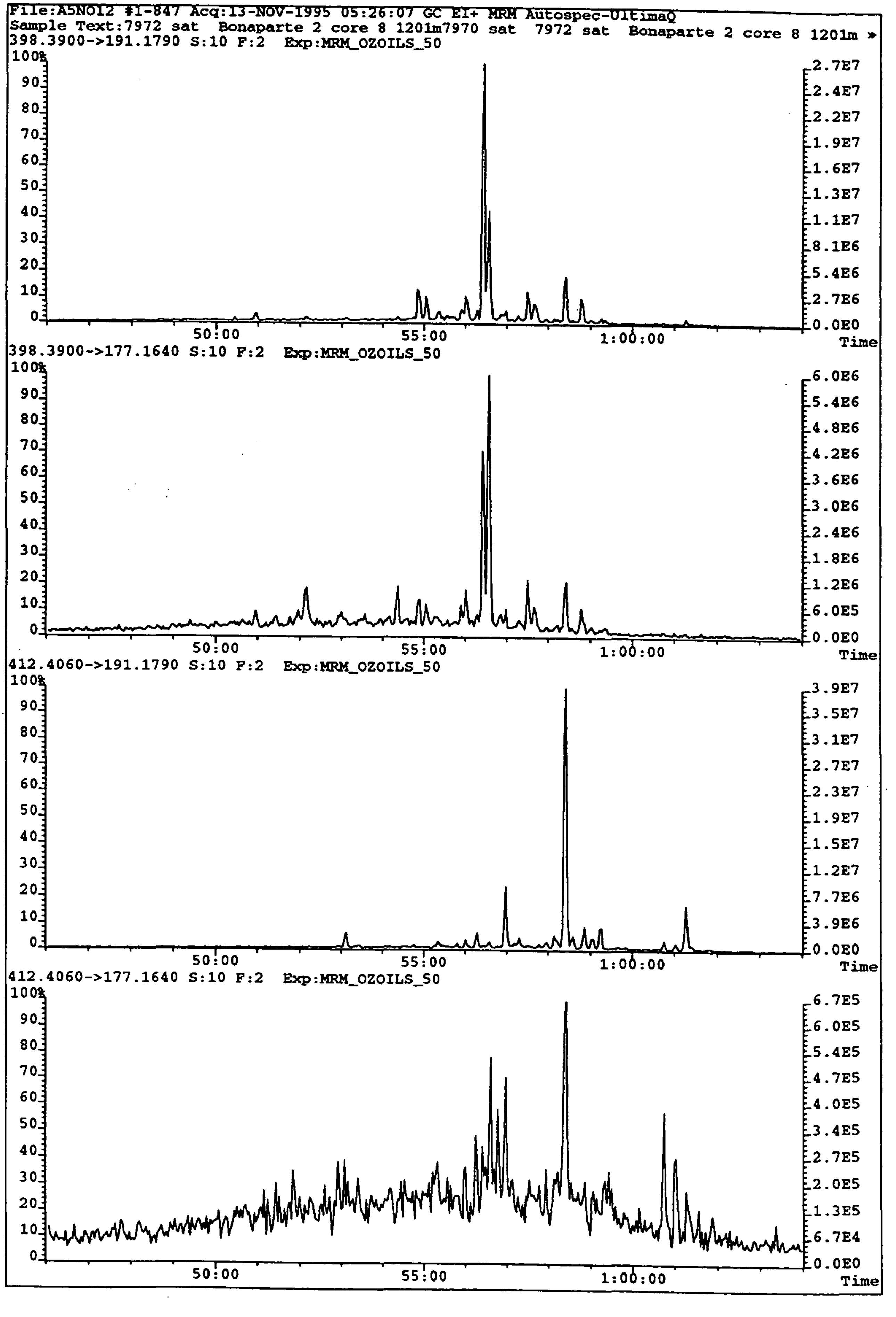

File:A5N012 #1-1251 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
262.2650->191.1790 S:10 Exp:MRM_OZOILS_50
276.2800->191.1790 S:10 Exp:MRM_OZOILS_50
290.2960->191.1790 S:10 Exp:MRM_OZOILS_50
304.3120->191.1790 S:10 Exp:MRM_OZOILS_50
318.3280->191.1790 S:10 Exp:MRM_OZOILS_50
Time


File:A5N012 #1-1251 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
332.3440->191.1790 S:10 Exp:MRM_OZOILS_50
100%
1.8E7
1.6E7
1.4E7
1.2E7
1.1E7
8.8E6
7.1E6
5.3E6
3.5E6
1.8E6
0.0E0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time
346.3590->191.1790 S:10 Exp:MRM_OZOILS_50
5.2E6
4.6E6
4.1E6
3.6E6
3.1E6
2.6E6
2.1E6
1.5E6
1.0E6
5.2E5
0.0E0
330.3280->191.1790 S:10 Exp:MRM_OZOILS_50
1.2E7
1.1E7
9.6E6
8.4E6
7.2E6
6.0E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
360.3740->191.1790 S:10 Exp:MRM_OZOILS_50
3.6E6
3.2E6
2.9E6
2.5E6
2.1E6
1.8E6
1.4E6
1.1E6
7.1E5
3.6E5
0.0E0
Time

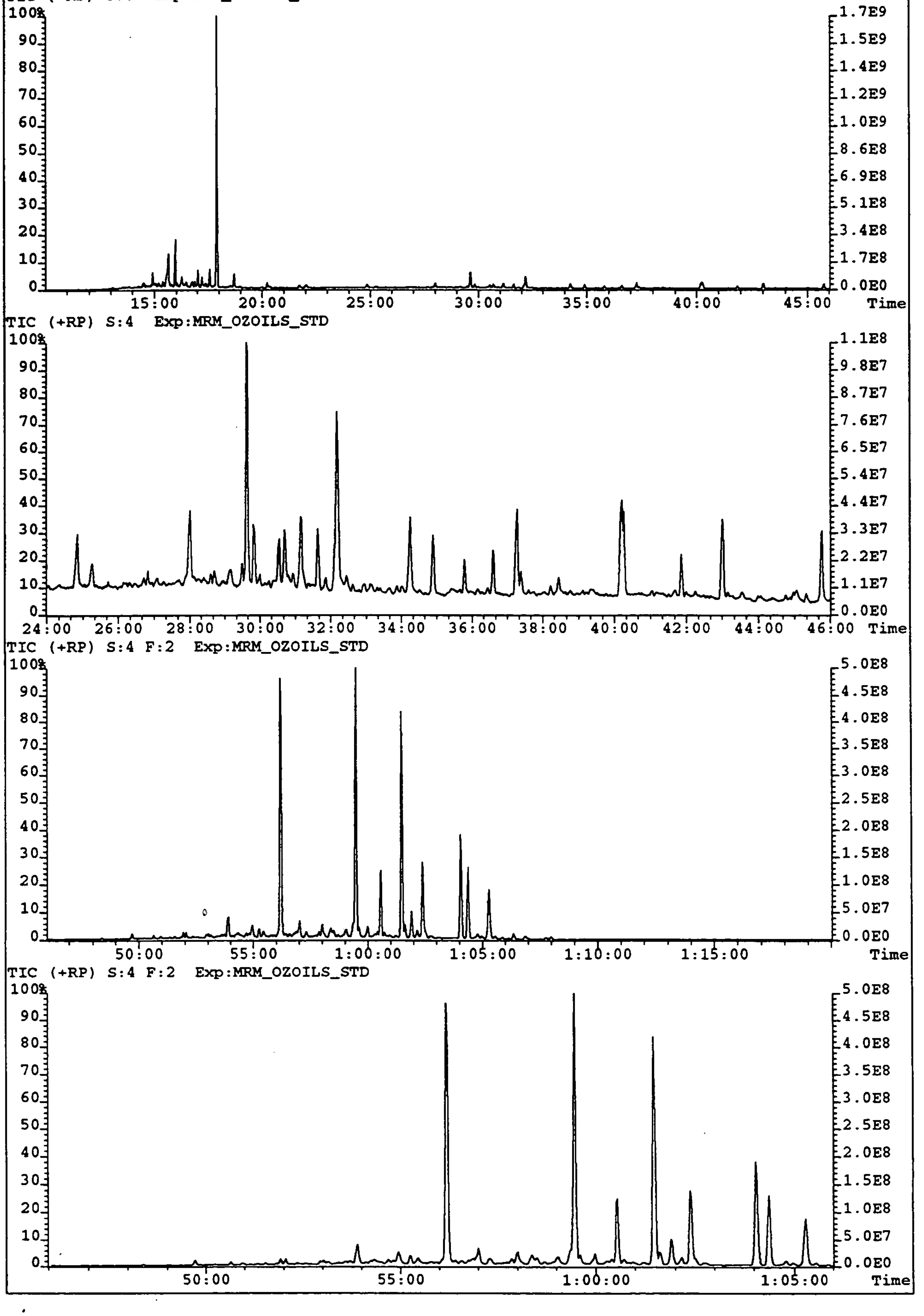

File:A5NO12 #1-847 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
372.3760->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.3E7
1.0E7
7.7E6
5.1E6
2.6E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
6.0E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
400.4070->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
1.3E7
1.1E7
8.0E6
5.4E6
2.7E6
0.0E0
414.4230->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
4.3E5
3.4E5
2.6E5
1.7E5
8.5E4
0.0E0
414.4230->231.2120 S:10 F:2 Exp:MRM_OZOILS_50
1.5E6
1.2E6
9.0E5
6.0E5
3.0E5
0.0E0

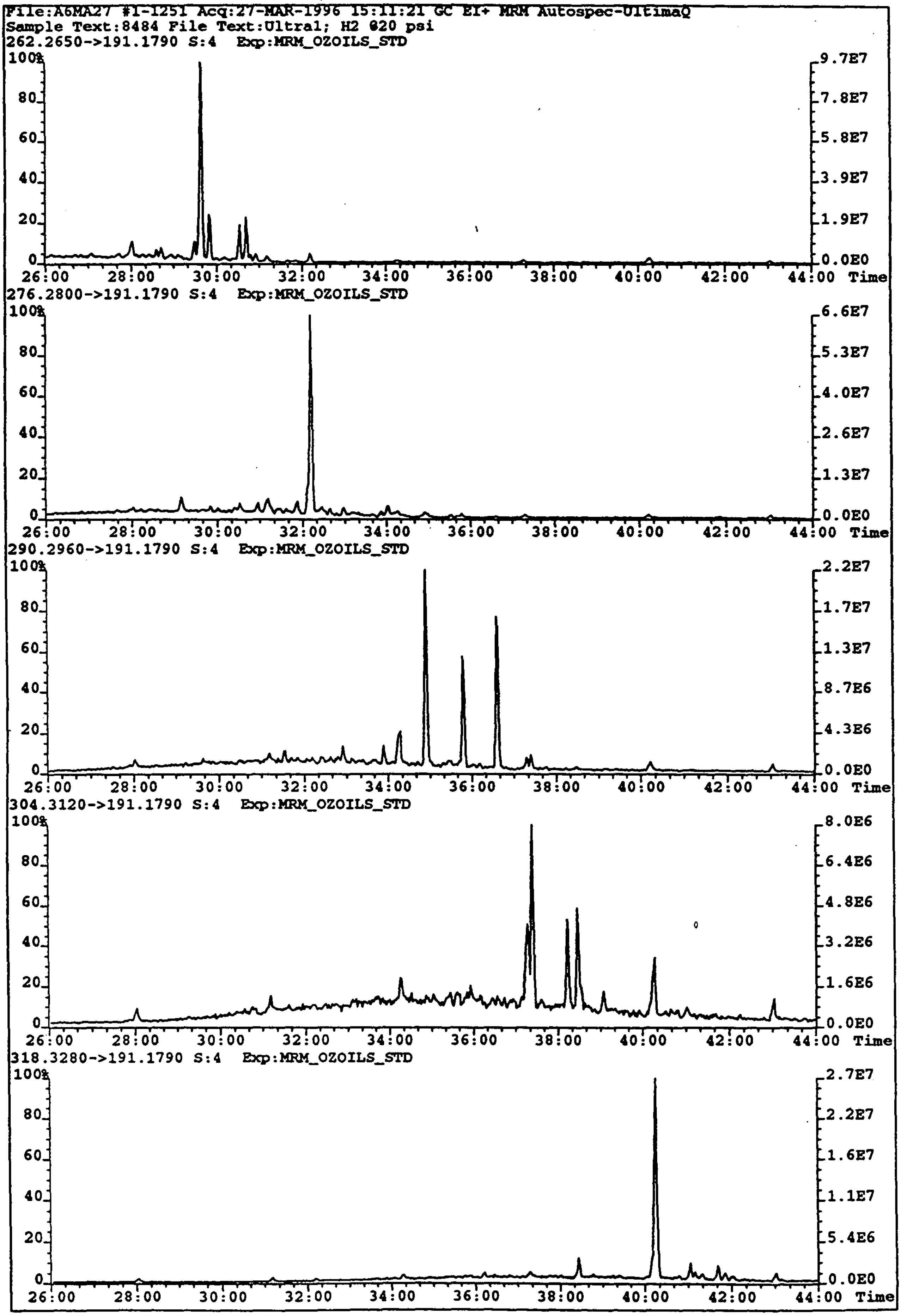

File:A5NO12 #1-847 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
370.3590->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.8E7
1.5E7
1.1E7
7.3E6
3.7E6
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
3.8E6
3.1E6
2.3E6
1.5E6
7.7E5
0.0E0
398.3900->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
2.7E7
2.2E7
1.6E7
1.1E7
5.4E6
0.0E0
412.4060->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
3.9E7
3.1E7
2.3E7
1.5E7
7.7E6
0.0E0
426.4210->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
1.5E7
1.2E7
8.8E6
5.8E6
2.9E6
0.0E0

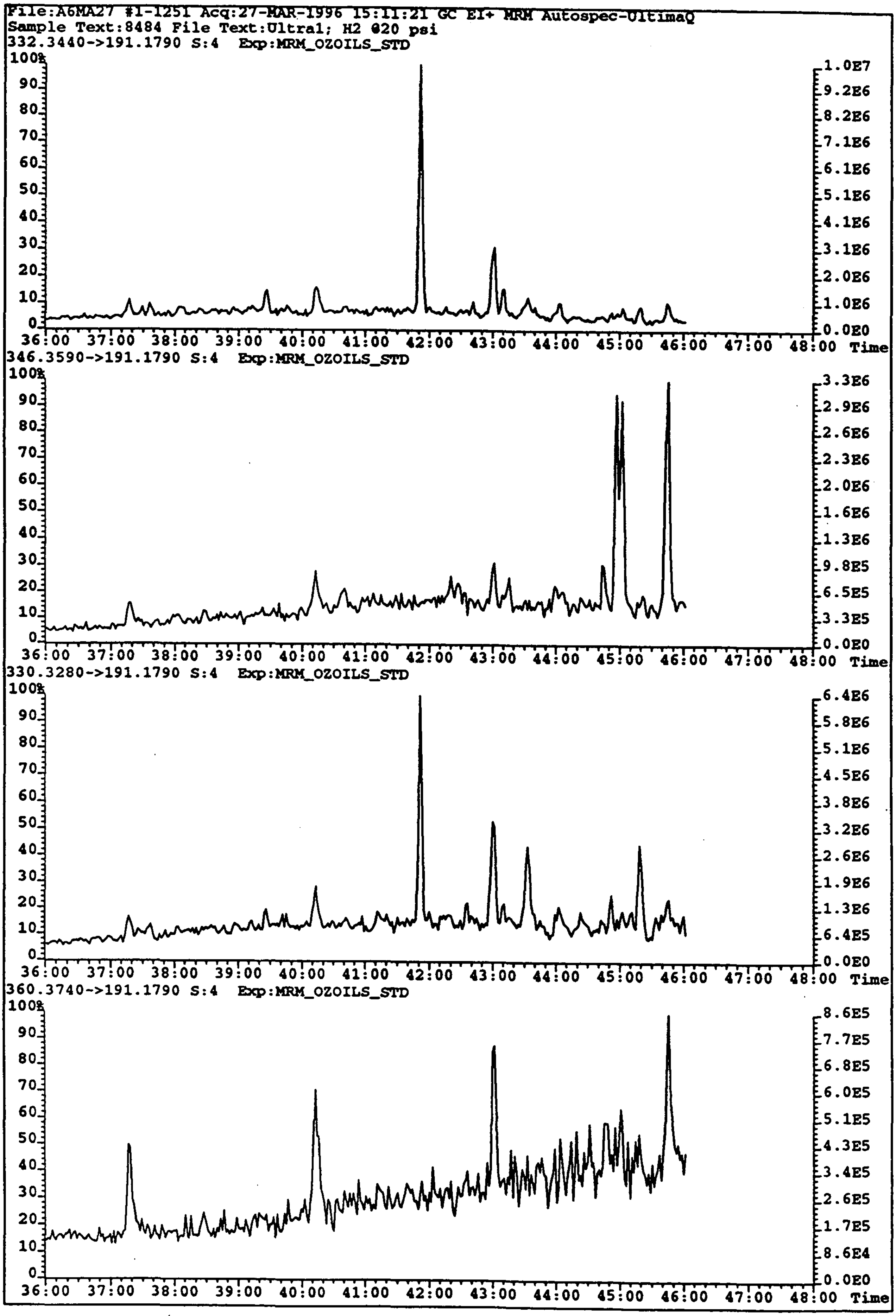

File:A5NO12 #1-847 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
412.4060->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.9E7
3.1E7
2.3E7
1.5E7
7.7E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
1.5E7
1.2E7
8.8E6
5.8E6
2.9E6
0.0E0
426.4210->205.1940 S:10 F:2 Exp:MRM_OZOILS_50
4.3E6
3.5E6
2.6E6
1.7E6
8.6E5
0.0E0
468.4670->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
1.3E6
1.0E6
7.6E5
5.1E5
2.5E5
0.0E0
482.4820->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
5.3E5
4.2E5
3.2E5
2.1E5
1.1E5
0.0E0

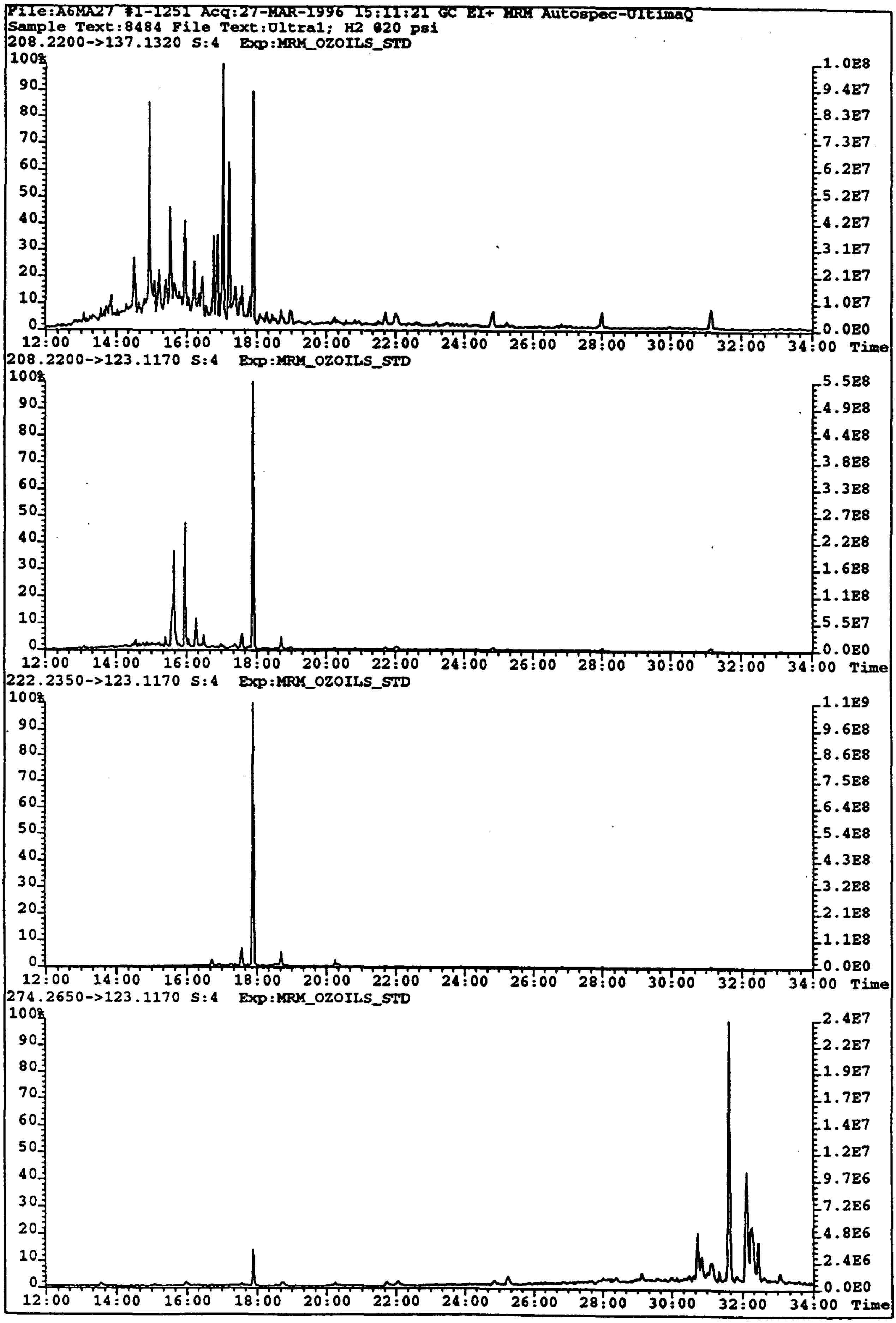

File:A5NO12 #1-847 Acq:13-NOV-1995 05:26:07 GC EI+ MRM Autospec-UltimaQ
Sample Text:7972 sat Bonaparte 2 core 8 1201m7970 sat 7972 sat Bonaparte 2 core 8 1201m »
398.3900->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
100%
2.7E7
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:10 F:2 Exp:MRM_OZOILS_50
6.0E6
412.4060->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
3.9E7
412.4060->177.1640 S:10 F:2 Exp:MRM_OZOILS_50
6.7E5

File:A6MA27 #1-1251 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
TIC (+RP) S:4 Exp:MRM_OZOILS_STD

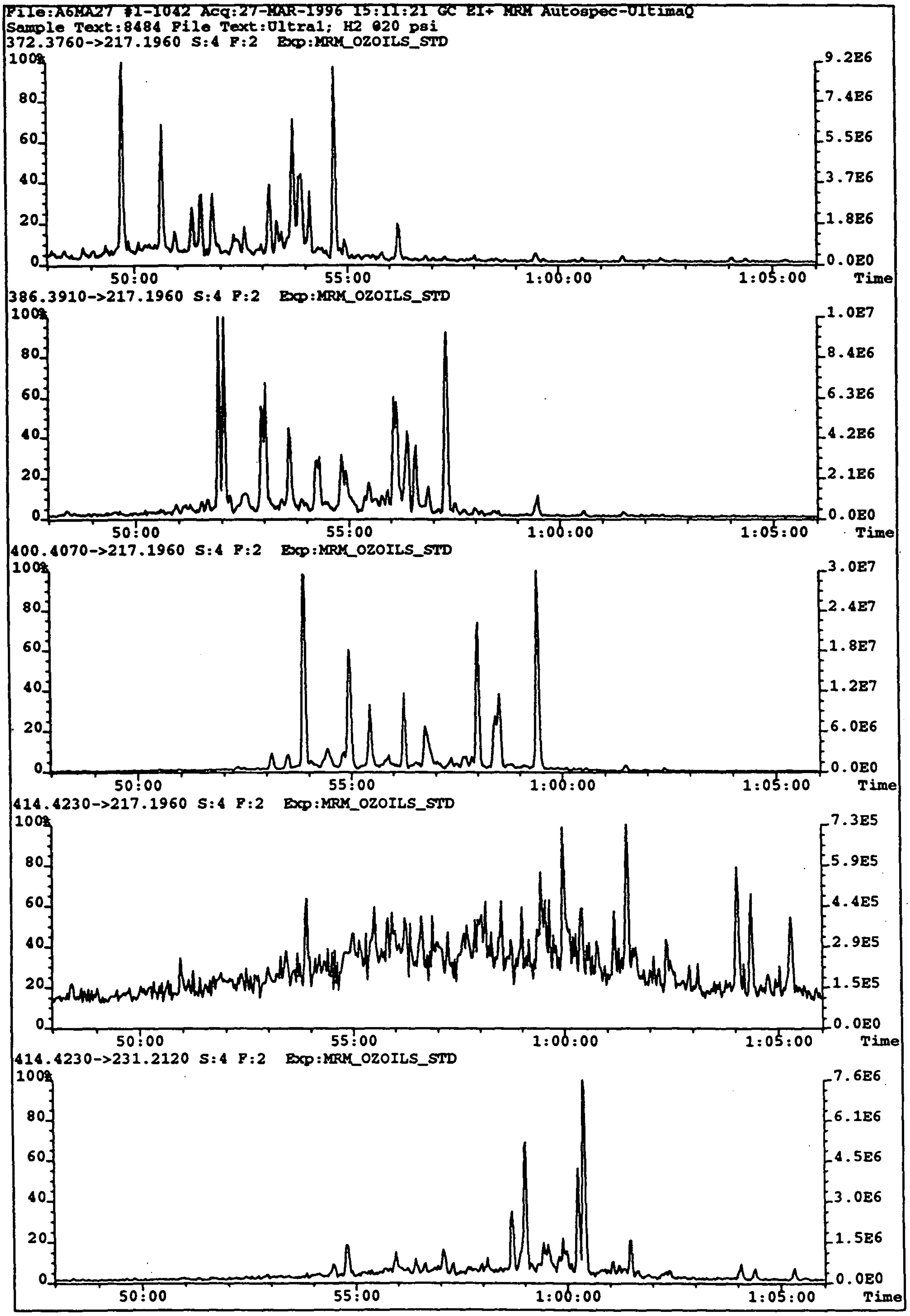


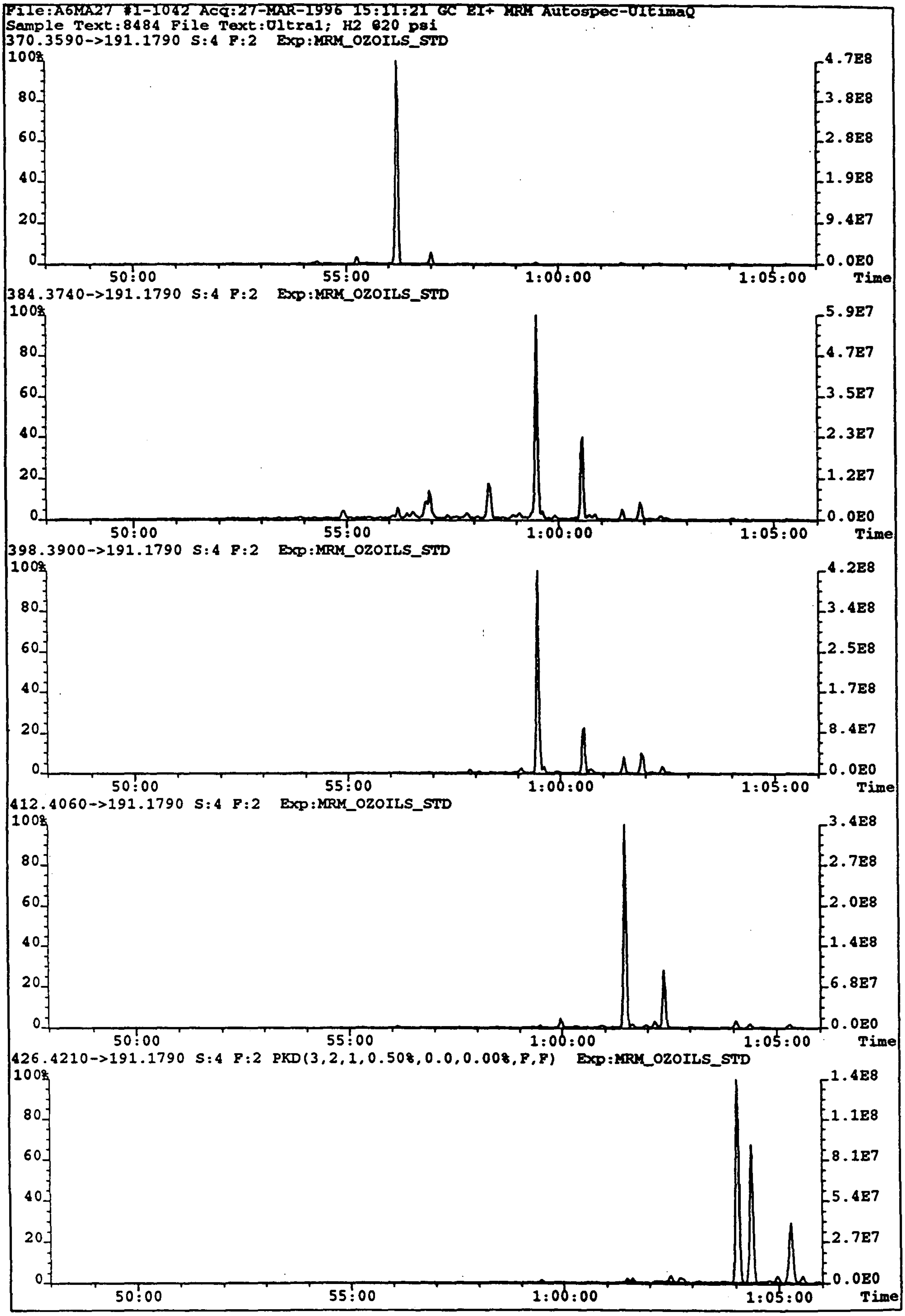

File:A6MA27 #1-1251 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultral; H2 @20 psi
262.2650->191.1790 S:4 Exp:MRM_OZOILS_STD
276.2800->191.1790 S:4 Exp:MRM_OZOILS_STD
290.2960->191.1790 S:4 Exp:MRM_OZOILS_STD
304.3120->191.1790 S:4 Exp:MRM_OZOILS_STD
318.3280->191.1790 S:4 Exp:MRM_OZOILS_STD
Time

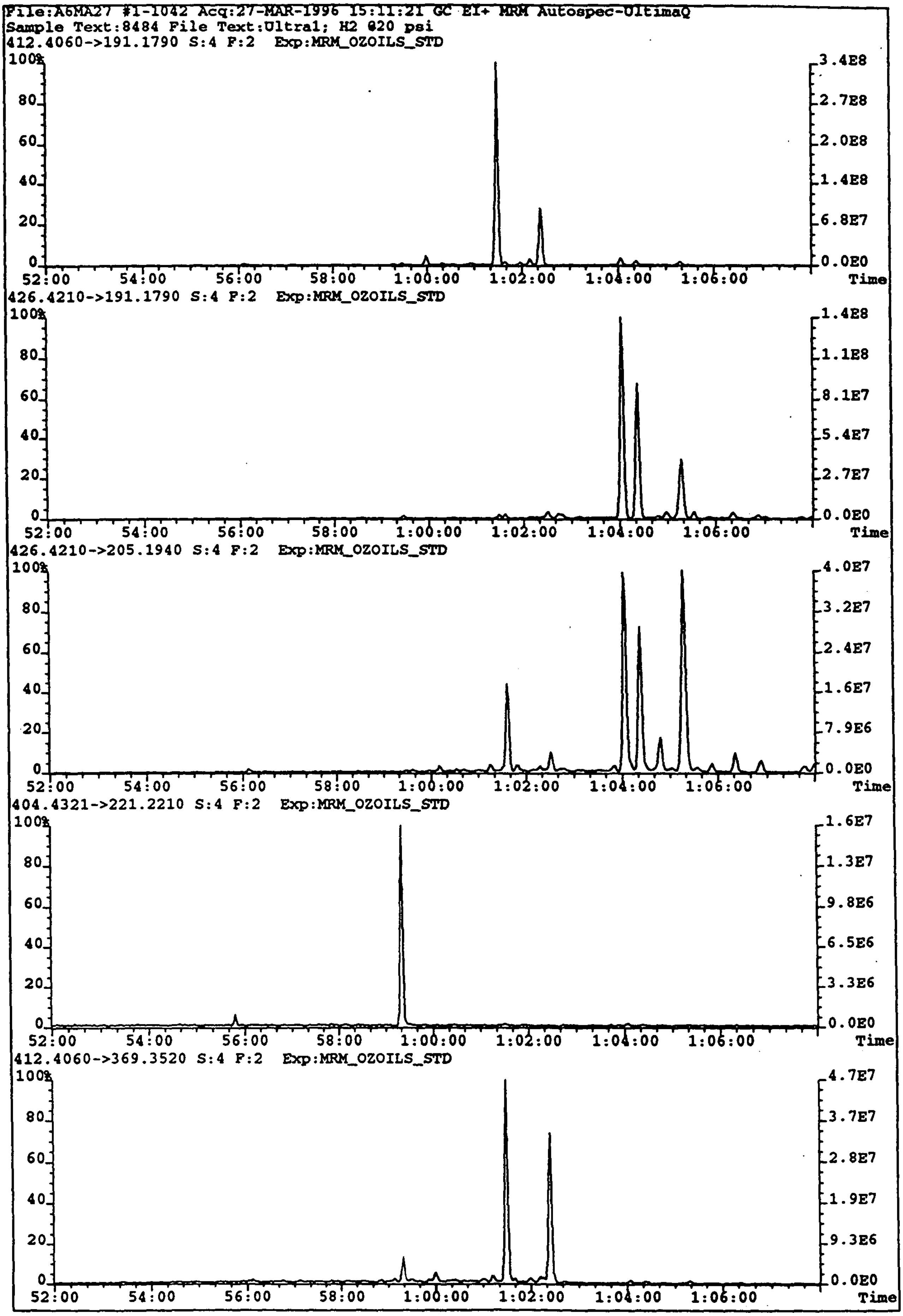

File:A6MA27 #1-1251 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
332.3440->191.1790 S:4 Exp:MRM_OZOILS_STD
346.3590->191.1790 S:4 Exp:MRM_OZOILS_STD
330.3280->191.1790 S:4 Exp:MRM_OZOILS_STD
360.3740->191.1790 S:4 Exp:MRM_OZOILS_STD
100%
1.0E7
3.3E6
6.4E6
8.6E5
0.0E0
Time
36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 47:00 48:00

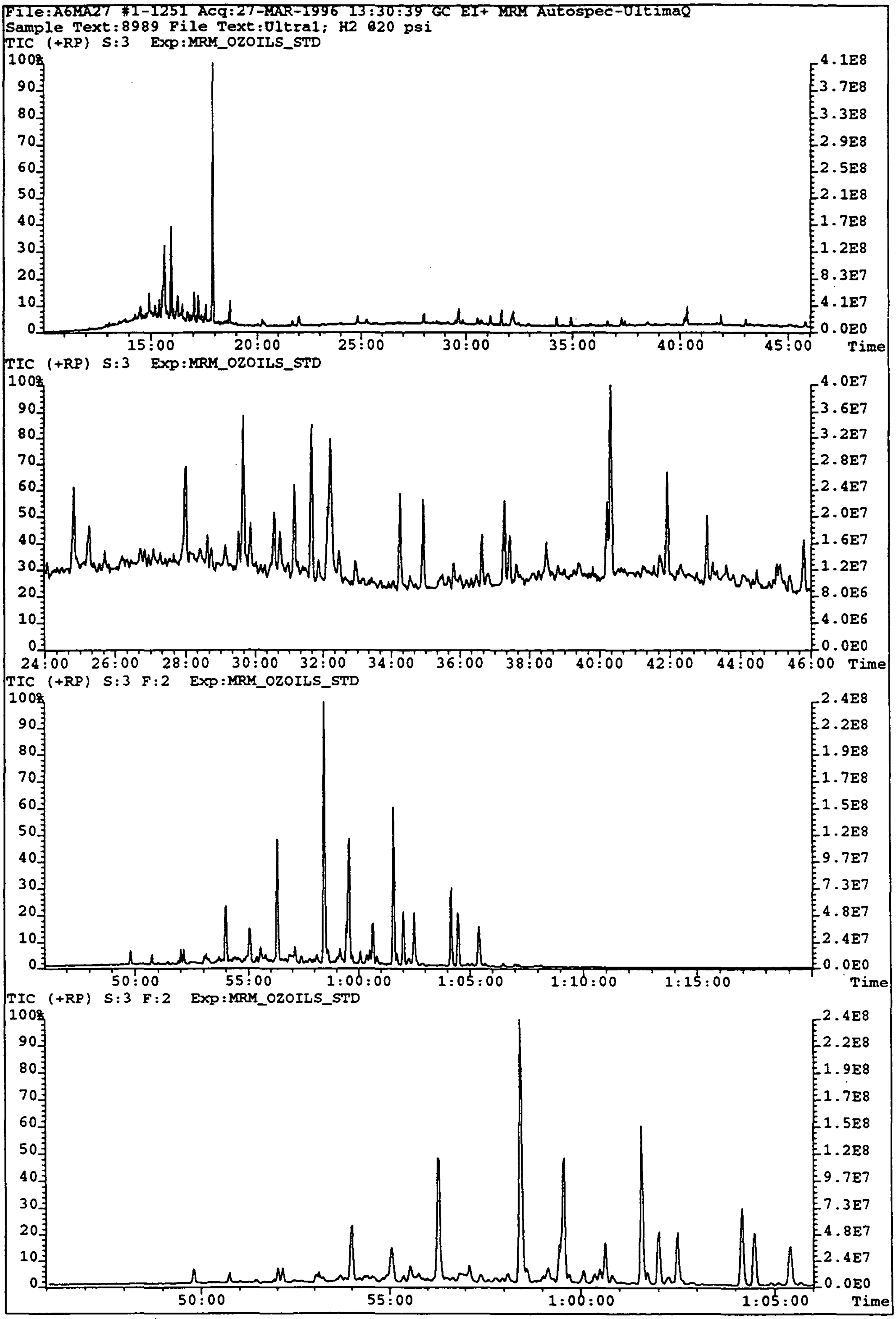


File:A6MA27 #1-1251 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
208.2200->137.1320 S:4 Exp:MRM_OZOILS_STD
1.0E8
0.0E0
208.2200->123.1170 S:4 Exp:MRM_OZOILS_STD
5.5E8
0.0E0
222.2350->123.1170 S:4 Exp:MRM_OZOILS_STD
1.1E9
0.0E0
274.2650->123.1170 S:4 Exp:MRM_OZOILS_STD
2.4E7
0.0E0
12:00
14:00
16:00
18:00
20:00
22:00
24:00
26:00
28:00
30:00
32:00
34:00
Time

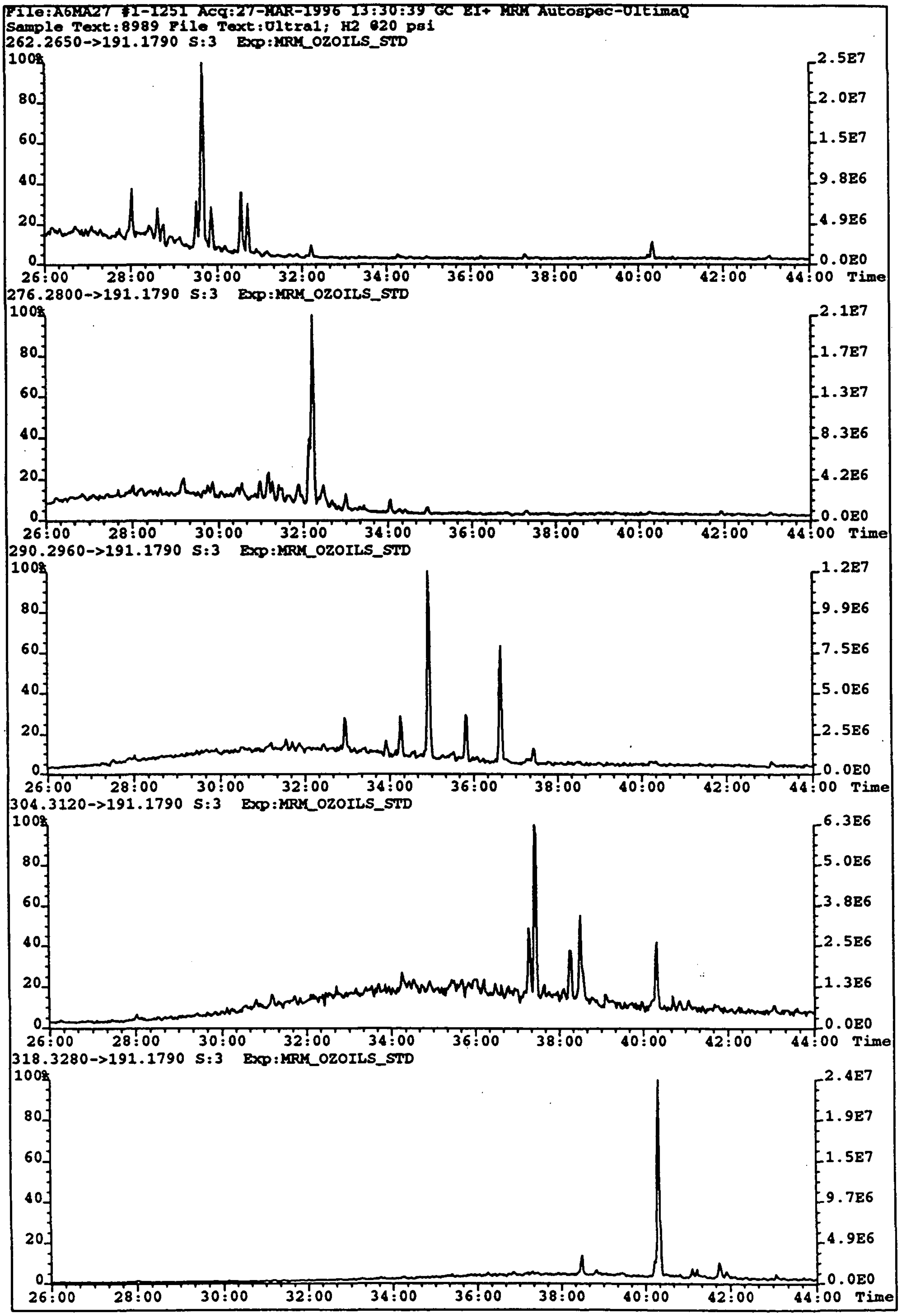

File:A6MA27 #1-1042 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
372.3760->217.1960 S:4 F:2 Exp:MRM_OZOILS_STD
386.3910->217.1960 S:4 F:2 Exp:MRM_OZOILS_STD
400.4070->217.1960 S:4 F:2 Exp:MRM_OZOILS_STD
414.4230->217.1960 S:4 F:2 Exp:MRM_OZOILS_STD
414.4230->231.2120 S:4 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
9.2E6
7.4E6
5.5E6
3.7E6
1.8E6
0.0E0
1.0E7
8.4E6
6.3E6
4.2E6
2.1E6
3.0E7
2.4E7
1.8E7
1.2E7
6.0E6
7.3E5
5.9E5
4.4E5
2.9E5
1.5E5
7.6E6
6.1E6
4.5E6
3.0E6
1.5E6
50:00
55:00
1:00:00
1:05:00
Time


File:A6MA27 #1-1042 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
370.3590->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
4.7E8
3.8E8
2.8E8
1.9E8
9.4E7
0.0E0
50:00
55:00
1:00:00
1:05:00
Time
384.3740->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
5.9E7
4.7E7
3.5E7
2.3E7
1.2E7
0.0E0
398.3900->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
4.2E8
3.4E8
2.5E8
1.7E8
8.4E7
0.0E0
412.4060->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
3.4E8
2.7E8
2.0E8
1.4E8
6.8E7
0.0E0
426.4210->191.1790 S:4 F:2 PKD(3,2,1,0.50%,0.0,0.00%,F,F) Exp:MRM_OZOILS_STD
1.4E8
1.1E8
8.1E7
5.4E7
2.7E7
0.0E0

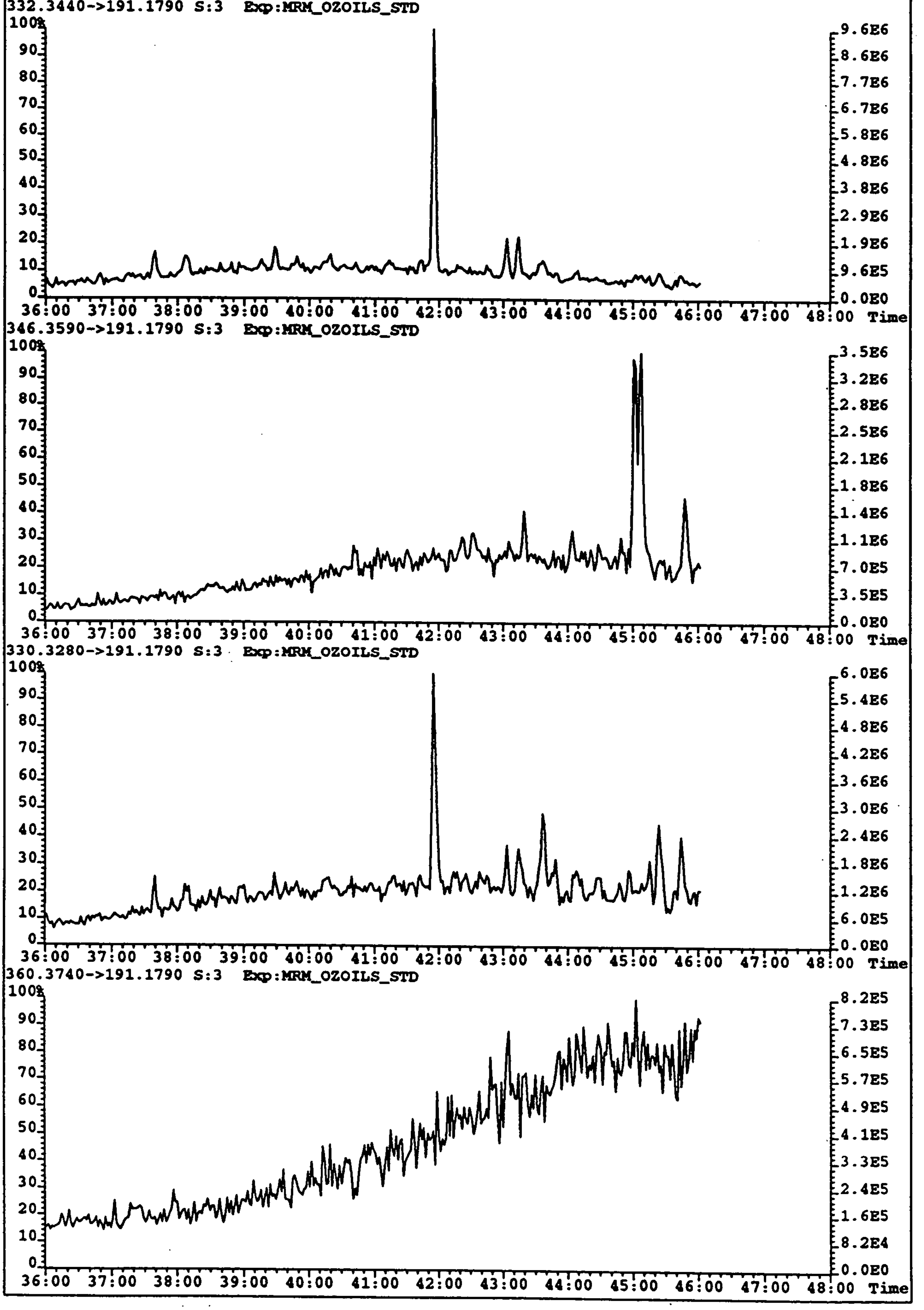

File:A6MA27 #1-1042 Acq:27-MAR-1996 15:11:21 GC EI+ MRM Autospec-UltimaQ
Sample Text:8484 File Text:Ultra1; H2 @20 psi
412.4060->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
426.4210->191.1790 S:4 F:2 Exp:MRM_OZOILS_STD
426.4210->205.1940 S:4 F:2 Exp:MRM_OZOILS_STD
404.4321->221.2210 S:4 F:2 Exp:MRM_OZOILS_STD
412.4060->369.3520 S:4 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
52:00
54:00
56:00
58:00
1:00:00
1:02:00
1:04:00
1:06:00
Time
3.4E8
2.7E8
2.0E8
1.4E8
6.8E7
0.0E0
1.4E8
1.1E8
8.1E7
5.4E7
2.7E7
4.0E7
3.2E7
2.4E7
1.6E7
7.9E6
1.6E7
1.3E7
9.8E6
6.5E6
3.3E6
4.7E7
3.7E7
2.8E7
1.9E7
9.3E6

