EPACT/V2/E-89 FUEL BLENDING

FINAL REPORT

NREL Subcontract No. ACI-8-88612-01
US EPA Contract EP-C-07-028,
Work Assignments 0-01, 1-04, and 1-10

SwRI® Project Nos. 03. 03.13363.01, 03.14175.04,
03.14175.10, and 03.14295

Prepared for:

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September 2010

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SAN ANTONIO, TX ● HOUSTON, TX ● WASHINGTON, DC

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EMISSIONS RESEARCH AND DEVELOPMENT DEPARTMENT
ENGINE, EMISSIONS AND VEHICLE RESEARCH DIVISION

FOREWORD

This report covers work the Southwest Research Institute (SwRI®) Office of Automotive Engineering has conducted for the National Renewable Energy Laboratory (NREL) and the U.S. Environmental Protection Agency (EPA) in support of the Energy Policy Act of 2005 (EPAct). Section 1506 of EPAct requires EPA to produce an updated fuel effects model representing the 2007 light-duty gasoline fleet, including determination of the emissions impacts of increased renewable fuel use.

This report covers the formulation, analysis, and procurement of test fuels for the EPAct Gasoline Light-Duty Exhaust Fuel Effects Test Program, also referred to as the EPAct/V2/E-89 Program. It is expected that this report will be an attachment or chapter in the overall EPAct/V2/E-89 Program report prepared by EPA and NREL. Other EPAct/V2/E-89 reports are expected to cover room temperature and 50°F emissions testing of three fuels using nineteen Tier 2 vehicles (known as Phase 1, Phase 2, and Interim FTP Testing); emissions testing of 28 fuels using sixteen Tier 2 vehicles (Phase 3); room temperature, 95°F, and 20°F testing of three fuels using six Tier 2 vehicles (Phase 4); and room temperature, 95°F, and 20°F testing of three fuels using three high-emitting vehicles (Phase 5).

SwRI's portion of this fuel blending effort was funded under NREL Subcontract No. ACI-8-88612-01 and EPA Contract No. EP-C-07-028, Work Assignments 0-01, 1-04, and 1-10. The project was based on SwRI Proposal Nos. 03-50782C, 03-53262A, 03-51563E and 03-54753.

The program was identified within SwRI under Project Nos. 03.13363.01, 03.14175.04, 03.14175.10, and 03.14295. The program was monitored by Douglas Lawson of NREL and Rafal Sobotowski of EPA. The SwRI Project Manager was Kevin Whitney, and the Project Leader was Kevin Brunner. Fuel was blended and supplied by Haltermann Products based on formulations jointly developed by Haltermann and EPA. Dr. Sobotowski of EPA offered substantial assistance in the formulation and approval of test fuels.

Fuel formulation and procurement occurred between March 2008 and May 2009. At the time this report was written, some fuels were still being utilized in testing under the EPAct/V2/E-89 Program. Details of fuel handling and quality checks to confirm each fuel drum for ethanol content, aromatic content, and T90 are included in individual reports or chapters associated with the testing using specific fuels.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENTS

SwRI acknowledges the following:

- The Department of Energy Office of Biomass Programs and Office of Vehicle Technologies for their financial support provided through the National Renewable Energy Laboratory
- The Environmental Protection Agency for their funding and extensive technical support in the development of these test fuels
- The Coordinating Research Council for providing Fuel 29

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
IBP	initial boiling point
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
Btu	British thermal unit
CRC	Coordinating Research Council
DHA	detailed hydrocarbon analysis
DVPE	dry vapor pressure equivalent
EPA	US Environmental Protection Agency
EPAct	2007 Energy Policy Act
E10	gasoline containing 10 percent volume denatured ethanol
E15	gasoline containing 15 percent volume denatured ethanol
E20	gasoline containing 20 percent volume denatured ethanol
E85	gasoline containing 85 percent volume denatured ethanol
FBP	final boiling point
FIA	flame ionization analyzer
g	gram
HP	Haltermann products
IBP	initial boiling point
Kg	kilogram
kPa	kilopascal
lb	pound mass
mg	milligram
MJ	megajoule
mL	milliliter
MON	motor octane number
NREL	National Renewable Energy Laboratory
psi	pounds per square inch
ppm	parts per million
RON	research octane number
RVP	Reid vapor pressure
SwRI	Southwest Research Institute
vol.	volume
WAM	work assignment manager

1.0 INTRODUCTION

The National Renewable Energy Laboratory and the US Environmental Protection Agency (EPA), with support from the Coordinating Research Council (CRC), are conducting the EPAct Gasoline Light-Duty Exhaust Fuel Effects Test Program, also referred to as the EPAct/V2/E-89 Program. This emission test program includes multiple fuel properties, multiple ambient test temperatures, and different vehicle technologies. This report covers the formulation, analysis, and procurement of the thirty-one test fuels used in the EPAct/V2/E-89 Program. This effort was funded under NREL Subcontract No. ACI-8-88612-01 and EPA Contract No. EP-C-07-028, Work Assignments 0-01, 1-04, and 1-10. One test fuel was provided by the Coordinating Research Council.

2.0 TECHNICAL APPROACH AND RESULTS

Test fuels were procured from Haltermann Products. EPA provided SwRI with target fuel specifications. These test fuels were designed to cover a broad range of properties and were not representative of commercial fuels. Many of these fuels were extremely difficult to blend to meet all specification, and in some cases EPA and NREL approved fuel blends that did not meet all target specifications. To help the reader understand these differences, Table 1 contains target fuel specifications as well as SwRI inspection data of final approved fuels.

Fuels 17, 18, and 19 were the first fuels blended, and were formulated by Haltermann based on EPA's recommendation and NREL's acceptance. However, based on the challenges of blending these fuels, a formalized fuel development protocol was created. Using this protocol, all other test fuels except Fuel 29 were formulated by Rafal Sobotowski of the EPA in conjunction with Haltermann, who provided EPA with data for all their blendstock components. The final fuel development protocol used for this program is given in Table 2. Fuel 29 was provided to the program by the Coordinating Research Council.

Detailed fuel inspection results as determined by SwRI are provided in Appendix A. The format of Appendix A is the same as an EPA-coordinated EPAct/V2/E-89 Fuels Round Robin study, which is expected to be separately reported. All data provided in Appendix A are the same as those SwRI provided to EPA for the round robin data study. The inspection data in Appendix A are much more detailed than the information provided in Table 1, which includes only the fuel specifications and related inspection results.

Over the course of fuel development, Haltermann Products used the following external laboratories for analyses: Dixie, Gage, Core, Inspectorate, Paragon, and Saybolt. Following every set of analyses, Haltermann compiled these inspection results in spreadsheets, which were forwarded to NREL, EPA, and SwRI. These detailed fuel inspection data are provided for reference in Appendix B.

In addition to the provided inspection data, all fuels except Fuel 29 received detailed hydrocarbon analysis (DHA) using ASTM Method D6729. These results are given in Appendix C. DHA results show that Fuels 17 and 18 contained unusually high amounts of cyclohexane: approximately 18 and 13 volume percent respectively. Haltermann used cyclohexane as a one of the fuel blending components in an effort to meet EPA's request to "match" the three fuels within a 20°F window across as much of the distillation curve as possible.

The data in Appendices A, B, and C have also been provided in Excel format as part of the electronic submission of this report

TABLE 1. EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM FUEL PROPERTIES

Test Fuel Specification

PROPERTY	UNIT	METHOD	BLENDING TOLERANCE	E0/E10 Fuels															
				TEST FUELS															
				1		2		3		4		5		6		7		8	
				Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result
Density, 60°F	g/cm^3	D4052	NA	Report	0.7214	Report	0.7224	Report	0.7360	Report	0.7350	Report	0.7578	Report	0.7345	Report	0.7211	Report	0.7203
API Gravity, 60°F	°API	D4052	NA	Report	64.5	Report	64.3	Report	60.7	Report	60.9	Report	55.2	Report	61.1	Report	64.7	Report	64.9
Ethanol Content	**vol. %**	**D5599**	**E0: < 0.1; E10: ± 0.5; E15: ± 0.5; E20: ±0.5; E85: ±2**	**10**	**10.1**	**0**	**<0.1**	**10**	**10.4**	**10**	**9.8**	**0**	**<0.2**	**10**	**10.6**	**0**	**<0.1**	**0**	**<0.1**
Total Content of Oxygenates Other than Ethanol	vol. %	D5599	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
T10	°F	D86	-	<158	117	<158	121	<158	142	<158	123	<158	143	<158	137	<158	137	<158	124
T50	**°F**	**D86**	**± 4**	**150**	**149**	**240**	**236**	**220**	**218**	**220**	**219**	**240**	**236**	**190**	**196**	**190**	**193**	**220**	**222**
T90	**°F**	**D86**	**± 5**	**300**	**303**	**340**	**341**	**300**	**300**	**340**	**337**	**300**	**301**	**340**	**344**	**300**	**297**	**300**	**304**
FBP	°F	D86	-	<437	368	<437	375	<437	372	<437	371	<437	360	<437	370	<437	359	<437	360
DVPE	**psi**	**D5191**	**± 0.25**	**10.0**	**10.1**	**10.0**	**10.4**	**7.0**	**6.8**	**10.0**	**10.0**	**7.0**	**6.9**	**7.0**	**7.2**	**7.0**	**7.3**	**10.0**	**9.9**
Aromatics	**vol. %**	**D1319**	**± 1.5**	**15.0**	**15.5**	**15.0**	**14.1**	**15.0**	**15.9**	**15.0**	**15.6**	**35.0**	**35.8**	**15.0**	**15.4**	**15.0**	**16.7**	**15.0**	**16.0**
Olefins	vol. %	D1319	± 1.5	7	7.5	7	7.2	7	7.3	7	6.9	7	7.0	7	9.0	7	7.3	7	6.2
Benzene	vol. %	D3606	± 0.15	0.62	0.71	0.62	0.50	0.62	0.75	0.62	0.57	0.62	0.49	0.62	0.82	0.62	0.55	0.62	0.48
S	mg/kg	D5453	± 5	25	30	25	23	25	26	25	21	25	25	25	22	25	23	25	22
(R + M)/2	-	Calc.	-	≥ 87.0	91	≥ 87.0	92	≥ 87.0	93	≥ 87.0	93	≥ 87.0	91	≥ 87.0	92	≥ 87.0	88	≥ 87.0	92
C	mass %	Calc.	-	Report	82.2	Report	85.4	Report	82.4	Report	82.2	Report	87.0	Report	81.4	Report	85.3	Report	85.5
H	mass %	D4808 Method A	-	Report	13.6	Report	14.3	Report	14.0	Report	13.9	Report	13.0	Report	14.3	Report	14.2	Report	14.2
O	mass %	D5599	-	Report	3.9	Report	<0.1	Report	3.9	Report	3.7	Report	<0.1	Report	4.0	Report	<0.1	Report	<0.1
Gross Heat of Combustion	Btu/lb	D4809	-	Report	19,318	Report	20,216	Report	19,242	Report	19,312	Report	19,628	Report	19,191	Report	20,125	Report	20,209
Water Content[a]	mg/kg	E1064	-	Report	0.1	Report	<0.1	Report	0.1	Report	<0.1	Report	<0.1	Report	0.1	Report	<0.1	Report	<0.1
Copper Strip Corrosion, 3h at 122°F[a]	-	D130	-	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A
Solvent-Washed Gum Content[a]	mg/100 ml	D381	-	< 5	<0.5	< 5	<0.5	< 5	<0.5	< 5	1.5	< 5	<0.5	< 5	<0.5	< 5	<0.5	< 5	<0.5
Oxidation Stability[a]	minute	D525	-	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

NOTE: Properties in bold were varied within the fuel matrix. All other properties were held constant.

TABLE 1 (CONT'D). EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM FUEL PROPERTIES

Test Fuel Specification

PROPERTY	UNIT	METHOD	BLENDING TOLERANCE	E0/E10 Fuels															
				TEST FUELS															
				9		10		11		12		13		14		15		16	
				Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result
Density, 60°F	g/cm^3	D4052	NA	Report	0.7453	Report	0.7663	Report	0.7601	Report	0.7521	Report	0.7544	Report	0.7227	Report	0.7431	Report	0.7645
API Gravity, 60°F	°API	D4052	NA	Report	58.3	Report	53.1	Report	54.6	Report	56.6	Report	56.0	Report	64.2	Report	58.8	Report	53.5
Ethanol Content	**vol. %**	**D5599**	**E0: < 0.1; E10: ± 0.5; E15: ± 0.5; E20: ±0.5; E85: ±2**	**0**	**<0.1**	**10**	**9.9**	**10**	**10.2**	**10**	**9.9**	**0**	**<0.1**	**0**	**<0.1**	**0**	**<0.1**	**10**	**10.6**
Total Content of Oxygenates Other than Ethanol	vol. %	D5599	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
T10	°F	D86	-	<158	113	<158	137	<158	125	<158	117	<158	137	<158	134	<158	116	<158	140
T50	**°F**	**D86**	**± 4**	**190**	**191**	**220**	**218**	**190**	**196**	**150**	**153**	**220**	**222**	**190**	**192**	**190**	**190**	**220**	**221**
T90	**°F**	**D86**	**± 5**	**340**	**341**	**340**	**342**	**300**	**303**	**340**	**342**	**340**	**339**	**340**	**338**	**300**	**299**	**300**	**306**
FBP	°F	D86	-	<437	381	<437	372	<437	361	<437	380	<437	377	<437	369	<437	365	<437	370
DVPE	**psi**	**D5191**	**± 0.25**	**10.0**	**10.3**	**7.0**	**7.0**	**10.0**	**9.9**	**10.0**	**10.1**	**7.0**	**6.9**	**7.0**	**7.1**	**10.0**	**10.1**	**7.0**	**7.0**
Aromatics	**vol. %**	**D1319**	**± 1.5**	**35.0**	**37.3**	**35.0**	**35.6**	**35.0**	**35.1**	**35.0**	**35.1**	**35.0**	**33.5**	**15.0**	**16.6**	**35.0**	**36.7**	**35.0**	**36.7**
Olefins	vol. %	D1319	± 1.5	7	6.2	7	6.0	7	6.3	7	6.0	7	5.1	7	7.7	7	7.2	7	6.7
Benzene	vol. %	D3606	± 0.15	0.62	0.55	0.62	0.58	0.62	0.57	0.62	0.62	0.62	0.53	0.62	0.52	0.62	0.53	0.62	0.65
S	mg/kg	D5453	± 5	25	23	25	25	25	22	25	19	25	22	25	24	25	23	25	22
(R + M)/2	-	Calc.	-	≥ 87.0	90	≥ 87.0	93	≥ 87.0	92	≥ 87.0	94	≥ 87.0	91	≥ 87.0	88	≥ 87.0	90	≥ 87.0	95
C	mass %	Calc.	-	Report	87.2	Report	83.5	Report	83.7	Report	83.8	Report	86.6	Report	85.4	Report	87.1	Report	83.3
H	mass %	D4808 Method A	-	Report	12.8	Report	12.7	Report	12.5	Report	12.7	Report	13.6	Report	14.2	Report	12.9	Report	12.6
O	mass %	D5599	-	Report	<0.1	Report	3.6	Report	3.7	Report	3.6	Report	<0.1	Report	<0.1	Report	<0.1	Report	3.8
Gross Heat of Combustion	Btu/lb	D4809	-	Report	19,757	Report	18,958	Report	18,817	Report	18,950	Report	19,729	Report	20,128	Report	19,710	Report	18,769
Water Content[a]	mg/kg	E1064	-	Report	<0.1	Report	0.1	Report	0.1	Report	0.1	Report	<0.1	Report	<0.1	Report	<0.1	Report	0.1
Copper Strip Corrosion, 3h at 122°F[a]	-	D130	-	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A
Solvent-Washed Gum Content[a]	mg/100 ml	D381	-	< 5	<0.5	< 5	<0.5	< 5	0.5	< 5	<0.5	< 5	1.5	< 5	<0.5	< 5	0.5	< 5	1.0
Oxidation Stability[a]	minute	D525	-	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

NOTE: Properties in bold were varied within the fuel matrix. All other properties were held constant.

TABLE 1 (CONT'D). EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM FUEL PROPERTIES

Test Fuel Specification
September 22, 2008

PROPERTY	UNIT	METHOD	BLENDING TOLERANCE	RFS2 Fuels						E15/E20 Fuels									
				TEST FUELS															
				17		18		19		20		21		22		23		24	
				Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result
Density, 60°F	g/cm^3	D4052	NA	Report	0.7581	Report	0.7537	Report	0.7498	Report	0.7429	Report	0.7764	Report	0.7375	Report	0.7485	Report	0.7428
API Gravity, 60°F	°API	D4052	NA	Report	55.1	Report	56.1	Report	57.4	Report	58.9	Report	50.7	Report	60.3	Report	57.5	Report	58.9
Ethanol Content	**vol. %**	**D5599**	**E0: < 0.1; E10: ± 0.5; E15: ± 0.5; E20: ±0.5; E85: ±2**	**0**	**<0.1**	**9.5**	**9.4**	**14.5**	**14.1**	**20**	**19.8**	**20**	**20.0**	**20**	**20.1**	**20**	**20.0**	**20**	**20.1**
Total Content of Oxygenates Other than Ethanol	vol. %	D5599	-	<0.1	<0.1	<0.1	<0.1	<0.15	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2	<0.1	<0.2	<0.1
T10	°F	D86	-	<158	130	<158	134	<158	128	<158	143	<158	142	<158	130	<158	139	<158	129
T50	**°F**	**D86**	**± 4**	**215**	**215**	**202**	**211**	**195**	**181**	**165**	**162**	**165**	**168**	**165**	**163**	**165**	**162**	**165**	**165**
T90	**°F**	**D86**	**± 5**	**325**	**323**	**325**	**319**	**325**	**312**	**300**	**300**	**300**	**308**	**300**	**303**	**340**	**338**	**340**	**341**
FBP	°F	D86	-	<437	371	<437	345	<437	350	<437	377	<437	360	<437	377	<437	365	<437	370
DVPE	**psi**	**D5191**	**± 0.25**	**8.9**	**9.2**	**8.9**	**9.0**	**8.9**	**9.0**	**7.0**	**6.7**	**7.0**	**6.9**	**10.0**	**10.2**	**7.0**	**6.6**	**10.0**	**10.2**
Aromatics	**vol. %**	**D1319**	**± 1.5**	**29.5**	**29.5**	**24.9**	**22.9**	**22.6**	**22.1**	**15.0**	**16.3**	**35.0**	**34.5**	**15.0**	**15.4**	**15.0**	**16.5**	**15.0**	**15.9**
Olefins	vol. %	D1319	± 1.5	7	6.3	7	5.7	7	6.2	7	7.3	7	7.1	7	7.1	7	7.0	7	6.6
Benzene	vol. %	D3606	± 0.15	0.62	0.46	0.62	0.68	0.62	0.71	0.62	0.69	0.62	0.72	0.62	0.65	0.62	0.70	0.62	0.71
S	mg/kg	D5453	± 5	25	23	25	22	25	21	25	23	25	20	25	21	25	22	25	21
(R + M)/2	-	Calc.	-	≥ 87.0	88	≥ 87.0	89	≥ 87.0	89	≥ 87.0	96	≥ 87.0	94	≥ 87.0	95	≥ 87.0	93	≥ 87.0	95
C	mass %	Calc.	-	Report	86.5	Report	82.9	Report	81.5	Report	78.0	Report	80.7	Report	78.6	Report	77.8	Report	78.4
H	mass %	D4808 Method A	-	Report	13.5	Report	13.7	Report	13.5	Report	14.3	Report	12.2	Report	13.7	Report	14.9	Report	13.9
O	mass %	D5599	-	Report	<0.1	Report	3.4	Report	5.1	Report	7.4	Report	7.1	Report	7.5	Report	7.4	Report	7.5
Gross Heat of Combustion	Btu/lb	D4809	-	Report	19,775	Report	19,117	Report	18,725	Report	18,473	Report	18,021	Report	18,470	Report	18,434	Report	18,447
Water Content[a]	mg/kg	E1064	-	Report	<0.1	Report	0.1	Report	0.2	Report	<0.1	Report	<0.1	Report	0.1	Report	<0.1	Report	0.1
Copper Strip Corrosion, 3h at 122°F[a]	-	D130	-	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A
Solvent-Washed Gum Content[a]	mg/100 ml	D381	-	< 5	<0.5	< 5	<0.5	< 5	0.5	< 5	<0.5	< 5	0.5	< 5	<0.5	< 5	0.5	< 5	0.5
Oxidation Stability[a]	minute	D525	-	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

NOTE: Properties in bold were varied within the fuel matrix. All other properties were held constant.

TABLE 1 (CONT'D). EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM FUEL PROPERTIES

Test Fuel Specification

PROPERTY	UNIT	METHOD	BLENDING TOLERANCE	E15/E20 Fuels								E85		CRC Fuels			
				TEST FUELS													
				25		26		27		28		29[b]		30		31	
				Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result	Spec.	SwRI Result[c]	Spec.	SwRI Result	Spec.	SwRI Result
Density, 60°F	g/cm^3	D4052	NA	Report	0.7714	Report	0.7624	Report	0.7448	Report	0.7724	Report	0.7797	Report	0.7513	Report	0.7748
API Gravity, 60°F	°API	D4052	NA	Report	51.8	Report	54.0	Report	58.4	Report	51.6	Report	49.8	Report	56.8	Report	51.0
Ethanol Content	**vol. %**	**D5599**	**E0: < 0.1; E10: ± 0.5; E15: ± 0.5; E20: ±0.5; E85: ±2**	**20**	**19.9**	**15**	**15.1**	**15**	**14.7**	**15**	**14.6**	**81**	**79.6**	**10**	**9.9**	**20**	**20.1**
Total Content of Oxygenates Other than Ethanol	vol. %	D5599	-	<0.2	<0.1	<0.15	<0.1	<0.15	<0.1	<0.15	<0.1	<2.0	<0.01	<0.1	<0.1	<0.2	<0.1
T10	°F	D86	-	<158	129	<158	119	<158	143	<158	144	Report	154	<158	115	<158	140
T50	**°F**	**D86**	**± 4**	**165**	**167**	**160**	**161**	**220**	**225**	**220**	**219**	**Report**	**172**	**150**	**152**	**165**	**167**
T90	**°F**	**D86**	**± 5**	**340**	**344**	**340**	**344**	**340**	**342**	**300**	**303**	**Report**	**174**	**325**	**329**	**325**	**330**
FBP	°F	D86	-	<437	377	<437	376	<437	372	<437	364	Report	266	<437	364	<437	366
DVPE	**psi**	**D5191**	**± 0.25**	**10.0**	**10.1**	**10.0**	**10.0**	**7.0**	**6.9**	**7.0**	**6.8**	**6.9**	**8.9**	**10.0**	**10.0**	**7.0**	**6.9**
Aromatics	**vol. %**	**D1319**	**± 1.5**	**35.0**	**37.9**	**35.0**	**36.9**	**15.0**	**16.2**	**35.0**	**36.5**	**Report**	**na**	**35.0**	**37.1**	**35.0**	**38.0**
Olefins	vol. %	D1319	± 1.5	7	6.8	7	6.8	7	8.1	7	7.2	Report	na	7	6.4	7	5.7
Benzene	vol. %	D3606	± 0.15	0.62	0.75	0.62	0.67	0.62	0.66	0.62	0.69	Report	0.12	0.62	0.70	0.62	0.79
S	mg/kg	D5453	± 5	25	25	25	23	25	26	25	24	15	16	25	25	25	22
(R + M)/2	-	Calc.	-	≥ 87.0	95	≥ 87.0	95	≥ 87.0	95	≥ 87.0	96	Report	na	≥ 87.0	94	≥ 87.0	94
C	mass %	Calc.	-	Report	81.0	Report	82.1	Report	81.1	Report	82.1	Report	57.7	Report	82.7	Report	80.4
H	mass %	D4808 Method A	-	Report	11.9	Report	12.2	Report	13.9	Report	12.5	Report	12.8	Report	13.8	Report	12.5
O	mass %	D5599	-	Report	7.1	Report	5.5	Report	5.5	Report	5.2	Report	27.2	Report	3.7	Report	7.2
Gross Heat of Combustion	Btu/lb	D4809	-	Report	17,309	Report	18,524	Report	18,972	Report	18,575	Report	12,925	Report	18,963	Report	18,021
Water Content[a]	mg/kg	E1064	-	Report	0.1	Report	0.1	Report	0.1	Report	0.1	<10,000	9,255	Report	<0.1	Report	<0.1
Copper Strip Corrosion, 3h at 122°F[a]	-	D130	-	<No. 1	1A	<No. 1	1A	<No. 1	1A	<No. 1	1A	na	na	<No. 1	1A	<No. 1	1A
Solvent-Washed Gum Content[a]	mg/100 ml	D381	-	< 5	<0.5	< 5	<0.5	< 5	0.5	< 5	<0.5	< 5	1.9	< 5	<0.5	< 5	0.5
Oxidation Stability[a]	minute	D525	-	>240	>240	>240	>240	>240	>240	>240	>240	na	na	>240	>240	>240	>240

[a] – inspection results from Haltermann
[b] – fuel provided by CRC
[c] – inspection results from EPA Fuels Round Robin study
NOTE: Properties in bold were varied within the fuel matrix. All other properties were held constant.

TABLE 2. FUEL DEVELOPMENT PROTOCOL

Step 1: Based on the specification provided in Table 1, the EPA shall generate a recipe for each test fuel and forward it to Haltermann Products (HP)[1]

Step 2: HP shall prepare a hand blend and perform its analysis. The scope of this analysis shall include, at the minimum, D86 distillation, D1319 FIA and D5191 DVPE

- If the predicted S content of this blend is ≥ 27 ppm, then S by D5453 shall also be measured
- If the predicted benzene content of this blend ≥ 0.70, then benzene by D3606 shall also be measured
- If the predicted anti knock index ((R+M)/2) of this blend ≤ 88.0, D2699 research and D2700 motor octane numbers shall also be measured

Note: OptiDist distillation stills shall be used to generate D86 distillation data for all E10, E15, E20 and E85 fuels

Note: Distillation, FIA, and RVP shall be measured by HP and a contract laboratory of HP's choice

Note: For a typical fuel, it is expected that Steps 1 and 2 may be repeated up to three more times; more iterations may be necessary for some fuels.

Step 3: Once the blend meets the T10, T50, T90, FBP, DVPE, FIA aromatics, FIA olefins, benzene content, S content, ethanol content and anti knock index requirements of the specification provided in Table 1, its inspection data shall be presented to the EPA WAM for approval

Step 4: Upon approval of the hand blend inspection data, the EPA WAM shall generate the final specification for the bulk blend of this fuel based on the following table:

[1] Communications between EPA and HP will take place via SwRI

TABLE 2 (CONT'D). FUEL DEVELOPMENT PROTOCOL

PROPERTY	UNIT	METHOD	BLENDING TOLERANCE	SPECIFICATION
Relative Density, 60/60°F	-	D4052	NA	Report
API Gravity, 60°F	°API	D4052	NA	Report
Ethanol Content	vol. %	D5599	E0: < 0.1; E10: ± 0.5; E15: ± 0.5; E20: ±0.5; E85: ±2	Per Appendix 1
Total Content of Oxygenates Other than Ethanol	vol. %	D5599	-	<0.1
T10	°F	D86	± 5	Value approved by EPA WAM in Step 3
T30	°F	D86	± 5	Value approved by EPA WAM in Step 3
T50	°F	D86	± 4	Value approved by EPA WAM in Step 3
T70	°F	D86	± 5	Value approved by EPA WAM in Step 3
T90	°F	D86	± 5	Value approved by EPA WAM in Step 3
FBP	°F	D86	-	<437
DVPE	psi	D5191	± 0.15	Value approved by EPA WAM in Step 3
Aromatics	vol. %	D1319	± 1.5	Value approved by EPA WAM in Step 3
Olefins	vol. %	D1319	± 1.5	Value approved by EPA WAM in Step 3
Benzene	vol. %	D3606	± 0.15	0.62
S	mg/kg	D5453	± 5	25
(R + M)/2	-	Calc.	-	>=87
C (Part of D4809)	mass %	D5291	-	Report
H (Part of D4809)	mass %	D5291	-	Report
O	mass %	D5599	-	Report
Water Content	mg/kg	E1064	-	Report
Net Heat of Combustion	MJ/kg	D4809	-	Report
Oxidation Stability	minute	D525	-	>240
Copper Strip Corrosion, 3h at 122°F	-	D130	-	<No. 1
Solvent-Washed Gum Content	mg/100 ml	D381	-	< 5

TABLE 2 (CONT'D). FUEL DEVELOPMENT PROTOCOL

Step 5: HP shall prepare the bulk blend of the fuel and adjust its properties until it meets the specification defined in Step 4

Note: OptiDist distillation stills shall be used to generate D86 distillation data for all E10, E15, E20 and E85 fuels

Note: Distillation, FIA, RVP, S content, benzene content and anti knock index shall be determined by HP

Note: The fuel shall be also analyzed by a contract laboratory of HP's choice in two phases

Phase 1: Initially, the distillation, FIA, and RVP shall be determined

- S content, benzene content and anti knock index shall also be determined if the criteria listed for these parameters in Step 2 are met

Phase 2: The remaining fuel properties shall be determined only when the average values of distillation parameters, FIA, RVP, S content, benzene content and anti knock index determined by HP and the contract lab have been shown to meet the requirements of the specification defined in Step 4 (Phase 2). They must also be within the reproducibility limits of each test method.

Step 6: Once the inspection data generated by HP and the contract laboratory indicate that the final blend meets the specification defined in Step 4, a sample shall be shipped to SWRI for confirmatory analysis

Step 7: SWRI shall perform tests listed in WA 1-04, contract EP-C-07-028, except for H by D4808 which has been dropped from the EPAct fuel specification

Note: OptiDist distillation stills shall be used to generate D86 distillation data for all E10, E15, E20 and E85 fuels

Step 8: If SwRI analytical results are outside of test reproducibility limits for any parameter, discussions will be necessary among EPA, SwRI, and Haltermann regarding the disposition of the fuel. Otherwise, following review of SwRI and Haltermann results, EPA will approve the bulk blend for shipment to SwRI.

Blending sequence: E0 and E10 fuels will be blended first, followed by E20 fuels, E15 fuels and the E85 fuel

SwRI procured the following fuel amounts:

	Number of 55-Gallon Drums			
	EPA funding		NREL funding	Provided by CRC
	Shipped to SwRI	Shipped to EPA	Shipped to SwRI	
Fuel 1	10			
Fuel 2	10			
Fuel 3	10			
Fuel 4	10			
Fuel 5	10			
Fuel 6	10			
Fuel 7	10			
Fuel 8	10			
Fuel 9	10			
Fuel 10	10			
Fuel 11	10			
Fuel 12	10			
Fuel 13	10			
Fuel 14	10			
Fuel 15	10			
Fuel 16	10			
Fuel 17	20	4	2	
Fuel 18	20	4	2	
Fuel 19	20	4	2	
Fuel 20			10	
Fuel 21			10	
Fuel 22			10	
Fuel 23			10	
Fuel 24			10	
Fuel 25			10	
Fuel 26			10	
Fuel 27			10	
Fuel 28			10	
Fuel 29				4
Fuel 30	10			
Fuel 31	10			

For contingency purposes, these amounts included approximately 20 percent more fuel than the anticipated need to complete the program. All fuels were maintained in sealed epoxy-lined 5B drums at a constant temperature of less than 75°F (Figure 1). The storage temperature for unopened drums was 70°F ± 5°F. Prior to opening a drum, it was conditioned to a temperature of less than 50°F. Once a drum of fuel was opened, it continued to be stored at 45°F ± 5°F. In an effort to ensure correct drum labeling, during the conduct of the program each time a new drum was opened ethanol content, aromatic content, and T90 were determined using

a PetroSpec portable gasoline analyzer. PetroSpec analyses were performed as part of individual NREL and EPA contracts and work assignments, some of which are still ongoing. As such, PetroSpec results are not reported here and will be included in appropriate reports for Phases 1, 2, 3, 4, & 5, and Interim FTP Testing.

FIGURE 1. CONSTANT-TEMPERATURE STORAGE OF UNOPENED FUEL DRUMS

3.0 CLOSURE

All analytical results included in the report have also been submitted electronically to NREL and EPA. With the submission of this final report, all contracted items of work under the relevant proposals are complete.

APPENDIX A

DETAILED FUEL INSPECTION DATA

EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM – DETAILED FUEL INSPECTION DATA

PROPERTY	UNIT	TEST METHOD	FUEL					
			1	2	3	4	5	6
Density, 60°F	g/cm^3	D4052	0.7214	0.7224	0.7360	0.7350	0.7578	0.7345
API Gravity, 60°F	°API	D4052	64.5	64.3	60.7	60.9	55.2	61.1
Ethanol	vol. %	D5599	10.14	<0.1	10.42	9.83	<0.2	10.55
Total Content of Oxygenates Other Than Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Distillation IBP	°F	D86 (OptiDist or equivalent for E10, E15 and E20 fuels)	94	83	109	94	94	109
5% evap	°F		113	105	137	113	125	132
10% evap	°F		117	121	142	123	143	137
20% evap	°F		124	153	149	140	171	143
30% evap	°F		131	190	155	151	198	149
40% evap	°F		140	218	180	158	221	154
50% evap	°F		149	236	218	219	236	196
60% evap	°F		177	251	225	243	248	231
70% evap	°F		226	272	245	267	260	274
80% evap	°F		256	305	260	300	274	315
90% evap	°F		303	341	300	337	301	344
95% evap	°F		338	353	340	350	324	358
FBP	°F		368	375	372	371	360	370
Recovery	vol. %		98.4	96.8	98.2	97.6	97.3	97.1
Residue	vol. %		1.1	0.9	1.0	0.8	1	1.1
Loss	vol. %		0.5	2.3	0.8	1.6	1.7	1.8
DVPE	psi	D5191	10.05	10.38	6.78	10.00	6.86	7.19
Aromatics	vol. %	D1319	15.5	14.1	15.9	15.6	35.8	15.4
Olefins	vol. %	D1319	7.5	7.2	7.3	6.9	7.0	9.0
Benzene	vol. %	D3606	0.71	0.50	0.75	0.57	0.49	0.82
S	mg/kg	D5453	30	23	26	21	25	22
RON	-	D2699	94.9	96	98	97	96	96
MON	-	D2700	86.7	89	88	88	86	87
(R + M)/2	-	Calc.	90.8	92	93	93	91	92
C	mass %	D5291 mod.	82.16	85.39	82.44	82.23	86.98	81.42
H	mass %	D5291 mod.	13.60	14.25	14.04	13.90	13.04	14.26
O	mass %	D5599	3.9	<0.1	3.9	3.7	<0.1	4.0
Gross Heat of Combustion	Btu/lb	D4809	19,318	20,216	19,242	19,312	19,628	19,191
Toluene	vol. %	D3606	4.66	3.95	4.46	4.13	11.93	3.94
Water[a]	mass %	E-1064	0.052	0.005	0.051	0.063	0.004	0.058
Lead[a]	g/l	D3237	-	<0.001	-	-	<0.003	-
Copper Strip Corrosion[a]	-	D130	1A	1A	1A	1A	1A	1A
Solvent Washed Gum Content[a]	mg/100ml	D381	<0.5	<0.5	<0.5	1.5	<0.5	<0.5
Oxidation Stability[a]	min.	D525	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

[b] – inspection results from EPA Fuels Round Robin study

EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM – DETAILED FUEL INSPECTION DATA (CONT'D)

PROPERTY	UNIT	TEST METHOD	FUEL					
			7	8	9	10	11	12
Density, 60°F	g/cm^3	D4052	0.7211	0.7203	0.7453	0.7663	0.7601	0.7521
API Gravity, 60°F	°API	D4052	64.7	64.9	58.3	53.1	54.6	56.6
Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	9.87	10.21	9.85
Total Content of Oxygenates Other Than Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Distillation IBP	°F	D86 (OptiDist or equivalent for E10, E15 and E20 fuels)	100	84	84	106	92	92
5% evap	°F		128	108	102	131	117	111
10% evap	°F		137	124	113	137	125	117
20% evap	°F		149	152	129	144	138	124
30% evap	°F		161	182	146	151	148	134
40% evap	°F		177	205	166	163	157	143
50% evap	°F		193	222	191	218	196	153
60% evap	°F		210	234	223	263	233	210
70% evap	°F		229	248	260	289	253	280
80% evap	°F		252	266	292	319	273	312
90% evap	°F		297	304	341	342	303	342
95% evap	°F		329	332	363	357	336	365
FBP	°F		359	360	381	372	361	380
Recovery	vol. %		97.9	96.9	97.2	98.0	97.9	97.5
Residue	vol. %		0.8	1.1	0.5	1.0	1.0	1.1
Loss	vol. %		1.3	2	2.3	1.0	1.1	1.4
DVPE	psi	D5191	7.32	9.93	10.32	7.02	9.87	10.14
Aromatics	vol. %	D1319	16.7	16.0	37.3	35.6	35.1	35.1
Olefins	vol. %	D1319	7.3	6.2	6.2	6.0	6.3	6.0
Benzene	vol. %	D3606	0.55	0.48	0.55	0.58	0.57	0.62
S	mg/kg	D5453	23	22	23	25	22	19
RON	-	D2699	92	96	94	98	98	100
MON	-	D2700	85	88	85	87	86	88
(R + M)/2	-	Calc.	88	92	90	93	92	94
C	mass %	D5291 mod.	85.32	85.49	87.15	83.49	83.71	83.76
H	mass %	D5291 mod.	14.20	14.16	12.78	12.67	12.50	12.74
O	mass %	D5599	<0.1	0	<0.1	3.6	3.7	3.6
Gross Heat of Combustion	Btu/lb	D4809	20,125	20,209	19,757	18,958	18,817	18,950
Toluene	vol. %	D3606	5.07	4.31	14.16	8.5	12.77	8.58
Water[a]	mass %	E-1064	0.005	<0.1	0.007	0.058	0.055	0.053
Lead[a]	g/l	D3237	<0.001	0.001	<0.001	<0.003	-	<0.003
Copper Strip Corrosion[a]	-	D130	1A	1A	1A	1A	1A	1A
Solvent Washed Gum Content[a]	mg/100ml	D381	<0.5	<0.5	<0.5	<0.5	0.5	<0.5
Oxidation Stability[a]	min.	D525	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

[b] – inspection results from EPA Fuels Round Robin study

EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM – DETAILED FUEL INSPECTION DATA (CONT'D)

PROPERTY	UNIT	TEST METHOD	FUEL						
			13	14	15	16	17	18	19
Density, 60°F	g/cm^3	D4052	0.7544	0.7227	0.7431	0.7645	0.7583	0.7536	0.7495
API Gravity, 60°F	°API	D4052	56.0	64.2	58.8	53.5	55.1	56.1	57.3
Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	10.62	<0.1	9.39	13.94
Total Content of Oxygenates Other Than Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Distillation IBP	°F	D86 (OptiDist or equivalent for E10, E15 and E20 fuels)	97	99	80	106	89	98	93
5% evap	°F		123	124	106	134	116	123	117
10% evap	°F		137	134	116	140	130	134	128
20% evap	°F		157	146	131	148	158	148	137
30% evap	°F		177	159	147	156	182	154	144
40% evap	°F		198	174	166	175	199	170	156
50% evap	°F		222	192	190	221	215	211	181
60% evap	°F		245	210	216	238	235	233	246
70% evap	°F		270	236	244	254	264	265	262
80% evap	°F		303	277	267	271	296	297	287
90% evap	°F		339	338	299	306	323	319	312
95% evap	°F		355	354	328	342	339	330	327
FBP	°F		377	369	365	370	371	345	350
Recovery	vol. %		96.9	97.7	97.8	97.6	98.1	97.8	97.9
Residue	vol. %		1	0.6	0.8	1.0	0.8	0.8	0.6
Loss	vol. %		2.1	1.7	1.4	1.4	1.1	1.4	1.5
DVPE	psi	D5191	6.92	7.09	10.06	7.00	9.34	8.99	8.99
Aromatics	vol. %	D1319	33.5	16.6	36.7	36.7	29.5	22.9	22.06
Olefins	vol. %	D1319	5.1	7.7	7.2	6.7	6.3	5.7	6.18
Benzene	vol. %	D3606	0.53	0.52	0.53	0.65	0.46	0.68	0.71
S	mg/kg	D5453	22	24	23	22	23	22	21
RON	-	D2699	96	92	95	101	93	94	94
MON	-	D2700	86	85	85	88	83	85	85
(R + M)/2	-	Calc.	91	88	90	95	88	89	89
C	mass %	D5291 mod.	86.63	85.42	87.06	83.32	86.50	82.92	81.47
H	mass %	D5291 mod.	13.60	14.24	12.91	12.64	13.50	13.66	13.45
O	mass %	D5599	<0.1	<0.1	<0.1	3.8	<0.1	3.42	5.08
Gross Heat of Combustion	Btu/lb	D4809	19,729	20,128	19,710	18,769	19,775	19,117	18,725
Toluene	vol. %	D3606	12.21	4.42	16.26	12.85	4.59	4.39	6.37
Water[a]	mass %	E-1064	<0.1	0.005	0.007	0.057	<0.1	<0.1	<0.1
Lead[a]	g/l	D3237	<0.001	<0.001	<0.001	-	-	-	-
Copper Strip Corrosion[a]	-	D130	1A	1A	1A	1A	1A	0	0
Solvent Washed Gum Content[a]	mg/100ml	D381	1.5	<0.5	0.5	1	<0.5	0	0
Oxidation Stability[a]	min.	D525	>240	>240	>240	>240	>240	0	0

[a] – inspection results from Haltermann

[b] – inspection results from EPA Fuels Round Robin study

EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM – DETAILED FUEL INSPECTION DATA (CONT'D)

PROPERTY	UNIT	TEST METHOD	FUEL					
			20	21	22	23	24	25
Density, 60°F	g/cm^3	D4052	0.7429	0.7764	0.7375	0.7485	0.7428	0.7714
API Gravity, 60°F	°API	D4052	58.9	50.7	60.3	57.5	58.9	51.8
Ethanol	vol. %	D5599	19.77	20.04	20.06	20.04	20.08	19.91
Total Content of Oxygenates Other Than Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Distillation IBP	°F	D86 (OptiDist or equivalent for E10, E15 and E20 fuels)	107	109	93	110	91	92
5% evap	°F		137	136	121	134	120	119
10% evap	°F		143	142	130	139	129	129
20% evap	°F		149	150	145	146	144	145
30% evap	°F		155	157	154	152	154	155
40% evap	°F		159	163	159	157	160	162
50% evap	°F		162	168	163	162	165	167
60% evap	°F		182	223	168	178	185	237
70% evap	°F		234	255	234	272	270	289
80% evap	°F		252	277	257	313	310	317
90% evap	°F		300	308	303	338	341	344
95% evap	°F		338	334	343	351	354	363
FBP	°F		377	360	377	365	370	377
Recovery	vol. %		98.8	98.2	97.8	98.6	97.6	97.1
Residue	vol. %		1.0	1.0	1.0	1.0	1.1	1.1
Loss	vol. %		0.2	0.8	1.2	0.4	1.3	1.8
DVPE	psi	D5191	6.70	6.94	10.22	6.64	10.19	10.10
Aromatics	vol. %	D1319	16.3	34.5	15.4	16.5	15.9	37.9
Olefins	vol. %	D1319	7.3	7.1	7.1	7.0	6.6	6.8
Benzene	vol. %	D3606	0.69	0.72	0.65	0.70	0.71	0.75
S	mg/kg	D5453	23	20	21	22	21	25
RON	-	D2699	102	100	101	98	101	101
MON	-	D2700	90	88	90	87	89	88
(R + M)/2	-	Calc.	96	94	95	93	95	95
C	mass %	D5291 mod.	78.00	80.70	78.64	77.83	78.40	80.97
H	mass %	D5291 mod.	14.26	12.24	13.71	14.88	13.94	11.85
O	mass %	D5599	7.4	7.1	7.5	7.4	7.5	7.1
Gross Heat of Combustion	Btu/lb	D4809	18,473	18,021	18,470	18,434	18,447	17,309
Toluene	vol. %	D3606	4.15	12.81	4.10	4.06	4.08	8.78
Water[a]	mass %	E-1064	<0.1	<0.1	0.105	<0.1	0.103	0.113
Lead[a]	g/l	D3237	<0.0003	0.009	0.004	<0.003	0.005	0.001
Copper Strip Corrosion[a]	-	D130	1A	1A	1A	1A	1A	1A
Solvent Washed Gum Content[a]	mg/100ml	D381	<0.5	0.5	<0.5	0.5	0.5	<0.5
Oxidation Stability[a]	min.	D525	>240	>240	>240	>240	>240	>240

[a] – inspection results from Haltermann

[b] – inspection results from EPA Fuels Round Robin study

EPACT/V2/E-89 GASOLINE LIGHT-DUTY EXHAUST FUEL EFFECTS TEST PROGRAM – DETAILED FUEL INSPECTION DATA (CONT'D)

PROPERTY	UNIT	TEST METHOD	FUEL					
			26	27	28	29[b]	30	31
Density, 60°F	g/cm^3	D4052	0.7624	0.7448	0.7724	0.7797	0.7513	0.7748
API Gravity, 60°F	°API	D4052	54.0	58.4	51.6	49.8	56.8	51.0
Ethanol	vol. %	D5599	15.13	14.71	14.59	77.15	9.91	20.08
Total Content of Oxygenates Other Than Ethanol	vol. %	D5599	<0.1	<0.1	<0.1	<0.01	<0.1	<0.1
Distillation IBP	°F	D86 (OptiDist or equivalent for E10, E15 and E20 fuels)	93	111	107	99	92	106
5% evap	°F		113	138	136	133	108	134
10% evap	°F		119	143	144	154	115	140
20% evap	°F		130	153	153	168	125	149
30% evap	°F		140	159	159	170	134	156
40% evap	°F		151	164	164	171	143	162
50% evap	°F		161	225	219	172	152	167
60% evap	°F		188	252	241	172	208	236
70% evap	°F		280	276	254	173	270	274
80% evap	°F		313	316	270	173	298	302
90% evap	°F		344	342	303	174	329	330
95% evap	°F		357	352	337	176	333	350
FBP	°F		376	372	364	266	364	366
Recovery	vol. %		97.4	97.5	98.2	na	97.2	97.6
Residue	vol. %		1.1	1.0	1.0	na	1.0	1.0
Loss	vol. %		1.5	1.5	0.8	na	1.8	1.4
DVPE	psi	D5191	9.96	6.92	6.80	8.92	10.04	6.88
Aromatics	vol. %	D1319	36.9	16.2	36.5	-	37.1	38.0
Olefins	vol. %	D1319	6.8	8.1	7.2	-	6.4	5.7
Benzene	vol. %	D3606	0.67	0.66	0.69	0.12	0.70	0.79
S	mg/kg	D5453	23	26	24	16	25	22
RON	-	D2699	101	100	102	-	100	101
MON	-	D2700	89	89	90	-	88	88
(R + M)/2	-	Calc.	95	95	96	-	94	94
C	mass %	D5291 mod.	82.09	81.08	82.05	57.74	82.66	80.41
H	mass %	D5291 mod.	12.18	13.85	12.50	12.80	13.83	12.45
O	mass %	D5599	5.5	5.5	5.2	27.19	3.7	7.2
Gross Heat of Combustion	Btu/lb	D4809	18,524	18,972	18,575	12,925	18,963	18,021
Toluene	vol. %	D3606	8.65	3.91	12.38	-	9.69	9.67
Water[a]	mass %	E-1064	0.084	0.088	0.088	0.93	<0.1	<0.1
Lead[a]	g/l	D3237	<0.003	<0.003	<0.003	-	-	<0.003
Copper Strip Corrosion[a]	-	D130	1A	1A	1A	-	1A	1A
Solvent Washed Gum Content[a]	mg/100ml	D381	<0.5	0.5	<0.5	1.9	<0.5	0.5
Oxidation Stability[a]	min.	D525	>240	>240	>240	-	>240	>240

[a] – inspection results from Haltermann

[b] – inspection results from EPA Fuels Round Robin study

APPENDIX B

FUEL ANALYSES SUMMARY

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 1
PRODUCT CODE: HF078-1

Batch No.:	WL1821GP04	WL1821GP04	WL1821GP04	WL1821GP04	WL1821GP04	WL1821GP04	1D	1D	1D	1D
Analysis Date:	1/14/2009	1/12/2009	1/12/2009	1/9/2009	1/8/2009	1/7/2009	12/10/2008	12/10/2008	12/10/2008	12/10/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS	RESULTS Optidist	RESULTS Optidist
			MIN	TARGET	MAX										
Distillation - IBP	ASTM D86	°F							93.0	93.0	95.5			91.8	92.1
5%		°F							111.6	111.9	111.6			111.1	111.1
10%		°F	110	115	120				116.7	116.7	116.6			116.4	116.3
20%		°F							120.0	123.4	123.1			123.7	123.5
30%		°F	126	131	136				130.9	130.8	130.6			131.3	131.0
40%		°F							139.5	139.5	138.9			139.8	140.0
50%		°F	144	148	152				148.7	148.1	147.7			148.3	148.5
60%		°F							170.5	171.8	164.5			177.1	173.1
70%		°F	219	224	229				223.9	224.2	222.1			223.2	223.8
80%		°F							252.8	254.5	248.9			254.6	254.9
90%		°F	295	300	305				298.5	299.6	296.8			300.2	299.1
95%		°F							333.6	334.1	329.7			334.4	334.5
Distillation - EP		°F			437				366.3	366.3	362.5			368.3	366.0
Recovery		vol %		Report					98.5	97.8	97.8			97.4	98.4
Residue		vol %		Report					1.0	1.1	0.9			1.1	1.0
Loss		vol %		Report					0.5	1.1	1.3			1.5	0.6
Gravity	ASTM D4052	°API		Report				64.5			64.6				63.9
Specific Gravity	ASTM D4052	-		Report				0.7228			0.7215				0.7242
Reid Vapor Pressure	ASTM D5191	psi	9.85	10.00	10.15			9.90	9.98/9.99		8.00		9.91	10.08	9.95
Carbon	ASTM D5291	wt fraction		Report				81.5							
Hydrogen	ASTM D5291	wt fraction		Report				14.5							
Oxygen	ASTM D5599	wt fraction		Report				3.7							
Oxygen, other then ETOH	ASTM D5599	vol %			0.10			<0.01							
Ethanol content	ASTM D5599	vol %	9.50		10.50			9.59							
Water content	ASTM E1064	mg/kg		Report				520							
Sulfur	ASTM D5453	ppm wt	20		30	34		32			24.6	24			
Composition, aromatics, corrected	ASTM D1319	vol %	13.5		16.5		15.8		16.2				15.0	14.1	15.8
Composition, olefins, corrected	ASTM D1319	vol %	5.8	7.3	8.8		6.5		7.2				6.5	7.2	8.1
Composition, saturates, corrected	ASTM D1319	vol %		Report			67.7		66.6				68.6	68.9	66.2
Benzene	ASTM D3606	vol %	0.47		0.77			0.59				0.66			
Existent gum, washed	ASTM D381	mg/100mls			5.0			<0.5							
Research Octane Number	ASTM D2699			Report				94.8							
Motor Octane Number	ASTM D2700			Report				87.3							
R+M	D2699/2700		87.0					91.0							
Corrosion, Copper	ASTM D130				1			1A							
Oxidation stability	ASTM D525	minutes	240					>240							
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report				17991.0							
					ANALYST	Paragon	Core	Dixie	HP	Inspectorate	Gage	Dixie	Core	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 1**
PRODUCT CODE: **HF078-1**

	Batch No.:	1C	1C	1B	1B	1A	1A	1A				
	Analysis Date:	11/26/2008	11/26/2008	11/11/2008	11/11/2008	11/3/2008	11/3/2008	11/3/2008	3/25/2008	3/24/2008	3/19/2008	3/12/2008

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS Optidist	RESULTS Optidist 2	RESULTS Optidist 1	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					91.3	97.0	95.2			93.5	94.6	94.6	98.5	98.3
5%		°F					109.0	113.1	112.6			111.6	112.8	112.1	110.7	110.3
10%		°F	110	115	120		114.7	118.4	117.9			117.3	118.3	117.9	105.2	114.8
20%		°F					121.9	125.5	125.1			124.6	125.0	124.6	121.3	121.5
30%		°F	126	131	136		129.6	133.1	132.9			132.5	131.9	131.7	128.1	128.7
40%		°F					138.1	142.4	142.1			141.8	139.2	139.2	135.6	135.9
50%		°F	144	148	152		147.1	152.3	152.1			151.8	146.8	146.5	**143.1**	**144.0**
60%		°F					166.1	176.6	172.9			170.1	172.2	181.2	169.3	165.5
70%		°F	219	224	229		219.5	229.7	228.0			229.3	217.3	231.3	218.3	219.6
80%		°F					252.8	257.3	256.0			255.0	250.2	273.7	267.4	267.4
90%		°F	295	300	305		297.0	300.0	297.1			293.7	295.8	297.4	299.0	295.9
95%		°F					332.8	335.1	333.8			331.7	322.5	314.8	316.8	312.9
Distillation - EP		°F			437		366.9	369.6	361.7			364.3	361.8	349.3	350.8	342.8
Recovery		vol %		Report			97.2	98	97.9			97.6	97.8	97.7	97.3	97.3
Residue		vol %		Report			1.1	1.0	1.0			1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report			1.7	1.0	1.1			1.4	1.2	1.3	1.7	1.7
Gravity	ASTM D4052	°API		Report			64.2		64.1			64.0	60.2	60.2	61.6	61.2
Specific Gravity	ASTM D4052	-		Report			0.7229		0.7235			0.7238	0.7382	0.7382	0.7330	0.7345
Reid Vapor Pressure	ASTM D5191	psi	9.85	10.00	10.15		10.03		10.21			10.24	9.90	9.90	10.11	**10.60**
Carbon	ASTM D5291	wt fraction		Report												
Hydrogen	ASTM D5291	wt fraction		Report												
Oxygen	ASTM D5599	wt fraction		Report												
Oxygen, other then ETOH	ASTM D5599	vol %			0.10											
Ethanol content	ASTM D5599	vol %	9.50		10.50								10.28	10.28		9.70
Water content	ASTM E1064	mg/kg		Report												
Sulfur	ASTM D5453	ppm wt	20		30				21							
Composition, aromatics, corrected	ASTM D1319	vol %	13.5		16.5	14.7	15.2	14.5	14.9	16.2	17.1	16.1	14.9	14.9	**12.4**	**17.3**
Composition, olefins, corrected	ASTM D1319	vol %	5.8	7.3	8.8	5.5	7.8	7.7	7.1	6.7	7.5	6.5	7.2	7.2	7.5	**5.4**
Composition, saturates, corrected	ASTM D1319	vol %		Report		69.9	67.1	67.9	68.0	67.1	65.4	67.9	77.9	77.9	80.1	67.5
Benzene	ASTM D3606	vol %	0.47		0.77				0.67							
Existent gum, washed	ASTM D381	mg/100mls			5.0											
Research Octane Number	ASTM D2699			Report									93.4		91.9	**90.4**
Motor Octane Number	ASTM D2700			Report									83.2		83.5	**82.0**
R+M	D2699/2700		87.0										88.3		87.7	**86.2**
Corrosion, Copper	ASTM D130				1											
Oxidation stability	ASTM D525	minutes	240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report												
					ANALYST	Dixie	JB/INS	JB	JB	Core	Inspectorate	JB	HVD	HVD	HVD	HVD