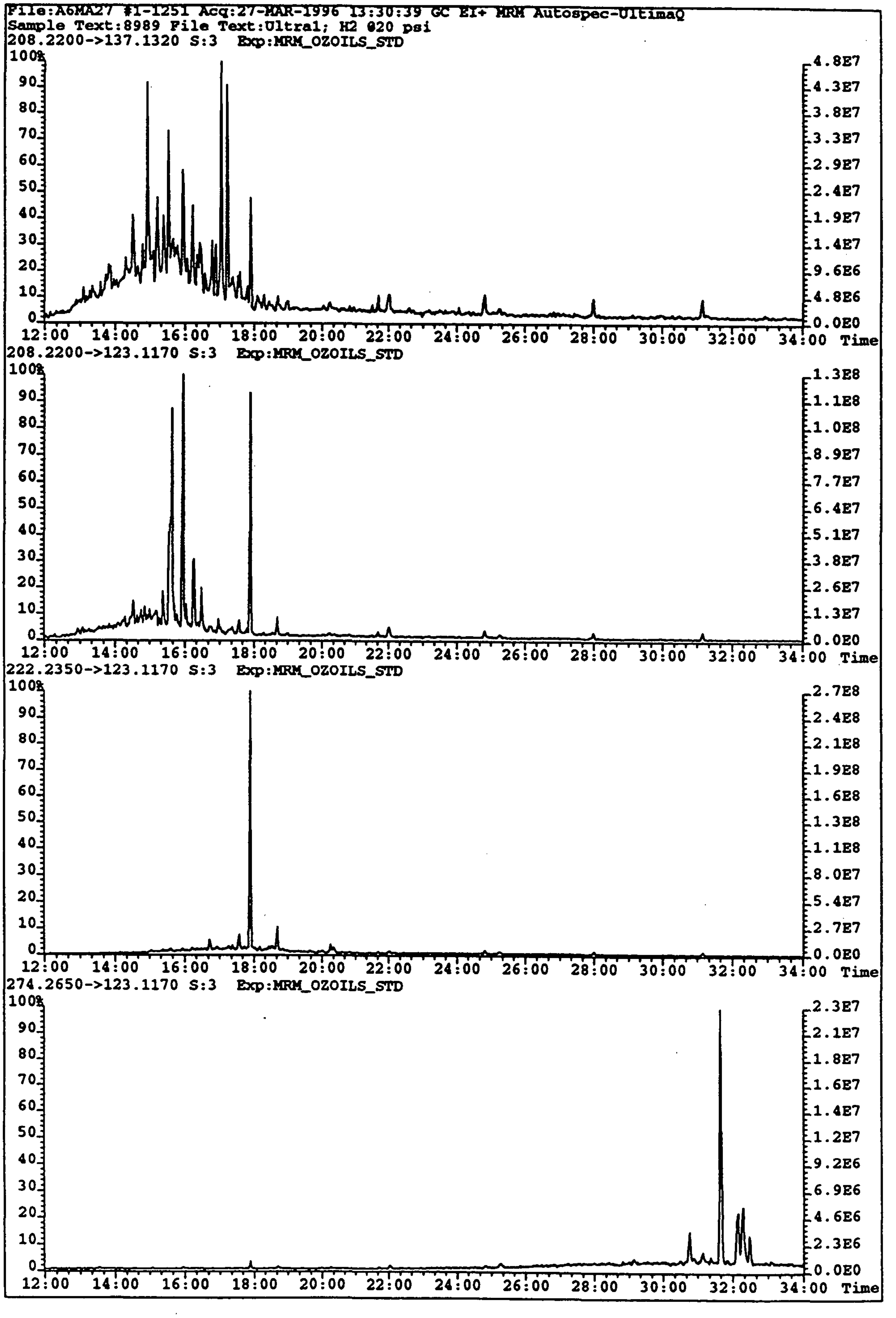


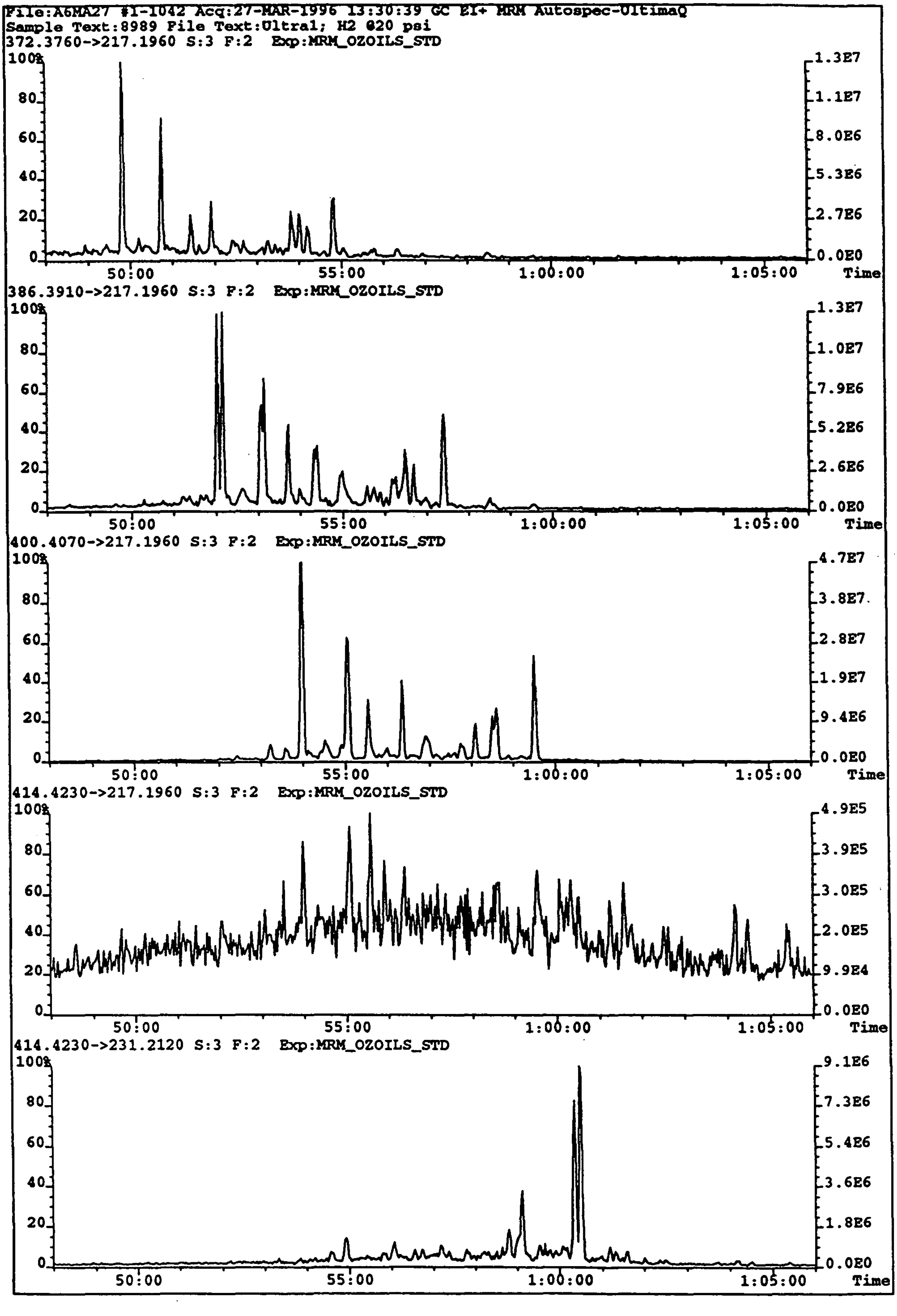
File:A6MA27 #1-1251 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi
TIC (+RP) S:3 Exp:MRM_OZOILS_STD
4.1E8
Time
TIC (+RP) S:3 Exp:MRM_OZOILS_STD
4.0E7
Time
TIC (+RP) S:3 F:2 Exp:MRM_OZOILS_STD
2.4E8
Time
TIC (+RP) S:3 F:2 Exp:MRM_OZOILS_STD
2.4E8
Time

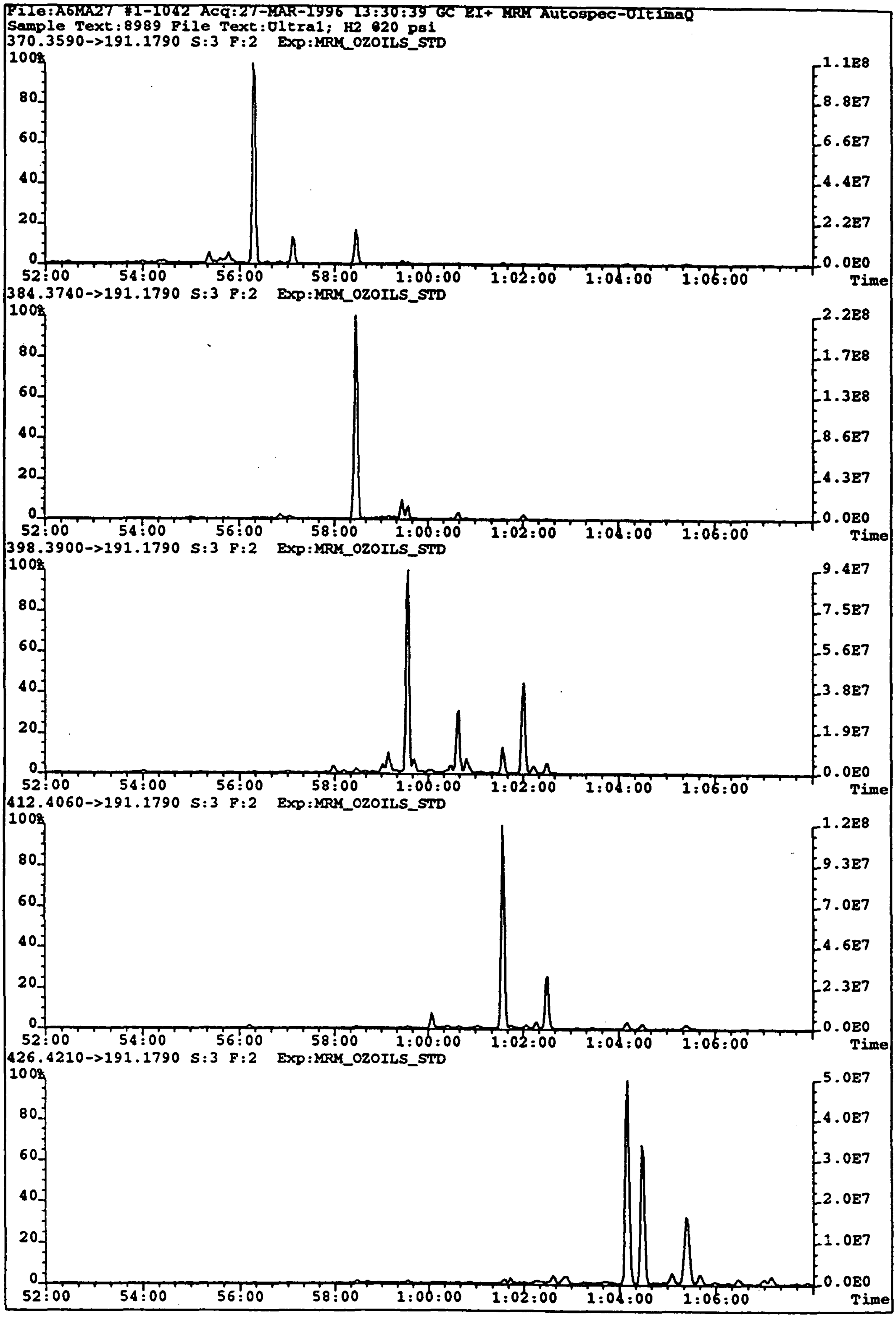

File:A6MA27 #1-1251 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi
262.2650->191.1790 S:3 Exp:MRM_OZOILS_STD
2.5E7
276.2800->191.1790 S:3 Exp:MRM_OZOILS_STD
2.1E7
290.2960->191.1790 S:3 Exp:MRM_OZOILS_STD
1.2E7
304.3120->191.1790 S:3 Exp:MRM_OZOILS_STD
6.3E6
318.3280->191.1790 S:3 Exp:MRM_OZOILS_STD
2.4E7
Time

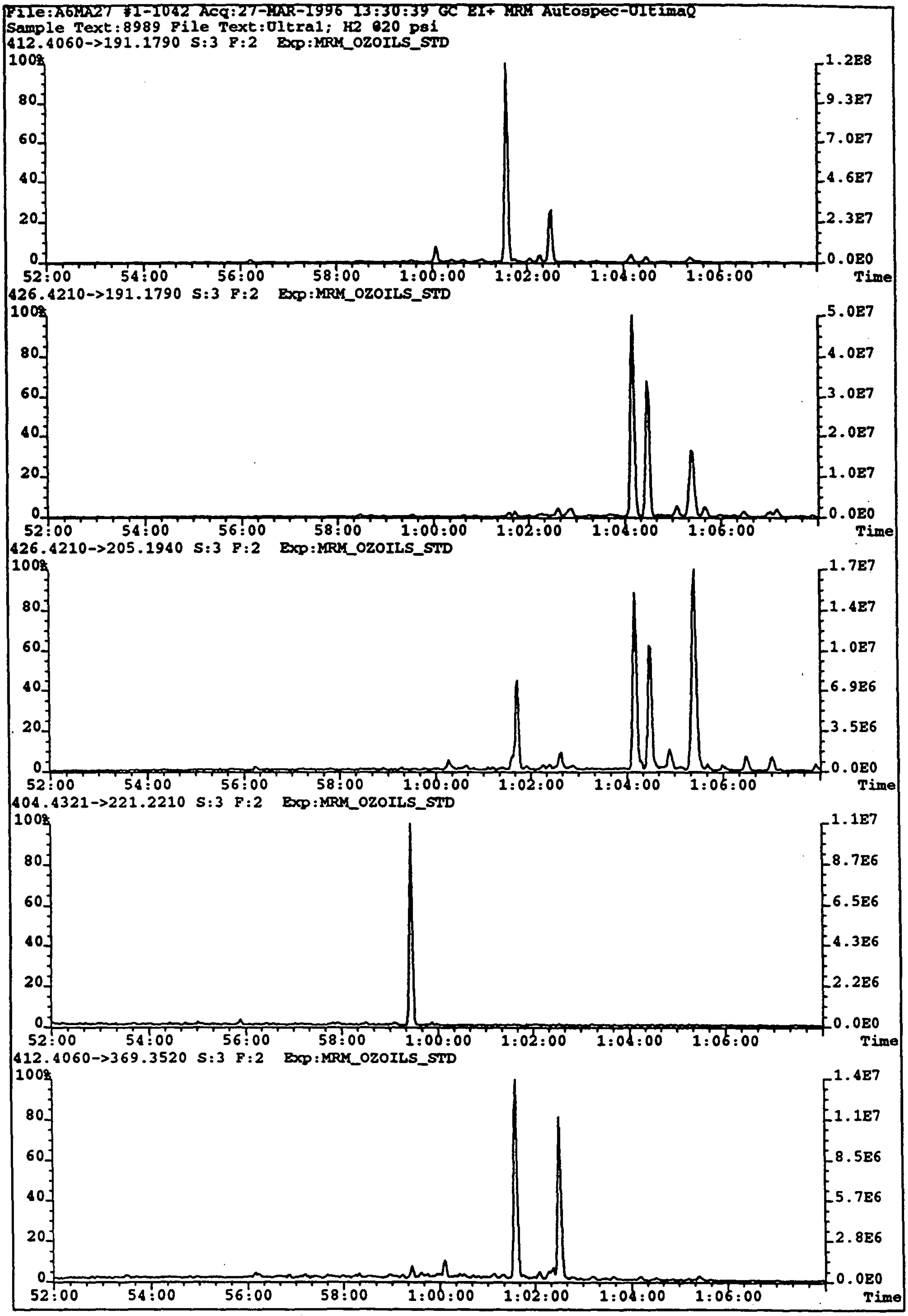
File:A6MA27 #1-1251 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi

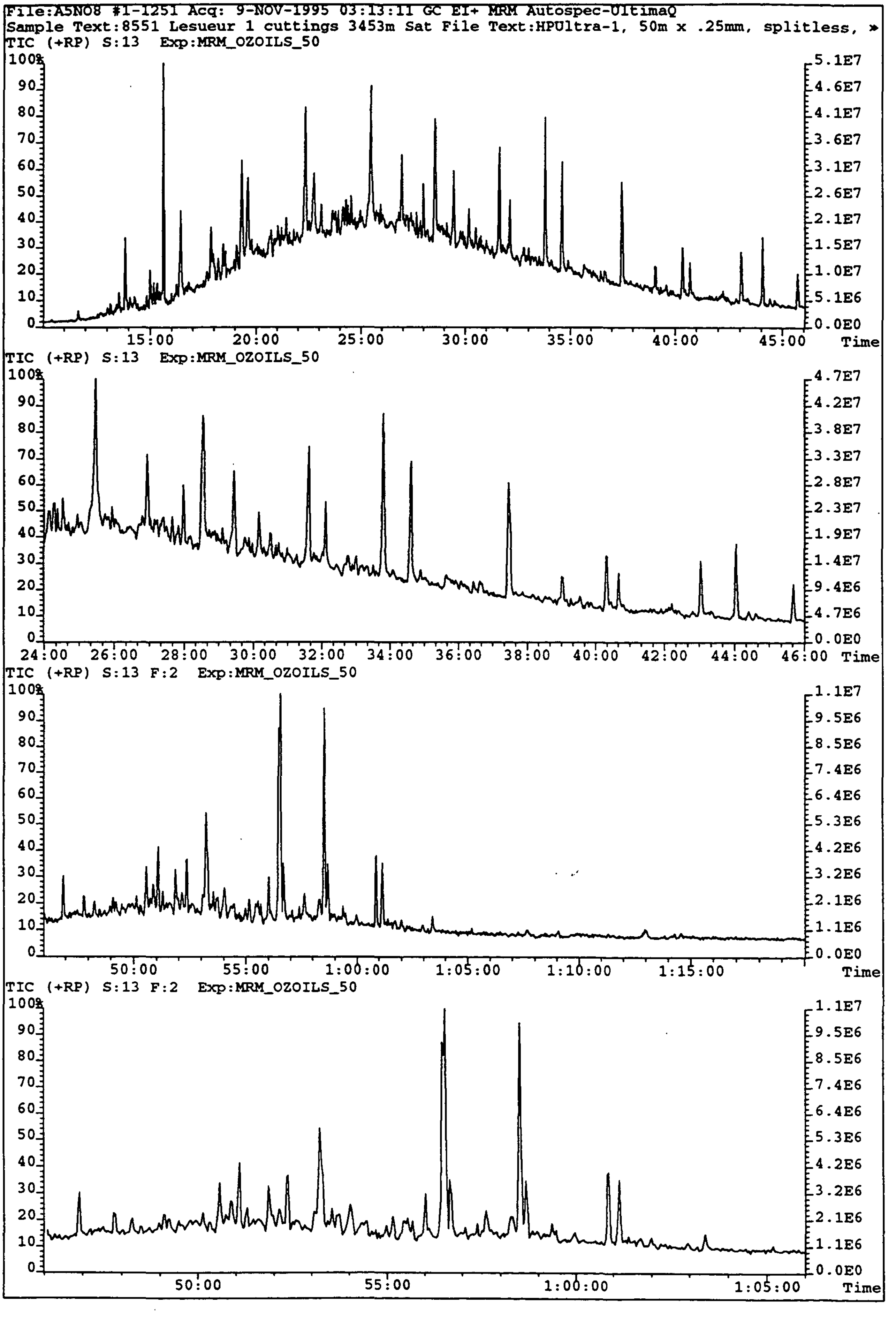


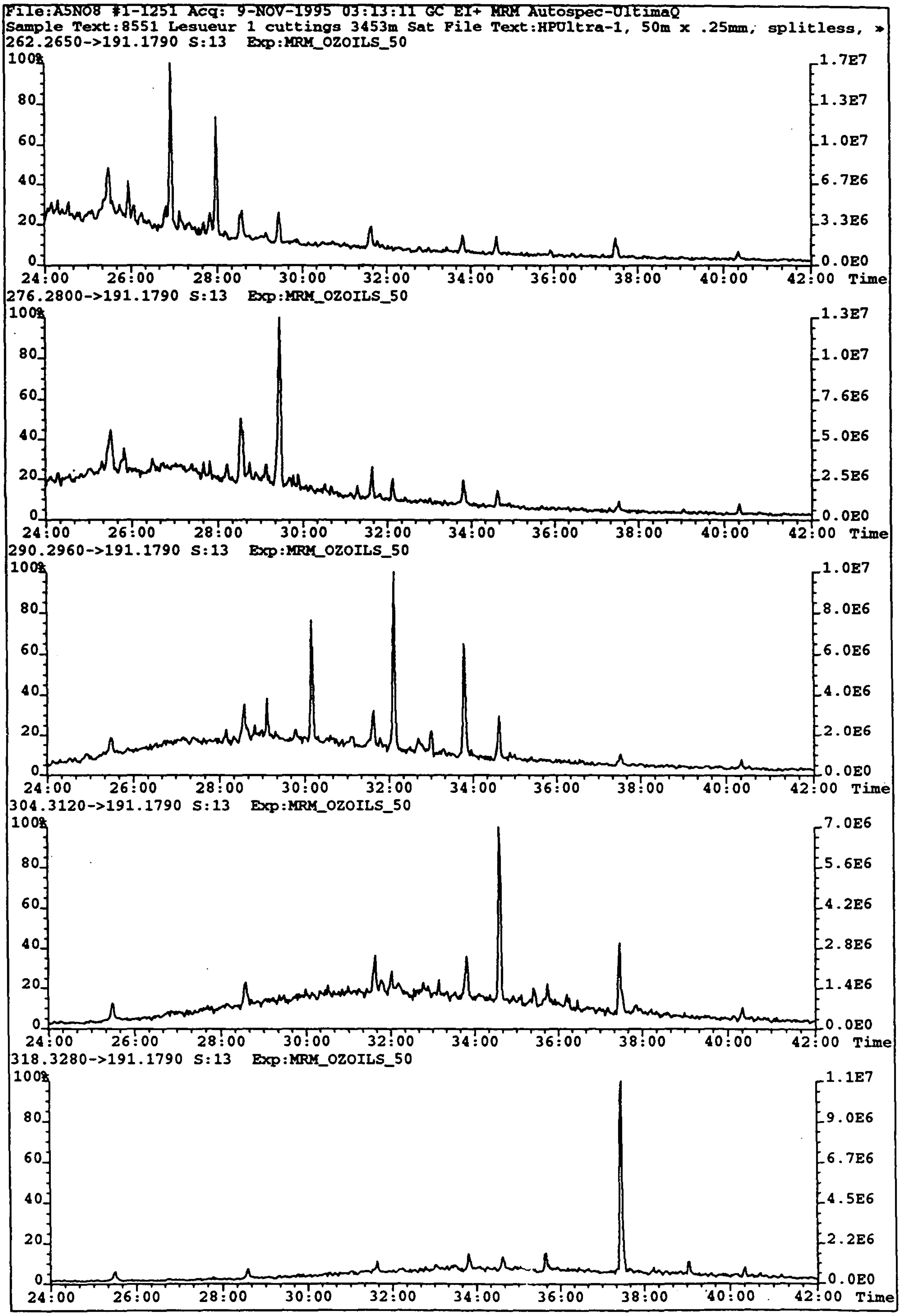

File:A6MA27 #1-1251 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi
208.2200->137.1320 S:3 Exp:MRM_OZOILS_STD
208.2200->123.1170 S:3 Exp:MRM_OZOILS_STD
222.2350->123.1170 S:3 Exp:MRM_OZOILS_STD
274.2650->123.1170 S:3 Exp:MRM_OZOILS_STD
Time


File:A6MA27 #1-1042 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi
372.3760->217.1960 S:3 F:2 Exp:MRM_OZOILS_STD
386.3910->217.1960 S:3 F:2 Exp:MRM_OZOILS_STD
400.4070->217.1960 S:3 F:2 Exp:MRM_OZOILS_STD
414.4230->217.1960 S:3 F:2 Exp:MRM_OZOILS_STD
414.4230->231.2120 S:3 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
50:00
55:00
1:00:00
1:05:00
Time
1.3E7
1.1E7
8.0E6
5.3E6
2.7E6
0.0E0
1.0E7
7.9E6
5.2E6
2.6E6
4.7E7
3.8E7
2.8E7
1.9E7
9.4E6
4.9E5
3.9E5
3.0E5
2.0E5
9.9E4
9.1E6
7.3E6
5.4E6
3.6E6
1.8E6

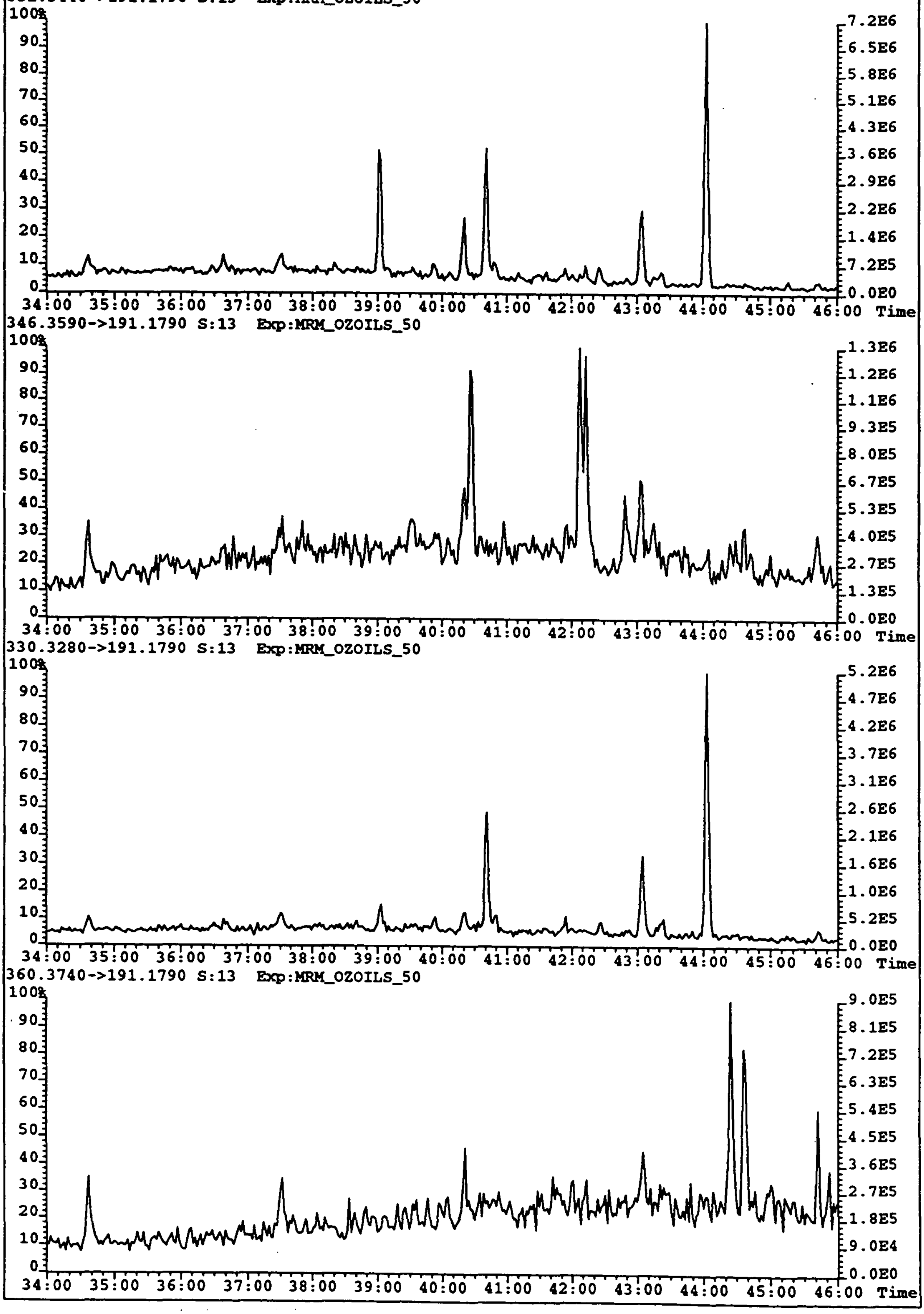

File:A6MA27 #1-1042 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultra1; H2 @20 psi
370.3590->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
1.1E8
384.3740->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
2.2E8
398.3900->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
9.4E7
412.4060->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
1.2E8
426.4210->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
5.0E7
52:00
54:00
56:00
58:00
1:00:00
1:02:00
1:04:00
1:06:00
Time

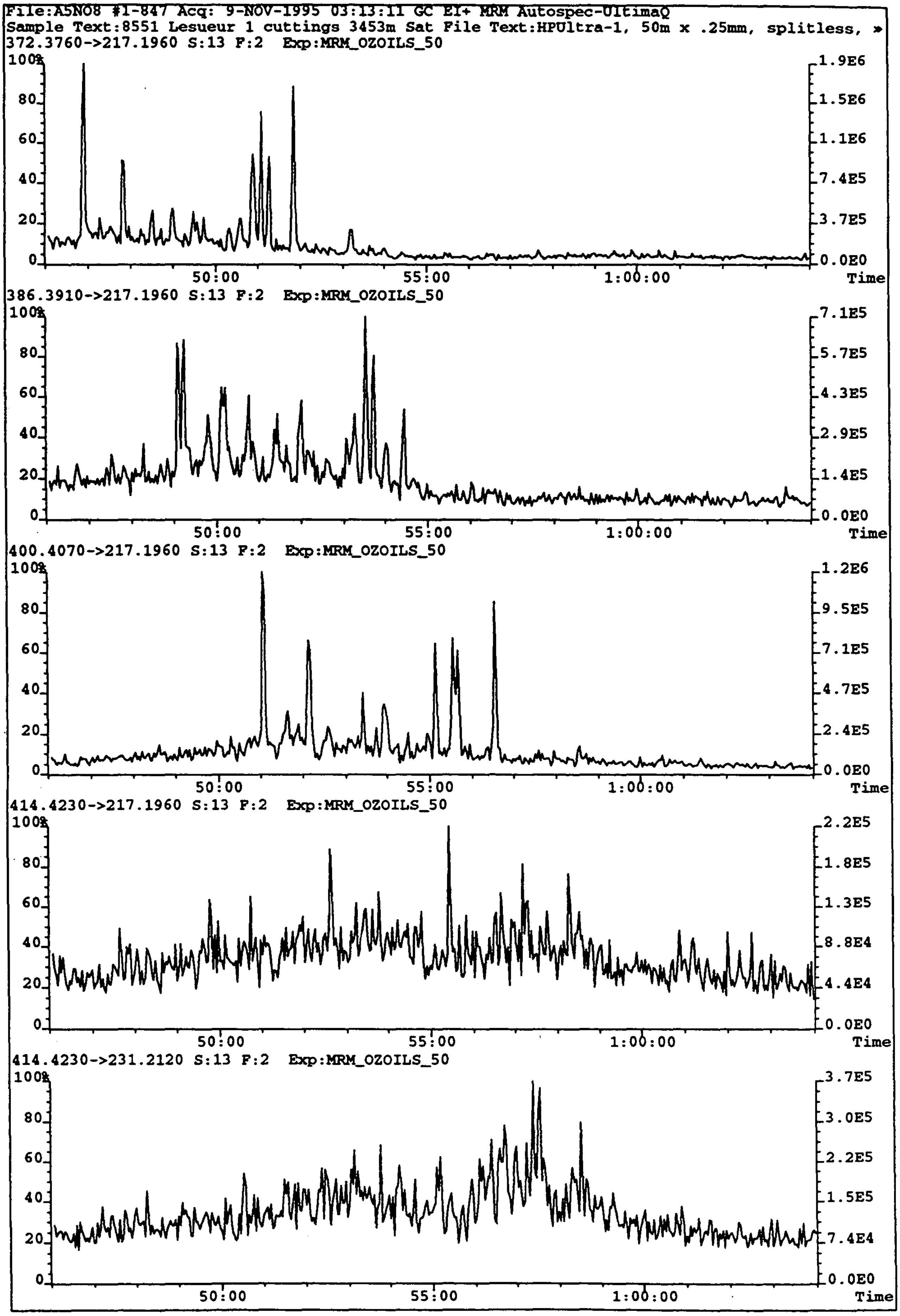

File:A6MA27 #1-1042 Acq:27-MAR-1996 13:30:39 GC EI+ MRM Autospec-UltimaQ
Sample Text:8989 File Text:Ultral; H2 @20 psi
412.4060->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
426.4210->191.1790 S:3 F:2 Exp:MRM_OZOILS_STD
426.4210->205.1940 S:3 F:2 Exp:MRM_OZOILS_STD
404.4321->221.2210 S:3 F:2 Exp:MRM_OZOILS_STD
412.4060->369.3520 S:3 F:2 Exp:MRM_OZOILS_STD
100%
80
60
40
20
0
52:00
54:00
56:00
58:00
1:00:00
1:02:00
1:04:00
1:06:00
Time
1.2E8
9.3E7
7.0E7
4.6E7
2.3E7
0.0E0
5.0E7
4.0E7
3.0E7
2.0E7
1.0E7
1.7E7
1.4E7
1.0E7
6.9E6
3.5E6
1.1E7
8.7E6
6.5E6
4.3E6
2.2E6
1.4E7
1.1E7
8.5E6
5.7E6
2.8E6

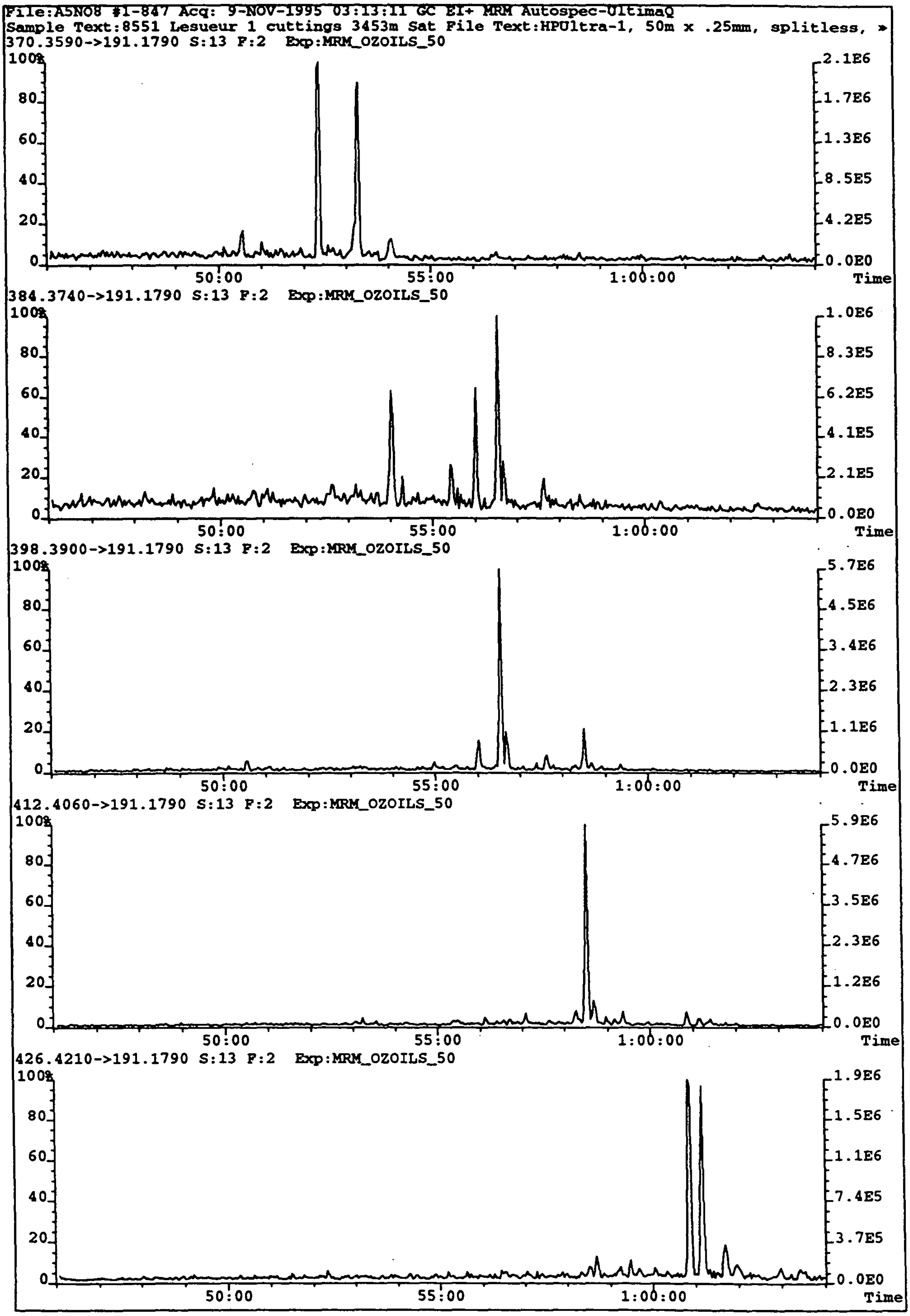

File:A5NO8 #1-1251 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
TIC (+RP) S:13 Exp:MRM_OZOILS_50
100%
5.1E7
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:13 Exp:MRM_OZOILS_50
4.7E7
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:13 F:2 Exp:MRM_OZOILS_50
1.1E7
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:13 F:2 Exp:MRM_OZOILS_50
1.1E7
50:00
55:00
1:00:00
1:05:00
Time

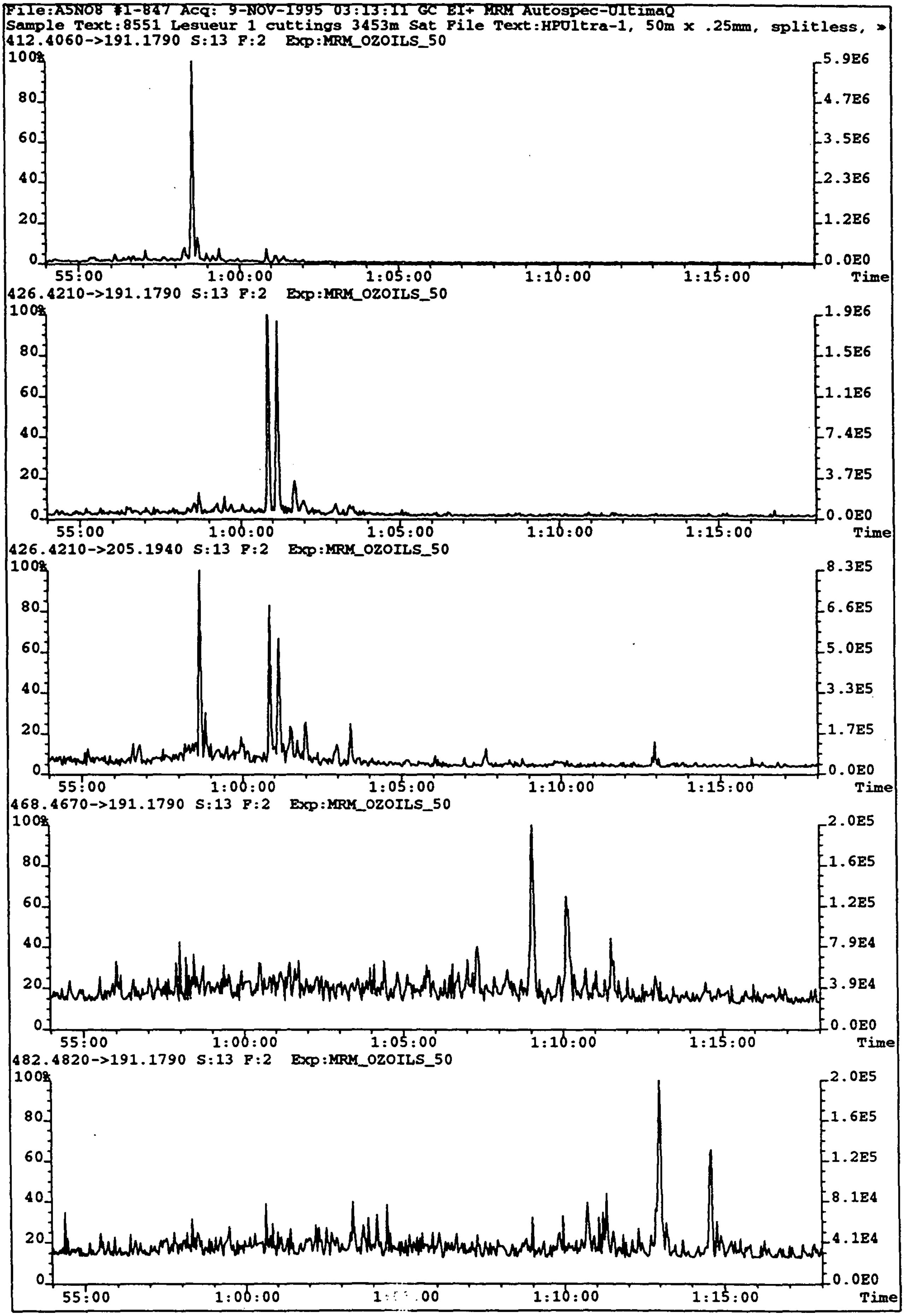

File:A5N08 #1-1251 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
262.2650->191.1790 S:13 Exp:MRM_OZOILS_50
276.2800->191.1790 S:13 Exp:MRM_OZOILS_50
290.2960->191.1790 S:13 Exp:MRM_OZOILS_50
304.3120->191.1790 S:13 Exp:MRM_OZOILS_50
318.3280->191.1790 S:13 Exp:MRM_OZOILS_50
Time

File:A5N08 #1-1251 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
332.3440->191.1790 S:13 Exp:MRM_OZOILS_50

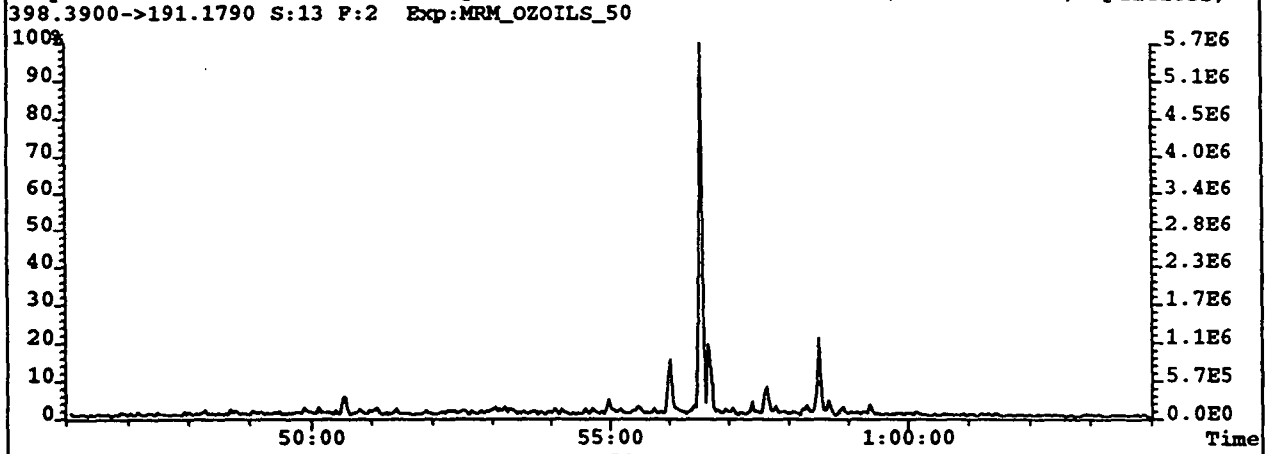


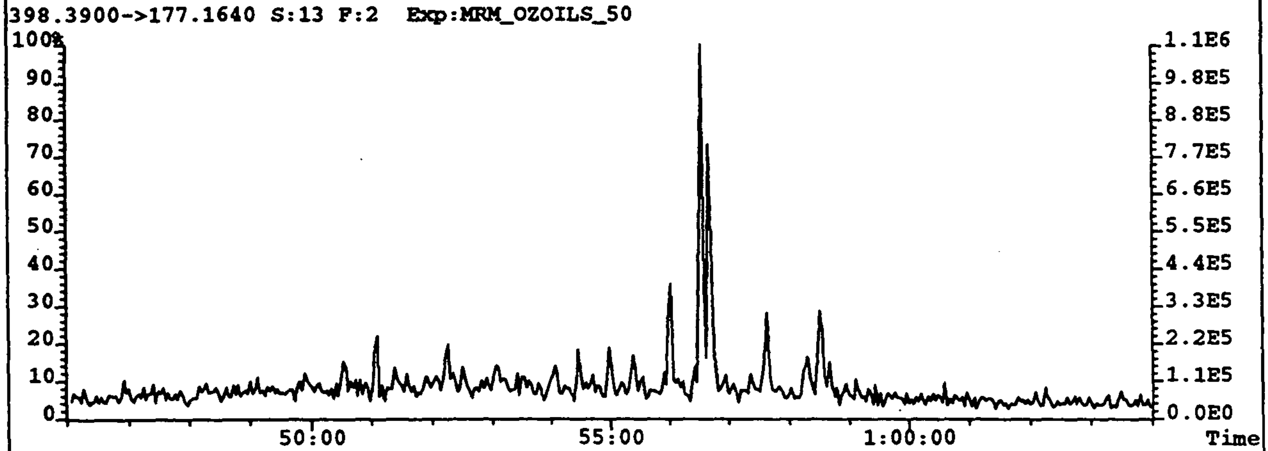

File:A5N08 #1-847 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
372.3760->217.1960 S:13 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.9E6
1.5E6
1.1E6
7.4E5
3.7E5
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:13 F:2 Exp:MRM_OZOILS_50
7.1E5
5.7E5
4.3E5
2.9E5
1.4E5
0.0E0
400.4070->217.1960 S:13 F:2 Exp:MRM_OZOILS_50
1.2E6
9.5E5
7.1E5
4.7E5
2.4E5
0.0E0
414.4230->217.1960 S:13 F:2 Exp:MRM_OZOILS_50
2.2E5
1.8E5
1.3E5
8.8E4
4.4E4
0.0E0
414.4230->231.2120 S:13 F:2 Exp:MRM_OZOILS_50
3.7E5
3.0E5
2.2E5
1.5E5
7.4E4
0.0E0

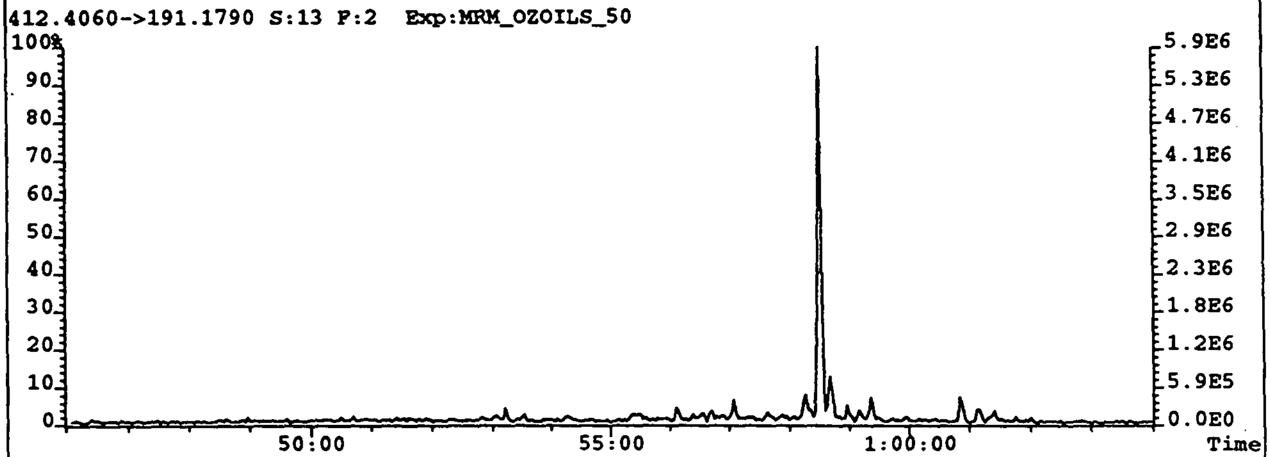

File:A5N08 #1-847 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
370.3590->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.1E6
1.7E6
1.3E6
8.5E5
4.2E5
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
1.0E6
8.3E5
6.2E5
4.1E5
2.1E5
0.0E0
398.3900->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
5.7E6
4.5E6
3.4E6
2.3E6
1.1E6
0.0E0
412.4060->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
5.9E6
4.7E6
3.5E6
2.3E6
1.2E6
0.0E0
426.4210->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
1.9E6
1.5E6
1.1E6
7.4E5
3.7E5
0.0E0

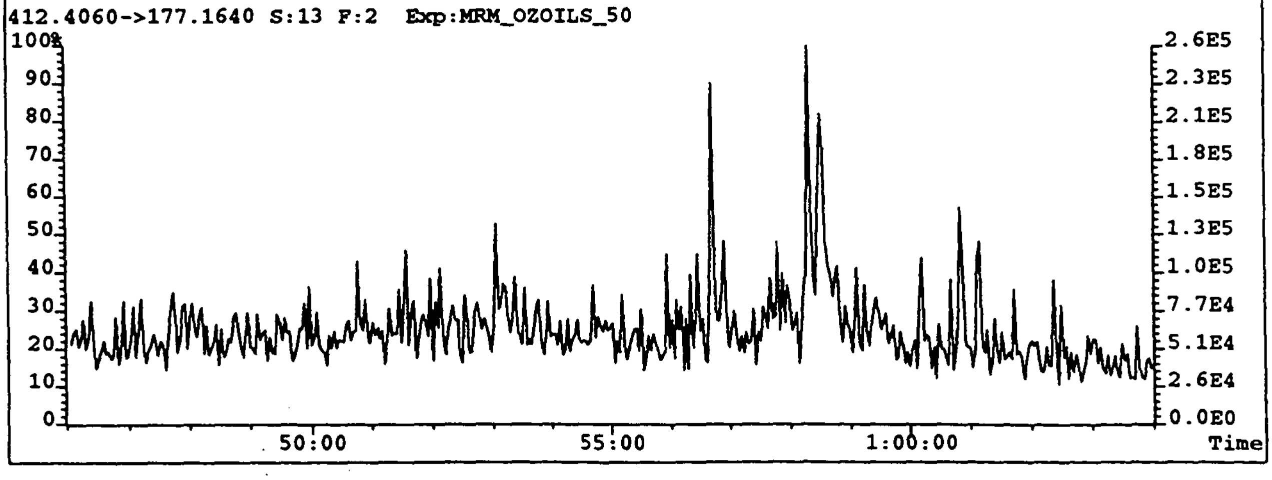

File:A5N08 #1-847 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
412.4060->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.9E6
4.7E6
3.5E6
2.3E6
1.2E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
1.9E6
1.5E6
1.1E6
7.4E5
3.7E5
0.0E0
426.4210->205.1940 S:13 F:2 Exp:MRM_OZOILS_50
8.3E5
6.6E5
5.0E5
3.3E5
1.7E5
0.0E0
468.4670->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
2.0E5
1.6E5
1.2E5
7.9E4
3.9E4
0.0E0
482.4820->191.1790 S:13 F:2 Exp:MRM_OZOILS_50
2.0E5
1.6E5
1.2E5
8.1E4
4.1E4
0.0E0

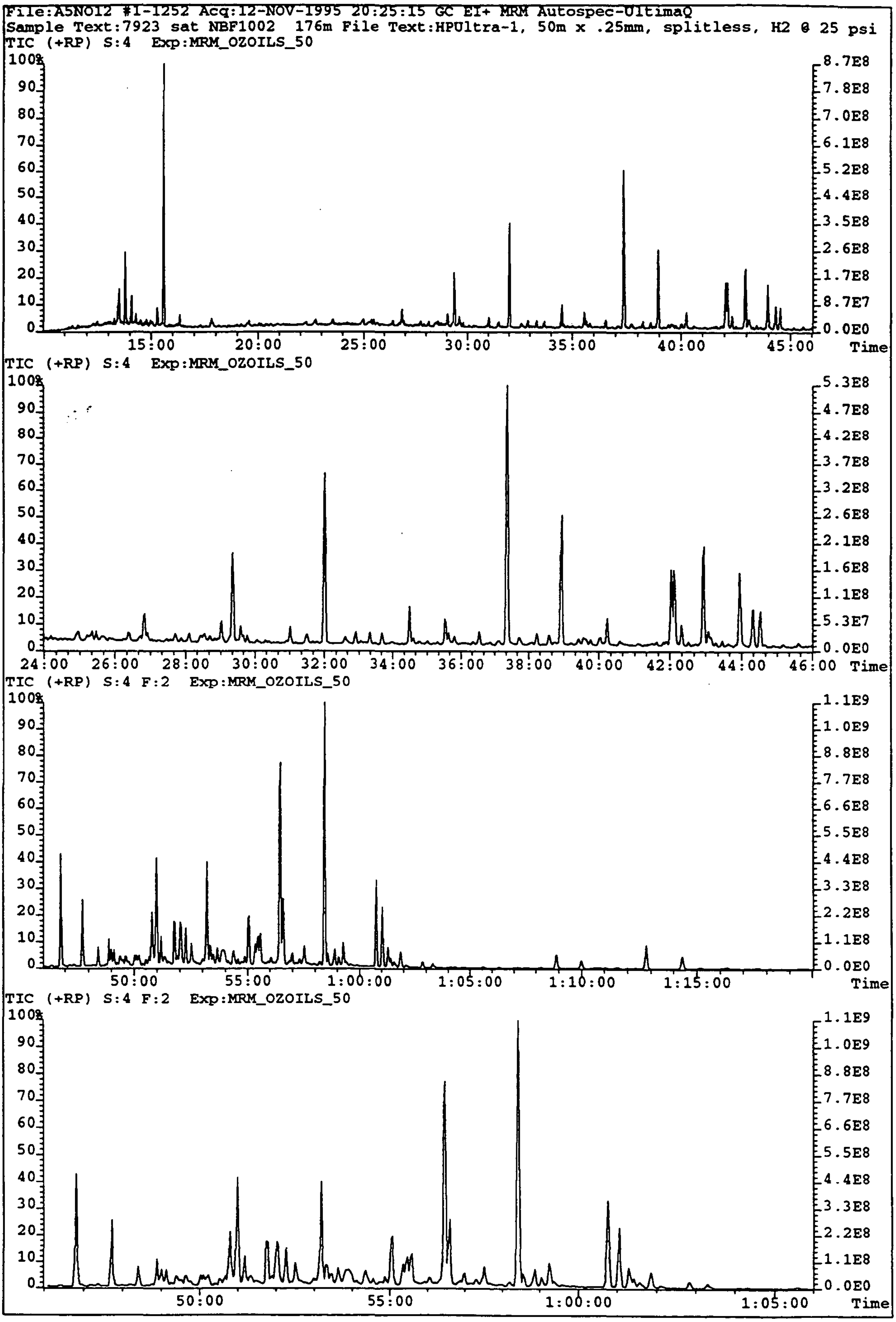
File:A5NO8 #1-847 Acq: 9-NOV-1995 03:13:11 GC EI+ MRM Autospec-UltimaQ
Sample Text:8551 Lesueur 1 cuttings 3453m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »

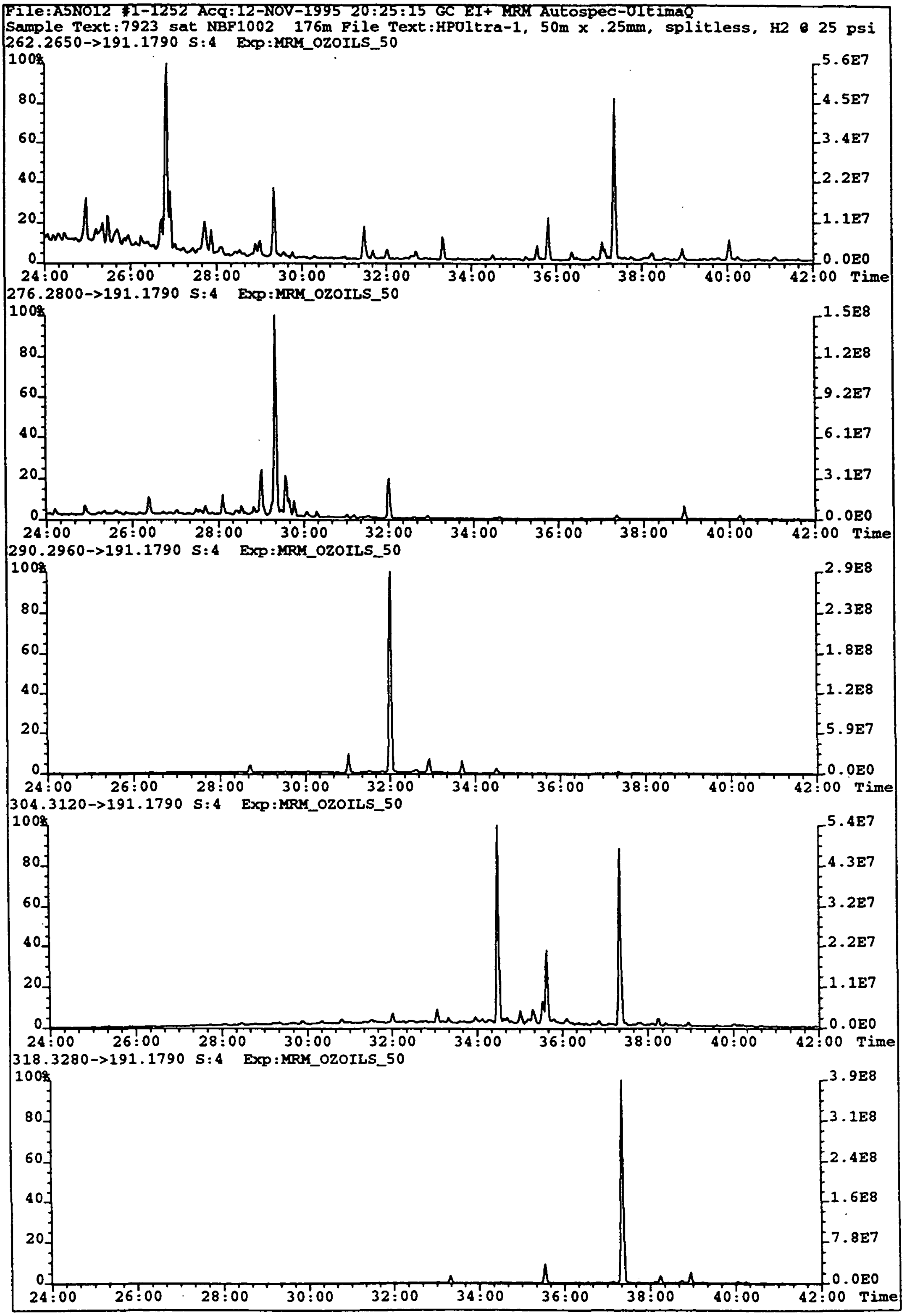


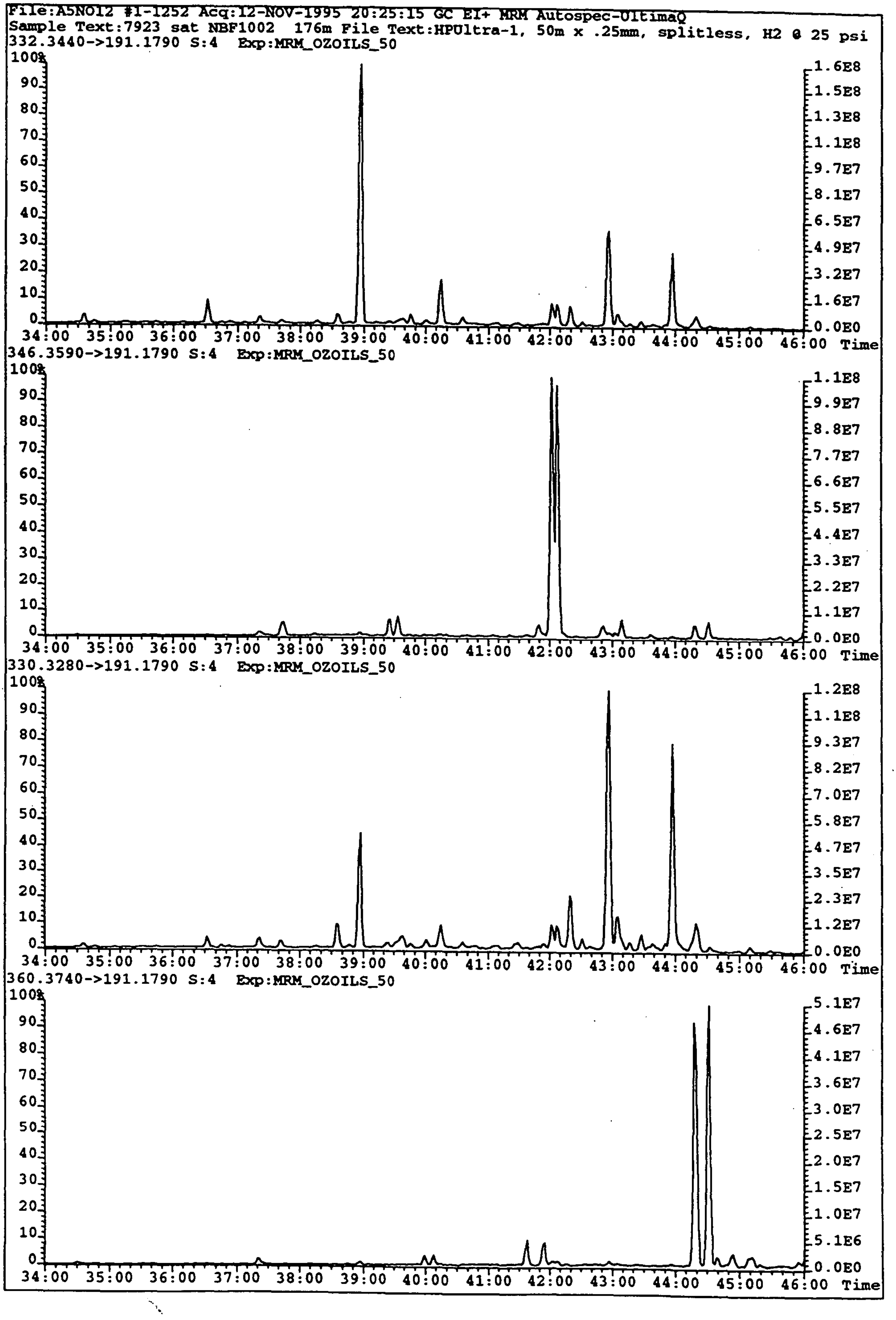


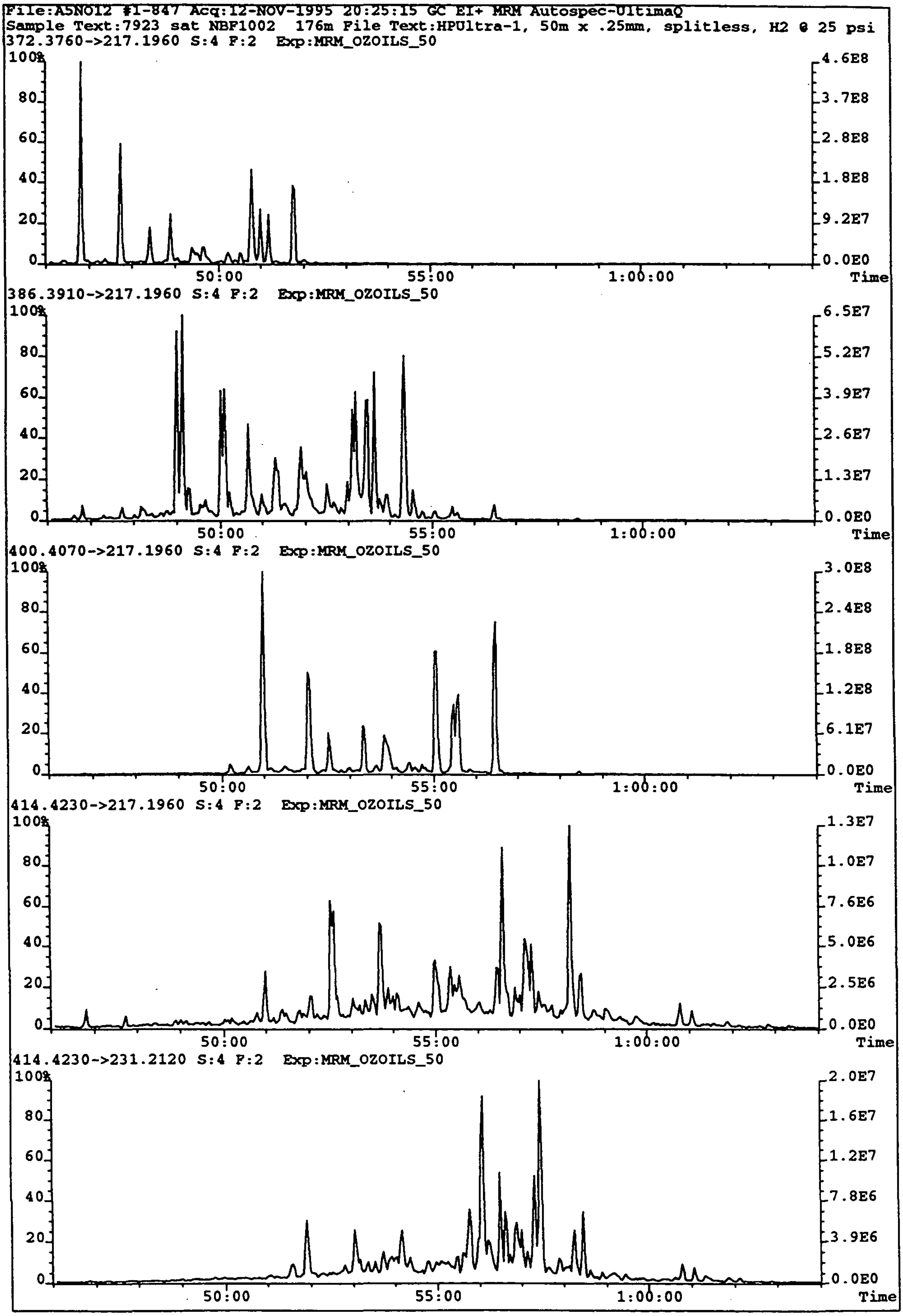




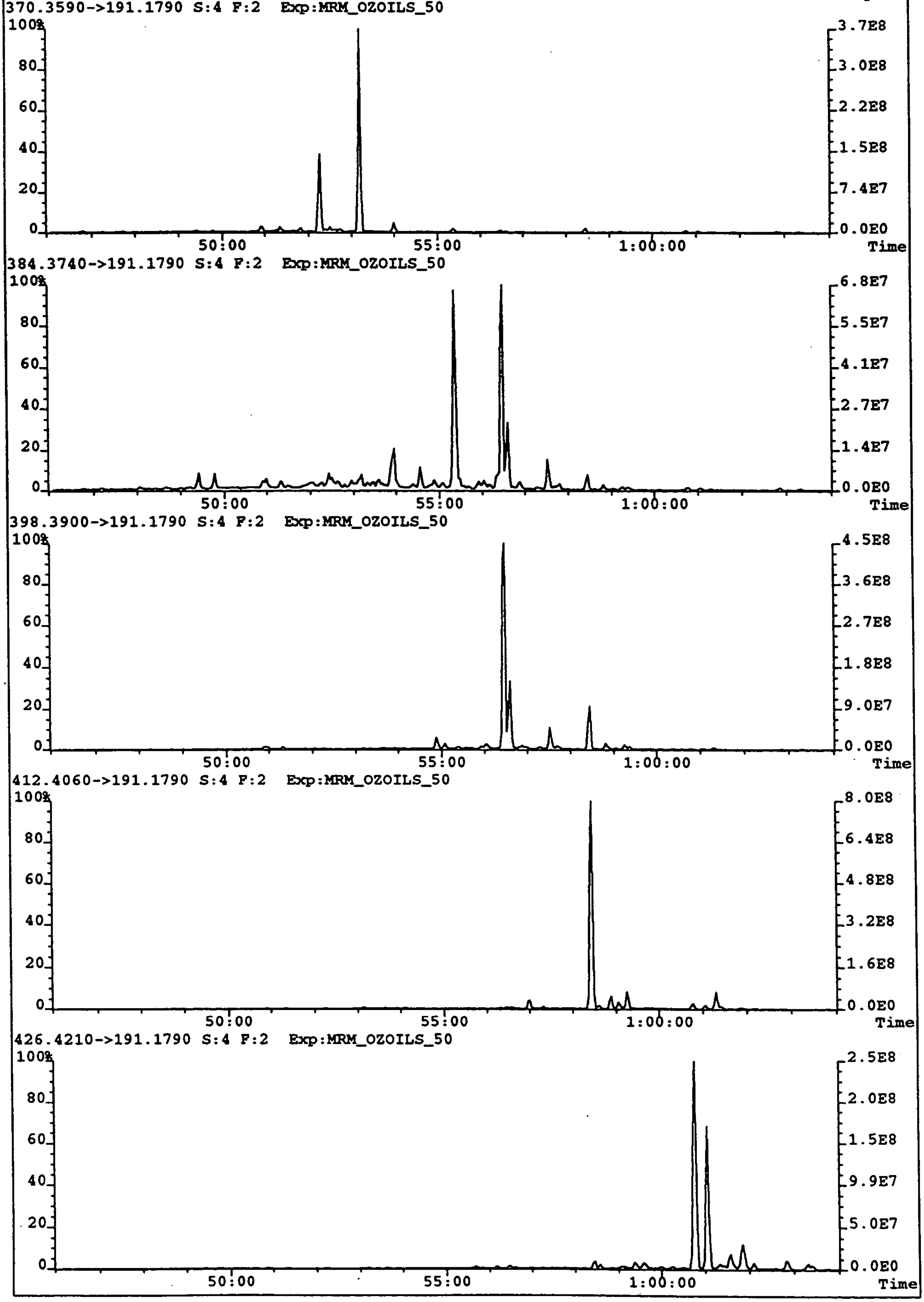

File:A5NO12 #1-1252 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
TIC (+RP) S:4 Exp:MRM_OZOILS_50
100%
8.7E8
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:4 Exp:MRM_OZOILS_50
5.3E8
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:4 F:2 Exp:MRM_OZOILS_50
1.1E9
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:4 F:2 Exp:MRM_OZOILS_50
1.1E9
50:00
55:00
1:00:00
1:05:00
Time

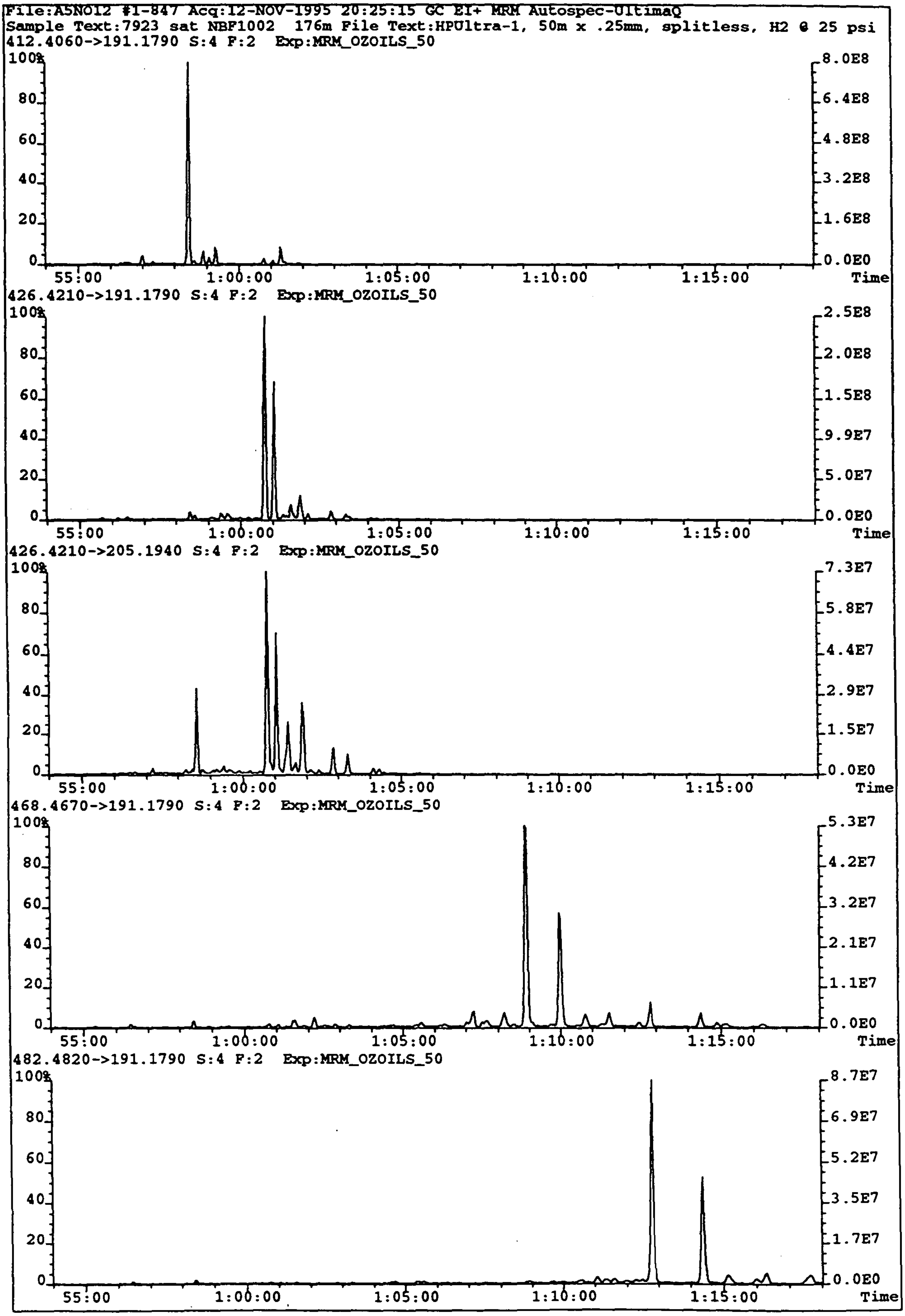

File:A5NO12 #1-1252 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
262.2650->191.1790 S:4 Exp:MRM_OZOILS_50
276.2800->191.1790 S:4 Exp:MRM_OZOILS_50
290.2960->191.1790 S:4 Exp:MRM_OZOILS_50
304.3120->191.1790 S:4 Exp:MRM_OZOILS_50
318.3280->191.1790 S:4 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
5.6E7
4.5E7
3.4E7
2.2E7
1.1E7
0.0E0
1.5E8
1.2E8
9.2E7
6.1E7
3.1E7
2.9E8
2.3E8
1.8E8
1.2E8
5.9E7
5.4E7
4.3E7
3.2E7
2.2E7
1.1E7
3.9E8
3.1E8
2.4E8
1.6E8
7.8E7


File:A5N012 #1-1252 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
332.3440->191.1790 S:4 Exp:MRM_OZOILS_50
346.3590->191.1790 S:4 Exp:MRM_OZOILS_50
330.3280->191.1790 S:4 Exp:MRM_OZOILS_50
360.3740->191.1790 S:4 Exp:MRM_OZOILS_50
Time


File:A5NO12 #1-847 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
372.3760->217.1960 S:4 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
4.6E8
3.7E8
2.8E8
1.8E8
9.2E7
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:4 F:2 Exp:MRM_OZOILS_50
6.5E7
5.2E7
3.9E7
2.6E7
1.3E7
0.0E0
400.4070->217.1960 S:4 F:2 Exp:MRM_OZOILS_50
3.0E8
2.4E8
1.8E8
1.2E8
6.1E7
0.0E0
414.4230->217.1960 S:4 F:2 Exp:MRM_OZOILS_50
1.3E7
1.0E7
7.6E6
5.0E6
2.5E6
0.0E0
414.4230->231.2120 S:4 F:2 Exp:MRM_OZOILS_50
2.0E7
1.6E7
1.2E7
7.8E6
3.9E6
0.0E0

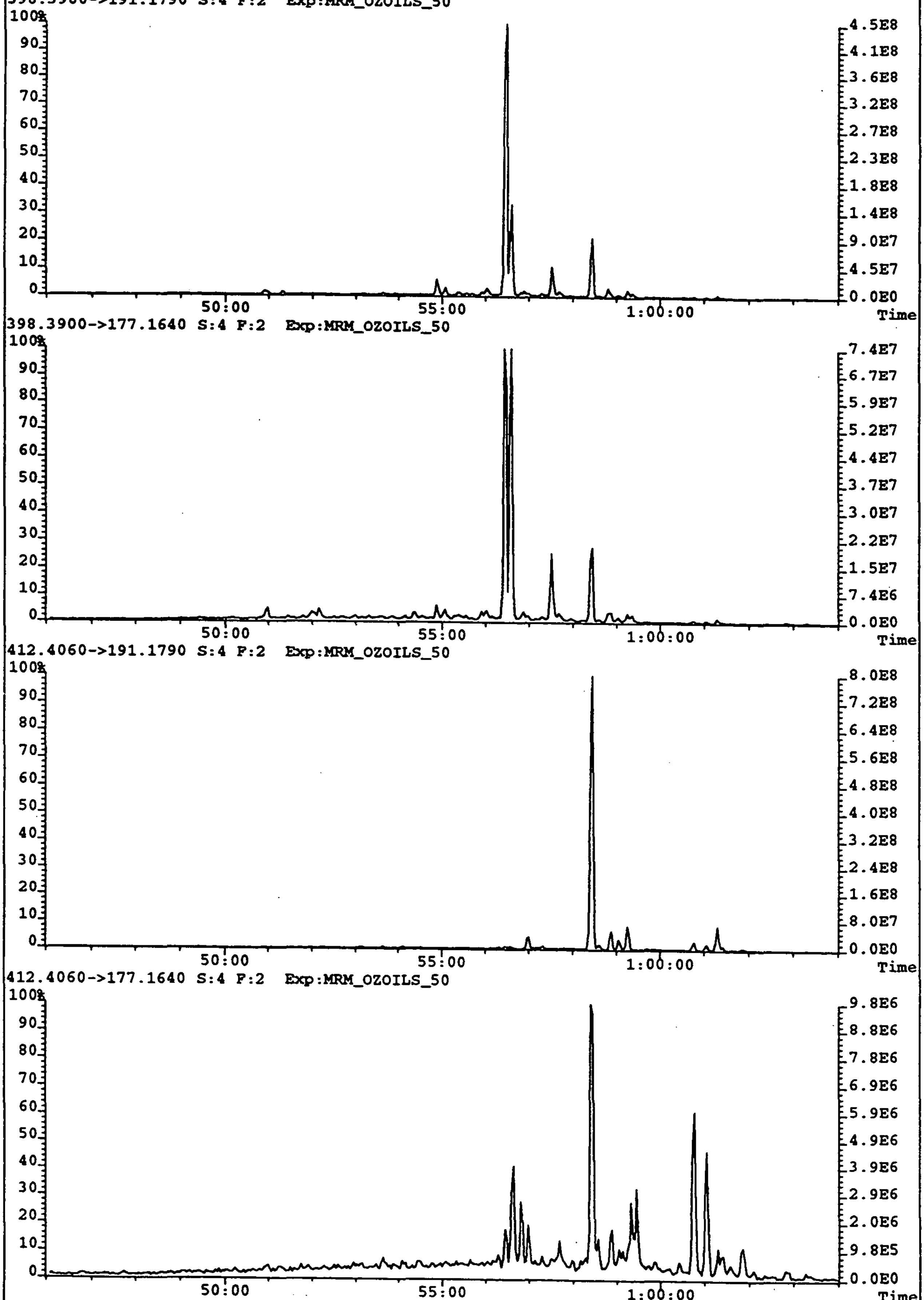
File:A5NO12 #1-847 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

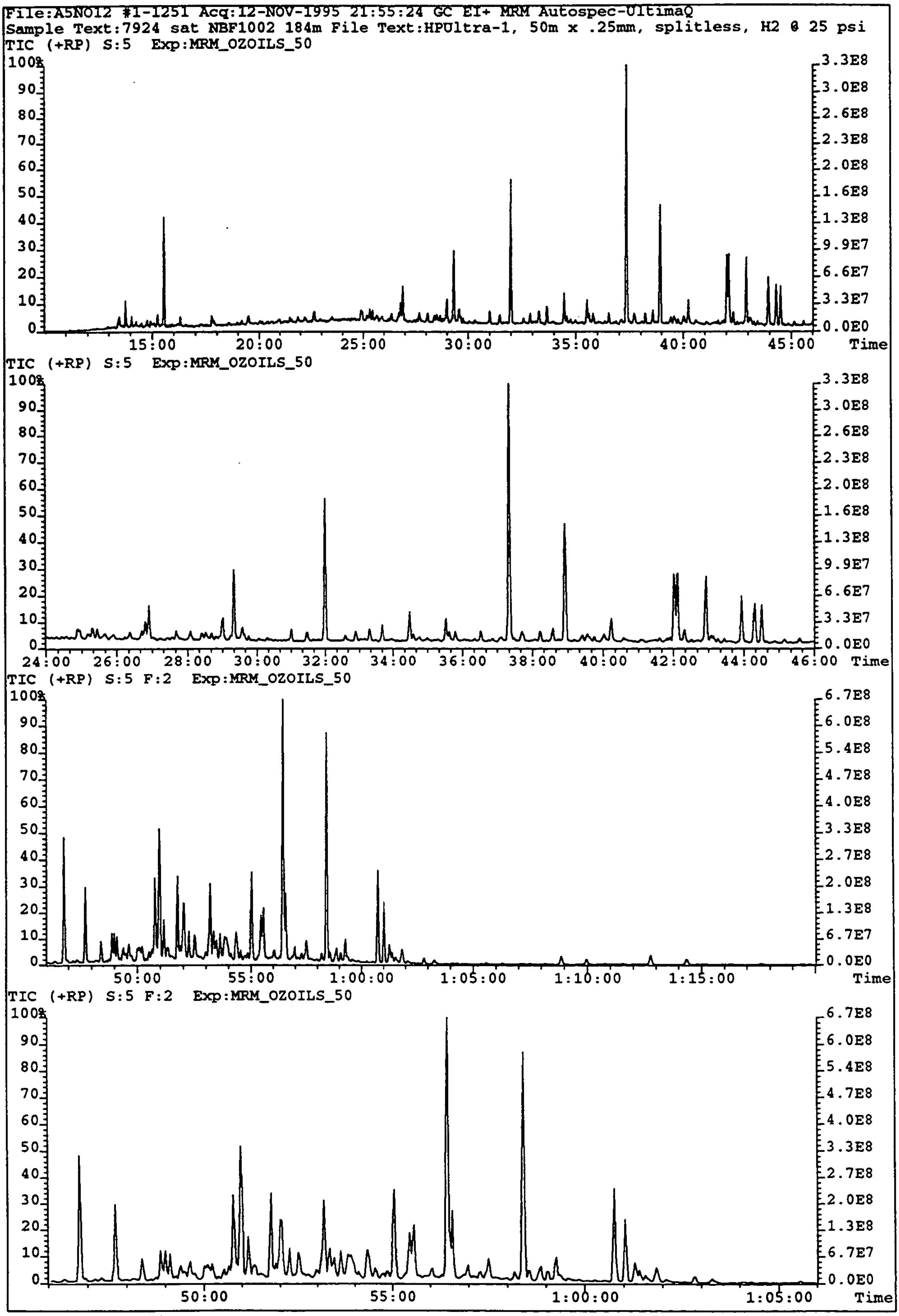


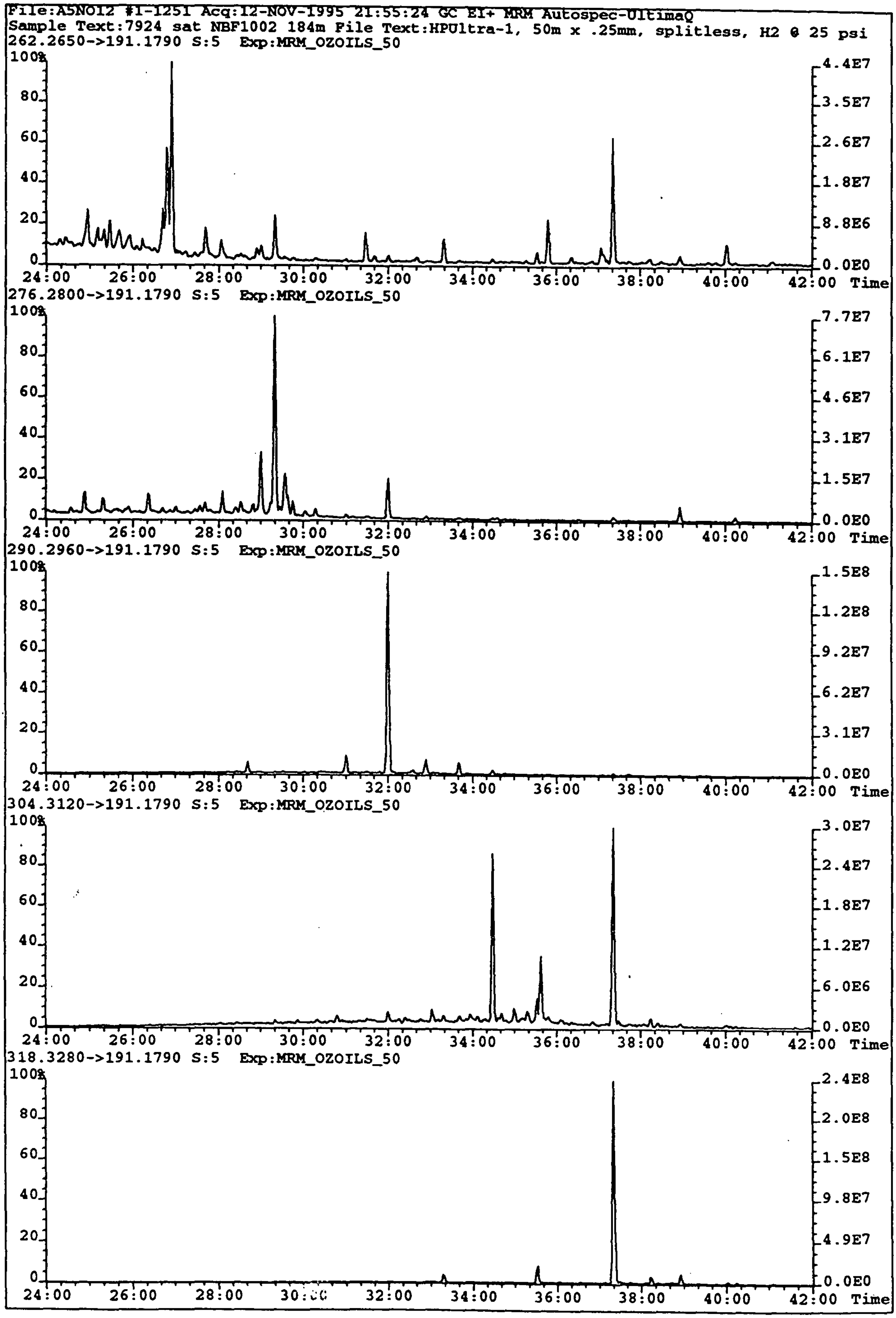


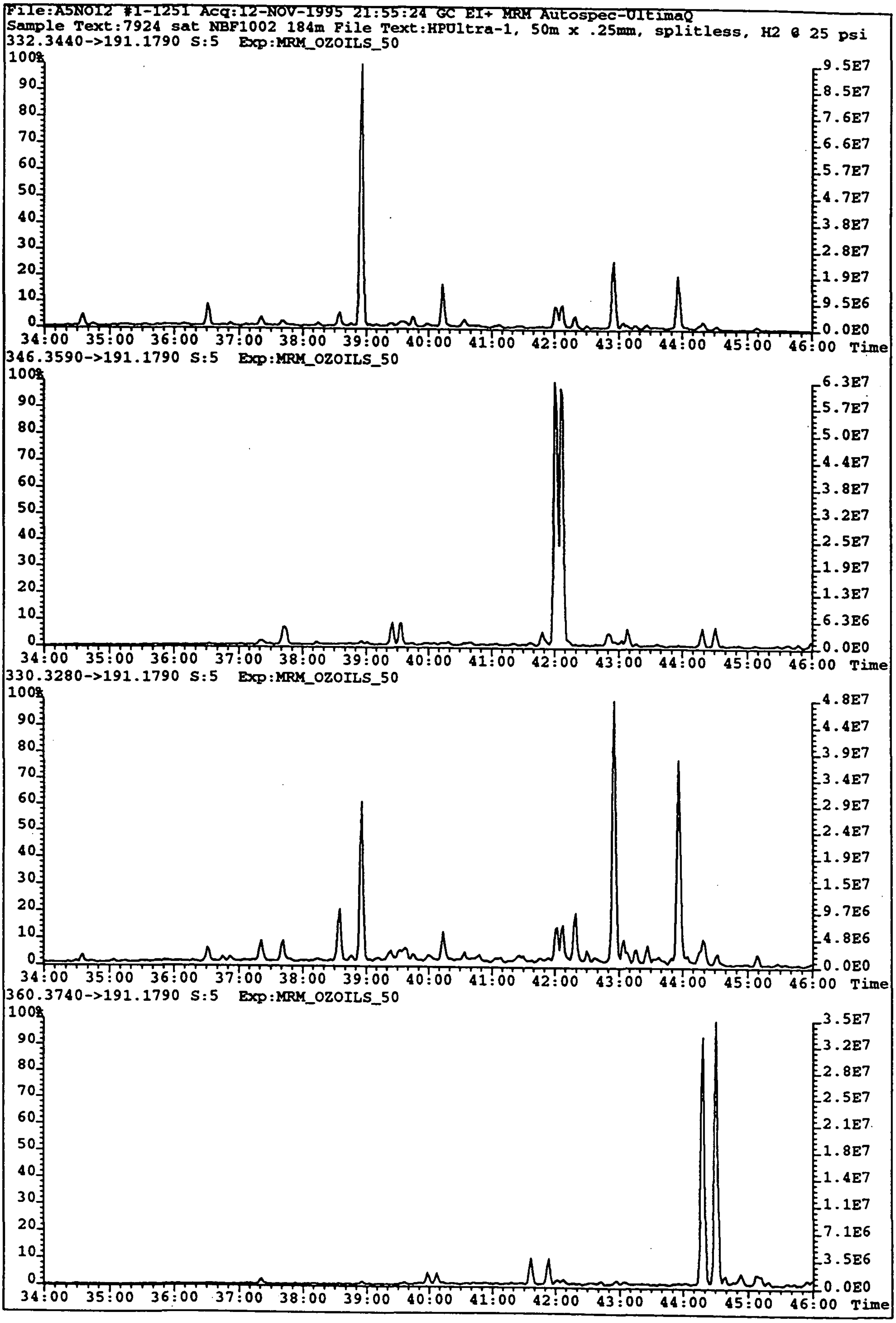
File:A5N012 #1-847 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->191.1790 S:4 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
8.0E8
6.4E8
4.8E8
3.2E8
1.6E8
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:4 F:2 Exp:MRM_OZOILS_50
2.5E8
2.0E8
1.5E8
9.9E7
5.0E7
0.0E0
426.4210->205.1940 S:4 F:2 Exp:MRM_OZOILS_50
7.3E7
5.8E7
4.4E7
2.9E7
1.5E7
0.0E0
468.4670->191.1790 S:4 F:2 Exp:MRM_OZOILS_50
5.3E7
4.2E7
3.2E7
2.1E7
1.1E7
0.0E0
482.4820->191.1790 S:4 F:2 Exp:MRM_OZOILS_50
8.7E7
6.9E7
5.2E7
3.5E7
1.7E7
0.0E0