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 2
PRODUCT CODE: HF0678-2

	Batch No.:	WK0521GP14	WK0521GP14	WK0521GP14	WK0521GP14	2E	2D	2C	HB #9	HB #8	HB #7	HB #6	HB #5	HB #4	HB #3	HB #2	HB #1
	Analysis Date:	11/26/2008	11/20/2008	11/18/2008	11/12/2008	10/24/2008	10/20/2008	10/13/2008		3/26/2008	3/26/2008	3/25/2008	3/25/2008	3/24/2008	3/19/2008	3/13/2008	3/13/2008

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F				79.3	87.0	82.0	90.5		82.8	85.6	92.1	82.0	82.0	95.0	89.9	82.4	96.0	93.8	91.8
5%		°F				99.2	107.8	97.0	93.2		103.4	104.7	112.7	102.7	102.7	113.2	106.3	97.5	111.9	112.4	106.0
10%		°F	114	119	124	116.4	123.4	117.0	115.9		118.8	119.6	128.5	118.0	118.0	127.5	117.5	109.7	122.7	122.7	118.3
20%		°F				150.9	157.0	152.0	148.1		151.0	150.9	158.2	149.6	149.6	163.6	140.7	135.7	143.9	142.3	138.1
30%		°F	184	189	194	189.0	194.8	190.0	185.4		188.8	186.8	197.7	192.8	192.8	204.8	170.7	169.4	169.0	166.0	162.1
40%		°F				217.8	223.3	218.0	216.1		218.2	218.0	225.4	224.0	224.0	230.1	205.4	205.6	199.4	193.9	190.3
50%		°F	234	238	242	236.6	241.2	237.0	235.4		237.9	239.8	237.0	238.0	238.0	243.0	**230.2**	**231.7**	**226.7**	**219.8**	**217.3**
60%		°F				251.8	256.6	253.0	250.5		253.9	257.8	248.2	248.5	248.5	253.1	242.2	246.7	243.9	237.9	235.5
70%		°F	268	273	278	271.0	275.4	271.0	269.4		272.7	280.1	258.2	260.9	260.9	266.9	254.0	260.6	257.3	252.9	248.5
80%		°F				304.6	309.9	306.0	302.7		305.6	312.4	274.1	284.3	284.3	293.2	269.5	282.0	279.3	276.4	265.1
90%		°F	335	340	345	337.5	344.5	342.0	323.1		339.4	338.0	325.9	344.2	344.2	**349.6**	**311.1**	**332.6**	**330.9**	**334.7**	**300.3**
95%		°F				351.0	357.0	356.0	338.7		352.5	349.2	361.2	367.4	367.4	368.8	355.0	355.6	355.6	358.7	324.5
Distillation - EP		°F			437	375.2	381.4	373.0	375.3		371.9	368.4	388.8	392.3	392.3	390.4	388.1	386.5	387.6	392.0	364.3
Recovery		vol %		Report		97.3	97.3	97.0	95.1		97.2	97.2	96.9	97.5	97.5	96.8	97.3	96.6	96.8	97.9	96.3
Residue		vol %		Report		1.1	1.1	1.2	0.9		1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		1.6	1.6	1.8	4.0		1.7	1.8	2.1	1.5	1.5	2.2	1.7	2.4	2.2	1.1	2.7
Gravity	ASTM D4052	°API		Report				64.4	64.4		64.5	63.6	64.3	64.9	64.9	63.2	65.5	65.5	65.4	66.0	
Specific Gravity	ASTM D4052	-		Report				0.7227	0.7222		0.7221	0.7251	0.7227	0.7205	0.7205	0.7268	0.7183	0.7183	0.7185	0.7163	1.0760
Reid Vapor Pressure	ASTM D5191	psi	9.90	10.05	10.20		9.98	10.15	10.20	10.05	10.3900	9.8100	**9.24**	**11.20**	**11.20**	**9.60**	**10.90**	**11.48**	**9.80**	10.09	**10.20**
Carbon	ASTM D5291	wt fraction		Report				84.5													
Hydrogen	ASTM D5291	wt fraction		Report				15.5													
Oxygen	ASTM D5599	wt fraction		Report				<0.1													
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10			<0.01													
Ethanol content	ASTM D5599	wt %			0.05			<0.01													
Water content	ASTM E1064	mg/kg		Report				51													
Sulfur	ASTM D5453	ppm wt	20		30			25	18.28		23	22									
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5		14.2	14.1			15.0	14.2	14.6					15.0	14.5	14.5	14.5
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5		6.3	5.7			6.5	7.4	5.5					5.8	7.3	7.3	7.3
Composition, saturates	ASTM D1319	vol %		Report			79.5	80.2			78.5	78.4	79.9					79.2	78.2	78.2	78.2
Benzene	ASTM D3606	vol %	0.47		0.77			0.46			0.25	0.29									
Existent gum, washed	ASTM D381	mg/100mls			5.0			<0.5													
Research Octane Number	ASTM D2699			Report				96.1			96.3	95.6		91.6					92.4	93.5	93.5
Motor Octane Number	ASTM D2700			Report				88.4			88.9	88.4		85.1					85.2	86.2	86.2
R+M	D2699/2700		87.0					92.3			92.6	92.0		88.4					88.8	89.9	89.9
Corrosion, Copper	ASTM D130				1			1A													
Oxidation stability	ASTM D525	minutes	240					>240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report				18745													
		ANALYST				INS	JB	Dixie	Gage	JB	JB	JB		HVD	HVD	HVD	HVD	HVD	HVD	HVD	HVD

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 3
PRODUCT CODE: HF0678-3

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS Optidist	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS
Batch No.:						XB0921GP01	XB0921GP01	XB0921GP01	XB0921GP01	XB0921GP01	XB0921GP01	XB0921GP01	XB0921GP01	3G	3G	3G	3G	3F
Analysis Date:						2/26/2009	2/25/2009	2/23/2009	2/16/2009	2/16/2009	2/13/2009	2/16/2009	2/10/2009	2/2/2009	1/30/2009	1/30/2009	1/29/2009	1/23/2009
Distillation - IBP	ASTM D86	°F				108.3	106.7				107.9	109	118.8			109.1	110.3	
5%		°F				136.1	135.6				137.0	135.9	137.5			136.0	136.0	
10%		°F	136	141	146	141.5	141.4				142.1	141.7	141.8			141.3	141.6	
20%		°F				148.5	148.7				149.1	145.4	149			148.4	148.6	
30%		°F	149	154	159	154.5	154.7				155.3	154.5	155.5			153.8	154.7	
40%		°F				175.5	174.8				182.6	182.5	182.7			179.3	179.1	
50%		°F	215	219	223	216.8	216.8				218.0	218.5	218.1			219.9	219.0	
60%		°F				229.8	231.1				231.8	232.7	231.8			232.7	234.7	
70%		°F	242	247	252	244.4	242.9				243.9	244.9	241.3			246.3	246.8	
80%		°F				258.5	247.7				258.1	259.5	259			262.3	261.2	
90%		°F	295	300	305	297.1	293.7				294.5	296.1	293			300.9	299.1	
95%		°F				333.2	332.7				328.8	334	329.9			336.0	334.5	
Distillation - EP		°F			437	373.5	566.4				365.2	372.8	370.9			372.6	368.7	
Recovery		vol %		Report		98.8	98.9				97.7	98.1	98.1			97.2	98.3	
Residue		vol %		Report		1.0	1.0				1.0	1.0	0.9			1.1	1.0	
Loss		vol %		Report		0.2	0.1				1.3	0.9	1			1.7	0.7	
Gravity	ASTM D4052	°API		Report								60.6	60.8				60.3	
Specific Gravity	ASTM D4052	-		Report								0.736					0.7380	
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95			6.76		6.48		6.32	6.34		**6.42**		**6.31**	
Carbon	ASTM D5291	wt fraction		Report						81								
Hydrogen	ASTM D5291	wt fraction		Report						14.4								
Oxygen	ASTM D5599	wt fraction		Report						3.5								
Oxygen, other then ETOH	ASTM D5599	vol %			0.10					<0.01								
Ethanol content	ASTM D5599	vol %	9.50	10.0	10.50			10.15		9.40								
Water content	ASTM E1064	mg/kg		Report						514.00								
Sulfur	ASTM D5453	ppm wt	20	25	30					23			17.71		24			
Composition, aromatics, corrected	ASTM D1319	vol %	13.8	15.3	16.8				14.6			15.7		15.3			15.3	15.3
Composition, olefins, corrected	ASTM D1319	vol %	5.3	6.8	8.3				6.8			7.8		6.2			7.3	6.7
Composition, saturates, corrected	ASTM D1319	vol %		Report					68.7			66.5		68.5			67.4	68.0
Benzene	ASTM D3606	vol %	0.47	0.62	0.77			0.54		0.33								
Existent gum, washed	ASTM D381	mg/100mls			5.0					<0.5								
Research Octane Number	ASTM D2699									97.7								
Motor Octane Number	ASTM D2700									86.9								
R+M	D2699/2700		87.0							92.3								
Corrosion, Copper	ASTM D130				1					1A								
Oxidation stability	ASTM D525	minutes	240							>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report						17567								
		ANALYST				INS	JAM	Dixie	Core	Dixie	INS	JB	Gage	Core	Dixie	INS	JB	Core

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	EPA Matrix Fuel 3	Batch No.:	3F	3F	3F	3E	3E	3E	3E	3E	3E	3E	3D	3D	3D	3D	3C	3C
PRODUCT CODE:	HF0678-3	Analysis Date:	1/23/2009	1/23/2009	1/22/2009	12/30/2008	12/28/2008	12/26/2008	12/22/2008	12/22/2008	12/24/2008	12/22/2008	12/10/2008	12/10/2008	12/10/2008	12/10/2008	11/26/2008	11/26/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS Optidist
			MIN	TARGET	MAX																
Distillation - IBP	ASTM D86	°F					110.1	109.6	113.2	111.9				108.5	109.4			102	106.5		107.4
5%		°F					136.8	136.4	137.8	138.4				137.3	137.1			132.3	133.6		134.4
10%		°F	136	141	146		142	142.0	142.5	145.0				142.3	142.3			138.5	139.6		140.3
20%		°F					148.8	148.9	149.7	150.1				149.2	149.4			147	147.6		147.5
30%		°F	149	154	159		154.2	154.9	156.4	156.3				156.2	155.8			153.9	154.5		151.3
40%		°F					181	180.7	190.6	196.4				193.8	186.0			174.2	176.3		172.8
50%		°F	215	219	223		219.6	219.1	221.4	**223.5**				222.4	220.5			218.3	220.8		214.7
60%		°F					232.5	233.6	230.5	235.1				236.1	235.2			233.1	231.5		228.1
70%		°F	242	247	252		245.1	245.1	241.5	243.6				243.0	247.2			246.4	247.2		244.8
80%		°F					259.2	260.4	264.2	264.0				268.7	257.4			261.2	261.4		258
90%		°F	295	300	305		295.3	**294.7**	**305.1**	**310.8**				313.2	301.0			298.5	301.1		298.3
95%		°F					331.5	332.3	341.1	347.8				350.6	337.8			334.1	334.4		331.2
Distillation - EP		°F			437		369.9	372.7	372.4	373.3				437.4	375.6			370.9	372.9		372.4
Recovery		vol %		Report			97.6	98.6	98.4	97.5				97.7	98.8			98.1	98.3		97.6
Residue		vol %		Report			1.0	1.0	1.0	1.1				1.1	1.1			1.0	1.0		1.0
Loss		vol %		Report			1.4	0.4	0.6	1.4				1.2	0.1			0.9	0.7		1.4
Gravity	ASTM D4052	°API		Report				60.2	60.4		60.4				60.1				60.4		60.5
Specific Gravity	ASTM D4052	-		Report				0.7380	0.7372						0.7384				0.7372		0.7369
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95	**6.44**		**6.37**	**6.24**		**6.24**	**6.32**	**6.41**				6.84	6.83	6.58		6.28
Carbon	ASTM D5291	wt fraction		Report																	
Hydrogen	ASTM D5291	wt fraction		Report																	
Oxygen	ASTM D5599	wt fraction		Report																	
Oxygen, other then ETOH	ASTM D5599	vol %			0.10																
Ethanol content	ASTM D5599	vol %	9.50	10.0	10.50						9.9 Cal	9.9 Cal									
Water content	ASTM E1064	mg/kg		Report																	
Sulfur	ASTM D5453	ppm wt	20	25	30											25					
Composition, aromatics, corrected	ASTM D1319	vol %	13.8	15.3	16.8			16.0			15.0	15.0			15.8		14.9	13.8	15.4	15.1	14.9
Composition, olefins, corrected	ASTM D1319	vol %	5.3	6.8	8.3			7.7			6.1	6.1			7.2		6.3	7.8	8.1	6.4	7.4
Composition, saturates, corrected	ASTM D1319	vol %		Report				66.2			69.0	69.0			67.1		68.9	68.5	66.6	68.6	67.8
Benzene	ASTM D3606	vol %	0.47	0.62	0.77											0.35					
Existent gum, washed	ASTM D381	mg/100mls			5.0																
Research Octane Number	ASTM D2699																				
Motor Octane Number	ASTM D2700																				
R+M	D2699/2700		87.0																		
Corrosion, Copper	ASTM D130				1																
Oxidation stability	ASTM D525	minutes	240																		
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report																	
						ANALYST	Dixie	INS	JB	JB	INS	Core	Core	Dixie	Inpectorate	JB	Dixie	Core	Inspectorate	JB	Dixie	JB/INS

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 3
PRODUCT CODE: HF0678-3

	Batch No.:	3B	3B	3A	3A	3A	HB#5	HB#4	HB#3	HB#2	HB#1	HB#2 Old	HB#1 Old
	Analysis Date:	11/11/2008	11/11/2008	11/3/2008	11/3/2008	11/3/2008	4/1/2008	4/2/2008	4/1/2008	3/31/2008	3/27/2008	3/11/2008	3/10/2008

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS Optidist 1	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					108.2			109.6	108.2	105.5	105.3	104.1	87.1	91.0	91.5
5%		°F					135.9			134.0	132.4	132.9	131.4	128.4	108.4	128.1	123.1
10%		°F	136	141	146		141.7			141.6	138.5	138.6	137.1	134.9	118.7	138.6	133.4
20%		°F					150.1			150.1	146.5	146.5	145.4	145.2	134.7	155.3	149.5
30%		°F	149	154	159		157.1			157.8	153.3	153.9	152.4	154.1	148.4	175.4	170.4
40%		°F					175.2			177.1	178.4	179.7	173.2	173.7	157.9	199.9	197.2
50%		°F	215	219	223		222.8			222.2	219.6	219.6	219.9	**233.8**	**230.3**	220.8	220.6
60%		°F					238.6			237.6	233.6	232.1	235.4	249.2	252.4	233.3	234.6
70%		°F	242	247	252		249.1			249.8	246.3	244.9	249.5	263.1	266.5	243.7	246.0
80%		°F					264.4			262.2	265.1	260.9	270.8	280.0	288.3	259.8	262.7
90%		°F	295	300	305		301.6			288.4	299.0	**292.5**	**311.1**	**309.0**	**317.8**	295.9	**306.0**
95%		°F					339.9			326.5	324.8	322.3	329.5	326.6	328.9	324.6	329.8
Distillation - EP		°F			437		378.2			367.7	355.5	355.5	356.7	356.6	351.5	366.6	369.1
Recovery		vol %		Report			98.7			96.6	97.7	98.3	98.2	98.5	97.4	98.4	98.4
Residue		vol %		Report			1.0			1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report			0.3			2.3	1.3	0.7	0.8	0.5	1.6	0.6	0.6
Gravity	ASTM D4052	°API		Report			60.8			60.1		59.5	59.7	60.8	62.8	65.6	66.2
Specific Gravity	ASTM D4052	-		Report			0.736			0.7384		0.7409	0.7399	0.7360	0.7283	0.7178	0.7159
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.78			6.68		6.77	**6.88**	**7.30**	**10.90**	7.10	7.40
Carbon	ASTM D5291	wt fraction		Report													
Hydrogen	ASTM D5291	wt fraction		Report													
Oxygen	ASTM D5599	wt fraction		Report													
Oxygen, other then ETOH	ASTM D5599	vol %			0.10												
Ethanol content	ASTM D5599	vol %	9.50	10.0	10.50						9.70	9.70	9.70	9.70			
Water content	ASTM E1064	mg/kg		Report													
Sulfur	ASTM D5453	ppm wt	20	25	30	22											
Composition, aromatics, corrected	ASTM D1319	vol %	13.8	15.3	16.8	14.3	14.7	15.6	16.0	16.1	14.9	14.9	14.9	14.4	13.6	14.3	14.3
Composition, olefins, corrected	ASTM D1319	vol %	5.3	6.8	8.3	6.5	6.5	6.6	7.8	6.4	8.0	8.0	8.0	5.8	**5.3**	9.3	6.7
Composition, saturates, corrected	ASTM D1319	vol %		Report		69.2	68.8	67.9	66.2	68.0	67.4	67.4	67.4	79.8	81.1	76.4	78.9
Benzene	ASTM D3606	vol %	0.47	0.62	0.77	0.34											
Existent gum, washed	ASTM D381	mg/100mls			5.0												
Research Octane Number	ASTM D2699									99.2	93.2				93.7	94.5	**95.2**
Motor Octane Number	ASTM D2700									88.7	84.8				85.5	**87.5**	**87.6**
R+M	D2699/2700		87.0							94.0	89.0				89.6	91.0	**91.4**
Corrosion, Copper	ASTM D130				1												
Oxidation stability	ASTM D525	minutes	240														
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report													
					ANALYST	Dixie	JB	Core	Inspectorate	JB	HVD	HVD	HVD	HVD	HVD	HVD	HVD

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 4**				**Batch No.:**	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	WL0121GP01	**4A**	**4A**	HB#2	HB#1
PRODUCT CODE:	**HF0678-4**				**Analysis Date:**	1/15/2009	12/26/2008	12/26/2008	12/20/2008	12/19/2008	12/12/2008	12/12/2008	12/12/2008	12/10/2008	12/10/2008	12/3/2008	11/25/2008	11/11/2008	11/11/2008	3/31/2008	3/27/2008
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**Results**	**Results optidist**	**Results optidist**	**Results optidist**	**Results optidist**	**Results**	**Results optidist**	**Results**	**Results**	**Results Optidist**	**Results**	**Results**	**Optidist 2**	**Optidist 1**		
			MIN	**TARGET**	**MAX**																
Distillation - IBP	ASTM D86	°F					90.7	88.7	88.0	92.4		86.1			88.6	92.0	97.9	93.4	94.2	96.4	87.1
5%		°F					112.8	116.9	116.3	113.7		113.1			112.4	110.0	111.7	115.5	115.9	113.9	108.4
10%		°F	121	126	131		124.0	126.9	126.7	124.1		123.7			122.7	124.0	121.8	126.1	126.2	121.4	118.7
20%		°F					139.0	141.4	141.6	139.6		139.0			138.6	140.0	138.4	142.0	142.1	134.8	134.7
30%		°F	149	154	159		150.6	152.0	152.4	150.9		150.3			150.0	151.0	150.4	153.8	153.9	146.6	148.4
40%		°F					157.8	164.2	165.5	161.0		157.8			158.7	158.0	157.1	161.9	162.4	155.8	157.9
50%		°F	215	219	223		218.6	225.4	225.1	218.7		216.5			214.6	216.0	215.8	218.4	218.8	219.0	230.3
60%		°F					239.2	242.7	247.7	243.9		240.0			237.1	247.0	241.9	247.1	248.0	250.3	252.4
70%		°F	265	270	275		266.5	272.7	269.3	267.3		259.8			264.6	268.0	262.8	269.8	269.6	273.2	266.5
80%		°F					301.8	308.1	309.9	302.4		296.6			294.9	302.0	297.0	301.7	302.8	302.5	288.3
90%		°F	334	339	344		336.2	340.7	342.3	336.1		335.5			334.7	338.0	336.2	339.9	338.9	343.5	317.8
95%		°F					350.4	356.4	358.7	350.1		350.0			350.1	355.0	350.4	355.6	355.2	359.3	328.9
Distillation - EP		°F			437		368.8	370.1	370.2	369.1		371.0			370.3	375.0	370.8	375.7	375.6	385.4	351.5
Recovery		vol %		Report			97	97.1	97.3	97.3		97.5			97.2	97.3	96.6	97.5	97.5	97.6	97.4
Residue		vol %		Report			1.1	1.1	1.1	1.1		1.1			1.1	1.1	1.1	1.1	1.1	1.0	1.0
Loss		vol %		Report			1.9	1.8	1.6	1.6		1.4			1.7	1.6	2.3	1.4	1.4	1.4	1.6
Gravity	ASTM D4052	°API		Report			60.7								61.4	61.4	61.4		61.0	61.5	62.8
Specific Gravity	ASTM D4052	-		Report			0.7361								0.7340	0.7340	0.7337		0.7352	0.7332	0.7283
Reid Vapor Pressure	ASTM D5191	psi	9.95	10.10	10.25	9.95	9.93				10.00			10.01		10.10	10.05		10.10	9.96	10.90
Carbon	ASTM D5291	wt fraction		Report												78.5					
Hydrogen	ASTM D5291	wt fraction		Report												15.3					
Oxygen	ASTM D5599	wt fraction		Report												3.6					
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10											<0.01					
Ethanol content	ASTM D5599	wt %	9.50		10.50			10.02								10.31				9.70	
Water content	ASTM E1064	mg/kg		Report				633								656					
Sulfur	ASTM D5453	ppm wt	20	25	30			30								23	22	22			
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5		16.0	15.1							15.4	14.8	16.5	14.8	15.5	16.0	13.6
Composition, olefins	ASTM D1319	vol %	4.6	6.1	7.6		6.1	6.1							6.6	6.0	11.1	6.0	6.2	7.8	**5.3**
Composition, saturates	ASTM D1319	vol %		Report			67.9	68.6							68.1	69.6	57.5	69.2	68.3	76.2	81.1
Benzene	ASTM D3606	vol %	0.47		0.77			5.10					0.51			0.40		0.44			
Existent gum, washed	ASTM D381	mg/100mls			5.0											1.5					
Research Octane Number	ASTM D2699			Report												97.2				94.3	93.7
Motor Octane Number	ASTM D2700			Report												87.5				85.1	85.5
R+M	D2699/2700		87.0													92.3				89.7	89.6
Corrosion, Copper	ASTM D130				1											1a					
Oxidation stability	ASTM D525	minutes	240													>240					
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report												17918					
						ANALYST	Inspectorate	JB	INS	INS	JB	Core	Inspectorate	Dixie	Inspectorate	JB	Dixie	Gage	JB	JB	HVD	HVD

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 5**				**Batch No.:**	XB2321GP01	XB2321GP01	XB2321GP01	XB2321GP01	XB2321GP01	XB2321GP01	5 ReBlend B	5 ReBlend B	5 ReBlend B	5 ReBlend B
PRODUCT CODE:	**HF0678-5**				**Analysis Date:**	3/3/2009	3/4/2009	3/2/2009	3/4/2009	2/27/2009	2/26/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
					Shipment Date:										
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
			MIN	**TARGET**	**MAX**				**797**					**optidist**	**optidist**
Distillation - IBP	ASTM D86	°F						89.9	93.5					93.5	92
5%		°F						125.3	126.7					130.5	127
10%		°F	141	146	151			142.4	143.5					146.9	144.7
20%		°F						170.4	170.3					174.9	173.1
30%		°F	196	201	206			197.7	198.2					201.7	200.6
40%		°F						220.3	221.2					223.1	222.8
50%		°F	234	238	242			235.4	236.4					238.0	237.5
60%		°F						247.2	247.2					248.1	247.5
70%		°F	254	259	264			257.8	258					258.5	259.2
80%		°F						271.8	272.3					273.8	274.1
90%		°F	296	301	306			299.7	298.1					300.5	300.6
95%		°F						322	323.1					323.2	323.8
Distillation - EP		°F			437			354.3	356.6					353.5	354.9
Recovery		vol %		Report				98.5	98.1					97.8	98.2
Residue		vol %		Report				1.0	1.0					1.0	1.0
Loss		vol %		Report				0.5	0.9					1.2	0.8
Gravity	ASTM D4052	°API		Report					55.0						54.8
Specific Gravity	ASTM D4052	-		Report					0.7585						0.7595
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.9200		6.76	6.85	6.34	6.88			6.76
Carbon	ASTM D5291	wt fraction		Report			86								
Hydrogen	ASTM D5291	wt fraction		Report			13.6								
Oxygen	ASTM D5599	wt fraction		Report			<0.1								
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10		<0.01								
Ethanol content	ASTM D5599	wt %			0.05		<0.01								
Water content	ASTM E1064	mg/kg		Report			43								
Sulfur	ASTM D5453	ppm wt	20		30		26								
Composition, aromatics	ASTM D1319	vol %	33.5	35.0	36.5	34			34.8				34.0		34.9
Composition, olefins	ASTM D1319	vol %	5.0	6.5	8.0	5.7			7.1				6.3		6.8
Composition, saturates	ASTM D1319	vol %		Report		60.3			58.1				59.7		58.3
Benzene	ASTM D3606	vol %	0.47		0.77		0.48								
Existent gum, washed	ASTM D381	mg/100mls			5.0		<0.5								
Research Octane Number	ASTM D2699			Report			97.2								
Motor Octane Number	ASTM D2700			Report			86.1								
R+M	D2699/2700		87.0				91.7								
Corrosion, Copper	ASTM D130				1		1A								
Oxidation stability	ASTM D525	minutes	240				>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report			18346								
					ANALYST	Core	Dixie	Inspectorate	JB	Gage	Gage	Dixie	Core	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 5**
PRODUCT CODE: **HF0678-5**

Batch No.:	WC1121GP02	WC1121GP02	WC1121GP02	WC1121GP02	lab blend #6	LB 5	LB 4	LB 3	lab blend #2
Analysis Date:	5/23/2008	4/18/2008	4/9/2008	4/9/2008	2/28/2008	2/26/2008	2/25/2008	2/22/2008	2/20/2008
Shipment Date:									

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX									
Distillation - IBP	ASTM D86	°F				95	95	99	99	99	100	102	97	100
5%		°F				125	125	131	128	131	136	136	131	129
10%		°F	141	146	151	144	144	148	147	146	150	151	145	145
20%		°F				172	172	175	174	170	173	174	169	174
30%		°F	196	201	206	200	200	203	201	198	198	198	195	205
40%		°F				227	227	228	226	225	220	220	217	232
50%		°F	234	238	242	244	244	242	241	242	233	233	231	251
60%		°F				254	254	252	253	253	243	242	241	269
70%		°F	254	259	264	266	266	263	263	264	253	251	250	267
80%		°F				278	278	277	277	278	267	266	265	319
90%		°F	296	301	306	298	298	297	297	298	300	300	300	329
95%		°F				316	316	315	316	319	323	325	326	335
Distillation - EP		°F			437	373	373	352	356	355	358	361	363	362
Recovery		vol %		Report		99	99	98.5	98.5	97.6	97.8	97.8	98.4	97.9
Residue		vol %		Report		0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		0.2	0.2	0.6	0.6	1.4	1.2	1.2	0.6	1.1
Gravity	ASTM D4052	°API		Report					53.0	53.9	53.8	52.2	52.9	52.7
Specific Gravity	ASTM D4052	-		Report					0.7672	0.7633	0.7636	0.7704	0.7675	0.7694
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95	6.79	6.49		5.74	6.50	5.96	5.92	7.01	6.58
Carbon	ASTM D5291	wt fraction		Report					86.9					
Hydrogen	ASTM D5291	wt fraction		Report					12.7					
Oxygen	ASTM D5599	wt fraction		Report					<0.1					
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10				0.01					
Ethanol content	ASTM D5599	wt %			0.05				<0.01					
Water content	ASTM E1064	mg/kg		Report					52					
Sulfur	ASTM D5453	ppm wt	20		30	23	23		21				9	8
Composition, aromatics	ASTM D1319	vol %	33.5	35.0	36.5	38.6	38.3		38.9	39.8	41.5	45.7	46.3	40.8
Composition, olefins	ASTM D1319	vol %	5.0	6.5	8.0	5.7	5.7		6.8	5.3	6.9	6.5	6.6	5.5
Composition, saturates	ASTM D1319	vol %		Report		56.0	56.0		54.3	54.9	51.6	47.8	47.1	53.7
Benzene	ASTM D3606	vol %	0.47		0.77	0.54	0.54		0.44			0.38	0.84	0.40
Existent gum, washed	ASTM D381	mg/100mls			5.0				<0.5					
Research Octane Number	ASTM D2699			Report					94.0	92.5				
Motor Octane Number	ASTM D2700			Report					84.7	83.8				
R+M	D2699/2700		87.0						89.4	88.2				
Corrosion, Copper	ASTM D130				1				1a					
Oxidation stability	ASTM D525	minutes	240			>240	>240	>240	220.0					
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report		18417	18417		18417					
					ANALYST	Dixie	Dixie	Dixie	Dixie	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 6**
PRODUCT CODE: **HF0678-6**

Batch No.:	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01
Analysis Date:	3/11/2009	3/11/2009	3/11/2009	3/6/2009	3/6/2009	3/6/2009	3/5/2009	2/26/2009

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX								
Distillation - IBP	ASTM D86	°F				108.6	106.4	106.1	105.3	107.6	107		102.5
5%		°F				131.3	130.7	129.3	127	128.9	128.8		129.4
10%		°F	131	136	141	136.3	135.7	135	133.9	134.7	134.5		135
20%		°F				142.7	142.4	141.9	140.7	141.7	141.6		142.1
30%		°F	142	147	152	148.5	147.9	147.5	147.7	147.4	147.5		146.9
40%		°F				153.8	153	152.7	151.9	152.5	151.9		151.7
50%		°F	187	191	195	191.7	189.4	185.6	180.3	185.5	185.3		187.4
60%		°F				229.5	230.3	225.3	222.4	224.7	226.8		226.4
70%		°F	264	269	274	269.6	270.7	264.8	261.9	264.6	265.5		266.3
80%		°F				313.5	313.2	306.8	305.8	308.2	304		310.7
90%		°F	336	341	346	342.4	342.2	338.7	338.2	339.4	339.5		340.4
95%		°F				354.9	354.5	350.6	349.5	350.4	351.1		352.8
Distillation - EP		°F				369.7	370.1	367.4	366.1	368.4	370.5		368.5
Recovery		vol %		Report		97.9	97.6	98.3	97.4	98.0	98.0		98.1
Residue		vol %		Report		1.0	1.0	1.0	1.0	1.0	1.0		1.0
Loss		vol %		Report		1.1	1.4	0.7	1.6	1.0	1.0		0.9
Gravity	ASTM D4052	°API		Report									
Specific Gravity	ASTM D4052	-		Report									
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00					7.14		7.18	
Carbon	ASTM D5291	wt fraction		Report									
Hydrogen	ASTM D5291	wt fraction		Report									
Oxygen	ASTM D5599	wt fraction		Report									
Oxygen, other then ETOH	ASTM D5599	vol %			0.10								
Ethanol content	ASTM D5599	vol %	9.50		10.50								
Water content	ASTM E1064	mg/kg		Report									
Sulfur	ASTM D5453	ppm wt	20		30								
Composition, aromatics, corrected	ASTM D1319	vol %	13.5	15.0	16.5								
Composition, olefins, corrected	ASTM D1319	vol %	5.5	7.0	8.5								
Composition, saturates, corrected	ASTM D1319	vol %		Report									
Benzene	ASTM D3606	vol %	0.47	0.62	0.77								
Existent gum, washed	ASTM D381	mg/100mls			5.0								
Research Octane Number	ASTM D2699			Report									
Motor Octane Number	ASTM D2700			Report									
R+M	D2699/2700		87.0										
Corrosion, Copper	ASTM D130				1								
Oxidation stability	ASTM D525	minutes	240										
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report									
						ANALYST	Saybolt	Insp	JAM	Insp	JB	JB	Gage	Insp

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 6
PRODUCT CODE: HF0678-6

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS bz, rvp, etoh	RESULTS	RESULTS	RESULTS	RESULTS recheck	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS
Batch No.:						XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01	XA0821GP01
Analysis Date:						2/5/2009	2/3/2009	2/4/2009	1/21/2009	1/21/2009	1/22/2009	1/20/2009	1/20/2009	1/19/2009	1/16/2009	1/14/2009
Distillation - IBP	ASTM D86	°F				102.3					114.3	109.4	110.9			109.9
5%		°F				125.7					136.2	132.6	131.9			132.4
10%		°F	131	136	141	133					138.9	137.5	136.5			136.8
20%		°F				140.3					144.7	143.4	141.9			142.2
30%		°F	142	147	152	146.4					154.22	148.8	146.7			147.4
40%		°F				151.2					170.6	153	151.3			152.2
50%		°F	187	191	195	181.3					196.5	199	194.6			198
60%		°F				221.1					233.2	235	230.7			233.4
70%		°F	264	269	274	260					273.4	274.5	269.4			270.1
80%		°F				305.5					315.1	315.1	309.3			312.6
90%		°F	336	341	346	339.3					343	343.4	338.9			341.4
95%		°F				350.5					355.6	356	352.2			351.3
Distillation - EP		°F				365.2					367.5	370.8	375.5			374.9
Recovery		vol %		Report		96.9					97.2	97.5	98.4			98.1
Residue		vol %		Report		1.1					1.0	1.0	1.0			1.2
Loss		vol %		Report		2.0					1.8	1.5	0.6			0.7
Gravity	ASTM D4052	°API		Report						61.1						
Specific Gravity	ASTM D4052	-		Report						0.735						
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00		7.22	7.14		6.66					6.96	6.56
Carbon	ASTM D5291	wt fraction		Report						81.3						
Hydrogen	ASTM D5291	wt fraction		Report						15.2						
Oxygen	ASTM D5599	wt fraction		Report						3.4						
Oxygen, other then ETOH	ASTM D5599	vol %			0.10					0.01						
Ethanol content	ASTM D5599	vol %	9.50		10.50		9.97			9.13						
Water content	ASTM E1064	mg/kg		Report						575.00						
Sulfur	ASTM D5453	ppm wt	20		30					22				27		18
Composition, aromatics, corrected	ASTM D1319	vol %	13.5	15.0	16.5				15.1				15.6			
Composition, olefins, corrected	ASTM D1319	vol %	5.5	7.0	8.5				8.1				7.7			
Composition, saturates, corrected	ASTM D1319	vol %		Report					66.8				66.7			
Benzene	ASTM D3606	vol %	0.47	0.62	0.77		0.61			0.19						
Existent gum, washed	ASTM D381	mg/100mls			5.0					<0.5						
Research Octane Number	ASTM D2699			Report						95.8						
Motor Octane Number	ASTM D2700			Report						85.6						
R+M	D2699/2700		87.0							90.7						
Corrosion, Copper	ASTM D130				1					1A						
Oxidation stability	ASTM D525	minutes	240							>240						
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report						17950.0						
					ANALYST	Insp	Dixie	Gage	Core	Dixie	Inspectorate	Inspectorate	JB	Paragon	Gage	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 6**
PRODUCT CODE: **HF0678-6**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS D86 re-check	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS Optidist	RESULTS	RESULTS Optidist 2
Batch No.:						6D	6D	6D	6D	6C	6C	6C	6C	6B	6B	6A	6A
Analysis Date:						12/22/2008	12/22/2008	12/24/2008	12/22/2008	12/15/2008	12/10/2008	12/10/2008	12/10/2008	11/26/2008	11/26/2008	11/11/2008	11/11/2008
Distillation - IBP	ASTM D86	°F						110.2	110.3	109.7		120.3	111.1		109.9		107.3
5%		°F						129.8	131.0	131.5		133.6	130.4		130.2		132.1
10%		°F	131	136	141			135.3	135.7	135.6		137.6	134.7		135.2		137.7
20%		°F						141.2	142.1	140.7		142.8	140.4		140.9		144.4
30%		°F	142	147	152			146.9	147.4	146		147.5	145.8		146.4		150.4
40%		°F						152.1	151.6	151.5		151.3	150.8		150.6		156.6
50%		°F	187	191	195			189.8	191.4	179.9		188.6	182		184.3		195.8
60%		°F						228.3	229.8	220.2		225	221		217.0		229.2
70%		°F	264	269	274			268.0	269.5	259.6		262.3	259		250.8		260.7
80%		°F						308.3	312.0	302.8		304.2	303.8		294.8		300.4
90%		°F	336	341	346			340.6	341.5	337.3		338	338.2		335.9		339.8
95%		°F						351.3	353.4	349.4		349.2	351.1		350.3		354.5
Distillation - EP		°F						372.3	379.6	369.7		387.1	371.9		369.1		373.6
Recovery		vol %		Report				97.2	98.3	98.1		98.8	98.1		97.2		98.2
Residue		vol %		Report				1.0	1.0	1.0		0.1	1.1		1.1		1.1
Loss		vol %		Report				1.8	0.7	0.9		1.1	0.8		1.7		0.7
Gravity	ASTM D4052	°API		Report					60.7				61.22		61.1		60.3
Specific Gravity	ASTM D4052	-		Report					0.736				0.734		0.735		0.7377
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00	6.66	6.76			6.82	6.75	6.96	6.68		6.57		7.0600
Carbon	ASTM D5291	wt fraction		Report													
Hydrogen	ASTM D5291	wt fraction		Report													
Oxygen	ASTM D5599	wt fraction		Report													
Oxygen, other then ETOH	ASTM D5599	vol %			0.10												
Ethanol content	ASTM D5599	vol %	9.50		10.50	9.9 cal											
Water content	ASTM E1064	mg/kg		Report													
Sulfur	ASTM D5453	ppm wt	20		30											21	
Composition, aromatics, corrected	ASTM D1319	vol %	13.5	15.0	16.5	15.2			14.5		15	13.6	15.3	14.9	15.4	15.6	14.9
Composition, olefins, corrected	ASTM D1319	vol %	5.5	7.0	8.5	6.1			7.5		6.6	7.4	8.1	6.2	7.3	6.8	7.1
Composition, saturates, corrected	ASTM D1319	vol %		Report		68.7			68.1		68.6	68.7	66.7	69	67.4	67.6	68
Benzene	ASTM D3606	vol %	0.47	0.62	0.77											0.47	
Existent gum, washed	ASTM D381	mg/100mls			5.0												
Research Octane Number	ASTM D2699			Report													
Motor Octane Number	ASTM D2700			Report													
R+M	D2699/2700		87.0														
Corrosion, Copper	ASTM D130				1												
Oxidation stability	ASTM D525	minutes	240														
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report													
						ANALYST	Core	Dixie	Inspectorate	JB	Inspectorate	Core	Inspectorate	JB	Dixie	JB/INS	Dixie	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 7**
PRODUCT CODE: **HF0678-7**

Batch No.:	WK0521GP13	WK0521GP13	WK0521GP13	WK0521GP13	WK0521GP13	WK0521GP13	7E
Analysis Date:	12/12/2008	11/18/2008	11/26/2008	11/20/2008	11/18/2008	11/12/2008	10/20/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX							
Distillation - IBP	ASTM D86	°F				100.0		97.5	105.0	100.0	104.0	100.7
5%		°F				128.0		124.3	132.0	125.0	130.6	127.8
10%		°F	132	137	142	137.0		134.9	141.0	136.0	138.2	137.1
20%		°F				149.0		147.8	153.0	148.0	149.4	149.4
30%		°F	157	162	167	161.0		160.2	165.0	161.0	161.8	162.3
40%		°F				177.0		175.6	180.0	176.0	176.2	177.0
50%		°F	189	193	197	193.0		192.3	196.0	192.0	192.6	192.8
60%		°F				210.0		209.9	214.0	209.0	209.7	209.9
70%		°F	224	229	234	229.0		228.6	232.0	228.0	228.0	228.8
80%		°F				252.0		250.8	255.0	251.0	150.9	252.5
90%		°F	296	301	306	297.0		299.8	302.0	298.0	298.4	300.5
95%		°F				329.0		328.7	333.0	329.0	329.5	332.4
Distillation - EP		°F			437	359.0		365.5	363.0	360.0	357.6	359.2
Recovery		vol %		Report		97.9		97.5	97.8	98.5	98.3	97.8
Residue		vol %		Report		0.8		1.1	1.1	1.0	1.0	1.1
Loss		vol %		Report		1.3		1.4	1.1	0.5	0.7	1.1
Gravity	ASTM D4052	°API		Report		64.7				64.7	64.6	64.7
Specific Gravity	ASTM D4052	-		Report		0.721				0.722	0.722	0.721
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00	7.32	7.09		6.87	7.20	6.98	6.92
Carbon	ASTM D5291	wt fraction		Report		85.04				84.7		
Hydrogen	ASTM D5291	wt fraction		Report		14.38				15.3		
Oxygen	ASTM D5599	wt fraction		Report		<0.1				<0.1		
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10	<0.1				<0.01		
Ethanol content	ASTM D5599	wt %			0.05	<0.1				<0.01		
Water content	ASTM E1064	mg/kg		Report			50			ttbd		
Sulfur	ASTM D5453	ppm wt	20		30	23	24			19	18	21.00
Composition, aromatics	ASTM D1319	vol %	14.0	16.5	18.0	16.7			17.6	15.5		16
Composition, olefins	ASTM D1319	vol %	6.3	7.8	9.3	7.3			7.1	6.8		8.1
Composition, saturates	ASTM D1319	vol %		Report		76			75.3	77.7		75.7
Benzene	ASTM D3606	vol %	0.47		0.77	0.55	0.51			0.44		0.52
Existent gum, washed	ASTM D381	mg/100mls			5.0					<0.5		
Research Octane Number	ASTM D2699			Report		92.1				91.2		90.6
Motor Octane Number	ASTM D2700			Report		84.7				84.2		83.9
(R+M)/2	D2699/2700		87.0			88.4				87.7		87.3
Corrosion, Copper	ASTM D130				1					1A		
Oxidation stability	ASTM D525	minutes	240							>240		
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report		18813				18722.0		

ANALYST	SWRI	Dixie	INS	JB	Dixie	Gage	JB
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NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 7
PRODUCT CODE: HF0678-7

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.: lab blend #11	lab blend #10	lab blend #9	lab blend #8	lab blend #7	lab blend #6	lab blend #5	lab blend #4	lab blend #3	lab blend #2	lab blend #1
						Analysis Date: 3/26/2008	3/24/2008	3/20/2008	3/13/2008	3/12/2008	2/28/2008	2/28/2008	2/22/2008	2/20/2008	2/18/2008	2/14/2008
						RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
								submit to SWRI		Dist curve fix	submit for	re-check				
Distillation - IBP	ASTM D86	°F				101	101	100	102	102	99	99	99	98	94	115
5%		°F				131	135	129	130	133	130	130	133	133	128	148
10%		°F	132	137	142	143	145	140	141	143	140	140	142	144	141	161
20%		°F				157	158	155	156	156	154	154	155	159	160	179
30%		°F	157	162	167	171	171	169	170	170	167	167	168	175	178	195
40%		°F				183	184	184	186	184	181	181	182	191	193	207
50%		°F	189	193	197	196	197	197	200	196.1	194	194	195.3	205	205	218
60%		°F				208	209	211	215	207	206	206	207	216	213	229
70%		°F	224	229	234	223	224	228	236	220	219	219	219	228	220	244
80%		°F				251	253	254	267	244	240	240	242	249	229	274
90%		°F	296	301	306	300	305	304	311	314	296	296	298	304	249	323
95%		°F				325	329	329	338	344	330	330	332	335	305	338
Distillation - EP		°F			437	368	370	370	380	384	372	372	372	377	379	372
Recovery		vol %		Report		96.7	97.9	96.6	97.2	98.1	97.5	97.5	98.9	98.2	97.8	98.5
Residue		vol %		Report		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0
Loss		vol %		Report		2.3	1.1	2.4	1.8	0.9	1.5	1.5	0.1	0.8	0.7	0.5
Gravity	ASTM D4052	°API		Report			60.4	61.4			61.8	61.8	61.8	62.9	63.7	61.2
Specific Gravity	ASTM D4052	-		Report			0.738	0.733			0.732	0.732	0.7319	0.7277	0.7248	0.7345
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00	6.50	6.50	6.83			6.80	7.04	7.10	6.70	7.80	6.30
Carbon	ASTM D5291	wt fraction		Report												
Hydrogen	ASTM D5291	wt fraction		Report												
Oxygen	ASTM D5599	wt fraction		Report												
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10											
Ethanol content	ASTM D5599	wt %			0.05											
Water content	ASTM E1064	mg/kg		Report												
Sulfur	ASTM D5453	ppm wt	20		30									9		
Composition, aromatics	ASTM D1319	vol %	14.0	16.5	18.0	17.6		16.0			15.9		15.9	15.3	14.2	
Composition, olefins	ASTM D1319	vol %	6.3	7.8	9.3	6.0		7.4			7.1		7.1	5.9	6.4	
Composition, saturates	ASTM D1319	vol %		Report		76.4		76.6					77	78.8	79.4	
Benzene	ASTM D3606	vol %	0.47		0.77						0.50			0.39		
Existent gum, washed	ASTM D381	mg/100mls			5.0											
Research Octane Number	ASTM D2699			Report							92.3		92.0			
Motor Octane Number	ASTM D2700			Report							84.7		84.2			
(R+M)/2	D2699/2700		87.0								88.5		88.1			
Corrosion, Copper	ASTM D130				1											
Oxidation stability	ASTM D525	minutes	240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report												
					ANALYST	JB	JB	JB	JB	JB	Dixie Svcs	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 8**
PRODUCT CODE: **HF0678-8**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS Run 2	RESULTS Run 1	RESULTS	RESULTS Optidist	RESULTS	RESULTS Optidist	RESULTS Optidist
Batch No.:						WJ1521GP01	WJ1521GP01	WJ1521GP01	WJ1521GP01	WJ1521GP01	WJ1521GP01	8C	8B	8B (Run 2)	8B
Analysis Date:						10/24/2008	10/24/2008	10/22/2008	10/21/2008	10/21/2008	10/16/2008	10/6/2008	10/3/2008	10/2/2008	10/2/2008
												8C	8B	8B (Run 2)	8B
Distillation - IBP	ASTM D86	°F					88.3		83.0	84.0	90.3	87.0		86.0	82.0
5%		°F					105.4		99.0	100.0	104.4	108.0		107.0	104.0
10%		°F	118	123	128		120.7		118.0	118.0	119.8	123.0		121.0	118.0
20%		°F					148.3		149.0	148.0	147.7	150.0		148.0	145.0
30%		°F	175	180	185		178.0		179.0	178.0	177.3	180.0		178.0	176.0
40%		°F					202.3		203.0	203.0	202.1	204.0		202.0	201.0
50%		°F	217	221	225		219.2		221.0	220.0	219.0	221.0		219.0	218.0
60%		°F					232.2		233.0	234.0	232.3	234.0		233.0	232.0
70%		°F	241	246	251		245.1		246.0	245.0	244.2	246.0		244.0	244.0
80%		°F					261.1		264.0	263.0	261.5	263.0		260.0	260.0
90%		°F	296	301	306		300.2		301.0	302.0	300.6	301.0		296.0	296.0
95%		°F					326.7		331.0	330.0	326.7	330.0		329.0	325.0
Distillation - EP		°F			437		357.8		361.0	363.0	360.3	356.0		355.0	357.0
Recovery		vol %		Report			96.2		96.1	96.7	96.4	97.6		97.4	96.7
Residue		vol %		Report			1.0		1.2	1.1	1.0	1.0		1.0	1.1
Loss		vol %		Report			2.8		2.1	2.2	2.6	1.4		1.6	2.2
Gravity	ASTM D4052	°API		Report			65.1			65.2	65.2	65.2		65.2	65.2
Specific Gravity	ASTM D4052	-		Report			0.7196			0.7197	0.7193	0.7200		0.7190	0.7190
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30				10.28	10.22	10.17	10.15		**10.33**	**10.33**
Carbon	ASTM D5291	wt fraction		Report					85.2	84.9					
Hydrogen	ASTM D5291	wt fraction		Report					14.8	14.6					
Oxygen	ASTM D5599	wt fraction		Report						<0.1					
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10					<0.01					
Ethanol content	ASTM D5599	wt %			0.05					<0.01					
Sulfur	ASTM D5453	ppm wt	20	25	30	26				19					
Composition, aromatics	ASTM D1319	vol %	14.4	15.9	17.4			15.9	15.3	15.8		15.9	15.0	16.0	16.0
Composition, olefins	ASTM D1319	vol %	5.8	7.3	8.8			6.5	5.1	5.5		7.3	6.4	6.8	6.8
Composition, saturates	ASTM D1319	vol %		Report				77.6	79.6	78.7		76.9	78.6	77.2	77.2
Benzene	ASTM D3606	vol %	0.47	0.62	0.77	0.48			0.34	0.33					
Existent gum, washed	ASTM D381	mg/100mls			5.0					<0.5					
Research Octane Number	ASTM D2699		91.0		95.0					95.5					
Motor Octane Number	ASTM D2700		83.0		87.0					87.6					
R+M	D2699/2700		87.0		91.0					91.6					
Corrosion, Copper	ASTM D130				1					1A					
Oxidation stability	ASTM D525	minutes	240							>240					
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report						18959.0					
					ANALYST	Dixie	Gage	HP-jam	Dixie	Dixie	Gage	JB	Dixie	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 8**
PRODUCT CODE: **HF0678-8**

	Batch No.:	HB#8	HB#7	HB#6	HB#5	HB#4	HB#3	HB#2	HB#1
	Analysis Date:	3/13/2008	3/12/2008	3/11/2008	3/5/2008	3/5/2008	3/4/2008	2/28/2008	2/26/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX								
Distillation - IBP	ASTM D86	°F				91.8	89.7	89.8	91.8	89.3	91.7	91.2	88.4
5%		°F				106.0	108.6	110.5	111.2	109.2	110.6	109.4	108.1
10%		°F	118	123	128	118.3	118.9	119.9	120.3	119.3	120.2	119.2	117.8
20%		°F				138.1	136.2	136.5	138.0	137.4	137.7	135.8	133.1
30%		°F	175	180	185	162.1	158.1	157.4	159.9	160.8	159.0	156.8	151.3
40%		°F				190.3	186.1	184.5	188.7	191.6	187.1	184.4	173.2
50%		°F	217	221	225	217.3	**214.1**	**212.4**	216.4	219.2	**212.7**	**212.0**	**196.4**
60%		°F				235.5	232.0	230.8	232.4	234.1	227.5	228.6	210.6
70%		°F	241	246	251	248.5	243.9	243.9	244.4	245.6	238.2	240.4	218.7
80%		°F				265.1	259.8	260.6	260.8	263.5	251.9	258.7	226.2
90%		°F	296	301	306	300.3	299.2	302.1	303.1	**307.5**	**290.0**	**305.5**	**238.8**
95%		°F				324.5	325.9	327.3	328.6	330.6	324.0	327.7	256.7
Distillation - EP		°F			437	364.3	363.0	365.4	366.1	366.1	362.1	362.8	311.5
Recovery		vol %		Report		96.3	97.5	97.7	97.9	97.6	97.7	97.3	97.2
Residue		vol %		Report		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		2.7	1.5	1.3	1.1	1.4	1.3	1.7	1.8
Gravity	ASTM D4052	°API		Report			67.4	67.1	67.9	67.6	68.1	68.3	68.4
Specific Gravity	ASTM D4052	-		Report		1.0760	0.7114	0.7125	0.7098	0.7107	0.7091	0.7082	0.7079
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	**10.20**	**10.50**	9.90	10.05	9.86	10.14	10.08	10.11
Carbon	ASTM D5291	wt fraction		Report									
Hydrogen	ASTM D5291	wt fraction		Report									
Oxygen	ASTM D5599	wt fraction		Report									
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10								
Ethanol content	ASTM D5599	wt %			0.05								
Sulfur	ASTM D5453	ppm wt	20	25	30								
Composition, aromatics	ASTM D1319	vol %	14.4	15.9	17.4	14.5	14.5		13.6	13.7	14.0	13.8	15.2
Composition, olefins	ASTM D1319	vol %	5.8	7.3	8.8	7.3	7.3		6.4	5.5	6.0	**4.8**	7.9
Composition, saturates	ASTM D1319	vol %		Report		78.2	78.2		80.0	80.8	80.0	81.4	76.9
Benzene	ASTM D3606	vol %	0.47	0.62	0.77				0.21				
Existent gum, washed	ASTM D381	mg/100mls			5.0								
Research Octane Number	ASTM D2699		91.0		95.0	93.5	94.3		94.5	93.8	94.4	**95.2**	92.7
Motor Octane Number	ASTM D2700		83.0		87.0	86.2	86.9		87.8	**87.7**	**87.6**	**88.1**	86.6
R+M	D2699/2700		87.0		91.0	89.9	90.6		**91.2**	90.8	91.0	**91.7**	89.7
Corrosion, Copper	ASTM D130				1								
Oxidation stability	ASTM D525	minutes	240										
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report									
					ANALYST	HVD	HVD	HVD	HVD	HVD	HVD	HVD	HVD

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 9**			**Batch No.:**	WK0521GP05	WK0521GP05	9G	lab blend 13	lab blend 13	lab blend 12	lab blend 12	lab blend 11	lab blend 11	lab blend 10	lab blend 10
PRODUCT CODE:	**HF0678-9**			**Analysis Date:**	11/20/2008	11/18/2008	10/27/2008	8/27/2008	8/27/2008	8/27/2008	8/27/2008	8/27/2008	8/27/2008	8/27/2008	8/27/2008
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
			MIN	**TARGET**	**MAX**											
Distillation - IBP	ASTM D86	°F				83.9	85.0	83.1	86	90	86.9	90	86	91.2	86	90.4
5%		°F				104.8	103.0	105.3	106.7	113	98.6	113	104.9	113.3	107.6	112.8
10%		°F			158	114.1	115.0	115.0	117.5	121	114.3	122	117.5	122.1	117.5	121.8
20%		°F				130.0	131.0	130.8	135.5	137	133.3	138	135.5	139.1	135.5	138.3
30%		°F				146.8	149.0	148.2	154.4	155	153.3	156	155.3	157.6	155.3	156.8
40%		°F				167.7	169.0	168.5	175.1	175	174.9	176	175.1	177.4	175.1	176.8
50%		°F	186		194	192.5	194.0	192.6	194.9	194.7	194.7	194.7	196.7	196.4	194.9	195.7
60%		°F				225.0	227.0	223.2	214.7	214	214.3	213	215.6	215.5	215.6	214.8
70%		°F				260.5	261.0	259.2	244.4	243	243	241	245.3	244.9	246.2	244.3
80%		°F				293.0	290.0	292.7	289.4	289	284.7	285	289.4	289.5	290.3	289.7
90%		°F	335		345	341.9	344.0	342.8	339.8	338	337.8	334.8	334.4	334.5	340.7	337.4
95%		°F				362.8	365.0	364.9	364.1	361	362.7	358	360.5	356.2	363.2	360.3
Distillation - EP		°F				379.8	387.0	379.2	395.6	383	379.9	383.4	397.4	379.6	402.8	382.5
Recovery		vol %		Report		97.6	97.8	97.8	99.0	98.7	94.6	99.9	99.0	99.0	99.0	98.8
Residue		vol %		Report		1.1	0.9	1.1	0.5	1.0	1.1	0.1	0.4	1.0	0.6	0.0
Loss		vol %		Report		1.3	1.3	1.1	0.5	0.3	4.3	0.0	0.6	0.0	0.4	0.3
Gravity	ASTM D4052	°API		Report			58.3	58.3		52.45		53.80		52.03		52.07
Specific Gravity	ASTM D4052	-		Report			0.746	0.746		0.769		0.764		0.771		0.771
Reid Vapor Pressure	ASTM D5191	psi	9.85		10.15	10.02	10.32	10.02		9.88		9.94		9.86		9.88
Carbon	ASTM D5291	wt fraction		Report			84									
Hydrogen	ASTM D5291	wt fraction		Report			14									
Oxygen	ASTM D5599	wt fraction		Report			<0.1									
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10		<0.01									
Ethanol content	ASTM D5599	wt %			0.05		<0.01									
Sulfur	ASTM D5453	ppm wt	20		30		20	23								
Composition, aromatics	ASTM D1319	vol %	38.5		41.5		35.7	35.4		40.37		37.3		40.8		41.4
Composition, olefins	ASTM D1319	vol %	5.5		8.5	36.4	5.5	7.1		5.88		6.3		6.5		7.0
Composition, saturates	ASTM D1319	vol %		Report		6.0	58.8	57.5		53.8		56.4		52.7		51.6
Benzene	ASTM D3606	vol %	0.47		0.77	57.6	0.37	0.42								
Existent gum, washed	ASTM D381	mg/100mls			5.0		<0.5									
Research Octane Number	ASTM D2699		91.0		95.0		94.6	94.0	96.7	96.7						
Motor Octane Number	ASTM D2700		83.0		87.0		85.3	84.7	84.3							
R+M	D2699/2700		87.0		91.0		90.0	89.4	90.5							
Corrosion, Copper	ASTM D130				1		1A									
Oxidation stability	ASTM D525	minutes	240				>240									
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report			18424.0									
					ANALYST		Dixie	JB	Dixie	JB	JB	JB	Dixie	JB	Dixie	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 9**			**Batch No.:**	lab blend 9	lab blend 9	lab blend 9	lab blend 8	lab blend 7	lab blend 6	lab blend 5	lab blend 4	lab blend 3	lab blend 2	lab blend 1
PRODUCT CODE:	**HF0678-9**			**Analysis Date:**	8/22/2008	8/22/2008	8/22/2008	3/24/2008	3/20/2008	3/18/2008	3/3/2008	2/29/2008	2/28/2008	2/25/2008	2/22/2008