File:A5N012 #1-847 Acq:12-NOV-1995 20:25:15 GC EI+ MRM Autospec-UltimaQ
Sample Text:7923 sat NBF1002 176m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

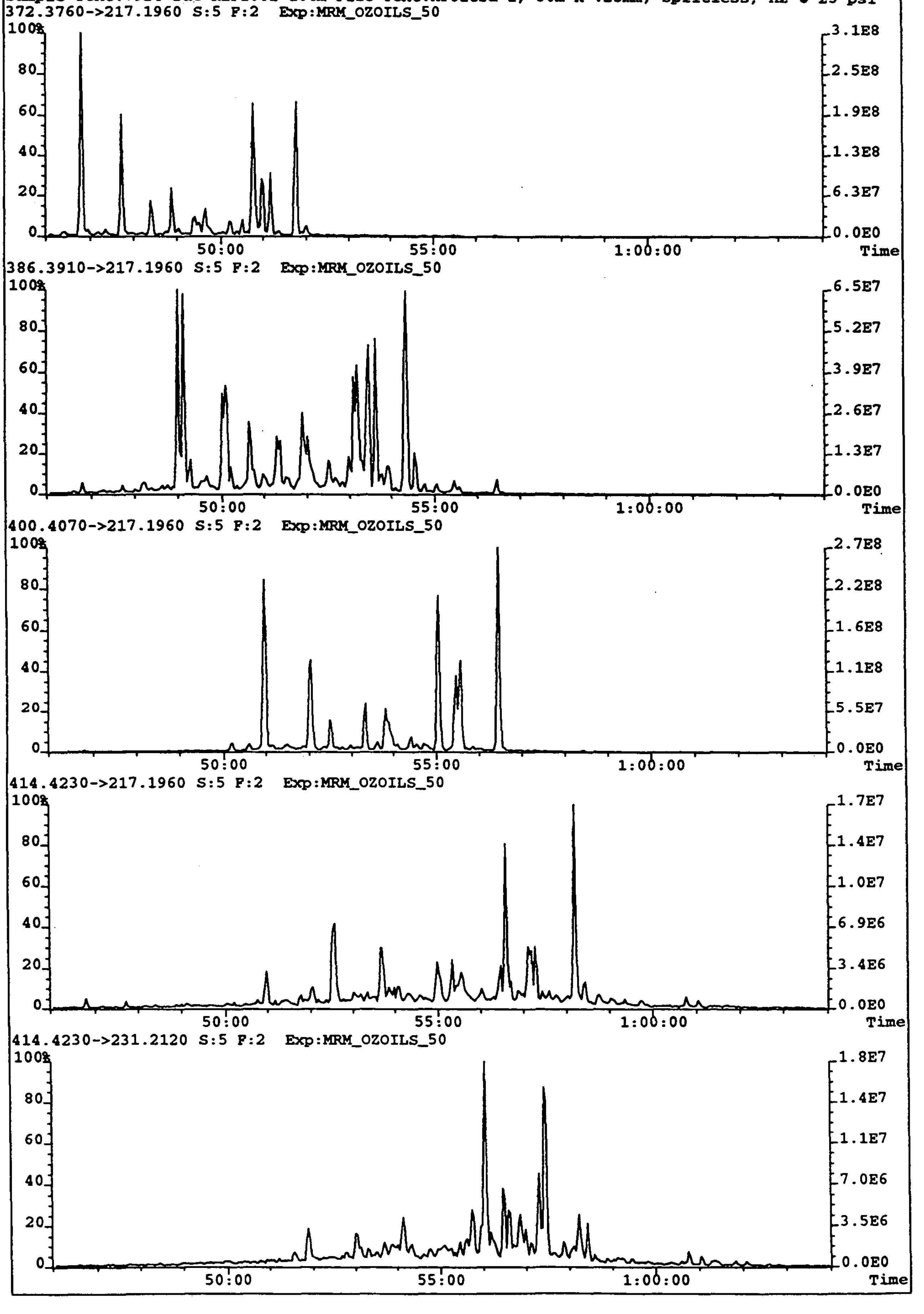


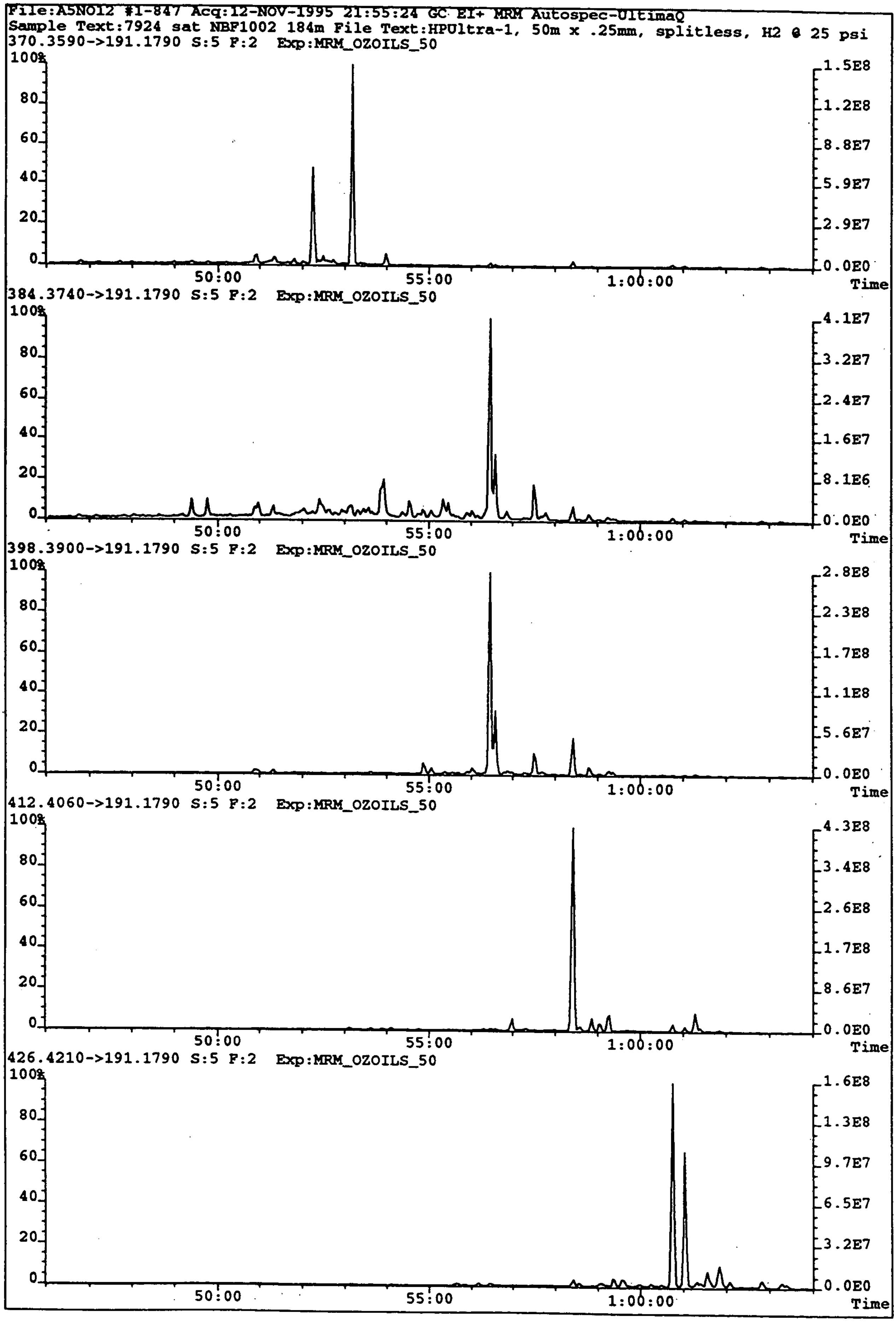

File:A5NO12 #1-1251 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
TIC (+RP) S:5 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
3.3E8
3.0E8
2.6E8
2.3E8
2.0E8
1.6E8
1.3E8
9.9E7
6.6E7
3.3E7
0.0E0
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:5 Exp:MRM_OZOILS_50
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:5 F:2 Exp:MRM_OZOILS_50
6.7E8
6.0E8
5.4E8
4.7E8
4.0E8
3.3E8
2.7E8
2.0E8
1.3E8
6.7E7
0.0E0
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:5 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
1:05:00
Time


File:A5NO12 #1-1251 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
262.2650->191.1790 S:5 Exp:MRM_OZOILS_50
276.2800->191.1790 S:5 Exp:MRM_OZOILS_50
290.2960->191.1790 S:5 Exp:MRM_OZOILS_50
304.3120->191.1790 S:5 Exp:MRM_OZOILS_50
318.3280->191.1790 S:5 Exp:MRM_OZOILS_50
4.4E7
7.7E7
1.5E8
3.0E7
2.4E8
Time

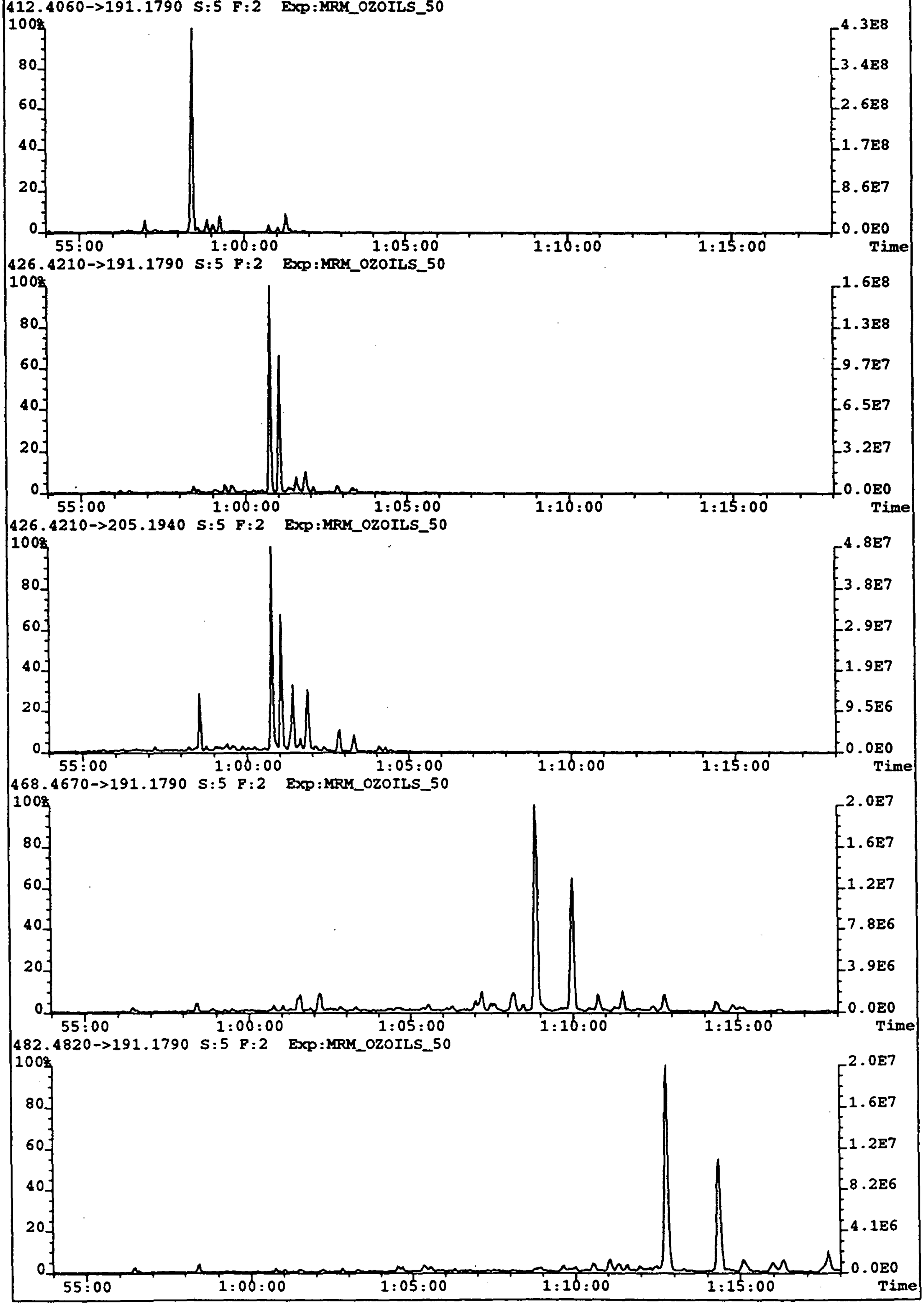

File:A5NO12 #1-1251 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
332.3440->191.1790 S:5 Exp:MRM_OZOILS_50
100%
9.5E7
0.0E0
Time
346.3590->191.1790 S:5 Exp:MRM_OZOILS_50
6.3E7
0.0E0
330.3280->191.1790 S:5 Exp:MRM_OZOILS_50
4.8E7
0.0E0
360.3740->191.1790 S:5 Exp:MRM_OZOILS_50
3.5E7
0.0E0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00

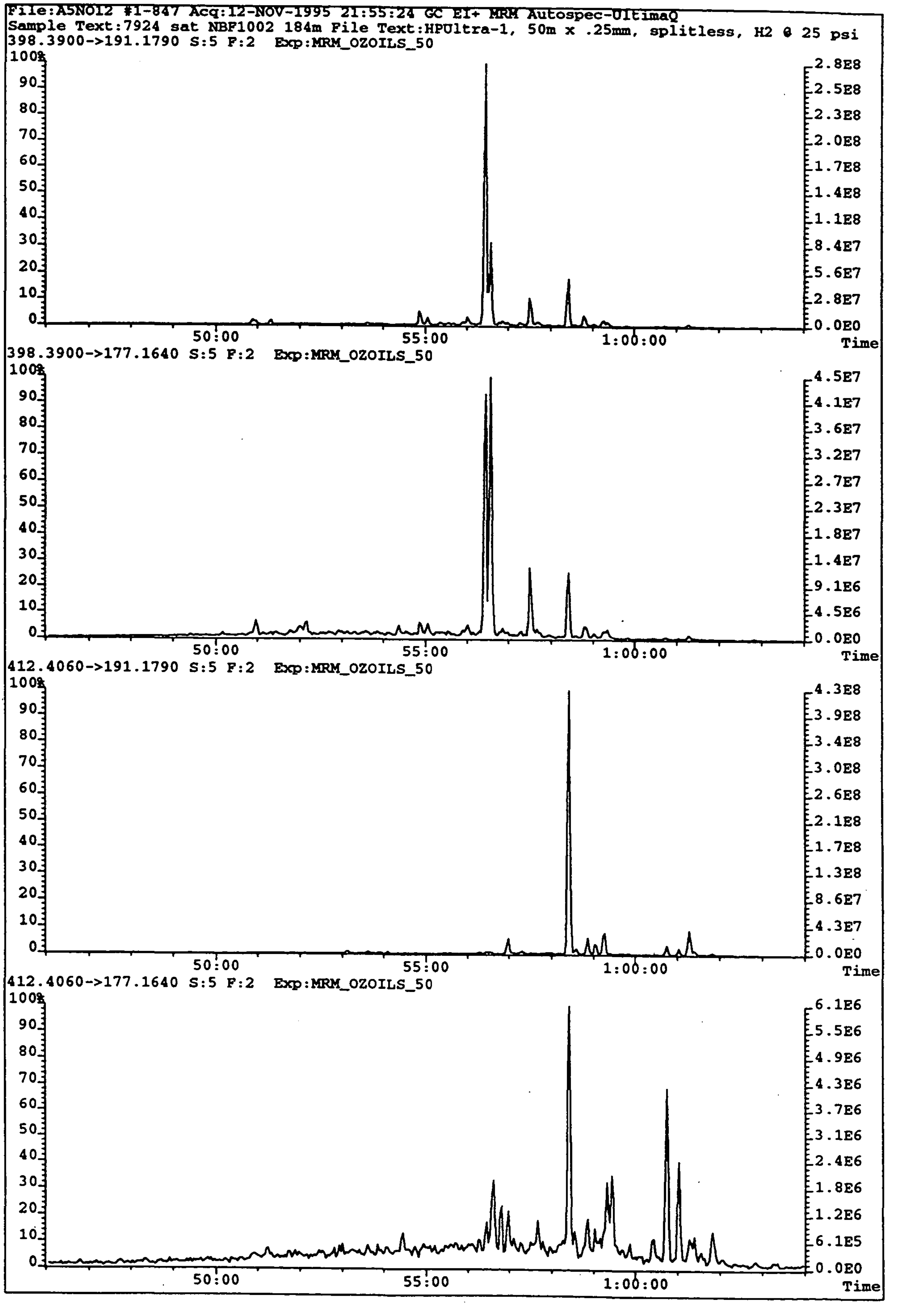
File:A5N012 #1-847 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

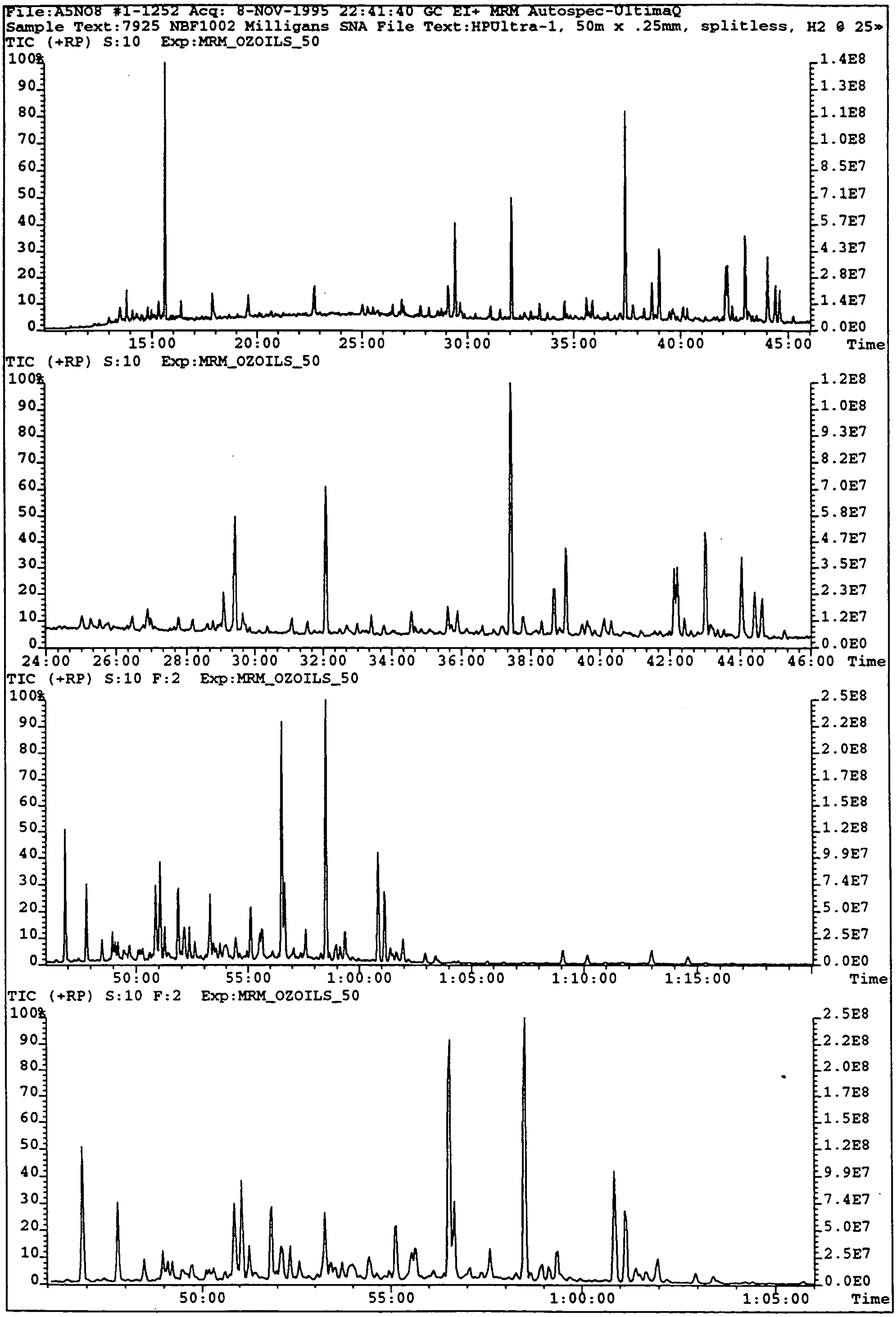


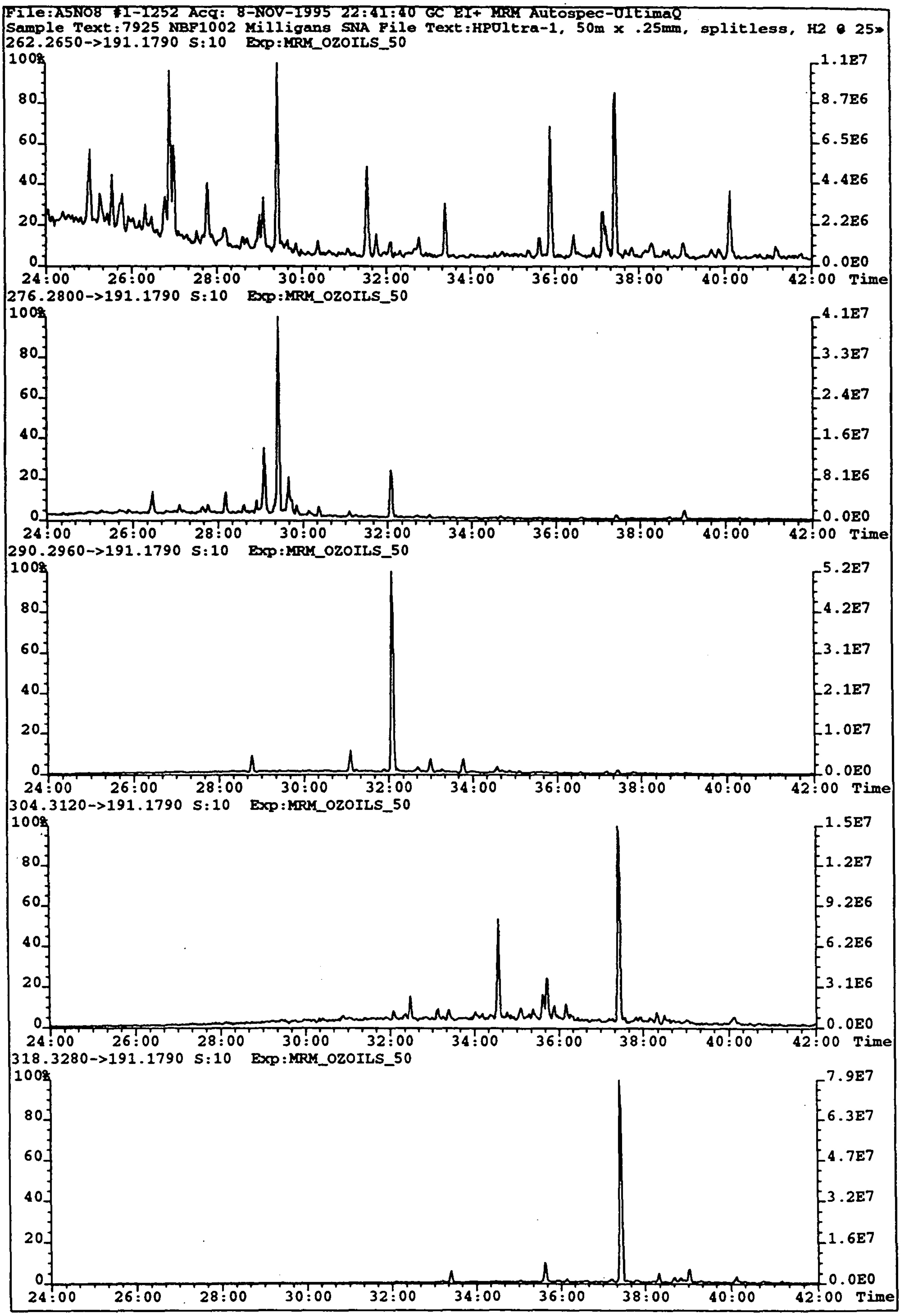

File:A5N012 #1-847 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
370.3590->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.5E8
1.2E8
8.8E7
5.9E7
2.9E7
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
4.1E7
3.2E7
2.4E7
1.6E7
8.1E6
0.0E0
398.3900->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
2.8E8
2.3E8
1.7E8
1.1E8
5.6E7
0.0E0
412.4060->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
4.3E8
3.4E8
2.6E8
1.7E8
8.6E7
0.0E0
426.4210->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
1.6E8
1.3E8
9.7E7
6.5E7
3.2E7
0.0E0

File:A5NO12 #1-847 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

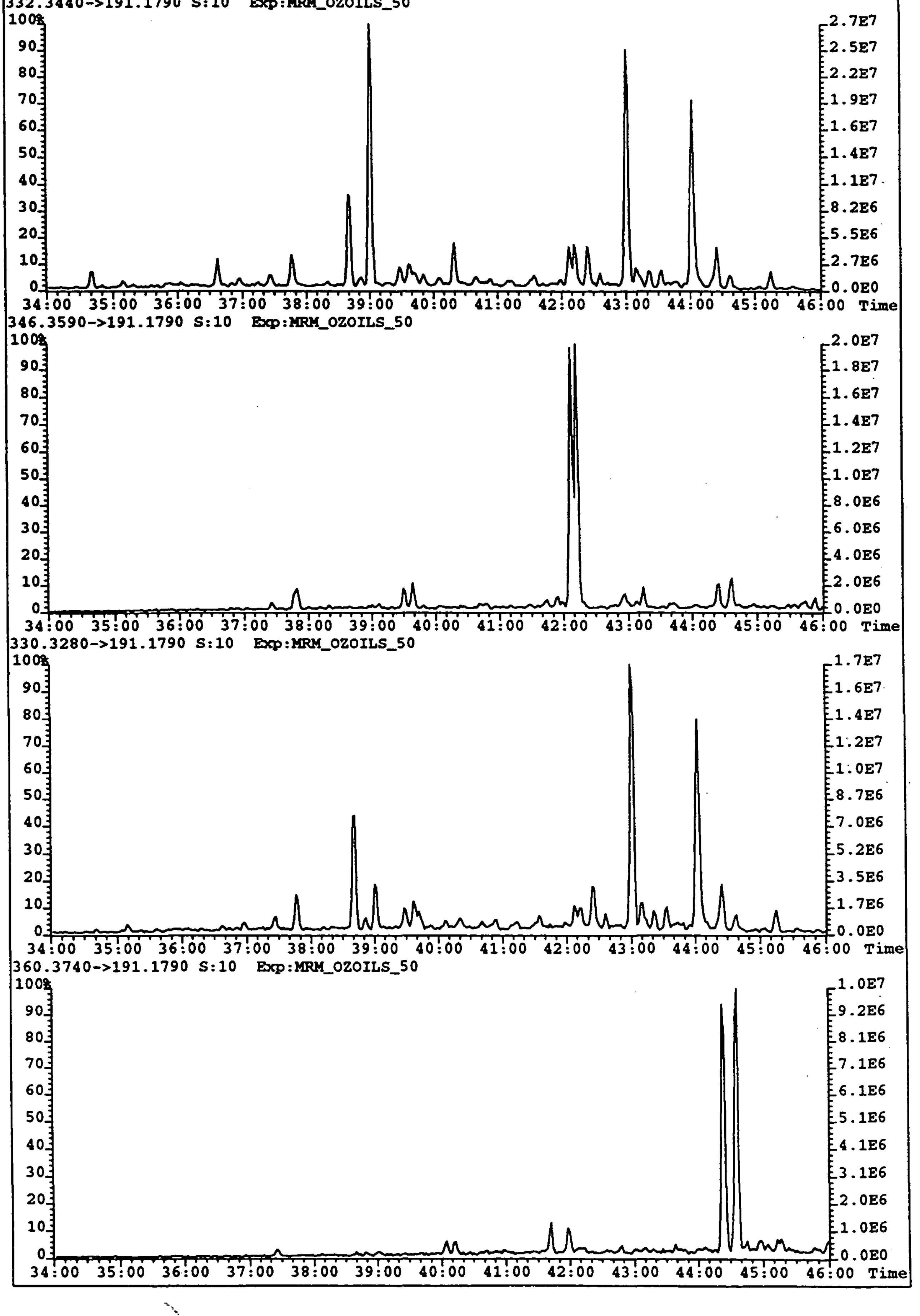


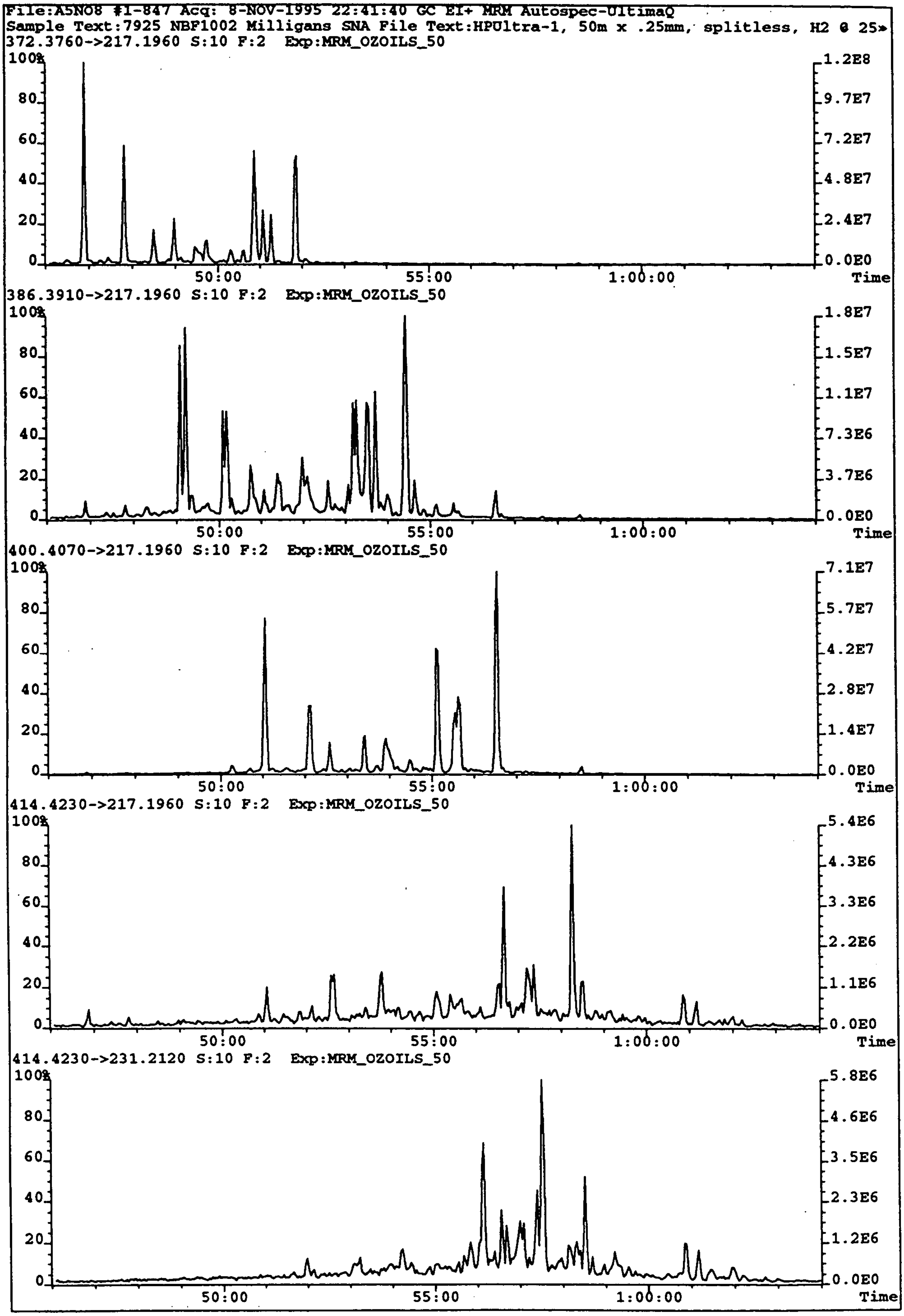

File:A5NO12 #1-847 Acq:12-NOV-1995 21:55:24 GC EI+ MRM Autospec-UltimaQ
Sample Text:7924 sat NBF1002 184m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
398.3900->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:5 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:5 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:5 F:2 Exp:MRM_OZOILS_50
100%
50:00
55:00
1:00:00
Time
2.8E8
4.5E7
4.3E8
6.1E6


File:A5N08 #1-1252 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
TIC (+RP) S:10 Exp:MRM_OZOILS_50
100%
1.4E8
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:10 Exp:MRM_OZOILS_50
1.2E8
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:10 F:2 Exp:MRM_OZOILS_50
2.5E8
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:10 F:2 Exp:MRM_OZOILS_50
2.5E8
50:00
55:00
1:00:00
1:05:00
Time

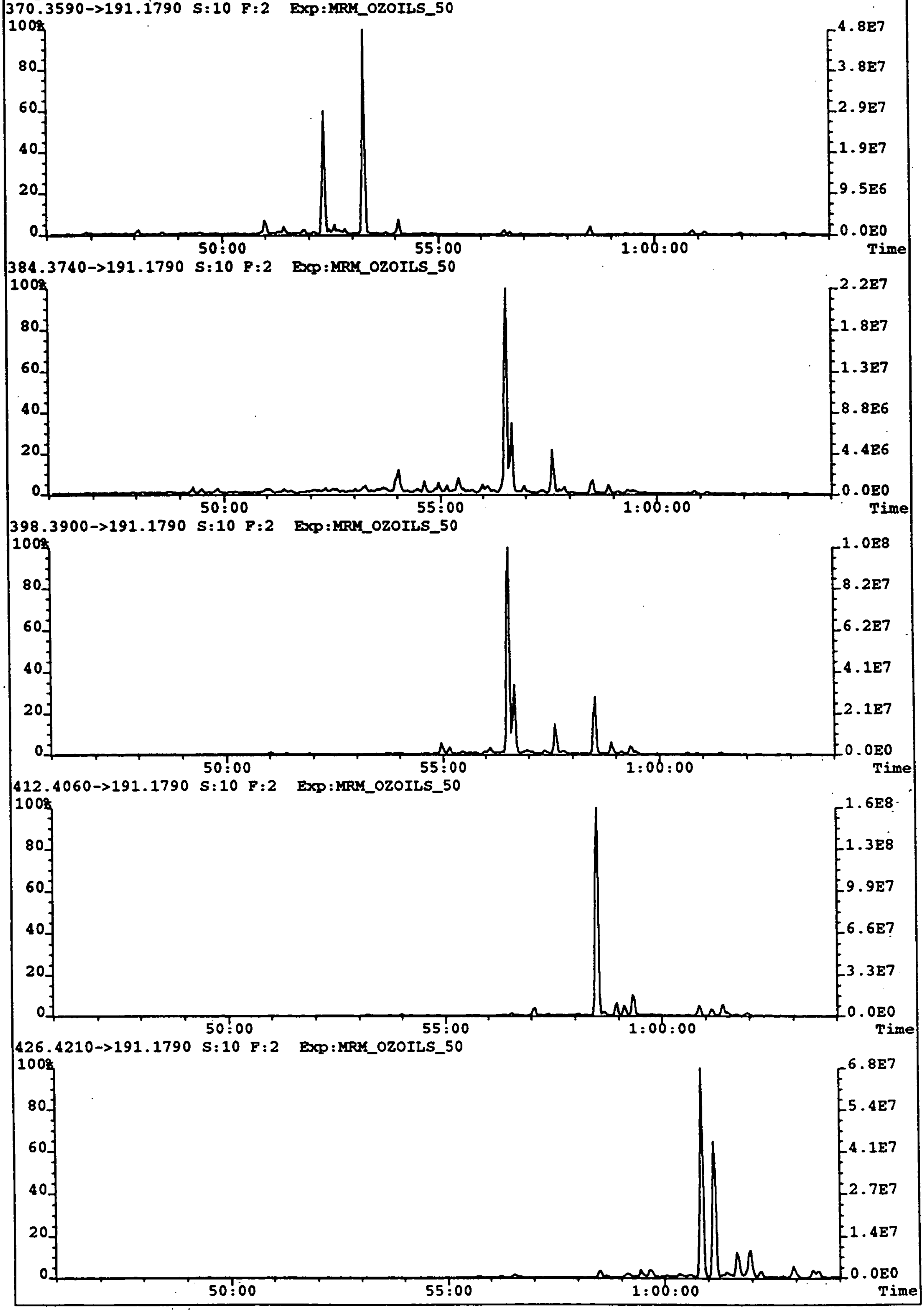

File:A5N08 #1-1252 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
262.2650->191.1790 S:10 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.1E7
8.7E6
6.5E6
4.4E6
2.2E6
0.0E0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
276.2800->191.1790 S:10 Exp:MRM_OZOILS_50
4.1E7
3.3E7
2.4E7
1.6E7
8.1E6
0.0E0
290.2960->191.1790 S:10 Exp:MRM_OZOILS_50
5.2E7
4.2E7
3.1E7
2.1E7
1.0E7
0.0E0
304.3120->191.1790 S:10 Exp:MRM_OZOILS_50
1.5E7
1.2E7
9.2E6
6.2E6
3.1E6
0.0E0
318.3280->191.1790 S:10 Exp:MRM_OZOILS_50
7.9E7
6.3E7
4.7E7
3.2E7
1.6E7
0.0E0

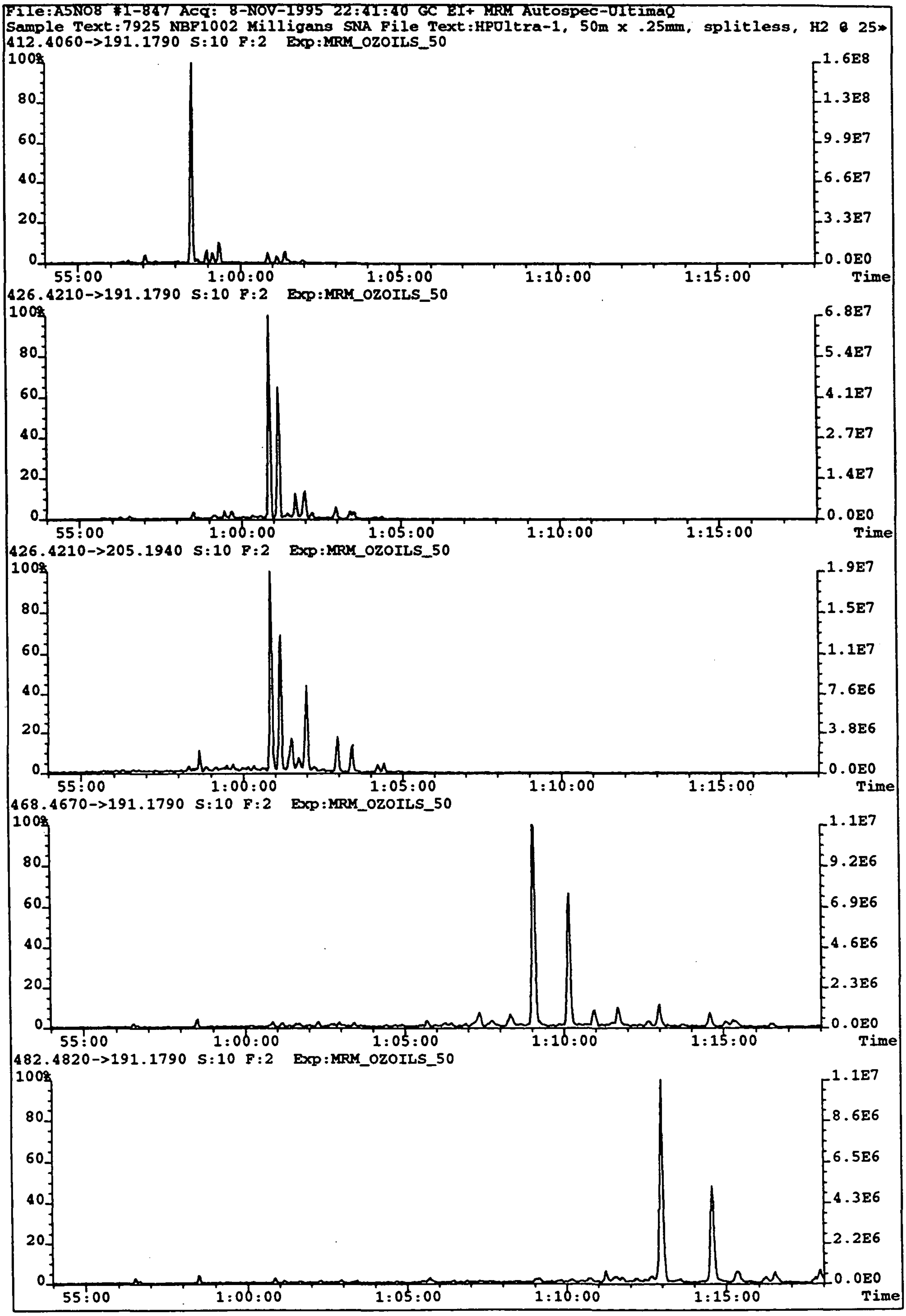
File:A5NO8 #1-1252 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»

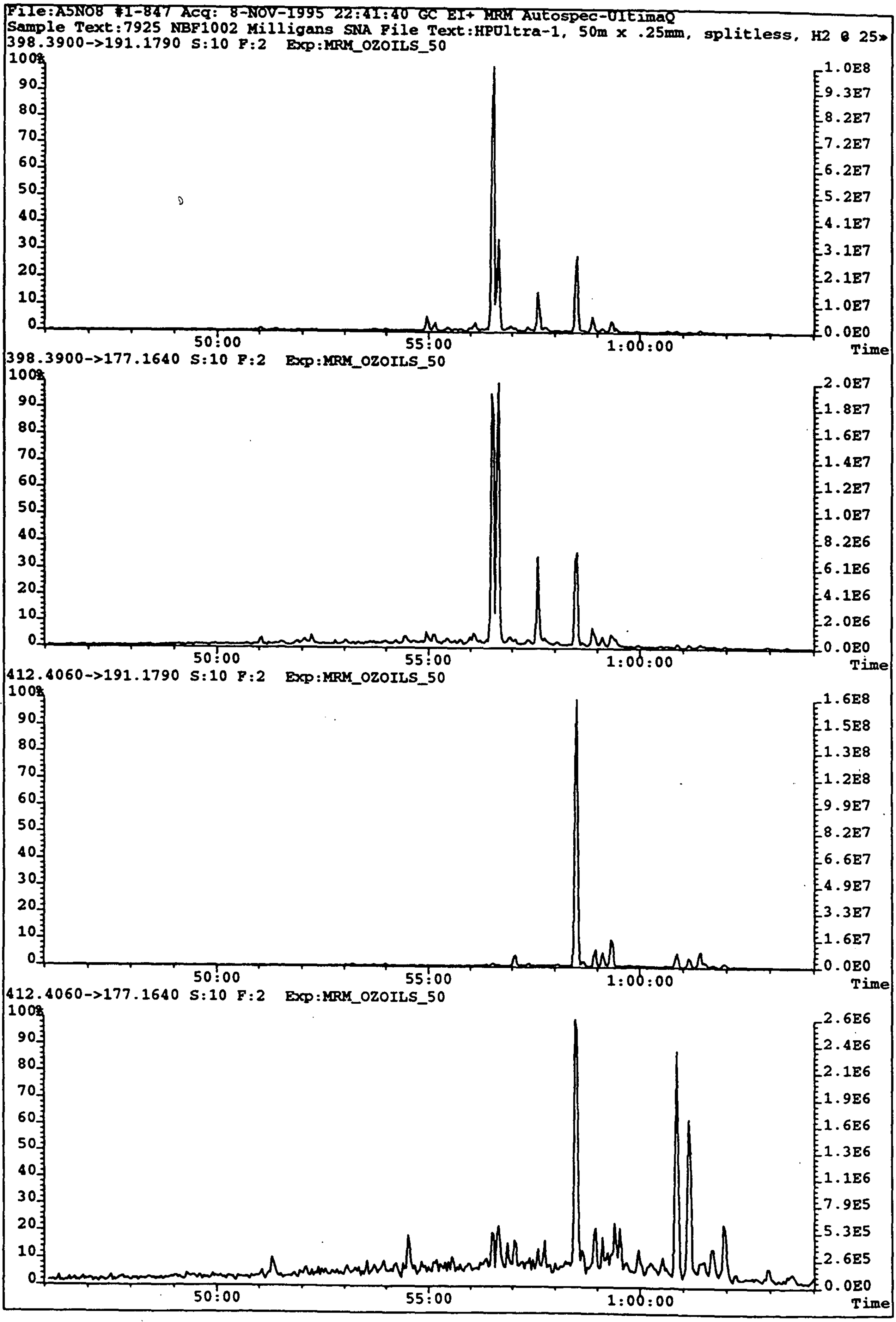


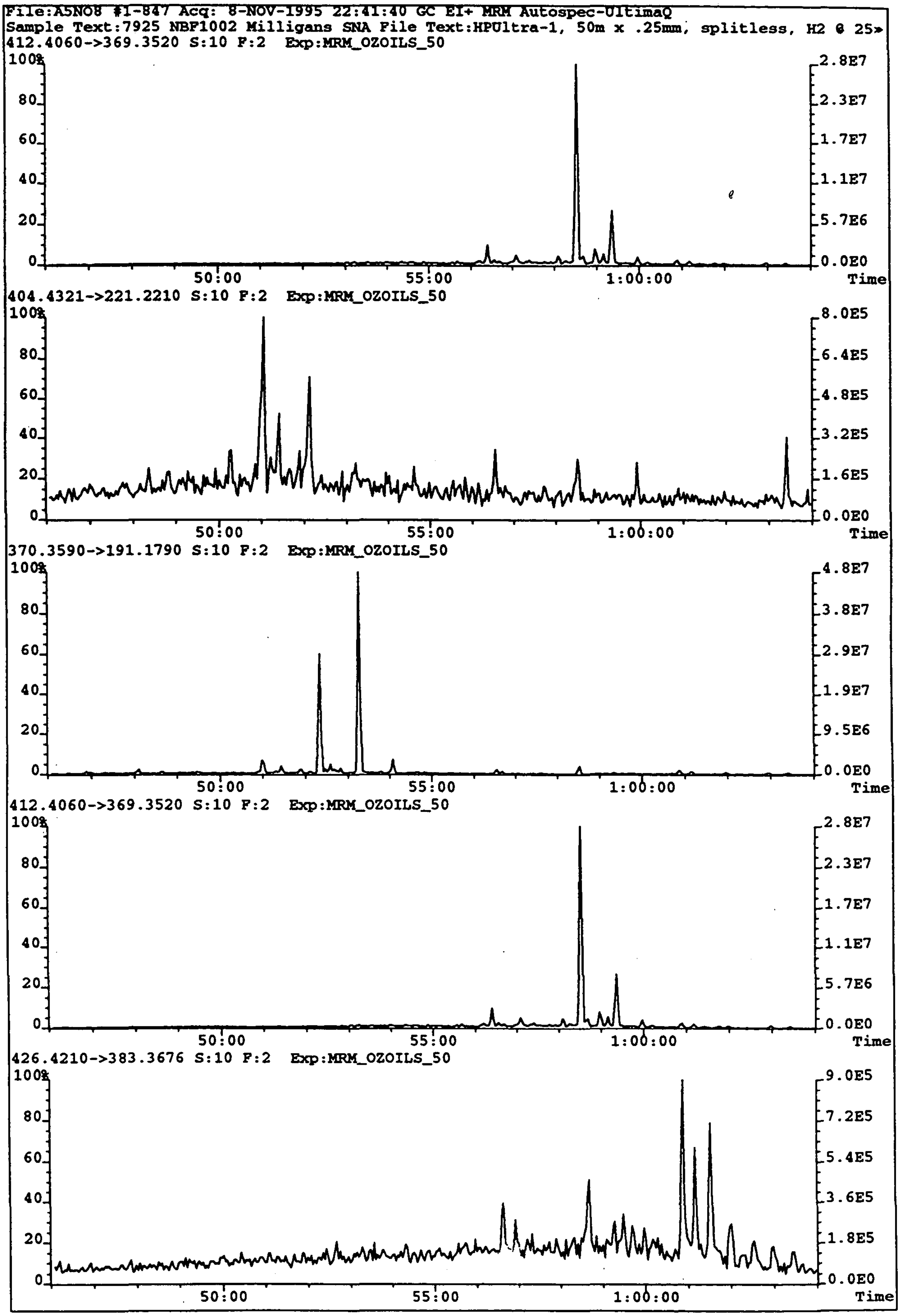

File:A5N08 #1-847 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
372.3760->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
1.2E8
386.3910->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
1.8E7
400.4070->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
7.1E7
414.4230->217.1960 S:10 F:2 Exp:MRM_OZOILS_50
5.4E6
414.4230->231.2120 S:10 F:2 Exp:MRM_OZOILS_50
5.8E6
50:00
55:00
1:00:00
Time

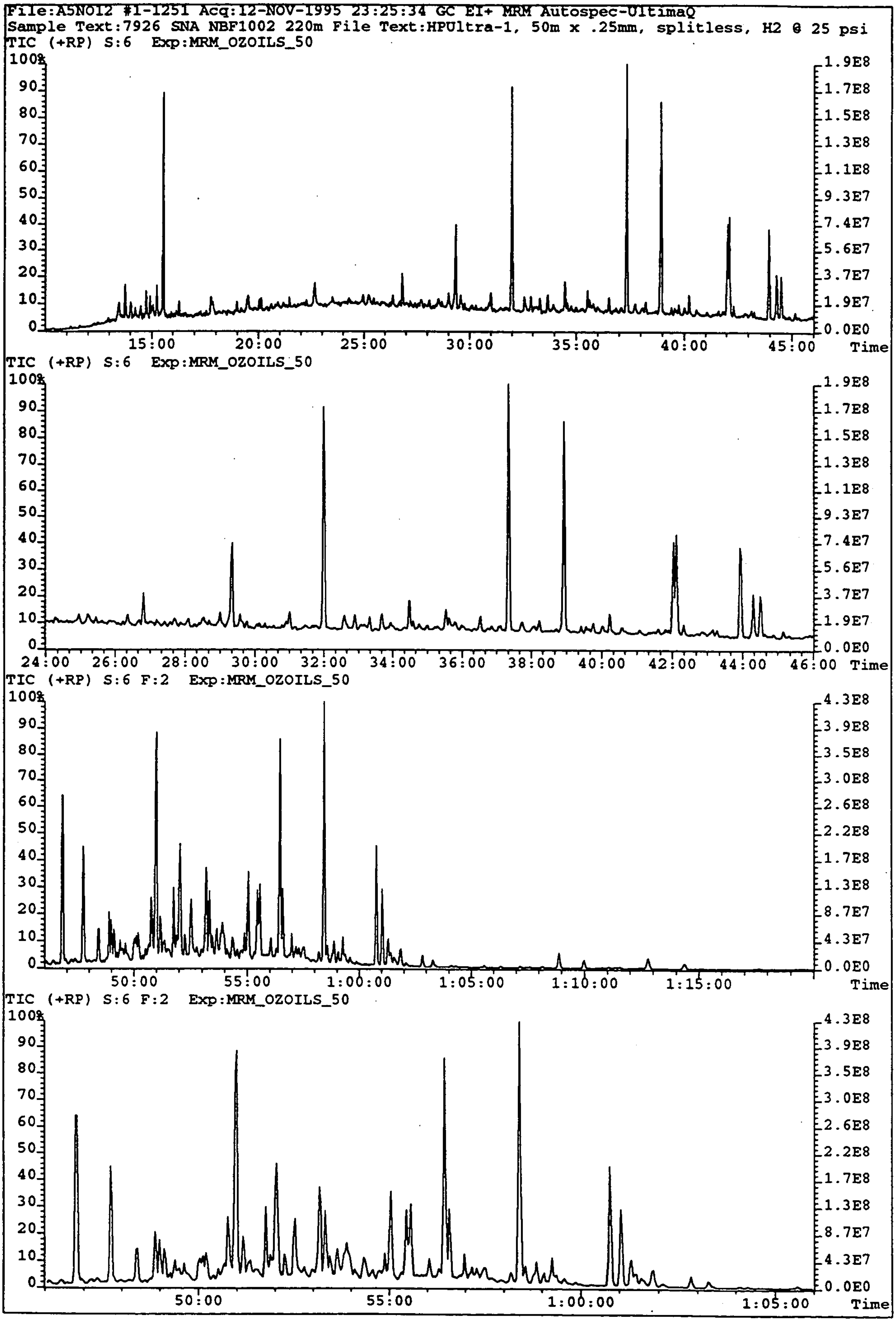
File:A5N08 #1-847 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»

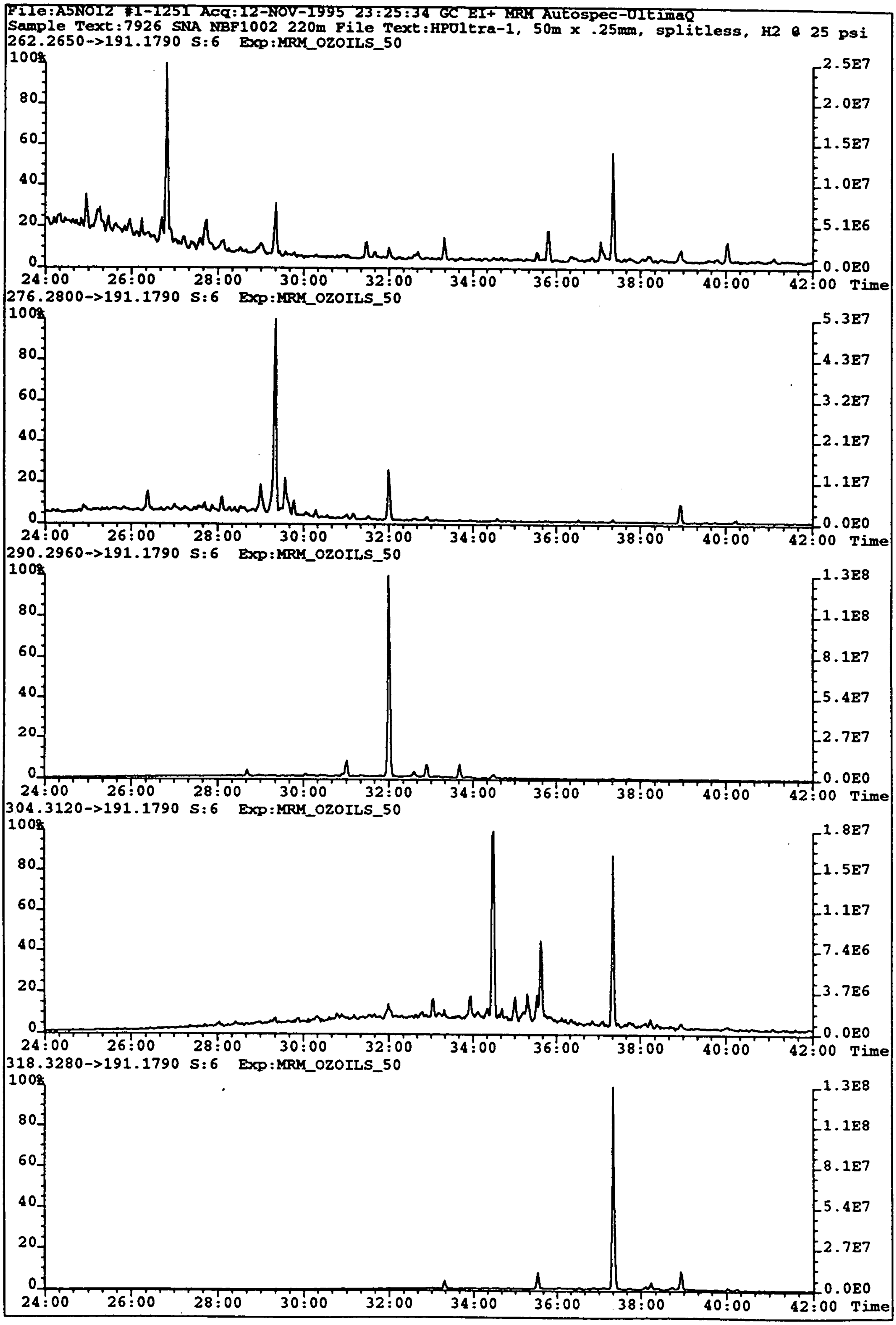


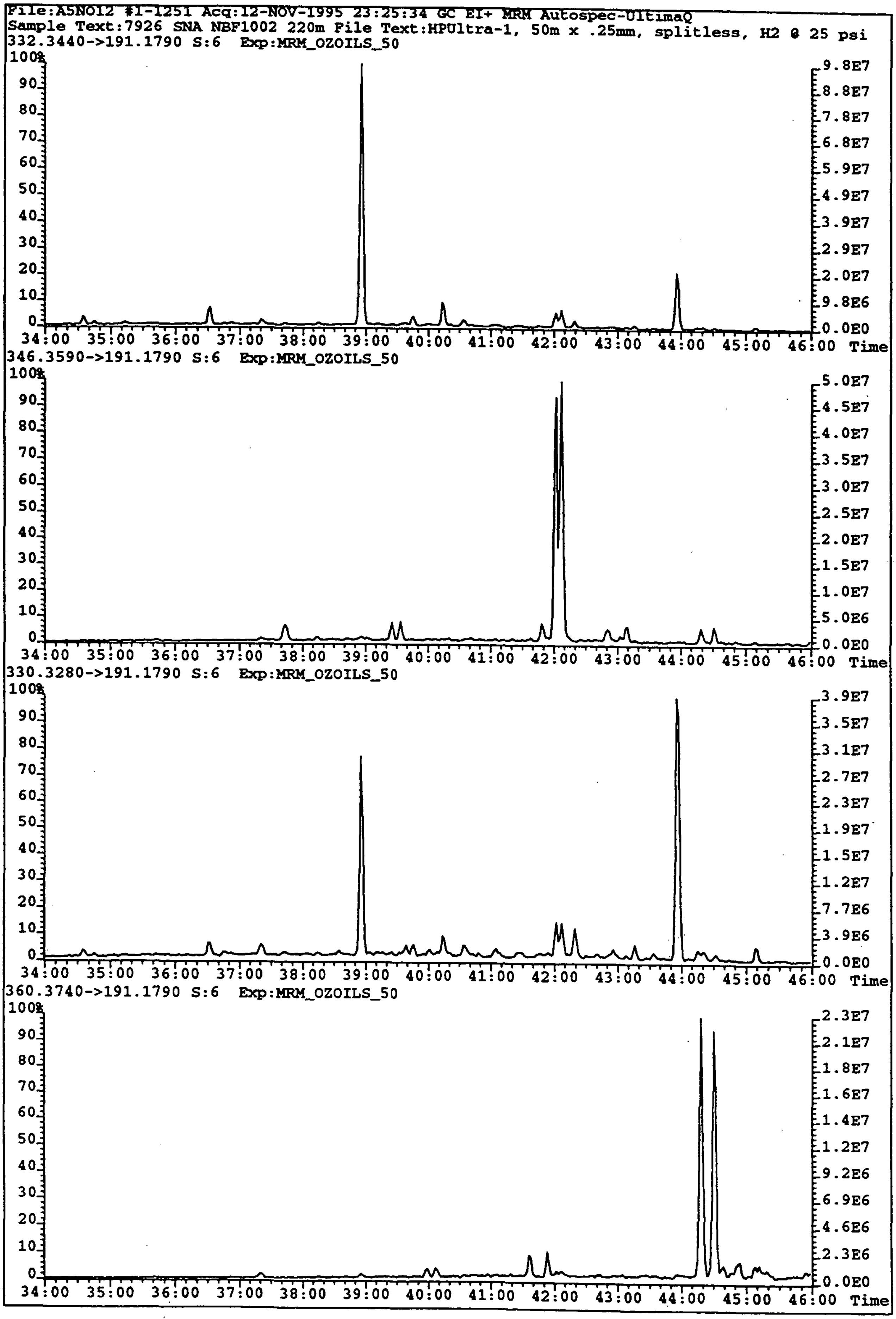

File:A5NO8 #1-847 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
412.4060->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
1.6E8
1.3E8
9.9E7
6.6E7
3.3E7
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
6.8E7
5.4E7
4.1E7
2.7E7
1.4E7
0.0E0
426.4210->205.1940 S:10 F:2 Exp:MRM_OZOILS_50
1.9E7
1.5E7
1.1E7
7.6E6
3.8E6
0.0E0
468.4670->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
1.1E7
9.2E6
6.9E6
4.6E6
2.3E6
0.0E0
482.4820->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
1.1E7
8.6E6
6.5E6
4.3E6
2.2E6
0.0E0


File:A5N08 #1-847 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
398.3900->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:10 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:10 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

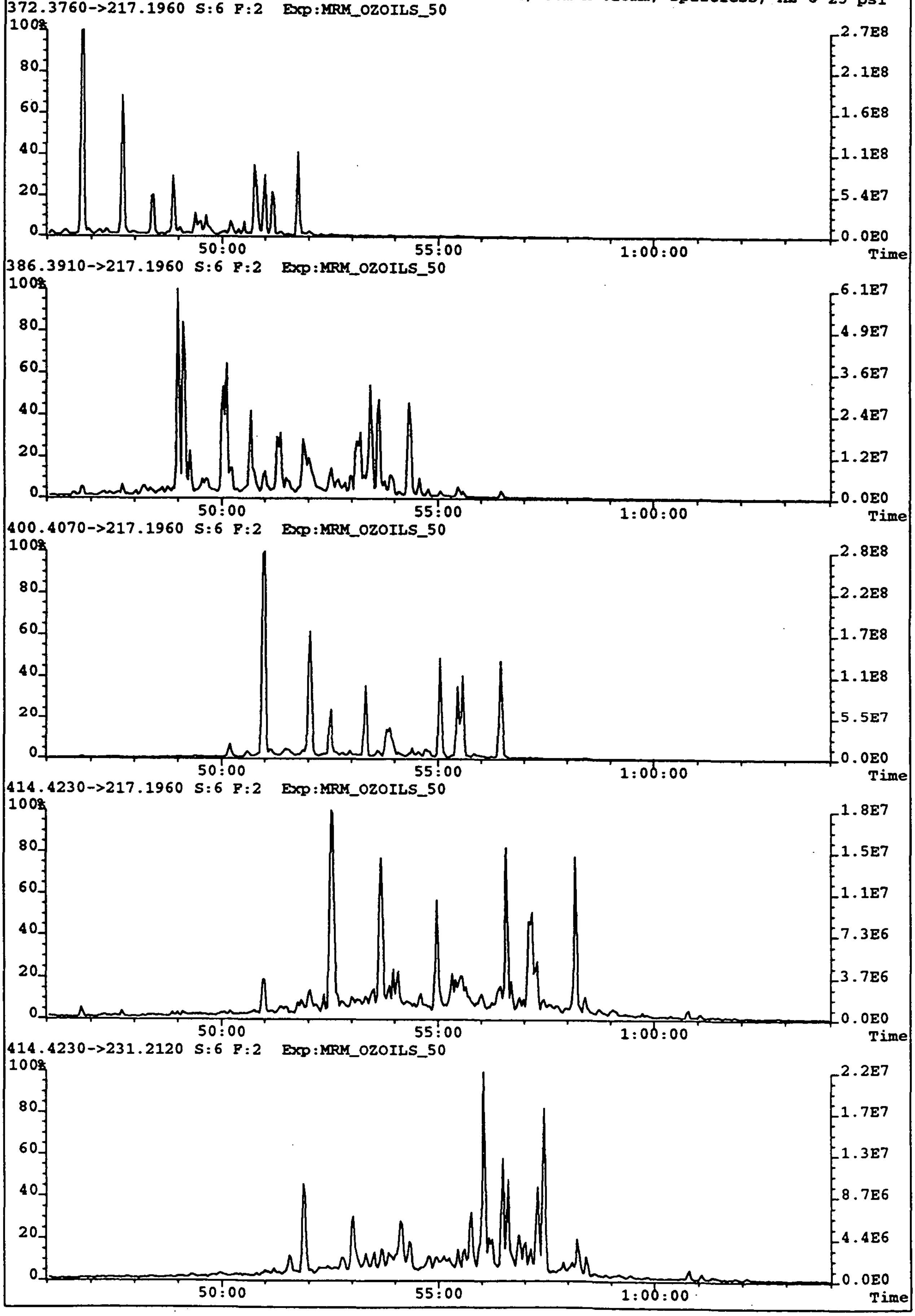

File:A5N08 #1-847 Acq: 8-NOV-1995 22:41:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:7925 NBF1002 Milligans SNA File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25»
412.4060->369.3520 S:10 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.8E7
2.3E7
1.7E7
1.1E7
5.7E6
0.0E0
50:00
55:00
1:00:00
Time
404.4321->221.2210 S:10 F:2 Exp:MRM_OZOILS_50
8.0E5
6.4E5
4.8E5
3.2E5
1.6E5
0.0E0
370.3590->191.1790 S:10 F:2 Exp:MRM_OZOILS_50
4.8E7
3.8E7
2.9E7
1.9E7
9.5E6
0.0E0
412.4060->369.3520 S:10 F:2 Exp:MRM_OZOILS_50
2.8E7
2.3E7
1.7E7
1.1E7
5.7E6
0.0E0
426.4210->383.3676 S:10 F:2 Exp:MRM_OZOILS_50
9.0E5
7.2E5
5.4E5
3.6E5
1.8E5
0.0E0

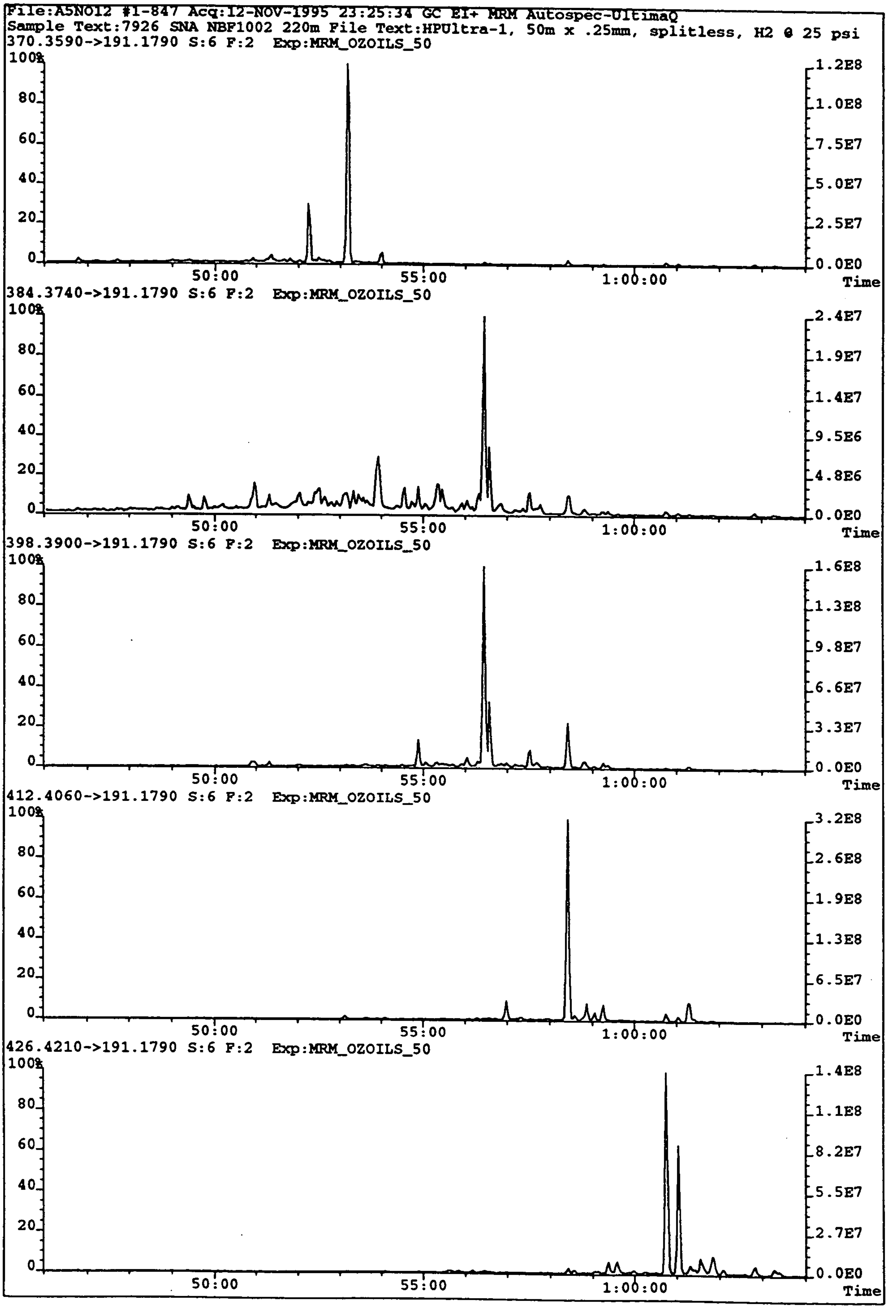

File:A5N012 #1-1251 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
TIC (+RP) S:6 Exp:MRM_OZOILS_50
TIC (+RP) S:6 Exp:MRM_OZOILS_50
TIC (+RP) S:6 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:6 F:2 Exp:MRM_OZOILS_50
Time

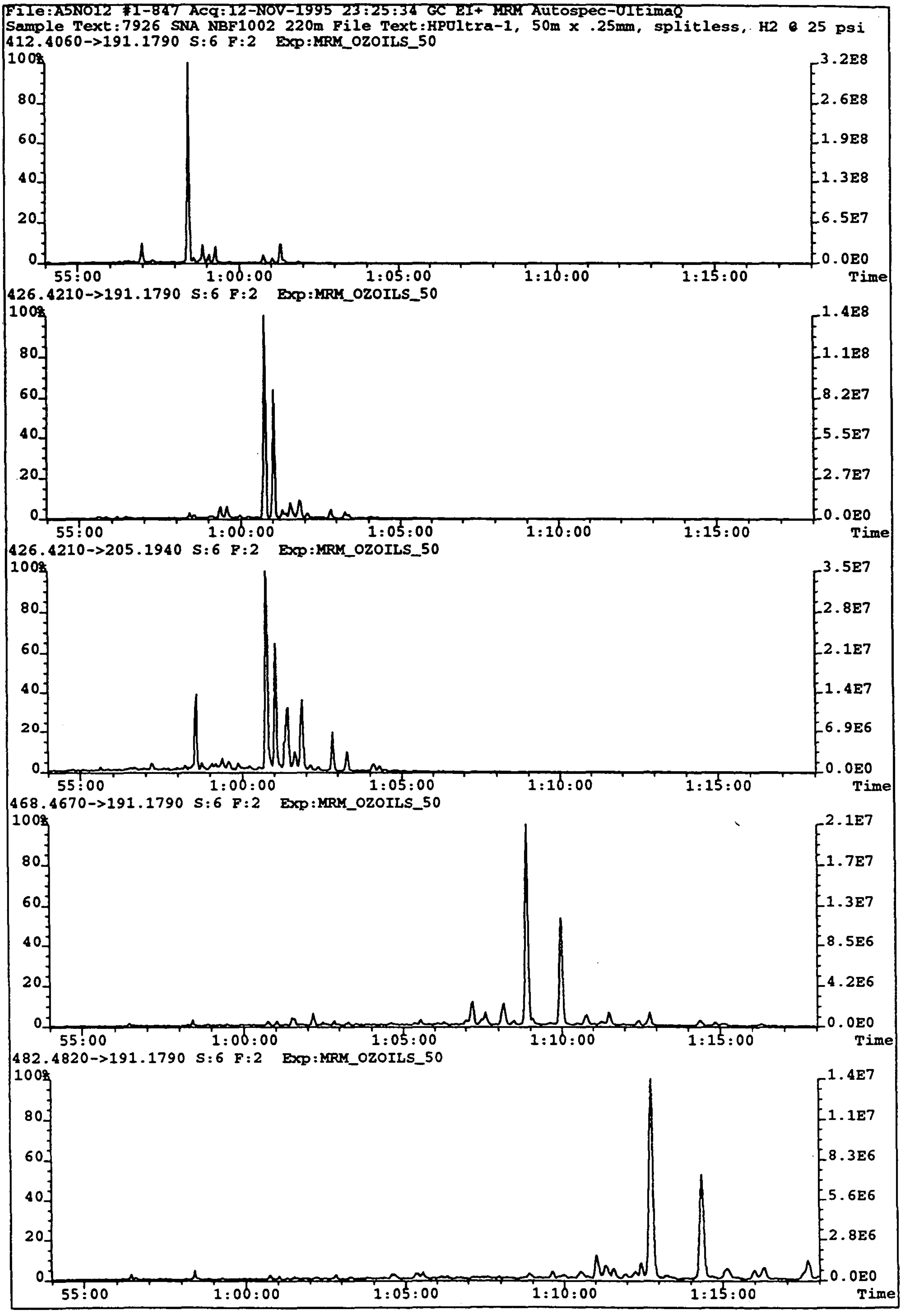

File:A5NO12 #1-1251 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
262.2650->191.1790 S:6 Exp:MRM_OZOILS_50
276.2800->191.1790 S:6 Exp:MRM_OZOILS_50
290.2960->191.1790 S:6 Exp:MRM_OZOILS_50
304.3120->191.1790 S:6 Exp:MRM_OZOILS_50
318.3280->191.1790 S:6 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
2.5E7
2.0E7
1.5E7
1.0E7
5.1E6
0.0E0
5.3E7
4.3E7
3.2E7
2.1E7
1.1E7
1.3E8
1.1E8
8.1E7
5.4E7
2.7E7
1.8E7
1.5E7
1.1E7
7.4E6
3.7E6


File:A5N012 #1-1251 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
332.3440->191.1790 S:6 Exp:MRM_OZOILS_50
9.8E7
346.3590->191.1790 S:6 Exp:MRM_OZOILS_50
5.0E7
330.3280->191.1790 S:6 Exp:MRM_OZOILS_50
3.9E7
360.3740->191.1790 S:6 Exp:MRM_OZOILS_50
2.3E7
Time

File:A5NO12 #1-847 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

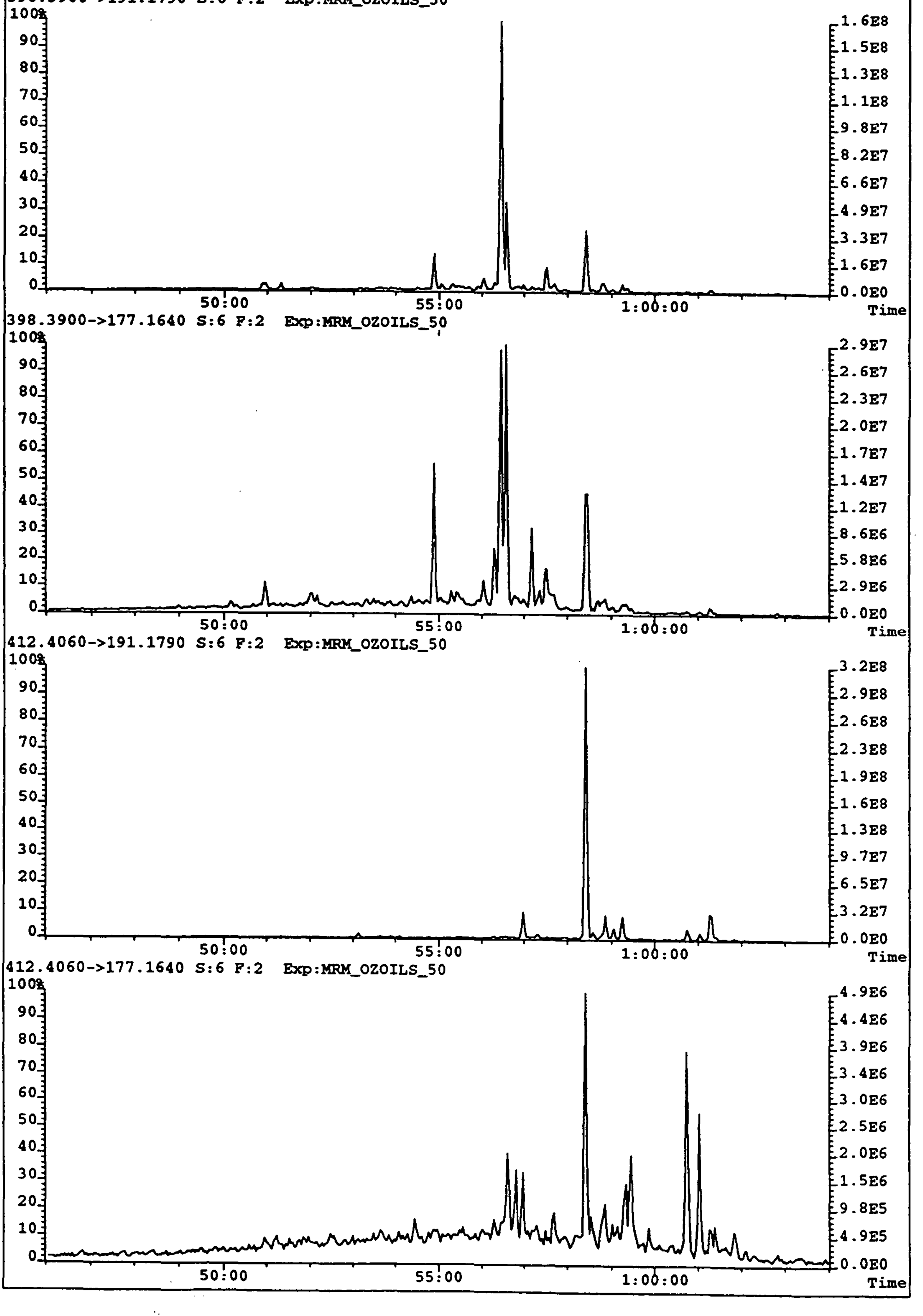


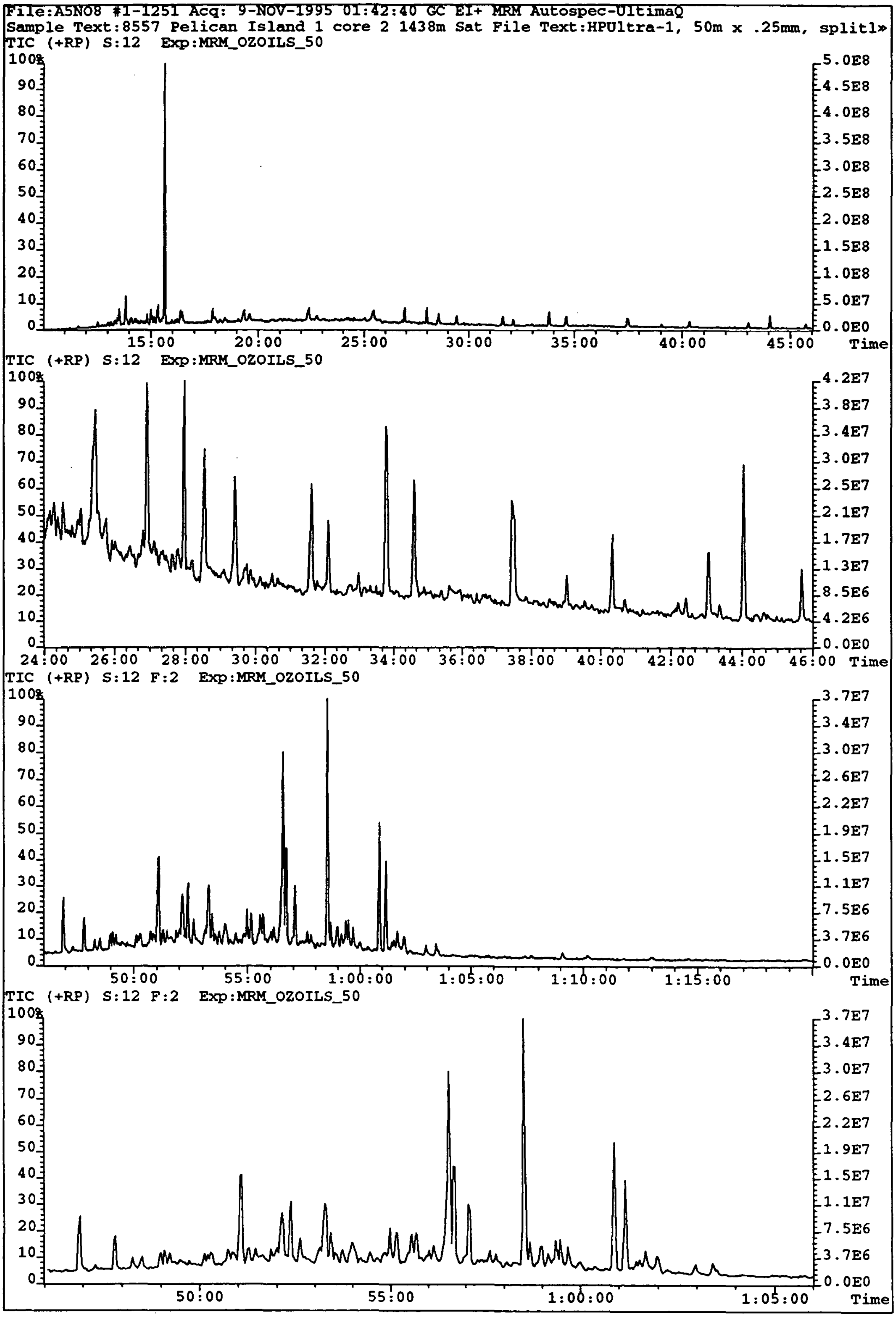

File:A5NO12 #1-847 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
370.3590->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
1.2E8
1.0E8
7.5E7
5.0E7
2.5E7
0.0E0
2.4E7
1.9E7
1.4E7
9.5E6
4.8E6
1.6E8
1.3E8
9.8E7
6.6E7
3.3E7
3.2E8
2.6E8
1.9E8
1.3E8
6.5E7
1.4E8
1.1E8
8.2E7
5.5E7
2.7E7

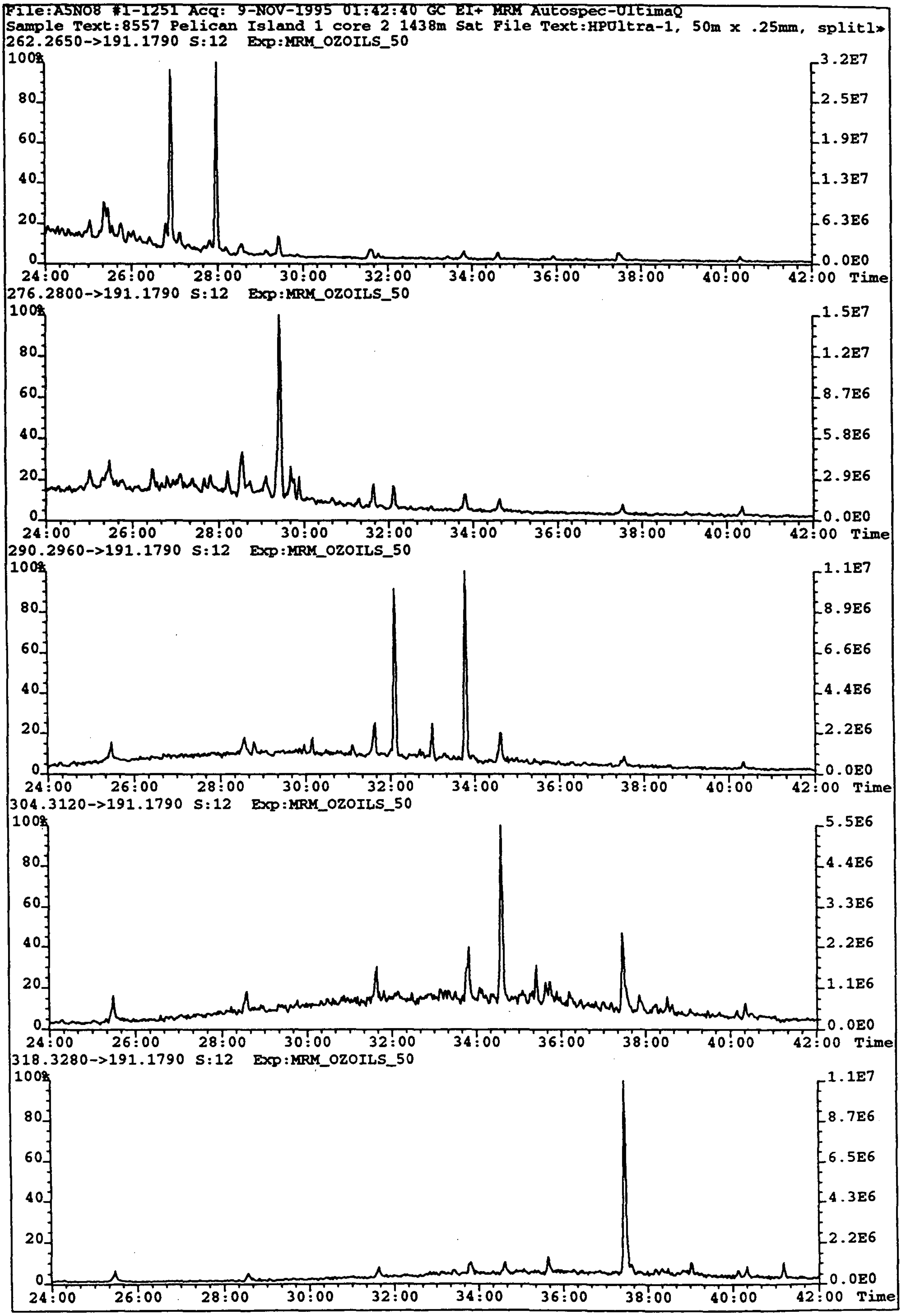


File:A5NO12 #1-847 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi
412.4060->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.2E8
2.6E8
1.9E8
1.3E8
6.5E7
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
1.4E8
1.1E8
8.2E7
5.5E7
2.7E7
0.0E0
426.4210->205.1940 S:6 F:2 Exp:MRM_OZOILS_50
3.5E7
2.8E7
2.1E7
1.4E7
6.9E6
0.0E0
468.4670->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
2.1E7
1.7E7
1.3E7
8.5E6
4.2E6
0.0E0
482.4820->191.1790 S:6 F:2 Exp:MRM_OZOILS_50
1.4E7
1.1E7
8.3E6
5.6E6
2.8E6
0.0E0

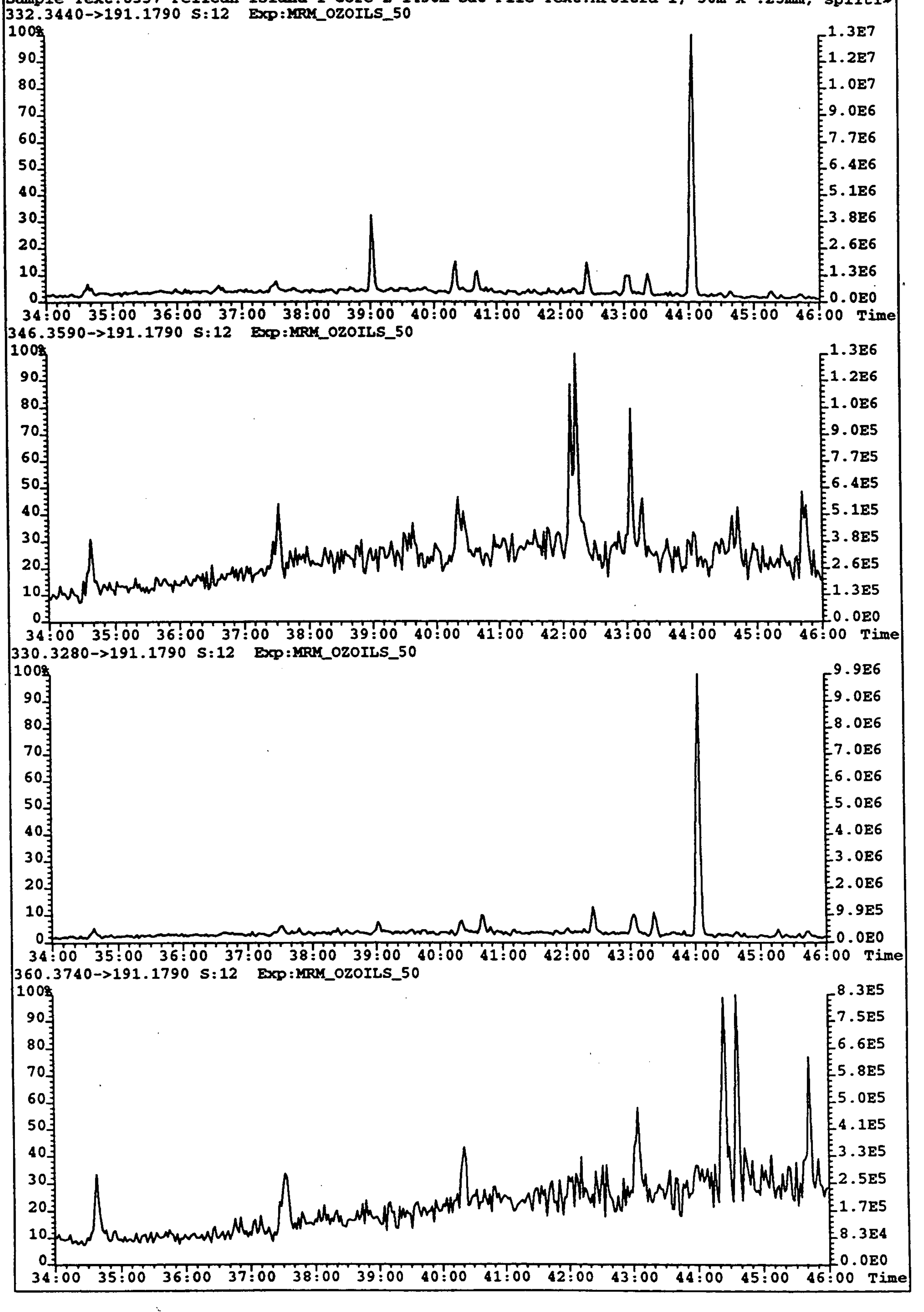
File:A5N012 #1-847 Acq:12-NOV-1995 23:25:34 GC EI+ MRM Autospec-UltimaQ
Sample Text:7926 SNA NBF1002 220m File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 psi