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F				86	84.9	87.7	86	90	89	83	86	87	88	83
5%		°F				99.5	101.7	105.7	107	108	108	105	105	105	107	103
10%		°F			158	109.4	110.1	114	117	118	119	115	117	116	122	116
20%		°F				123.8	124	126.5	133	134	135	132	134	135	148	145
30%		°F				141.8	140.2	142.9	152	153	153	150	155	157	175	179
40%		°F				165.2	164.7	166.9	172	173	173	172	177	181	197	209
50%		°F	186		194	199.4	199.4	203	192	192	193	192	197.4	202	217	235
60%		°F				243.5	243.9	245.8	211	211	213	212	218	225	245	262
70%		°F				279.5	279	280.1	240	241	241	247	259	263	290	304
80%		°F				304.7	303.4	304	287	287	285	306	310	312	339	358
90%		°F	335		345	323.6	330.6	331.1	336	340	329	339	338	338	361	375
95%		°F				351.5	350.8	350.9	359	363	350	351	350	351	373	381
Distillation - EP		°F				382.1	373.3	375.7	388	391	381	377	378	377	395	396
Recovery		vol %		Report		98.0	97.5	98.7	97.4	97.0	97.7	97.4	96.6	97.0	96.9	97.1
Residue		vol %		Report		0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		1.1	1.5	0.3	1.6	2.0	1.3	1.6	2.4	2.0	2.1	1.9
Gravity	ASTM D4052	°API		Report				55.37	52.66			52.30	52.89	52.95	51.02	52.44
Specific Gravity	ASTM D4052	-		Report				0.7572	0.7684			0.769	0.767	0.7671	0.7753	0.7693
Reid Vapor Pressure	ASTM D5191	psi	9.85		10.15			10.22	10.25			10.15	10.08	10.39	9.97	10.49
Carbon	ASTM D5291	wt fraction		Report												
Hydrogen	ASTM D5291	wt fraction		Report												
Oxygen	ASTM D5599	wt fraction		Report												
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10											
Ethanol content	ASTM D5599	wt %			0.05											
Sulfur	ASTM D5453	ppm wt	20		30							24				10
Composition, aromatics	ASTM D1319	vol %	38.5		41.5			43.6				40.5	36.2	41.3	43.1	43.8
Composition, olefins	ASTM D1319	vol %	5.5		8.5			5.3				5.7	5.3	4.8	5.47	6.3
Composition, saturates	ASTM D1319	vol %		Report				51.1						53.9	51.4	49.9
Benzene	ASTM D3606	vol %	0.47		0.77							0.48			0.41	
Existent gum, washed	ASTM D381	mg/100mls			5.0											
Research Octane Number	ASTM D2699		91.0		95.0							96.2			92.4	
Motor Octane Number	ASTM D2700		83.0		87.0							83.7			81.7	
R+M	D2699/2700		87.0		91.0							90.0			87.1	
Corrosion, Copper	ASTM D130				1											
Oxidation stability	ASTM D525	minutes	240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report												
					ANALYST	Dixie	JB	JB	JB	JB	JB	JB/Dixie	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 10**
PRODUCT CODE: **HF0678-10 (TR1166)**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Batch No.:						XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02
Analysis Date:						4/13/2009	4/11/2009	4/9/2009	4/8/2009	4/7/2009	4/7/2009	4/6/2009	4/2/2009	4/2/2009
Distillation - IBP	ASTM D86	°F				107.4	104.4	111.4		105.6	105.4	108.5	114.1	110.5
5%		°F				129.1	130.5	128.1		129.4	128.7	139.5	134.7	128.7
10%		°F	132	137	142	135.9	136.1	134.4		135.7	135.3	140	139.6	135.5
20%		°F				144.1	144.1	142.9		143.8	143.8	145.9	146.1	144.9
30%		°F	146	151	156	151.1	150.8	149.7		150.9	150.6	151.9	152.6	152.2
40%		°F				162.5	160.1	156.7		161	160.8	172	167.4	163.4
50%		°F	217	221	225	217.2	217.9	215.8		215.8	215.7	230.2	223.2	226
60%		°F				261.3	261.9	260.2		261.5	261.5	269.8	265.9	266.2
70%		°F	289	294	299	291.1	292.5	290.7		287.8	290.6	297.1	293.9	293.9
80%		°F				317.2	317.7	317.1		315.5	316.7	322	319	318.4
90%		°F	337	342	347	339.2	340.5	340		339.4	340.3	343.8	341.4	340.2
95%		°F				355.3	353.8	352		351.9	354.1	357.3	354.8	353.5
Distillation - EP		°F			437	375.7	371.3	373.5		371.6	375.6	373.5	377.4	369.1
Recovery		vol %		Report		97.9	98.5	97.9		98.7	97.9	98.6	98.4	98
Residue		vol %		Report		1.0	1.0	0.9		1.0	1.1	1.0	1.0	1.0
Loss		vol %		Report		1.1	0.5	1.2		0.3	1	0.4	0.6	1
Gravity	ASTM D4052	°API		Report										52.9
Specific Gravity	ASTM D4052	-		Report							0.7655			
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95				7.06		6.87	6.95		6.96
Carbon	ASTM D5291	wt fraction		Report										
Hydrogen	ASTM D5291	wt fraction		Report										
Oxygen	ASTM D5599	wt fraction		Report										
Oxygen, other then ETOH	ASTM D5599	vol %			0.10									
Ethanol content	ASTM D5599	vol %	9.50		10.50				9.83					
Sulfur	ASTM D5453	ppm wt	20		30				25			26		26
Composition, aromatics, corrected	ASTM D1319	vol %	33.8	35.3	36.8						34.2			
Composition, olefins, corrected	ASTM D1319	vol %	4.9	6.4	7.9						6.6			
Composition, saturates, corrected	ASTM D1319	vol %		Report							49.2			
Benzene	ASTM D3606	vol %	0.47		0.77				0.50					
Existent gum, washed	ASTM D381	mg/100mls			5.0									
Research Octane Number	ASTM D2699													
Motor Octane Number	ASTM D2700													
R+M	D2699/2700		87.0											
Corrosion, Copper	ASTM D130				1									
Oxidation stability	ASTM D525	minutes	240											
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report										
Lead	ASTM D3237	g/L		Report										
					ANALYST	HP	Inpectorate	Gage	Dixie	JB	JB	Gage	JB	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 10**			**Batch No.:**	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	XC2521GP02	10G	10G	10G	10G
PRODUCT CODE:	**HF0678-10 (TR1166)**			**Analysis Date:**	3/31/2009	4/1/2009	3/31/2009	3/30/2009	3/30/2009	3/27/2009	3/13/2009	3/13/2009	3/12/2009	3/12/2009

TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS 797**	**RESULTS 958**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS 797**
			MIN	**TARGET**	**MAX**										
Distillation - IBP	ASTM D86	°F						109.2	111.6	111	115.5			107	108.6
5%		°F						133.3	133.5	132.6	133			131.7	132
10%		°F	132	137	142			138.6	138.7	138	138			137	137.2
20%		°F						146.6	145.8	145.7	145.4			144.1	144.7
30%		°F	146	151	156			152.6	152.5	152.3	151.7			151.2	151.4
40%		°F						168.2	165.6	164.6	157.8			164.2	163.2
50%		°F	217	221	225			227.8	226.3	225.8	227.8			220.5	221.5
60%		°F						270.8	268.1	267.8	267.8			266.1	266
70%		°F	289	294	299			296.3	293.3	293.7	294.3			294.4	293
80%		°F						321.1	318.7	319	319.1			319.1	317.5
90%		°F	337	342	347			343.5	340.5	341	341.1			343.2	340.8
95%		°F						358.2	353.8	354.2	354.9			357.7	354
Distillation - EP		°F			437			369.9	371.8	371.9	372			372	371.1
Recovery		vol %		Report				97.6	98.3	98	98.1			98.1	98.6
Residue		vol %		Report				1.0	1.0	1.0	0.9			1.1	1.0
Loss		vol %		Report				1.4	0.7	1	1			0.8	0.4
Gravity	ASTM D4052	°API		Report						52.0	46.2				52.6
Specific Gravity	ASTM D4052	-		Report			0.7701			0.7711	0.7905				0.7686
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.18			6.07	6.15		6.42		6.26
Carbon	ASTM D5291	wt fraction		Report			82.6								
Hydrogen	ASTM D5291	wt fraction		Report			14								
Oxygen	ASTM D5599	wt fraction		Report			3.6								
Oxygen, other then ETOH	ASTM D5599	vol %			0.10		<0.01								
Ethanol content	ASTM D5599	vol %	9.50		10.50		10.30								
Sulfur	ASTM D5453	ppm wt	20		30		21				19.66		25		
Composition, aromatics, corrected	ASTM D1319	vol %	33.8	35.3	36.8	36.0				36.0		34.7			35.6
Composition, olefins, corrected	ASTM D1319	vol %	4.9	6.4	7.9	5.1				6.9		6			6.8
Composition, saturates, corrected	ASTM D1319	vol %		Report		48.9				47.1		49.2			47.6
Benzene	ASTM D3606	vol %	0.47		0.77		0.29								
Existent gum, washed	ASTM D381	mg/100mls			5.0		<0.5								
Research Octane Number	ASTM D2699						99.7								
Motor Octane Number	ASTM D2700						86.7								
R+M	D2699/2700		87.0				93.2								
Corrosion, Copper	ASTM D130				1		1A								
Oxidation stability	ASTM D525	minutes	240				>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report			17528.0								
Lead	ASTM D3237	g/L		Report			<0.003								
					ANALYST	Core	Dixie	Insp	JB	JB	Gage	Core	Dixie	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 10**
PRODUCT CODE: **HF0678-10 (TR1166)**

Batch No.:	10F	10F	10F	10F	10E	10E	10E	10E
Analysis Date:	3/2/2009	3/2/2009	2/27/2009	2/27/2009	1/30/2009	1/30/2009	1/29/2009	1/29/2009

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS 958	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F						105.4	111.8			111.5	111.4
5%		°F						129.6	131.1			132.4	132.3
10%		°F	132	137	142			136.2	136.7			137.3	137.5
20%		°F						144	144.1			144.3	144.4
30%		°F	146	151	156			150	150.7			150.5	151.1
40%		°F						156.2	161			159.4	162.3
50%		°F	217	221	225			216.5	217.1			216.5	215.6
60%		°F						262.9	263.9			253.5	252.9
70%		°F	289	294	299			293.4	288			279.0	279.2
80%		°F						318.6	318.4			308.0	306.4
90%		°F	337	342	347			341.6	341.1			337.8	337.7
95%		°F						354.7	354.7			353.1	353.3
Distillation - EP		°F			437			370	371.3			370.2	374.1
Recovery		vol %		Report				98.6	98			97.4	98
Residue		vol %		Report				1.0	1.0			1.1	1.1
Loss		vol %		Report				0.4	1			1.5	0.9
Gravity	ASTM D4052	°API		Report					52.7				52.7
Specific Gravity	ASTM D4052	-		Report					0.7682				0.7681
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.48		6.28		**6.51**		**6.42**
Carbon	ASTM D5291	wt fraction		Report									
Hydrogen	ASTM D5291	wt fraction		Report									
Oxygen	ASTM D5599	wt fraction		Report									
Oxygen, other then ETOH	ASTM D5599	vol %			0.10								
Ethanol content	ASTM D5599	vol %	9.50		10.50								
Sulfur	ASTM D5453	ppm wt	20		30		23				23		
Composition, aromatics, corrected	ASTM D1319	vol %	33.8	35.3	36.8	33.9			35.7	36			35.5
Composition, olefins, corrected	ASTM D1319	vol %	4.9	6.4	7.9	6.4			6.7	5.2			5.9
Composition, saturates, corrected	ASTM D1319	vol %		Report		49.7			47.6	48.8			48.6
Benzene	ASTM D3606	vol %	0.47		0.77								
Existent gum, washed	ASTM D381	mg/100mls			5.0								
Research Octane Number	ASTM D2699												
Motor Octane Number	ASTM D2700												
R+M	D2699/2700		87.0										
Corrosion, Copper	ASTM D130				1								
Oxidation stability	ASTM D525	minutes	240										
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report									
Lead	ASTM D3237	g/L		Report									
					ANALYST	Core	Dixie	Insp	JB	Core	Dixie	Insp	JB

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EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 10**
PRODUCT CODE: **HF0678-10 (TR1166)**

Batch No.:	10D	10D	10D	10D	10D	10D	10D
Analysis Date:	12/26/2008	12/23/2008	12/22/2008	12/22/2008	12/28/2008	12/22/2008	12/22/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX					Recheck	Optidist	Optidist
Distillation - IBP	ASTM D86	°F				108.9	101.8			107.2	117.4	107.9
5%		°F				130.8	134.6			130.5	134.6	130.4
10%		°F	132	137	142	136.4	139.4			136.0	139.4	135.9
20%		°F				143.9	146.1			144.0	146.1	143.4
30%		°F	146	151	156	151.0	152.4			151.0	152.4	150.8
40%		°F				158.4	167.2			162.0	167.2	159.9
50%		°F	217	221	225	**215.1**	**228.7**			223.1	228.7	217.5
60%		°F				260.4	268.4			265.8	268.4	262.6
70%		°F	289	294	299	291.0	296.4			293.6	296.4	291.4
80%		°F				316.3	320.3			320.5	320.4	316.7
90%		°F	337	342	347	339.7	341.7			344.0	341.7	340.7
95%		°F				353.1	352.9			360.4	352.9	353.8
Distillation - EP		°F			437	370.1	406.5			370.1	406.5	370.4
Recovery		vol %		Report		98.6	98.0			97.1	98	98.2
Residue		vol %		Report		1.0	1.0			1.1	1.0	1.1
Loss		vol %		Report		0.4	1.0			1.8	1	0.7
Gravity	ASTM D4052	°API		Report		52.8						52.2
Specific Gravity	ASTM D4052	-		Report		0.7678						0.7703
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95	**6.60**		6.54	6.65			
Carbon	ASTM D5291	wt fraction		Report								
Hydrogen	ASTM D5291	wt fraction		Report								
Oxygen	ASTM D5599	wt fraction		Report								
Oxygen, other then ETOH	ASTM D5599	vol %			0.10							
Ethanol content	ASTM D5599	vol %	9.50		10.50							
Sulfur	ASTM D5453	ppm wt	20		30							
Composition, aromatics, corrected	ASTM D1319	vol %	33.8	35.3	36.8			35.9				36.3
Composition, olefins, corrected	ASTM D1319	vol %	4.9	6.4	7.9			3.9				5.9
Composition, saturates, corrected	ASTM D1319	vol %		Report				50.3				47.9
Benzene	ASTM D3606	vol %	0.47		0.77							
Existent gum, washed	ASTM D381	mg/100mls			5.0							
Research Octane Number	ASTM D2699											
Motor Octane Number	ASTM D2700											
R+M	D2699/2700		87.0									
Corrosion, Copper	ASTM D130				1							
Oxidation stability	ASTM D525	minutes	240									
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report								
Lead	ASTM D3237	g/L		Report								
					ANALYST	JB	INS	Core	Dixie	Inspectorate	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 10**		**Batch No.:**	10C	10C	10C	10C	10B	10B	10B	10A	10A
PRODUCT CODE:	**HF0678-10 (TR1166)**		**Analysis Date:**	12/16/2008 re-blended	12/9/2008	12/9/2008	12/9/2008	11/26/2008	12/5/2008	11/26/2008	11/11/2008	11/11/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX	Optidist		Optidist	Optidist		Optidist	Optidist	Optidist 2	Optidist 1
Distillation - IBP	ASTM D86	°F				104.7		101.9	107.4		107.6	105.0	106.3	108.3
5%		°F				127.2		125.5	127.6		132.4	130.6	134.1	134.6
10%		°F	132	137	142	133.3		132.5	133.8		137.6	136.8	140.3	140.4
20%		°F				141.1		141.3	141.6		145.7	144.7	149.1	149.4
30%		°F	146	151	156	149		148.3	149.2		152.5	150.9	156.6	157
40%		°F				157.2		156	156.2		166.6	163.9	173	174.2
50%		°F	217	221	225	207.6		205.8	206.9		217.3	213.8	227.9	228.6
60%		°F				256.6		254.3	256.1		250.6	245.3	255.4	256.5
70%		°F	289	294	299	288.3		287.1	288.1		278.3	276.3	279.5	279.8
80%		°F				312.5		313.9	314.5		306.4	304.2	306.8	306.9
90%		°F	337	342	347	335.9		337.8	338.6		336.6	334.0	337.6	337.2
95%		°F				351.8		351.6	352.3		353.7	351.6	355	355.1
Distillation - EP		°F			437	369.1		368.8	370.9		378.9	368.9	374.6	375
Recovery		vol %		Report		98		97.6	97.9		98.5	97.5	98.5	98.8
Residue		vol %		Report		1.0		1.0	1.0		1.1	1.1	1.0	1.0
Loss		vol %		Report		1		1.4	1.1		0.4	1.4	0.5	0.2
Gravity	ASTM D4052	°API		Report					52.6			52.1		52.0
Specific Gravity	ASTM D4052	-		Report					0.7686			0.7708		0.7710
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		7.01	7.14	6.83			6.35		6.65
Carbon	ASTM D5291	wt fraction		Report										
Hydrogen	ASTM D5291	wt fraction		Report										
Oxygen	ASTM D5599	wt fraction		Report										
Oxygen, other then ETOH	ASTM D5599	vol %			0.10									
Ethanol content	ASTM D5599	vol %	9.50		10.50									
Sulfur	ASTM D5453	ppm wt	20		30								22	
Composition, aromatics, corrected	ASTM D1319	vol %	33.8	35.3	36.8		35.6	34.6		35.2		36.4	34.5	36.2
Composition, olefins, corrected	ASTM D1319	vol %	4.9	6.4	7.9		5.8	7.2		5.8		6.8	5.7	6
Composition, saturates, corrected	ASTM D1319	vol %		Report			48.7	48.3		49.1		46.9	49.9	47.8
Benzene	ASTM D3606	vol %	0.47		0.77								0.62	
Existent gum, washed	ASTM D381	mg/100mls			5.0									
Research Octane Number	ASTM D2699													
Motor Octane Number	ASTM D2700													
R+M	D2699/2700		87.0											
Corrosion, Copper	ASTM D130				1									
Oxidation stability	ASTM D525	minutes	240											
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report										
Lead	ASTM D3237	g/L		Report										
					ANALYST	JB	Core	Inspectorate	JB	Dixie	JB	JB/INS	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 11
PRODUCT CODE: HF0678-11

Batch No.:	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02	XA0821GP02
Analysis Date:	2/18/2009	2/18/2009	2/17/2009	2/16/2009	2/5/2009	2/5/2009	2/5/2009	1/20/2009	1/20/2009	1/29/2009	1/20/2009	1/23/2009	1/20/2009	1/19/2009			

TEST	METHOD	UNITS	SPECIFICATIONS			Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
			MIN	TARGET	MAX	HTC1	HTC2	958	797	S-958	S-958	S-797			recheck	Optidist	recheck	Optidist	
Distillation - IBP	ASTM D86	°F				92.7	91.2	94.2	90.8	87.5	85.6	85.2		92	86.5	91.4	86.7	87.1	
5%		°F				113.7	113.2	114.6	115.4	113.9	112.9	112.6		110	116.3	117.8	113.2	112	
10%		°F	119	124	129	123.4	123.4	123.9	124.5	123.4	122.9	122.5		122	125.2	126.1	122.9	122	
20%		°F				137.1	136.8	137.6	138.0	136.8	135.7	136.6		137	138.2	138.7	136.8	136.3	
30%		°F	143	148	153	147.2	147.4	148.2	148.1	147.5	147.0	147.3		148	148.8	148.9	147.2	147.5	
40%		°F				155.1	155.3	157.0	156.8	155.8	155.1	156.1		156	156.3	157.2	154.8	155.8	
50%		°F	186	190	194	188.6	188.4	190.0	189.8	187.3	185.6	187.7		190	195.9	196.8	187.5	185.4	
60%		°F				230.0	229.5	231.0	230.9	228.8	230.1	228.4		231	233.9	234.4	230.2	230.3	
70%		°F	245	250	255	250.2	249.3	251.0	251.8	251.5	252.1	251.3		252	253.2	253.8	250.2	251.9	
80%		°F				269.4	268.9	269.1	270.3	268.9	269.9	269.3		271	273.1	272.2	269.4	267	
90%		°F	294	299	304	298.0	297.5	299.0	298.2	297.8	298.5	295.6		300	303.9	302.6	298.6	297.8	
95%		°F				323.4	323.1	325.5	324.7	323.4	325.1	323.8		329	337.4	333.7	325.5	324.4	
Distillation - EP		°F			437	358.0	358.7	358.6	357.8	358.7	359.2	357.8		361	368.5	358	355.4	359.4	
Recovery		vol %		Report		97.2	97.3	97.5	98.1	97.6	98.0	97.9		98	97.8	97.9	98	97.7	
Residue		vol %		Report		1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Loss		vol %		Report		1.8	1.7	1.5	0.9	1.4	1.0	1.1		1	1.2	1.1	1	1.3	
Gravity	ASTM D4052	°API		Report										54.6					
Specific Gravity	ASTM D4052	-		Report										0.7608					
Reid Vapor Pressure	ASTM D5191	psi	9.85		10.15									9.92					9.91
Carbon	ASTM D5291	wt fraction		Report										82.6					
Hydrogen	ASTM D5291	wt fraction		Report										13.6					
Oxygen	ASTM D5599	wt fraction		Report										3.5					
Oxygen, other then ETOH	ASTM D5599	vol %			0.10									<0.01					
Ethanol content	ASTM D5599	vol %	9.50		10.50									9.69					
Water content	ASTM E1064	mg/kg		Report										551					
Sulfur	ASTM D5453	ppm wt	20		30									27					
Composition, aromatics, corrected	ASTM D1319	vol %	33.5	35.0	36.5								34.4	33.8				35.7	
Composition, olefins, corrected	ASTM D1319	vol %	5.5		8.5								6.8	7.2				7.0	
Composition, saturates, corrected	ASTM D1319	vol %		Report									48.9	49.1				47.3	
Benzene	ASTM D3606	vol %	0.47		0.77									0.50					
Existent gum, washed	ASTM D381	mg/100mls			5.0									0.5					
Research Octane Number	ASTM D2699			Report										97.4					
Motor Octane Number	ASTM D2700			Report										85.0					
R+M	D2699/2700		87.0											91.2					
Corrosion, Copper	ASTM D130				1									1A					
Oxidation stability	ASTM D525	minutes	240											>240					
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report										17614.0					
					ANALYST	Insp	Insp	JB	JB	HP	HP	HP	Core	Dixie	Insp	Insp	JB	JB	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 11
PRODUCT CODE: HF0678-11

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.: 11G	11G	11G	11G	11F	11F	11F	11E	11E	11D	11D	11C	11C	11C	11B	11A
						Analysis Date: 12/22/2008	12/22/2008	12/24/2008	12/22/2008	12/9/2008	12/9/2008	12/9/2008	11/26/2008	11/26/2008	11/11/2008	11/11/2008	11/3/2008	11/3/2008	11/3/2008	10/27/2008	10/22/2008
Distillation - IBP	ASTM D86	°F						91.2	92.1		89.3	93		88.6		96.5			94.9	86.4	91.4
5%		°F						113.2	114.9		113.7	113.6		111.1		116.4			120	109.1	108.8
10%		°F	119	124	129			122.9	124.2		122.8	122.9		121.3		125.2			129.5	119.4	117.5
20%		°F						136.7	137.7		137.1	137.3		135.7		138.2			143.4	135.6	131.6
30%		°F	143	148	153			147.3	148.4		148.3	148.4		146.7		148.7			154.4	148.7	144.2
40%		°F						156.0	156.4		155.9	157.7		155.3		157.2			164	158.5	154.6
50%		°F	186	190	194			188.7	190.3		193.6	193.9		186.1		178.4			210.8	196.7	175.5
60%		°F						229.9	229.6		231.8	232.9		227.4		226			240.9	235.1	228.5
70%		°F	245	250	255			250.1	250.3		250.5	251.1		247.9		252			258.2	251.2	246.9
80%		°F						269.0	269.8		269.6	269.3		267.7		273.4			276.2	267.3	263
90%		°F	294	299	304			298.0	300.3		298	299.7		295.5		303.4			306	297.5	292.4
95%		°F						326.1	327.8		325.9	328.1		322.1		331			333	325.8	319.6
Distillation - EP		°F			437			360.9	360.6		358.6	362.7		357.7		365.9			364	362.6	359.6
Recovery		vol %		Report				97.4	97.8		97.3	97.6		97.2		97.9			98.8	97.6	97.1
Residue		vol %		Report				1.0	1.0		1.0	1.0		1.0		1.0			1.0	1.0	1.0
Loss		vol %		Report				1.6	1.2		1.7	1.4		1.8		1.1			0.2	1.4	1.9
Gravity	ASTM D4052	°API		Report					54.4			54.3		54.3		54.5			53.6	54.7	54.1
Specific Gravity	ASTM D4052	-		Report					0.7612			0.7618		0.7618		0.7606			0.7643	0.7598	0.7623
Reid Vapor Pressure	ASTM D5191	psi	9.85		10.15	9.65	9.74			10.04	10.12	9.75		9.82		9.97			9.59	10.28	10.45
Carbon	ASTM D5291	wt fraction		Report																	
Hydrogen	ASTM D5291	wt fraction		Report																	
Oxygen	ASTM D5599	wt fraction		Report																	
Oxygen, other then ETOH	ASTM D5599	vol %			0.10																
Ethanol content	ASTM D5599	vol %	9.50		10.50																10.50
Water content	ASTM E1064	mg/kg		Report																	
Sulfur	ASTM D5453	ppm wt	20		30										21						
Composition, aromatics, corrected	ASTM D1319	vol %	33.5	35.0	36.5	34.7			35.7	35.1	33.5		35.7	36.3	34.4	35.5	35.1	36.0	35.4	37.5	36.2
Composition, olefins, corrected	ASTM D1319	vol %	5.5		8.5	5.5			5.8	6.3	6.9		5.9	6.5	5.5	6.7	6.2	6.6	6.4	6	6
Composition, saturates, corrected	ASTM D1319	vol %		Report		49.9			48.6	48.7	49.6		48.5	47.3	50.1	47.8	48.7	47.4	48.2	46	47.3
Benzene	ASTM D3606	vol %	0.47		0.77										0.57						
Existent gum, washed	ASTM D381	mg/100mls			5.0																
Research Octane Number	ASTM D2699			Report																	
Motor Octane Number	ASTM D2700			Report																	
R+M	D2699/2700		87.0																		
Corrosion, Copper	ASTM D130				1																
Oxidation stability	ASTM D525	minutes	240																		
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report																	
						ANALYST	Core	Dixie	Inspectorate	JB	Core	Inspectorate	JB	Dixie	JB/INS	JB	JB	Core	Inspectorate	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 12**			**Batch No.:**	WL1821GP03	WL1821GP03	WL1821GP03	WL1821GP03	WL1821GP03	WL1821GP03	WL1821GP03	WL1821GP03	12C	12C	12C	12B	12B	12B	12B	12A	12A
PRODUCT CODE:	**HF078-12**			**Analysis Date:**	1/16/2009	1/16/2009	1/12/2009	1/13/2009	1/9/2009	1/9/2009	1/7/2009	1/7/2009	12/9/2008	12/9/2008	12/9/2008	12/3/2008	12/3/2008	12/3/2008	12/3/2008	11/11/2008	11/11/2008

TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS recheck**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS optidist**	**RESULTS optidist**	**RESULTS**	**RESULTS**	**RESULTS optidist**	**RESULTS optidist**	**RESULTS Optidist 2**	**RESULTS Optidist 1**
			MIN	**TARGET**	**MAX**																	
Distillation - IBP	ASTM D86	°F									92.1	92.9	95.9		88.2	93.6			93.8	91.1	89.9	90.5
5%		°F									110.8	111.9	111.6		104.7	109			111.2	111.1	105.3	105.4
10%		°F	109	114	119						117.0	117.6	117.7		112.5	115.1			117.2	117.3	111.3	111.6
20%		°F									123.8	125.5	126.0		122.2	123.8			125.2	125.1	119.3	118.9
30%		°F	126	131	136						133.2	133.9	133.7		130.5	132.2			132.9	132.6	128.1	127.8
40%		°F									142.3	143.0	140.7		139.4	141.3			141.3	141.6	140	140.1
50%		°F	147	151	155						151.3	151.5	151.0		149.9	151.9			151	150	156.1	155.9
60%		°F									200.1	200.8	200.8		182.3	186.4			187.8	183.4	187.5	184.9
70%		°F	267	272	277						275.5	276.0	275.9		271.1	272.3			267.4	267.5	268.2	266.2
80%		°F									307.7	308.0	307.4		305.2	305.7			298.3	294.2	298.1	296
90%		°F	334	339	344						340.1	339.4	339.3		337.8	339.2			330.4	330	333.1	330.8
95%		°F									357.5	357.0	357.1		357	357.3			349.4	348.9	352.5	351.8
Distillation - EP		°F			437						376.3	373.6	375.6		375.6	376.7			370	371.7	374.2	373.4
Recovery		vol %		Report							97.8	97.4	98.0		97.2	97.6			97.2	98.2	97.6	97.7
Residue		vol %		Report							1.1	1.1	0.8		1.1	1.1			1.1	1.0	1.1	1.0
Loss		vol %		Report							1.1	1.5	1.2		1.7	1.3			1.7	0.8	1.3	1.3
Gravity	ASTM D4052	°API		Report			56.7		56.3				56.4			56.5				56.4		58.9
Specific Gravity	ASTM D4052	-		Report			0.7520		0.7539				0.7529			0.7526				0.7529		0.7512
Reid Vapor Pressure	ASTM D5191	psi	9.85	10.00	10.15	10.10	9.99		9.54		9.57/9.56		8.70	10.33	10.31	10.04		9.5300	9.6800	9.3300		10.9300
Carbon	ASTM D5291	wt fraction		Report					82.2													
Hydrogen	ASTM D5291	wt fraction		Report					13.4													
Oxygen	ASTM D5599	wt fraction		Report					3.4													
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10				<0.01													
Ethanol content	ASTM D5599	wt %	9.50		10.50				9.83													
Water content	ASTM E1064	mg/kg		Report					523.00													
Sulfur	ASTM D5453	ppm wt	20		30				21				16.4								21	
Composition, aromatics	ASTM D1319	vol %	33.5	35.0	36.5			34.6		37.3	36.7			35.3	33.3	36.4	32.8	35.3		36.8	34.3	36.2
Composition, olefins	ASTM D1319	vol %	4.7	6.2	7.7			6.4		5.9	5.5			5.7	6.8	5.6	6	7.1		6	5.3	6
Composition, saturates	ASTM D1319	vol %		Report				49		46.8	47.8			49.1	49.9	48.1	51.3	47.7		48.1	50.4	47.8
Benzene	ASTM D3606	vol %	0.47		0.77	0.52			0.20												0.39	
Existent gum, washed	ASTM D381	mg/100mls			5.0				<0.5													
Research Octane Number	ASTM D2699			Report					99.9													
Motor Octane Number	ASTM D2700			Report					88.5													
R+M	D2699/2700		87.0						94.2													
Corrosion, Copper	ASTM D130				1				1A													
Oxidation stability	ASTM D525	minutes	240						>240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					17663.0													
						ANALYST	Dixie	Gage	Core	Dixie	HP	HP	Inspectorate	Gage	Core	Inspectorate	JB	Dixie	Core	Inspectorate	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 13**
PRODUCT CODE: **HF0678-13**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Batch No.:						WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	WJ1521GP02	
Analysis Date:						11/26/2008	11/20/2008	11/13/2008	10/31/2008	10/30/2008	10/24/2008	10/22/2008	10/21/2008	10/21/2008	10/16/2008
Distillation - IBP	ASTM D86	°F				93.8	93.2	99.0		97.0	99.9		99.0	99.0	97.2
5%		°F				123.8	125.6	123.0		120.0	125.2		124.0	124.0	124.5
10%		°F	131	136	141	137.6	137.9	137.0		135.0	136.9		137.0	136.0	136.4
20%		°F				157.2	156.8	157.0		156.0	155.1		156.0	155.0	153.7
30%		°F	169	174	179	176.6	176.8	177.0		176.0	174.2		176.0	175.0	174.0
40%		°F				198.4	198.9	199.0		197.0	196.5		198.0	197.0	196.2
50%		°F	215	219	223	221.1	221.0	222.0		219.0	220.6		222.0	222.0	219.9
60%		°F				244.0	244.5	245.0		246.0	245.7		248.0	246.0	244.6
70%		°F	267	272	277	268.4	269.2	270.0		272.0	271.9		275.0	273.0	270.9
80%		°F				301.7	302.5	305.0		307.0	306.1		309.0	308.0	306.5
90%		°F	333	338	343	336.7	337.2	337.0		339.0	338.2		340.0	340.0	338.9
95%		°F				353.1	353.7	356.0		355.0	353.5		355.0	353.0	353.8
Distillation - EP		°F			437	373.6	375.6	385.0		390.0	375.4		380.0	377.0	376.9
Recovery		vol %		Report		97.5	97.7	98.5		98.4	97.5		98.5	98.5	97.4
Residue		vol %		Report		1.1	1.1	0.9		0.8	1.0		1.1	1.1	0.9
Loss		vol %		Report		1.4	1.2	0.6		0.8	1.5		0.5	0.5	1.7
Gravity	ASTM D4052	°API		Report				56.0		56.8	56.9		-	56.9	56.9
Specific Gravity	ASTM D4052	-		Report				0.855		0.752	0.751		-	0.752	0.751
Reid Vapor Pressure	ASTM D5191	psi	6.71	6.86	7.01		6.64	6.83	7.060	7.060	6.950		7.05	7.05	6.93
Carbon	ASTM D5291	wt fraction		Report						86.4			-	86.5	
Hydrogen	ASTM D5291	wt fraction		Report						13.6			-	13.5	
Oxygen	ASTM D5599	wt fraction		Report						<0.1			-	<0.1	
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10					<0.01			-	<0.01	
Ethanol content	ASTM D5599	wt %			0.05					<0.01			-	<0.01	
Sulfur	ASTM D5453	ppm wt	20	25	30					26			-	20	13
Lead	ASTM D3237	g/l			0.01					<0.001			-	0.001	
Composition, aromatics	ASTM D1319	vol %	32.6	34.1	35.6		34.7	33.9	34.1	31.0		33.6	31.2	31.1	
Composition, olefins	ASTM D1319	vol %	4.8	6.3	7.8		6.5	5.2	6.0	7.1		6.8	5.4	5.7	
Composition, saturates	ASTM D1319	vol %		Report			58.8	60.9	59.9	61.9		59.6	63.4	63.2	
Benzene	ASTM D3606	vol %	0.47	0.62	0.77					0.500			0.45	0.45	
Existent gum, washed	ASTM D381	mg/100mls			5.0					1.500			-	2.0	
Research Octane Number	ASTM D2699		91.0		95.0					95.800			-	95.5	
Motor Octane Number	ASTM D2700		83.0		87.0					86.100			-	86.5	
R+M	D2699/2700		87.0		91.0					90.950			-	91.0	
Corrosion, Copper	ASTM D130				1					1A			-	1A	
Oxidation stability	ASTM D525	minutes	240							>240			-	>240	
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report						18566.0			-	18374.0	
					ANALYST	INS	JB	Dixie	Dixie	Dixie	Gage	HP-jam	Dixie	Dixie	GAGE

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 13**				**Batch No.:**				lab blend #9	lab blend #8	lab blend #7	lab blend #6a	lab blend #6	lab blend #5	lab blend #4	lab blend #3	lab blend #2	lab blend #1
PRODUCT CODE:	**HF0678-13**				**Analysis Date:**	10/6/2008	10/3/2008	10/2/2008	3/13/2008	3/12/2008	3/4/2008	2/29/2008	2/28/2008	2/26/2008	2/25/2008	2/22/2008	2/20/2008	2/18/2008
						13C	**13B**	**13B**										
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
			MIN	**TARGET**	**MAX**	OptiDist		OptiDist		Dist. curve fix								
Distillation - IBP	ASTM D86	°F				97		94	106	103	98		98	91	93	91	86	90
5%		°F				125		121	131	132	132		127	120	116	119	104	116
10%		°F	131	136	141	136		133	145	146	146		140	134	131	133	120	133.9
20%		°F				155		153	167	166	167		162	159	155	160	148	173
30%		°F	169	174	179	174		174	189	185	187		183	184	181	190	187	207
40%		°F				195		197	210	202	204		202	205	205	218	224	225
50%		°F	215	219	223	219		222	230	218	219		218	222	226	239	248	237.8
60%		°F				245		244	254	235	237		234	241	248	258	268	250
70%		°F	267	272	277	272		268	285	263	261		260	275	283	296	292	266
80%		°F				305		298	312	325	308		309	324	329	349	318	299
90%		°F	333	338	343	338		333	334	359	338		337	350	351	370	329	326.1
95%		°F				354		352	349	372.8	352		350	364	366	378	334	333
Distillation - EP		°F			437	373		375	376	385	378		377	389	390	398	358	364
Recovery		vol %		Report		97.7		97.2	97.4	97.4	97.8		98.0	97.5	97.3	98.9	96.6	97.1
Residue		vol %		Report		1.1		1.1	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		1.2		1.2	1.6	1.6	1.2		1.0	1.5	1.7	0.1	2.4	1.9
Gravity	ASTM D4052	°API		Report		56.9		55.6			51.9		53.45	53.3	52.8	54.0	54.1	54.1
Specific Gravity	ASTM D4052	-		Report		0.751		0.757			0.7715		0.7651	0.7659	0.7677	0.7627	0.7626	0.7622
Reid Vapor Pressure	ASTM D5191	psi	6.71	6.86	7.01	6.86		7.04			6.48		7.36	8.27	8.36	8.42	9.90	9.16
Carbon	ASTM D5291	wt fraction		Report														
Hydrogen	ASTM D5291	wt fraction		Report														
Oxygen	ASTM D5599	wt fraction		Report														
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10													
Ethanol content	ASTM D5599	wt %			0.05													
Sulfur	ASTM D5453	ppm wt	20	25	30						21					8.1	7.3	
Lead	ASTM D3237	g/l			0.01													
Composition, aromatics	ASTM D1319	vol %	32.6	34.1	35.6	34.1	33.7	38.5			42.6	36.1	37.7	36.9	39.3	37.5	41.6	39.3
Composition, olefins	ASTM D1319	vol %	4.8	6.3	7.8	6.3	5.4	6.3			7.0	5.0	4.4	4.7	4.3	3.7	4.9	3.1
Composition, saturates	ASTM D1319	vol %		Report		59.6	60.9	55.2			50.4	58.9	57.9	58.3	56.4	58.8	53.5	57.6
Benzene	ASTM D3606	vol %	0.47	0.62	0.77						0.48					0.70	0.34	
Existent gum, washed	ASTM D381	mg/100mls			5.0													
Research Octane Number	ASTM D2699		91.0		95.0							93.6			91.2			
Motor Octane Number	ASTM D2700		83.0		87.0							83.5			82.0			
R+M	D2699/2700		87.0		91.0							88.6			86.6			
Corrosion, Copper	ASTM D130				1													
Oxidation stability	ASTM D525	minutes	240															
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report														
					ANALYST	JB	Dixie	JB	JB	JB	JB	Dixie	JB	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 14
PRODUCT CODE: HF0678-14

	Batch No.:	WK0521GP07	WK0521GP07	WK0521GP07	WK0521GP07	WK0521GP07	14D	14D(a)	14D	14C	14C	14C	LB #5	LB #4	LB #3	LB #2	LB #1
	Analysis Date:	11/19/2008	11/26/2008	11/20/2008	11/19/2008	11/12/2008	10/29/2008	10/24/2008	10/20/2008	10/15/2008	10/15/2008	10/13/2008		3/13/2008	3/12/2008	3/11/2008	3/10/2008
							FIA re-check	Octane recheck									

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					97.4	105.0	101.0	103.1			102.5	103.1	100.8	100.6	101	101	104	97	98
5%		°F					122.7	131.0	123.0	126.3			128.8	123.8	128.5	121.4	128	128	132	126	128
10%		°F	132	137	142		132.9	139.0	134.0	134.6			137.1	134.6	136.7	133.8	137	137	142	136	138
20%		°F					145.7	150.0	146.0	146.3			147.8	147.2	148.6	146.7	151	151	156	151	151
30%		°F	157	162	167		158.5	163.0	159.0	159.3			161.6	158.9	161.1	159.4	166	166	169	165	166
40%		°F					174.0	178.0	174.0	174.0			176.7	174.2	175.6	173.8	183	183	182	180	181
50%		°F	188	192	196		191.6	196.2	193.0	191.7			192.1	190.4	191.8	190.1	199	199	195	194	196
60%		°F					210.9	216.0	212.0	210.9			211.9	208.4	210.2	208.9	216	216	207	208	209
70%		°F	230	235	240		236.2	241.3	237.0	237.2			235.4	234.5	235.7	234.7	236	236	222	223	223
80%		°F					279.5	283.0	281.0	279.1			278.0	280.4	278.4	276.9	270	270	249	252	251
90%		°F	333	338	434		337.1	343.0	338.0	338.2			337.7	338.0	337.9	337.1	330	330	330	347	317
95%		°F					354.0	359.0	355.0	354.0			354.8	356.0	254.8	354.1	363	363	356	369	340
Distillation - EP		°F			437		371.7	377.0	388.0	373.1			372.6	377.6	269.8	369.8	392	392	387	399	378
Recovery		vol %		Report			97.2	98.3	98.5	97.7			98.3	98.1	98.1	95.6	98.1	98.1	97.5	97.1	97.9
Residue		vol %		Report			1.1	1.1	0.9	1.0			1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report			1.7	0.6	0.6	1.3			0.6	0.8	0.8	3.3	0.9	0.9	1.5	1.9	1.1
Gravity	ASTM D4052	°API		Report					64.3	64.3			64.2			64.1			60.9	61.7	62.2
Specific Gravity	ASTM D4052	-		Report					0.723	0.723			0.723			0.723			0.7355	0.7320	0.7306
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00	7.18		6.970	7.250	7.030			6.880			6.810		7.29	6.83	7.30	7.30
Carbon	ASTM D5291	wt fraction		Report					84.7												
Hydrogen	ASTM D5291	wt fraction		Report					15.3												
Oxygen	ASTM D5599	wt fraction		Report					<0.1												
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10				<0.01												
Ethanol content	ASTM D5599	wt %			0.05				<0.01												
Water content	ASTM E1064	mg/kg		Report		50			tbd												
Sulfur	ASTM D5453	ppm wt	20		30	25			21	19			23	22							
Lead	ASTM D3237	g/l			0.01				<0.001												
Composition, aromatics	ASTM D1319	vol %	15.0	16.5	18.0			16.5	17		16.9		16.1	16.4				16.3	16.3	16.1	21.4
Composition, olefins	ASTM D1319	vol %	6.4	7.9	9.4			8.4	7.6		7.1		8.7	7.4				5.9	6.5	5.9	6.9
Composition, saturates	ASTM D1319	vol %		Report				75.1	75.4		76.0		75.3	76.2				77.8	77.2	78	71.7
Benzene	ASTM D3606	vol %	0.47		0.77	0.49			0.42				0.49	0.55							
Existent gum, washed	ASTM D381	mg/100mls			5.0				<0.5												
Research Octane Number	ASTM D2699			Report					91.5			91.1	90.0	89.5				91.0		92.6	
Motor Octane Number	ASTM D2700			Report					85.1			84.6	84.0	83.6				84.2		84.9	
R+M	D2699/2700		87.0						88.3			87.9	87.0	86.6				87.6		88.8	
Corrosion, Copper	ASTM D130				1				1A												
Oxidation stability	ASTM D525	minutes	240						>240												
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					18388												
						ANALYST	Dixie	INS	JB	Dixie	Gage	JB	Dixie	JB	Dixie	JAM	JB		JB	JB	JB/Dixie	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 15**
PRODUCT CODE: **HF067-15**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Batch No.:						WK0521GP06	WK0521GP06	WK0521GP06	WK0521GP06	WK0521GP06	15F	15F	15E	15D	15D	15D	LB #4	LB #3	LB #2	LB #1
Analysis Date:						Report 12/12	11/14/2008	11/25/2008	11/20/2008	11/14/2008	11/12/2008	10/27/2008	10/20/2008	10/15/2008	10/15/2008	10/13/2008	3/26/2008	3/24/2008	3/7/2008	3/5/2008
Distillation - IBP	ASTM D86	°F				80.0	84.0	82.0	88.6	84.0	91.6	83.9	84.3	88.7	83.2	88.4	90	90	87	89
5%		°F				106.0	102.0	101.9	108.6	102.0	109.8	106.8	106.5	104.9	106.7	99.7	106	111	110	112
10%		°F	112	117	122	116.0	114.0	112.9	118.4	114.0	117.7	116.9	116.6	115.7	116.9	113.0	118	121	121	122
20%		°F				131.0	130.0	128.9	133.3	130.0	131.4	132.5	132.3	131.0	132.1	129.6	135	138	137	139
30%		°F	144	149	154	147.0	146.0	145.4	149.7	146.0	147.4	148.9	148.8	147.2	148.6	146.2	153	156	155	157
40%		°F				166.0	167.0	165.1	169.2	167.0	166.8	168.7	168.3	167.0	167.9	165.9	171	175	174	175
50%		°F	189	191	195	190.0	190.0	188.3	192.6	190.0	189.9	190.9	190.8	189.5	190.2	189.5	188	191	192	192
60%		°F				216.0	217.0	215.1	219.3	217.0	216.3	217.0	216.2	218.3	216.4	216.2	203	206	209	205
70%		°F	238	243	248	244.0	242.0	242.1	246.0	242.0	243.1	242.8	243.1	242.6	244.1	244.0	220	225	233	220
80%		°F				267.0	265.0	264.4	269.7	265.0	265.6	266.0	266.8	286.7	268.7	268.3	247	254	273	239
90%		°F	295	300	305	299.0	300.0	298.1	303.0	300.0	299.1	300.4	301.4	302.0	301.2	300.2	298	306	321	277
95%		°F				328.0	330.0	327.1	333.0	330.0	330.4	329.5	330.4	332.6	328.0	327.8	325	327	328	321
Distillation - EP		°F			437	365.0	366.0	361.4	368.0	366.0	361.6	361.0	361.9	360.5	363.2	358.0	338	345	350	338
Recovery		vol %		Report		97.8	98.0	96.9	97.8	98.0	98.1	98.3	98	98.1	98.1	95.1	95.8	97.5	97.2	97.5
Residue		vol %		Report		0.8	0.9	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report		1.4	1.0	2.1	1.2	1.0	0.9	0.7	1	0.8	0.8	3.9	3.2	1.5	1.8	1.5
Gravity	ASTM D4052	°API		Report		58.8	58.9			58.9	58.9	58.7	59.3			59.1	53.1	53.1	52.3	52.4
Specific Gravity	ASTM D4052	-		Report		0.7434	0.7437			0.7437	0.7433	0.7440	0.7416			0.7425	0.7665	0.7665	0.7699	0.7693
Reid Vapor Pressure	ASTM D5191	psi	9.85	10.00	10.15	10.06	10.16		10.02	10.34	10.18	10.00	9.87			9.74	9.95	9.95	9.66	9.63
Carbon	ASTM D5291	wt fraction		Report		86.4	86.5			86.5										
Hydrogen	ASTM D5291	wt fraction		Report		12.59	13.5			13.5										
Oxygen	ASTM D5599	wt fraction		Report		<0.1	<0.1			<0.1										
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10	<0.01	<0.01			<0.01										
Ethanol content	ASTM D5599	wt %			0.05	<0.01	<0.01			<0.01										
Water content	ASTM E1064	mg/kg		Report		x	71			tbd										
Sulfur	ASTM D5453	ppm wt	20		30	22.9	25			21	18.24	25	23	22						
Lead	ASTM D3237	g/l			0.01	x	<0.001			<0.001										
Composition, aromatics	ASTM D1319	vol %	34.5	36.0	37.5	36.7	33.4		35.4	33.4		36.2	31.9	33.5			41.3	41.3	41.8	42.4
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5	7.2	6.3		7	6.3		6.7	7	5.3			8.6	8.6	5.1	7.3
Composition, saturates	ASTM D1319	vol %		Report		60.3	60.3		57.6	60.3		57.1	61.1	61.2			52.5	52.5	52.5	7.3
Benzene	ASTM D3606	vol %	0.47		0.77	0.49	0.49			0.49		0.6	0.58	0.65						
Existent gum, washed	ASTM D381	mg/100mls			5.0	x	0.5			0.5										
Research Octane Number	ASTM D2699			Report		94.7	94.9			94.9		94.5	93.6	93.2					96.7	
Motor Octane Number	ASTM D2700			Report		84.9	85.2			85.2		84.8	84.2	83.9					84.0	
R+M	D2699/2700		87.0			89.8	90.1			90.1		89.7	88.9	88.6					90.4	
Corrosion, Copper	ASTM D130				1	x	1A			1A										
Oxidation stability	ASTM D525	minutes	240			x	>240			>240										
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report		18562	18379			18379										
					ANALYST	SwRI	Dixie	INS	JB	Dixie	Gage	JB	JB	Dixie	JAM	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 16**
PRODUCT CODE: **HF0678-16**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS etoh adj	RESULTS rvp adj	RESULTS rvp adj	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS Optidist	RESULTS Optidist
Batch No.:						XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	XA0821GP03	16G	16G	16G	16G
Analysis Date:						2/27/2009	2/19/2009	2/3/2009	1/30/2009	1/23/2009	1/20/2009	1/16/2009	1/16/2009	1/16/2009	12/22/2008	12/22/2008	12/24/2008	12/22/2008
Distillation - IBP	ASTM D86	°F											104.7	107.2			105.8	107.7
5%		°F											134.8	134.0			132.1	133.1
10%		°F	134		144								140.0	139.5			138.5	139.2
20%		°F											148.5	147.6			146.8	147.3
30%		°F	150		160								153.5	154.8			154.8	155.1
40%		°F											180.0	177.2			171.9	173.3
50%		°F	216		224								220.6	220.6			220.2	218.8
60%		°F											238.6	238.0			237.3	238.5
70%		°F	246		256								253.0	252.1			250.4	251.9
80%		°F											269.8	268.1			267.7	268.0
90%		°F	295		305								302.0	300.0			299.0	299.7
95%		°F											333.3	329.0			329.2	328.8
Distillation - EP		°F			437								364.5	367.8			366.7	360.7
Recovery		vol %		Report									98.3	98.5			97.8	98.4
Residue		vol %		Report									1.0	1.0			1.0	1.0
Loss		vol %		Report									0.7	0.5			1.2	0.6
Gravity	ASTM D4052	°API		Report							53.4			53.2				53.1
Specific Gravity	ASTM D4052	-		Report							0.7658			0.7659				0.7664
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00				6.9500	6.8000	6.4700	6.2600		6.3400	6.5100	6.6300		
Carbon	ASTM D5291	wt fraction		Report							79.7							
Hydrogen	ASTM D5291	wt fraction		Report							13.1							
Oxygen	ASTM D5599	wt fraction		Report		3.7					3.4							
Oxygen, other then ETOH	ASTM D5599	vol %			0.10	<0.01					<0.01							
Ethanol content	ASTM D5599	vol %	9.50		10.50	10.69	10.16	9.98	9.27		9.34							
Water content	ASTM E1064	mg/kg		Report							570.00							
Sulfur	ASTM D5453	ppm wt	20		30						26							
Composition, aromatics, corrected	ASTM D1319	vol %	33.5	35.0	36.5						34.6	35.6		36.2	34.6			35.5
Composition, olefins, corrected	ASTM D1319	vol %	5.5		8.5						6.6	5.9		5.5	5.2			6.7
Composition, saturates, corrected	ASTM D1319	vol %		Report							49.4	48.5		48.3	50.3			47.9
Benzene	ASTM D3606	vol %	0.47		0.77				0.60		0.33							
Existent gum, washed	ASTM D381	mg/100mls			5.0						1.0							
Research Octane Number	ASTM D2699			Report							100.8							
Motor Octane Number	ASTM D2700			Report							88.1							
R+M	D2699/2700		87.0								94.4							
Corrosion, Copper	ASTM D130				1						1A							
Oxidation stability	ASTM D525	minutes	240								>240							
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report							17567.0							
						ANALYST	Dixie	Dixie	Dixie	Dixie	Gage	Dixie	Core	Insp	JB	Core	Dixie	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 16
PRODUCT CODE: HF0678-16

Batch No.:	16F	16F	16F	16E	16E	16E	16D	16D	16C	16C	16C	16B	16A
Analysis Date:	12/9/2008	12/9/2008	12/9/2008	11/26/2008	11/26/2008	11/26/2008	11/11/2008	11/11/2008	11/3/2008	11/3/2008	11/3/2008	10/27/2008	10/22/2008