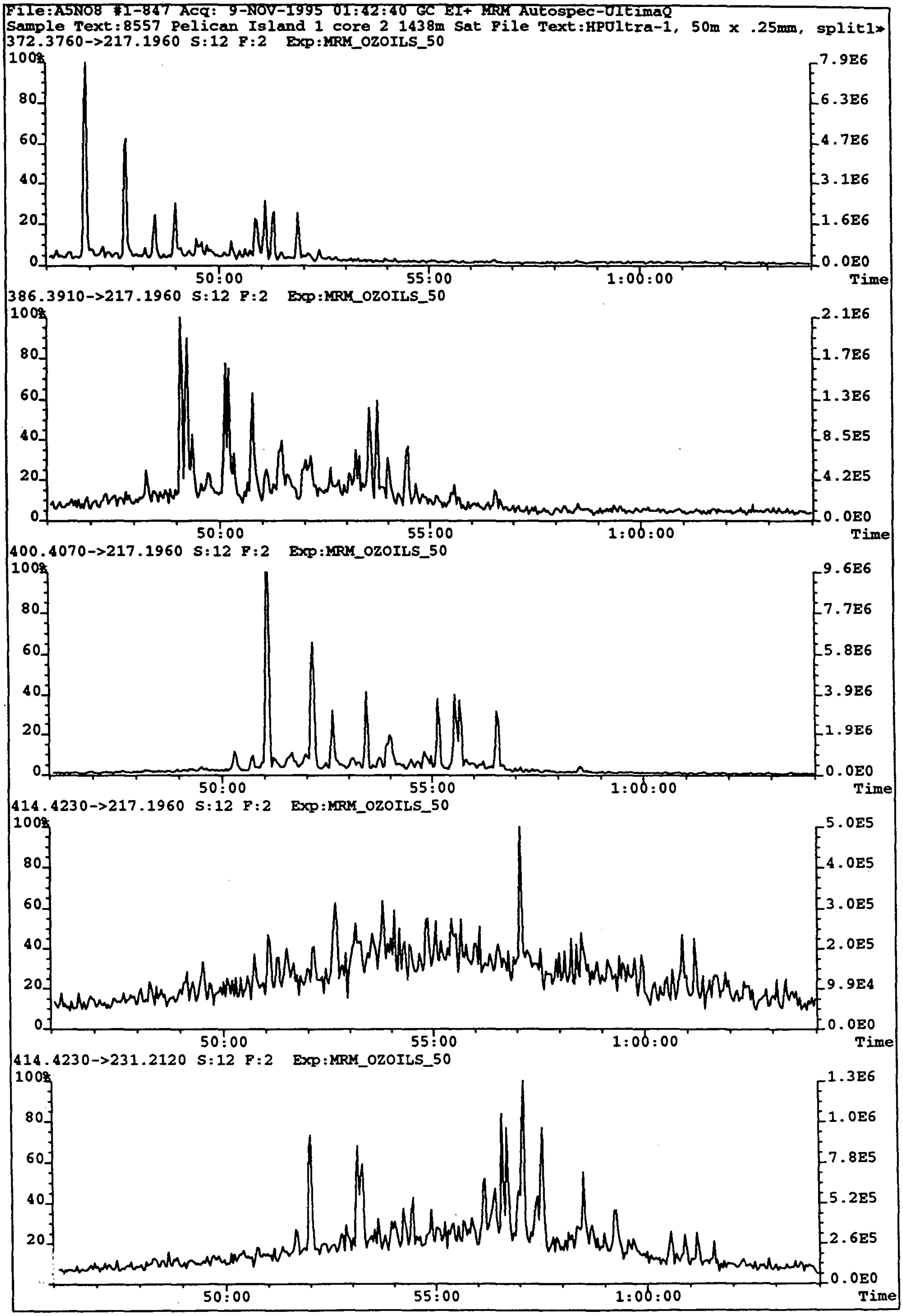


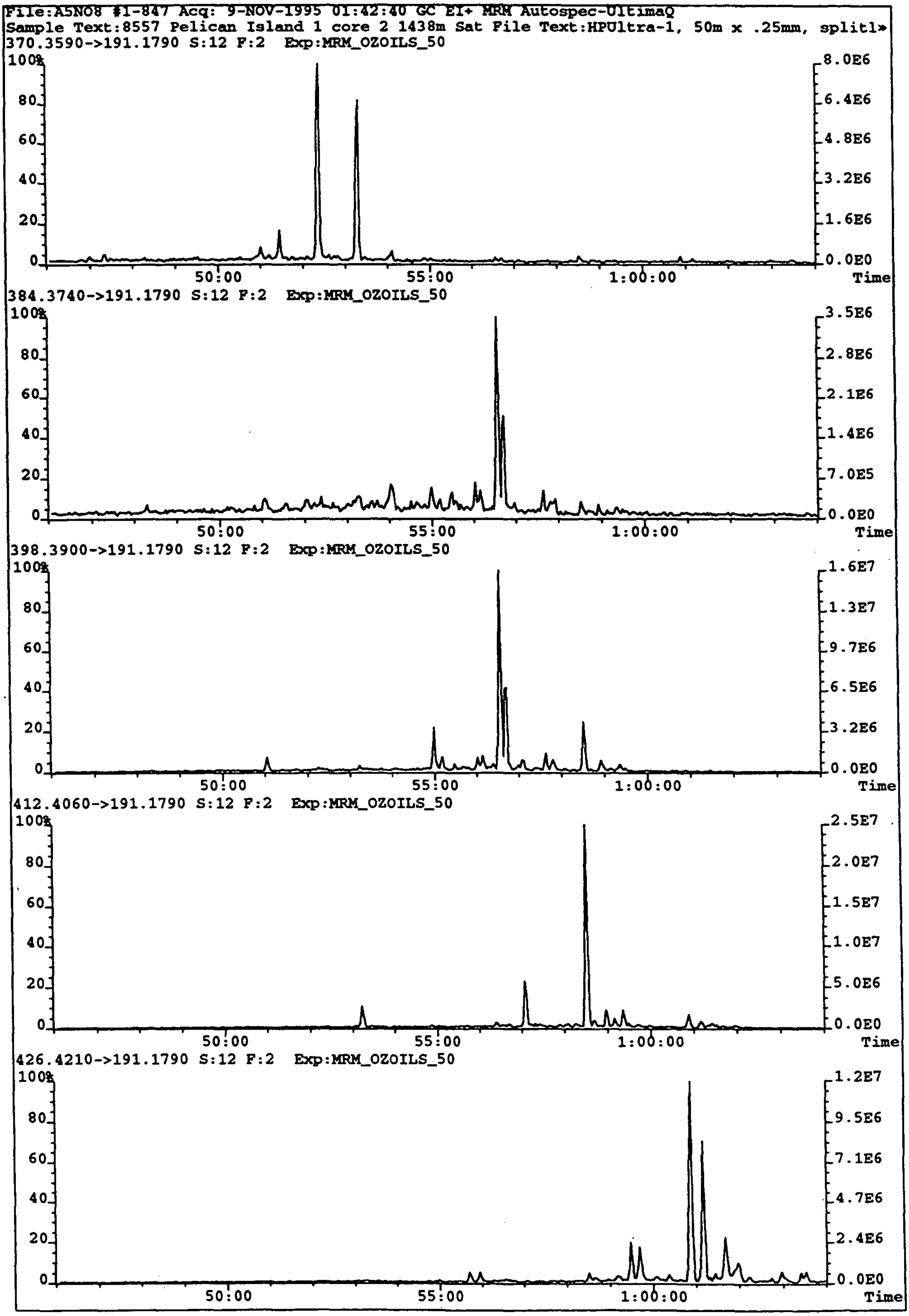

File:A5NO8 #1-1251 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
TIC (+RP) S:12 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
5.0E8
4.5E8
4.0E8
3.5E8
3.0E8
2.5E8
2.0E8
1.5E8
1.0E8
5.0E7
0.0E0
15:00
20:00
25:00
30:00
35:00
40:00
45:00
Time
TIC (+RP) S:12 Exp:MRM_OZOILS_50
4.2E7
3.8E7
3.4E7
3.0E7
2.5E7
2.1E7
1.7E7
1.3E7
8.5E6
4.2E6
0.0E0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
44:00
46:00
Time
TIC (+RP) S:12 F:2 Exp:MRM_OZOILS_50
3.7E7
3.4E7
3.0E7
2.6E7
2.2E7
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
50:00
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
TIC (+RP) S:12 F:2 Exp:MRM_OZOILS_50
3.7E7
3.4E7
3.0E7
2.6E7
2.2E7
1.9E7
1.5E7
1.1E7
7.5E6
3.7E6
0.0E0
50:00
55:00
1:00:00
1:05:00
Time

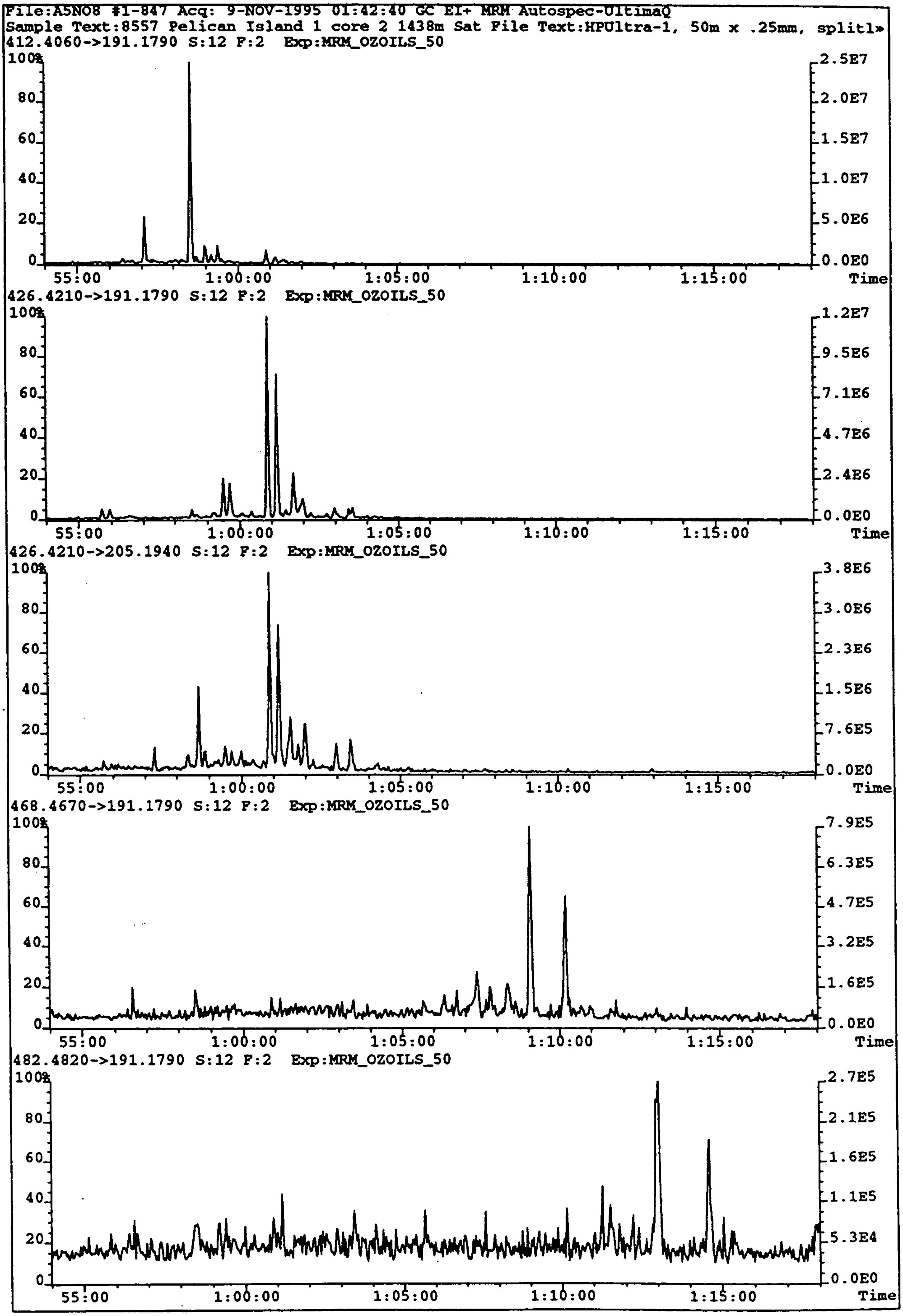

File:A5N08 #1-1251 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
262.2650->191.1790 S:12 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.2E7
2.5E7
1.9E7
1.3E7
6.3E6
0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
276.2800->191.1790 S:12 Exp:MRM_OZOILS_50
1.5E7
1.2E7
8.7E6
5.8E6
2.9E6
0.0E0
290.2960->191.1790 S:12 Exp:MRM_OZOILS_50
1.1E7
8.9E6
6.6E6
4.4E6
2.2E6
0.0E0
304.3120->191.1790 S:12 Exp:MRM_OZOILS_50
5.5E6
4.4E6
3.3E6
2.2E6
1.1E6
0.0E0
318.3280->191.1790 S:12 Exp:MRM_OZOILS_50
1.1E7
8.7E6
6.5E6
4.3E6
2.2E6
0.0E0

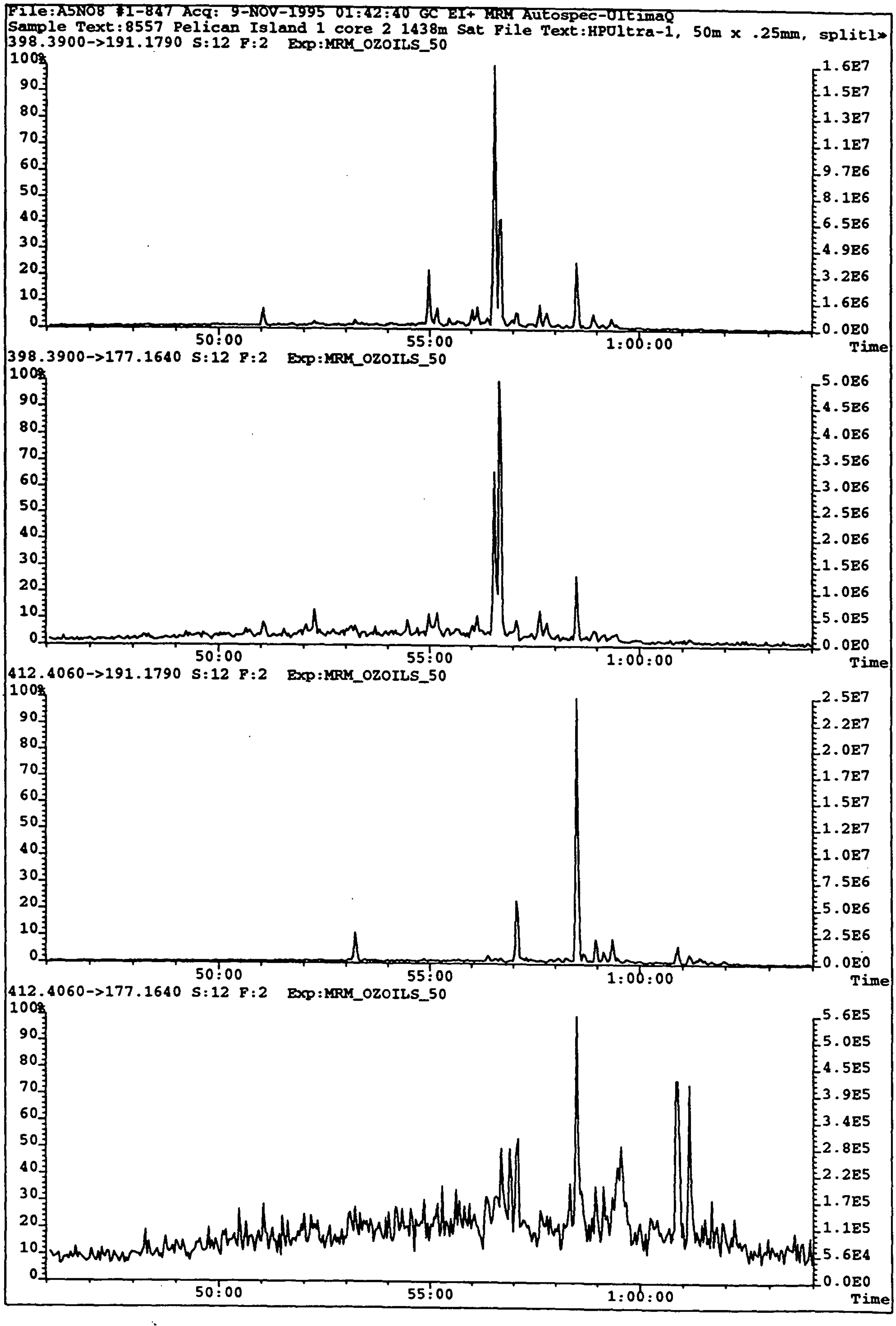
File:A5N08 #1-1251 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»



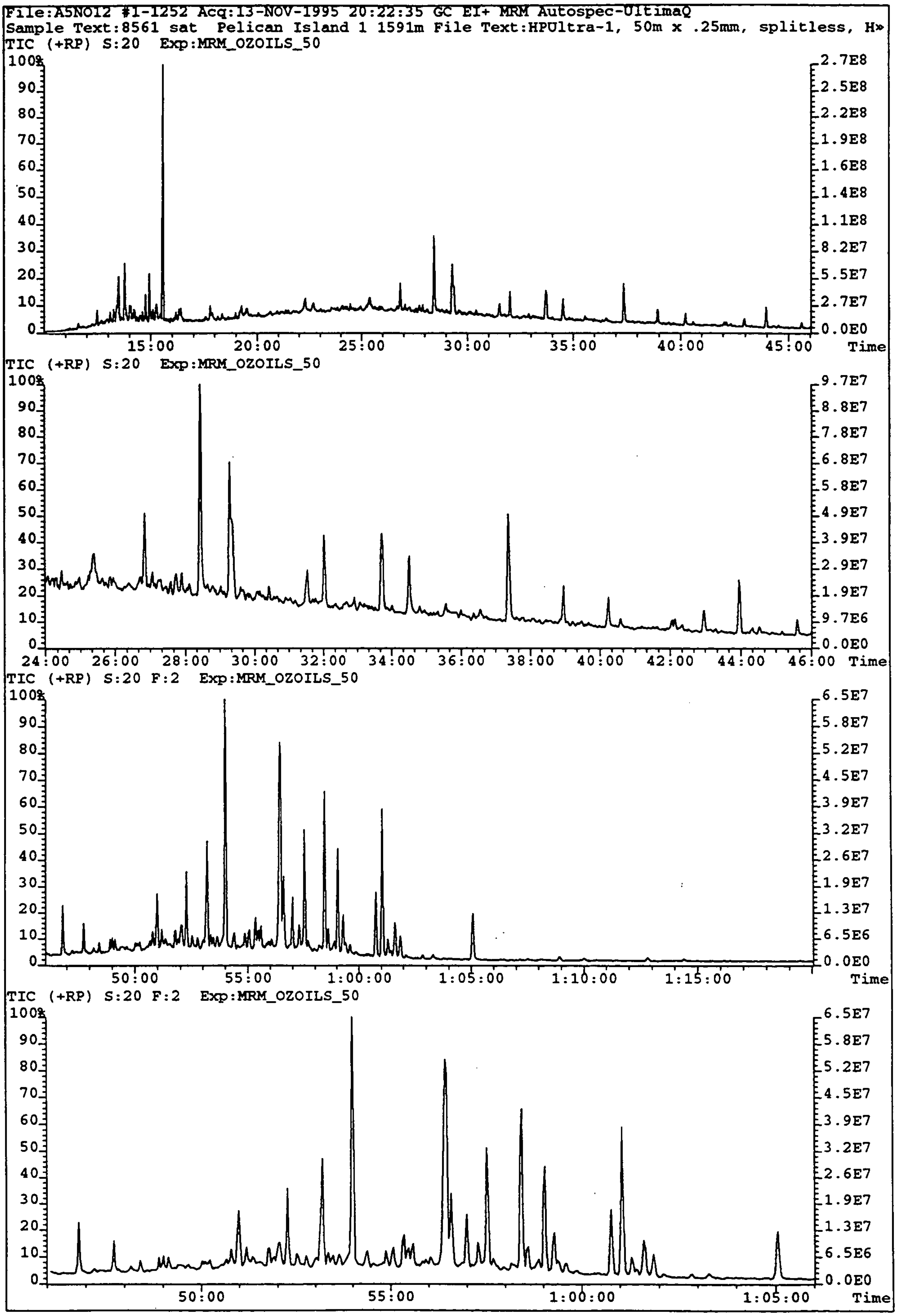

File:A5NO8 #1-847 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
372.3760->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
7.9E6
6.3E6
4.7E6
3.1E6
1.6E6
0.0E0
50:00
55:00
1:00:00
Time
386.3910->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
2.1E6
1.7E6
1.3E6
8.5E5
4.2E5
0.0E0
400.4070->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
9.6E6
7.7E6
5.8E6
3.9E6
1.9E6
0.0E0
414.4230->217.1960 S:12 F:2 Exp:MRM_OZOILS_50
5.0E5
4.0E5
3.0E5
2.0E5
9.9E4
0.0E0
414.4230->231.2120 S:12 F:2 Exp:MRM_OZOILS_50
1.3E6
1.0E6
7.8E5
5.2E5
2.6E5
0.0E0

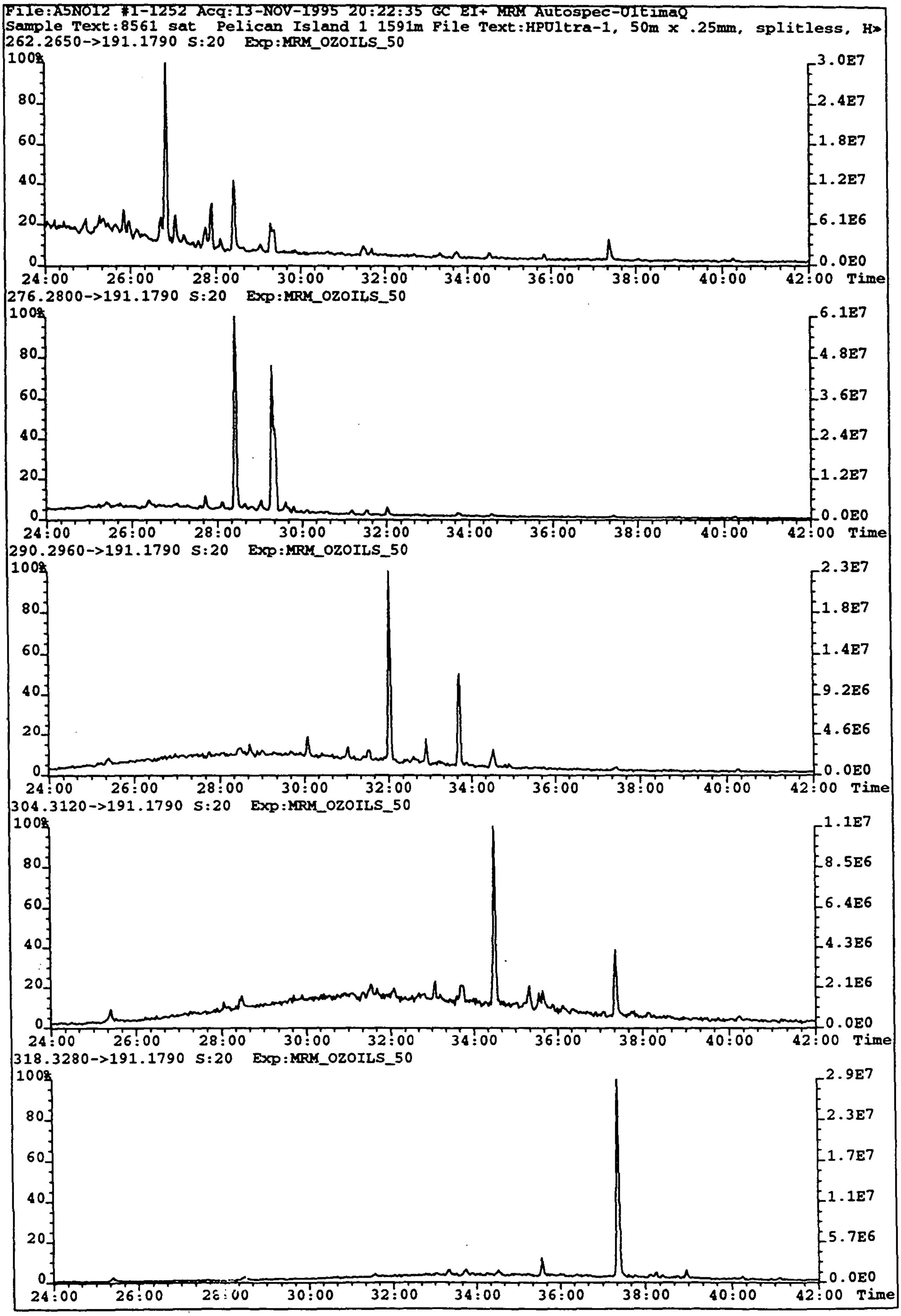

File:A5N08 #1-847 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
370.3590->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
8.0E6
6.4E6
4.8E6
3.2E6
1.6E6
0.0E0
50:00
55:00
1:00:00
Time
384.3740->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
3.5E6
2.8E6
2.1E6
1.4E6
7.0E5
0.0E0
398.3900->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
1.6E7
1.3E7
9.7E6
6.5E6
3.2E6
0.0E0
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
2.5E7
2.0E7
1.5E7
1.0E7
5.0E6
0.0E0
426.4210->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
1.2E7
9.5E6
7.1E6
4.7E6
2.4E6
0.0E0

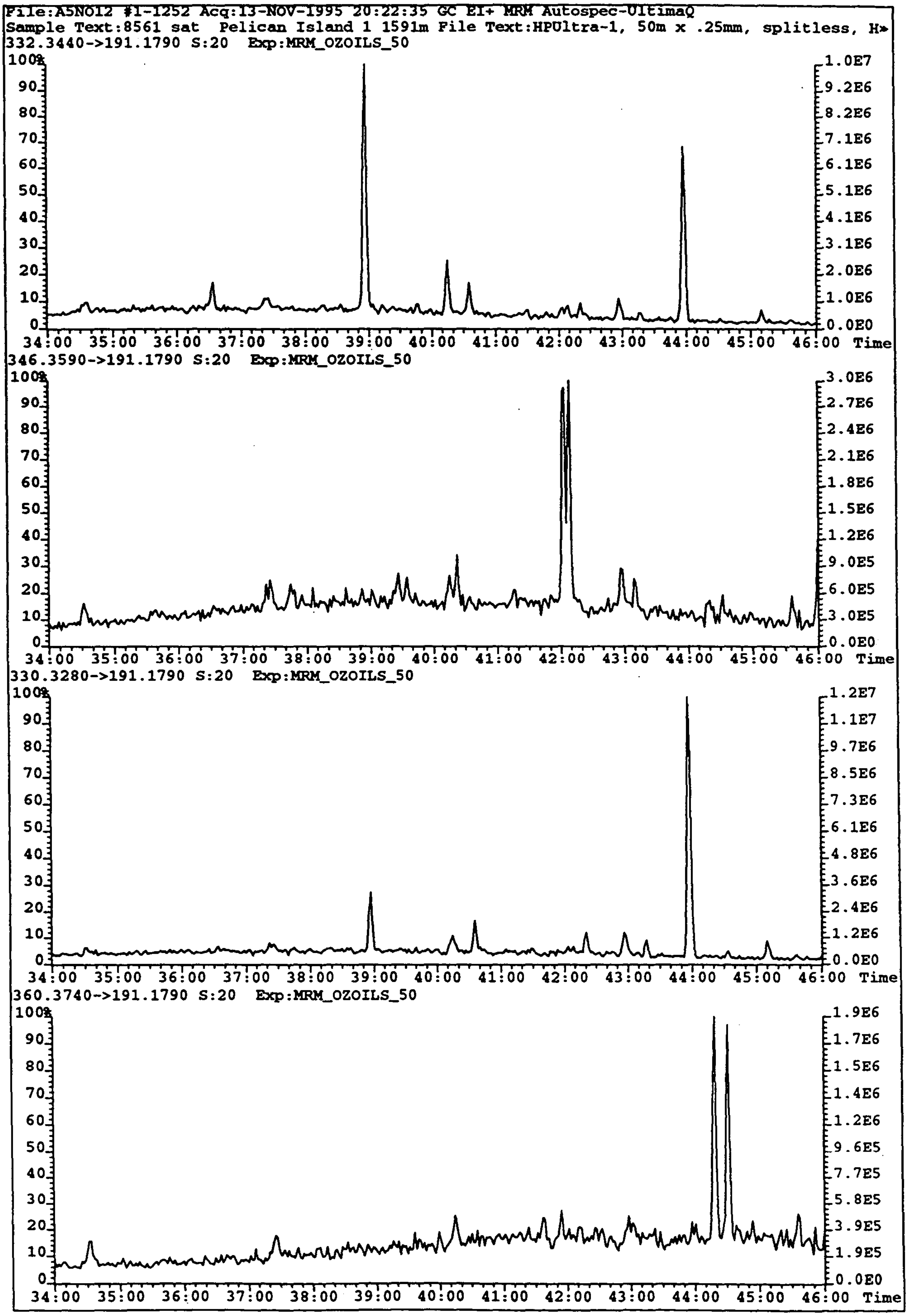

File:A5NO8 #1-847 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.5E7
2.0E7
1.5E7
1.0E7
5.0E6
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
1.2E7
9.5E6
7.1E6
4.7E6
2.4E6
0.0E0
426.4210->205.1940 S:12 F:2 Exp:MRM_OZOILS_50
3.8E6
3.0E6
2.3E6
1.5E6
7.6E5
0.0E0
468.4670->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
7.9E5
6.3E5
4.7E5
3.2E5
1.6E5
0.0E0
482.4820->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
2.7E5
2.1E5
1.6E5
1.1E5
5.3E4
0.0E0

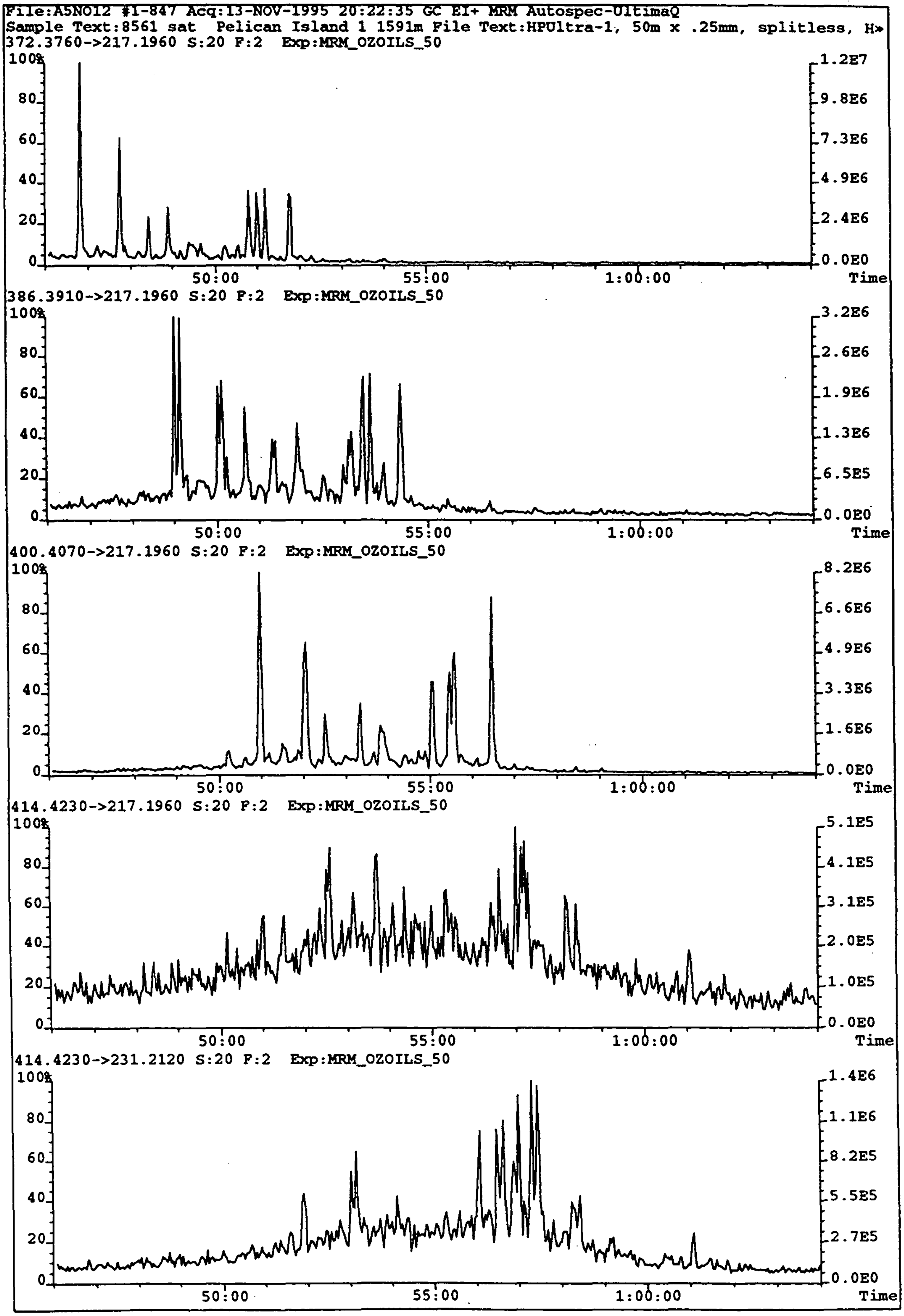


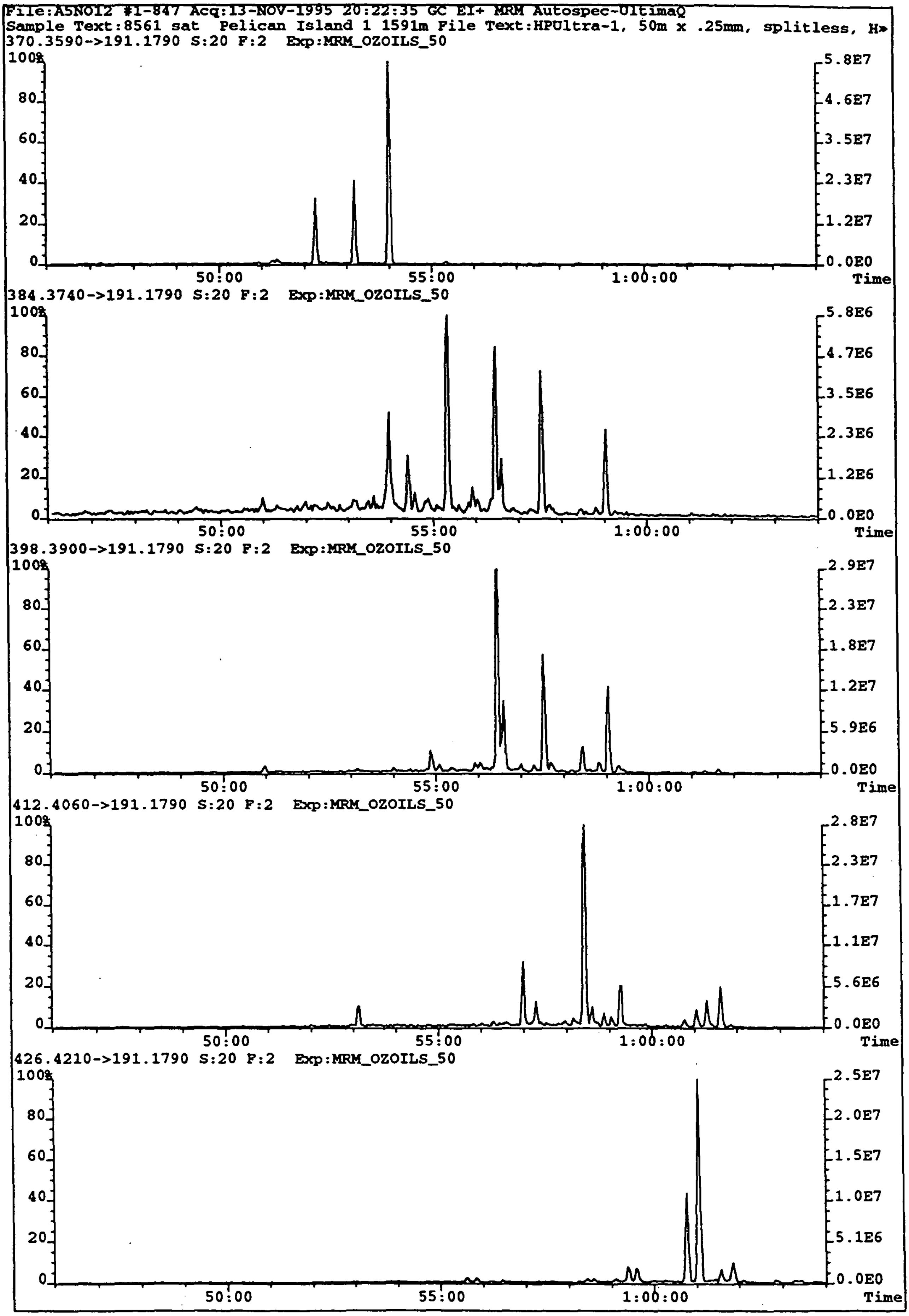
File:A5NO8 #1-847 Acq: 9-NOV-1995 01:42:40 GC EI+ MRM Autospec-UltimaQ
Sample Text:8557 Pelican Island 1 core 2 1438m Sat File Text:HPUltra-1, 50m x .25mm, splitl»
398.3900->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:12 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:12 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:12 F:2 Exp:MRM_OZOILS_50
100%
50:00
55:00
1:00:00
Time
1.6E7
5.0E6
2.5E7
5.6E5
0.0E0


File:A5NOI2 #1-1252 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»
TIC (+RP) S:20 Exp:MRM_OZOILS_50
100%
2.7E8
Time
TIC (+RP) S:20 Exp:MRM_OZOILS_50
9.7E7
Time
TIC (+RP) S:20 F:2 Exp:MRM_OZOILS_50
6.5E7
Time
TIC (+RP) S:20 F:2 Exp:MRM_OZOILS_50
6.5E7
Time

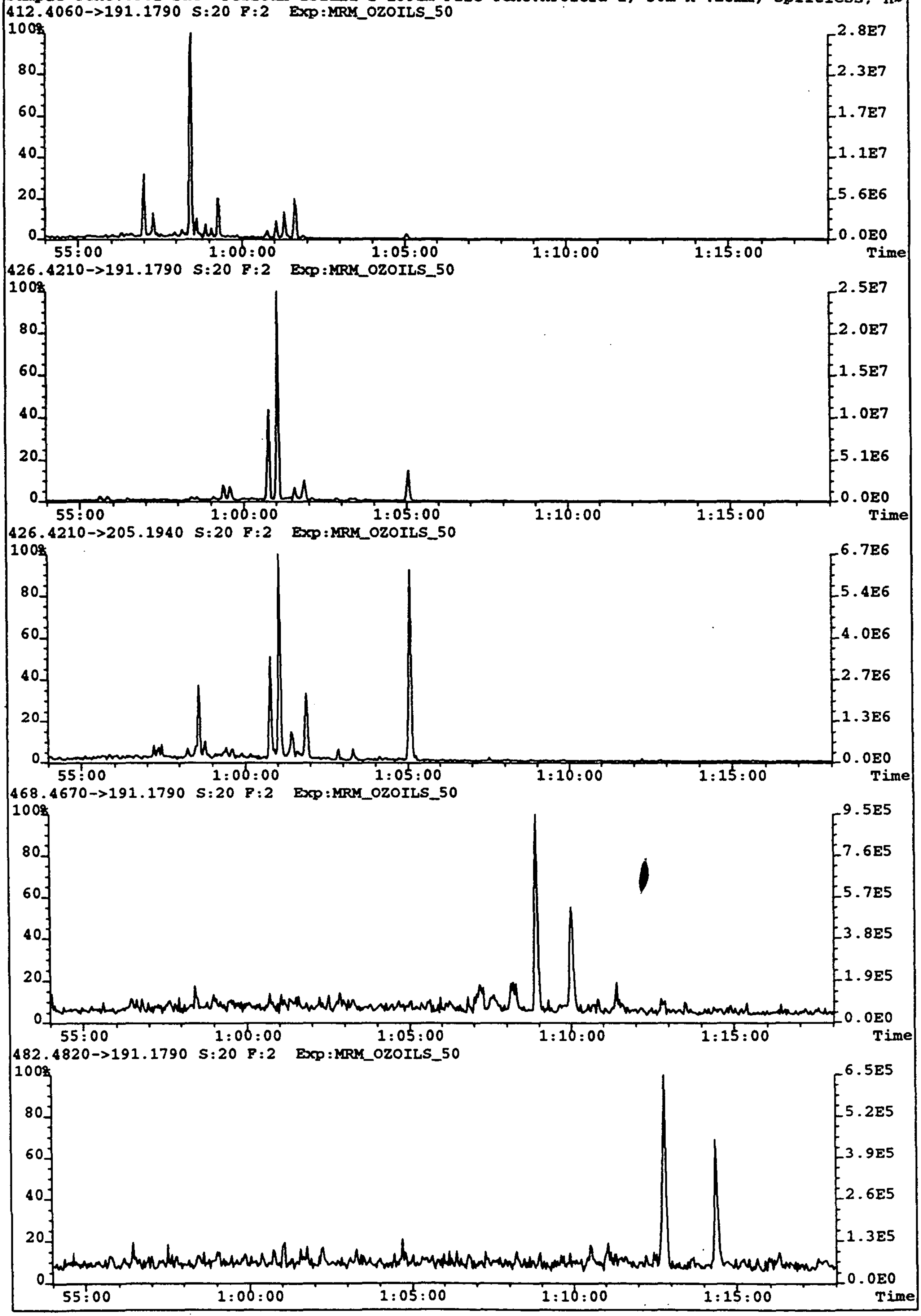

File:A5NO12 #1-1252 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»
262.2650->191.1790 S:20 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
3.0E7
2.4E7
1.8E7
1.2E7
6.1E6
0.0E0
24:00 26:00 28:00 30:00 32:00 34:00 36:00 38:00 40:00 42:00 Time
276.2800->191.1790 S:20 Exp:MRM_OZOILS_50
6.1E7
4.8E7
3.6E7
2.4E7
1.2E7
0.0E0
290.2960->191.1790 S:20 Exp:MRM_OZOILS_50
2.3E7
1.8E7
1.4E7
9.2E6
4.6E6
0.0E0
304.3120->191.1790 S:20 Exp:MRM_OZOILS_50
1.1E7
8.5E6
6.4E6
4.3E6
2.1E6
0.0E0
318.3280->191.1790 S:20 Exp:MRM_OZOILS_50
2.9E7
2.3E7
1.7E7
1.1E7
5.7E6
0.0E0

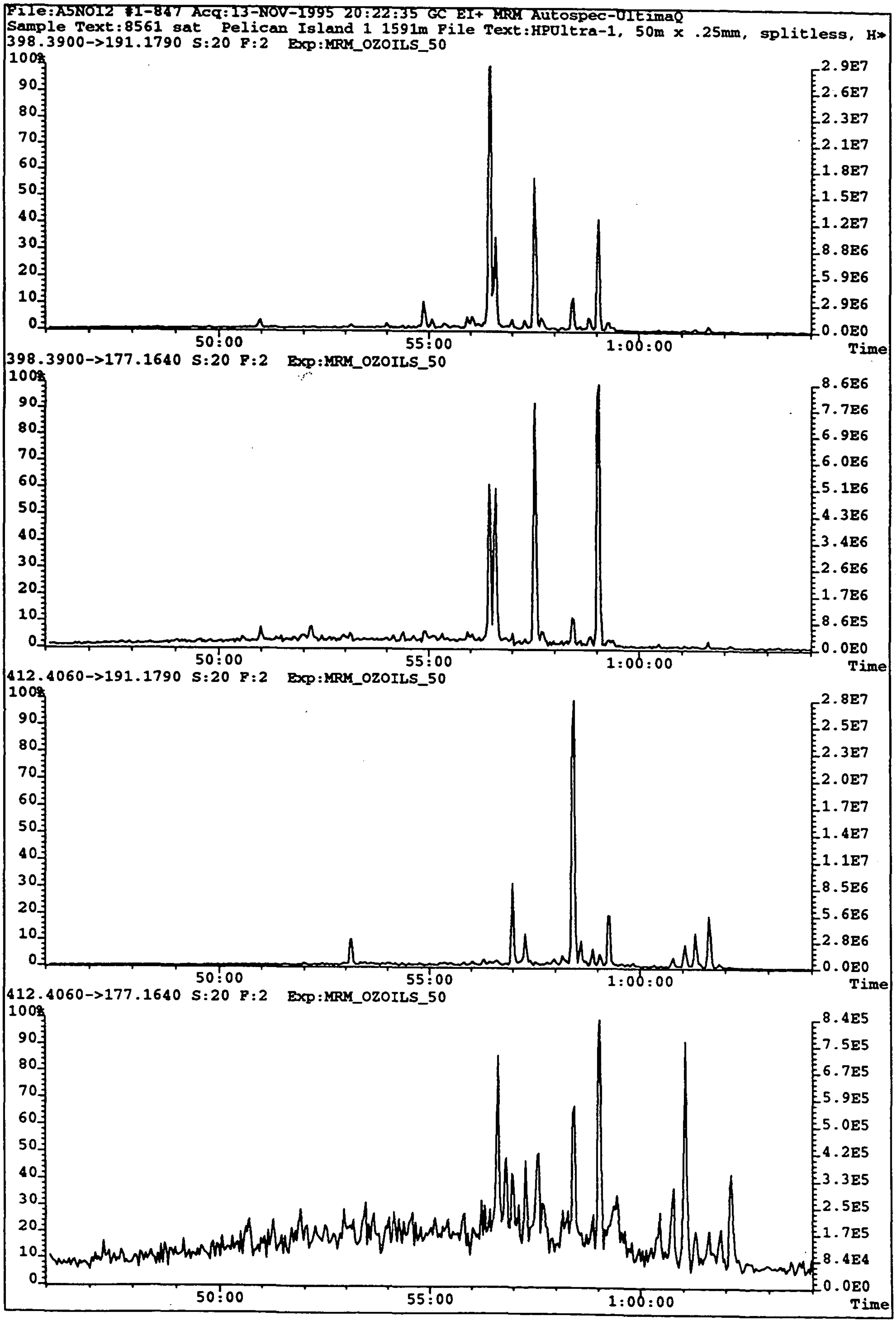

File:A5N012 #1-1252 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H▸
332.3440->191.1790 S:20 Exp:MRM_OZOILS_50
100%
90
80
70
60
50
40
30
20
10
0
1.0E7
9.2E6
8.2E6
7.1E6
6.1E6
5.1E6
4.1E6
3.1E6
2.0E6
1.0E6
0.0E0
34:00 35:00 36:00 37:00 38:00 39:00 40:00 41:00 42:00 43:00 44:00 45:00 46:00 Time
346.3590->191.1790 S:20 Exp:MRM_OZOILS_50
3.0E6
2.7E6
2.4E6
2.1E6
1.8E6
1.5E6
1.2E6
9.0E5
6.0E5
3.0E5
0.0E0
330.3280->191.1790 S:20 Exp:MRM_OZOILS_50
1.2E7
1.1E7
9.7E6
8.5E6
7.3E6
6.1E6
4.8E6
3.6E6
2.4E6
1.2E6
0.0E0
360.3740->191.1790 S:20 Exp:MRM_OZOILS_50
1.9E6
1.7E6
1.5E6
1.4E6
1.2E6
9.6E5
7.7E5
5.8E5
3.9E5
1.9E5
0.0E0