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS Optidist	RESULTS Optidist	RESULTS	RESULTS Optidist 1	RESULTS	RESULTS	RESULTS OptiDist	RESULTS OptiDist	RESULTS OptiDist
Distillation - IBP	ASTM D86	°F					102.7	110.2		106.7	103.0		110.4			108.7	103.6	104.7
5%		°F					131.5	131.8		130.9	131.1		135.1			136.1	129	130.2
10%		°F	134		144		137.7	137.8		137.5	137.1		140.9			141.8	137	137.2
20%		°F					146.4	146.6		145.1	145.2		149.3			150.8	146.8	146.9
30%		°F	150		160		153.2	154.8		151.9	152.4		157.1			158.7	155.3	155.2
40%		°F					171.2	171.8		163.4	160.6		172.4			179.9	174.1	171.9
50%		°F	216		224		221.1	221.3		210.5	212.0		222.4			228.1	221.9	220.1
60%		°F					238.1	238.8		232.7	233.3		241.8			245	240	238
70%		°F	246		256		250.2	252		249.7	249.8		256.9			257.7	252.8	250.4
80%		°F					267.8	268		264.9	266.1		273			273.9	268.2	265.5
90%		°F	295		305		298.3	299.6		297	296.3		301.6			302.6	297.1	294.6
95%		°F					326.3	329.6		324.9	323.6		328.6			330.9	324.9	322.6
Distillation - EP		°F			437		365.5	367.7		360.5	359.7		364.3			361.5	359.2	361.2
Recovery		vol %		Report			97.9	98.3		97.8	98.0		98.6			98.9	97.1	98.3
Residue		vol %		Report			1.0	1.0		1.0	1.0		1.0			1.0	1.0	1.0
Loss		vol %		Report			1.1	0.7		1.2	1.0		0.4			0.1	1.9	0.7
Gravity	ASTM D4052	°API		Report				53.1			53.4		52.5			52.7	52.8	53.7
Specific Gravity	ASTM D4052	-		Report				0.7666			0.7654		0.7690			0.7684	0.7677	0.7641
Reid Vapor Pressure	ASTM D5191	psi	6.70	6.85	7.00	6.8600	6.9600	6.7100			6.4700		6.7000			6.6500	6.8200	7.1200
Carbon	ASTM D5291	wt fraction		Report														
Hydrogen	ASTM D5291	wt fraction		Report														
Oxygen	ASTM D5599	wt fraction		Report														
Oxygen, other then ETOH	ASTM D5599	vol %			0.10													
Ethanol content	ASTM D5599	vol %	9.50		10.50													
Water content	ASTM E1064	mg/kg		Report														
Sulfur	ASTM D5453	ppm wt	20		30							21					21	
Composition, aromatics, corrected	ASTM D1319	vol %	33.5	35.0	36.5	34.5	33.5	35.8	34.0		35.6	33.9	35.4	34.8	34.3	34.8	38.7	35.1
Composition, olefins, corrected	ASTM D1319	vol %	5.5		8.5	6.1	7.9	6.3	6.7		7.4	6.0	6.3	6.2	7.6	6.5	6.6	6.8
Composition, saturates, corrected	ASTM D1319	vol %		Report		49.5	48.7	48.0	49.5		47.1	50.0	48.3	49.0	48.2	48.7	44.2	47.6
Benzene	ASTM D3606	vol %	0.47		0.77							0.62					0.39	
Existent gum, washed	ASTM D381	mg/100mls			5.0													
Research Octane Number	ASTM D2699			Report												98.7	101.2	
Motor Octane Number	ASTM D2700			Report												87.3	89.0	
R+M	D2699/2700		87.0													93.0	95.1	
Corrosion, Copper	ASTM D130				1													
Oxidation stability	ASTM D525	minutes	240															
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report														
		ANALYST				Core	Inspectorate	JB	Dixie	JB	JB/INS	Dixie	JB	Core	Inspectorate	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 20**
PRODUCT CODE: **TR1181**

Batch No.:	XA2121GP01	XA2121GP01	XA2121GP01	XA2121GP01	XA2121GP01	XA2121GP01	XA2121GP01
Analysis Date:	2/13/2009	2/6/2009	2/8/2009	2/16/2009 recheck	2/6/2009	2/5/2009	2/4/2009

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS optidist (797)	RESULTS
Distillation - IBP	ASTM D86	°F							106.3	108.5	107.6	117.1
5%		°F							137.7	136.2	135.6	138
10%		°F	137	142	147				142.7	141.8	141.7	142.5
20%		°F							149.7	148.6	149.1	149.9
30%		°F	150	155	160				155.3	154.6	155	155.5
40%		°F							159.4	158.6	159.3	159.8
50%		°F	148	162	166				162.7	162	162.2	163
60%		°F							186.3	179.4	176.8	175.1
70%		°F	232	237	242				234	233.4	235.9	235
80%		°F							252	254.4	253.7	251.4
90%		°F	296	301	306				300.9	294.4	297.3	297.5
95%		°F							339.4	333.9	335.2	335.3
Distillation - EP		°F			437				368.1	368.9	373.3	372.2
Recovery		vol %		Report					98.5	97.7	98.4	98.8
Residue		vol %		Report					1.0	1.1	1.0	1.0
Loss		vol %		Report					0.5	1.2	0.6	0.2
Gravity	ASTM D4052	°API		Report				59.00			58.84	59.02
Specific Gravity	ASTM D4052	-		Report				0.7431			0.7434	0.7427
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95			6.66			6.57	6.57
Carbon	ASTM D5291	wt fraction		Report				70.8				
Hydrogen	ASTM D5291	wt fraction		Report				12.7				
Oxygen	ASTM D5599	wt fraction		Report				7.1				
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10			0.03				
Ethanol content	ASTM D5599	wt %	19.50		20.50			20.33				
Sulfur	ASTM D5453	ppm wt	20		30			22				7.79
Lead	ASTM D3237	g/l			0.01			<0.0003				
Composition, aromatics	ASTM D1319	vol %	14.0	15.5	17.0		15.4				14.3	
Composition, olefins	ASTM D1319	vol %	5.7	7.2	8.7		6				7.2	
Composition, saturates	ASTM D1319	vol %		Report			58.6				58.5	
Benzene	ASTM D3606	vol %	0.47		0.77	0.57		0.30				
Existent gum, washed	ASTM D381	mg/100mls			5.0			<0.5				
Research Octane Number	ASTM D2699							101.6				
Motor Octane Number	ASTM D2700							95.3				
R+M	D2699/2700		87.0					89.0				
Corrosion, Copper	ASTM D130				1			1A				
Oxidation stability	ASTM D525	minutes	240					>240				
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report				17, 242				
					ANALYST	Dixie	Core	Dixie	Insp	Insp	JB	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 20**
PRODUCT CODE: **TR1181**

Batch No.:	20C	20C	20C	20C	20B	20B	20B	20B	20A	20A	20A
Analysis Date:	1/7/2009	1/7/2009	1/7/2009	1/7/2009	12/16/2008	12/16/2008	12/16/2008	12/16/2008	12/5/2008	12/5/2008	12/5/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS optidist	RESULTS optidist
			MIN	TARGET	MAX											
Distillation - IBP	ASTM D86	°F						109.4	106.9			106.1	107.3		103.1	109.1
5%		°F						137.3	135.9			135.5	134.2		133.5	135.2
10%		°F	137	142	147			142.1	141.8			140.8	140.2		139.7	140.9
20%		°F						149.3	149.2			148.5	148.5		148.2	148.8
30%		°F	150	155	160			154.8	155			155.2	154.6		153.9	154.5
40%		°F						158.8	159.5			159.6	159.4		158.7	159.3
50%		°F	148	162	166			161.7	163.1			162.7	163.2		161.1	162.6
60%		°F						173.6	173			169.3	167.2		169	171
70%		°F	232	237	242			236.7	238			236.4	237.5		231	233.9
80%		°F						256.6	257.1			258.1	253.5		249	252.4
90%		°F	296	301	306			300.8	301			298.5	300.1		291.9	292.6
95%		°F						335.6	337.8			337.1	337.7		331.4	332.7
Distillation - EP		°F			437			369.8	371.7			375.3	374		372.1	371.1
Recovery		vol %		Report				98.1	98.2			98.2	98.2		97.7	98.3
Residue		vol %		Report				1.1	1.1			1.0	1.1		1.0	1.0
Loss		vol %		Report				0.8	0.7			0.8	0.7		1.3	0.7
Gravity	ASTM D4052	°API		Report					58.5				58.5			58.6
Specific Gravity	ASTM D4052	-		Report					0.7449				0.7448			0.7443
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.6200		6.4500	6.8300	6.8500	6.7900		6.5800	6.7900	6.5500
Carbon	ASTM D5291	wt fraction		Report												
Hydrogen	ASTM D5291	wt fraction		Report												
Oxygen	ASTM D5599	wt fraction		Report												
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10											
Ethanol content	ASTM D5599	wt %	19.50		20.50											
Sulfur	ASTM D5453	ppm wt	20		30											
Lead	ASTM D3237	g/l			0.01											
Composition, aromatics	ASTM D1319	vol %	14.0	15.5	17.0	15.9			15.1	15	15	14.2	15.3	15.6		15.5
Composition, olefins	ASTM D1319	vol %	5.7	7.2	8.7	6.48			7.9	5.8	6.2	8.2	6.3	6.4		7.9
Composition, saturates	ASTM D1319	vol %		Report		57.6			57	59.1	58.7	57.7	58.4	58		56.6
Benzene	ASTM D3606	vol %	0.47		0.77											
Existent gum, washed	ASTM D381	mg/100mls			5.0											
Research Octane Number	ASTM D2699															
Motor Octane Number	ASTM D2700															
R+M	D2699/2700		87.0													
Corrosion, Copper	ASTM D130				1											
Oxidation stability	ASTM D525	minutes	240													
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report												
						ANALYST	Core	Dixie	Inpectorate	JB	Core	Dixie	Inpectorate	JB	Core	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 21**
PRODUCT CODE: **TR1182**

Batch No.:	XB2321GP02	XB2321GP02	XB2321GP02	XB2321GP02	XB2321GP02	XB2321GP02	XB2321GP02	21A	21A	21A	21A
Analysis Date:	3/3/2009	2/27/2009	2/25/2009	2/26/2009	2/24/2009	2/24/2009	2/23/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS 797	RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist
			MIN	TARGET	MAX											
Distillation - IBP	ASTM D86	°F								108.6	111.8				108.6	105.4
5%		°F								137.1	135.6				132.6	135.3
10%		°F	136	141	146					142.6	141.8				140.6	141.5
20%		°F								150.9	150.9				149.5	149.9
30%		°F	152	157	162					157.6	157.5				156.2	156.9
40%		°F								162.7	162.7				161.2	162.5
50%		°F	163	167	171					167.7	168.1				166	167.5
60%		°F								224.5	217.5				209	215.2
70%		°F	250	255	260					256.5	253.4				254.8	254.5
80%		°F								274.6	273.5				273.8	275.6
90%		°F	298	303	308					305.6	303.7				301.5	304.3
95%		°F								334.5	329.2				326.1	329.2
Distillation - EP		°F			437					361.9	359.4				356.7	359.5
Recovery		vol %		Report						98.4	98.4				97.8	98.6
Residue		vol %		Report						1.0	1.0				1.0	1.0
Loss		vol %		Report						0.6	0.6				1.2	0.4
Gravity	ASTM D4052	°API		Report					50.5		50.5					50.3
Specific Gravity	ASTM D4052	-		Report					0.7780		0.7775					0.7783
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95	6.85	6.80		6.42		6.16	6.37		6.44		6.35
Carbon	ASTM D5291	wt fraction		Report					79.9							
Hydrogen	ASTM D5291	wt fraction		Report					12.9							
Oxygen	ASTM D5599	wt fraction		Report					7							
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10				<0.01							
Ethanol content	ASTM D5599	wt %	19.50	20.0	20.50				20.32							
Sulfur	ASTM D5453	ppm wt	20		30				27			16.8				
Lead	ASTM D3237	g/l			0.01				0.009							
Composition, aromatics	ASTM D1319	vol %	35.0	36.5	38.0			35.0			37.0		35.5			37.3
Composition, olefins	ASTM D1319	vol %	5.1	6.6	8.1			6.6			7.3		6.4			6.8
Composition, saturates	ASTM D1319	vol %		Report				38.3			35.7		38.1			35.9
Benzene	ASTM D3606	vol %	0.47		0.77	0.52			0.41							
Existent gum, washed	ASTM D381	mg/100mls			5.0				0.5							
Research Octane Number	ASTM D2699								101.6							
Motor Octane Number	ASTM D2700								86.8							
R+M	D2699/2700		87.0						94.2							
Corrosion, Copper	ASTM D130				1				1A							
Oxidation stability	ASTM D525	minutes	240						>240							
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					16845.0							
						ANALYST	Dixie	Gage	Core	Dixie	Inspectorate	JB	Gage	Core	Dixie	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 22**
PRODUCT CODE: **HF0678-22**

Batch No.:	WL2621GP02	WL2621GP02	WL2621GP02	WL2621GP02	WL2621GP02	WL2621GP02	WL2621GP02
Analysis Date:	1/27/2009	1/23/2009	1/15/2009	1/14/2009	1/23/2009	1/14/2009	1/14/2009

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX	rvp adj	rvp adj			recheck	optidist	optidist
Distillation - IBP	ASTM D86	°F								92.5	91.5	91.7
5%		°F								119.7	118.3	119.8
10%		°F	122	127	132					130.4	129	130.1
20%		°F								144.5	144	144.4
30%		°F	147	152	157					153.6	153	153.5
40%		°F								159.2	159	159.1
50%		°F	158	162	166					162.9	162.6	162
60%		°F								168.2	165.9	165.5
70%		°F	227	232	237					234	232.7	233.7
80%		°F								254.9	253.3	254.4
90%		°F	293	298	303					296.4	293.6	298.3
95%		°F								333.3	332.3	334.6
Distillation - EP		°F			437					364.2	364.2	371.4
Recovery		vol %		Report						98.1	97.8	97.2
Residue		vol %		Report						1.0	1.0	1.1
Loss		vol %		Report						0.9	1.2	1.7
Gravity	ASTM D4052	°API		Report				60.1			59.8	
Specific Gravity	ASTM D4052	-		Report				0.7390			0.7395	
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	10.21	9.85	9.74	9.57		9.59	
Carbon	ASTM D5291	wt fraction		Report				77				
Hydrogen	ASTM D5291	wt fraction		Report				15.3				
Oxygen	ASTM D5599	wt fraction		Report				7.1				
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10			0.03				
Ethanol content	ASTM D5599	wt %	19.50		20.50			20.58				
Water content	ASTM E1064	mg/kg		Report				1051				
Sulfur	ASTM D5453	ppm wt	20		30			21				
Lead	ASTM D3237	g/l			0.01			0.004				
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5				14.6		15.3	
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5				6.6		6.3	
Composition, saturates	ASTM D1319	vol %		Report					58.8		58.4	
Benzene	ASTM D3606	vol %	0.47		0.77	0.56		0.29				
Existent gum, washed	ASTM D381	mg/100mls			5.0			<0.5				
Research Octane Number	ASTM D2699			Report				101.8				
Motor Octane Number	ASTM D2700			Report				89.8				
R+M	D2699/2700		87.0					95.8				
Corrosion, Copper	ASTM D130				1			1A				
Oxidation stability	ASTM D525	minutes	240					>240				
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report				17118				
					ANALYST	Dixie	Gage	Dixie	Core	JB	JB	Insp

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 22**
PRODUCT CODE: **HF0678-22**

	Batch No.:	22B	22B	22B	22B	22A	22A	22A	Blend #5	Blend #4	Blend #3	Blend #2	Blend #1
	Analysis Date:	12/16/2008	12/16/2008	12/16/2008	12/16/2008	12/5/2008	12/5/2008	12/5/2008	3/7/2008	3/5/2008	2/26/2008	2/25/2008	2/23/2008
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS MIN**	**TARGET**	**MAX**	**RESULTS**	**RESULTS**	**RESULTS optidist**	**RESULTS optidist**	**RESULTS**	**RESULTS optidist**	**RESULTS optidist**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
Distillation - IBP	ASTM D86	°F						90.1	91.1		91	88.5	111	108	108	108	102
5%		°F						115.2	116.2		109.9	110	130	128	124	130	126
10%		°F	122	127	132			126.2	127.4		116.3	116.1	135	132	131	136	132
20%		°F						141.7	142.7		124.4	124.1	141	138	140	145	144
30%		°F	147	152	157			152	152.6		133.4	133.1	148	145	149	153	155
40%		°F						158.1	158.6		143.2	143.5	155	153	158	160	163
50%		°F	158	162	166			162.1	162.6		152.9	153.3	162	161	165	166	168
60%		°F						165.2	166.4		160.3	160.9	168	170	174	177	191
70%		°F	227	232	237			230.8	232.8		165	166	255	252	252	241	254
80%		°F						251.9	253.9		243.9	245.5	276	276	270	270	270
90%		°F	293	298	303			295.9	299.1		293.8	294.8	300	299	295	295	297
95%		°F						332.3	337		332.4	332.6	314	314	312	313	315
Distillation - EP		°F			437			366.2	371		369.2	365.7	343	342	346	346	351
Recovery		vol %		Report				97.3	97.6		98.1	98.1	98.4	98.1	98	98.2	98.2
Residue		vol %		Report				1.1	1.1		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report				1.6	1.3		0.9	0.9	0.6	0.9	1.0	0.8	0.8
Gravity	ASTM D4052	°API		Report					59.4			59.8	49.8	48.9	50.7	51.9	51.6
Specific Gravity	ASTM D4052	-		Report					0.7411			0.7397	0.7807	0.7842	0.7765	0.7715	0.7727
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	9.94	9.98	9.85		10.07	10.21	10.03	6.74	7.13	7.76	7.18	7.70
Carbon	ASTM D5291	wt fraction		Report													
Hydrogen	ASTM D5291	wt fraction		Report													
Oxygen	ASTM D5599	wt fraction		Report													
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10												
Ethanol content	ASTM D5599	wt %	19.50		20.50												
Water content	ASTM E1064	mg/kg		Report													
Sulfur	ASTM D5453	ppm wt	20		30												
Lead	ASTM D3237	g/l			0.01												
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5	14	15.4	14.7	15	16.3		16.5	38.8	42.1	38.1	38.2	39.2
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5	5.9	5.5	7.6	6.4	6.8		8.2	7.5	6.5	6.9	7.7	7.6
Composition, saturates	ASTM D1319	vol %		Report		60.1	59.1	57.9	58.6	56.9		55.3	32.7	31.4	32.9	32.2	32.2
Benzene	ASTM D3606	vol %	0.47		0.77												
Existent gum, washed	ASTM D381	mg/100mls			5.0												
Research Octane Number	ASTM D2699			Report											104.8		
Motor Octane Number	ASTM D2700			Report											88.4		
R+M	D2699/2700		87.0														
Corrosion, Copper	ASTM D130				1												
Oxidation stability	ASTM D525	minutes	240														
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report													
					ANALYST	Core	Dixie	Inspectorate	JB	Core	Inspectorate	JB	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 23
PRODUCT CODE: TR1184

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.:	XA2121GP02	XA2121GP02	XA2121GP02	XA2121GP02	XA2121GP02	XA2121GP02	XA2121GP02	23A	23A	23A	23A
						Analysis Date:	2/23/2009	2/16/2009	2/12/2009	2/12/2009	2/13/2009	2/13/2009	2/10/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
							RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F								110.8	110.0	109.8	116.8			110.6	108.8
5%		°F								131.8	132.8	131.7	133.0			133.2	132.2
10%		°F	133	138	143					138.0	138.6	138.0	138.7			138.3	138.1
20%		°F								145.0	145.9	145.4	146.3			145.1	145.4
30%		°F	147	152	157					151.8	151.9	151.8	152.6			151.5	151.7
40%		°F								157.2	157.6	157.6	158.0			156.4	157.3
50%		°F	158	162	166					161.2	162.5	162.4	163.0			162.1	162.4
60%		°F								167.7	172.6	171.0	174.0			167.9	170.3
70%		°F	265	270	275					270.1	269.5	271.8	272.5			269.3	271.1
80%		°F								309.8	311.0	309.8	312.3			310.5	310.7
90%		°F	333	338	343					337.6	338.1	337.6	338.4			338.3	338.1
95%		°F								349.2	348.7	349.6	350.1			349.4	349.2
Distillation - EP		°F			437					366.0	365.2	365.6	368.4			364.5	363.5
Recovery		vol %		Report						97.0	98.4	97.6	97.6			97.7	98.3
Residue		vol %		Report						1.0	1.0	1.0	1.0			1.0	1.0
Loss		vol %		Report						2.0	0.6	1.4	1.4			1.3	0.7
Gravity	ASTM D4052	°API		Report							57.5		57.6				57.3
Specific Gravity	ASTM D4052	-		Report							0.7489		0.7482				0.7495
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95				6.68		6.58		6.60	6.66			6.51
Carbon	ASTM D5291	wt fraction		Report					77.4								
Hydrogen	ASTM D5291	wt fraction		Report					13.9								
Oxygen	ASTM D5599	wt fraction		Report					7								
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.20				<0.01								
Ethanol content	ASTM D5599	wt %	19.50		20.50				20.26								
Sulfur	ASTM D5453	ppm wt	20		30				22				17.3				
Lead	ASTM D3237	g/l			0.01				<0.003								
Composition, aromatics	ASTM D1319	vol %	14.0	15.5	17.0		15.5					16.6			15.4		15.6
Composition, olefins	ASTM D1319	vol %	5.8	7.3	8.8		6.8					7.9			7		7.6
Composition, saturates	ASTM D1319	vol %		Report			57.7					55.5			57.6		56.8
Benzene	ASTM D3606	vol %	0.47		0.77	0.68			0.35								
Existent gum, washed	ASTM D381	mg/100mls			5.0				0.5								
Research Octane Number	ASTM D2699			Report					97.2								
Motor Octane Number	ASTM D2700			Report					86.4								
R+M	D2699/2700		87.0						91.8								
Corrosion, Copper	ASTM D130				1				1A								
Oxidation stability	ASTM D525	minutes	240						>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					17152								
						ANALYST	Dixie	Core	Dixie	Insp	JB	JB	Gage	Dixie	Core	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 24**
PRODUCT CODE: **HF0678-24**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist
Batch No.:						WL2621GP03	WL2621GP03	WL2621GP03	WL2621GP03	WL2621GP03	WL2621GP03	24B	24B	24B	24B
Analysis Date:						1/21/2009	1/19/2009	1/16/2009	1/14/2009	1/14/2009	1/14/2009	12/16/2008	12/16/2008	12/16/2008	12/16/2008
Distillation - IBP	ASTM D86	°F								89.8	91.2			87.9	88.4
5%		°F								114	112.3			111.2	111.5
10%		°F	119	124	129					125.5	124.1			123.7	123.9
20%		°F								141.7	141.4			140.6	141
30%		°F	147	152	157					152.3	152.5			152	152.4
40%		°F								159.7	159.3			159.3	159.7
50%		°F	160	164	168					164.4	163.9			164	164.6
60%		°F								174.2	169.7			169.8	170.4
70%		°F	262	267	272					265.1	262.8			265.7	267.3
80%		°F								303.6	302.6			305.6	306.1
90%		°F	334	339	344					337.6	336.1			337.8	339.1
95%		°F								349.8	349.1			350.3	351.2
Distillation - EP		°F			437					366	367.7			372.1	371.5
Recovery		vol %		Report						97.2	96.4			97.2	97.3
Residue		vol %		Report						1.1	1.1			1.0	1.1
Loss		vol %		Report						1.7	2.5			1.8	1.6
Gravity	ASTM D4052	°API		Report				58.90		58.79					58.22
Specific Gravity	ASTM D4052	-		Report				0.7436		0.7436					0.7458
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	10.1600	10.1400	9.9200	9.7700	9.6500		10.18	10.10	10.05	
Carbon	ASTM D5291	wt fraction		Report				78							
Hydrogen	ASTM D5291	wt fraction		Report				15.2							
Oxygen	ASTM D5599	wt fraction		Report				7.1							
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10			0.03							
Ethanol content	ASTM D5599	wt %	19.50		20.50			20.44							
Water content	ASTM D1064	mg/kg		Report				1031							
Sulfur	ASTM D5453	ppm wt	20		30			22							
Lead	ASTM D3237	g/l			0.01			0.005							
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5				14.6	15.9		15	14.2	14.7	14.6
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5				7.4	7		6.3	6.6	7.5	6
Composition, saturates	ASTM D1319	vol %		Report					57.9	57.1		58.7	59.2	57.8	59.4
Benzene	ASTM D3606	vol %	0.47		0.77	0.56		0.32							
Existent gum, washed	ASTM D381	mg/100mls			5.0			0.5							
Research Octane Number	ASTM D2699			Report				100.9							
Motor Octane Number	ASTM D2700			Report				89.6							
R+M	D2699/2700		87.0					95.2							
Corrosion, Copper	ASTM D130				1			1A							
Oxidation stability	ASTM D525	minutes	240					>240							
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report											
					ANALYST	Dixie	Gage	Dixie	Core	JB	Insp	Core	Dixie	Inspectorate	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 24**
PRODUCT CODE: **HF0678-24**

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Batch No.:							24A	24A	LB #7	LB #6	LB #5	LB #4	LB #3	LB #2	LB #1
Analysis Date:							12/5/2008	12/5/2008		3/7/2008	3/5/2008	3/3/2008	2/26/2008	2/25/2008	2/23/2008
Distillation - IBP	ASTM D86	°F					90.8	87.3	93	93	91	91	93	94	98
5%		°F					114.8	113.3	112	112	109	111	113	114	119
10%		°F	119	124	129		126.2	125.4	118	118	116	119	122	122	129
20%		°F					143.1	142.9	127	127	127	132	136	135	143
30%		°F	147	152	157		154.2	154	137	137	138	145	149	148	154
40%		°F					160.2	160.6	149	149	150	157	160	158	161
50%		°F	160	164	168		164.4	164.6	160	160	161	165	166	164	164
60%		°F					170.5	172.5	167	167	168	169	168	169	171
70%		°F	262	267	272		255.9	254	223	223	226	243	246	237	241
80%		°F					288.7	288	278	278	280	282	2786	269	272
90%		°F	334	339	344		331.2	331.5	340	340	342	346	355	347	355
95%		°F					348.5	348.9	356	356	358	361	370	364	371
Distillation - EP		°F			437		370.4	368.8	381	381	383	390	393	388	395
Recovery		vol %		Report			97.2	97.3		97.8	97.7	97.7	97.5	97.5	97.5
Residue		vol %		Report			1.1	1.1		1.0	1.0	1.0	1.0	1.0	1.0
Loss		vol %		Report			1.7	1.6		1	1.5	1.5	1.5	1.5	1.5
Gravity	ASTM D4052	°API		Report				57.98		51.9	52.0	51.7	52.4	52.3	535.0
Specific Gravity	ASTM D4052	-		Report				0.7468		0.7716	0.7724	0.7724	0.7696	0.7697	0.7647
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	10.01	10.15	10.05		9.76	10.68	10.19	9.97	9.97	8.86
Carbon	ASTM D5291	wt fraction		Report											
Hydrogen	ASTM D5291	wt fraction		Report											
Oxygen	ASTM D5599	wt fraction		Report											
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10										
Ethanol content	ASTM D5599	wt %	19.50		20.50										
Water content	ASTM D1064	mg/kg		Report											
Sulfur	ASTM D5453	ppm wt	20		30										6
Lead	ASTM D3237	g/l			0.01										
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5	14.9		14.8		38.4	38.9	37.3	38.8	35.5	36.4
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5	6.2		8.1		9.1	7.8	8.9	7.5	7.4	7.3
Composition, saturates	ASTM D1319	vol %		Report		59		57.1		31.5	33.3	32.8	32.7	36.1	35.3
Benzene	ASTM D3606	vol %	0.47		0.77										0.38
Existent gum, washed	ASTM D381	mg/100mls			5.0										
Research Octane Number	ASTM D2699			Report								104.0			
Motor Octane Number	ASTM D2700			Report								88.2			
R+M	D2699/2700		87.0												
Corrosion, Copper	ASTM D130				1										
Oxidation stability	ASTM D525	minutes	240												
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report											
					ANALYST	Core	Inspectorate	JB	JB	JB	JB	JB	JB	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 25
PRODUCT CODE: TR1186

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.: XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03	XC1021GP03
						Analysis Date: 3/31/2009	3/26/2009	3/27/2009	3/25/2009	3/20/2009	3/20/2009	3/17/2009	3/17/2009	3/17/2009	3/16/2009	3/16/2009	3/12/2009
						RESULTS	RESULTS Optidist	RESULTS	RESULTS	RESULTS	RESULTS re check	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					92.7				88.3			86.2	86.8	88.1	95.9
5%		°F					117.5				115.2			112.2	110.2	109.2	109.8
10%		°F	123	128	133		128				126.3			123.6	122.5	122	120.7
20%		°F					143.7				143.1			141.3	140.5	140.6	138.9
30%		°F	148	153	158		154.3				154			152.7	152.8	152.6	151.7
40%		°F					161.5				161.1			160.2	160.5	160.4	159.8
50%		°F	163	167	171		167.3				167.5			166.1	166.7	166.7	166.3
60%		°F					214				226.8			177.3	187.3	186.4	178.3
70%		°F	278	283	288		285.8				284.7			281	280	283.6	278.8
80%		°F					312.4				314.2			310.1	309.9	309.7	304.7
90%		°F	335	340	345		340.8				342.1			336.9	337.3	337.5	335.5
95%		°F					357.5				359.8			352.6	352.8	353.1	351.3
Distillation - EP		°F			437		372.2				369.7			370	371.5	371.7	376.2
Recovery		vol %		Report			98				97.1			98	97.4	97.1	96.4
Residue		vol %		Report			1.1				1.1			1.0	1.1	1.1	0.6
Loss		vol %		Report			0.9				1.8			1	1.5	1.8	3.0
Gravity	ASTM D4052	°API		Report												51.1	52.2
Specific Gravity	ASTM D4052	-		Report												0.7750	0.7702
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30								10.21			10.01	10.11
Carbon	ASTM D5291	wt fraction		Report									79				
Hydrogen	ASTM D5291	wt fraction		Report									13.7				
Oxygen	ASTM D5599	wt fraction		Report									7				
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.20								<0.01				
Ethanol content	ASTM D5599	wt %	19.50	20.0	20.50								20.23				
Sulfur	ASTM D5453	ppm wt	20	25	30	27		22	21.6	21			21				9.9
Lead	ASTM D3237	g/l			0.01								0.001				
Composition, aromatics	ASTM D1319	vol %	34.0	35.5	37.0							35.4				36	
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5							5.44				7.6	
Composition, saturates	ASTM D1319	vol %		Report								39.1				36.4	
Benzene	ASTM D3606	vol %	0.47	0.62	0.77					0.59			0.19				
Existent gum, washed	ASTM D381	mg/100mls			5.0								<0.5				
Research Octane Number	ASTM D2699												102.6				
Motor Octane Number	ASTM D2700												88.2				
R+M	D2699/2700		87.0										95.4				
Corrosion, Copper	ASTM D130				1								1A				
Oxidation stability	ASTM D525	minutes	240										>240				
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report									16918.0				
Water content	ASTM E1064	mg/kg		Report									1131				
					ANALYST	Dixie	Saybolt	Paragon	Gage	Dixie	Insp	Core	Dixie	Insp	JB	JB	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 25
PRODUCT CODE: TR1186

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist
Batch No.:						25C	25C	25C	25C	25B	25B	25B	25B	25A	25A	25A	25A
Analysis Date:						3/2/2009	3/2/2009	2/27/2009	2/27/2009	1/23/2009	1/23/2009	1/23/2009	1/22/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
Distillation - IBP	ASTM D86	°F						90.9	96.6			89.8	89.2			91	87.1
5%		°F						118	116.2			113.4	111.1			111.6	110
10%		°F	123	128	133			128.3	126.7			125.6	123.9			122.7	122.6
20%		°F						143.2	142.1			143.2	142.2			141.8	141.9
30%		°F	148	153	158			153.3	152.8			154.2	153.7			153.7	154.4
40%		°F						160.7	160.4			161.2	161.4			162	162.4
50%		°F	163	167	171			166.8	166.9			167.4	167.3			165.6	168.1
60%		°F						189.5	182.8			196	193.7			197.2	196.8
70%		°F	278	283	288			284.4	282.5			285.1	284.2			281.7	283
80%		°F						313	307.4			310.6	309.3			310.1	309.9
90%		°F	335	340	345			340.9	339.1			338.2	336.1			336.9	336
95%		°F						357.8	356.4			353.7	352.9			352.2	352.1
Distillation - EP		°F			437			373.1	374			373.6	371			372	372
Recovery		vol %		Report				98	97.3			97.6	97.1			97.1	97.3
Residue		vol %		Report				1.1	1.1			1.0	1.1			1.1	1.1
Loss		vol %		Report				0.9	1.6			1.4	1.8			1.8	1.6
Gravity	ASTM D4052	°API		Report					51.8				51.4				51.4
Specific Gravity	ASTM D4052	-		Report					0.7722				0.7736				0.7736
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30	9.68			9.36	10.07			9.94	10.32			10.25
Carbon	ASTM D5291	wt fraction		Report													
Hydrogen	ASTM D5291	wt fraction		Report													
Oxygen	ASTM D5599	wt fraction		Report													
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.20												
Ethanol content	ASTM D5599	wt %	19.50	20.0	20.50												
Sulfur	ASTM D5453	ppm wt	20	25	30	22											
Lead	ASTM D3237	g/l			0.01												
Composition, aromatics	ASTM D1319	vol %	34.0	35.5	37.0		35.1		36		36		37.7		35.4		38.1
Composition, olefins	ASTM D1319	vol %	5.5	7.0	8.5		5.7		5.6		6.1		6.2		6		6.1
Composition, saturates	ASTM D1319	vol %		Report			39.2		38.4		37.9		36.2		38.56		35.8
Benzene	ASTM D3606	vol %	0.47	0.62	0.77												
Existent gum, washed	ASTM D381	mg/100mls			5.0												
Research Octane Number	ASTM D2699																
Motor Octane Number	ASTM D2700																
R+M	D2699/2700		87.0														
Corrosion, Copper	ASTM D130				1												
Oxidation stability	ASTM D525	minutes	240														
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report													
Water content	ASTM E1064	mg/kg		Report													
					ANALYST	Dixie	Core	Insp	JB	Dixie	Core	Insp	JB	Dixie	Core	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 26**		**Batch No.:**	XC1621GP01	XC1621GP01	XC1621GP01	XC1621GP01	XC1621GP01	XC1621GP01	XC1621GP01	XC1621GP01	26B	26B	26B	26B	26A	26A	26A	26A
PRODUCT CODE:	**HF0678-26**		**Analysis Date:**	4/8/2009	3/30/2009	3/20/2009	3/19/2009	3/25/2009	3/23/2009	3/23/2009	3/18/2009	1/23/2009	1/23/2009	1/23/2009	1/22/2009	1/7/2008	1/7/2008	1/7/2008	1/7/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS 797	RESULTS 958	RESULTS	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist
			MIN	TARGET	MAX																
Distillation - IBP	ASTM D86	°F								85.7	91.1	91.8	95.5			90.5	90.5			90	88.4
5%		°F								107.4	109.3	107.4	110.3			109.2	109.3			109.5	107.5
10%		°F	112	117	122					115.6	116.7	115.5	117			117.1	116.8			116.3	115.2
20%		°F								126.6	127.5	126.5	126.9			127.6	127.1			126.5	125.9
30%		°F	133	138	143					137.6	137.9	137.5	137.7			138.2	137.7			137.1	136.6
40%		°F								149.2	149.2	149	148.5			149.2	149.3			148.2	148
50%		°F	156	160	164					159.7	160	160.3	159.3			159.8	160.1			158.6	158.9
60%		°F								172.4	175.6	173.7	166.3			172.8	172			165	169.4
70%		°F	272	277	282					275.7	277.6	276.8	275.7			278.1	276			271	271.9
80%		°F								304.5	307.6	305.1	303.6			306.5	306.7			304.3	303.5
90%		°F	334	339	344					338.1	338.1	337.9	335.1			339.6	338.9			337	336.2
95%		°F								354.9	357.1	356.3	355.1			357.3	356.5			355.2	355.1
Distillation - EP		°F			437					373.5	379.6	377.3	379			376.7	375.4			373.8	371.9
Recovery		vol %		Report						98	98.1	96.8	97.4			97.4	97.7			97.5	97.7
Residue		vol %		Report						1.1	1.1	1.1	0.9			1.1	1.1			1.1	1.1
Loss		vol %		Report						0.9	0.8	2.1	1.7			1.5	1.2			1.4	1.2
Gravity	ASTM D4052	°API		Report								54.7	54.8				54.6				54.7
Specific Gravity	ASTM D4052	-		Report								0.7599	0.7595				0.7603				0.7598
Reid Vapor Pressure	ASTM D5191	psi	10.00	10.15	10.30				10.1800			10.0400	10.0500		10.0300		9.9700		10.2900		10.0500
Carbon	ASTM D5291	wt fraction		Report					80.6												
Hydrogen	ASTM D5291	wt fraction		Report					13.8												
Oxygen	ASTM D5599	wt fraction		Report					5.2												
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.15				<0.01												
Ethanol content	ASTM D5599	wt %	14.50		15.50				15.05												
Sulfur	ASTM D5453	ppm wt	20	25	30	24	22		21												
Lead	ASTM D3237	g/l			0.01				<0.003												
Composition, aromatics	ASTM D1319	vol %	35.3	36.8	38.3			35.4				37.3		35.9			37.6	35.6			37.5
Composition, olefins	ASTM D1319	vol %	4.4	5.9	7.4			5.6				5.7		6.4			5.4	5.8			5.9
Composition, saturates	ASTM D1319	vol %		Report				43.9				42		42.8			42.1	43.6			41.6
Benzene	ASTM D3606	vol %	0.47	0.62	0.77		0.56		0.20												
Existent gum, washed	ASTM D381	mg/100mls			5.0				<0.5												
Research Octane Number	ASTM D2699								101.6												
Motor Octane Number	ASTM D2700								88.0												
R+M	D2699/2700		87.0						94.8												
Corrosion, Copper	ASTM D130				1				1A												
Oxidation stability	ASTM D525	minutes	240						>240												
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					17249.0												
Water Content	EN1064	mg/kg							838												
		ANALYST				Saybolt	Dixie	Core	Dixie	Insp	JB	JB	Gage	Core	Dixie	Insp	JB	Core	Dixie	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 27
PRODUCT CODE: HF0678-27 (TR1188)

Batch No.:	XC2521GP03	XC2521GP03	XC2521GP03	XC2521GP03	XC2521GP03	XC2521GP03	XC2521GP03	27C	27C	27C	27C	27C
Analysis Date:	4/8/2009	4/6/2009	4/2/2009	4/1/2009	3/31/2009	4/1/2009	3/27/2009	3/13/2009	3/13/2009	3/18/2009	3/12/2009	3/12/2009

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS 958	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS 958
Distillation - IBP	ASTM D86	°F								101.5	104.7	110.5			109.7	106.7	101.6
5%		°F								134.5	132.3	133.5			137.4	136.5	132.8
10%		°F	138	143	148					141.7	141.2	140.9			143.6	141.7	140.9
20%		°F								151.5	151.4	151.5			152.5	151.9	150.8
30%		°F	153	158	163					155	158.2	158.4			158.6	158.2	157.7
40%		°F								163	163.3	163.4			164.3	162.8	162.5
50%		°F	217	221	225					223.6	218.1	224.1			223.9	217.8	212.6
60%		°F								250.5	251.1	250.5			248	250.1	249.4
70%		°F	274	279	284					276.6	274.2	274.6			279.9	277.4	273.9
80%		°F								312.5	309.6	311			313.9	313.2	309.1
90%		°F	338	343	348					341.4	339.3	340.3			344.1	341.2	339.7
95%		°F								354.4	351	352.2			355.6	355.3	351.1
Distillation - EP		°F			436					368	373.7	373.5			373.6	372.7	370.2
Recovery		vol %		Report						97.7	97.6	97.8			97.3	97.9	98
Residue		vol %		Report						1.0	1.0	1.2			1.0	1.0	1.0
Loss		vol %		Report						1.3	1.4	1			1.7	1.1	1
Gravity	ASTM D4052	°API		Report							58.6	58.7					58.4
Specific Gravity	ASTM D4052	-		Report					0.7441		0.7442	0.7440					0.7450
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95				6.91		6.77	6.95	6.84				6.76
Carbon	ASTM D5291	wt fraction		Report					79.3								
Hydrogen	ASTM D5291	wt fraction		Report					15.9								
Oxygen	ASTM D5599	wt fraction		Report					5.3								
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.15				<0.01								
Ethanol content	ASTM D5599	wt %	14.50	15.0	16.50				15.15								
Sulfur	ASTM D5453	ppm wt	20	25	30	26	25.4		20			25.2	24				
Lead	ASTM D3237	g/l			0.01				<0.003								
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5			14.1			14.6	21.25		14.5			16
Composition, olefins	ASTM D1319	vol %	5.1	6.6	8.1			6			7.7	3.06		6.1			7.1
Composition, saturates	ASTM D1319	vol %		Report				64.9			62.7	60.69		64.3			61.9
Benzene	ASTM D3606	vol %	0.47	0.62	0.77	0.53			0.19								
Existent gum, washed	ASTM D381	mg/100mls			5.0				0.5								
Research Octane Number	ASTM D2699								100.7								
Motor Octane Number	ASTM D2700								89.1								
R+M	D2699/2700		87.0		91.0				94.9								
Corrosion, Copper	ASTM D130				1				1A								
Oxidation stability	ASTM D525	minutes	240						>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report					17554.0								
Water	E1064	mg/kg		Report					882								
					ANALYST	Dixie	Gage	Core	Dixie	Insp	JB	Gage	Dixie	Core	Saybolt	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 27
PRODUCT CODE: HF0678-27 (TR1188)

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.:	27B	27B	27B	27B	27B	27B	27B	27B	27A	27A	27A	27A
						Analysis Date:	3/4/2009	3/4/2009	2/27/2009	2/26/2009	1/23/2009	1/23/2009	1/23/2009	1/22/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
							RESULTS	RESULTS	RESULTS	RESULTS 797	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					108.4	110	100.9	107.3			105.4	104.8			104.9	104.7
5%		°F					136.5	137.2	134.4	134			135.7	133.1			131.5	132.9
10%		°F	138	143	148		142.9	143.4	142.2	141.6			142.7	141.6			138.1	139.3
20%		°F					152	152.9	152.1	151.4			152.1	151.7			146.3	147.4
30%		°F	153	158	163		158.8	159.4	158.4	158.4			158.5	158.5			153.1	154.1
40%		°F					164.1	164.2	162.7	162.6			163	163.9			158.2	159.5
50%		°F	217	221	225		226.3	228.5	225	219.5			227.1	220.8			166.1	167.9
60%		°F					254	255.8	250.5	248.5			253	256.4			242.1	245.1
70%		°F	274	279	284		282.4	282.9	280.6	277.3			279.7	281.1			274.3	275.9
80%		°F					319.7	320	316.9	315.2			316.6	316.8			312.5	316.2
90%		°F	338	343	348		344.8	345.4	343.8	342.4			342.9	343.3			342	341.9
95%		°F					357.3	357.9	354.9	353.4			353.5	354.3			352.3	353.7
Distillation - EP		°F			436		372.6	373.8	369.5	375.1			372.7	372.2			373.6	374.1
Recovery		vol %		Report			97.9	97.8	98.2	97.9			97.6	97.4			97.6	98.2
Residue		vol %		Report			1.1	1.1	1.0	1.0			1.0	1.1			1.1	1.0
Loss		vol %		Report			1	1.1	0.8	1.1			1.4	1.5			1.3	0.8
Gravity	ASTM D4052	°API		Report										58.0				58.9
Specific Gravity	ASTM D4052	-		Report										0.7467				0.7431
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95						6.75			6.68	6.72			6.51
Carbon	ASTM D5291	wt fraction		Report														
Hydrogen	ASTM D5291	wt fraction		Report														
Oxygen	ASTM D5599	wt fraction		Report														
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.15													
Ethanol content	ASTM D5599	wt %	14.50	15.0	16.50													
Sulfur	ASTM D5453	ppm wt	20	25	30													
Lead	ASTM D3237	g/l			0.01													
Composition, aromatics	ASTM D1319	vol %	13.5	15.0	16.5							14.7		16.2		15		15.2
Composition, olefins	ASTM D1319	vol %	5.1	6.6	8.1							6.6		7.2		6.3		7.8
Composition, saturates	ASTM D1319	vol %		Report								63.7		61.6		63.8		62
Benzene	ASTM D3606	vol %	0.47	0.62	0.77													
Existent gum, washed	ASTM D381	mg/100mls			5.0													
Research Octane Number	ASTM D2699																	
Motor Octane Number	ASTM D2700																	
R+M	D2699/2700		87.0		91.0													
Corrosion, Copper	ASTM D130				1													
Oxidation stability	ASTM D525	minutes	240															
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report														
Water	E1064	mg/kg		Report														
						ANALYST	Saybolt	Saybolt	Insp	JB	Dixie	Core	Insp	JB	Dixie	Core	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 28**				**Batch No.:**	XC2521GP04	XC2521GP04	XC2521GP04	XC2521GP04	XC2521GP04	XC2521GP04	28D	28D	28D	28D	28D	28D
PRODUCT CODE:	**HF0678-28 (TR1189)**				**Analysis Date:**	4/8/2009	4/2/2009	4/2/2009	4/1/2009	4/1/2009	3/30/2009	3/2/2009	3/2/2009	3/13/2009	3/13/2009	2/27/2009	2/27/2009
					Shipment Date:									Sx to Saybolt	Sx to Saybolt		
TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
			MIN	**TARGET**	**MAX**					**797**							**797**
Distillation - IBP	ASTM D86	°F							100.6	105.6	112.5			109.4	110.1	107.4	110.5
5%		°F							135.4	133.8	133.5			140.3	140.1	139.3	138.1
10%		°F	141	146	151				143.5	142.9	142.7			146.3	146.2	145.6	145
20%		°F							153.7	153.3	153.5			154.8	154.3	154	153.6
30%		°F	155	160	165				159.2	160	160.2			160.8	160	160.2	160.1
40%		°F							162.6	166.5	166.3			165.2	165.7	166.1	166.2
50%		°F	215	219	223				216.9	215.9	215.8			219	220	218.8	215.3
60%		°F							237.8	240.1	240.4			241.4	241.1	241.3	240.3
70%		°F	246	254	259				247.3	253.2	251.4			253.4	254.7	254.1	253.3
80%		°F							267.7	268	266.9			270.1	270.3	268.9	269.2
90%		°F	296	301	306				298.4	298.6	297.7			302	301.3	300.4	299.4
95%		°F							326	327.5	325.2			330.8	329.2	329.9	328.1
Distillation - EP		°F			437				362.4	362.8	363.2			369.6	363.4	363.4	362.1
Recovery		vol %		Report					98.5	97.7	97.8			98.9	98.8	98.7	98.2
Residue		vol %		Report					1.0	1.0	0.8			1.0	1.0	1.0	1.0
Loss		vol %		Report					0.5	1.3	1.4			0.1	0.2	0.3	0.8
Gravity	ASTM D4052	°API		Report				52.12		52.1	52.2						51.6
Specific Gravity	ASTM D4052	-		Report				0.7706		0.7709	0.7701						0.7729
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95			6.81		6.64	6.77	6.2800					6.0600
Carbon	ASTM D5291	wt fraction		Report				80.3									
Hydrogen	ASTM D5291	wt fraction		Report				14.1									
Oxygen	ASTM D5599	wt fraction		Report				5.2									
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.15			<0.01									
Ethanol content	ASTM D5599	wt %	14.50	15.0	15.50			14.96									
Sulfur	ASTM D5453	ppm wt	20		30	24		21			21	20					
Lead	ASTM D3237	g/l						<0.003									
Composition, aromatics	ASTM D1319	vol %	33.5	35.0	36.5		33.7			34.6	32.4		33.8				36
Composition, olefins	ASTM D1319	vol %	5.4	6.9	8.4		5.4			6.9	6.4		6.2				7.5
Composition, saturates	ASTM D1319	vol %		Report			46			43.5	46.2		45				41.5
Benzene	ASTM D3606	vol %	0.47	0.62	0.77	0.54		0.19									
Existent gum, washed	ASTM D381	mg/100mls			5.0			<0.5									
Research Octane Number	ASTM D2699							102.8									
Motor Octane Number	ASTM D2700							88.9									
R+M	D2699/2700		87.0					95.8									
Corrosion, Copper	ASTM D130				1			1A									
Oxidation stability	ASTM D525	minutes	240					>240									
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report				17274.0									
Water	E1064	mg/kg		Report				881									
					ANALYST	Dixie	Core	Dixie	Insp	JB	Gage	Dixie	Core	Saybolt	Saybolt	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT:	**EPA Matrix Fuel 28**			**Batch No.:**	28C	28C	28C	28C	28B	28B	28B	28B	28A	28A	28A	28A	28A	28A
PRODUCT CODE:	**HF0678-28 (TR1189)**			**Analysis Date:**	1/30/2009	2/2/2009	1/30/2009	1/29/2009	1/23/2009	1.23/09	1/23/2009	1/22/2009	1/7/2009	1/12/2009	1/7/2009	1/7/2009	1/13/2009	1/7/2009
				Shipment Date:														

TEST	**METHOD**	**UNITS**	**SPECIFICATIONS**			**RESULTS**	**RESULTS**	**RESULTS optidist**	**RESULTS optidist**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS re check**	**RESULTS**	**RESULTS**	**RESULTS**	**RESULTS**
			MIN	**TARGET**	**MAX**														
Distillation - IBP	ASTM D86	°F						103.4	105.4			109.9	108.8				107.6		102.3
5%		°F						134.3	136.8			136.8	135.9				135.3		134.1
10%		°F	141	146	151			143.8	145.2			142.5	142.3				141.8		141.5
20%		°F						154.4	155.4			151	150.4				151		150.9
30%		°F	155	160	165			160.1	162.1			156.7	157.2				158.4		158.8
40%		°F						166.3	169.7			163.2	163				164.1		165.1
50%		°F	215	219	223			224.7	228.1			186.3	185.5				203.9		203.5
60%		°F						245	244.8			235.2	234.5				240.1		240.4
70%		°F	246	254	259			253.6	253.2			250.3	250.1				251.2		251.4
80%		°F						269.4	270.2			265.8	266.6				263.3		266.5
90%		°F	296	301	306			299.4	301.6			298.9	297.7				295.3		297.1
95%		°F						327.7	328.6			327	327.1				324.1		324.7
Distillation - EP		°F			437			361.8	360.9			371.8	370.7				366.4		367.3
Recovery		vol %		Report				97.4	98.2			98.3	98.1				98.5		98
Residue		vol %		Report				1.0	1.0			1.0	1.0				1.0		1.0
Loss		vol %		Report				1.6	0.8			0.7	0.9				0.5		1
Gravity	ASTM D4052	°API		Report					51.4				52.2						52.1
Specific Gravity	ASTM D4052	-		Report					0.7737				0.7703						0.7708
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95	6.6300			6.5500	6.3200			6.2500	6.5900					6.3800
Carbon	ASTM D5291	wt fraction		Report															
Hydrogen	ASTM D5291	wt fraction		Report															
Oxygen	ASTM D5599	wt fraction		Report															
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.15														
Ethanol content	ASTM D5599	wt %	14.50	15.0	15.50														
Sulfur	ASTM D5453	ppm wt	20		30	20													
Lead	ASTM D3237	g/l																	
Composition, aromatics	ASTM D1319	vol %	33.5	35.0	36.5		34.2		35.1		34.9		37.4		35.9	35.9		36.3	36
Composition, olefins	ASTM D1319	vol %	5.4	6.9	8.4		5.7		6.7		6.2		6		5.2	5		7.2	6.9
Composition, saturates	ASTM D1319	vol %		Report			45.1		43.2		43.9		41.6		43.9	44.1		41.5	42.1
Benzene	ASTM D3606	vol %	0.47	0.62	0.77														
Existent gum, washed	ASTM D381	mg/100mls			5.0														
Research Octane Number	ASTM D2699																		
Motor Octane Number	ASTM D2700																		
R+M	D2699/2700		87.0																
Corrosion, Copper	ASTM D130				1														
Oxidation stability	ASTM D525	minutes	240																
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report															
Water	E1064	mg/kg		Report															
					ANALYST	Dixie	Core	Insp	JB	Dixie	Core	Insp	JB	Dixie	Core	Core	Insp	JB	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 30
PRODUCT CODE: HF0678-30

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS HTC1	RESULTS HTC2	RESULTS	RESULTS 958	RESULTS 958	RESULTS	RESULTS	RESULTS optidist (797)	RESULTS optidist (958)	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
Batch No.:						XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	XA2121GP03	30A	30A	30A	30A
Analysis Date:						2/18/2009	2/18/2009	2/23/2009	2/17/2009	2/16/2009	2/10/2009	2/6/2009	2/8/2009	2/8/2009	2/4/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
Distillation - IBP	ASTM D86	°F				89.2	90.3		92.4	89.7			90.6	90.6	92.7			91.7	89.2
5%		°F				110.3	110.8		109.8	108.5			108.2	107.4	109.4			110.1	109.5
10%		°F	111	116	121	116.4	116.6		116.1	115.1			115.0	114.0	115.5			115.8	115.9
20%		°F				125.4	125.4		124.7	124.2			123.8	123.0	123.6			124.3	124.6
30%		°F	128	133	138	134.2	134.1		133.2	133.3			132.8	131.9	132.4			132.9	133
40%		°F				142.9	142.9		142.6	142.7			142.1	141.9	141.8			142.2	142.3
50%		°F	148	152	156	151.3	151.7		152.8	152.9			152.0	152.2	151.2			152	152.1
60%		°F				199.9	200.7		196.4	195.4			191.5	190.6	194.5			191.3	190.1
70%		°F	262	267	272	268.3	268.3		267.9	266.8			266.3	266.5	266.9			267.5	266.9
80%		°F				294.3	294.4		294.1	294.3			292.8	292.3	294.8			295.1	293.7
90%		°F	321	326	331	323.8	324.1		323.9	323.3			323.0	323.8	324.1			325.9	325.8
95%		°F				341.2	341.6		341.4	341.2			340.5	341.7	341.8			343.7	343.5
Distillation - EP		°F			437	363.7	363.6		366.4	363.2			366.5	366.0	364.1			363.8	363.9
Recovery		vol %		Report		98.2	97.9		98.1	97.7			97.8	97.2	97.7			97.4	97.9
Residue		vol %		Report		1.0	1.0		1.0	1.0			1.0	1.0	1.0			1.0	1.0
Loss		vol %		Report		0.8	1.1		0.9	1.3			1.2	1.8	1.3			1.6	1.1
Gravity	ASTM D4052	°API		Report										56.7	56.9				56.6
Specific Gravity	ASTM D4052	-		Report										0.7519	0.7510				0.7523
Reid Vapor Pressure	ASTM D5191	psi	9.90	10.05	10.20						10.27			10.1500	10.15	9.9300			9.8200
Carbon	ASTM D5291	wt fraction		Report							83								
Hydrogen	ASTM D5291	wt fraction		Report							13.6								
Oxygen	ASTM D5599	wt fraction		Report							3.4								
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.10						<0.01								
Ethanol content	ASTM D5599	wt %	9.5	10	10.50						9.74								
Sulfur	ASTM D5453	ppm wt	20		30			24			19				16.53				
Composition, aromatics	ASTM D1319	vol %	34.3	35.8	37.3							34.1	36.6	35.4			35		36.5
Composition, olefins	ASTM D1319	vol %	4.7	6.2	7.7							5.7	6.1	6.2			6		6.3
Composition, saturates	ASTM D1319	vol %		Report								50.2	47.3	48.4			49		47.2
Benzene	ASTM D3606	vol %	0.47	0.62	0.77			0.53			0.19								
Existent gum, washed	ASTM D381	mg/100mls			5.0						<0.5								
Research Octane Number	ASTM D2699			Report							100.5								
Motor Octane Number	ASTM D2700			Report							94.0								
R+M	D2699/2700		87.0								87.6								
Corrosion, Copper	ASTM D130				1						1A								
Oxidation stability	ASTM D525	minutes	240								>240								
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report							17, 653								
						ANALYST	Insp	Insp	Dixie	JB	JB	Dixie	Core	JB	JB	Gage	Dixie	Core	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: **EPA Matrix Fuel 31**
PRODUCT CODE: **TR1263**

	Batch No.:	Analysis Date:
	XC0221GP01	3/20/2009
	XC0221GP01	3/13/2009
	XC0221GP01	3/11/2009
	XC0221GP01	3/6/2009
	XC0221GP01	3/9/2009
	XC0221GP01	3/6/2009
	XC0221GP01	3/5/2009
	XC0221GP01	3/4/2009

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS 797	RESULTS
Distillation - IBP	ASTM D86	°F									107.3	109.7	114.6
5%		°F									130.9	133.3	132.3
10%		°F	133	138	143						138.1	139.5	138.6
20%		°F									146.8	147.8	147.0
30%		°F	149	154	159						154.2	154.9	154.8
40%		°F									160.1	161.5	161.1
50%		°F	163	167	171						165.4	167.4	166.3
60%		°F									210	210.8	220.1
70%		°F	268	273	278						272.1	270.3	271.8
80%		°F									295.8	297.2	295.5
90%		°F	322	327	332						324.3	324.6	325.2
95%		°F									341.1	341.7	342.1
Distillation - EP		°F			436						363.8	365.8	364.1
Recovery		vol %		Report							97.7	98.4	98.3
Residue		vol %		Report							1.0	1.0	0.8
Loss		vol %		Report							1.3	0.6	0.9
Gravity	ASTM D4052	°API		Report								50.9	50.82
Specific Gravity	ASTM D4052	-		Report								0.7757	0.7761
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95		6.85	6.86		6.48		6.32	6.40
Carbon	ASTM D5291	wt fraction		Report						79.5			
Hydrogen	ASTM D5291	wt fraction		Report						13			
Oxygen	ASTM D5599	wt fraction		Report						7			
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.20					<0.01			
Ethanol content	ASTM D5599	wt %	19.50	20.0	20.50					20.19			
Sulfur	ASTM D5453	ppm wt	20	25	30	27				21			10
Lead	ASTM D3237	g/l								<0.003			
Composition, aromatics	ASTM D1319	vol %	34.3	35.8	37.3				35.4			37	
Composition, olefins	ASTM D1319	vol %	4.8	6.3	7.8				5.8			6.8	
Composition, saturates	ASTM D1319	vol %		Report					38.8			36.2	
Benzene	ASTM D3606	vol %	0.47	0.62	0.77		0.60			0.30			
Existent gum, washed	ASTM D381	mg/100mls			5.0					0.5			
Research Octane Number	ASTM D2699									101.9			
Motor Octane Number	ASTM D2700									88.0			
R+M	D2699/2700		87.0							95.0			
Corrosion, Copper	ASTM D130				1					1A			
Oxidation stability	ASTM D525	minutes	240							>240			
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report						16855.0			
					ANALYST	Dixie	Dixie	Gage	Core	Dixie	Inspectorate	JB	Gage

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

EPACT FUEL ANALYSIS SUMMARY

PRODUCT: EPA Matrix Fuel 31
PRODUCT CODE: TR1263

TEST	METHOD	UNITS	SPECIFICATIONS MIN	SPECIFICATIONS TARGET	SPECIFICATIONS MAX	Batch No.:	31B	31B	31B	31B	31B	31B	31A	31A	31A	31A	31A
						Analysis Date:	2/24/2009 re-blended	2/23/2009 re-blended	1/30/2009	2/2/2009	2/1/2009	1/29/2009	1/20/2009	1/7/2009	1/7/2009	1/7/2009	1/7/2009
							RESULTS	RESULTS 797	RESULTS	RESULTS	RESULTS optidist	RESULTS optidist	RESULTS recheck	RESULTS	RESULTS	RESULTS	RESULTS
Distillation - IBP	ASTM D86	°F					107	107.4			111.6	108.6				108.1	106.5
5%		°F					133.3	128.7			132.3	131.7				134.9	132.8
10%		°F	133	138	143		138.7	137			137.4	137.9				140.9	139.8
20%		°F					147.6	146			144.5	147.0				150.1	149.6
30%		°F	149	154	159		154.8	153.9			151.2	154.7				157.5	157.2
40%		°F					161.1	160.8			160.9	161.5				163.3	163.4
50%		°F	163	167	171		166.5	166.6			215.7	167.3				167.5	168.8
60%		°F					223.9	210.1			253.6	214.5				243.3	242
70%		°F	268	273	278		273.3	272.9			280.0	274.0				276.2	277.3
80%		°F					298.6	297.7			308.1	298.9				303.1	303.1
90%		°F	322	327	332		327.4	326.1			337.8	326.9				329.6	330.2
95%		°F					345.7	343.3			353.8	343.2				345.4	345.6
Distillation - EP		°F			436		366.5	365			372.3	365.6				364.6	367.6
Recovery		vol %		Report			98.6	96.8			97.3	98.0				97.8	97.9
Residue		vol %		Report			1.0	1.0			1.1	1.0				1.0	1.0
Loss		vol %		Report			0.4	2.2			1.6	1.0				1.2	1.1
Gravity	ASTM D4052	°API		Report								50.7					49.9
Specific Gravity	ASTM D4052	-		Report								0.7766					0.7802
Reid Vapor Pressure	ASTM D5191	psi	6.65	6.80	6.95				6.5900			6.5700		6.5900			6.4400
Carbon	ASTM D5291	wt fraction		Report													
Hydrogen	ASTM D5291	wt fraction		Report													
Oxygen	ASTM D5599	wt fraction		Report													
Oxygen, other then ETOH	ASTM D5599	wt fraction			0.20												
Ethanol content	ASTM D5599	wt %	19.50	20.0	20.50												
Sulfur	ASTM D5453	ppm wt	20	25	30				22								
Lead	ASTM D3237	g/l															
Composition, aromatics	ASTM D1319	vol %	34.3	35.8	37.3					36		35.5	36.7		37.2		37
Composition, olefins	ASTM D1319	vol %	4.8	6.3	7.8					6.2		6.4	5.4		5.1		7.6
Composition, saturates	ASTM D1319	vol %		Report						37.8		38.1	37.8		37.7		35.4
Benzene	ASTM D3606	vol %	0.47	0.62	0.77												
Existent gum, washed	ASTM D381	mg/100mls			5.0												
Research Octane Number	ASTM D2699																
Motor Octane Number	ASTM D2700																
R+M	D2699/2700		87.0														
Corrosion, Copper	ASTM D130				1												
Oxidation stability	ASTM D525	minutes	240														
Net Heat of Combustion	ASTM D4809-A	BTU/lb		Report													
						ANALYST	Insp	JB	Dixie	Core	Insp	JB	Core	Dixie	Core	Insp	JB

NOTE: Highlighted cells are near or out of specification. In some cases, the fuel was approved with select properties out of specification. These approvals were made on a case-by-case basis based on EPA's recommendation.

APPENDIX C

DETAILED HYDROCARBON ANALYSIS RESULTS

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	10.907	12.118	11.272
I-Paraffins	41.057	44.544	38.393
Aromatics	21.495	17.700	16.790
Mono-Aromatics	20.516	16.957	16.130
Naphthalenes	0.077	0.054	0.049
Naphtheno/Olefino-Benz	0.159	0.128	0.100
Indenes	0.743	0.561	0.511
Naphthenes	7.436	7.020	7.009
Mono-Naphthenes	7.436	7.020	7.009
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.679	8.170	8.360
n-Olefins	3.263	3.548	3.648
Iso-Olefins	3.747	4.001	3.984
Naphtheno-Olefins	0.642	0.592	0.696
Di-Olefins	0.027	0.028	0.033
Oxygenates	9.308	8.480	16.828
Unidentified	2.117	1.968	1.348
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	9.196	8.379	16.672
C3	0.115	0.105	0.162
C4	0.548	0.669	0.797
C5	25.438	29.118	29.598
C6	18.536	19.229	18.217
C7	12.806	11.855	11.170
C8	17.326	16.410	12.988
C9	8.500	7.611	5.765
C10	4.219	3.565	2.632
C11	1.086	0.999	0.592
C12	0.113	0.093	0.058

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.003	0.005	0.006
	C4	0.308	0.383	0.443
	C5	4.874	5.596	5.643
	C6	3.981	4.340	3.858
	C7	0.905	0.952	0.755
	C8	0.425	0.435	0.311
	C9	0.294	0.295	0.192
	C10	0.064	0.063	0.038
	C11	0.051	0.049	0.027
I-Paraffins	C4	0.040	0.052	0.058
	C5	16.263	18.873	18.826
	C6	6.876	7.516	6.664
	C7	2.656	2.806	2.214
	C8	10.720	10.794	7.838
	C9	2.975	3.012	1.937
	C10	0.834	0.823	0.486
	C11	0.680	0.657	0.363
	C12	0.013	0.012	0.006
Mono-Aromatics	C6	0.831	0.680	0.889
	C7	6.056	5.021	5.489
	C8	5.652	4.689	4.447
	C9	5.090	4.198	3.537
	C10	2.486	2.043	1.547
	C11	0.300	0.244	0.169
	C12	0.101	0.081	0.052
Naphthalenes	C10	0.061	0.043	0.040
	C11	0.016	0.011	0.009
Naphtheno/Olefino-Benzenes	C10	0.159	0.128	0.100
Indenes	C9	0.124	0.092	0.088
	C10	0.614	0.464	0.421
	C11	0.005	0.004	0.003
Mono-Naphthenes	C5	0.449	0.433	0.535
	C6	4.135	3.906	4.104
	C7	2.343	2.208	1.993
	C8	0.493	0.458	0.367
	C9	0.017	0.014	0.011

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes				
n-Olefins	C4	0.199	0.235	0.297
	C5	1.709	1.894	2.036
	C6	1.211	1.274	1.202
	C7	0.110	0.112	0.093
	C11	0.034	0.033	0.020
Iso-Olefins	C5	1.909	2.101	2.273
	C6	1.065	1.113	1.057
	C7	0.737	0.754	0.627
	C8	0.036	0.033	0.026
Naphtheno-Olefins	C5	0.206	0.192	0.253
	C6	0.436	0.400	0.443
Di-Olefins	C5	0.027	0.028	0.033
Oxygenates	C2	9.196	8.379	16.672
	C3	0.112	0.101	0.156

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	35.78	31.61
5%	79.59	79.45
10%	80.59	80.31
15%	81.59	81.17
20%	94.75	82.03
25%	100.83	95.95
30%	139.74	120.87
35%	154.13	140.43
40%	157.48	154.33
45%	172.52	157.78
50%	173.11	172.58
55%	187.75	173.22
60%	210.19	193.48
65%	230.81	212.27
70%	233.98	230.91
75%	237.97	236.08
80%	255.30	243.75
85%	281.77	277.11
90%	322.42	318.26
95%	352.22	347.32
FBP	388.19	387.31

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.390	74-98-6	P3	Propane	0.003	0.005	0.006	0.788
2	8.612	75-28-5	I4	i-Butane	0.040	0.052	0.058	9.925
3	9.404	115-11-7	K4	Isobutene	0.016	0.019	0.024	4.054
4	9.444	106-98-9	K4	Butene-1	0.019	0.023	0.029	4.953
5	9.793	106-97-8	P4	n-Butane	0.308	0.383	0.443	76.175
6	10.267	624-64-6	K4	t-Butene-2	0.075	0.089	0.112	19.229
7	10.389	463-82-1	I5	2,2-Dimethylpropane	0.057	0.069	0.065	14.063
8	10.987	590-18-1	K4	c-Butene-2	0.089	0.103	0.132	22.743
9	12.745	64-17-5	X2	Ethanol	9.196	8.379	16.672	1011.630
10	13.128	563-45-1	C5	3-Methylbutene-1	0.300	0.344	0.357	76.734
11	14.727	78-78-4	I5	i-Pentane	16.207	18.804	18.761	4032.715
12	16.338	109-67-1	K5	Pentene-1	0.346	0.388	0.412	88.469
13	17.172	563-46-2	C5	2-Methylbutene-1	0.525	0.581	0.626	134.460
14	17.700	109-66-0	P5	n-Pentane	4.874	5.596	5.643	1212.875
15	18.209	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.011	0.013	2.829
16	18.797	646-04-8	K5	t-Pentene-2	0.881	0.977	1.049	225.410
17	19.821	627-20-3	K5	c-Pentene-2	0.483	0.530	0.575	123.614
18	20.491	513-35-9	C5	2-Methylbutene-2	1.084	1.177	1.291	277.414
19	20.823	2004-70-8	E5	1t,3-Pentadiene	0.016	0.017	0.020	4.233
20	22.064		?	Unidentified	0.006	0.006	0.008	1.883
21	22.608	75-83-2	I6	2,2-Dimethylbutane	0.310	0.343	0.300	77.375
22	25.250	142-29-0	B5	Cyclopentene	0.206	0.192	0.253	54.331
23	26.426		?	Unidentified	0.044	0.039	0.061	13.657
24	26.498	71-23-8	X3	n-Propanol	0.112	0.101	0.156	20.102
25	27.092	287-92-3	M5	Cyclopentane	0.449	0.433	0.535	114.905
26	27.833	79-29-8	I6	2,3-Dimethylbutane	0.785	0.853	0.761	196.149
27	28.233		?	Unidentified	0.054	0.052	0.051	16.789
28	28.695	691-38-3	C6	4-Methyl-c-pentene-2	0.047	0.050	0.047	12.061
29	28.918	107-83-5	I6	2-Methylpentane	3.405	3.748	3.300	850.670
30	29.349	674-76-0	C6	4-Methyl-t-pentene-2	0.138	0.148	0.137	35.376
31	31.558	96-14-0	I6	3-Methylpentane	2.376	2.571	2.303	593.542
32	32.722	763-29-1	C6	2-Methylpentene-1	0.237	0.249	0.235	60.619
33	32.943	592-41-6	K6	Hexene-1	0.170	0.180	0.168	43.445
34	35.305	110-54-3	P6	n-Hexane	3.981	4.340	3.858	994.579
35	35.936	13269-52-8	K6	t-Hexene-3	0.279	0.294	0.277	71.401
36	36.414	4050-45-7	K6	t-Hexene-2	0.535	0.563	0.531	136.913
37	36.906	625-27-4	C6	2-Methylpentene-2	0.363	0.377	0.360	92.848
38	37.321	922-62-3	C6	3-Methyl-c-pentene-2	0.281	0.289	0.278	71.798
39	38.254	7688-21-3	K6	c-Hexene-2	0.228	0.237	0.226	58.285
40	39.590	3404-73-7	C7	3,3-Dimethylpentene-1	0.332	0.340	0.283	85.027
41	40.168	96-37-7	M6	Methylcyclopentane	2.373	2.279	2.355	607.301
42	41.741	108-08-7	I7	2,4-Dimethylpentane	0.424	0.453	0.353	106.370
43	42.039	594-56-9	C7	2,3,3-Trimethylbutene-1	0.015	0.015	0.013	3.775

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF Acq: 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.277	464-06-2	I7	2,2,3-Trimethylbutane	0.053	0.055	0.044	13.318
45	44.938		?	Unidentified	0.012	0.012	0.013	3.894
46	45.140	71-42-3	Q6	Benzene	0.831	0.680	0.889	229.079
47	45.347	693-89-0	B6	1-Methylcyclopentene	0.388	0.358	0.395	101.725
48	46.162	3404-61-3	C7	3-Methylhexene-1	0.017	0.017	0.014	4.257
49	46.749	3524-73-0	C7	5-Methylhexene-1	0.084	0.087	0.071	21.467
50	47.063	110-82-7	M6	Cyclohexane	1.762	1.628	1.749	451.067
51	47.602		?	Unidentified	0.036	0.037	0.031	11.379
52	48.806	15840-60-5	C7	2-Methyl-c-hexene-3	0.043	0.045	0.037	11.006
53	49.152	3769-23-1	C7	4-Methylhexene-1	0.011	0.011	0.009	2.847
54	49.805	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.054	0.055	0.046	13.838
55	50.197	591-76-4	I7	2-Methylhexane	1.372	1.453	1.143	344.059
56	50.675	110-83-8	B6	Cyclohexene	0.047	0.042	0.048	12.145
57	52.034	589-34-4	I7	3-Methylhexane	0.807	0.844	0.673	202.424
58	52.885	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.242	0.232	0.206	61.894
59	53.471	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.195	0.188	0.166	49.809
60	54.098	822-50-4	M7	1t,2-Dimethylcyclopentane	0.293	0.280	0.249	74.973
61	54.402		C7	C7 - Iso-Olefin - 2	0.024	0.024	0.020	6.018
62	54.689	540-84-1	I8	2,2,4-Trimethylpentane	1.160	1.205	0.848	291.532
63	55.027	592-76-7	K7	Heptene-1	0.031	0.032	0.027	8.050
64	56.365	4914-89-0	C7	3-Methyl-c-hexene-3	0.015	0.015	0.013	3.865
65	56.883	14686-14-7	K7	t-Heptene-3	0.035	0.036	0.030	8.889
66	57.246	6094-02-6	C7	2-Methylhexene-1	0.062	0.064	0.053	15.916
67	57.624	142-82-5	P7	n-Heptane	0.905	0.952	0.755	227.081
68	57.839	7642-10-6	K7	c-Heptene-3	0.026	0.027	0.022	6.690
69	58.118	2738-19-4	C7	2-Methyl-2-hexene	0.028	0.029	0.024	7.239
70	58.363	3899-36-3	C7	3-Methyl-t-hexene-3	0.022	0.022	0.018	5.522
71	58.748	14686-13-6	K7	t-Heptene-2	0.017	0.018	0.015	4.402
72	59.205	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.020	0.019	0.017	5.062
73	59.649	20710-38-8	C7	3-Methyl-t-hexene-2	0.016	0.016	0.014	4.157
74	60.434	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.012	3.666
75	61.070	108-87-2	M7	Methylcyclohexane	1.542	1.440	1.311	394.560
76	62.018	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.038	0.036	0.028	9.687
77	62.423	590-73-8	I8	2,2-Dimethylhexane	0.030	0.031	0.022	7.476
78	63.860	1640-89-7	M7	Ethylcyclopentane	0.052	0.049	0.044	13.312
79	64.512	564-02-3	I8	2,2,3-Trimethylpentane	0.303	0.304	0.221	76.117
80	64.754	592-13-2	I8	2,5-Dimethylhexane	0.645	0.669	0.472	162.099
81	65.092	589-43-5	I8	2,4-Dimethylhexane	0.581	0.597	0.425	146.037
82	65.930	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.035	0.033	0.026	8.961
83	66.333	563-16-6	I8	3,3-Dimethylhexane	0.021	0.022	0.016	5.354
84	67.460	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.030	0.028	0.022	7.567
85	68.098	565-75-3	I8	2,3,4-Trimethylpentane	2.844	2.844	2.080	714.827
86	68.631	108-88-3	Q7	Toluene	6.056	5.021	5.489	1650.972

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	68.778	560-21-4	I8	2,3,3-Trimethylpentane	3.583	3.547	2.619	900.391
88	70.131		C8	C8 - Diolefin - 1	0.012	0.011	0.009	3.017
89	70.432	584-94-1	I8	2,3-Dimethylhexane	0.829	0.837	0.606	208.377
90	71.702	592-27-8	I8	2-Methylheptane	0.242	0.249	0.177	60.786
91	71.961	589-53-7	I8	4-Methylheptane	0.168	0.171	0.123	42.188
92	72.096		?	Unidentified	0.073	0.073	0.054	23.034
93	72.865		M8	1,3-dimethyl-t-cyclohexane	0.173	0.162	0.129	44.347
94	73.024	589-81-1	I8	3-Methylheptane	0.206	0.210	0.150	51.711
95	73.209	619-99-8	I8	3-Ethylhexane	0.109	0.109	0.079	27.295
96	74.105		?	Unidentified	0.027	0.025	0.020	8.494
97	74.936	3522-94-9	I9	2,2,5-Trimethylhexane	2.094	2.129	1.364	527.376
98	75.273		M8	3c-Ethylmethylcyclopentane	0.009	0.009	0.007	2.399
99	75.493		M8	3t-Ethylmethylcyclopentane	0.013	0.012	0.010	3.375
100	75.910		?	Unidentified	0.014	0.014	0.009	4.366
101	76.196	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.074	0.069	0.055	19.011
102	77.567	111-65-9	P8	n-Octane	0.425	0.435	0.311	106.791
103	78.511		?	Unidentified	0.051	0.050	0.034	16.140
104	80.059	1069-53-0	I9	2,3,5-Trimethylhexane	0.346	0.344	0.225	87.074
105	80.619		C8	C9 - IsoOlefin - 1	0.013	0.012	0.010	3.335
106	81.057	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.013	0.012	0.009	3.262
107	81.235	1071-26-7	I9	2,4-Dimethylheptane	0.062	0.063	0.040	15.565
108	81.870	1678-91-7	M8	Ethylcyclohexane	0.107	0.098	0.080	27.459
109	82.197	1072-05-5	I9	2,6-Dimethylheptane	0.096	0.097	0.062	24.096
110	82.676		?	Unidentified	0.020	0.021	0.013	6.335
111	83.130		I9	2,5-Dimethylheptane	0.201	0.202	0.131	50.507
112	83.304	926-82-9	I9	3,5-Dimethylheptane	0.021	0.021	0.014	5.324
113	84.441	100-41-4	Q8	Ethylbenzene	1.020	0.846	0.802	275.975
114	84.621		?	Unidentified	0.026	0.025	0.017	8.075
115	84.862		?	Unidentified	0.031	0.029	0.021	9.743
116	85.671	108-38-3	Q8	m-Xylene	2.565	2.134	2.018	694.152
117	85.820	106-42-3	Q8	p-Xylene	1.157	0.966	0.911	313.155
118	85.966		?	Unidentified	0.060	0.060	0.039	18.870
119	86.221		C8	C9-IsoOlefin-3	0.011	0.010	0.007	2.846
120	86.329		?	Unidentified	0.011	0.011	0.007	3.430
121	87.017	2216-34-4	I9	4-Methyloctane	0.040	0.040	0.026	10.037
122	87.149	3221-61-2	I9	2-Methyloctane	0.055	0.055	0.036	13.832
123	88.015	2216-33-3	I9	3-Methyloctane	0.061	0.061	0.040	15.443
124	88.481		?	Unidentified	0.118	0.125	0.078	37.130
125	88.653	95-47-6	Q8	o-Xylene	0.910	0.743	0.716	246.110
126	89.070		I10	C10 - IsoParaffin - 1	0.400	0.395	0.235	100.835
127	89.643		M9	trans-1,3-Diethylcyclopentane	0.017	0.014	0.011	4.560
128	89.916	14720-74-2	I10	2,2,4-trimethylheptane	0.280	0.277	0.164	70.641
129	91.485	111-84-2	P9	n-Nonane	0.294	0.295	0.192	74.085

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	92.840	98-82-8	Q9	i-Propylbenzene	0.035	0.029	0.025	9.479
131	93.600		?	Unidentified	0.044	0.043	0.026	13.696
132	93.824	15869-87-1	I10	2,2-Dimethyloctane	0.017	0.017	0.010	4.327
133	94.630	15869-89-3	I10	2,5-Dimethyloctane	0.010	0.010	0.006	2.510
134	94.816		I10	C10 - IsoParaffin - 2	0.010	0.010	0.006	2.647
135	95.266	2051-30-1	I10	2,4-Dimethyloctane	0.012	0.012	0.007	2.976
136	95.661		I10	2,6-Dimethyloctane	0.010	0.009	0.006	2.418
137	96.307	103-65-1	Q9	n-Propylbenzene	0.255	0.213	0.177	68.654
138	97.155	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.997	0.829	0.693	268.029
139	97.389	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.475	0.396	0.330	127.589
140	98.015	108-67-8	Q9	1,3,5-Trimethylbenzene	0.634	0.527	0.441	170.506
141	98.684	17301-94-8	I10	4-Methylnonane	0.012	0.011	0.007	2.938
142	98.885		?	Unidentified	0.235	0.233	0.138	73.669
143	99.100	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.388	0.317	0.270	104.326
144	99.663	5911-04-6	I10	3-Methylnonane	0.017	0.016	0.010	4.176
145	100.129		?	Unidentified	0.020	0.014	0.011	6.177
146	100.254		?	Unidentified	0.059	0.057	0.031	18.380
147	100.478		I11	C11-Isoparaffin-2	0.030	0.029	0.016	7.687
148	100.737	95-63-6	Q9	1,2,4-Trimethylbenzene	1.953	1.603	1.357	525.082
149	100.942		?	Unidentified	0.041	0.042	0.025	12.941
150	101.065		?	Unidentified	0.022	0.022	0.013	7.033
151	102.109	17302-01-1	I10	3-Ethyl-3-methylheptane	0.068	0.065	0.036	17.109
152	102.390	538-93-2	Q10	i-Butylbenzene	0.094	0.079	0.058	25.039
153	102.657	124-18-5	P10	n-Decane	0.064	0.063	0.038	16.253
154	102.976		?	Unidentified	0.018	0.017	0.010	5.618
155	103.612	526-73-8	Q9	1,2,3-Trimethylbenzene	0.352	0.283	0.245	94.713
156	104.005	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.014	0.012	0.009	3.714
157	104.194		I11	C11 Isoparaffin-4	0.011	0.010	0.006	2.690
158	104.395		?	Unidentified	0.066	0.055	0.041	20.702
159	104.803		J9	Indan	0.124	0.092	0.088	33.876
160	105.431		J10	Indene	0.435	0.325	0.308	118.912
161	106.148		I11	C11-Isoparaffin-7	0.194	0.187	0.104	48.994
162	106.334	141-93-5	Q10	1,3-Diethylbenzene	0.044	0.037	0.028	11.844
163	106.625	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.649	0.542	0.404	173.548
164	106.918	105-05-5	Q10	1,4-Diethylbenzene	0.214	0.178	0.133	57.206
165	107.176	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.116	0.095	0.072	30.996
166	107.428	135-01-3	Q10	1,2-Diethylbenzene	0.045	0.037	0.028	11.949
167	107.888		?	Unidentified	0.050	0.048	0.027	15.627
168	108.026	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.045	0.037	0.028	11.916
169	108.163		?	Unidentified	0.058	0.057	0.032	18.289
170	108.245		?	Unidentified	0.051	0.049	0.027	15.925
171	108.367		I11	C11- Isoparaffin-11	0.445	0.430	0.238	112.411
172	108.549		?	Unidentified	0.145	0.140	0.077	45.338

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	108.880	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.081	0.067	0.051	21.759
174	108.982		?	Unidentified	0.454	0.372	0.283	142.345
175	109.206		J10	2-Methylindan	0.076	0.057	0.048	20.864
176	109.544	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.256	0.210	0.159	68.453
177	110.101	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.405	0.327	0.252	108.326
178	110.529		?	Unidentified	0.014	0.012	0.007	4.250
179	110.731	693-61-8	K11	2-Undecene, (E)-	0.034	0.033	0.020	8.523
180	110.858		?	Unidentified	0.082	0.080	0.049	25.775
181	111.133		?	Unidentified	0.068	0.057	0.038	21.219
182	111.219	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.064	0.051	0.040	17.039
183	111.532	1120-21-4	P11	n-Undecane	0.051	0.049	0.027	12.912
184	111.688	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.058	0.047	0.033	15.364
185	111.799		?	Unidentified	0.038	0.031	0.021	11.848
186	112.164		Q10	1,2,4,5-Tetramethylbenzene	0.195	0.158	0.122	52.220
187	112.430	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.265	0.214	0.165	70.824
188	112.786		?	Unidentified	0.016	0.013	0.010	4.914
189	112.967		I12	C12 - IsoParaffin - 1	0.013	0.012	0.006	3.168
190	113.294		?	Unidentified	0.022	0.022	0.011	6.961
191	113.585		Q11	C11 - Aromatic - 3	0.045	0.036	0.025	11.872
192	113.763	874-35-1	H10	5-Methylindan	0.077	0.062	0.049	20.644
193	113.903		Q12	1,2-Di-i-propylbenzene	0.032	0.026	0.017	8.578
194	114.118	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.046	0.037	0.026	12.203
195	114.281		Q11	C11 - Aromatic - 4	0.025	0.020	0.014	6.628
196	114.515	824-22-6	J10	4-Methylindan	0.102	0.083	0.065	27.392
197	114.682		?	Unidentified	0.023	0.019	0.013	7.181
198	114.766	824-63-5	H10	2-Methylindan	0.082	0.066	0.052	21.813
199	114.979		?	Unidentified	0.008	0.007	0.005	2.641
200	115.092	538-68-1	Q11	n-Pentylbenzene	0.011	0.009	0.006	2.876
201	115.321		Q11	tert-Pentylbenzene	0.045	0.036	0.025	11.966
202	115.634	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.019	0.016	0.011	5.161
203	115.745		Q11	C11 - Aromatic - 7	0.026	0.022	0.015	6.925
204	116.206	100-18-5	Q12	1,4-Di-i-propylbenzene	0.035	0.028	0.018	9.335
205	116.633	91-20-3	G10	Naphthalene	0.061	0.043	0.040	17.146
206	117.081		J11	1,1-Dimethyl Indane	0.005	0.004	0.003	1.451
207	117.432	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.004	0.003	0.002	1.144
208	117.737		Q12	1,3-Di-n-propylbenzene	0.029	0.023	0.015	7.625
209	117.847		Q11	C11 - Aromatic - 11	0.016	0.014	0.009	4.307
210	118.403		Q11	C11 - Aromatic - 12	0.010	0.008	0.006	2.639
211	123.283	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.006	2.778
212	124.150	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.003	1.542

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.390	74-98-6	Propane	0.003	0.005	0.006	0.788
	9.793	106-97-8	n-Butane	0.308	0.383	0.443	76.175
	17.700	109-66-0	n-Pentane	4.874	5.596	5.643	1212.875
	35.305	110-54-3	n-Hexane	3.981	4.340	3.858	994.579
	57.624	142-82-5	n-Heptane	0.905	0.952	0.755	227.081
	77.567	111-65-9	n-Octane	0.425	0.435	0.311	106.791
	91.485	111-84-2	n-Nonane	0.294	0.295	0.192	74.085
	102.657	124-18-5	n-Decane	0.064	0.063	0.038	16.253
	111.532	1120-21-4	n-Undecane	0.051	0.049	0.027	12.912
I-Paraffins	8.612	75-28-5	i-Butane	0.040	0.052	0.058	9.925
	10.389	463-82-1	2,2-Dimethylpropane	0.057	0.069	0.065	14.063
	14.727	78-78-4	i-Pentane	16.207	18.804	18.761	4032.715
	22.608	75-83-2	2,2-Dimethylbutane	0.310	0.343	0.300	77.375
	27.833	79-29-8	2,3-Dimethylbutane	0.785	0.853	0.761	196.149
	28.918	107-83-5	2-Methylpentane	3.405	3.748	3.300	850.670
	31.558	96-14-0	3-Methylpentane	2.376	2.571	2.303	593.542
	41.741	108-08-7	2,4-Dimethylpentane	0.424	0.453	0.353	106.370
	42.277	464-06-2	2,2,3-Trimethylbutane	0.053	0.055	0.044	13.318
	50.197	591-76-4	2-Methylhexane	1.372	1.453	1.143	344.059
	52.034	589-34-4	3-Methylhexane	0.807	0.844	0.673	202.424
	54.689	540-84-1	2,2,4-Trimethylpentane	1.160	1.205	0.848	291.532
	62.423	590-73-8	2,2-Dimethylhexane	0.030	0.031	0.022	7.476
	64.512	564-02-3	2,2,3-Trimethylpentane	0.303	0.304	0.221	76.117
	64.754	592-13-2	2,5-Dimethylhexane	0.645	0.669	0.472	162.099
	65.092	589-43-5	2,4-Dimethylhexane	0.581	0.597	0.425	146.037
	66.333	563-16-6	3,3-Dimethylhexane	0.021	0.022	0.016	5.354
	68.098	565-75-3	2,3,4-Trimethylpentane	2.844	2.844	2.080	714.827
	68.778	560-21-4	2,3,3-Trimethylpentane	3.583	3.547	2.619	900.391
	70.432	584-94-1	2,3-Dimethylhexane	0.829	0.837	0.606	208.377
	71.702	592-27-8	2-Methylheptane	0.242	0.249	0.177	60.786
	71.961	589-53-7	4-Methylheptane	0.168	0.171	0.123	42.188
	73.024	589-81-1	3-Methylheptane	0.206	0.210	0.150	51.711
	73.209	619-99-8	3-Ethylhexane	0.109	0.109	0.079	27.295
	74.936	3522-94-9	2,2,5-Trimethylhexane	2.094	2.129	1.364	527.376
	80.059	1069-53-0	2,3,5-Trimethylhexane	0.346	0.344	0.225	87.074
	81.235	1071-26-7	2,4-Dimethylheptane	0.062	0.063	0.040	15.565
	82.197	1072-05-5	2,6-Dimethylheptane	0.096	0.097	0.062	24.096
	83.130		2,5-Dimethylheptane	0.201	0.202	0.131	50.507
	83.304	926-82-9	3,5-Dimethylheptane	0.021	0.021	0.014	5.324
	87.017	2216-34-4	4-Methyloctane	0.040	0.040	0.026	10.037
	87.149	3221-61-2	2-Methyloctane	0.055	0.055	0.036	13.832
	88.015	2216-33-3	3-Methyloctane	0.061	0.061	0.040	15.443
	89.070		C10 - IsoParaffin - 1	0.400	0.395	0.235	100.835
	89.91614720-74-2		2,2,4-trimethylheptane	0.280	0.277	0.164	70.641
	93.82415869-87-1		2,2-Dimethyloctane	0.017	0.017	0.010	4.327
	94.63015869-89-3		2,5-Dimethyloctane	0.010	0.010	0.006	2.510

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	94.816		C10 - IsoParaffin - 2	0.010	0.010	0.006	2.647
	95.266	2051-30-1	2,4-Dimethyloctane	0.012	0.012	0.007	2.976
	95.661		2,6-Dimethyloctane	0.010	0.009	0.006	2.418
	98.684	17301-94-8	4-Methylnonane	0.012	0.011	0.007	2.938
	99.663	5911-04-6	3-Methylnonane	0.017	0.016	0.010	4.176
	100.478		C11-Isoparaffin-2	0.030	0.029	0.016	7.687
	102.109	17302-01-1	3-Ethyl-3-methylheptane	0.068	0.065	0.036	17.109
	104.194		C11 Isoparaffin-4	0.011	0.010	0.006	2.690
	106.148		C11-Isoparaffin-7	0.194	0.187	0.104	48.994
	108.367		C11- Isoparaffin-11	0.445	0.430	0.238	112.411
	112.967		C12 - IsoParaffin - 1	0.013	0.012	0.006	3.168
Aromatics							
Mono-Aromatics	45.140	71-42-3	Benzene	0.831	0.680	0.889	229.079
	68.631	108-88-3	Toluene	6.056	5.021	5.489	1650.972
	84.441	100-41-4	Ethylbenzene	1.020	0.846	0.802	275.975
	85.671	108-38-3	m-Xylene	2.565	2.134	2.018	694.152
	85.820	106-42-3	p-Xylene	1.157	0.966	0.911	313.155
	88.653	95-47-6	o-Xylene	0.910	0.743	0.716	246.110
	92.840	98-82-8	i-Propylbenzene	0.035	0.029	0.025	9.479
	96.307	103-65-1	n-Propylbenzene	0.255	0.213	0.177	68.654
	97.155	620-14-4	1-Methyl-3-ethylbenzene	0.997	0.829	0.693	268.029
	97.389	622-96-8	1-Methyl-4-ethylbenzene	0.475	0.396	0.330	127.589
	98.015	108-67-8	1,3,5-Trimethylbenzene	0.634	0.527	0.441	170.506
	99.100	611-14-3	1-Methyl-2-ethylbenzene	0.388	0.317	0.270	104.326
	100.737	95-63-6	1,2,4-Trimethylbenzene	1.953	1.603	1.357	525.082
	102.390	538-93-2	i-Butylbenzene	0.094	0.079	0.058	25.039
	103.612	526-73-8	1,2,3-Trimethylbenzene	0.352	0.283	0.245	94.713
	104.005	535-77-3	1-Methyl-3-i-propylbenzene	0.014	0.012	0.009	3.714
	106.334	141-93-5	1,3-Diethylbenzene	0.044	0.037	0.028	11.844
	106.625	1074-43-7	1-Methyl-3-n-propylbenzene	0.649	0.542	0.404	173.548
	106.918	105-05-5	1,4-Diethylbenzene	0.214	0.178	0.133	57.206
	107.176	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.116	0.095	0.072	30.996
	107.428	135-01-3	1,2-Diethylbenzene	0.045	0.037	0.028	11.949
	108.026	1074-17-5	1-Methyl-2-n-propylbenzene	0.045	0.037	0.028	11.916
	108.880	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.081	0.067	0.051	21.759
	109.544	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.256	0.210	0.159	68.453
	110.101	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.405	0.327	0.252	108.326
	111.219	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.064	0.051	0.040	17.039
	111.688	4218-48-8	1-Ethyl-4-i-propylbenzene	0.058	0.047	0.033	15.364
	112.164		1,2,4,5-Tetramethylbenzene	0.195	0.158	0.122	52.220
	112.430	527-53-7	1,2,3,5-Tetramethylbenzene	0.265	0.214	0.165	70.824
	113.585		C11 - Aromatic - 3	0.045	0.036	0.025	11.872
	113.903		1,2-Di-i-propylbenzene	0.032	0.026	0.017	8.578
	114.118	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.046	0.037	0.026	12.203
	114.281		C11 - Aromatic - 4	0.025	0.020	0.014	6.628
	115.092	538-68-1	n-Pentylbenzene	0.011	0.009	0.006	2.876

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.321		tert-Pentylbenzene	0.045	0.036	0.025	11.966
	115.634	577-55-9	1-Methyl-2-n-butylbenzene	0.019	0.016	0.011	5.161
	115.745		C11 - Aromatic - 7	0.026	0.022	0.015	6.925
	116.206	100-18-5	1,4-Di-i-propylbenzene	0.035	0.028	0.018	9.335
	117.432	7364-19-4	1t-Butyl-4-ethylbenzene	0.004	0.003	0.002	1.144
	117.737		1,3-Di-n-propylbenzene	0.029	0.023	0.015	7.625
	117.847		C11 - Aromatic - 11	0.016	0.014	0.009	4.307
	118.403		C11 - Aromatic - 12	0.010	0.008	0.006	2.639
Naphthalenes	116.633	91-20-3	Naphthalene	0.061	0.043	0.040	17.146
	123.283	91-57-6	2-Methylnaphthalene	0.010	0.007	0.006	2.778
	124.150	90-12-0	1-Methylnaphthalene	0.006	0.004	0.003	1.542
Naphtheno/Olefir	113.763	874-35-1	5-Methylindan	0.077	0.062	0.049	20.644
	114.766	824-63-5	2-Methylindan	0.082	0.066	0.052	21.813
Indenes	104.803		Indan	0.124	0.092	0.088	33.876
	105.431		Indene	0.435	0.325	0.308	118.912
	109.206		2-Methylindan	0.076	0.057	0.048	20.864
	114.515	824-22-6	4-Methylindan	0.102	0.083	0.065	27.392
	117.081		1,1-Dimethyl Indane	0.005	0.004	0.003	1.451
Naphthenes							
Mono-Naphthene	27.092	287-92-3	Cyclopentane	0.449	0.433	0.535	114.905
	40.168	96-37-7	Methylcyclopentane	2.373	2.279	2.355	607.301
	47.063	110-82-7	Cyclohexane	1.762	1.628	1.749	451.067
	52.885	1759-58-6	1t,3-Dimethylcyclopentane	0.242	0.232	0.206	61.894
	53.471	2532-58-3	1c,3-Dimethylcyclopentane	0.195	0.188	0.166	49.809
	54.098	822-50-4	1t,2-Dimethylcyclopentane	0.293	0.280	0.249	74.973
	59.205	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.020	0.019	0.017	5.062
	61.070	108-87-2	Methylcyclohexane	1.542	1.440	1.311	394.560
	62.018	4516-69-2	1,1,3-Trimethylcyclopentane	0.038	0.036	0.028	9.687
	63.860	1640-89-7	Ethylcyclopentane	0.052	0.049	0.044	13.312
	65.930	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.035	0.033	0.026	8.961
	67.460	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.030	0.028	0.022	7.567
	72.865		1,3-dimethyl-t-cyclohexane	0.173	0.162	0.129	44.347
	75.273		3c-Ethylmethylcyclopentane	0.009	0.009	0.007	2.399
	75.493		3t-Ethylmethylcyclopentane	0.013	0.012	0.010	3.375
	76.196	2207-03-6	1t,3-Dimethylcyclohexane	0.074	0.069	0.055	19.011
	81.057	2207-01-4	1c,2-Dimethylcyclohexane	0.013	0.012	0.009	3.262
	81.870	1678-91-7	Ethylcyclohexane	0.107	0.098	0.080	27.459
	89.643		trans-1,3-Diethylcyclopentane	0.017	0.014	0.011	4.560
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.404	115-11-7	Isobutene	0.016	0.019	0.024	4.054
	9.444	106-98-9	Butene-1	0.019	0.023	0.029	4.953

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID12A.CDF Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	10.267	624-64-6	t-Butene-2	0.075	0.089	0.112	19.229
	10.987	590-18-1	c-Butene-2	0.089	0.103	0.132	22.743
	16.338	109-67-1	Pentene-1	0.346	0.388	0.412	88.469
	18.797	646-04-8	t-Pentene-2	0.881	0.977	1.049	225.410
	19.821	627-20-3	c-Pentene-2	0.483	0.530	0.575	123.614
	32.943	592-41-6	Hexene-1	0.170	0.180	0.168	43.445
	35.936	13269-52-8	t-Hexene-3	0.279	0.294	0.277	71.401
	36.414	4050-45-7	t-Hexene-2	0.535	0.563	0.531	136.913
	38.254	7688-21-3	c-Hexene-2	0.228	0.237	0.226	58.285
	55.027	592-76-7	Heptene-1	0.031	0.032	0.027	8.050
	56.883	14686-14-7	t-Heptene-3	0.035	0.036	0.030	8.889
	57.839	7642-10-6	c-Heptene-3	0.026	0.027	0.022	6.690
	58.748	14686-13-6	t-Heptene-2	0.017	0.018	0.015	4.402
	110.731	693-61-8	2-Undecene, (E)-	0.034	0.033	0.020	8.523
Iso-Olefins	13.128	563-45-1	3-Methylbutene-1	0.300	0.344	0.357	76.734
	17.172	563-46-2	2-Methylbutene-1	0.525	0.581	0.626	134.460
	20.491	513-35-9	2-Methylbutene-2	1.084	1.177	1.291	277.414
	28.695	691-38-3	4-Methyl-c-pentene-2	0.047	0.050	0.047	12.061
	29.349	674-76-0	4-Methyl-t-pentene-2	0.138	0.148	0.137	35.376
	32.722	763-29-1	2-Methylpentene-1	0.237	0.249	0.235	60.619
	36.906	625-27-4	2-Methylpentene-2	0.363	0.377	0.360	92.848
	37.321	922-62-3	3-Methyl-c-pentene-2	0.281	0.289	0.278	71.798
	39.590	3404-73-7	3,3-Dimethylpentene-1	0.332	0.340	0.283	85.027
	42.039	594-56-9	2,3,3-Trimethylbutene-1	0.015	0.015	0.013	3.775
	46.162	3404-61-3	3-Methylhexene-1	0.017	0.017	0.014	4.257
	46.749	3524-73-0	5-Methylhexene-1	0.084	0.087	0.071	21.467
	48.806	15840-60-5	2-Methyl-c-hexene-3	0.043	0.045	0.037	11.006
	49.152	3769-23-1	4-Methylhexene-1	0.011	0.011	0.009	2.847
	49.805	3404-55-5	4-Methyl-t/c-hexene-2	0.054	0.055	0.046	13.838
	54.402		C7 - Iso-Olefin - 2	0.024	0.024	0.020	6.018
	56.365	4914-89-0	3-Methyl-c-hexene-3	0.015	0.015	0.013	3.865
	57.246	6094-02-6	2-Methylhexene-1	0.062	0.064	0.053	15.916
	58.118	2738-19-4	2-Methyl-2-hexene	0.028	0.029	0.024	7.239
	58.363	3899-36-3	3-Methyl-t-hexene-3	0.022	0.022	0.018	5.522
	59.649	20710-38-8	3-Methyl-t-hexene-2	0.016	0.016	0.014	4.157
	60.434	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.012	3.666
	70.131		C8 - Diolefin - 1	0.012	0.011	0.009	3.017
	80.619		C9 - IsoOlefin - 1	0.013	0.012	0.010	3.335
	86.221		C9-IsoOlefin-3	0.011	0.010	0.007	2.846
Naphtheno-Olefir	25.250	142-29-0	Cyclopentene	0.206	0.192	0.253	54.331
	45.347	693-89-0	1-Methylcyclopentene	0.388	0.358	0.395	101.725
	50.675	110-83-8	Cyclohexene	0.047	0.042	0.048	12.145
Di-Olefins	18.209	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.011	0.013	2.829
	20.823	2004-70-8	1t,3-Pentadiene	0.016	0.017	0.020	4.233

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Di-Olefins							
Oxygenates	12.745	64-17-5	Ethanol	9.196	8.379	16.672	1011.630
	26.498	71-23-8	n-Propanol	0.112	0.101	0.156	20.102
Unidentified	22.064		Unidentified	0.006	0.006	0.008	1.883
	26.426		Unidentified	0.044	0.039	0.061	13.657
	28.233		Unidentified	0.054	0.052	0.051	16.789
	44.938		Unidentified	0.012	0.012	0.013	3.894
	47.602		Unidentified	0.036	0.037	0.031	11.379
	72.096		Unidentified	0.073	0.073	0.054	23.034
	74.105		Unidentified	0.027	0.025	0.020	8.494
	75.910		Unidentified	0.014	0.014	0.009	4.366
	78.511		Unidentified	0.051	0.050	0.034	16.140
	82.676		Unidentified	0.020	0.021	0.013	6.335
	84.621		Unidentified	0.026	0.025	0.017	8.075
	84.862		Unidentified	0.031	0.029	0.021	9.743
	85.966		Unidentified	0.060	0.060	0.039	18.870
	86.329		Unidentified	0.011	0.011	0.007	3.430
	88.481		Unidentified	0.118	0.125	0.078	37.130
	93.600		Unidentified	0.044	0.043	0.026	13.696
	98.885		Unidentified	0.235	0.233	0.138	73.669
	100.129		Unidentified	0.020	0.014	0.011	6.177
	100.254		Unidentified	0.059	0.057	0.031	18.380
	100.942		Unidentified	0.041	0.042	0.025	12.941
	101.065		Unidentified	0.022	0.022	0.013	7.033
	102.976		Unidentified	0.018	0.017	0.010	5.618
	104.395		Unidentified	0.066	0.055	0.041	20.702
	107.888		Unidentified	0.050	0.048	0.027	15.627
	108.163		Unidentified	0.058	0.057	0.032	18.289
	108.245		Unidentified	0.051	0.049	0.027	15.925
	108.549		Unidentified	0.145	0.140	0.077	45.338
	108.982		Unidentified	0.454	0.372	0.283	142.345
	110.529		Unidentified	0.014	0.012	0.007	4.250
	110.858		Unidentified	0.082	0.080	0.049	25.775
	111.133		Unidentified	0.068	0.057	0.038	21.219
	111.799		Unidentified	0.038	0.031	0.021	11.848
	112.786		Unidentified	0.016	0.013	0.010	4.914
	113.294		Unidentified	0.022	0.022	0.011	6.961
	114.682		Unidentified	0.023	0.019	0.013	7.181
	114.979		Unidentified	0.008	0.007	0.005	2.641

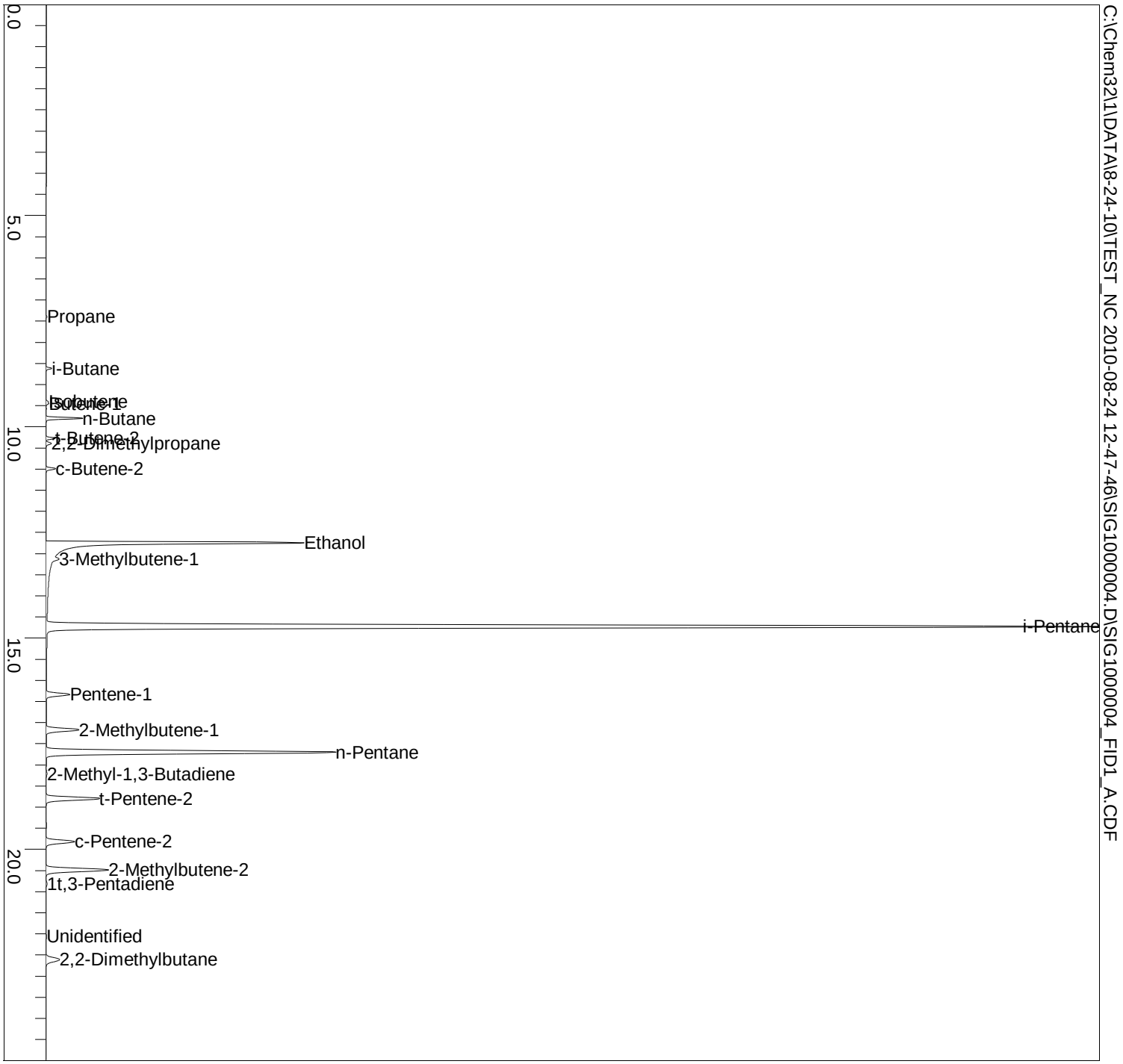
Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1_A.CDF
Sample: ODDB-91308
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

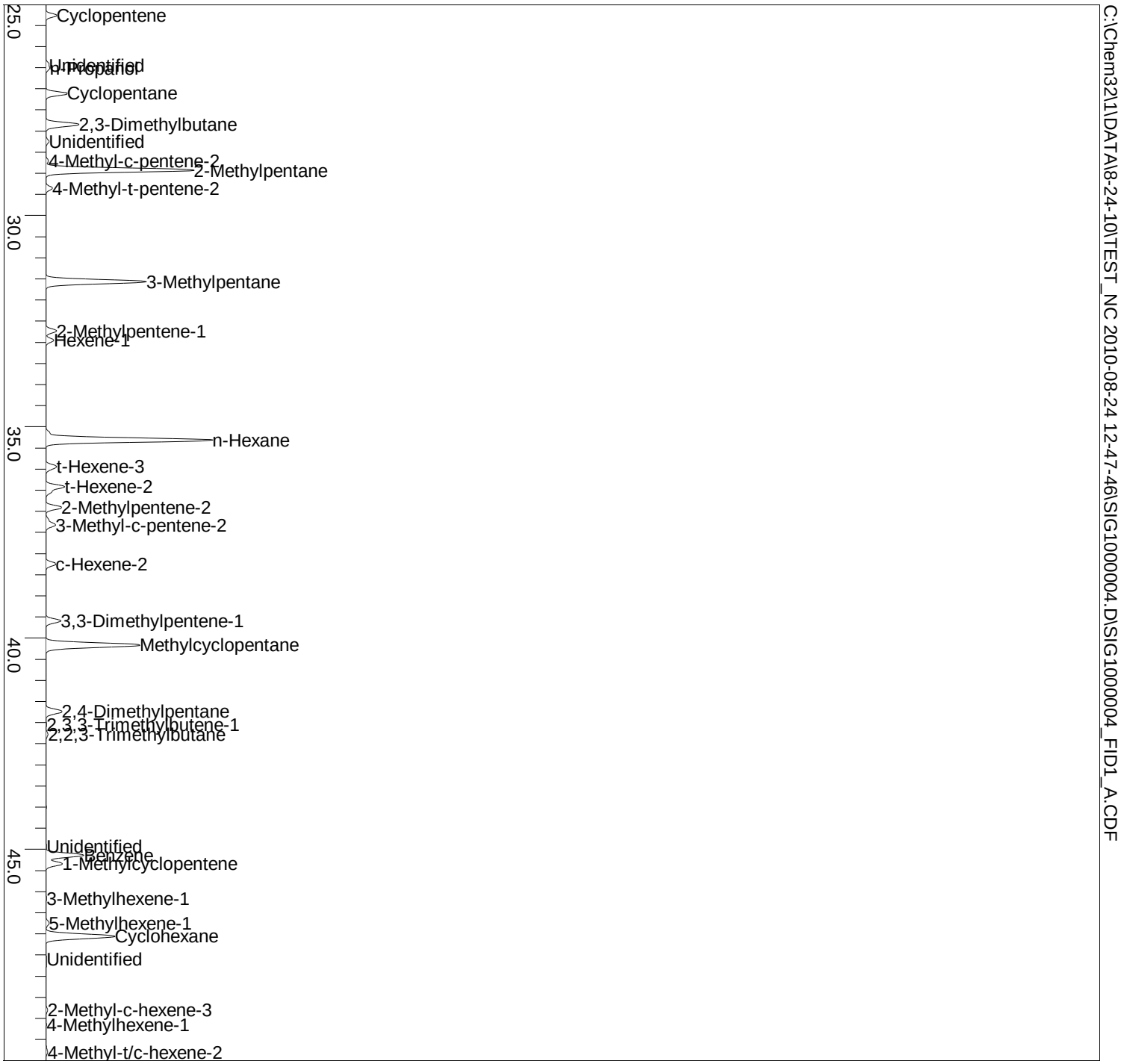
A-Aug-10, 20:15:02
Operator: AAD

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1_A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