File:A5NO12 #1-847 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»
372.3760->217.1960 S:20 F:2 Exp:MRM_OZOILS_50
1.2E7
9.8E6
7.3E6
4.9E6
2.4E6
0.0E0
386.3910->217.1960 S:20 F:2 Exp:MRM_OZOILS_50
3.2E6
2.6E6
1.9E6
1.3E6
6.5E5
0.0E0
400.4070->217.1960 S:20 F:2 Exp:MRM_OZOILS_50
8.2E6
6.6E6
4.9E6
3.3E6
1.6E6
0.0E0
414.4230->217.1960 S:20 F:2 Exp:MRM_OZOILS_50
5.1E5
4.1E5
3.1E5
2.0E5
1.0E5
0.0E0
414.4230->231.2120 S:20 F:2 Exp:MRM_OZOILS_50
1.4E6
1.1E6
8.2E5
5.5E5
2.7E5
0.0E0
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time

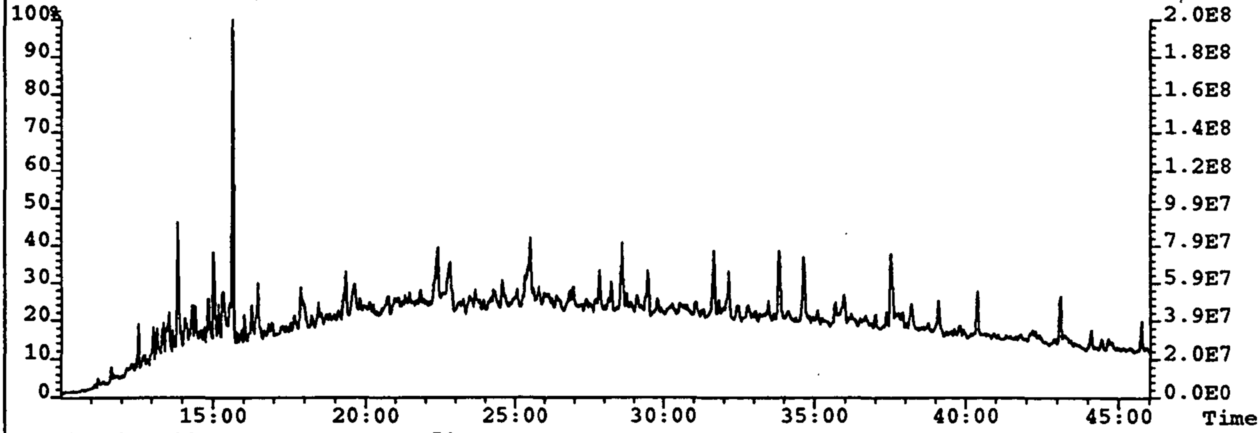

File:A5N012 #1-847 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»
370.3590->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time

File:A5NO12 #1-847 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»

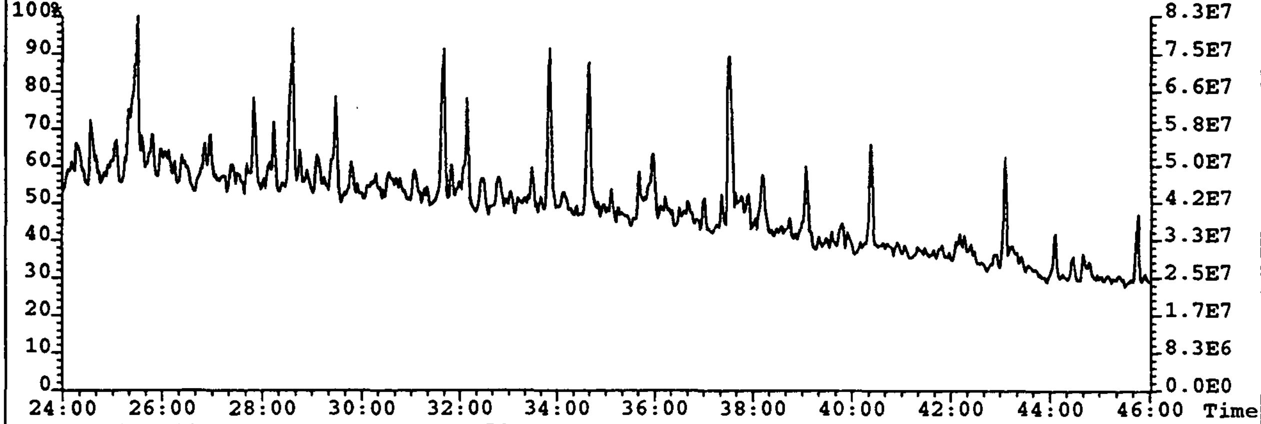



File:A5NO12 #1-847 Acq:13-NOV-1995 20:22:35 GC EI+ MRM Autospec-UltimaQ
Sample Text:8561 sat Pelican Island 1 1591m File Text:HPUltra-1, 50m x .25mm, splitless, H»
398.3900->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
398.3900->177.1640 S:20 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:20 F:2 Exp:MRM_OZOILS_50
412.4060->177.1640 S:20 F:2 Exp:MRM_OZOILS_50
50:00
55:00
1:00:00
Time
2.9E7
8.6E6
2.8E7
8.4E5

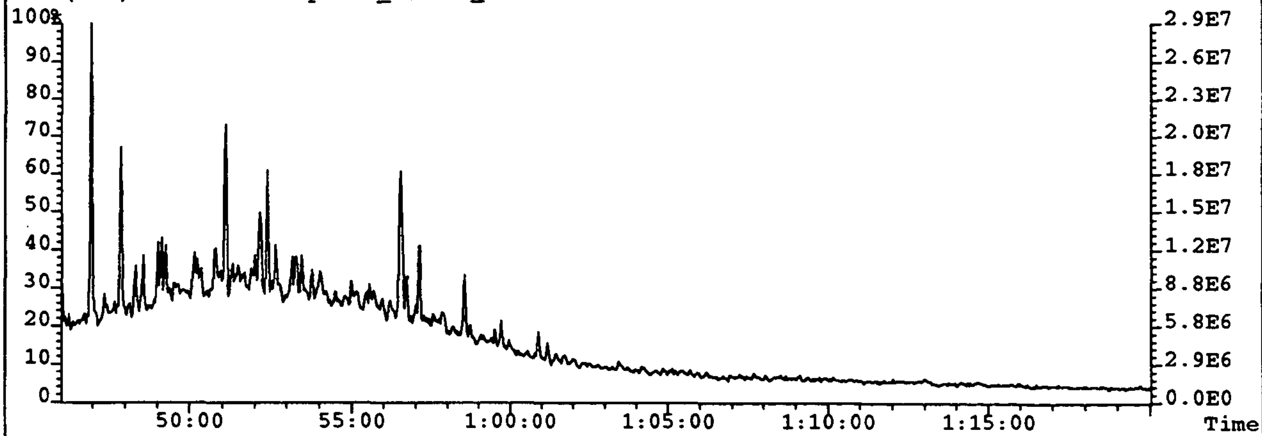
File:A5N08 #1-1251 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
TIC (+RP) S:11 Exp:MRM_OZOILS_50



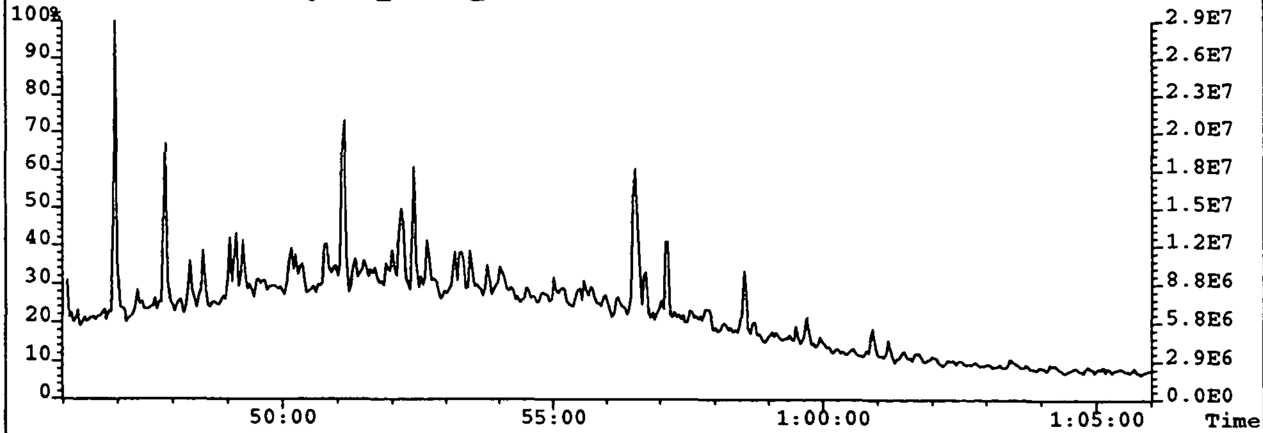
TIC (+RP) S:11 Exp:MRM_OZOILS_50



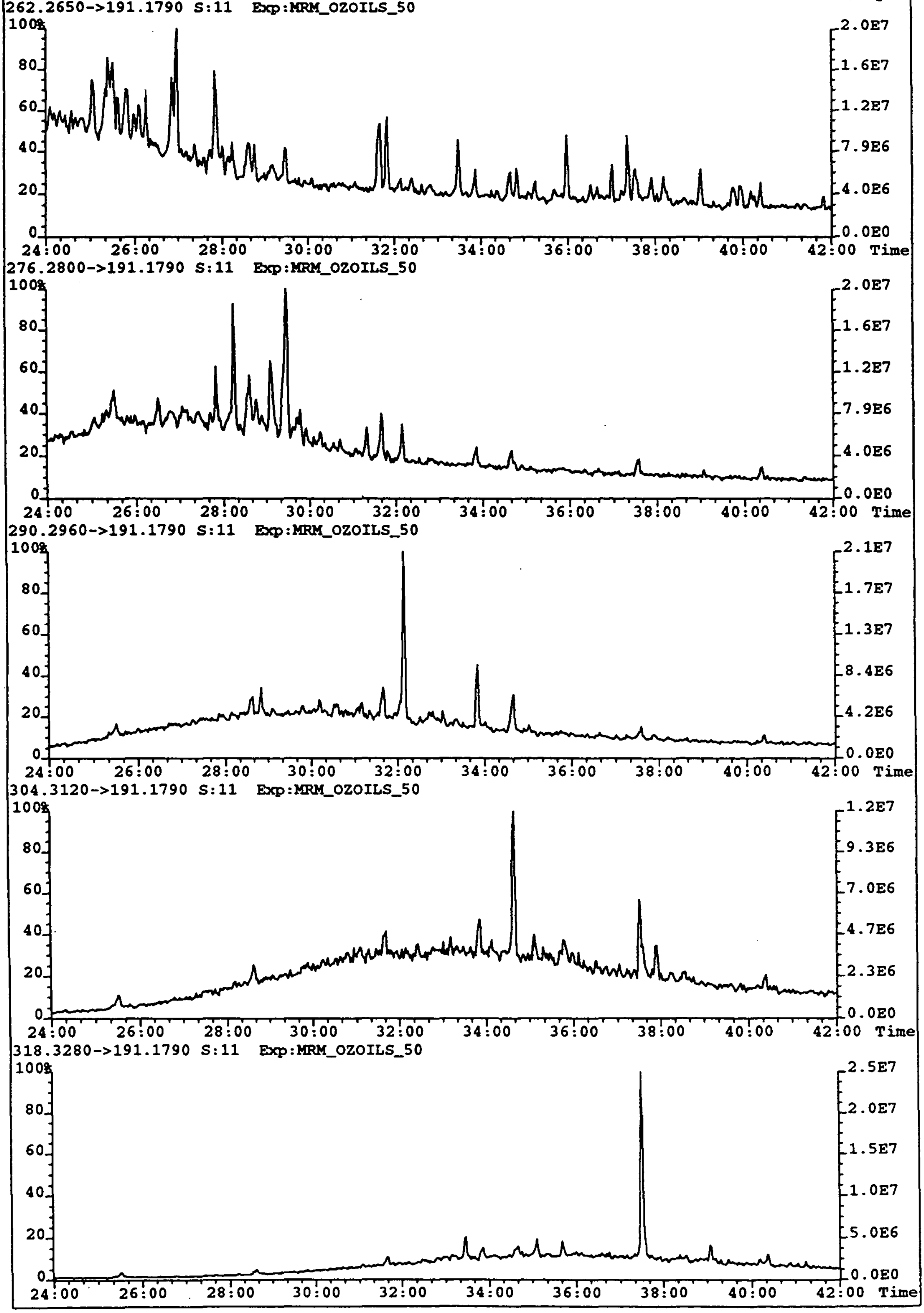
TIC (+RP) S:11 F:2 Exp:MRM_OZOILS_50

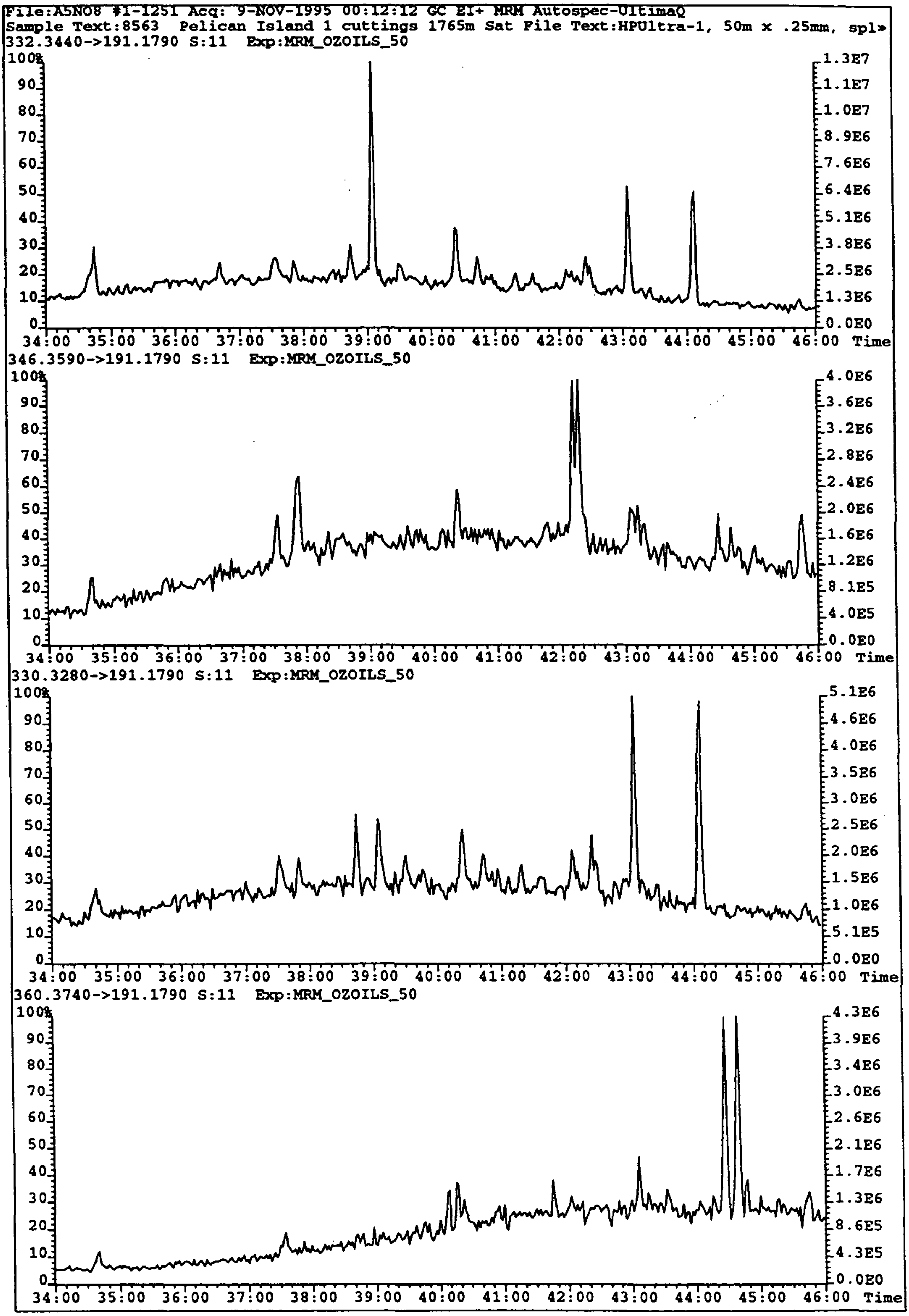


TIC (+RP) S:11 F:2 Exp:MRM_OZOILS_50

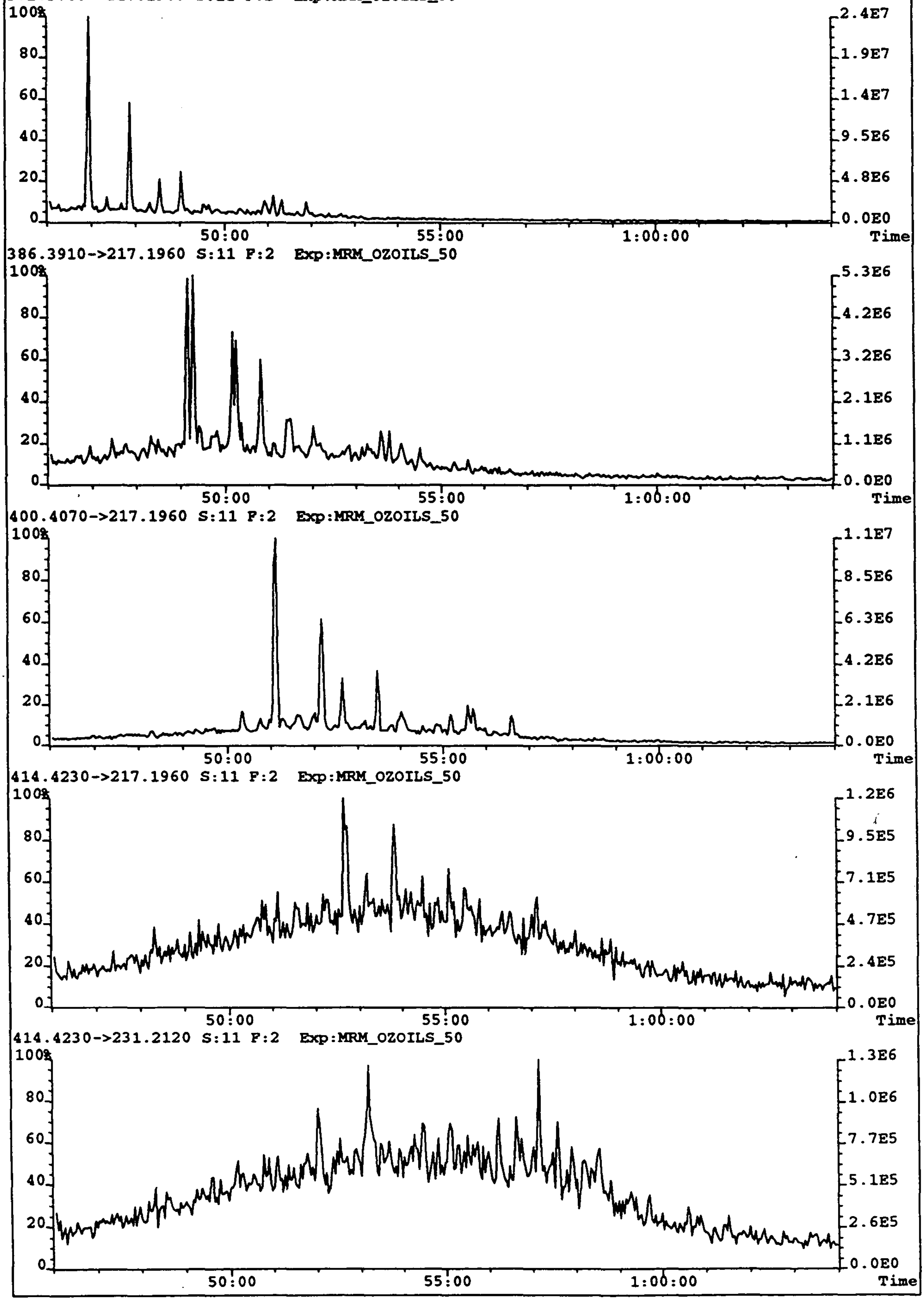


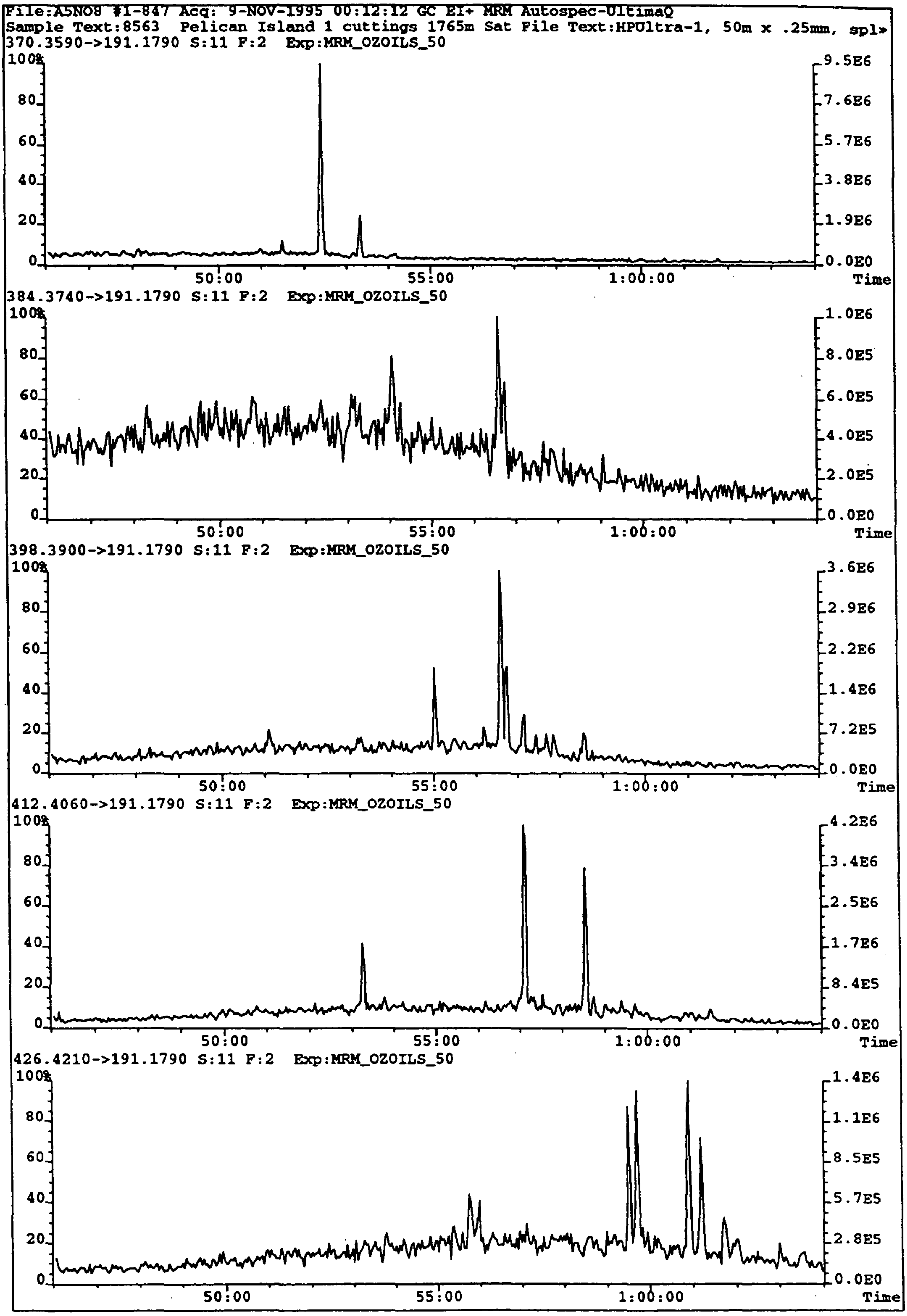
File:A5N08 #1-1251 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»

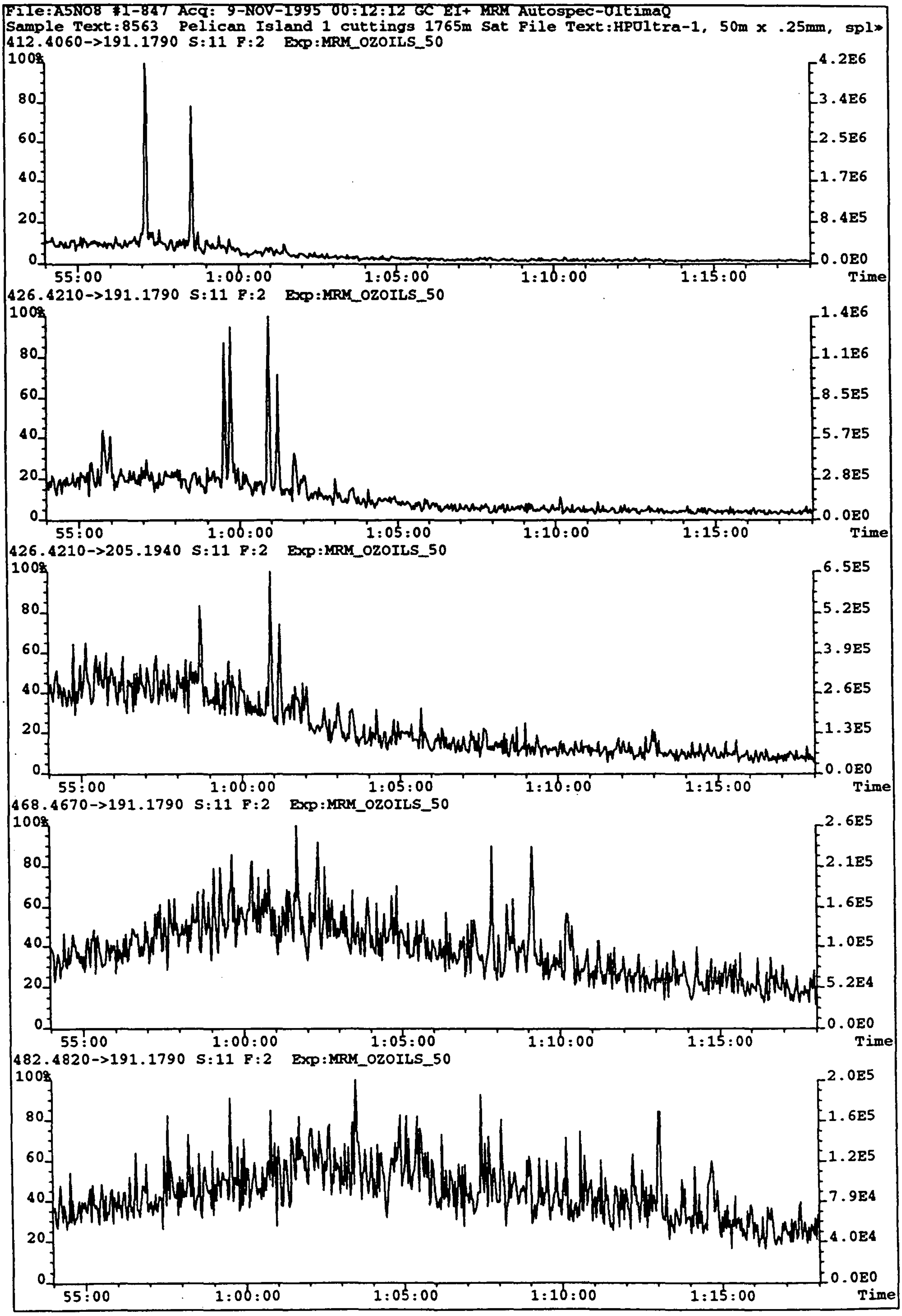


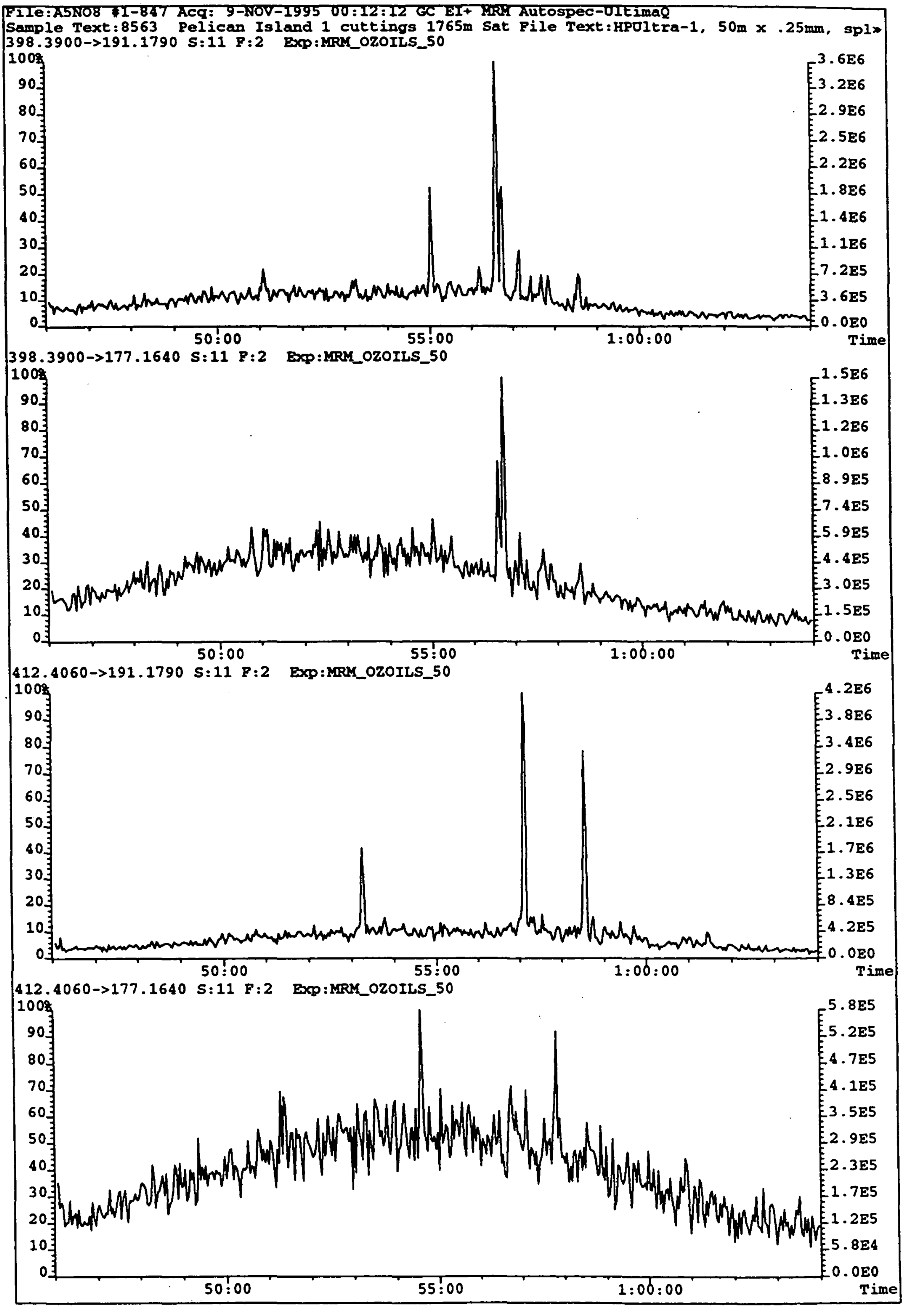

File:A5N08 #1-1251 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
332.3440->191.1790 S:11 Exp:MRM_OZOILS_50
346.3590->191.1790 S:11 Exp:MRM_OZOILS_50
330.3280->191.1790 S:11 Exp:MRM_OZOILS_50
360.3740->191.1790 S:11 Exp:MRM_OZOILS_50
Time

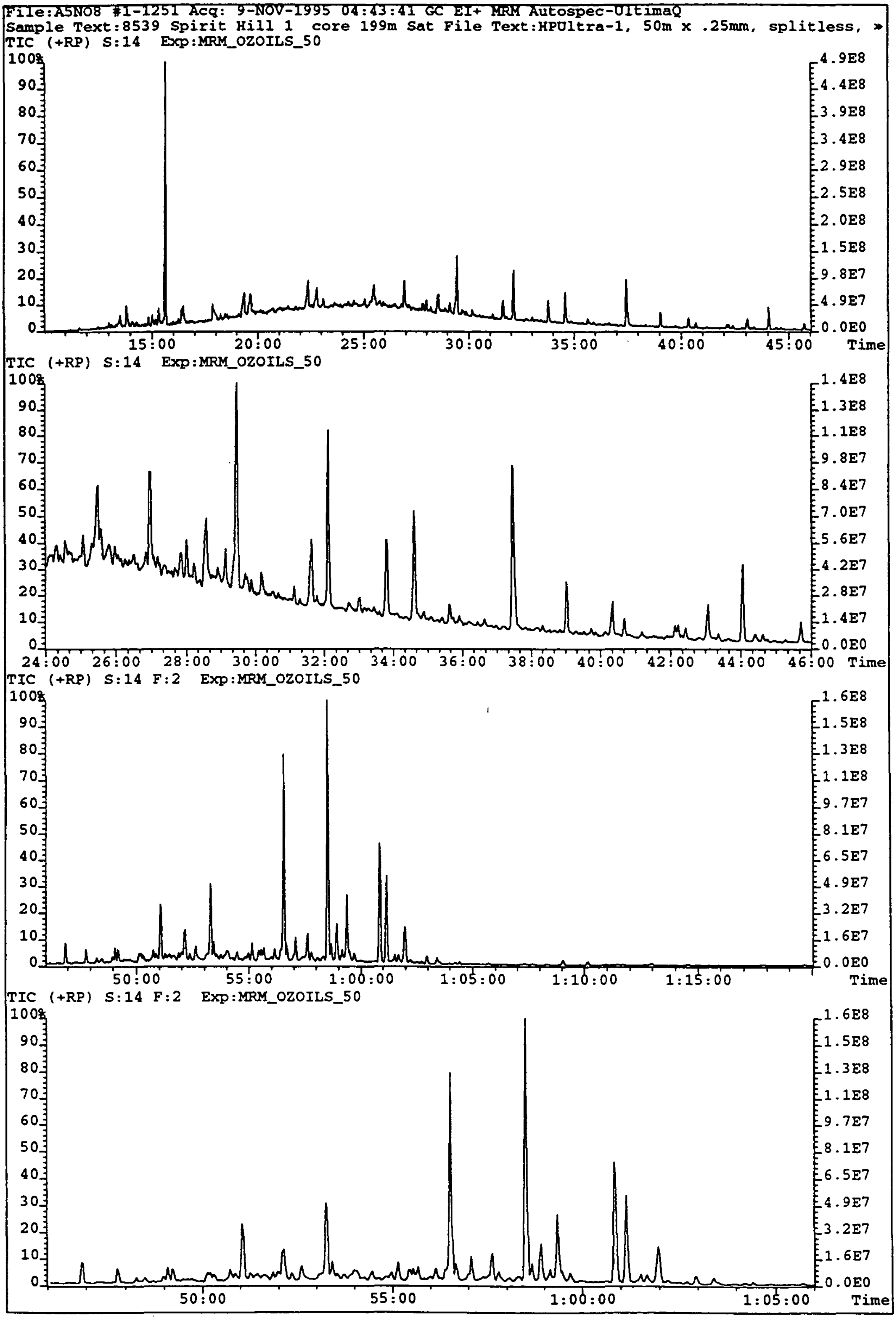
File:A5N08 #1-847 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
372.3760->217.1960 S:11 F:2 Exp:MRM_OZOILS_50

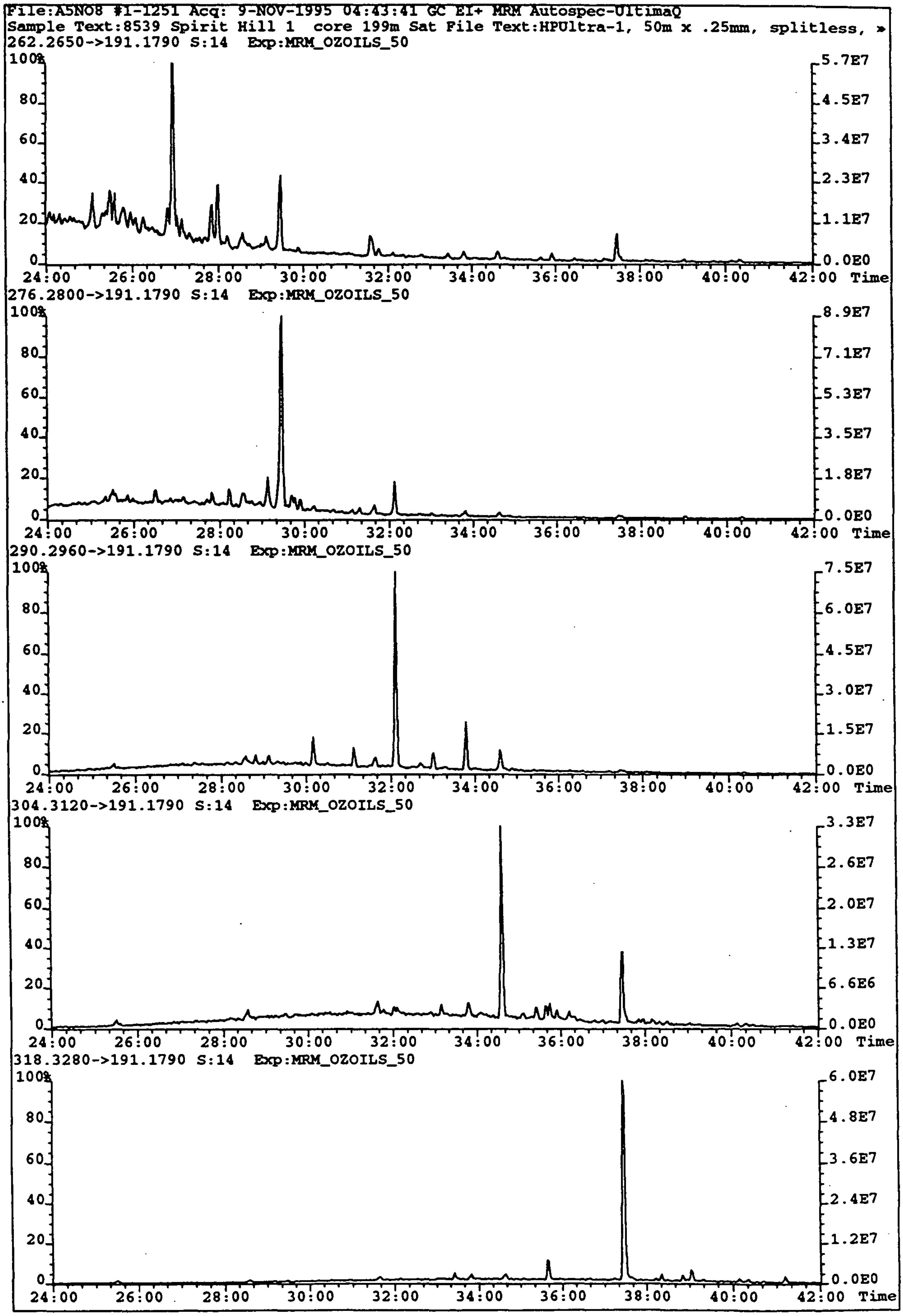



File:A5NO8 #1-847 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
370.3590->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
Time

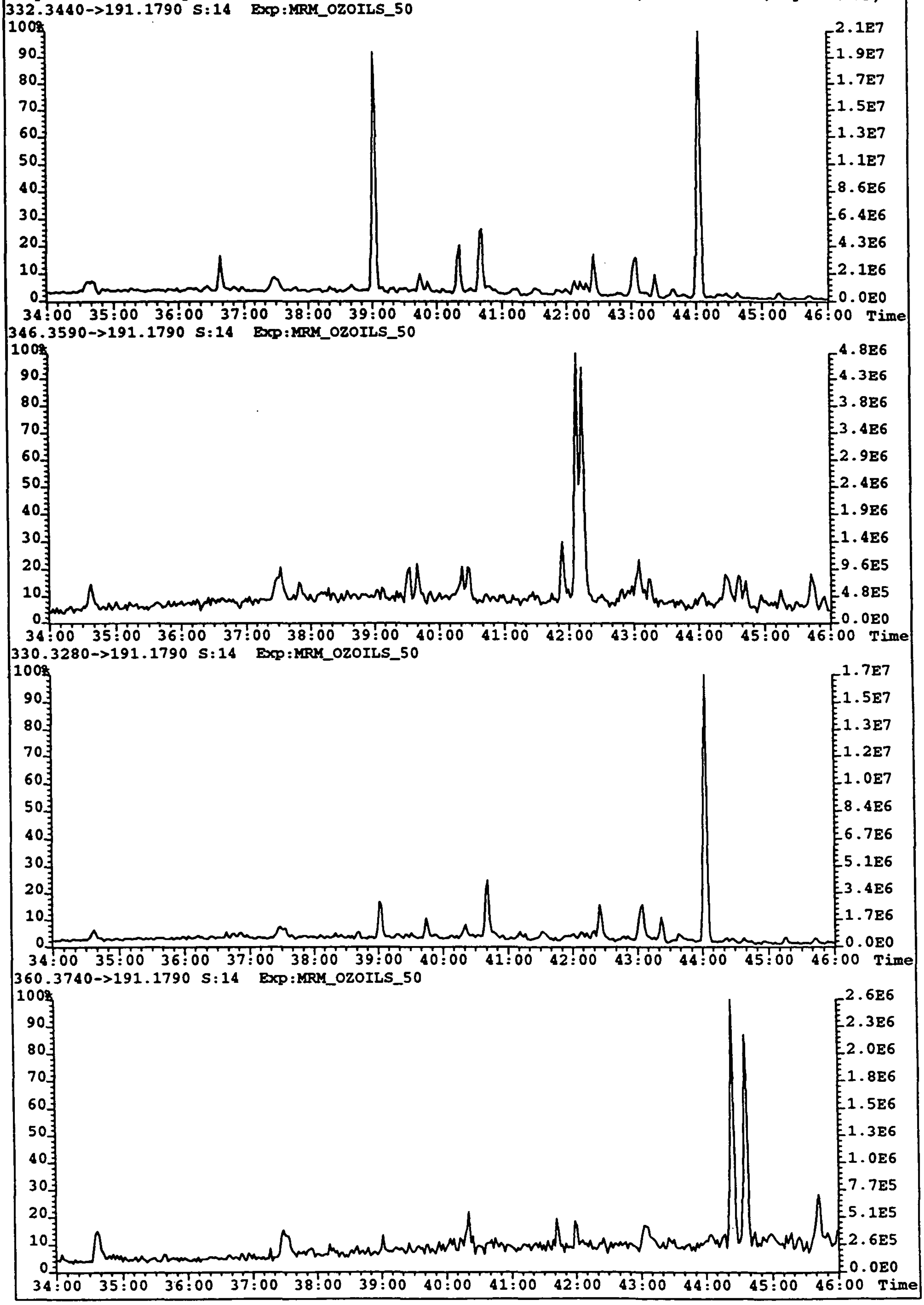

File:A5NO8 #1-847 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
412.4060->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
4.2E6
3.4E6
2.5E6
1.7E6
8.4E5
0.0E0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time
426.4210->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
1.4E6
1.1E6
8.5E5
5.7E5
2.8E5
0.0E0
426.4210->205.1940 S:11 F:2 Exp:MRM_OZOILS_50
6.5E5
5.2E5
3.9E5
2.6E5
1.3E5
0.0E0
468.4670->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
2.6E5
2.1E5
1.6E5
1.0E5
5.2E4
0.0E0
482.4820->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
2.0E5
1.6E5
1.2E5
7.9E4
4.0E4
0.0E0


File:A5NO8 #1-847 Acq: 9-NOV-1995 00:12:12 GC EI+ MRM Autospec-UltimaQ
Sample Text:8563 Pelican Island 1 cuttings 1765m Sat File Text:HPUltra-1, 50m x .25mm, spl»
398.3900->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
100%
3.6E6
3.2E6
2.9E6
2.5E6
2.2E6
1.8E6
1.4E6
1.1E6
7.2E5
3.6E5
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:11 F:2 Exp:MRM_OZOILS_50
1.5E6
1.3E6
1.2E6
1.0E6
8.9E5
7.4E5
5.9E5
4.4E5
3.0E5
1.5E5
0.0E0
412.4060->191.1790 S:11 F:2 Exp:MRM_OZOILS_50
4.2E6
3.8E6
3.4E6
2.9E6
2.5E6
2.1E6
1.7E6
1.3E6
8.4E5
4.2E5
0.0E0
412.4060->177.1640 S:11 F:2 Exp:MRM_OZOILS_50
5.8E5
5.2E5
4.7E5
4.1E5
3.5E5
2.9E5
2.3E5
1.7E5
1.2E5
5.8E4
0.0E0