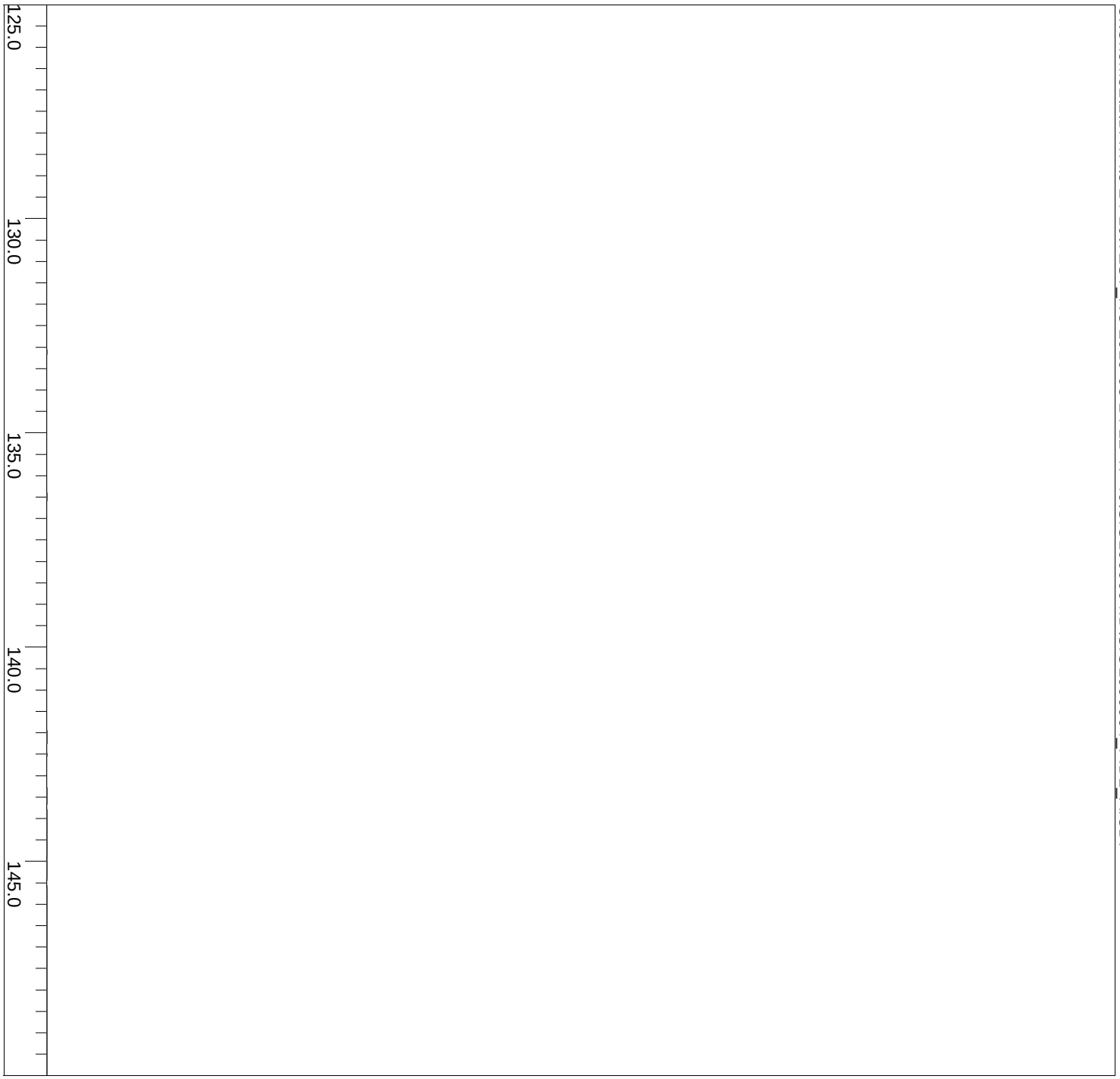
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000004.D\SIG1000004_FID1_A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91308 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91308
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	9.494	11.579	14.880
I-Paraffins	52.502	54.556	46.950
Aromatics	23.810	19.614	20.918
Mono-Aromatics	21.324	17.732	18.928
Naphthalenes	0.126	0.089	0.094
Naphtheno/Olefino-Benz	0.216	0.175	0.159
Indenes	2.145	1.618	1.737
Naphthenes	1.287	1.235	1.441
Mono-Naphthenes	1.287	1.235	1.441
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.508	8.052	9.629
n-Olefins	3.380	3.707	4.450
Iso-Olefins	3.513	3.770	4.394
Naphtheno-Olefins	0.591	0.549	0.751
Di-Olefins	0.024	0.026	0.034
Oxygenates	0.198	0.179	0.321
Unidentified	5.201	4.786	5.860
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.199	0.181	0.324
C4	7.925	9.888	13.300
C5	9.788	11.132	13.380
C6	9.084	9.500	10.459
C7	8.451	7.786	8.669
C8	34.173	33.913	29.491
C9	9.859	9.042	7.757
C10	12.601	11.229	9.050
C11	2.511	2.369	1.586
C12	0.208	0.176	0.124

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.002
	C4	7.610	9.509	12.756
	C5	0.877	1.014	1.185
	C6	0.455	0.499	0.514
	C7	0.092	0.097	0.090
	C8	0.028	0.029	0.024
	C9	0.274	0.276	0.208
	C10	0.062	0.061	0.042
	C11	0.095	0.093	0.059
I-Paraffins	C4	0.045	0.059	0.076
	C5	4.969	5.801	6.710
	C6	4.277	4.698	4.835
	C7	2.530	2.702	2.460
	C8	28.765	29.389	24.534
	C9	4.363	4.447	3.314
	C10	5.610	5.571	3.811
	C11	1.899	1.846	1.183
	C12	0.045	0.043	0.026
Mono-Aromatics	C6	0.663	0.545	0.827
	C7	5.145	4.293	5.441
	C8	5.332	4.450	4.893
	C9	4.977	4.129	4.034
	C10	4.660	3.866	3.383
	C11	0.389	0.319	0.256
	C12	0.158	0.128	0.095
Naphthalenes	C10	0.104	0.073	0.079
	C11	0.022	0.016	0.015
Naphtheno/Olefino-Benzs	C10	0.216	0.175	0.159
Indenes	C9	0.214	0.161	0.176
	C10	1.891	1.427	1.534
	C11	0.035	0.026	0.023
	C12	0.005	0.004	0.004
Mono-Naphthenes	C5	0.109	0.105	0.151
	C6	0.892	0.859	1.033
	C7	0.170	0.164	0.169
	C8	0.032	0.030	0.028

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.032	0.028	0.024
	C10	0.053	0.048	0.037
n-Olefins	C4	0.270	0.320	0.468
	C5	1.800	2.007	2.501
	C6	1.222	1.292	1.414
	C7	0.017	0.018	0.017
	C11	0.071	0.069	0.049
Iso-Olefins	C5	1.807	1.990	2.511
	C6	1.187	1.246	1.374
	C7	0.496	0.511	0.492
	C8	0.017	0.016	0.013
	C10	0.007	0.007	0.005
Naphtheno-Olefins	C5	0.202	0.189	0.289
	C6	0.390	0.360	0.462
Di-Olefins	C5	0.024	0.026	0.034
Oxygenates	C3	0.198	0.179	0.321

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.21	21.07
5%	27.39	26.01
10%	79.94	61.95
15%	96.88	81.49
20%	138.32	100.41
25%	155.78	140.92
30%	197.12	164.98
35%	209.78	209.22
40%	210.50	209.91
45%	230.00	215.65
50%	231.59	230.20
55%	235.89	232.78
60%	237.84	236.60
65%	247.22	238.31
70%	277.14	250.85
75%	296.60	281.40
80%	331.74	320.72
85%	335.68	332.38
90%	358.47	352.22
95%	363.20	363.20
FBP	404.36	399.20

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.391	74-98-6	P3	Propane	0.001	0.001	0.002	0.238
2	8.614	75-28-5	I4	i-Butane	0.045	0.059	0.076	10.860
3	9.406	115-11-7	K4	Isobutene	0.024	0.029	0.041	5.882
4	9.445	106-98-9	K4	Butene-1	0.028	0.034	0.049	6.958
5	9.794	106-97-8	P4	n-Butane	7.610	9.509	12.756	1825.633
6	10.269	624-64-6	K4	t-Butene-2	0.103	0.123	0.178	25.477
7	10.392	463-82-1	I5	2,2-Dimethylpropane	0.016	0.020	0.022	3.924
8	10.990	590-18-1	K4	c-Butene-2	0.115	0.134	0.201	28.695
9	13.132	563-45-1	C5	3-Methylbutene-1	0.079	0.091	0.109	19.531
10	14.711	78-78-4	I5	i-Pentane	4.953	5.781	6.688	1196.406
11	16.335	109-67-1	K5	Pentene-1	0.361	0.408	0.501	89.699
12	17.174	563-46-2	C5	2-Methylbutene-1	0.565	0.628	0.785	140.345
13	17.694	109-66-0	P5	n-Pentane	0.877	1.014	1.185	211.976
14	18.213	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.010	0.014	2.525
15	18.805	646-04-8	K5	t-Pentene-2	0.930	1.038	1.292	231.167
16	19.439		?	Unidentified	0.006	0.007	0.009	1.943
17	19.822	627-20-3	K5	c-Pentene-2	0.509	0.561	0.707	126.428
18	20.493	513-35-9	C5	2-Methylbutene-2	1.164	1.271	1.617	289.185
19	20.830	2004-70-8	E5	1t,3-Pentadiene	0.014	0.015	0.020	3.628
20	22.645	75-83-2	I6	2,2-Dimethylbutane	0.034	0.038	0.039	8.285
21	25.253	142-29-0	B5	Cyclopentene	0.202	0.189	0.289	51.612
22	26.495	71-23-8	X3	n-Propanol	0.198	0.179	0.321	34.490
23	27.103	287-92-3	M5	Cyclopentane	0.109	0.105	0.151	26.962
24	27.841	79-29-8	I6	2,3-Dimethylbutane	1.239	1.355	1.401	300.613
25	28.236		?	Unidentified	0.056	0.055	0.062	17.185
26	28.696	691-38-3	C6	4-Methyl-c-pentene-2	0.049	0.053	0.057	12.274
27	28.909	107-83-5	I6	2-Methylpentane	1.873	2.074	2.117	454.233
28	29.342	674-76-0	C6	4-Methyl-t-pentene-2	0.146	0.157	0.169	36.318
29	31.558	96-14-0	I6	3-Methylpentane	1.130	1.231	1.278	274.132
30	32.719	763-29-1	C6	2-Methylpentene-1	0.248	0.262	0.287	61.701
31	32.942	592-41-6	K6	Hexene-1	0.170	0.181	0.196	42.151
32	35.133	760-21-4	C6	2-Ethylbutene-1	0.076	0.079	0.088	18.784
33	35.289	110-54-3	P6	n-Hexane	0.455	0.499	0.514	110.296
34	35.936	13269-52-8	K6	t-Hexene-3	0.284	0.302	0.329	70.681
35	36.412	4050-45-7	K6	t-Hexene-2	0.539	0.571	0.624	133.884
36	36.904	625-27-4	C6	2-Methylpentene-2	0.378	0.396	0.438	94.017
37	37.312	922-62-3	C6	3-Methyl-c-pentene-2	0.289	0.299	0.335	71.804
38	38.242	7688-21-3	K6	c-Hexene-2	0.229	0.239	0.265	56.822
39	39.582	3404-73-7	C7	3,3-Dimethylpentene-1	0.343	0.354	0.340	85.254
40	40.153	96-37-7	M6	Methylcyclopentane	0.816	0.788	0.944	202.724
41	41.734	108-08-7	I7	2,4-Dimethylpentane	1.061	1.140	1.031	258.258
42	42.041	594-56-9	C7	2,3,3-Trimethylbutene-1	0.012	0.012	0.012	2.989
43	42.281	464-06-2	I7	2,2,3-Trimethylbutane	0.054	0.057	0.053	13.225

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	44.929		?	Unidentified	0.011	0.011	0.013	3.443
45	45.137	71-42-3	Q6	Benzene	0.663	0.545	0.827	177.372
46	45.337	693-89-0	B6	1-Methylcyclopentene	0.352	0.327	0.418	89.681
47	46.159	3404-61-3	C7	3-Methylhexene-1	0.013	0.014	0.013	3.327
48	46.743	3524-73-0	C7	5-Methylhexene-1	0.022	0.023	0.022	5.581
49	47.051	110-82-7	M6	Cyclohexane	0.076	0.071	0.088	18.902
50	47.587		?	Unidentified	0.030	0.031	0.030	9.268
51	48.806	15840-60-5	C7	2-Methyl-c-hexene-3	0.033	0.035	0.033	8.287
52	49.798	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.039	0.040	0.038	9.604
53	50.202	591-76-4	I7	2-Methylhexane	1.135	1.210	1.103	276.336
54	50.670	110-83-8	B6	Cyclohexene	0.037	0.033	0.044	9.213
55	52.028	589-34-4	I7	3-Methylhexane	0.281	0.295	0.273	68.305
56	52.885	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.067	0.065	0.066	16.641
57	53.472	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.043	0.042	0.043	10.746
58	54.101	822-50-4	M7	1t,2-Dimethylcyclopentane	0.033	0.031	0.032	8.102
59	54.750	540-84-1	I8	2,2,4-Trimethylpentane	9.991	10.444	8.522	2437.780
60	56.883	14686-14-7	K7	t-Heptene-3	0.017	0.018	0.017	4.325
61	57.235	6094-02-6	C7	2-Methylhexene-1	0.027	0.028	0.027	6.823
62	57.614	142-82-5	P7	n-Heptane	0.092	0.097	0.090	22.433
63	58.114	2738-19-4	C7	2-Methyl-2-hexene	0.005	0.005	0.005	1.315
64	61.052	108-87-2	M7	Methylcyclohexane	0.028	0.026	0.027	6.859
65	64.513	564-02-3	I8	2,2,3-Trimethylpentane	0.713	0.720	0.608	173.975
66	64.762	592-13-2	I8	2,5-Dimethylhexane	1.590	1.658	1.356	387.889
67	65.100	589-43-5	I8	2,4-Dimethylhexane	1.521	1.571	1.297	371.133
68	68.121	565-75-3	I8	2,3,4-Trimethylpentane	6.067	6.103	5.175	1480.332
69	68.628	108-88-3	Q7	Toluene	5.145	4.293	5.441	1361.918
70	68.800	560-21-4	I8	2,3,3-Trimethylpentane	6.862	6.835	5.853	1674.338
71	70.438	584-94-1	I8	2,3-Dimethylhexane	1.675	1.701	1.428	408.602
72	71.699	592-27-8	I8	2-Methylheptane	0.086	0.089	0.073	21.022
73	71.965	589-53-7	I8	4-Methylheptane	0.184	0.189	0.157	44.962
74	72.096		?	Unidentified	0.138	0.138	0.117	41.908
75	73.022	589-81-1	I8	3-Methylheptane	0.075	0.077	0.064	18.404
76	74.944	3522-94-9	I9	2,2,5-Trimethylhexane	3.375	3.451	2.563	825.027
77	75.910	3875-51-2	M8	i-Propylcyclopentane	0.032	0.030	0.028	7.902
78	77.564	111-65-9	P8	n-Octane	0.028	0.029	0.024	6.759
79	78.507		?	Unidentified	0.078	0.076	0.059	23.702
80	80.057	1069-53-0	I9	2,3,5-Trimethylhexane	0.534	0.535	0.405	130.490
81	81.233	1071-26-7	I9	2,4-Dimethylheptane	0.077	0.078	0.058	18.744
82	82.195	1072-05-5	I9	2,6-Dimethylheptane	0.097	0.099	0.073	23.610
83	83.129		I9	2,5-Dimethylheptane	0.255	0.257	0.193	62.228
84	84.439	100-41-4	Q8	Ethylbenzene	1.009	0.842	0.926	265.092
85	84.617		?	Unidentified	0.035	0.035	0.028	10.715
86	84.858		?	Unidentified	0.029	0.027	0.022	8.815

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.ODF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	85.666	108-38-3	Q8	m-Xylene	2.374	1.987	2.178	623.536
88	85.815	106-42-3	Q8	p-Xylene	1.112	0.934	1.021	292.195
89	85.963		?	Unidentified	0.081	0.081	0.062	24.719
90	86.220		C8	C9-IsoOlefin-3	0.017	0.016	0.013	4.207
91	86.328		?	Unidentified	0.014	0.014	0.011	4.378
92	87.147	3221-61-2	I9	2-Methyloctane	0.017	0.017	0.013	4.036
93	88.012	2216-33-3	I9	3-Methyloctane	0.010	0.010	0.008	2.537
94	88.480		?	Unidentified	0.162	0.171	0.125	49.219
95	88.650	95-47-6	Q8	o-Xylene	0.836	0.687	0.768	219.714
96	89.068		I10	C10 - IsoParaffin - 1	0.562	0.559	0.385	137.798
97	89.914	14720-74-2	I10	2,2,4-trimethylheptane	0.387	0.385	0.265	94.884
98	91.459	111-84-2	P9	n-Nonane	0.274	0.276	0.208	66.938
99	92.087	4926-90-3	M9	1,1-Methylethylcyclohexane	0.025	0.022	0.019	6.224
100	92.837	98-82-8	Q9	i-Propylbenzene	0.033	0.028	0.027	8.711
101	93.027		?	Unidentified	0.017	0.016	0.013	5.298
102	93.027		?	Unidentified	0.017	0.018	0.012	5.298
103	93.027		?	Unidentified	0.017	0.013	0.012	5.298
104	93.135	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.007	0.006	0.005	1.660
105	93.135		C10	C10-IsoOlefin-4	0.007	0.007	0.005	1.660
106	93.135		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.660
107	93.602		?	Unidentified	0.213	0.212	0.146	64.761
108	93.825	15869-87-1	I10	2,2-Dimethyloctane	0.073	0.073	0.050	17.793
109	94.267		?	Unidentified	0.023	0.017	2.266	7.078
110	94.267		?	Unidentified	0.023	0.024	0.016	7.078
111	94.623	15869-89-3	I10	2,5-Dimethyloctane	0.112	0.111	0.076	27.337
112	95.101	2040-95-1	I10	2,7-Dimethyloctane	0.054	0.053	0.037	13.127
113	95.266	2051-30-1	I10	2,4-Dimethyloctane	0.242	0.241	0.166	59.312
114	95.660		I10	2,6-Dimethyloctane	0.071	0.070	0.048	17.322
115	96.304	103-65-1	Q9	n-Propylbenzene	0.268	0.225	0.217	69.964
116	97.153	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.940	0.787	0.762	245.384
117	97.387	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.442	0.371	0.358	115.423
118	98.013	108-67-8	Q9	1,3,5-Trimethylbenzene	0.652	0.545	0.528	170.112
119	98.902		I10	2,2,6-Trimethyloctane	3.607	3.591	2.470	883.576
120	99.099	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.359	0.295	0.291	93.606
121	99.472		?	Unidentified	0.011	0.011	0.008	3.397
122	99.663	5911-04-6	I10	3-Methylnonane	0.016	0.015	0.011	3.801
123	99.839		?	Unidentified	0.011	0.011	0.007	3.261
124	100.129		?	Unidentified	0.214	0.155	0.134	65.229
125	100.256		?	Unidentified	0.571	0.555	0.356	173.820
126	100.481		I11	C11-Isoparaffin-2	0.306	0.298	0.191	75.057
127	100.737	95-63-6	Q9	1,2,4-Trimethylbenzene	1.933	1.597	1.567	504.588
128	100.945		?	Unidentified	0.352	0.363	0.244	107.019
129	101.066		?	Unidentified	0.208	0.206	0.143	63.457

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID12A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	101.323	1678-98-4	M10	i-Butylcyclohexane	0.051	0.046	0.035	12.644
131	101.966		?	Unidentified	0.020	0.018	0.014	6.013
132	102.11117302-01-1		I10	3-Ethyl-3-methylheptane	0.487	0.474	0.304	119.460
133	102.324		?	Unidentified	0.139	0.118	0.101	42.320
134	102.465	538-93-2	Q10	i-Butylbenzene	0.341	0.289	0.248	88.576
135	102.662	124-18-5	P10	n-Decane	0.062	0.061	0.042	15.142
136	102.976		?	Unidentified	0.131	0.128	0.082	39.935
137	103.468		?	Unidentified	0.016	0.013	0.013	4.772
138	103.614	526-73-8	Q9	1,2,3-Trimethylbenzene	0.349	0.282	0.283	91.056
139	103.978	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.040	0.033	0.029	10.293
140	104.192		I11	C11 Isoparaffin-4	0.057	0.056	0.036	14.100
141	104.397		?	Unidentified	0.280	0.236	0.203	85.224
142	104.803		J9	Indan	0.214	0.161	0.176	56.785
143	105.059		I11	C11-Isoparaffin-5	0.028	0.027	0.017	6.878
144	105.440		J10	Indene	1.607	1.206	1.325	426.325
145	105.857		M10	n-ButylCyclohexane	0.002	0.002	0.001	0.534
146	105.994		?	Unidentified	0.013	0.012	0.009	3.965
147	106.154		I11	C11-Isoparaffin-7	0.582	0.566	0.363	142.769
148	106.335	141-93-5	Q10	1,3-Diethylbenzene	0.049	0.041	0.036	12.828
149	106.634	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.607	1.350	1.167	417.204
150	106.905	105-05-5	Q10	1,4-Diethylbenzene	0.459	0.385	0.333	119.254
151	107.176	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.136	0.112	0.099	35.293
152	107.423	135-01-3	Q10	1,2-Diethylbenzene	0.128	0.105	0.093	33.253
153	107.889		?	Unidentified	0.133	0.130	0.083	40.617
154	108.026	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.056	0.046	0.041	14.536
155	108.164		?	Unidentified	0.132	0.129	0.083	40.238
156	108.245		?	Unidentified	0.123	0.120	0.077	37.475
157	108.369		I11	C11- Isoparaffin-11	0.925	0.899	0.576	226.780
158	108.552		?	Unidentified	0.302	0.293	0.188	91.811
159	108.984		?	Unidentified	0.905	0.746	0.657	275.522
160	109.205		J10	2-Methylindan	0.146	0.110	0.108	38.783
161	109.544	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.368	0.304	0.267	95.474
162	109.703		?	Unidentified	0.063	0.047	0.046	19.169
163	110.102	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.781	0.634	0.567	202.650
164	110.528		?	Unidentified	0.031	0.028	0.020	9.567
165	110.729	693-61-8	K11	2-Undecene, (E)-	0.071	0.069	0.049	17.406
166	110.859		?	Unidentified	0.148	0.145	0.103	45.088
167	111.132		?	Unidentified	0.130	0.110	0.085	39.466
168	111.215	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.083	0.067	0.060	21.476
169	111.532	1120-21-4	P11	n-Undecane	0.095	0.093	0.059	23.348
170	111.688	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.106	0.086	0.070	27.365
171	111.798		?	Unidentified	0.074	0.060	0.048	22.449
172	112.163		Q10	1,2,4,5-Tetramethylbenzene	0.264	0.215	0.192	68.534

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID12A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	112.429	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.348	0.283	0.253	90.340
174	112.653		?	Unidentified	0.013	0.011	0.009	4.083
175	112.784		?	Unidentified	0.022	0.018	0.016	6.611
176	112.965		I12	C12 - IsoParaffin - 1	0.028	0.028	0.016	6.984
177	113.296		?	Unidentified	0.036	0.036	0.022	11.096
178	113.447		?	Unidentified	0.014	0.014	0.008	4.326
179	113.654		?	Unidentified	0.071	0.058	0.047	21.743
180	113.760	874-35-1	H10	5-Methylindan	0.108	0.087	0.079	27.938
181	113.901		Q12	1,2-Di-i-propylbenzene	0.048	0.039	0.029	12.271
182	114.117	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.064	0.052	0.042	16.605
183	114.290		Q11	C11 - Aromatic - 4	0.040	0.033	0.027	10.448
184	114.513	824-22-6	J10	4-Methylindan	0.137	0.111	0.101	35.591
185	114.683		?	Unidentified	0.031	0.025	0.020	9.474
186	114.765	824-63-5	H10	2-Methylindan	0.108	0.088	0.080	28.076
187	114.978		?	Unidentified	0.014	0.011	0.009	4.236
188	115.090	538-68-1	Q11	n-Pentylbenzene	0.016	0.013	0.011	4.160
189	115.320		Q11	tert-Pentylbenzene	0.059	0.048	0.039	15.326
190	115.632	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.029	0.024	0.019	7.604
191	115.744		Q11	C11 - Aromatic - 7	0.040	0.034	0.026	10.364
192	116.093		I12	C12 - IsoParaffin - 4	0.016	0.016	0.009	4.203
193	116.205	100-18-5	Q12	1,4-Di-i-propylbenzene	0.054	0.044	0.032	13.846
194	116.636	91-20-3	G10	Naphthalene	0.104	0.073	0.079	28.146
195	116.796		J11	4,7-Dimethyl Indane	0.022	0.017	0.015	5.944
196	116.972		?	Unidentified	0.007	0.006	0.004	2.091
197	117.079		J11	1,1-Dimethyl Indane	0.013	0.009	0.008	3.327
198	117.248		J12	Dimethyl Indane - 1	0.005	0.004	0.004	1.448
199	117.431	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.010	0.008	0.006	2.680
200	117.734		Q12	1,3-Di-n-propylbenzene	0.038	0.031	0.023	9.758
201	117.847		Q11	C11 - Aromatic - 11	0.019	0.017	0.013	5.024
202	118.402		Q11	C11 - Aromatic - 12	0.014	0.012	0.009	3.732
203	122.541	877-44-1	Q12	1,2,4-Triethylbenzene	0.008	0.007	0.005	2.176
204	123.280	91-57-6	G11	2-Methylnaphthalene	0.015	0.011	0.010	4.101
205	124.146	90-12-0	G11	1-Methylnaphthalene	0.007	0.005	0.005	1.903
206	126.171		?	Unidentified	0.009	0.008	0.006	2.827
207	126.171		?	Unidentified	0.009	0.008	0.005	2.827
208	126.171		?	Unidentified	0.009	0.009	0.005	2.827
209	127.135		?	Unidentified	0.003	0.003	0.001	0.914

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.391	74-98-6	Propane	0.001	0.001	0.002	0.238
	9.794	106-97-8	n-Butane	7.610	9.509	12.756	1825.633
	17.694	109-66-0	n-Pentane	0.877	1.014	1.185	211.976
	35.289	110-54-3	n-Hexane	0.455	0.499	0.514	110.296
	57.614	142-82-5	n-Heptane	0.092	0.097	0.090	22.433
	77.564	111-65-9	n-Octane	0.028	0.029	0.024	6.759
	91.459	111-84-2	n-Nonane	0.274	0.276	0.208	66.938
	102.662	124-18-5	n-Decane	0.062	0.061	0.042	15.142
	111.532	1120-21-4	n-Undecane	0.095	0.093	0.059	23.348
I-Paraffins	8.614	75-28-5	i-Butane	0.045	0.059	0.076	10.860
	10.392	463-82-1	2,2-Dimethylpropane	0.016	0.020	0.022	3.924
	14.711	78-78-4	i-Pentane	4.953	5.781	6.688	1196.406
	22.645	75-83-2	2,2-Dimethylbutane	0.034	0.038	0.039	8.285
	27.841	79-29-8	2,3-Dimethylbutane	1.239	1.355	1.401	300.613
	28.909	107-83-5	2-Methylpentane	1.873	2.074	2.117	454.233
	31.558	96-14-0	3-Methylpentane	1.130	1.231	1.278	274.132
	41.734	108-08-7	2,4-Dimethylpentane	1.061	1.140	1.031	258.258
	42.281	464-06-2	2,2,3-Trimethylbutane	0.054	0.057	0.053	13.225
	50.202	591-76-4	2-Methylhexane	1.135	1.210	1.103	276.336
	52.028	589-34-4	3-Methylhexane	0.281	0.295	0.273	68.305
	54.750	540-84-1	2,2,4-Trimethylpentane	9.991	10.444	8.522	2437.780
	64.513	564-02-3	2,2,3-Trimethylpentane	0.713	0.720	0.608	173.975
	64.762	592-13-2	2,5-Dimethylhexane	1.590	1.658	1.356	387.889
	65.100	589-43-5	2,4-Dimethylhexane	1.521	1.571	1.297	371.133
	68.121	565-75-3	2,3,4-Trimethylpentane	6.067	6.103	5.175	1480.332
	68.800	560-21-4	2,3,3-Trimethylpentane	6.862	6.835	5.853	1674.338
	70.438	584-94-1	2,3-Dimethylhexane	1.675	1.701	1.428	408.602
	71.699	592-27-8	2-Methylheptane	0.086	0.089	0.073	21.022
	71.965	589-53-7	4-Methylheptane	0.184	0.189	0.157	44.962
	73.022	589-81-1	3-Methylheptane	0.075	0.077	0.064	18.404
	74.944	3522-94-9	2,2,5-Trimethylhexane	3.375	3.451	2.563	825.027
	80.057	1069-53-0	2,3,5-Trimethylhexane	0.534	0.535	0.405	130.490
	81.233	1071-26-7	2,4-Dimethylheptane	0.077	0.078	0.058	18.744
	82.195	1072-05-5	2,6-Dimethylheptane	0.097	0.099	0.073	23.610
	83.129		2,5-Dimethylheptane	0.255	0.257	0.193	62.228
	87.147	3221-61-2	2-Methyloctane	0.017	0.017	0.013	4.036
	88.012	2216-33-3	3-Methyloctane	0.010	0.010	0.008	2.537
	89.068		C10 - IsoParaffin - 1	0.562	0.559	0.385	137.798
	89.914	14720-74-2	2,2,4-trimethylheptane	0.387	0.385	0.265	94.884
	93.135		C10-isoparaffin-x	0.000	0.000	0.000	1.660
	93.825	15869-87-1	2,2-Dimethyloctane	0.073	0.073	0.050	17.793
	94.623	15869-89-3	2,5-Dimethyloctane	0.112	0.111	0.076	27.337
	95.101	2040-95-1	2,7-Dimethyloctane	0.054	0.053	0.037	13.127
	95.266	2051-30-1	2,4-Dimethyloctane	0.242	0.241	0.166	59.312
	95.660		2,6-Dimethyloctane	0.071	0.070	0.048	17.322
	98.902		2,2,6-Trimethyloctane	3.607	3.591	2.470	883.576

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID12A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	99.663	5911-04-6	3-Methylnonane	0.016	0.015	0.011	3.801
	100.481		C11-Isoparaffin-2	0.306	0.298	0.191	75.057
	102.111	17302-01-1	3-Ethyl-3-methylheptane	0.487	0.474	0.304	119.460
	104.192		C11 Isoparaffin-4	0.057	0.056	0.036	14.100
	105.059		C11-Isoparaffin-5	0.028	0.027	0.017	6.878
	106.154		C11-Isoparaffin-7	0.582	0.566	0.363	142.769
	108.369		C11- Isoparaffin-11	0.925	0.899	0.576	226.780
	112.965		C12 - IsoParaffin - 1	0.028	0.028	0.016	6.984
	116.093		C12 - IsoParaffin - 4	0.016	0.016	0.009	4.203
Aromatics							
Mono-Aromatics	45.137	71-42-3	Benzene	0.663	0.545	0.827	177.372
	68.628	108-88-3	Toluene	5.145	4.293	5.441	1361.918
	84.439	100-41-4	Ethylbenzene	1.009	0.842	0.926	265.092
	85.666	108-38-3	m-Xylene	2.374	1.987	2.178	623.536
	85.815	106-42-3	p-Xylene	1.112	0.934	1.021	292.195
	88.650	95-47-6	o-Xylene	0.836	0.687	0.768	219.714
	92.837	98-82-8	i-Propylbenzene	0.033	0.028	0.027	8.711
	96.304	103-65-1	n-Propylbenzene	0.268	0.225	0.217	69.964
	97.153	620-14-4	1-Methyl-3-ethylbenzene	0.940	0.787	0.762	245.384
	97.387	622-96-8	1-Methyl-4-ethylbenzene	0.442	0.371	0.358	115.423
	98.013	108-67-8	1,3,5-Trimethylbenzene	0.652	0.545	0.528	170.112
	99.099	611-14-3	1-Methyl-2-ethylbenzene	0.359	0.295	0.291	93.606
	100.737	95-63-6	1,2,4-Trimethylbenzene	1.933	1.597	1.567	504.588
	102.465	538-93-2	i-Butylbenzene	0.341	0.289	0.248	88.576
	103.614	526-73-8	1,2,3-Trimethylbenzene	0.349	0.282	0.283	91.056
	103.978	535-77-3	1-Methyl-3-i-propylbenzene	0.040	0.033	0.029	10.293
	106.335	141-93-5	1,3-Diethylbenzene	0.049	0.041	0.036	12.828
	106.634	1074-43-7	1-Methyl-3-n-propylbenzene	1.607	1.350	1.167	417.204
	106.905	105-05-5	1,4-Diethylbenzene	0.459	0.385	0.333	119.254
	107.176	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.136	0.112	0.099	35.293
	107.423	135-01-3	1,2-Diethylbenzene	0.128	0.105	0.093	33.253
	108.026	1074-17-5	1-Methyl-2-n-propylbenzene	0.056	0.046	0.041	14.536
	109.544	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.368	0.304	0.267	95.474
	110.102	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.781	0.634	0.567	202.650
	111.215	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.083	0.067	0.060	21.476
	111.688	4218-48-8	1-Ethyl-4-i-propylbenzene	0.106	0.086	0.070	27.365
	112.163		1,2,4,5-Tetramethylbenzene	0.264	0.215	0.192	68.534
	112.429	527-53-7	1,2,3,5-Tetramethylbenzene	0.348	0.283	0.253	90.340
	113.901		1,2-Di-i-propylbenzene	0.048	0.039	0.029	12.271
	114.117	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.064	0.052	0.042	16.605
	114.290		C11 - Aromatic - 4	0.040	0.033	0.027	10.448
	115.090	538-68-1	n-Pentylbenzene	0.016	0.013	0.011	4.160
	115.320		tert-Pentylbenzene	0.059	0.048	0.039	15.326
	115.632	577-55-9	1-Methyl-2-n-butylbenzene	0.029	0.024	0.019	7.604
	115.744		C11 - Aromatic - 7	0.040	0.034	0.026	10.364
	116.205	100-18-5	1,4-Di-i-propylbenzene	0.054	0.044	0.032	13.846

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	117.431	7364-19-4	1t-Butyl-4-ethylbenzene	0.010	0.008	0.006	2.680
	117.734		1,3-Di-n-propylbenzene	0.038	0.031	0.023	9.758
	117.847		C11 - Aromatic - 11	0.019	0.017	0.013	5.024
	118.402		C11 - Aromatic - 12	0.014	0.012	0.009	3.732
	122.541	877-44-1	1,2,4-Triethylbenzene	0.008	0.007	0.005	2.176
Naphthalenes	116.636	91-20-3	Naphthalene	0.104	0.073	0.079	28.146
	123.280	91-57-6	2-Methylnaphthalene	0.015	0.011	0.010	4.101
	124.146	90-12-0	1-Methylnaphthalene	0.007	0.005	0.005	1.903
Naphtheno/Olefir	113.760	874-35-1	5-Methylindan	0.108	0.087	0.079	27.938
	114.765	824-63-5	2-Methylindan	0.108	0.088	0.080	28.076
Indenes	104.803		Indan	0.214	0.161	0.176	56.785
	105.440		Indene	1.607	1.206	1.325	426.325
	109.205		2-Methylindan	0.146	0.110	0.108	38.783
	114.513	824-22-6	4-Methylindan	0.137	0.111	0.101	35.591
	116.796		4,7-Dimethyl Indane	0.022	0.017	0.015	5.944
	117.079		1,1-Dimethyl Indane	0.013	0.009	0.008	3.327
	117.248		Dimethyl Indane - 1	0.005	0.004	0.004	1.448
Naphthenes							
Mono-Naphthene	27.103	287-92-3	Cyclopentane	0.109	0.105	0.151	26.962
	40.153	96-37-7	Methylcyclopentane	0.816	0.788	0.944	202.724
	47.051	110-82-7	Cyclohexane	0.076	0.071	0.088	18.902
	52.885	1759-58-6	1t,3-Dimethylcyclopentane	0.067	0.065	0.066	16.641
	53.472	2532-58-3	1c,3-Dimethylcyclopentane	0.043	0.042	0.043	10.746
	54.101	822-50-4	1t,2-Dimethylcyclopentane	0.033	0.031	0.032	8.102
	61.052	108-87-2	Methylcyclohexane	0.028	0.026	0.027	6.859
	75.910	3875-51-2	i-Propylcyclopentane	0.032	0.030	0.028	7.902
	92.087	4926-90-3	1,1-Methylethylcyclohexane	0.025	0.022	0.019	6.224
	93.135	696-29-7	1-Methyl-2-propyl-cyclopentan	0.007	0.006	0.005	1.660
	101.323	1678-98-4	i-Butylcyclohexane	0.051	0.046	0.035	12.644
	105.857		n-ButylCyclohexane	0.002	0.002	0.001	0.534
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.406	115-11-7	Isobutene	0.024	0.029	0.041	5.882
	9.445	106-98-9	Butene-1	0.028	0.034	0.049	6.958
	10.269	624-64-6	t-Butene-2	0.103	0.123	0.178	25.477
	10.990	590-18-1	c-Butene-2	0.115	0.134	0.201	28.695
	16.335	109-67-1	Pentene-1	0.361	0.408	0.501	89.699
	18.805	646-04-8	t-Pentene-2	0.930	1.038	1.292	231.167
	19.822	627-20-3	c-Pentene-2	0.509	0.561	0.707	126.428
	32.942	592-41-6	Hexene-1	0.170	0.181	0.196	42.151
	35.936	13269-52-8	t-Hexene-3	0.284	0.302	0.329	70.681
	36.412	4050-45-7	t-Hexene-2	0.539	0.571	0.624	133.884

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	38.242	7688-21-3	c-Hexene-2	0.229	0.239	0.265	56.822
	56.883	14686-14-7	t-Heptene-3	0.017	0.018	0.017	4.325
	110.729	693-61-8	2-Undecene, (E)-	0.071	0.069	0.049	17.406
Iso-Olefins	13.132	563-45-1	3-Methylbutene-1	0.079	0.091	0.109	19.531
	17.174	563-46-2	2-Methylbutene-1	0.565	0.628	0.785	140.345
	20.493	513-35-9	2-Methylbutene-2	1.164	1.271	1.617	289.185
	28.696	691-38-3	4-Methyl-c-pentene-2	0.049	0.053	0.057	12.274
	29.342	674-76-0	4-Methyl-t-pentene-2	0.146	0.157	0.169	36.318
	32.719	763-29-1	2-Methylpentene-1	0.248	0.262	0.287	61.701
	35.133	760-21-4	2-Ethylbutene-1	0.076	0.079	0.088	18.784
	36.904	625-27-4	2-Methylpentene-2	0.378	0.396	0.438	94.017
	37.312	922-62-3	3-Methyl-c-pentene-2	0.289	0.299	0.335	71.804
	39.582	3404-73-7	3,3-Dimethylpentene-1	0.343	0.354	0.340	85.254
	42.041	594-56-9	2,3,3-Trimethylbutene-1	0.012	0.012	0.012	2.989
	46.159	3404-61-3	3-Methylhexene-1	0.013	0.014	0.013	3.327
	46.743	3524-73-0	5-Methylhexene-1	0.022	0.023	0.022	5.581
	48.806	15840-60-5	2-Methyl-c-hexene-3	0.033	0.035	0.033	8.287
	49.798	3404-55-5	4-Methyl-t/c-hexene-2	0.039	0.040	0.038	9.604
	57.235	6094-02-6	2-Methylhexene-1	0.027	0.028	0.027	6.823
	58.114	2738-19-4	2-Methyl-2-hexene	0.005	0.005	0.005	1.315
	86.220		C9-IsoOlefin-3	0.017	0.016	0.013	4.207
	93.135		C10-IsoOlefin-4	0.007	0.007	0.005	1.660
Naphtheno-Olefir	25.253	142-29-0	Cyclopentene	0.202	0.189	0.289	51.612
	45.337	693-89-0	1-Methylcyclopentene	0.352	0.327	0.418	89.681
	50.670	110-83-8	Cyclohexene	0.037	0.033	0.044	9.213
Di-Olefins	18.213	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.010	0.014	2.525
	20.830	2004-70-8	1t,3-Pentadiene	0.014	0.015	0.020	3.628
Oxygenates	26.495	71-23-8	n-Propanol	0.198	0.179	0.321	34.490
Unidentified	19.439		Unidentified	0.006	0.007	0.009	1.943
	28.236		Unidentified	0.056	0.055	0.062	17.185
	44.929		Unidentified	0.011	0.011	0.013	3.443
	47.587		Unidentified	0.030	0.031	0.030	9.268
	72.096		Unidentified	0.138	0.138	0.117	41.908
	78.507		Unidentified	0.078	0.076	0.059	23.702
	84.617		Unidentified	0.035	0.035	0.028	10.715
	84.858		Unidentified	0.029	0.027	0.022	8.815
	85.963		Unidentified	0.081	0.081	0.062	24.719
	86.328		Unidentified	0.014	0.014	0.011	4.378
	88.480		Unidentified	0.162	0.171	0.125	49.219
	93.027		Unidentified	0.017	0.016	0.013	5.298
	93.027		Unidentified	0.017	0.018	0.012	5.298
	93.027		Unidentified	0.017	0.013	0.012	5.298

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.ch 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Components by Group

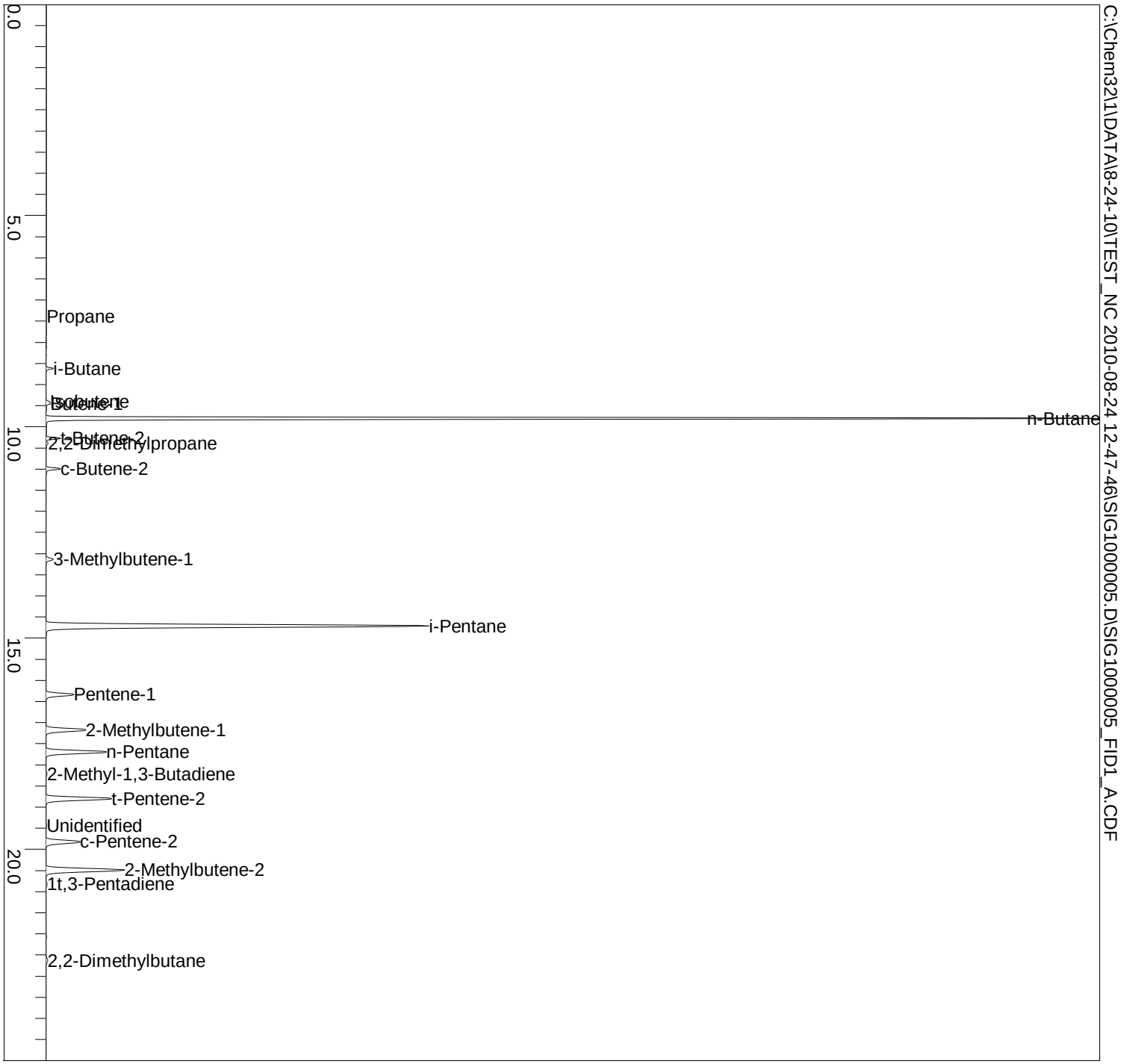
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	93.602		Unidentified	0.213	0.212	0.146	64.761
	94.267		Unidentified	0.023	0.017	2.266	7.078
	94.267		Unidentified	0.023	0.024	0.016	7.078
	99.472		Unidentified	0.011	0.011	0.008	3.397
	99.839		Unidentified	0.011	0.011	0.007	3.261
	100.129		Unidentified	0.214	0.155	0.134	65.229
	100.256		Unidentified	0.571	0.555	0.356	173.820
	100.945		Unidentified	0.352	0.363	0.244	107.019
	101.066		Unidentified	0.208	0.206	0.143	63.457
	101.966		Unidentified	0.020	0.018	0.014	6.013
	102.324		Unidentified	0.139	0.118	0.101	42.320
	102.976		Unidentified	0.131	0.128	0.082	39.935
	103.468		Unidentified	0.016	0.013	0.013	4.772
	104.397		Unidentified	0.280	0.236	0.203	85.224
	105.994		Unidentified	0.013	0.012	0.009	3.965
	107.889		Unidentified	0.133	0.130	0.083	40.617
	108.164		Unidentified	0.132	0.129	0.083	40.238
	108.245		Unidentified	0.123	0.120	0.077	37.475
	108.552		Unidentified	0.302	0.293	0.188	91.811
	108.984		Unidentified	0.905	0.746	0.657	275.522
	109.703		Unidentified	0.063	0.047	0.046	19.169
	110.528		Unidentified	0.031	0.028	0.020	9.567
	110.859		Unidentified	0.148	0.145	0.103	45.088
	111.132		Unidentified	0.130	0.110	0.085	39.466
	111.798		Unidentified	0.074	0.060	0.048	22.449
	112.653		Unidentified	0.013	0.011	0.009	4.083
	112.784		Unidentified	0.022	0.018	0.016	6.611
	113.296		Unidentified	0.036	0.036	0.022	11.096
	113.447		Unidentified	0.014	0.014	0.008	4.326
	113.654		Unidentified	0.071	0.058	0.047	21.743
	114.683		Unidentified	0.031	0.025	0.020	9.474
	114.978		Unidentified	0.014	0.011	0.009	4.236
	116.972		Unidentified	0.007	0.006	0.004	2.091
	126.171		Unidentified	0.009	0.008	0.006	2.827
	126.171		Unidentified	0.009	0.008	0.005	2.827
	126.171		Unidentified	0.009	0.009	0.005	2.827
	127.135		Unidentified	0.003	0.003	0.001	0.914

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1_A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram



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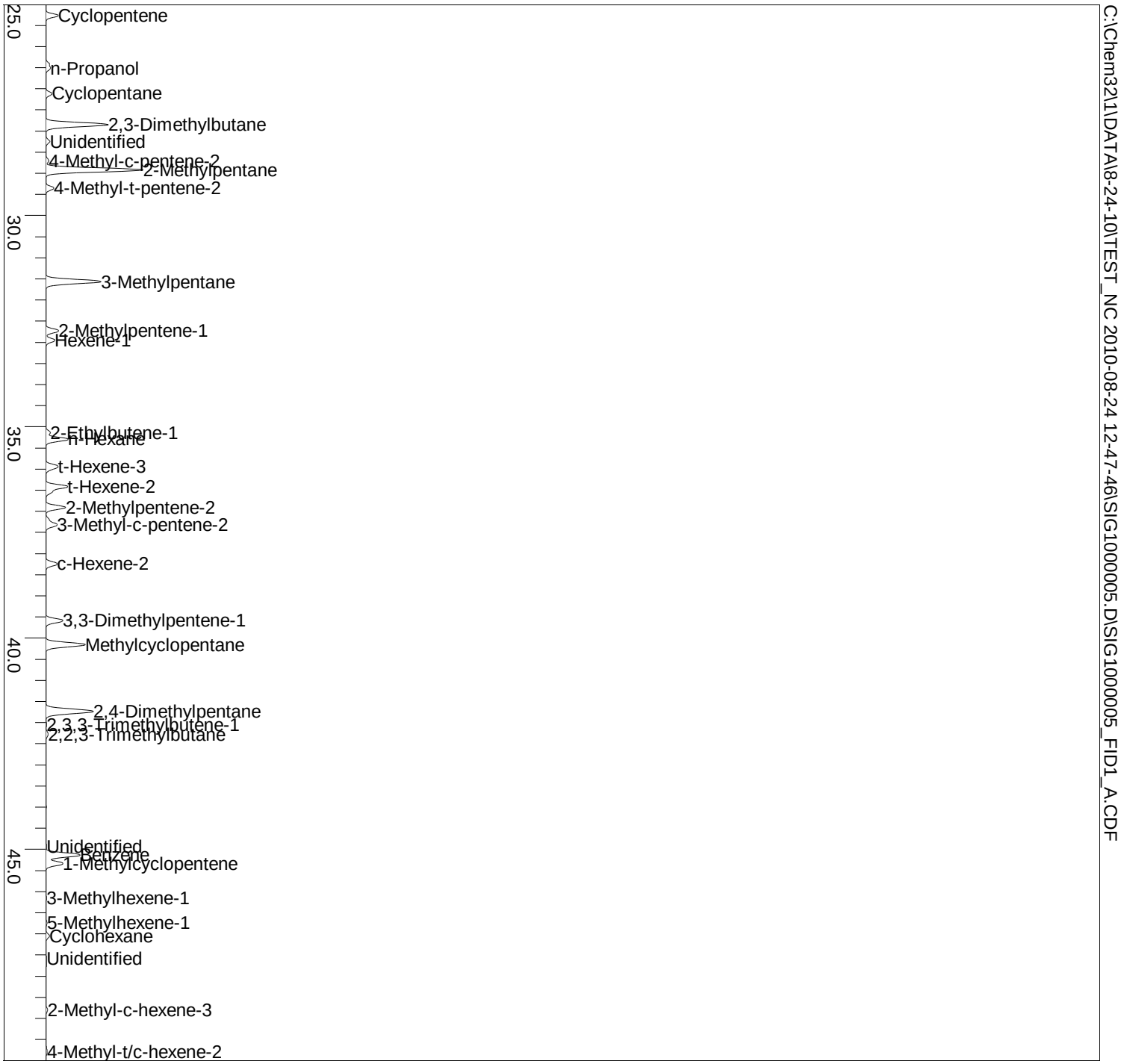
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram



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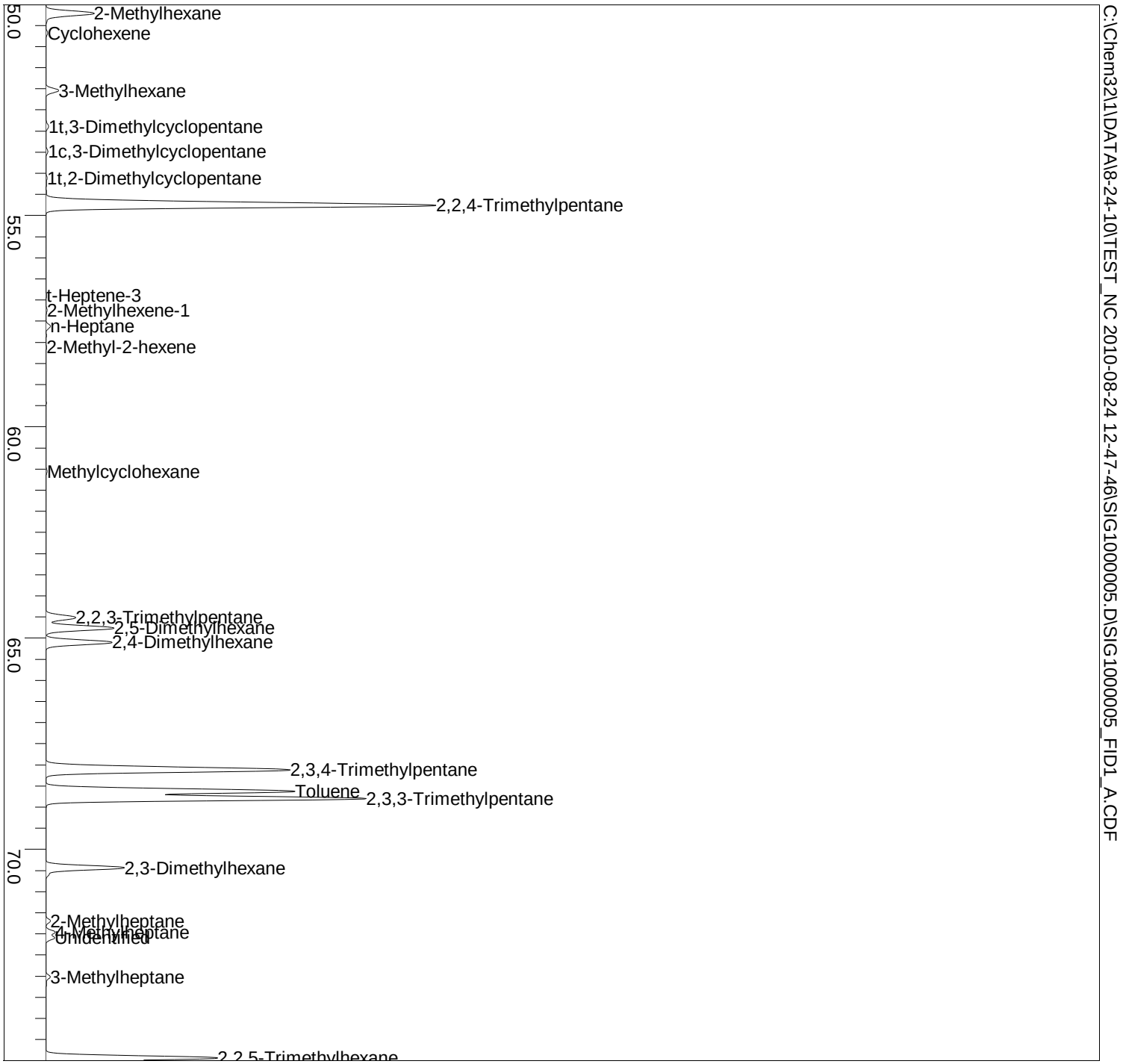
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram

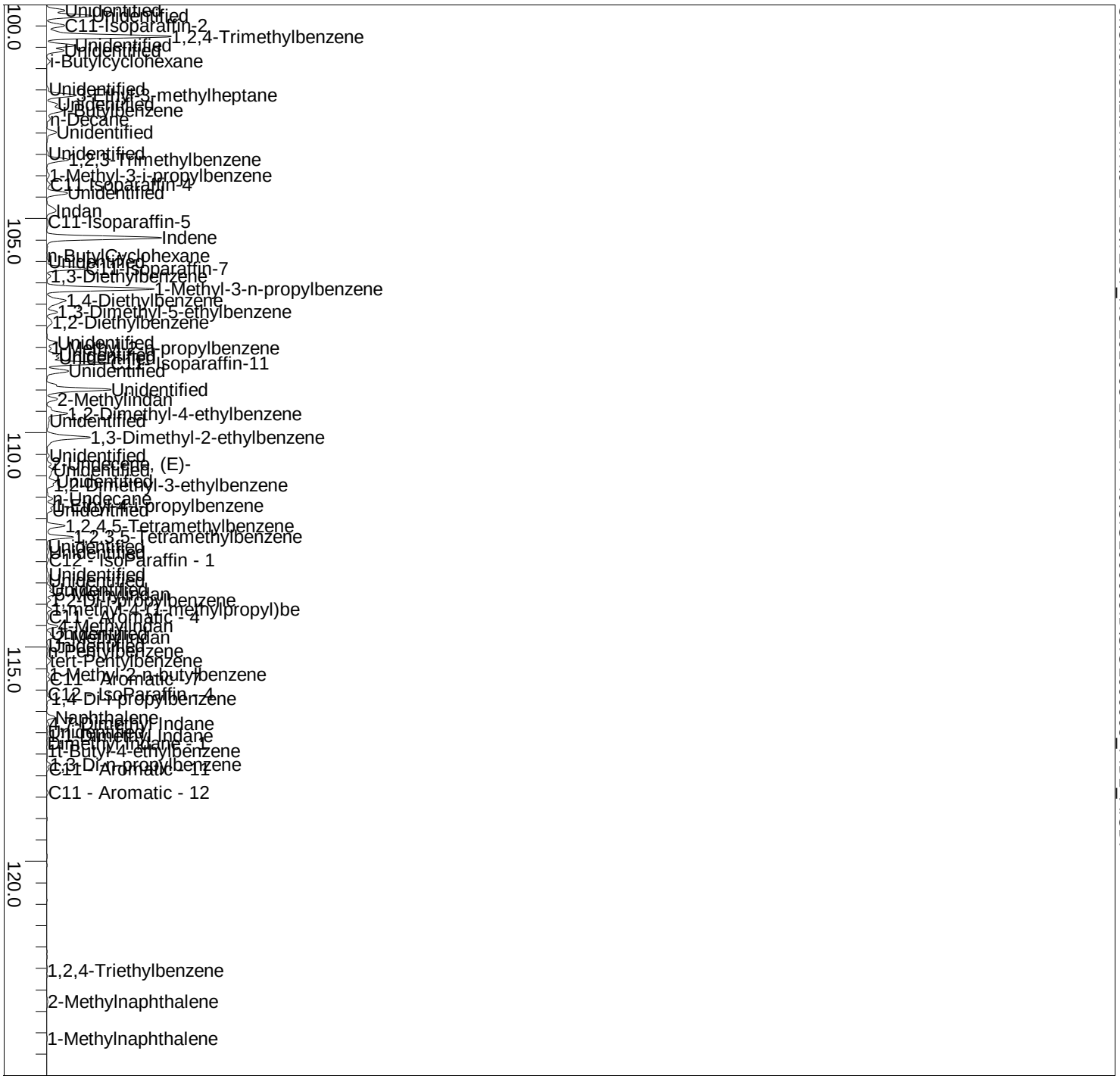


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram

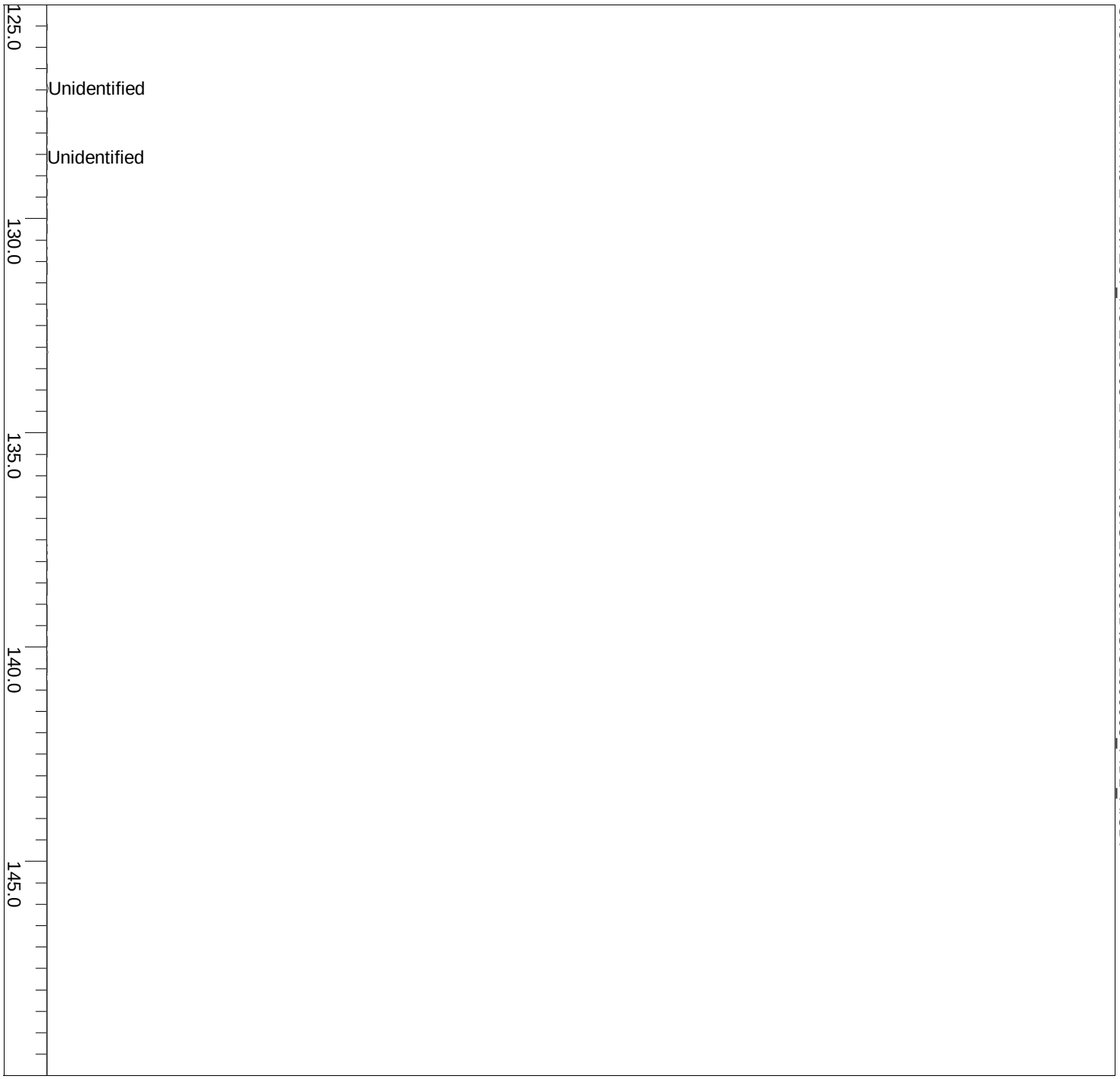
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1_A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000005.D\SIG1000005_FID1A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91309 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91309
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	6.743	7.618	7.467
I-Paraffins	49.355	52.034	42.026
Aromatics	19.783	16.589	16.677
Mono-Aromatics	18.793	15.822	15.960
Naphthalenes	0.134	0.096	0.093
Naphtheno/Olefino-Benz	0.206	0.170	0.141
Indenes	0.651	0.501	0.482
Naphthenes	4.785	4.592	4.780
Mono-Naphthenes	4.785	4.592	4.780
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.333	7.945	8.650
n-Olefins	3.109	3.443	3.769
Iso-Olefins	3.589	3.901	4.131
Naphtheno-Olefins	0.609	0.572	0.716
Di-Olefins	0.026	0.028	0.034
Oxygenates	9.533	8.844	18.680
Unidentified	2.468	2.378	1.721
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	9.432	8.752	18.528
C3	0.107	0.102	0.165
C4	1.351	1.699	2.113
C5	9.206	10.589	11.695
C6	13.831	14.626	14.743
C7	11.550	11.013	10.889
C8	36.105	36.126	28.945
C9	10.410	9.818	7.570
C10	4.474	3.918	3.004
C11	0.924	0.858	0.547
C12	0.143	0.120	0.080

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.006	0.009	0.013
	C4	1.108	1.402	1.725
	C5	1.166	1.364	1.463
	C6	2.728	3.029	2.865
	C7	0.689	0.738	0.623
	C8	0.546	0.569	0.433
	C9	0.427	0.435	0.301
	C10	0.040	0.040	0.025
	C11	0.032	0.032	0.019
I-Paraffins	C4	0.053	0.070	0.083
	C5	4.200	4.964	5.268
	C6	5.287	5.878	5.552
	C7	3.274	3.532	2.957
	C8	29.426	30.317	23.314
	C9	5.226	5.388	3.688
	C10	1.322	1.328	0.837
	C11	0.550	0.542	0.319
	C12	0.016	0.015	0.008
Mono-Aromatics	C6	0.735	0.612	0.852
	C7	5.234	4.420	5.141
	C8	5.547	4.686	4.728
	C9	4.640	3.902	3.494
	C10	2.229	1.863	1.503
	C11	0.285	0.237	0.174
	C12	0.123	0.101	0.069
Naphthalenes	C10	0.116	0.083	0.082
	C11	0.017	0.012	0.011
Naphtheno/Olefino-Benzs	C10	0.206	0.170	0.141
Indenes	C9	0.076	0.058	0.058
	C10	0.559	0.432	0.414
	C11	0.011	0.008	0.007
	C12	0.004	0.003	0.003
Mono-Naphthenes	C5	0.144	0.141	0.185
	C6	2.508	2.414	2.697
	C7	1.562	1.500	1.440
	C8	0.531	0.502	0.429

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.041	0.035	0.029
n-Olefins	C4	0.189	0.227	0.305
	C5	1.637	1.847	2.112
	C6	1.150	1.231	1.236
	C7	0.105	0.110	0.097
	C11	0.028	0.028	0.018
Iso-Olefins	C5	1.837	2.059	2.370
	C6	1.010	1.074	1.086
	C7	0.685	0.714	0.632
	C8	0.054	0.051	0.042
	C10	0.002	0.003	0.002
Naphtheno-Olefins	C5	0.197	0.187	0.262
	C6	0.412	0.386	0.454
Di-Olefins	C5	0.026	0.028	0.034
Oxygenates	C2	9.432	8.752	18.528
	C3	0.101	0.092	0.152

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	24.50	23.49
5%	81.26	80.63
10%	100.96	97.18
15%	144.13	138.61
20%	155.27	153.92
25%	172.43	160.63
30%	173.01	172.73
35%	177.16	175.13
40%	209.25	197.28
45%	210.21	209.76
50%	228.59	212.40
55%	230.95	230.77
60%	234.81	234.05
65%	236.63	235.98
70%	238.01	237.44
75%	243.86	239.11
80%	258.64	254.81
85%	281.77	279.29
90%	320.83	317.38
95%	352.12	336.85
FBP	402.72	389.41

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.391	74-98-6	P3	Propane	0.006	0.009	0.013	1.698
2	8.613	75-28-5	I4	i-Butane	0.053	0.070	0.083	14.393
3	9.405	115-11-7	K4	Isobutene	0.015	0.019	0.024	4.238
4	9.444	106-98-9	K4	Butene-1	0.018	0.022	0.029	5.067
5	9.793	106-97-8	P4	n-Butane	1.108	1.402	1.725	299.818
6	10.267	624-64-6	K4	t-Butene-2	0.071	0.087	0.115	20.025
7	10.390	463-82-1	I5	2,2-Dimethylpropane	0.013	0.016	0.016	3.416
8	10.989	590-18-1	K4	c-Butene-2	0.085	0.100	0.136	23.705
9	12.753	64-17-5	X2	Ethanol	9.432	8.752	18.528	1136.062
10	13.128	563-45-1	C5	3-Methylbutene-1	0.297	0.346	0.383	83.131
11	14.713	78-78-4	I5	i-Pentane	4.188	4.948	5.253	1140.912
12	16.337	109-67-1	K5	Pentene-1	0.331	0.379	0.428	92.873
13	17.165	563-46-2	C5	2-Methylbutene-1	0.503	0.567	0.650	141.068
14	17.696	109-66-0	P5	n-Pentane	1.166	1.364	1.463	317.807
15	18.208	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.994
16	18.798	646-04-8	K5	t-Pentene-2	0.843	0.952	1.088	236.251
17	19.439		?	Unidentified	0.006	0.006	0.007	1.936
18	19.822	627-20-3	K5	c-Pentene-2	0.462	0.516	0.597	129.552
19	20.490	513-35-9	C5	2-Methylbutene-2	1.037	1.146	1.338	290.485
20	20.818	2004-70-8	E5	1t,3-Pentadiene	0.015	0.016	0.020	4.373
21	22.071		?	Unidentified	0.006	0.006	0.008	2.041
22	22.623	75-83-2	I6	2,2-Dimethylbutane	0.077	0.087	0.081	20.997
23	25.249	142-29-0	B5	Cyclopentene	0.197	0.187	0.262	56.828
24	26.430		?	Unidentified	0.045	0.041	0.068	15.395
25	26.504	71-23-8	X3	n-Propanol	0.101	0.092	0.152	19.798
26	27.099	287-92-3	M5	Cyclopentane	0.144	0.141	0.185	40.242
27	27.833	79-29-8	I6	2,3-Dimethylbutane	1.138	1.259	1.195	311.211
28	28.228		?	Unidentified	0.051	0.050	0.052	17.407
29	28.696	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.048	0.048	12.494
30	28.904	107-83-5	I6	2-Methylpentane	2.321	2.602	2.438	635.007
31	29.339	674-76-0	C6	4-Methyl-t-pentene-2	0.131	0.142	0.141	36.738
32	31.547	96-14-0	I6	3-Methylpentane	1.751	1.930	1.839	478.997
33	32.718	763-29-1	C6	2-Methylpentene-1	0.225	0.240	0.242	63.033
34	32.942	592-41-6	K6	Hexene-1	0.161	0.174	0.174	45.242
35	35.303	110-54-3	P6	n-Hexane	2.728	3.029	2.865	746.276
36	35.942	13269-52-8	K6	t-Hexene-3	0.265	0.284	0.285	74.235
37	36.410	4050-45-7	K6	t-Hexene-2	0.508	0.545	0.546	142.292
38	36.900	625-27-4	C6	2-Methylpentene-2	0.344	0.364	0.370	96.344
39	37.313	922-62-3	C6	3-Methyl-c-pentene-2	0.266	0.279	0.286	74.498
40	38.237	7688-21-3	K6	c-Hexene-2	0.216	0.228	0.232	60.446
41	39.588	3404-73-7	C7	3,3-Dimethylpentene-1	0.315	0.329	0.291	88.376
42	40.162	96-37-7	M6	Methylcyclopentane	1.490	1.457	1.602	417.419
43	41.732	108-08-7	I7	2,4-Dimethylpentane	0.971	1.056	0.877	266.530

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.034	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.013	3.988
45	42.276	464-06-2	I7	2,2,3-Trimethylbutane	0.076	0.080	0.068	20.786
46	44.931		?	Unidentified	0.012	0.011	0.013	4.044
47	45.137	71-42-3	Q6	Benzene	0.735	0.612	0.852	221.834
48	45.336	693-89-0	B6	1-Methylcyclopentene	0.367	0.345	0.405	105.417
49	46.159	3404-61-3	C7	3-Methylhexene-1	0.016	0.016	0.014	4.391
50	46.742	3524-73-0	C7	5-Methylhexene-1	0.065	0.068	0.060	18.261
51	47.057	110-82-7	M6	Cyclohexane	1.018	0.958	1.095	285.348
52	47.596		?	Unidentified	0.035	0.036	0.032	11.890
53	48.805	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.038	11.564
54	49.146	3769-23-1	C7	4-Methylhexene-1	0.010	0.011	0.009	2.855
55	49.797	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.053	0.047	14.405
56	50.197	591-76-4	I7	2-Methylhexane	1.566	1.690	1.414	430.088
57	50.669	110-83-8	B6	Cyclohexene	0.045	0.041	0.050	12.602
58	52.028	589-34-4	I7	3-Methylhexane	0.662	0.706	0.598	181.839
59	52.882	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.170	0.166	0.156	47.503
60	53.470	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.131	0.129	0.121	36.786
61	54.094	822-50-4	M7	1t,2-Dimethylcyclopentane	0.187	0.183	0.173	52.531
62	54.429		C7	C7 - Iso-Olefin - 2	0.022	0.022	0.020	6.183
63	54.738	540-84-1	I8	2,2,4-Trimethylpentane	7.470	7.905	5.918	2055.609
64	55.028	592-76-7	K7	Heptene-1	0.030	0.031	0.028	8.377
65	56.359	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.013	4.021
66	56.880	14686-14-7	K7	t-Heptene-3	0.033	0.035	0.031	9.287
67	57.242	6094-02-6	C7	2-Methylhexene-1	0.059	0.062	0.054	16.551
68	57.617	142-82-5	P7	n-Heptane	0.689	0.738	0.623	189.290
69	57.834	7642-10-6	K7	c-Heptene-3	0.025	0.026	0.023	7.035
70	58.113	2738-19-4	C7	2-Methyl-2-hexene	0.027	0.028	0.025	7.601
71	58.359	3899-36-3	C7	3-Methyl-t-hexene-3	0.021	0.022	0.019	5.773
72	58.742	14686-13-6	K7	t-Heptene-2	0.017	0.018	0.016	4.727
73	59.202	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.017	5.174
74	59.644	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.014	4.294
75	60.429	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.013	3.812
76	61.062	108-87-2	M7	Methylcyclohexane	1.017	0.968	0.937	284.936
77	62.012	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.030	0.030	0.025	8.543
78	62.418	590-73-8	I8	2,2-Dimethylhexane	0.030	0.031	0.023	8.132
79	63.857	1640-89-7	M7	Ethylcyclopentane	0.038	0.037	0.035	10.744
80	64.513	564-02-3	I8	2,2,3-Trimethylpentane	0.749	0.766	0.593	206.023
81	64.760	592-13-2	I8	2,5-Dimethylhexane	1.519	1.604	1.204	418.070
82	65.100	589-43-5	I8	2,4-Dimethylhexane	1.433	1.498	1.135	394.285
83	65.930	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.031	0.030	0.025	8.692
84	66.331	563-16-6	I8	3,3-Dimethylhexane	0.021	0.022	0.017	5.883
85	67.461	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.028	0.026	0.022	7.727
86	68.135	565-75-3	I8	2,3,4-Trimethylpentane	6.895	7.022	5.463	1897.493

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	68.637	108-88-3	Q7	Toluene	5.234	4.420	5.141	1562.352
88	68.821	560-21-4	I8	2,3,3-Trimethylpentane	8.453	8.522	6.697	2326.163
89	70.134		C8	C8 - Diolefin - 1	0.012	0.011	0.010	3.324
90	70.441	584-94-1	I8	2,3-Dimethylhexane	1.889	1.942	1.497	519.797
91	71.701	592-27-8	I8	2-Methylheptane	0.303	0.318	0.240	83.514
92	71.961	589-53-7	I8	4-Methylheptane	0.284	0.295	0.225	78.043
93	72.096		?	Unidentified	0.158	0.161	0.126	54.383
94	72.864		M8	1,3-dimethyl-t-cyclohexane	0.181	0.172	0.146	50.735
95	73.023	589-81-1	I8	3-Methylheptane	0.263	0.273	0.208	72.292
96	73.207	619-99-8	I8	3-Ethylhexane	0.117	0.120	0.093	32.285
97	74.103		?	Unidentified	0.030	0.028	0.024	10.196
98	74.950	3522-94-9	I9	2,2,5-Trimethylhexane	3.735	3.866	2.635	1029.771
99	75.272		M8	3c-Ethylmethylcyclopentane	0.011	0.010	0.009	3.060
100	75.495		M8	3t-Ethylmethylcyclopentane	0.015	0.014	0.012	4.182
101	75.910		?	Unidentified	0.029	0.027	0.023	9.886
102	76.198	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.084	0.079	0.068	23.559
103	77.567	111-65-9	P8	n-Octane	0.546	0.569	0.433	150.328
104	78.509		?	Unidentified	0.094	0.093	0.066	32.143
105	80.057	1069-53-0	I9	2,3,5-Trimethylhexane	0.619	0.628	0.437	170.654
106	80.618		C8	C9 - IsoOlefin - 1	0.019	0.018	0.015	5.247
107	81.055	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.016	0.015	0.013	4.451
108	81.233	1071-26-7	I9	2,4-Dimethylheptane	0.113	0.117	0.080	31.196
109	81.869	1678-91-7	M8	Ethylcyclohexane	0.126	0.118	0.101	35.261
110	82.195	1072-05-5	I9	2,6-Dimethylheptane	0.163	0.168	0.115	44.810
111	82.674		?	Unidentified	0.030	0.032	0.021	10.181
112	83.130		I9	2,5-Dimethylheptane	0.340	0.348	0.240	93.846
113	83.300	926-82-9	I9	3,5-Dimethylheptane	0.034	0.034	0.024	9.290
114	84.440	100-41-4	Q8	Ethylbenzene	0.964	0.814	0.821	285.467
115	84.620		?	Unidentified	0.048	0.048	0.035	16.327
116	84.859		?	Unidentified	0.049	0.046	0.035	16.930
117	85.671	108-38-3	Q8	m-Xylene	2.568	2.175	2.189	760.710
118	85.818	106-42-3	Q8	p-Xylene	1.135	0.965	0.967	336.205
119	85.965		?	Unidentified	0.127	0.128	0.089	43.485
120	86.221		C8	C9-IsoOlefin-3	0.024	0.022	0.017	6.657
121	86.328		?	Unidentified	0.022	0.023	0.016	7.717
122	86.618	1067-20-5	I9	3,3-Diethylpentane	0.004	0.004	0.003	1.197
123	87.015	2216-34-4	I9	4-Methyloctane	0.057	0.058	0.040	15.625
124	87.148	3221-61-2	I9	2-Methyloctane	0.076	0.078	0.054	21.082
125	87.850	15869-80-4	I9	Heptane, 3-ethyl-	0.010	0.010	0.007	2.791
126	88.013	2216-33-3	I9	3-Methyloctane	0.075	0.076	0.053	20.696
127	88.480		?	Unidentified	0.205	0.220	0.147	70.483
128	88.652	95-47-6	Q8	o-Xylene	0.880	0.732	0.750	260.821
129	89.068		I10	C10 - IsoParaffin - 1	0.665	0.669	0.423	183.644

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	89.488	3728-57-2	M8	Cyclopentane, 1-methyl-2-propyl-	0.009	0.008	0.008	2.811
131	89.643		M9	trans-1,3-Diethylcyclopentane	0.022	0.018	0.016	6.570
132	89.915	14720-74-2	I10	2,2,4-trimethylheptane	0.469	0.472	0.298	129.541
133	91.476	111-84-2	P9	n-Nonane	0.427	0.435	0.301	117.650
134	92.053	4926-90-3	M9	1,1-Methylethylcyclohexane	0.016	0.015	0.012	4.528
135	92.837	98-82-8	Q9	i-Propylbenzene	0.032	0.027	0.024	9.385
136	93.028		?	Unidentified	0.008	0.008	0.006	2.747
137	93.028		?	Unidentified	0.008	0.008	0.005	2.747
138	93.028		?	Unidentified	0.008	0.006	0.005	2.747
139	93.139	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.002	0.002	0.002	0.683
140	93.139		C10	C10-IsoOlefin-4	0.002	0.003	0.002	0.683
141	93.139		I10	C10-isoparaffin-x	0.000	0.000	0.000	0.683
142	93.600		?	Unidentified	0.085	0.086	0.054	29.069
143	93.824	15869-87-1	I10	2,2-Dimethyloctane	0.030	0.030	0.019	8.266
144	94.630	15869-89-3	I10	2,5-Dimethyloctane	0.017	0.017	0.011	4.671
145	94.814		I10	C10 - IsoParaffin - 2	0.010	0.010	0.006	2.692
146	95.265	2051-30-1	I10	2,4-Dimethyloctane	0.025	0.026	0.016	7.002
147	95.660		I10	2,6-Dimethyloctane	0.013	0.013	0.008	3.658
148	96.305	103-65-1	Q9	n-Propylbenzene	0.275	0.233	0.207	80.905
149	97.155	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.034	0.876	0.779	304.465
150	97.387	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.479	0.408	0.361	141.098
151	98.015	108-67-8	Q9	1,3,5-Trimethylbenzene	0.606	0.513	0.456	178.294
152	98.682	17301-94-8	I10	4-Methylnonane	0.012	0.012	0.007	3.195
153	98.883		?	Unidentified	0.302	0.304	0.192	103.678
154	99.099	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.354	0.294	0.267	104.266
155	99.661	5911-04-6	I10	3-Methylnonane	0.016	0.016	0.010	4.292
156	100.127		?	Unidentified	0.024	0.018	0.014	8.302
157	100.251		?	Unidentified	0.065	0.064	0.038	22.337
158	100.476		I11	C11-Isoparaffin-2	0.036	0.036	0.021	9.990
159	100.733	95-63-6	Q9	1,2,4-Trimethylbenzene	1.654	1.383	1.246	486.978
160	100.941		?	Unidentified	0.046	0.048	0.029	15.652
161	101.062		?	Unidentified	0.028	0.028	0.018	9.462
162	101.320	98-06-6	Q10	t-Butylbenzene	0.007	0.006	0.005	2.012
163	102.108	17302-01-1	I10	3-Ethyl-3-methylheptane	0.066	0.065	0.038	18.229
164	102.456	538-93-2	Q10	i-Butylbenzene	0.080	0.068	0.054	23.371
165	102.595	124-18-5	P10	n-Decane	0.040	0.040	0.025	10.930
166	102.974		?	Unidentified	0.018	0.018	0.011	6.344
167	103.609	526-73-8	Q9	1,2,3-Trimethylbenzene	0.206	0.168	0.155	60.511
168	103.991	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.009	0.008	0.006	2.681
169	104.190		I11	C11 Isoparaffin-4	0.009	0.009	0.005	2.609
170	104.394		?	Unidentified	0.056	0.048	0.038	19.166
171	104.801		J9	Indan	0.076	0.058	0.058	22.715
172	105.429		J10	Indene	0.386	0.293	0.296	115.521

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	106.147		I11	C11-Isoparaffin-7	0.160	0.157	0.092	44.169
174	106.332	141-93-5	Q10	1,3-Diethylbenzene	0.024	0.020	0.016	6.917
175	106.621	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.499	0.424	0.336	146.108
176	106.922	105-05-5	Q10	1,4-Diethylbenzene	0.186	0.158	0.125	54.488
177	107.173	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.109	0.091	0.074	31.943
178	107.428	135-01-3	Q10	1,2-Diethylbenzene	0.039	0.033	0.026	11.502
179	107.886		?	Unidentified	0.040	0.039	0.023	13.584
180	108.025	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.044	0.037	0.029	12.780
181	108.161		?	Unidentified	0.046	0.046	0.027	15.918
182	108.244		?	Unidentified	0.042	0.041	0.024	14.362
183	108.365		I11	C11- Isoparaffin-11	0.345	0.340	0.200	95.418
184	108.550		?	Unidentified	0.111	0.109	0.064	38.149
185	108.877	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.091	0.076	0.061	26.507
186	108.981		?	Unidentified	0.386	0.322	0.260	132.391
187	109.203		J10	2-Methylindan	0.059	0.044	0.040	17.525
188	109.543	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.258	0.216	0.174	75.621
189	110.101	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.336	0.276	0.227	98.408
190	110.528		?	Unidentified	0.011	0.010	0.007	3.900
191	110.729	693-61-8	K11	2-Undecene, (E)-	0.028	0.028	0.018	7.782
192	110.857		?	Unidentified	0.065	0.064	0.042	22.346
193	111.132		?	Unidentified	0.055	0.047	0.033	18.831
194	111.219	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.063	0.052	0.042	18.375
195	111.531	1120-21-4	P11	n-Undecane	0.032	0.032	0.019	8.875
196	111.687	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.043	0.035	0.026	12.478
197	111.798		?	Unidentified	0.026	0.021	0.016	8.785
198	112.162		Q10	1,2,4,5-Tetramethylbenzene	0.204	0.168	0.137	59.668
199	112.430	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.281	0.231	0.189	82.148
200	112.785		?	Unidentified	0.006	0.005	0.004	2.187
201	112.966		I12	C12 - IsoParaffin - 1	0.010	0.010	0.005	2.763
202	113.293		?	Unidentified	0.019	0.019	0.010	6.538
203	113.445		?	Unidentified	0.007	0.007	0.004	2.291
204	113.584		Q11	C11 - Aromatic - 3	0.025	0.021	0.015	7.283
205	113.652		?	Unidentified	0.021	0.017	0.013	7.134
206	113.762	874-35-1	H10	5-Methylindan	0.091	0.075	0.062	26.545
207	113.902		Q12	1,2-Di-i-propylbenzene	0.034	0.028	0.019	9.786
208	114.117	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.045	0.037	0.028	13.171
209	114.286		Q11	C11 - Aromatic - 4	0.029	0.024	0.018	8.592
210	114.513	824-22-6	J10	4-Methylindan	0.115	0.094	0.078	33.536
211	114.765	824-63-5	H10	2-Methylindan	0.115	0.095	0.079	33.795
212	114.978		?	Unidentified	0.009	0.009	0.005	3.121
213	115.091	538-68-1	Q11	n-Pentylbenzene	0.011	0.009	0.006	3.099
214	115.319		Q11	tert-Pentylbenzene	0.044	0.036	0.027	12.909
215	115.633	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.021	0.017	0.013	6.160

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	115.744		Q11	C11 - Aromatic - 7	0.033	0.029	0.020	9.747
217	116.092		I12	C12 - IsoParaffin - 4	0.006	0.005	0.003	1.644
218	116.205	100-18-5	Q12	1,4-Di-i-propylbenzene	0.041	0.033	0.023	11.816
219	116.634	91-20-3	G10	Naphthalene	0.116	0.083	0.082	35.678
220	116.798		?	Unidentified	0.015	0.015	0.008	5.186
221	116.972		?	Unidentified	0.005	0.004	0.003	1.645
222	117.087		J11	1,1-Dimethyl Indane	0.011	0.008	0.007	3.263
223	117.248		J12	Dimethyl Indane - 1	0.004	0.003	0.003	1.334
224	117.432	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.007	0.006	0.004	2.153
225	117.736		Q12	1,3-Di-n-propylbenzene	0.035	0.029	0.020	10.262
226	117.846		Q11	C11 - Aromatic - 11	0.018	0.016	0.011	5.308
227	118.402		Q11	C11 - Aromatic - 12	0.015	0.013	0.009	4.321
228	122.542	877-44-1	Q12	1,2,4-Triethylbenzene	0.006	0.005	0.004	1.826
229	123.281	91-57-6	G11	2-Methylnaphthalene	0.012	0.008	0.007	3.566
230	124.144	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.004	1.706
231	126.172		?	Unidentified	0.008	0.007	0.004	2.619
232	127.137		?	Unidentified	0.002	0.001	0.001	0.586
233	129.864		?	Unidentified	0.003	0.002	0.002	1.129

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.391	74-98-6	Propane	0.006	0.009	0.013	1.698
	9.793	106-97-8	n-Butane	1.108	1.402	1.725	299.818
	17.696	109-66-0	n-Pentane	1.166	1.364	1.463	317.807
	35.303	110-54-3	n-Hexane	2.728	3.029	2.865	746.276
	57.617	142-82-5	n-Heptane	0.689	0.738	0.623	189.290
	77.567	111-65-9	n-Octane	0.546	0.569	0.433	150.328
	91.476	111-84-2	n-Nonane	0.427	0.435	0.301	117.650
	102.595	124-18-5	n-Decane	0.040	0.040	0.025	10.930
	111.531	1120-21-4	n-Undecane	0.032	0.032	0.019	8.875
I-Paraffins	8.613	75-28-5	i-Butane	0.053	0.070	0.083	14.393
	10.390	463-82-1	2,2-Dimethylpropane	0.013	0.016	0.016	3.416
	14.713	78-78-4	i-Pentane	4.188	4.948	5.253	1140.912
	22.623	75-83-2	2,2-Dimethylbutane	0.077	0.087	0.081	20.997
	27.833	79-29-8	2,3-Dimethylbutane	1.138	1.259	1.195	311.211
	28.904	107-83-5	2-Methylpentane	2.321	2.602	2.438	635.007
	31.547	96-14-0	3-Methylpentane	1.751	1.930	1.839	478.997
	41.732	108-08-7	2,4-Dimethylpentane	0.971	1.056	0.877	266.530
	42.276	464-06-2	2,2,3-Trimethylbutane	0.076	0.080	0.068	20.786
	50.197	591-76-4	2-Methylhexane	1.566	1.690	1.414	430.088
	52.028	589-34-4	3-Methylhexane	0.662	0.706	0.598	181.839
	54.738	540-84-1	2,2,4-Trimethylpentane	7.470	7.905	5.918	2055.609
	62.418	590-73-8	2,2-Dimethylhexane	0.030	0.031	0.023	8.132
	64.513	564-02-3	2,2,3-Trimethylpentane	0.749	0.766	0.593	206.023
	64.760	592-13-2	2,5-Dimethylhexane	1.519	1.604	1.204	418.070
	65.100	589-43-5	2,4-Dimethylhexane	1.433	1.498	1.135	394.285
	66.331	563-16-6	3,3-Dimethylhexane	0.021	0.022	0.017	5.883
	68.135	565-75-3	2,3,4-Trimethylpentane	6.895	7.022	5.463	1897.493
	68.821	560-21-4	2,3,3-Trimethylpentane	8.453	8.522	6.697	2326.163
	70.441	584-94-1	2,3-Dimethylhexane	1.889	1.942	1.497	519.797
	71.701	592-27-8	2-Methylheptane	0.303	0.318	0.240	83.514
	71.961	589-53-7	4-Methylheptane	0.284	0.295	0.225	78.043
	73.023	589-81-1	3-Methylheptane	0.263	0.273	0.208	72.292
	73.207	619-99-8	3-Ethylhexane	0.117	0.120	0.093	32.285
	74.950	3522-94-9	2,2,5-Trimethylhexane	3.735	3.866	2.635	1029.771
	80.057	1069-53-0	2,3,5-Trimethylhexane	0.619	0.628	0.437	170.654
	81.233	1071-26-7	2,4-Dimethylheptane	0.113	0.117	0.080	31.196
	82.195	1072-05-5	2,6-Dimethylheptane	0.163	0.168	0.115	44.810
	83.130		2,5-Dimethylheptane	0.340	0.348	0.240	93.846
	83.300	926-82-9	3,5-Dimethylheptane	0.034	0.034	0.024	9.290
	86.618	1067-20-5	3,3-Diethylpentane	0.004	0.004	0.003	1.197
	87.015	2216-34-4	4-Methyloctane	0.057	0.058	0.040	15.625
	87.148	3221-61-2	2-Methyloctane	0.076	0.078	0.054	21.082
	87.850	15869-80-4	Heptane, 3-ethyl-	0.010	0.010	0.007	2.791
	88.013	2216-33-3	3-Methyloctane	0.075	0.076	0.053	20.696
	89.068		C10 - IsoParaffin - 1	0.665	0.669	0.423	183.644
	89.915	14720-74-2	2,2,4-trimethylheptane	0.469	0.472	0.298	129.541

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	93.139		C10-isoparaffin-x	0.000	0.000	0.000	0.683
	93.824	15869-87-1	2,2-Dimethyloctane	0.030	0.030	0.019	8.266
	94.630	15869-89-3	2,5-Dimethyloctane	0.017	0.017	0.011	4.671
	94.814		C10 - IsoParaffin - 2	0.010	0.010	0.006	2.692
	95.265	2051-30-1	2,4-Dimethyloctane	0.025	0.026	0.016	7.002
	95.660		2,6-Dimethyloctane	0.013	0.013	0.008	3.658
	98.682	17301-94-8	4-Methylnonane	0.012	0.012	0.007	3.195
	99.661	5911-04-6	3-Methylnonane	0.016	0.016	0.010	4.292
	100.476		C11-Isoparaffin-2	0.036	0.036	0.021	9.990
	102.108	17302-01-1	3-Ethyl-3-methylheptane	0.066	0.065	0.038	18.229
	104.190		C11 Isoparaffin-4	0.009	0.009	0.005	2.609
	106.147		C11-Isoparaffin-7	0.160	0.157	0.092	44.169
	108.365		C11- Isoparaffin-11	0.345	0.340	0.200	95.418
	112.966		C12 - IsoParaffin - 1	0.010	0.010	0.005	2.763
	116.092		C12 - IsoParaffin - 4	0.006	0.005	0.003	1.644
Aromatics							
Mono-Aromatics	45.137	71-42-3	Benzene	0.735	0.612	0.852	221.834
	68.637	108-88-3	Toluene	5.234	4.420	5.141	1562.352
	84.440	100-41-4	Ethylbenzene	0.964	0.814	0.821	285.467
	85.671	108-38-3	m-Xylene	2.568	2.175	2.189	760.710
	85.818	106-42-3	p-Xylene	1.135	0.965	0.967	336.205
	88.652	95-47-6	o-Xylene	0.880	0.732	0.750	260.821
	92.837	98-82-8	i-Propylbenzene	0.032	0.027	0.024	9.385
	96.305	103-65-1	n-Propylbenzene	0.275	0.233	0.207	80.905
	97.155	620-14-4	1-Methyl-3-ethylbenzene	1.034	0.876	0.779	304.465
	97.387	622-96-8	1-Methyl-4-ethylbenzene	0.479	0.408	0.361	141.098
	98.015	108-67-8	1,3,5-Trimethylbenzene	0.606	0.513	0.456	178.294
	99.099	611-14-3	1-Methyl-2-ethylbenzene	0.354	0.294	0.267	104.266
	100.733	95-63-6	1,2,4-Trimethylbenzene	1.654	1.383	1.246	486.978
	101.320	98-06-6	t-Butylbenzene	0.007	0.006	0.005	2.012
	102.456	538-93-2	i-Butylbenzene	0.080	0.068	0.054	23.371
	103.609	526-73-8	1,2,3-Trimethylbenzene	0.206	0.168	0.155	60.511
	103.991	535-77-3	1-Methyl-3-i-propylbenzene	0.009	0.008	0.006	2.681
	106.332	141-93-5	1,3-Diethylbenzene	0.024	0.020	0.016	6.917
	106.621	1074-43-7	1-Methyl-3-n-propylbenzene	0.499	0.424	0.336	146.108
	106.922	105-05-5	1,4-Diethylbenzene	0.186	0.158	0.125	54.488
	107.173	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.109	0.091	0.074	31.943
	107.428	135-01-3	1,2-Diethylbenzene	0.039	0.033	0.026	11.502
	108.025	1074-17-5	1-Methyl-2-n-propylbenzene	0.044	0.037	0.029	12.780
	108.877	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.091	0.076	0.061	26.507
	109.543	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.258	0.216	0.174	75.621
	110.101	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.336	0.276	0.227	98.408
	111.219	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.063	0.052	0.042	18.375
	111.687	4218-48-8	1-Ethyl-4-i-propylbenzene	0.043	0.035	0.026	12.478
	112.162		1,2,4,5-Tetramethylbenzene	0.204	0.168	0.137	59.668
	112.430	527-53-7	1,2,3,5-Tetramethylbenzene	0.281	0.231	0.189	82.148

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	113.584		C11 - Aromatic - 3	0.025	0.021	0.015	7.283
	113.902		1,2-Di-i-propylbenzene	0.034	0.028	0.019	9.786
	114.117	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.045	0.037	0.028	13.171
	114.286		C11 - Aromatic - 4	0.029	0.024	0.018	8.592
	115.091	538-68-1	n-Pentylbenzene	0.011	0.009	0.006	3.099
	115.319		tert-Pentylbenzene	0.044	0.036	0.027	12.909
	115.633	577-55-9	1-Methyl-2-n-butylbenzene	0.021	0.017	0.013	6.160
	115.744		C11 - Aromatic - 7	0.033	0.029	0.020	9.747
	116.205	100-18-5	1,4-Di-i-propylbenzene	0.041	0.033	0.023	11.816
	117.432	7364-19-4	1t-Butyl-4-ethylbenzene	0.007	0.006	0.004	2.153
	117.736		1,3-Di-n-propylbenzene	0.035	0.029	0.020	10.262
	117.846		C11 - Aromatic - 11	0.018	0.016	0.011	5.308
	118.402		C11 - Aromatic - 12	0.015	0.013	0.009	4.321
	122.542	877-44-1	1,2,4-Triethylbenzene	0.006	0.005	0.004	1.826
Naphthalenes	116.634	91-20-3	Naphthalene	0.116	0.083	0.082	35.678
	123.281	91-57-6	2-Methylnaphthalene	0.012	0.008	0.007	3.566
	124.144	90-12-0	1-Methylnaphthalene	0.006	0.004	0.004	1.706
Naphtheno/Olefir	113.762	874-35-1	5-Methylindan	0.091	0.075	0.062	26.545
	114.765	824-63-5	2-Methylindan	0.115	0.095	0.079	33.795
Indenes	104.801		Indan	0.076	0.058	0.058	22.715
	105.429		Indene	0.386	0.293	0.296	115.521
	109.203		2-Methylindan	0.059	0.044	0.040	17.525
	114.513	824-22-6	4-Methylindan	0.115	0.094	0.078	33.536
	117.087		1,1-Dimethyl Indane	0.011	0.008	0.007	3.263
	117.248		Dimethyl Indane - 1	0.004	0.003	0.003	1.334
Naphthenes							
Mono-Naphthene	27.099	287-92-3	Cyclopentane	0.144	0.141	0.185	40.242
	40.162	96-37-7	Methylcyclopentane	1.490	1.457	1.602	417.419
	47.057	110-82-7	Cyclohexane	1.018	0.958	1.095	285.348
	52.882	1759-58-6	1t,3-Dimethylcyclopentane	0.170	0.166	0.156	47.503
	53.470	2532-58-3	1c,3-Dimethylcyclopentane	0.131	0.129	0.121	36.786
	54.094	822-50-4	1t,2-Dimethylcyclopentane	0.187	0.183	0.173	52.531
	59.202	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.017	5.174
	61.062	108-87-2	Methylcyclohexane	1.017	0.968	0.937	284.936
	62.012	4516-69-2	1,1,3-Trimethylcyclopentane	0.030	0.030	0.025	8.543
	63.857	1640-89-7	Ethylcyclopentane	0.038	0.037	0.035	10.744
	65.930	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.031	0.030	0.025	8.692
	67.461	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.028	0.026	0.022	7.727
	72.864		1,3-dimethyl-t-cyclohexane	0.181	0.172	0.146	50.735
	75.272		3c-Ethylmethylcyclopentane	0.011	0.010	0.009	3.060
	75.495		3t-Ethylmethylcyclopentane	0.015	0.014	0.012	4.182
	76.198	2207-03-6	1t,3-Dimethylcyclohexane	0.084	0.079	0.068	23.559
	81.055	2207-01-4	1c,2-Dimethylcyclohexane	0.016	0.015	0.013	4.451

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	81.869	1678-91-7	Ethylcyclohexane	0.126	0.118	0.101	35.261
	89.488	3728-57-2	Cyclopentane, 1-methyl-2-propyl-	0.009	0.008	0.008	2.811
	89.643		trans-1,3-Diethylcyclopentane	0.022	0.018	0.016	6.570
	92.053	4926-90-3	1,1-Methylethylcyclohexane	0.016	0.015	0.012	4.528
	93.139	696-29-7	1-Methyl-2-propyl-cyclopentan	0.002	0.002	0.002	0.683
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.405	115-11-7	Isobutene	0.015	0.019	0.024	4.238
	9.444	106-98-9	Butene-1	0.018	0.022	0.029	5.067
	10.267	624-64-6	t-Butene-2	0.071	0.087	0.115	20.025
	10.989	590-18-1	c-Butene-2	0.085	0.100	0.136	23.705
	16.337	109-67-1	Pentene-1	0.331	0.379	0.428	92.873
	18.798	646-04-8	t-Pentene-2	0.843	0.952	1.088	236.251
	19.822	627-20-3	c-Pentene-2	0.462	0.516	0.597	129.552
	32.942	592-41-6	Hexene-1	0.161	0.174	0.174	45.242
	35.942	13269-52-8	t-Hexene-3	0.265	0.284	0.285	74.235
	36.410	4050-45-7	t-Hexene-2	0.508	0.545	0.546	142.292
	38.237	7688-21-3	c-Hexene-2	0.216	0.228	0.232	60.446
	55.028	592-76-7	Heptene-1	0.030	0.031	0.028	8.377
	56.880	14686-14-7	t-Heptene-3	0.033	0.035	0.031	9.287
	57.834	7642-10-6	c-Heptene-3	0.025	0.026	0.023	7.035
	58.742	14686-13-6	t-Heptene-2	0.017	0.018	0.016	4.727
	110.729	693-61-8	2-Undecene, (E)-	0.028	0.028	0.018	7.782
Iso-Olefins	13.128	563-45-1	3-Methylbutene-1	0.297	0.346	0.383	83.131
	17.165	563-46-2	2-Methylbutene-1	0.503	0.567	0.650	141.068
	20.490	513-35-9	2-Methylbutene-2	1.037	1.146	1.338	290.485
	28.696	691-38-3	4-Methyl-c-pentene-2	0.045	0.048	0.048	12.494
	29.339	674-76-0	4-Methyl-t-pentene-2	0.131	0.142	0.141	36.738
	32.718	763-29-1	2-Methylpentene-1	0.225	0.240	0.242	63.033
	36.900	625-27-4	2-Methylpentene-2	0.344	0.364	0.370	96.344
	37.313	922-62-3	3-Methyl-c-pentene-2	0.266	0.279	0.286	74.498
	39.588	3404-73-7	3,3-Dimethylpentene-1	0.315	0.329	0.291	88.376
	42.034	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.013	3.988
	46.159	3404-61-3	3-Methylhexene-1	0.016	0.016	0.014	4.391
	46.742	3524-73-0	5-Methylhexene-1	0.065	0.068	0.060	18.261
	48.805	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.038	11.564
	49.146	3769-23-1	4-Methylhexene-1	0.010	0.011	0.009	2.855
	49.797	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.053	0.047	14.405
	54.429		C7 - Iso-Olefin - 2	0.022	0.022	0.020	6.183
	56.359	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.013	4.021
	57.242	6094-02-6	2-Methylhexene-1	0.059	0.062	0.054	16.551
	58.113	2738-19-4	2-Methyl-2-hexene	0.027	0.028	0.025	7.601
	58.359	3899-36-3	3-Methyl-t-hexene-3	0.021	0.022	0.019	5.773
	59.644	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.014	4.294
	60.429	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.013	3.812

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	70.134		C8 - Diolefin - 1	0.012	0.011	0.010	3.324
	80.618		C9 - IsoOlefin - 1	0.019	0.018	0.015	5.247
	86.221		C9-IsoOlefin-3	0.024	0.022	0.017	6.657
	93.139		C10-IsoOlefin-4	0.002	0.003	0.002	0.683
Naphtheno-Olefir	25.249	142-29-0	Cyclopentene	0.197	0.187	0.262	56.828
	45.336	693-89-0	1-Methylcyclopentene	0.367	0.345	0.405	105.417
	50.669	110-83-8	Cyclohexene	0.045	0.041	0.050	12.602
Di-Olefins	18.208	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.994
	20.818	2004-70-8	1t,3-Pentadiene	0.015	0.016	0.020	4.373
Oxygenates	12.753	64-17-5	Ethanol	9.432	8.752	18.528	1136.062
	26.504	71-23-8	n-Propanol	0.101	0.092	0.152	19.798
Unidentified	19.439		Unidentified	0.006	0.006	0.007	1.936
	22.071		Unidentified	0.006	0.006	0.008	2.041
	26.430		Unidentified	0.045	0.041	0.068	15.395
	28.228		Unidentified	0.051	0.050	0.052	17.407
	44.931		Unidentified	0.012	0.011	0.013	4.044
	47.596		Unidentified	0.035	0.036	0.032	11.890
	72.096		Unidentified	0.158	0.161	0.126	54.383
	74.103		Unidentified	0.030	0.028	0.024	10.196
	75.910		Unidentified	0.029	0.027	0.023	9.886
	78.509		Unidentified	0.094	0.093	0.066	32.143
	82.674		Unidentified	0.030	0.032	0.021	10.181
	84.620		Unidentified	0.048	0.048	0.035	16.327
	84.859		Unidentified	0.049	0.046	0.035	16.930
	85.965		Unidentified	0.127	0.128	0.089	43.485
	86.328		Unidentified	0.022	0.023	0.016	7.717
	88.480		Unidentified	0.205	0.220	0.147	70.483
	93.028		Unidentified	0.008	0.008	0.006	2.747
	93.028		Unidentified	0.008	0.008	0.005	2.747
	93.028		Unidentified	0.008	0.006	0.005	2.747
	93.600		Unidentified	0.085	0.086	0.054	29.069
	98.883		Unidentified	0.302	0.304	0.192	103.678
	100.127		Unidentified	0.024	0.018	0.014	8.302
	100.251		Unidentified	0.065	0.064	0.038	22.337
	100.941		Unidentified	0.046	0.048	0.029	15.652
	101.062		Unidentified	0.028	0.028	0.018	9.462
	102.974		Unidentified	0.018	0.018	0.011	6.344
	104.394		Unidentified	0.056	0.048	0.038	19.166
	107.886		Unidentified	0.040	0.039	0.023	13.584
	108.161		Unidentified	0.046	0.046	0.027	15.918
	108.244		Unidentified	0.042	0.041	0.024	14.362
	108.550		Unidentified	0.111	0.109	0.064	38.149
	108.981		Unidentified	0.386	0.322	0.260	132.391

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	110.528		Unidentified	0.011	0.010	0.007	3.900
	110.857		Unidentified	0.065	0.064	0.042	22.346
	111.132		Unidentified	0.055	0.047	0.033	18.831
	111.798		Unidentified	0.026	0.021	0.016	8.785
	112.785		Unidentified	0.006	0.005	0.004	2.187
	113.293		Unidentified	0.019	0.019	0.010	6.538
	113.445		Unidentified	0.007	0.007	0.004	2.291
	113.652		Unidentified	0.021	0.017	0.013	7.134
	114.978		Unidentified	0.009	0.009	0.005	3.121
	116.798		Unidentified	0.015	0.015	0.008	5.186
	116.972		Unidentified	0.005	0.004	0.003	1.645
	126.172		Unidentified	0.008	0.007	0.004	2.619
	127.137		Unidentified	0.002	0.001	0.001	0.586
	129.864		Unidentified	0.003	0.002	0.002	1.129

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

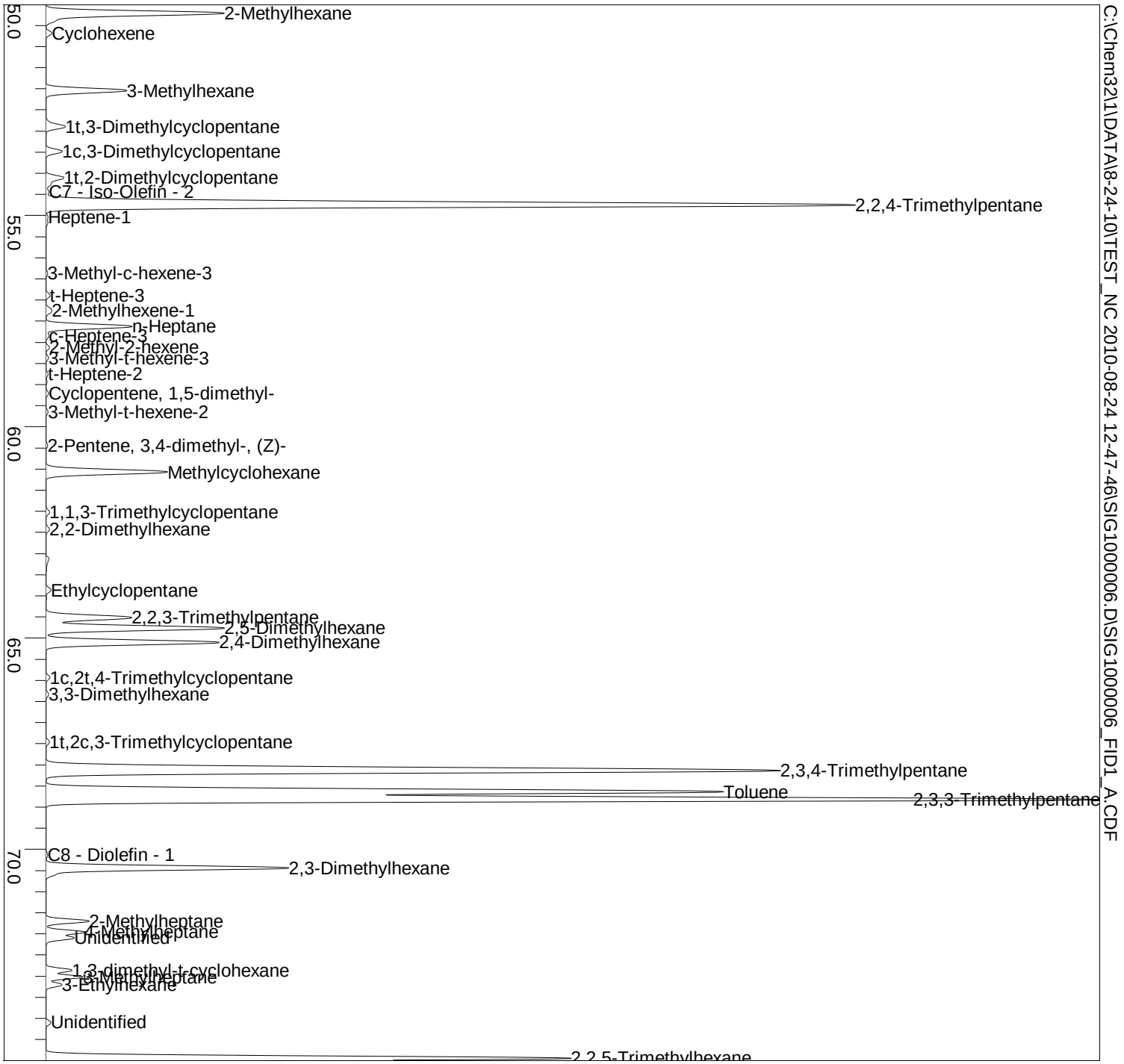
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