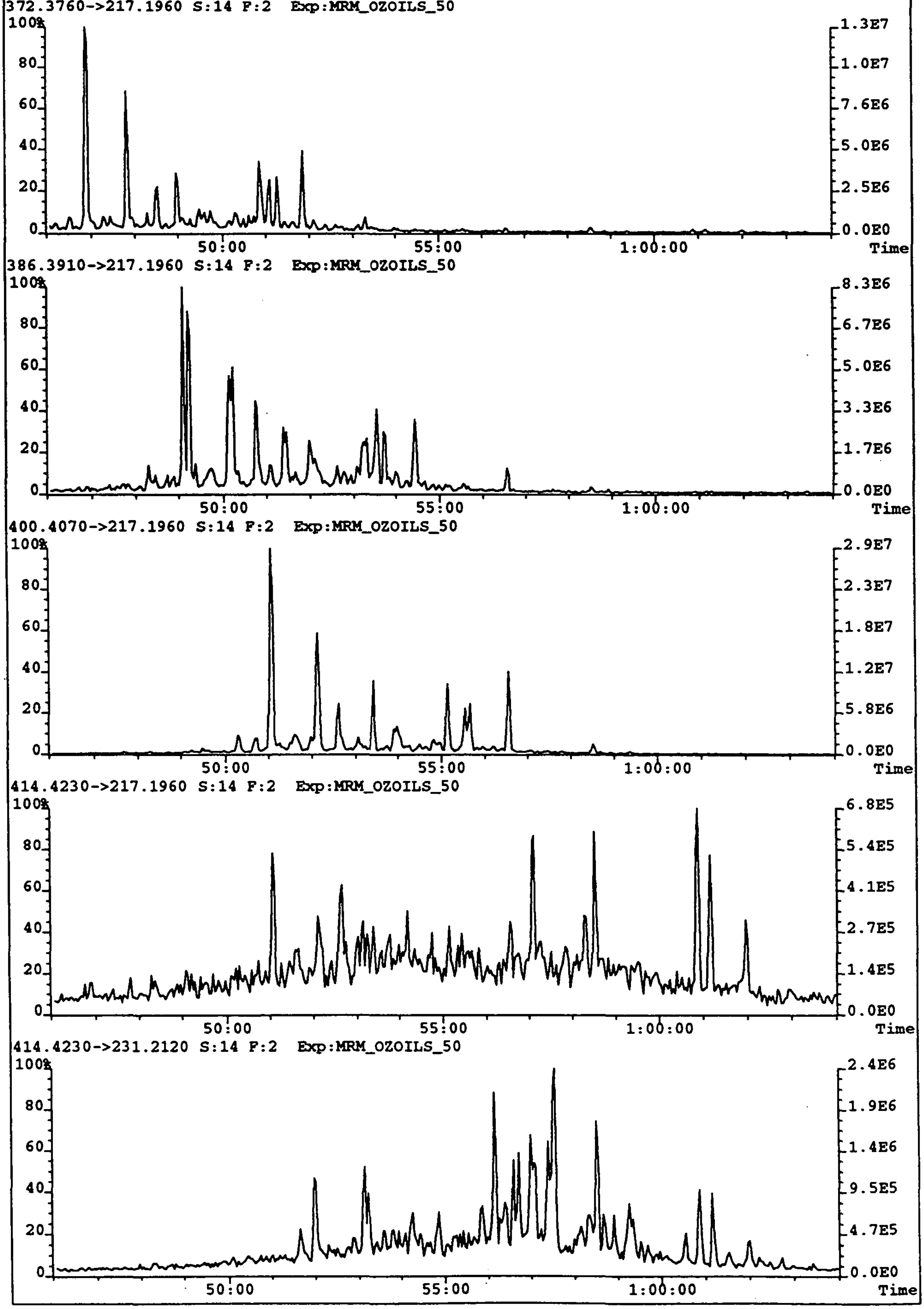

File:A5N08 #1-1251 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
TIC (+RP) S:14 Exp:MRM_OZOILS_50
TIC (+RP) S:14 Exp:MRM_OZOILS_50
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:14 F:2 Exp:MRM_OZOILS_50
Time

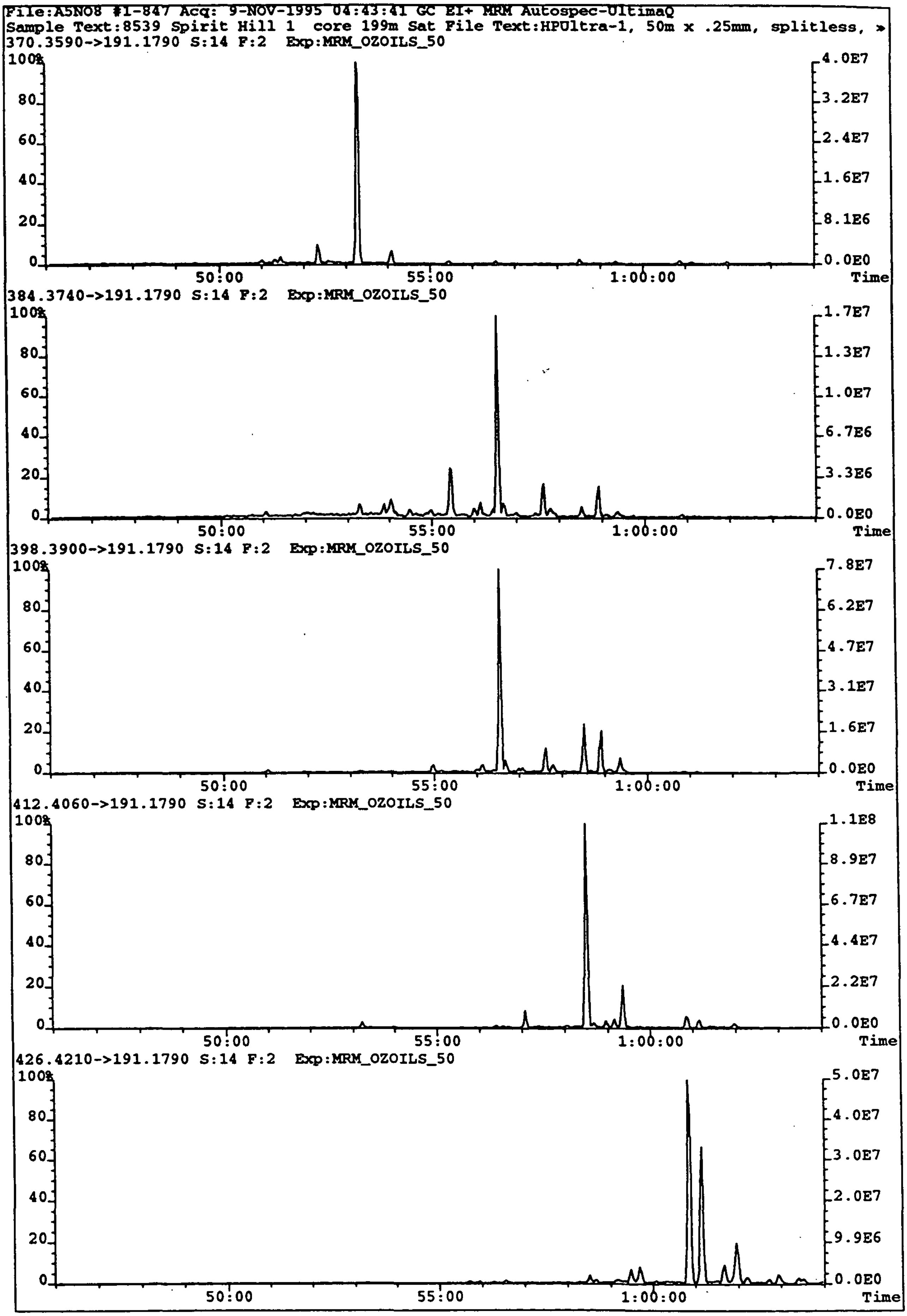

File:A5N08 #1-1251 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
262.2650->191.1790 S:14 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
5.7E7
4.5E7
3.4E7
2.3E7
1.1E7
0.0E0
24:00
26:00
28:00
30:00
32:00
34:00
36:00
38:00
40:00
42:00
Time
276.2800->191.1790 S:14 Exp:MRM_OZOILS_50
8.9E7
7.1E7
5.3E7
3.5E7
1.8E7
0.0E0
290.2960->191.1790 S:14 Exp:MRM_OZOILS_50
7.5E7
6.0E7
4.5E7
3.0E7
1.5E7
0.0E0
304.3120->191.1790 S:14 Exp:MRM_OZOILS_50
3.3E7
2.6E7
2.0E7
1.3E7
6.6E6
0.0E0
318.3280->191.1790 S:14 Exp:MRM_OZOILS_50
6.0E7
4.8E7
3.6E7
2.4E7
1.2E7
0.0E0

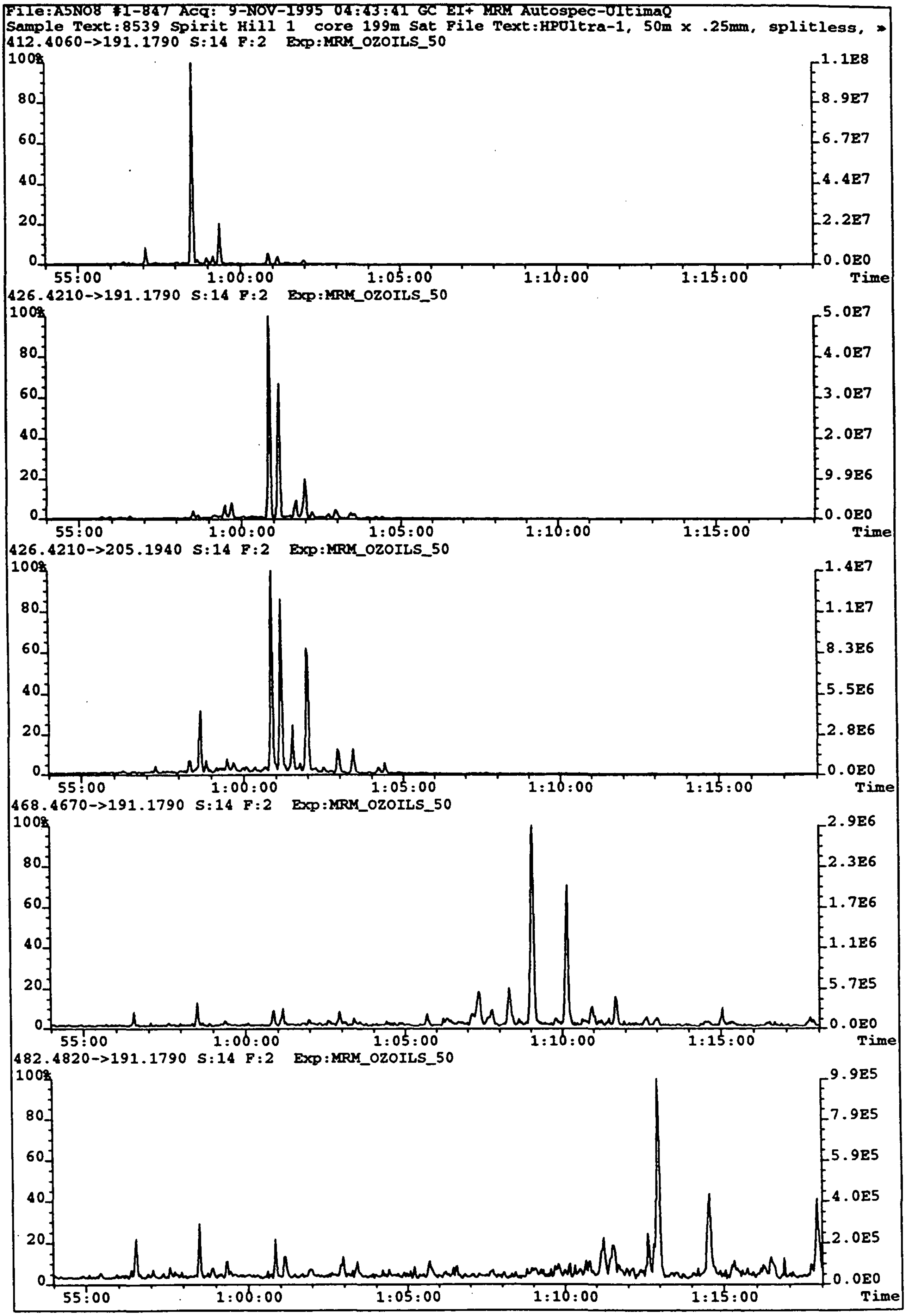
File:A5N08 #1-1251 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »

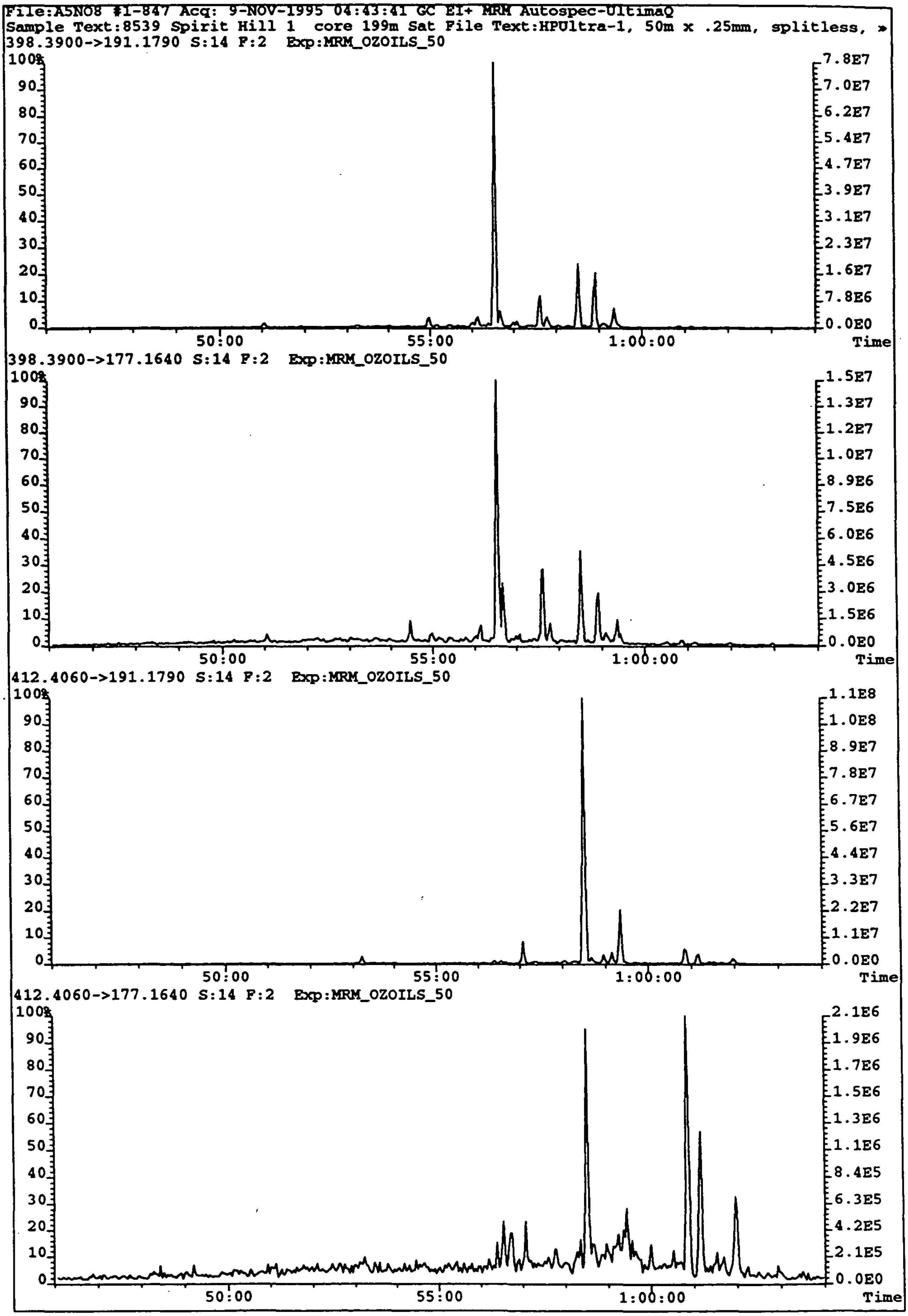


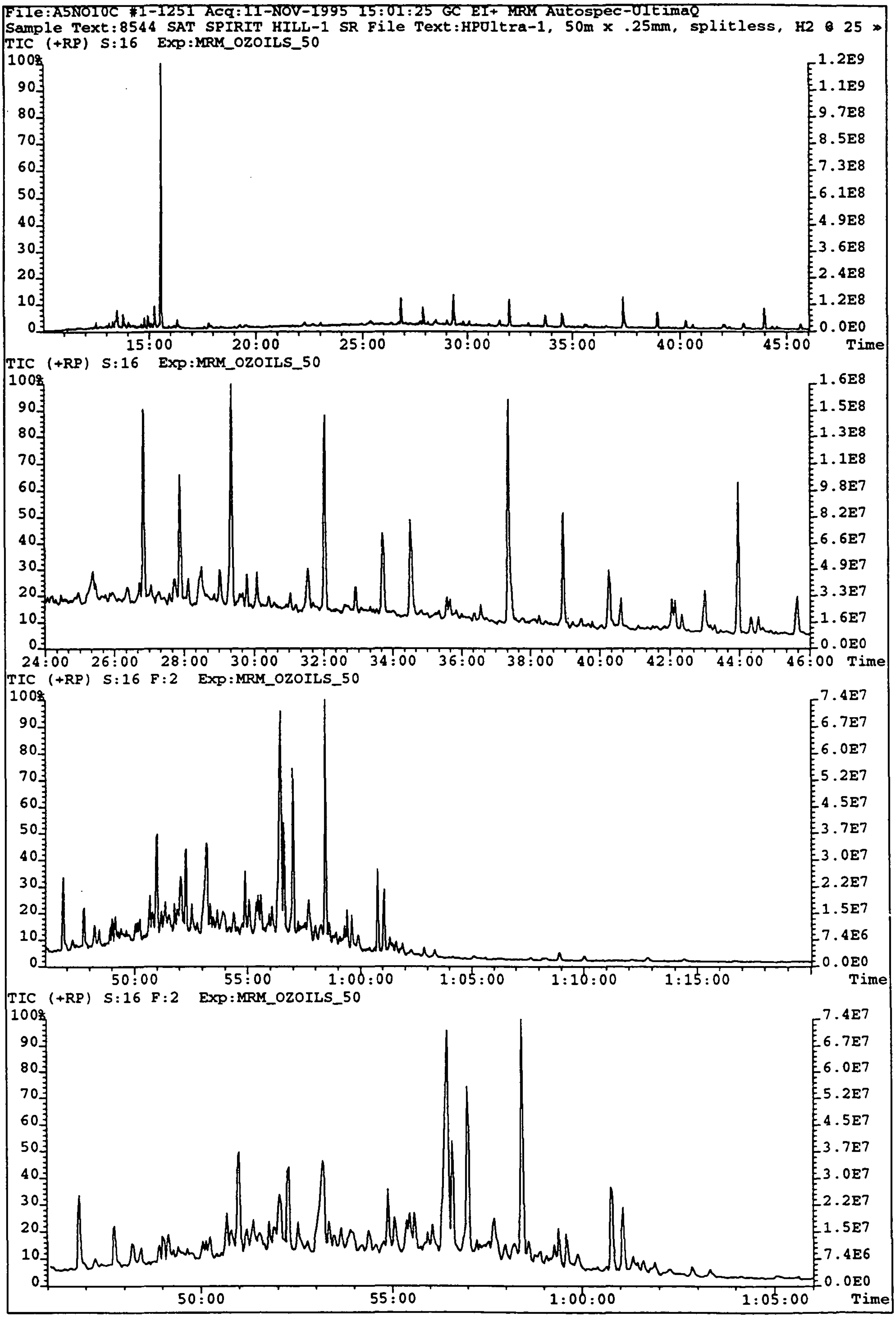
File:A5NO8 #1-847 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »



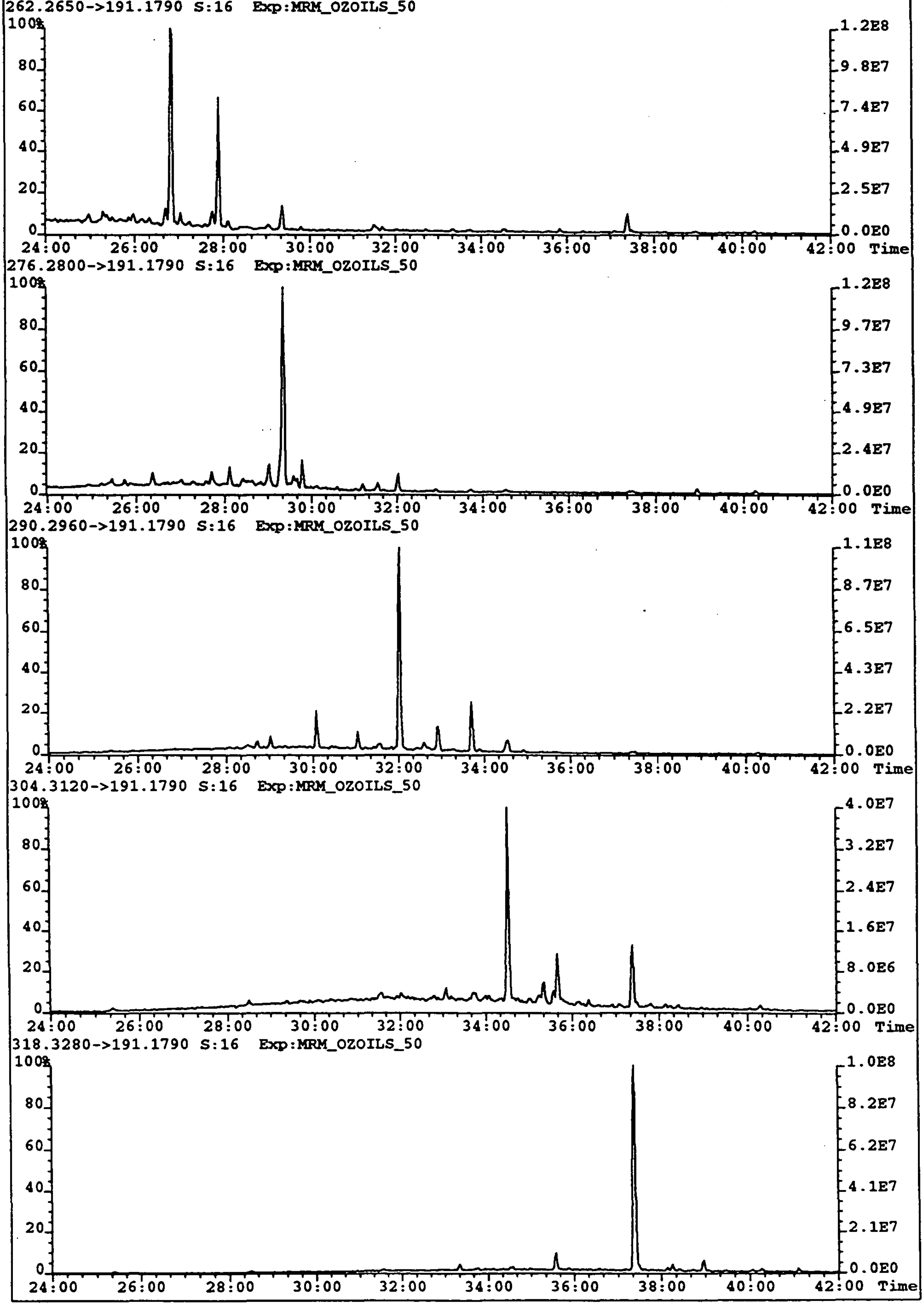

File:A5N08 #1-847 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
370.3590->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time
4.0E7
3.2E7
2.4E7
1.6E7
8.1E6
0.0E0
1.7E7
1.3E7
1.0E7
6.7E6
3.3E6
7.8E7
6.2E7
4.7E7
3.1E7
1.6E7
1.1E8
8.9E7
6.7E7
4.4E7
2.2E7
5.0E7
4.0E7
3.0E7
2.0E7
9.9E6

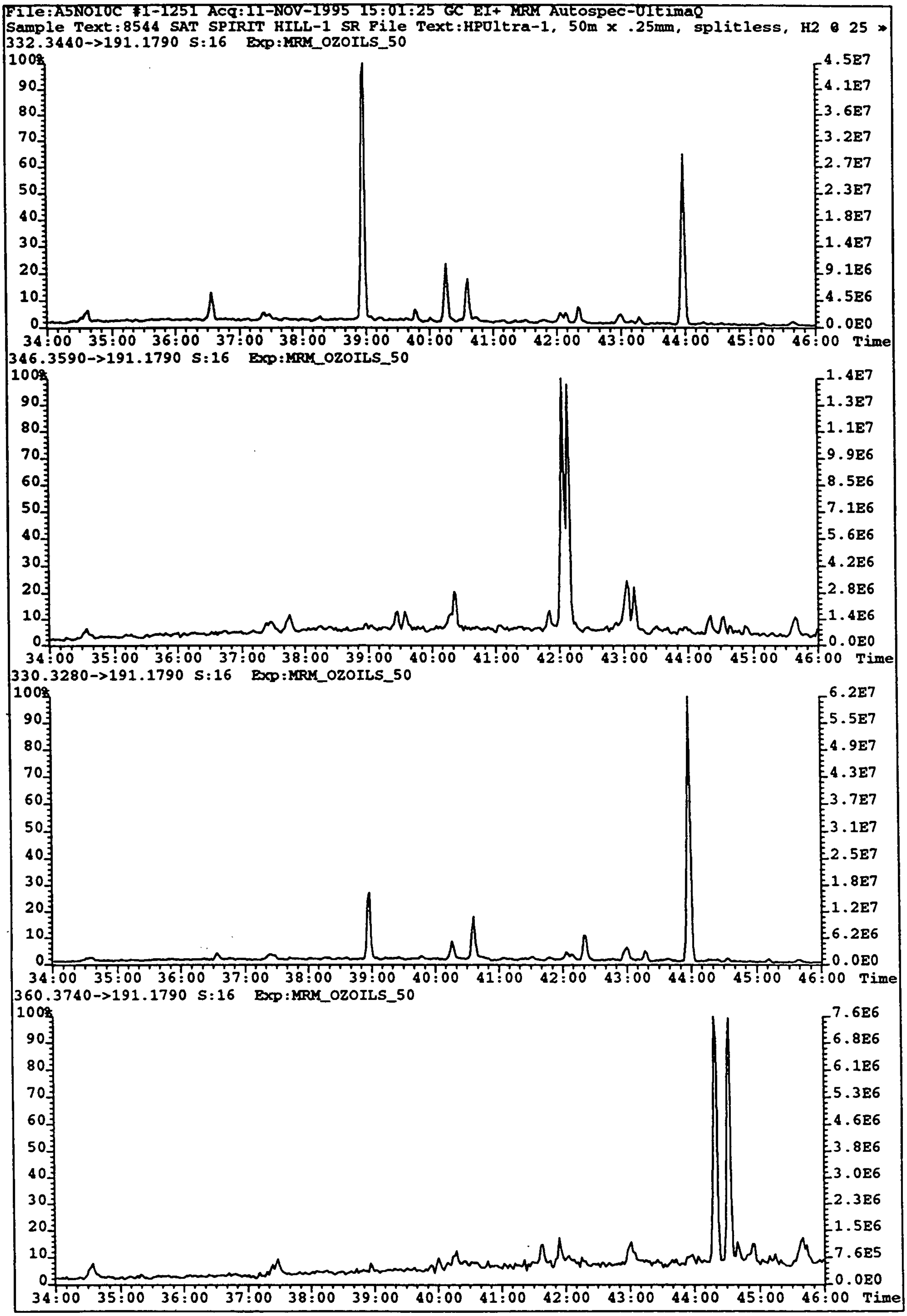

File:A5N08 #1-847 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.1E8
8.9E7
6.7E7
4.4E7
2.2E7
0.0E0
426.4210->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
5.0E7
4.0E7
3.0E7
2.0E7
9.9E6
0.0E0
426.4210->205.1940 S:14 F:2 Exp:MRM_OZOILS_50
1.4E7
1.1E7
8.3E6
5.5E6
2.8E6
0.0E0
468.4670->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
2.9E6
2.3E6
1.7E6
1.1E6
5.7E5
0.0E0
482.4820->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
9.9E5
7.9E5
5.9E5
4.0E5
2.0E5
0.0E0
100%
80
60
40
20
0
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time

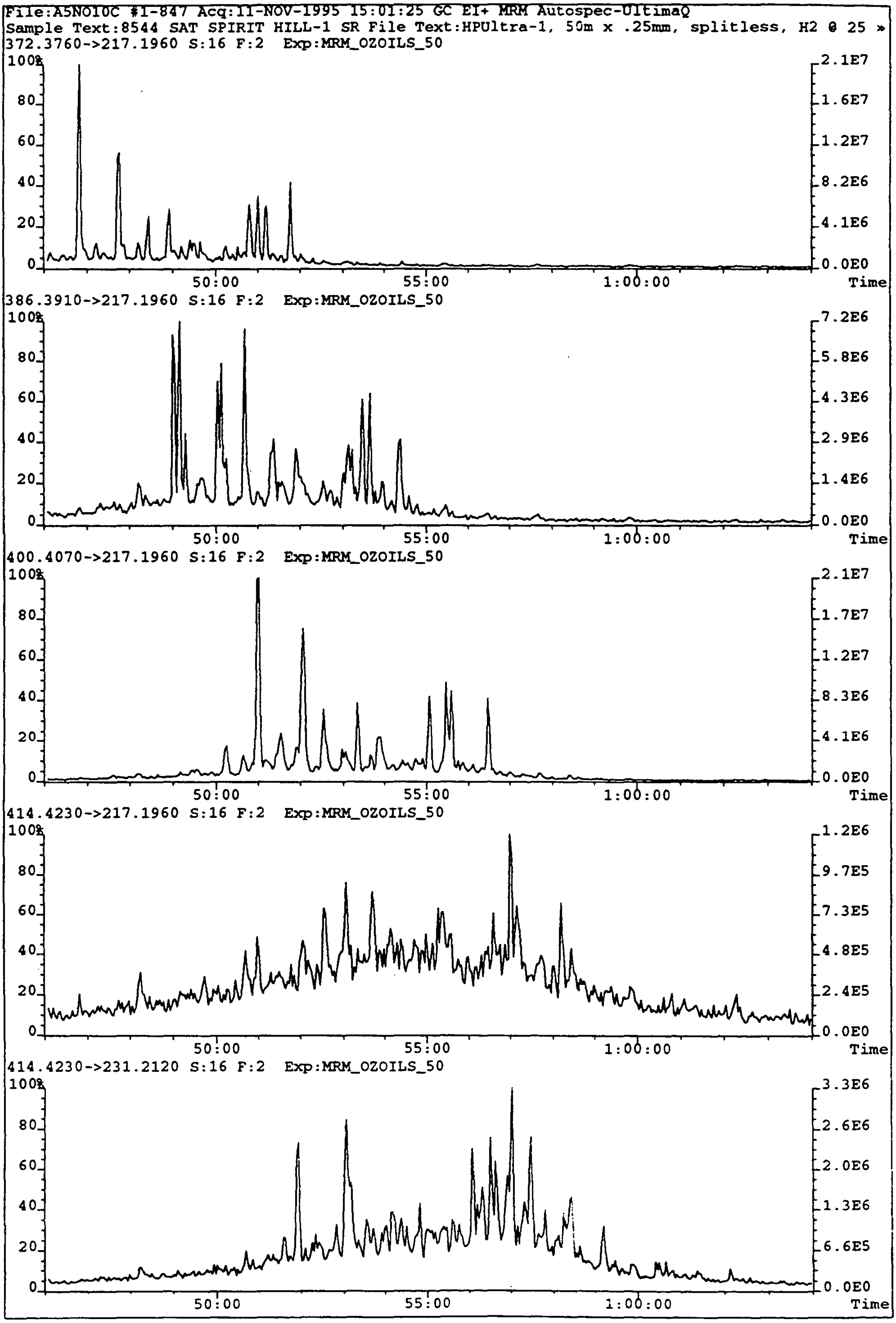

File:A5N08 #1-847 Acq: 9-NOV-1995 04:43:41 GC EI+ MRM Autospec-UltimaQ
Sample Text:8539 Spirit Hill 1 core 199m Sat File Text:HPUltra-1, 50m x .25mm, splitless, »
398.3900->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
100%
7.8E7
0.0E0
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
1.5E7
0.0E0
412.4060->191.1790 S:14 F:2 Exp:MRM_OZOILS_50
1.1E8
0.0E0
412.4060->177.1640 S:14 F:2 Exp:MRM_OZOILS_50
2.1E6
0.0E0

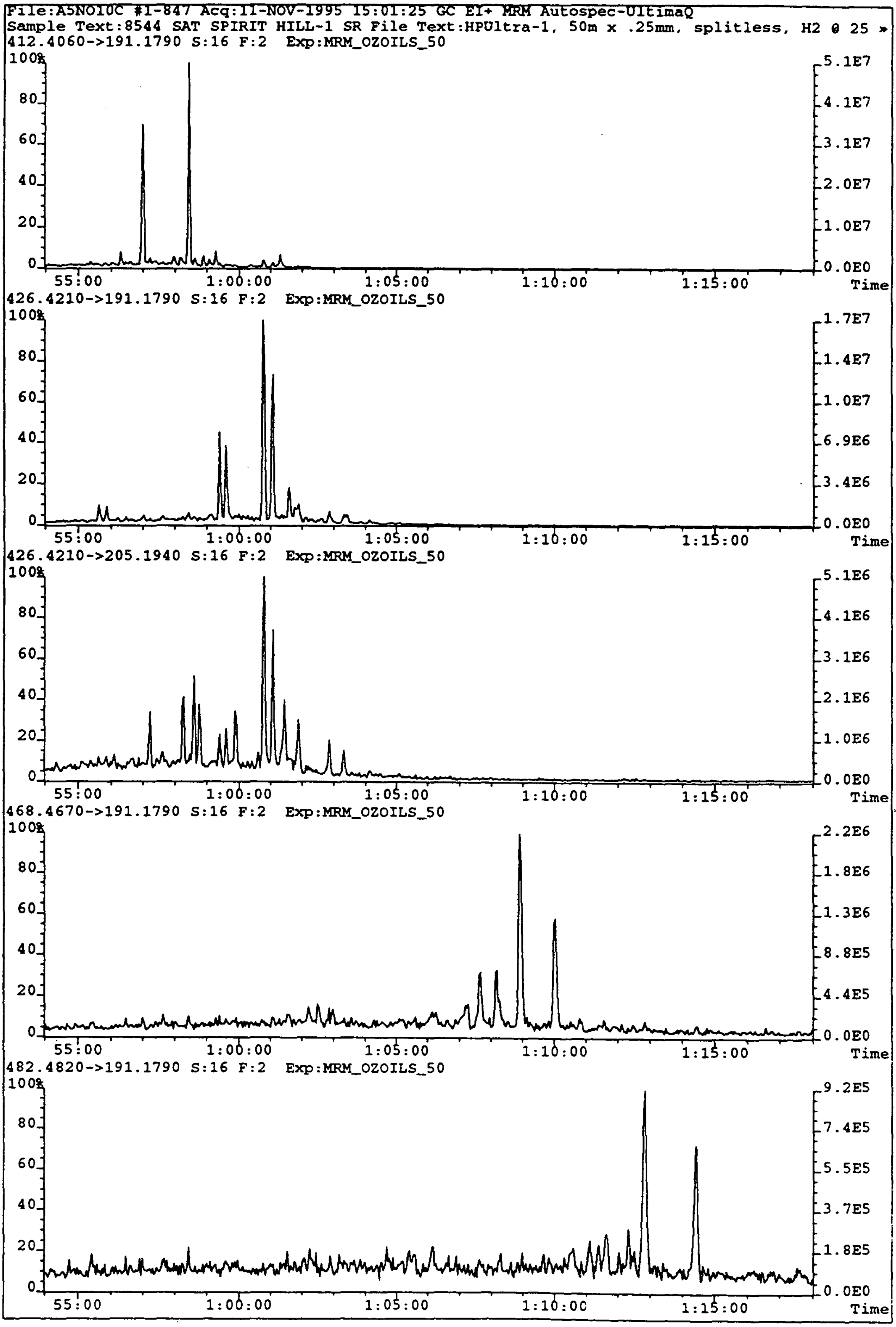

File:A5NO10C #1-1251 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
TIC (+RP) S:16 Exp:MRM_OZOILS_50
TIC (+RP) S:16 Exp:MRM_OZOILS_50
TIC (+RP) S:16 F:2 Exp:MRM_OZOILS_50
TIC (+RP) S:16 F:2 Exp:MRM_OZOILS_50
Time
100%
1.2E9
1.6E8
7.4E7

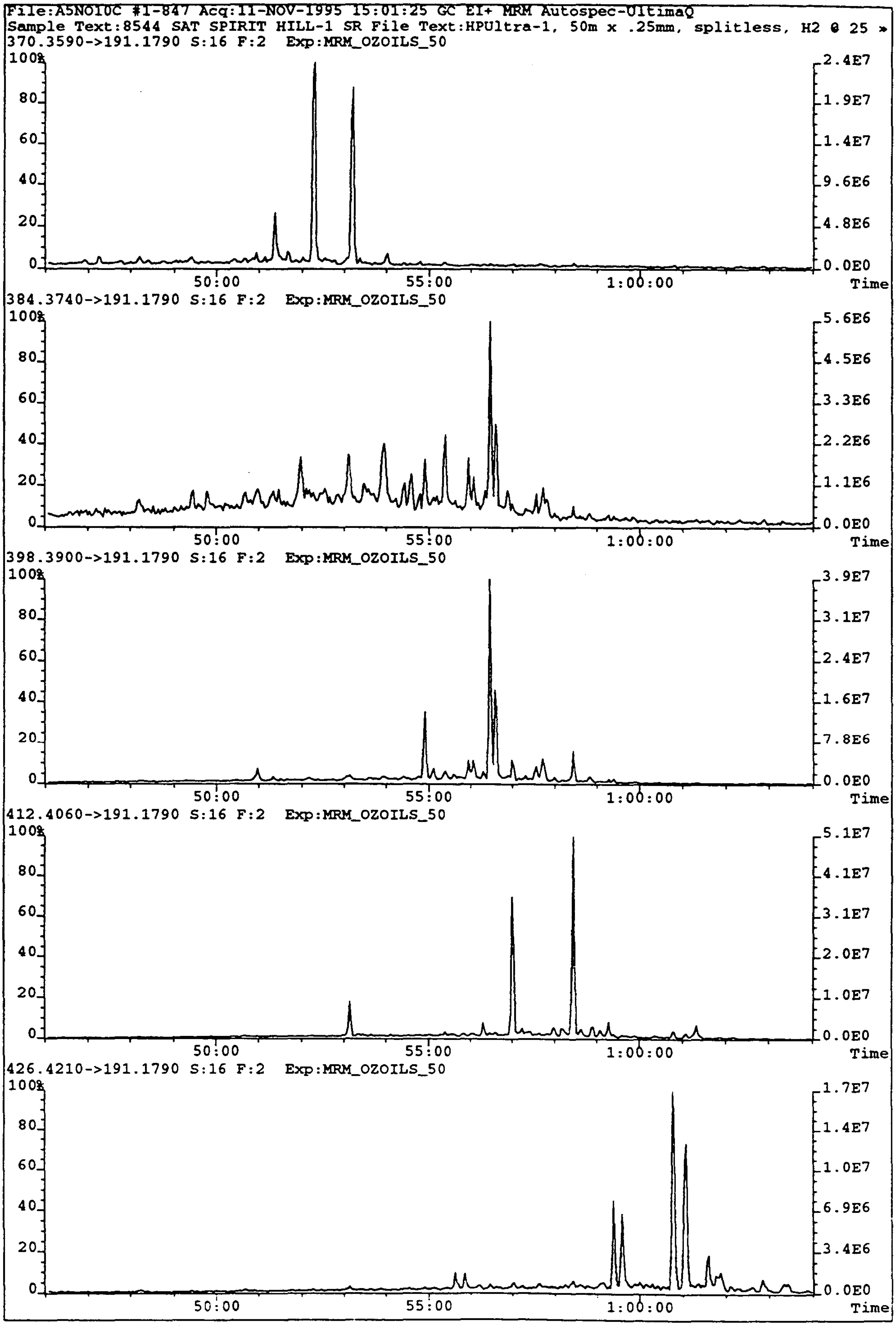
File:A5NO10C #1-1251 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »

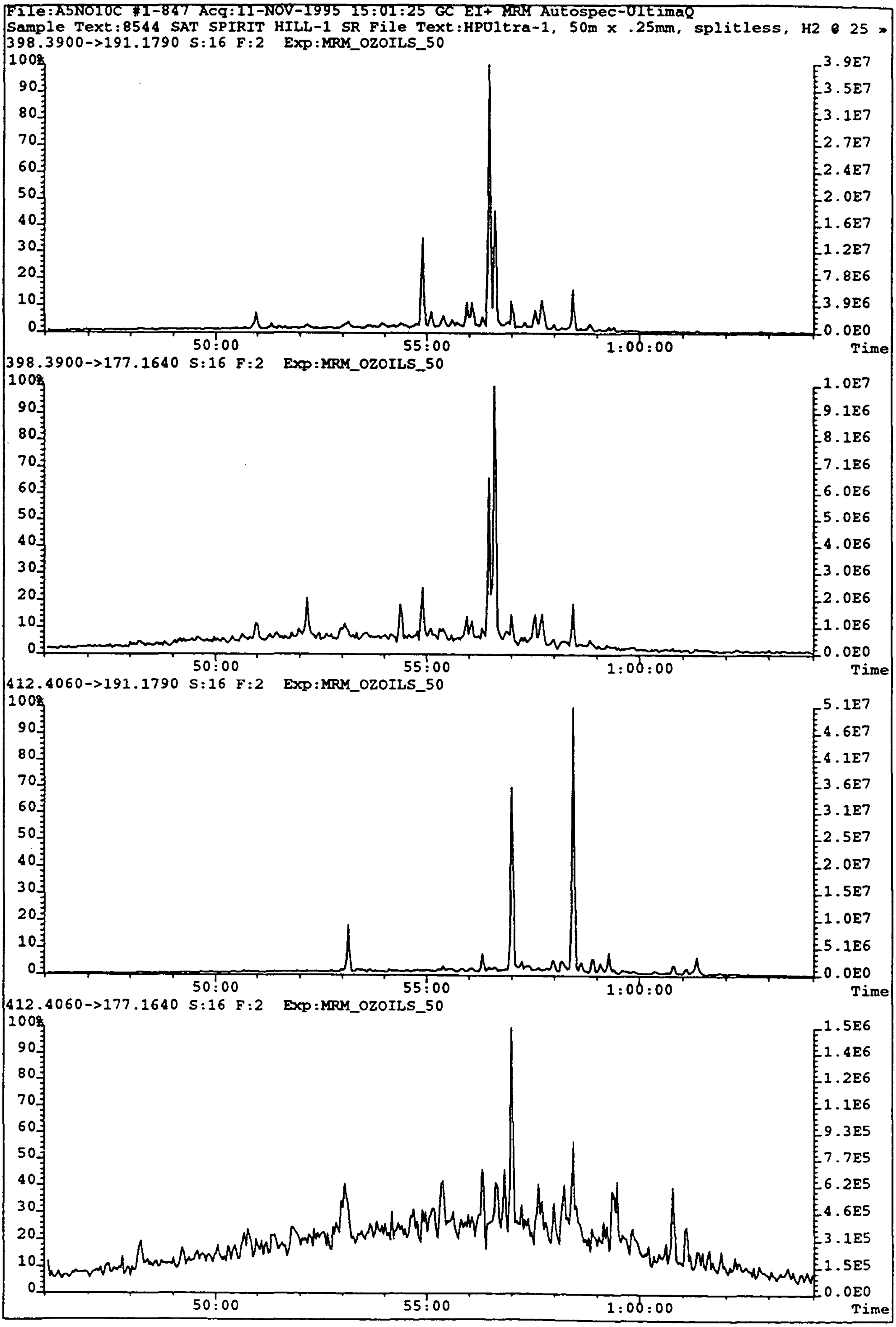



File:A5NO10C #1-1251 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
332.3440->191.1790 S:16 Exp:MRM_OZOILS_50
346.3590->191.1790 S:16 Exp:MRM_OZOILS_50
330.3280->191.1790 S:16 Exp:MRM_OZOILS_50
360.3740->191.1790 S:16 Exp:MRM_OZOILS_50
Time


File:A5NO10C #1-847 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
372.3760->217.1960 S:16 F:2 Exp:MRM_OZOILS_50
2.1E7
1.6E7
1.2E7
8.2E6
4.1E6
0.0E0
386.3910->217.1960 S:16 F:2 Exp:MRM_OZOILS_50
7.2E6
5.8E6
4.3E6
2.9E6
1.4E6
0.0E0
400.4070->217.1960 S:16 F:2 Exp:MRM_OZOILS_50
2.1E7
1.7E7
1.2E7
8.3E6
4.1E6
0.0E0
414.4230->217.1960 S:16 F:2 Exp:MRM_OZOILS_50
1.2E6
9.7E5
7.3E5
4.8E5
2.4E5
0.0E0
414.4230->231.2120 S:16 F:2 Exp:MRM_OZOILS_50
3.3E6
2.6E6
2.0E6
1.3E6
6.6E5
0.0E0
100%
80
60
40
20
0
50:00
55:00
1:00:00
Time


File:A5N010C #1-847 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
412.4060->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
5.1E7
426.4210->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
1.7E7
426.4210->205.1940 S:16 F:2 Exp:MRM_OZOILS_50
5.1E6
468.4670->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
2.2E6
482.4820->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
9.2E5
55:00
1:00:00
1:05:00
1:10:00
1:15:00
Time


File:A5NO10C #1-847 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
370.3590->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
384.3740->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
398.3900->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
412.4060->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
426.4210->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
100%
80
60
40
20
0
2.4E7
1.9E7
1.4E7
9.6E6
4.8E6
0.0E0
5.6E6
4.5E6
3.3E6
2.2E6
1.1E6
3.9E7
3.1E7
2.4E7
1.6E7
7.8E6
5.1E7
4.1E7
3.1E7
2.0E7
1.0E7
1.7E7
1.4E7
1.0E7
6.9E6
3.4E6
50:00
55:00
1:00:00
Time


File:A5NO10C #1-847 Acq:11-NOV-1995 15:01:25 GC EI+ MRM Autospec-UltimaQ
Sample Text:8544 SAT SPIRIT HILL-1 SR File Text:HPUltra-1, 50m x .25mm, splitless, H2 @ 25 »
398.3900->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
100%
3.9E7
50:00
55:00
1:00:00
Time
398.3900->177.1640 S:16 F:2 Exp:MRM_OZOILS_50
1.0E7
412.4060->191.1790 S:16 F:2 Exp:MRM_OZOILS_50
5.1E7
412.4060->177.1640 S:16 F:2 Exp:MRM_OZOILS_50
1.5E6