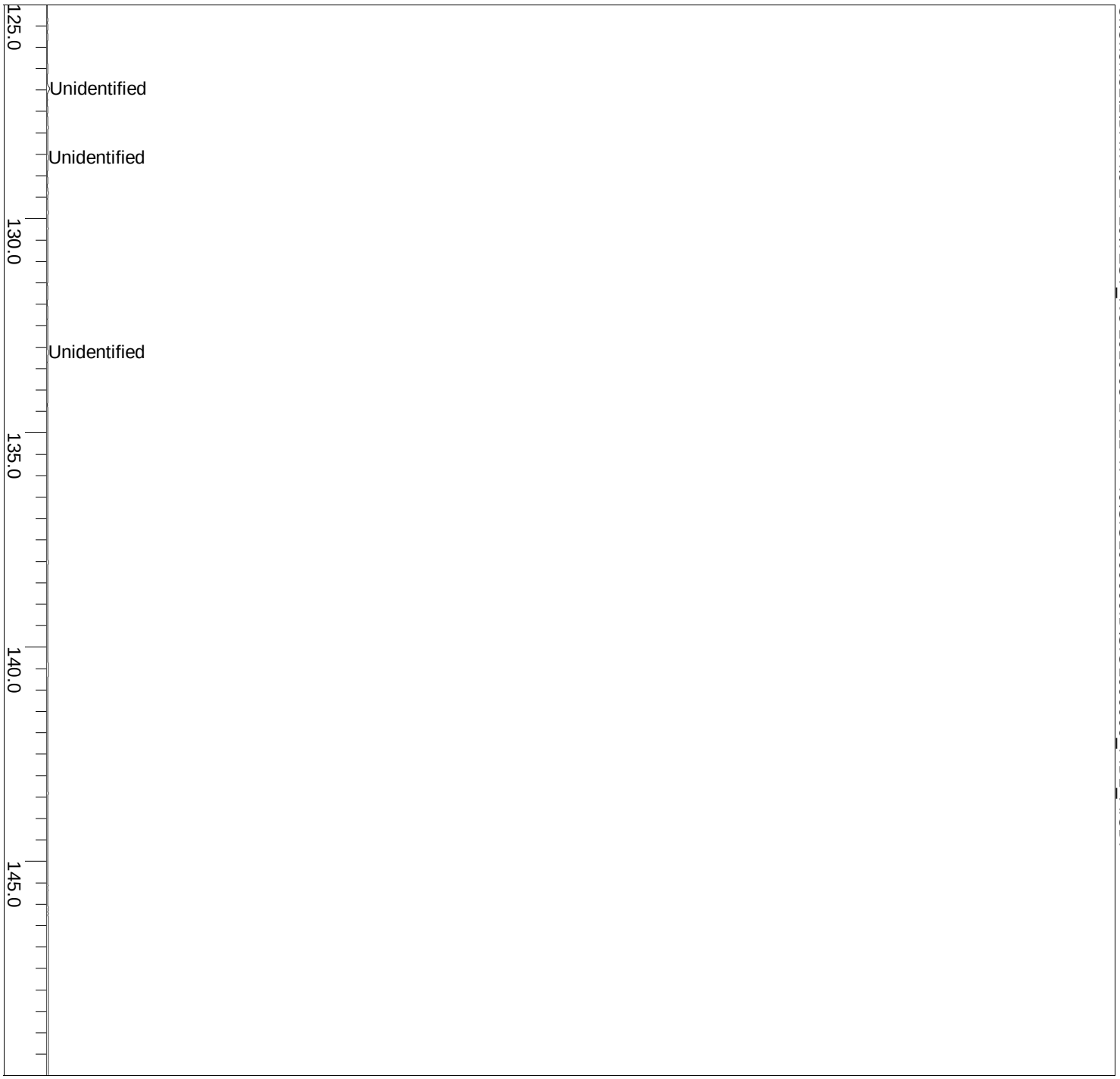
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000006.D\SIG1000006_FID1_A.CDF 24-Aug-10, 01:11:34
Sample: ODDB-91310 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91310
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	9.854	11.721	12.377
I-Paraffins	38.721	41.264	32.458
Aromatics	25.136	21.112	20.180
Mono-Aromatics	22.924	19.407	18.567
Naphthalenes	0.105	0.076	0.071
Naphtheno/Olefino-Benz	0.193	0.160	0.129
Indenes	1.914	1.470	1.413
Naphthenes	4.846	4.672	4.675
Mono-Naphthenes	4.846	4.672	4.675
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.429	8.119	8.663
n-Olefins	3.237	3.613	3.872
Iso-Olefins	3.602	3.945	4.106
Naphtheno-Olefins	0.567	0.536	0.655
Di-Olefins	0.023	0.025	0.030
Oxygenates	8.958	8.358	17.155
Unidentified	5.056	4.753	4.493
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	8.768	8.183	16.875
C3	0.195	0.182	0.290
C4	5.051	6.413	7.719
C5	11.049	12.809	13.729
C6	11.305	11.968	11.831
C7	11.105	10.482	10.304
C8	23.761	23.570	18.782
C9	10.111	9.257	7.281
C10	11.008	9.907	7.214
C11	2.415	2.326	1.388
C12	0.175	0.149	0.095

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.005	0.008	0.010
	C4	4.744	6.035	7.236
	C5	1.905	2.240	2.340
	C6	1.171	1.307	1.204
	C7	0.760	0.818	0.672
	C8	0.638	0.669	0.495
	C9	0.442	0.454	0.306
	C10	0.089	0.090	0.055
	C11	0.101	0.100	0.058
I-Paraffins	C4	0.056	0.074	0.085
	C5	5.085	6.044	6.248
	C6	4.654	5.209	4.788
	C7	2.411	2.614	2.133
	C8	16.842	17.497	13.072
	C9	3.393	3.516	2.346
	C10	4.411	4.459	2.726
	C11	1.841	1.822	1.044
	C12	0.029	0.029	0.015
Mono-Aromatics	C6	0.687	0.576	0.780
	C7	5.623	4.776	5.411
	C8	5.611	4.768	4.686
	C9	5.995	5.065	4.422
	C10	4.492	3.794	2.967
	C11	0.370	0.309	0.221
	C12	0.146	0.120	0.080
Naphthalenes	C10	0.085	0.061	0.059
	C11	0.020	0.014	0.012
Naphtheno/Olefino-Benzs	C10	0.193	0.160	0.129
Indenes	C9	0.213	0.163	0.160
	C10	1.689	1.298	1.245
	C11	0.011	0.009	0.007
Mono-Naphthenes	C5	0.209	0.206	0.264
	C6	2.115	2.051	2.228
	C7	1.791	1.726	1.617
	C8	0.619	0.588	0.490
	C9	0.067	0.059	0.047

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.044	0.041	0.028
n-Olefins	C4	0.252	0.304	0.398
	C5	1.719	1.951	2.173
	C6	1.178	1.269	1.241
	C7	0.017	0.017	0.015
	C11	0.072	0.071	0.045
Iso-Olefins	C5	1.916	2.158	2.422
	C6	1.127	1.205	1.187
	C7	0.504	0.529	0.455
	C8	0.051	0.048	0.039
	C10	0.005	0.006	0.003
Naphtheno-Olefins	C5	0.193	0.184	0.251
	C6	0.374	0.352	0.404
Di-Olefins	C5	0.023	0.025	0.030
Oxygenates	C2	8.768	8.183	16.875
	C3	0.190	0.175	0.280

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.52	21.28
5%	34.82	29.07
10%	81.64	80.44
15%	100.27	95.01
20%	142.42	134.41
25%	157.91	145.71
30%	172.65	165.52
35%	173.26	172.82
40%	205.78	176.93
45%	210.40	209.37
50%	230.77	212.26
55%	233.70	230.87
60%	237.08	235.12
65%	245.27	238.10
70%	277.00	254.85
75%	291.73	281.32
80%	324.57	319.97
85%	334.95	332.28
90%	355.84	352.22
95%	363.20	363.20
FBP	402.00	389.03

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.391	74-98-6	P3	Propane	0.005	0.008	0.010	1.346
2	8.613	75-28-5	I4	i-Butane	0.056	0.074	0.085	14.694
3	9.406	115-11-7	K4	Isobutene	0.022	0.027	0.035	6.070
4	9.445	106-98-9	K4	Butene-1	0.026	0.032	0.041	7.066
5	9.794	106-97-8	P4	n-Butane	4.744	6.035	7.236	1251.766
6	10.268	624-64-6	K4	t-Butene-2	0.095	0.116	0.151	26.095
7	10.390	463-82-1	I5	2,2-Dimethylpropane	0.021	0.027	0.026	5.672
8	10.988	590-18-1	K4	c-Butene-2	0.108	0.128	0.171	29.537
9	12.745	64-17-5	X2	Ethanol	8.768	8.183	16.875	1029.989
10	13.130	563-45-1	C5	3-Methylbutene-1	0.268	0.314	0.338	73.137
11	14.713	78-78-4	I5	i-Pentane	5.063	6.018	6.222	1345.320
12	16.335	109-67-1	K5	Pentene-1	0.345	0.396	0.436	94.186
13	17.175	563-46-2	C5	2-Methylbutene-1	0.538	0.609	0.680	146.981
14	17.700	109-66-0	P5	n-Pentane	1.905	2.240	2.340	506.058
15	18.213	78-79-5	E5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.617
16	18.804	646-04-8	K5	t-Pentene-2	0.888	1.009	1.123	242.815
17	19.447		?	Unidentified	0.006	0.007	0.008	2.076
18	19.824	627-20-3	K5	c-Pentene-2	0.486	0.546	0.614	132.821
19	20.489	513-35-9	C5	2-Methylbutene-2	1.110	1.235	1.404	303.484
20	20.818	2004-70-8	E5	1t,3-Pentadiene	0.014	0.015	0.018	3.910
21	22.067		?	Unidentified	0.005	0.005	0.007	1.634
22	22.614	75-83-2	I6	2,2-Dimethylbutane	0.133	0.151	0.137	35.394
23	25.253	142-29-0	B5	Cyclopentene	0.193	0.184	0.251	54.271
24	26.487	71-23-8	X3	n-Propanol	0.190	0.175	0.280	36.331
25	27.103	287-92-3	M5	Cyclopentane	0.209	0.206	0.264	57.120
26	27.831	79-29-8	I6	2,3-Dimethylbutane	0.899	1.000	0.925	239.759
27	28.238		?	Unidentified	0.055	0.054	0.055	18.264
28	28.695	691-38-3	C6	4-Methyl-c-pentene-2	0.047	0.051	0.050	12.848
29	28.908	107-83-5	I6	2-Methylpentane	2.257	2.544	2.322	601.975
30	29.345	674-76-0	C6	4-Methyl-t-pentene-2	0.140	0.153	0.147	38.214
31	31.551	96-14-0	I6	3-Methylpentane	1.366	1.514	1.405	364.340
32	32.718	763-29-1	C6	2-Methylpentene-1	0.238	0.256	0.251	65.016
33	32.940	592-41-6	K6	Hexene-1	0.170	0.185	0.179	46.445
34	35.140	760-21-4	C6	2-Ethylbutene-1	0.065	0.069	0.068	17.712
35	35.291	110-54-3	P6	n-Hexane	1.171	1.307	1.204	312.270
36	35.938	13269-52-8	K6	t-Hexene-3	0.272	0.294	0.287	74.454
37	36.409	4050-45-7	K6	t-Hexene-2	0.516	0.556	0.543	140.949
38	36.902	625-27-4	C6	2-Methylpentene-2	0.361	0.385	0.380	98.710
39	37.312	922-62-3	C6	3-Methyl-c-pentene-2	0.276	0.291	0.291	75.389
40	38.243	7688-21-3	K6	c-Hexene-2	0.219	0.234	0.231	59.980
41	39.588	3404-73-7	C7	3,3-Dimethylpentene-1	0.329	0.345	0.297	89.806
42	40.157	96-37-7	M6	Methylcyclopentane	1.337	1.315	1.409	365.410
43	41.731	108-08-7	I7	2,4-Dimethylpentane	0.654	0.716	0.579	175.234

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.037	594-56-9	C7	2,3,3-Trimethylbutene-1	0.011	0.012	0.010	3.132
45	42.276	464-06-2	I7	2,2,3-Trimethylbutane	0.046	0.050	0.041	12.446
46	44.935		?	Unidentified	0.011	0.011	0.012	3.586
47	45.136	71-42-3	Q6	Benzene	0.687	0.576	0.780	202.176
48	45.339	693-89-0	B6	1-Methylcyclopentene	0.338	0.319	0.365	94.630
49	46.162	3404-61-3	C7	3-Methylhexene-1	0.013	0.014	0.012	3.496
50	46.743	3524-73-0	C7	5-Methylhexene-1	0.051	0.054	0.046	13.935
51	47.054	110-82-7	M6	Cyclohexane	0.778	0.736	0.820	212.680
52	47.596		?	Unidentified	0.029	0.031	0.027	9.827
53	48.805	15840-60-5	C7	2-Methyl-c-hexene-3	0.032	0.034	0.029	8.671
54	49.801	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.037	0.039	0.033	10.097
55	50.197	591-76-4	I7	2-Methylhexane	1.172	1.272	1.037	314.015
56	50.667	110-83-8	B6	Cyclohexene	0.036	0.033	0.039	9.790
57	52.029	589-34-4	I7	3-Methylhexane	0.538	0.576	0.476	144.014
58	52.883	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.152	0.150	0.137	41.597
59	53.470	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.123	0.122	0.111	33.728
60	54.092	822-50-4	M7	1t,2-Dimethylcyclopentane	0.175	0.171	0.158	47.766
61	54.718	540-84-1	I8	2,2,4-Trimethylpentane	4.891	5.206	3.796	1312.640
62	56.882	14686-14-7	K7	t-Heptene-3	0.017	0.017	0.015	4.552
63	57.236	6094-02-6	C7	2-Methylhexene-1	0.026	0.027	0.023	7.021
64	57.617	142-82-5	P7	n-Heptane	0.760	0.818	0.672	203.464
65	58.116	2738-19-4	C7	2-Methyl-2-hexene	0.006	0.006	0.005	1.526
66	61.064	108-87-2	M7	Methylcyclohexane	1.295	1.239	1.169	353.928
67	62.014	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.035	0.034	0.028	9.553
68	62.418	590-73-8	I8	2,2-Dimethylhexane	0.036	0.038	0.028	9.606
69	63.856	1640-89-7	M7	Ethylcyclopentane	0.046	0.044	0.041	12.458
70	64.509		?	Unidentified	0.342	0.351	0.265	114.352
71	64.754	592-13-2	I8	2,5-Dimethylhexane	0.972	1.032	0.754	260.745
72	65.093	589-43-5	I8	2,4-Dimethylhexane	0.929	0.977	0.721	249.300
73	65.927	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.035	0.034	0.028	9.573
74	66.330	563-16-6	I8	3,3-Dimethylhexane	0.026	0.027	0.020	7.040
75	67.458	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.031	0.030	0.025	8.500
76	68.105	565-75-3	I8	2,3,4-Trimethylpentane	3.717	3.807	2.885	997.618
77	68.630	108-88-3	Q7	Toluene	5.623	4.776	5.411	1637.091
78	68.784	560-21-4	I8	2,3,3-Trimethylpentane	4.272	4.332	3.316	1146.564
79	70.129		C8	C8 - Diolefin - 1	0.013	0.013	0.011	3.664
80	70.433	584-94-1	I8	2,3-Dimethylhexane	1.073	1.110	0.833	288.011
81	71.700	592-27-8	I8	2-Methylheptane	0.311	0.328	0.241	83.489
82	71.958	589-53-7	I8	4-Methylheptane	0.211	0.220	0.163	56.522
83	72.096		?	Unidentified	0.089	0.091	0.069	29.749
84	72.863		M8	1,3-dimethyl-t-cyclohexane	0.214	0.205	0.169	58.547
85	73.022	589-81-1	I8	3-Methylheptane	0.268	0.280	0.208	71.971
86	73.207	619-99-8	I8	3-Ethylhexane	0.136	0.140	0.105	36.402

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	74.103		?	Unidentified	0.035	0.033	0.028	11.764
88	74.937	3522-94-9	I9	2,2,5-Trimethylhexane	2.255	2.348	1.559	606.420
89	75.271		M8	3c-Ethylmethylcyclopentane	0.013	0.013	0.010	3.614
90	75.492		M8	3t-Ethylmethylcyclopentane	0.017	0.016	0.013	4.643
91	75.909		?	Unidentified	0.016	0.016	0.011	5.465
92	76.194	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.098	0.093	0.078	26.881
93	77.567	111-65-9	P8	n-Octane	0.638	0.669	0.495	171.241
94	78.510		?	Unidentified	0.055	0.055	0.038	18.377
95	80.056	1069-53-0	I9	2,3,5-Trimethylhexane	0.363	0.370	0.251	97.612
96	80.617		C8	C9 - IsoOlefin - 1	0.022	0.021	0.017	6.013
97	81.052	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.018	0.017	0.014	4.961
98	81.233	1071-26-7	I9	2,4-Dimethylheptane	0.079	0.082	0.055	21.296
99	81.868	1678-91-7	M8	Ethylcyclohexane	0.147	0.138	0.116	40.204
100	82.194	1072-05-5	I9	2,6-Dimethylheptane	0.130	0.135	0.090	34.825
101	82.673		?	Unidentified	0.031	0.034	0.022	10.468
102	83.127		I9	2,5-Dimethylheptane	0.239	0.246	0.165	64.315
103	83.307	926-82-9	I9	3,5-Dimethylheptane	0.031	0.031	0.021	8.270
104	84.440	100-41-4	Q8	Ethylbenzene	1.019	0.866	0.851	294.532
105	84.619		?	Unidentified	0.031	0.031	0.022	10.355
106	84.860		?	Unidentified	0.040	0.038	0.028	13.495
107	85.670	108-38-3	Q8	m-Xylene	2.559	2.180	2.137	739.243
108	85.817	106-42-3	Q8	p-Xylene	1.136	0.972	0.949	328.278
109	85.964		?	Unidentified	0.080	0.081	0.055	26.710
110	86.220		C8	C9-IsoOlefin-3	0.015	0.015	0.011	4.218
111	86.328		?	Unidentified	0.014	0.015	0.010	4.796
112	86.459		I9	3,5-Dimethylheptane	0.012	0.012	0.008	3.133
113	86.618	1067-20-5	I9	3,3-Diethylpentane	0.010	0.010	0.007	2.796
114	87.015	2216-34-4	I9	4-Methyloctane	0.070	0.072	0.048	18.808
115	87.148	3221-61-2	I9	2-Methyloctane	0.096	0.099	0.066	25.681
116	87.850	15869-80-4	I9	Heptane, 3-ethyl-	0.013	0.013	0.009	3.572
117	88.013	2216-33-3	I9	3-Methyloctane	0.096	0.098	0.066	25.793
118	88.480		?	Unidentified	0.113	0.121	0.079	37.683
119	88.651	95-47-6	Q8	o-Xylene	0.896	0.750	0.749	258.967
120	89.067		I10	C10 - IsoParaffin - 1	0.394	0.399	0.246	106.186
121	89.488	3728-57-2	M8	Cyclopentane, 1-methyl-2-propyl-	0.010	0.008	0.008	2.921
122	89.642		M9	trans-1,3-Diethylcyclopentane	0.032	0.027	0.023	9.326
123	89.914	14720-74-2	I10	2,2,4-trimethylheptane	0.295	0.298	0.184	79.366
124	91.493	111-84-2	P9	n-Nonane	0.442	0.454	0.306	118.845
125	92.061	4926-90-3	M9	1,1-Methylethylcyclohexane	0.030	0.027	0.021	8.171
126	92.838	98-82-8	Q9	i-Propylbenzene	0.040	0.034	0.029	11.459
127	93.029		?	Unidentified	0.012	0.011	0.008	4.049
128	93.029		?	Unidentified	0.012	0.013	0.008	4.049
129	93.029		?	Unidentified	0.012	0.009	0.008	4.049

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	93.140	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.005	0.005	0.004	1.444
131	93.140		C10	C10-IsoOlefin-4	0.005	0.006	0.003	1.444
132	93.140		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.444
133	93.601		?	Unidentified	0.162	0.165	0.101	54.403
134	93.824	15869-87-1	I10	2,2-Dimethyloctane	0.058	0.059	0.036	15.626
135	94.269		?	Unidentified	0.014	0.010	1.245	4.701
136	94.269		?	Unidentified	0.014	0.015	0.009	4.701
137	94.625	15869-89-3	I10	2,5-Dimethyloctane	0.085	0.086	0.053	22.890
138	94.812		I10	C10 - IsoParaffin - 2	0.020	0.021	0.013	5.502
139	95.103	2040-95-1	I10	2,7-Dimethyloctane	0.043	0.044	0.027	11.709
140	95.267	2051-30-1	I10	2,4-Dimethyloctane	0.184	0.186	0.115	49.587
141	95.661		I10	2,6-Dimethyloctane	0.064	0.064	0.040	17.222
142	95.821		?	Unidentified	0.004	0.004	0.003	1.448
143	96.306	103-65-1	Q9	n-Propylbenzene	0.311	0.266	0.230	89.331
144	96.516		I10	3-Methyl-5-ethylheptane	0.009	0.009	0.006	2.421
145	97.156	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.147	0.977	0.846	329.185
146	97.389	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.543	0.464	0.401	155.889
147	98.016	108-67-8	Q9	1,3,5-Trimethylbenzene	0.789	0.672	0.582	226.584
148	98.499	15869-85-9	I10	5-Methylnonane	0.009	0.009	0.006	2.467
149	98.688	17301-94-8	I10	4-Methylnonane	0.022	0.022	0.014	5.870
150	98.900		I10	2,2,6-Trimethyloctane	2.806	2.845	1.749	756.161
151	99.100	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.438	0.366	0.323	125.598
152	99.472		?	Unidentified	0.008	0.008	0.005	2.614
153	99.664	5911-04-6	I10	3-Methylnonane	0.024	0.024	0.015	6.488
154	99.839		?	Unidentified	0.009	0.010	0.006	3.124
155	100.130		?	Unidentified	0.167	0.123	0.095	55.868
156	100.257		?	Unidentified	0.452	0.448	0.257	151.398
157	100.480		I11	C11-Isoparaffin-2	0.240	0.238	0.136	64.734
158	100.742	95-63-6	Q9	1,2,4-Trimethylbenzene	2.319	1.950	1.711	665.683
159	100.946		?	Unidentified	0.280	0.294	0.177	93.692
160	101.066		?	Unidentified	0.166	0.166	0.103	55.483
161	101.322	1678-98-4	M10	i-Butylcyclohexane	0.041	0.038	0.026	11.340
162	101.966		?	Unidentified	0.016	0.014	0.010	5.257
163	102.112	17302-01-1	I10	3-Ethyl-3-methylheptane	0.397	0.393	0.225	107.049
164	102.326		?	Unidentified	0.112	0.096	0.074	37.372
165	102.466	538-93-2	Q10	i-Butylbenzene	0.288	0.249	0.190	82.288
166	102.657	124-18-5	P10	n-Decane	0.089	0.090	0.055	23.965
167	102.975		?	Unidentified	0.104	0.103	0.059	34.809
168	103.468		?	Unidentified	0.012	0.010	0.009	4.150
169	103.614	526-73-8	Q9	1,2,3-Trimethylbenzene	0.408	0.336	0.301	117.257
170	103.981	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.035	0.030	0.023	10.133
171	104.193		I11	C11 Isoparaffin-4	0.048	0.047	0.027	12.916
172	104.395		?	Unidentified	0.247	0.212	0.163	82.822

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	104.803		J9	Indan	0.213	0.163	0.160	62.286
174	105.058		I11	C11-Isoparaffin-5	0.026	0.026	0.015	7.047
175	105.439		J10	Indene	1.415	1.081	1.062	412.963
176	105.852		M10	n-ButylCyclohexane	0.002	0.002	0.001	0.648
177	105.994		?	Unidentified	0.012	0.011	0.007	3.888
178	106.154		I11	C11-Isoparaffin-7	0.541	0.535	0.307	145.841
179	106.333	141-93-5	Q10	1,3-Diethylbenzene	0.054	0.046	0.036	15.373
180	106.634	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.591	1.361	1.051	454.260
181	106.906	105-05-5	Q10	1,4-Diethylbenzene	0.436	0.372	0.288	124.455
182	107.175	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.132	0.111	0.088	37.824
183	107.422	135-01-3	Q10	1,2-Diethylbenzene	0.120	0.100	0.079	34.250
184	107.889		?	Unidentified	0.130	0.128	0.074	43.447
185	108.027	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.053	0.045	0.035	15.261
186	108.164		?	Unidentified	0.132	0.132	0.076	44.311
187	108.245		?	Unidentified	0.119	0.118	0.068	39.904
188	108.369		I11	C11- Isoparaffin-11	0.986	0.976	0.559	265.970
189	108.552		?	Unidentified	0.314	0.311	0.178	105.123
190	108.983		?	Unidentified	0.913	0.766	0.603	305.601
191	109.206		J10	2-Methylindan	0.151	0.115	0.101	43.973
192	109.543	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.345	0.291	0.228	98.647
193	109.703		?	Unidentified	0.064	0.049	0.043	21.367
194	110.102	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.807	0.667	0.533	230.373
195	110.527		?	Unidentified	0.033	0.030	0.019	11.146
196	110.729	693-61-8	K11	2-Undecene, (E)-	0.072	0.071	0.045	19.459
197	110.857		?	Unidentified	0.156	0.155	0.099	52.275
198	111.131		?	Unidentified	0.136	0.118	0.081	45.609
199	111.212	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.072	0.059	0.048	20.555
200	111.530	1120-21-4	P11	n-Undecane	0.101	0.100	0.058	27.357
201	111.687	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.111	0.091	0.066	31.440
202	111.799		?	Unidentified	0.077	0.063	0.046	25.634
203	112.163		Q10	1,2,4,5-Tetramethylbenzene	0.241	0.200	0.159	68.841
204	112.429	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.317	0.262	0.209	90.442
205	112.653		?	Unidentified	0.014	0.012	0.009	4.778
206	112.784		?	Unidentified	0.021	0.017	0.014	7.016
207	112.965		I12	C12 - IsoParaffin - 1	0.029	0.029	0.015	7.834
208	113.293		?	Unidentified	0.034	0.035	0.019	11.521
209	113.447		?	Unidentified	0.013	0.013	0.007	4.355
210	113.653		?	Unidentified	0.062	0.051	0.037	20.761
211	113.760	874-35-1	H10	5-Methylindan	0.096	0.080	0.065	27.500
212	113.901		Q12	1,2-Di-i-propylbenzene	0.042	0.035	0.023	11.963
213	114.117	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.058	0.048	0.035	16.420
214	114.287		Q11	C11 - Aromatic - 4	0.036	0.029	0.021	10.117
215	114.513	824-22-6	J10	4-Methylindan	0.123	0.102	0.082	35.082

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	114.681		?	Unidentified	0.028	0.023	0.017	9.459
217	114.764	824-63-5	H10	2-Methylindan	0.097	0.080	0.065	27.579
218	114.977		?	Unidentified	0.012	0.010	0.007	4.058
219	115.090	538-68-1	Q11	n-Pentylbenzene	0.014	0.012	0.009	4.079
220	115.320		Q11	tert-Pentylbenzene	0.054	0.045	0.032	15.323
221	115.631	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.026	0.022	0.016	7.514
222	115.743		Q11	C11 - Aromatic - 7	0.040	0.035	0.024	11.474
223	116.205	100-18-5	Q12	1,4-Di-i-propylbenzene	0.054	0.045	0.030	15.365
224	116.633	91-20-3	G10	Naphthalene	0.085	0.061	0.059	25.418
225	116.797		?	Unidentified	0.012	0.009	0.007	3.973
226	116.973		?	Unidentified	0.005	0.004	0.003	1.612
227	117.078		J11	1,1-Dimethyl Indane	0.011	0.009	0.007	3.339
228	117.430	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.015	0.012	0.008	4.243
229	117.734		Q12	1,3-Di-n-propylbenzene	0.034	0.028	0.019	9.672
230	117.846		Q11	C11 - Aromatic - 11	0.019	0.016	0.011	5.275
231	118.401		Q11	C11 - Aromatic - 12	0.012	0.011	0.007	3.481
232	123.280	91-57-6	G11	2-Methylnaphthalene	0.013	0.010	0.008	3.963
233	124.146	90-12-0	G11	1-Methylnaphthalene	0.007	0.005	0.004	1.992
234	126.170		?	Unidentified	0.005	0.004	0.002	1.621
235	126.170		?	Unidentified	0.005	0.005	0.002	1.621
236	129.861		?	Unidentified	0.003	0.002	0.002	1.025

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.391	74-98-6	Propane	0.005	0.008	0.010	1.346
	9.794	106-97-8	n-Butane	4.744	6.035	7.236	1251.766
	17.700	109-66-0	n-Pentane	1.905	2.240	2.340	506.058
	35.291	110-54-3	n-Hexane	1.171	1.307	1.204	312.270
	57.617	142-82-5	n-Heptane	0.760	0.818	0.672	203.464
	77.567	111-65-9	n-Octane	0.638	0.669	0.495	171.241
	91.493	111-84-2	n-Nonane	0.442	0.454	0.306	118.845
	102.657	124-18-5	n-Decane	0.089	0.090	0.055	23.965
	111.530	1120-21-4	n-Undecane	0.101	0.100	0.058	27.357
I-Paraffins	8.613	75-28-5	i-Butane	0.056	0.074	0.085	14.694
	10.390	463-82-1	2,2-Dimethylpropane	0.021	0.027	0.026	5.672
	14.713	78-78-4	i-Pentane	5.063	6.018	6.222	1345.320
	22.614	75-83-2	2,2-Dimethylbutane	0.133	0.151	0.137	35.394
	27.831	79-29-8	2,3-Dimethylbutane	0.899	1.000	0.925	239.759
	28.908	107-83-5	2-Methylpentane	2.257	2.544	2.322	601.975
	31.551	96-14-0	3-Methylpentane	1.366	1.514	1.405	364.340
	41.731	108-08-7	2,4-Dimethylpentane	0.654	0.716	0.579	175.234
	42.276	464-06-2	2,2,3-Trimethylbutane	0.046	0.050	0.041	12.446
	50.197	591-76-4	2-Methylhexane	1.172	1.272	1.037	314.015
	52.029	589-34-4	3-Methylhexane	0.538	0.576	0.476	144.014
	54.718	540-84-1	2,2,4-Trimethylpentane	4.891	5.206	3.796	1312.640
	62.418	590-73-8	2,2-Dimethylhexane	0.036	0.038	0.028	9.606
	64.754	592-13-2	2,5-Dimethylhexane	0.972	1.032	0.754	260.745
	65.093	589-43-5	2,4-Dimethylhexane	0.929	0.977	0.721	249.300
	66.330	563-16-6	3,3-Dimethylhexane	0.026	0.027	0.020	7.040
	68.105	565-75-3	2,3,4-Trimethylpentane	3.717	3.807	2.885	997.618
	68.784	560-21-4	2,3,3-Trimethylpentane	4.272	4.332	3.316	1146.564
	70.433	584-94-1	2,3-Dimethylhexane	1.073	1.110	0.833	288.011
	71.700	592-27-8	2-Methylheptane	0.311	0.328	0.241	83.489
	71.958	589-53-7	4-Methylheptane	0.211	0.220	0.163	56.522
	73.022	589-81-1	3-Methylheptane	0.268	0.280	0.208	71.971
	73.207	619-99-8	3-Ethylhexane	0.136	0.140	0.105	36.402
	74.937	3522-94-9	2,2,5-Trimethylhexane	2.255	2.348	1.559	606.420
	80.056	1069-53-0	2,3,5-Trimethylhexane	0.363	0.370	0.251	97.612
	81.233	1071-26-7	2,4-Dimethylheptane	0.079	0.082	0.055	21.296
	82.194	1072-05-5	2,6-Dimethylheptane	0.130	0.135	0.090	34.825
	83.127		2,5-Dimethylheptane	0.239	0.246	0.165	64.315
	83.307	926-82-9	3,5-Dimethylheptane	0.031	0.031	0.021	8.270
	86.459		3,5-Dimethylheptane	0.012	0.012	0.008	3.133
	86.618	1067-20-5	3,3-Diethylpentane	0.010	0.010	0.007	2.796
	87.015	2216-34-4	4-Methyloctane	0.070	0.072	0.048	18.808
	87.148	3221-61-2	2-Methyloctane	0.096	0.099	0.066	25.681
	87.850	15869-80-4	Heptane, 3-ethyl-	0.013	0.013	0.009	3.572
	88.013	2216-33-3	3-Methyloctane	0.096	0.098	0.066	25.793
	89.067		C10 - IsoParaffin - 1	0.394	0.399	0.246	106.186
	89.914	14720-74-2	2,2,4-trimethylheptane	0.295	0.298	0.184	79.366

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	93.140		C10-isoparaffin-x	0.000	0.000	0.000	1.444
	93.824	15869-87-1	2,2-Dimethyloctane	0.058	0.059	0.036	15.626
	94.625	15869-89-3	2,5-Dimethyloctane	0.085	0.086	0.053	22.890
	94.812		C10 - IsoParaffin - 2	0.020	0.021	0.013	5.502
	95.103	2040-95-1	2,7-Dimethyloctane	0.043	0.044	0.027	11.709
	95.267	2051-30-1	2,4-Dimethyloctane	0.184	0.186	0.115	49.587
	95.661		2,6-Dimethyloctane	0.064	0.064	0.040	17.222
	96.516		3-Methyl-5-ethylheptane	0.009	0.009	0.006	2.421
	98.499	15869-85-9	5-Methylnonane	0.009	0.009	0.006	2.467
	98.688	17301-94-8	4-Methylnonane	0.022	0.022	0.014	5.870
	98.900		2,2,6-Trimethyloctane	2.806	2.845	1.749	756.161
	99.664	5911-04-6	3-Methylnonane	0.024	0.024	0.015	6.488
	100.480		C11-Isoparaffin-2	0.240	0.238	0.136	64.734
	102.112	17302-01-1	3-Ethyl-3-methylheptane	0.397	0.393	0.225	107.049
	104.193		C11 Isoparaffin-4	0.048	0.047	0.027	12.916
	105.058		C11-Isoparaffin-5	0.026	0.026	0.015	7.047
	106.154		C11-Isoparaffin-7	0.541	0.535	0.307	145.841
	108.369		C11- Isoparaffin-11	0.986	0.976	0.559	265.970
	112.965		C12 - IsoParaffin - 1	0.029	0.029	0.015	7.834
Aromatics							
Mono-Aromatics	45.136	71-42-3	Benzene	0.687	0.576	0.780	202.176
	68.630	108-88-3	Toluene	5.623	4.776	5.411	1637.091
	84.440	100-41-4	Ethylbenzene	1.019	0.866	0.851	294.532
	85.670	108-38-3	m-Xylene	2.559	2.180	2.137	739.243
	85.817	106-42-3	p-Xylene	1.136	0.972	0.949	328.278
	88.651	95-47-6	o-Xylene	0.896	0.750	0.749	258.967
	92.838	98-82-8	i-Propylbenzene	0.040	0.034	0.029	11.459
	96.306	103-65-1	n-Propylbenzene	0.311	0.266	0.230	89.331
	97.156	620-14-4	1-Methyl-3-ethylbenzene	1.147	0.977	0.846	329.185
	97.389	622-96-8	1-Methyl-4-ethylbenzene	0.543	0.464	0.401	155.889
	98.016	108-67-8	1,3,5-Trimethylbenzene	0.789	0.672	0.582	226.584
	99.100	611-14-3	1-Methyl-2-ethylbenzene	0.438	0.366	0.323	125.598
	100.742	95-63-6	1,2,4-Trimethylbenzene	2.319	1.950	1.711	665.683
	102.466	538-93-2	i-Butylbenzene	0.288	0.249	0.190	82.288
	103.614	526-73-8	1,2,3-Trimethylbenzene	0.408	0.336	0.301	117.257
	103.981	535-77-3	1-Methyl-3-i-propylbenzene	0.035	0.030	0.023	10.133
	106.333	141-93-5	1,3-Diethylbenzene	0.054	0.046	0.036	15.373
	106.634	1074-43-7	1-Methyl-3-n-propylbenzene	1.591	1.361	1.051	454.260
	106.906	105-05-5	1,4-Diethylbenzene	0.436	0.372	0.288	124.455
	107.175	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.132	0.111	0.088	37.824
	107.422	135-01-3	1,2-Diethylbenzene	0.120	0.100	0.079	34.250
	108.027	1074-17-5	1-Methyl-2-n-propylbenzene	0.053	0.045	0.035	15.261
	109.543	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.345	0.291	0.228	98.647
	110.102	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.807	0.667	0.533	230.373
	111.212	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.072	0.059	0.048	20.555
	111.687	4218-48-8	1-Ethyl-4-i-propylbenzene	0.111	0.091	0.066	31.440

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	112.163		1,2,4,5-Tetramethylbenzene	0.241	0.200	0.159	68.841
	112.429	527-53-7	1,2,3,5-Tetramethylbenzene	0.317	0.262	0.209	90.442
	113.901		1,2-Di-i-propylbenzene	0.042	0.035	0.023	11.963
	114.117	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.058	0.048	0.035	16.420
	114.287		C11 - Aromatic - 4	0.036	0.029	0.021	10.117
	115.090	538-68-1	n-Pentylbenzene	0.014	0.012	0.009	4.079
	115.320		tert-Pentylbenzene	0.054	0.045	0.032	15.323
	115.631	577-55-9	1-Methyl-2-n-butylbenzene	0.026	0.022	0.016	7.514
	115.743		C11 - Aromatic - 7	0.040	0.035	0.024	11.474
	116.205	100-18-5	1,4-Di-i-propylbenzene	0.054	0.045	0.030	15.365
	117.430	7364-19-4	1t-Butyl-4-ethylbenzene	0.015	0.012	0.008	4.243
	117.734		1,3-Di-n-propylbenzene	0.034	0.028	0.019	9.672
	117.846		C11 - Aromatic - 11	0.019	0.016	0.011	5.275
	118.401		C11 - Aromatic - 12	0.012	0.011	0.007	3.481
Naphthalenes	116.633	91-20-3	Naphthalene	0.085	0.061	0.059	25.418
	123.280	91-57-6	2-Methylnaphthalene	0.013	0.010	0.008	3.963
	124.146	90-12-0	1-Methylnaphthalene	0.007	0.005	0.004	1.992
Naphtheno/Olefir	113.760	874-35-1	5-Methylindan	0.096	0.080	0.065	27.500
	114.764	824-63-5	2-Methylindan	0.097	0.080	0.065	27.579
Indenes	104.803		Indan	0.213	0.163	0.160	62.286
	105.439		Indene	1.415	1.081	1.062	412.963
	109.206		2-Methylindan	0.151	0.115	0.101	43.973
	114.513	824-22-6	4-Methylindan	0.123	0.102	0.082	35.082
	117.078		1,1-Dimethyl Indane	0.011	0.009	0.007	3.339
Naphthenes							
Mono-Naphthene	27.103	287-92-3	Cyclopentane	0.209	0.206	0.264	57.120
	40.157	96-37-7	Methylcyclopentane	1.337	1.315	1.409	365.410
	47.054	110-82-7	Cyclohexane	0.778	0.736	0.820	212.680
	52.883	1759-58-6	1t,3-Dimethylcyclopentane	0.152	0.150	0.137	41.597
	53.470	2532-58-3	1c,3-Dimethylcyclopentane	0.123	0.122	0.111	33.728
	54.092	822-50-4	1t,2-Dimethylcyclopentane	0.175	0.171	0.158	47.766
	61.064	108-87-2	Methylcyclohexane	1.295	1.239	1.169	353.928
	62.014	4516-69-2	1,1,3-Trimethylcyclopentane	0.035	0.034	0.028	9.553
	63.856	1640-89-7	Ethylcyclopentane	0.046	0.044	0.041	12.458
	65.927	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.035	0.034	0.028	9.573
	67.458	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.031	0.030	0.025	8.500
	72.863		1,3-dimethyl-t-cyclohexane	0.214	0.205	0.169	58.547
	75.271		3c-Ethylmethylcyclopentane	0.013	0.013	0.010	3.614
	75.492		3t-Ethylmethylcyclopentane	0.017	0.016	0.013	4.643
	76.194	2207-03-6	1t,3-Dimethylcyclohexane	0.098	0.093	0.078	26.881
	81.052	2207-01-4	1c,2-Dimethylcyclohexane	0.018	0.017	0.014	4.961
	81.868	1678-91-7	Ethylcyclohexane	0.147	0.138	0.116	40.204
	89.488	3728-57-2	Cyclopentane, 1-methyl-2-propyl-	0.010	0.008	0.008	2.921

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	89.642		trans-1,3-Diethylcyclopentane	0.032	0.027	0.023	9.326
	92.061	4926-90-3	1,1-Methylethylcyclohexane	0.030	0.027	0.021	8.171
	93.140	696-29-7	1-Methyl-2-propyl-cyclopentan	0.005	0.005	0.004	1.444
	101.322	1678-98-4	i-Butylcyclohexane	0.041	0.038	0.026	11.340
	105.852		n-ButylCyclohexane	0.002	0.002	0.001	0.648
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.406	115-11-7	Isobutene	0.022	0.027	0.035	6.070
	9.445	106-98-9	Butene-1	0.026	0.032	0.041	7.066
	10.268	624-64-6	t-Butene-2	0.095	0.116	0.151	26.095
	10.988	590-18-1	c-Butene-2	0.108	0.128	0.171	29.537
	16.335	109-67-1	Pentene-1	0.345	0.396	0.436	94.186
	18.804	646-04-8	t-Pentene-2	0.888	1.009	1.123	242.815
	19.824	627-20-3	c-Pentene-2	0.486	0.546	0.614	132.821
	32.940	592-41-6	Hexene-1	0.170	0.185	0.179	46.445
	35.938	13269-52-8	t-Hexene-3	0.272	0.294	0.287	74.454
	36.409	4050-45-7	t-Hexene-2	0.516	0.556	0.543	140.949
	38.243	7688-21-3	c-Hexene-2	0.219	0.234	0.231	59.980
	56.882	14686-14-7	t-Heptene-3	0.017	0.017	0.015	4.552
	110.729	693-61-8	2-Undecene, (E)-	0.072	0.071	0.045	19.459
Iso-Olefins	13.130	563-45-1	3-Methylbutene-1	0.268	0.314	0.338	73.137
	17.175	563-46-2	2-Methylbutene-1	0.538	0.609	0.680	146.981
	20.489	513-35-9	2-Methylbutene-2	1.110	1.235	1.404	303.484
	28.695	691-38-3	4-Methyl-c-pentene-2	0.047	0.051	0.050	12.848
	29.345	674-76-0	4-Methyl-t-pentene-2	0.140	0.153	0.147	38.214
	32.718	763-29-1	2-Methylpentene-1	0.238	0.256	0.251	65.016
	35.140	760-21-4	2-Ethylbutene-1	0.065	0.069	0.068	17.712
	36.902	625-27-4	2-Methylpentene-2	0.361	0.385	0.380	98.710
	37.312	922-62-3	3-Methyl-c-pentene-2	0.276	0.291	0.291	75.389
	39.588	3404-73-7	3,3-Dimethylpentene-1	0.329	0.345	0.297	89.806
	42.037	594-56-9	2,3,3-Trimethylbutene-1	0.011	0.012	0.010	3.132
	46.162	3404-61-3	3-Methylhexene-1	0.013	0.014	0.012	3.496
	46.743	3524-73-0	5-Methylhexene-1	0.051	0.054	0.046	13.935
	48.805	15840-60-5	2-Methyl-c-hexene-3	0.032	0.034	0.029	8.671
	49.801	3404-55-5	4-Methyl-t/c-hexene-2	0.037	0.039	0.033	10.097
	57.236	6094-02-6	2-Methylhexene-1	0.026	0.027	0.023	7.021
	58.116	2738-19-4	2-Methyl-2-hexene	0.006	0.006	0.005	1.526
	70.129		C8 - Diolefin - 1	0.013	0.013	0.011	3.664
	80.617		C9 - IsoOlefin - 1	0.022	0.021	0.017	6.013
	86.220		C9-IsoOlefin-3	0.015	0.015	0.011	4.218
	93.140		C10-IsoOlefin-4	0.005	0.006	0.003	1.444
Naphtheno-Olefir	25.253	142-29-0	Cyclopentene	0.193	0.184	0.251	54.271
	45.339	693-89-0	1-Methylcyclopentene	0.338	0.319	0.365	94.630
	50.667	110-83-8	Cyclohexene	0.036	0.033	0.039	9.790

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphtheno-Olefir							
Di-Olefins	18.213	78-79-5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.617
	20.818	2004-70-8	1t,3-Pentadiene	0.014	0.015	0.018	3.910
Oxygenates	12.745	64-17-5	Ethanol	8.768	8.183	16.875	1029.989
	26.487	71-23-8	n-Propanol	0.190	0.175	0.280	36.331
Unidentified	19.447		Unidentified	0.006	0.007	0.008	2.076
	22.067		Unidentified	0.005	0.005	0.007	1.634
	28.238		Unidentified	0.055	0.054	0.055	18.264
	44.935		Unidentified	0.011	0.011	0.012	3.586
	47.596		Unidentified	0.029	0.031	0.027	9.827
	64.509		Unidentified	0.342	0.351	0.265	114.352
	72.096		Unidentified	0.089	0.091	0.069	29.749
	74.103		Unidentified	0.035	0.033	0.028	11.764
	75.909		Unidentified	0.016	0.016	0.011	5.465
	78.510		Unidentified	0.055	0.055	0.038	18.377
	82.673		Unidentified	0.031	0.034	0.022	10.468
	84.619		Unidentified	0.031	0.031	0.022	10.355
	84.860		Unidentified	0.040	0.038	0.028	13.495
	85.964		Unidentified	0.080	0.081	0.055	26.710
	86.328		Unidentified	0.014	0.015	0.010	4.796
	88.480		Unidentified	0.113	0.121	0.079	37.683
	93.029		Unidentified	0.012	0.011	0.008	4.049
	93.029		Unidentified	0.012	0.013	0.008	4.049
	93.029		Unidentified	0.012	0.009	0.008	4.049
	93.601		Unidentified	0.162	0.165	0.101	54.403
	94.269		Unidentified	0.014	0.010	1.245	4.701
	94.269		Unidentified	0.014	0.015	0.009	4.701
	95.821		Unidentified	0.004	0.004	0.003	1.448
	99.472		Unidentified	0.008	0.008	0.005	2.614
	99.839		Unidentified	0.009	0.010	0.006	3.124
	100.130		Unidentified	0.167	0.123	0.095	55.868
	100.257		Unidentified	0.452	0.448	0.257	151.398
	100.946		Unidentified	0.280	0.294	0.177	93.692
	101.066		Unidentified	0.166	0.166	0.103	55.483
	101.966		Unidentified	0.016	0.014	0.010	5.257
	102.326		Unidentified	0.112	0.096	0.074	37.372
	102.975		Unidentified	0.104	0.103	0.059	34.809
	103.468		Unidentified	0.012	0.010	0.009	4.150
	104.395		Unidentified	0.247	0.212	0.163	82.822
	105.994		Unidentified	0.012	0.011	0.007	3.888
	107.889		Unidentified	0.130	0.128	0.074	43.447
	108.164		Unidentified	0.132	0.132	0.076	44.311
	108.245		Unidentified	0.119	0.118	0.068	39.904
	108.552		Unidentified	0.314	0.311	0.178	105.123
	108.983		Unidentified	0.913	0.766	0.603	305.601

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Components by Group

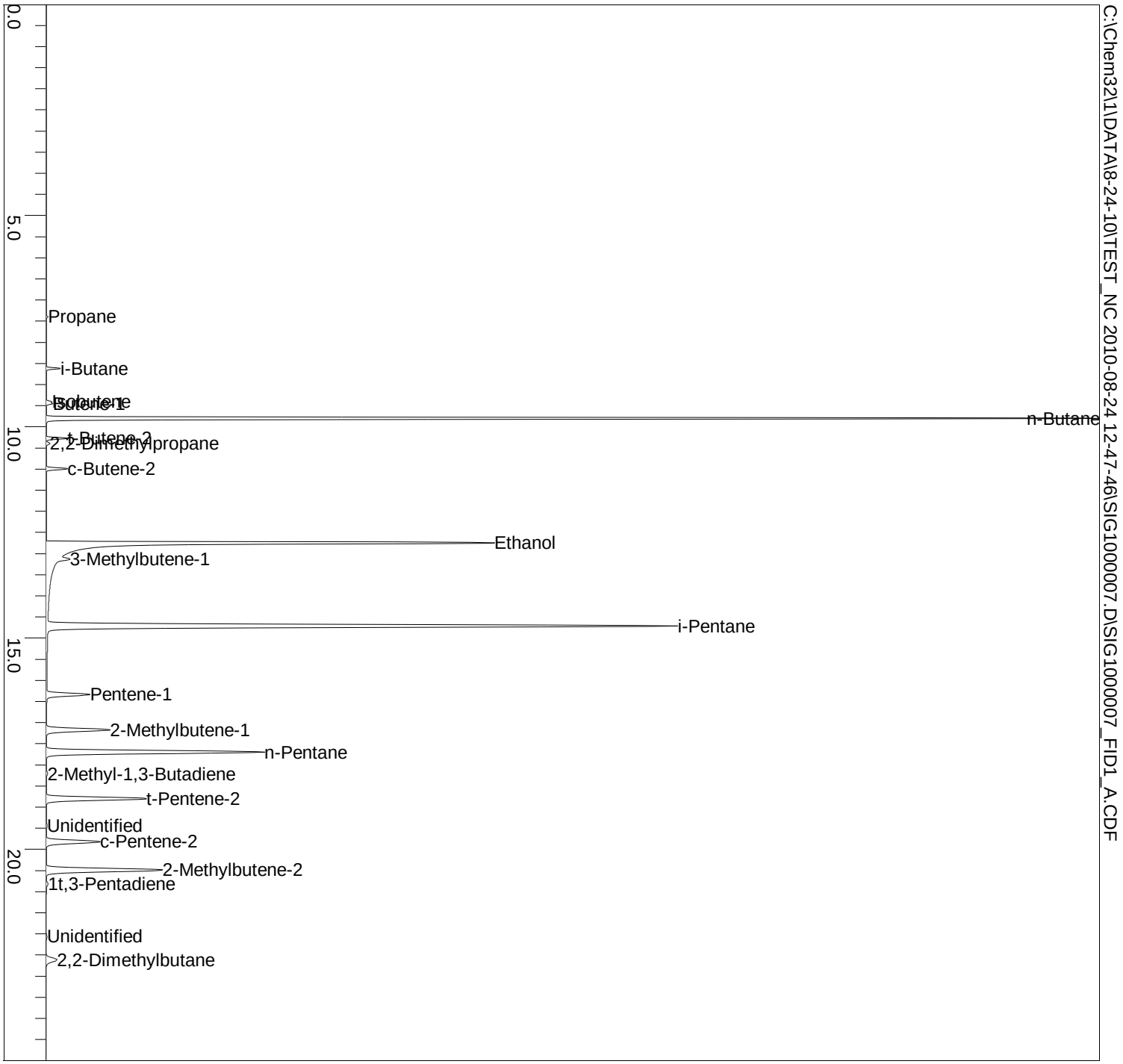
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	109.703		Unidentified	0.064	0.049	0.043	21.367
	110.527		Unidentified	0.033	0.030	0.019	11.146
	110.857		Unidentified	0.156	0.155	0.099	52.275
	111.131		Unidentified	0.136	0.118	0.081	45.609
	111.799		Unidentified	0.077	0.063	0.046	25.634
	112.653		Unidentified	0.014	0.012	0.009	4.778
	112.784		Unidentified	0.021	0.017	0.014	7.016
	113.293		Unidentified	0.034	0.035	0.019	11.521
	113.447		Unidentified	0.013	0.013	0.007	4.355
	113.653		Unidentified	0.062	0.051	0.037	20.761
	114.681		Unidentified	0.028	0.023	0.017	9.459
	114.977		Unidentified	0.012	0.010	0.007	4.058
	116.797		Unidentified	0.012	0.009	0.007	3.973
	116.973		Unidentified	0.005	0.004	0.003	1.612
	126.170		Unidentified	0.005	0.004	0.002	1.621
	126.170		Unidentified	0.005	0.005	0.002	1.621
	129.861		Unidentified	0.003	0.002	0.002	1.025

Plus

Recovery = 100.00

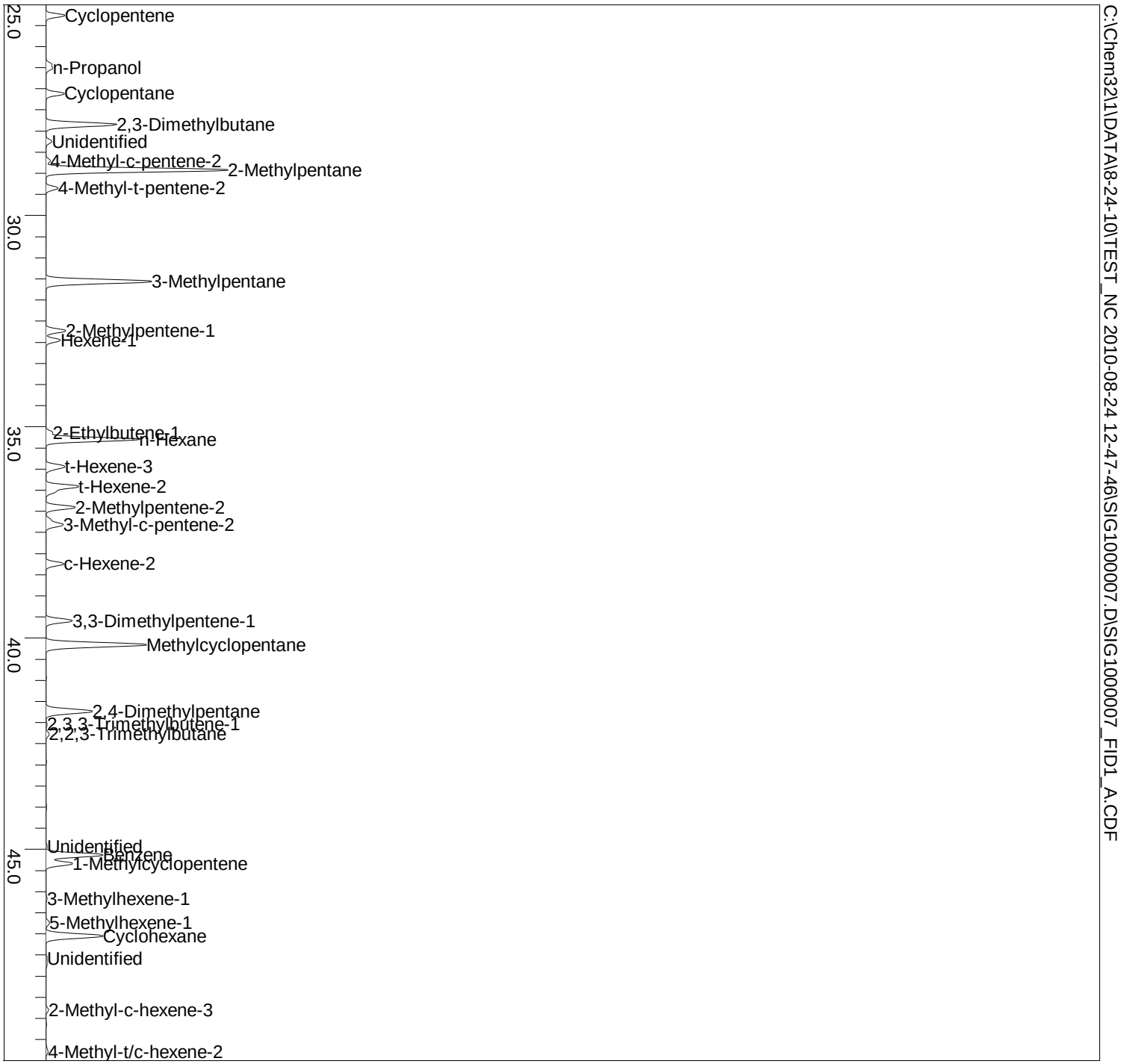
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

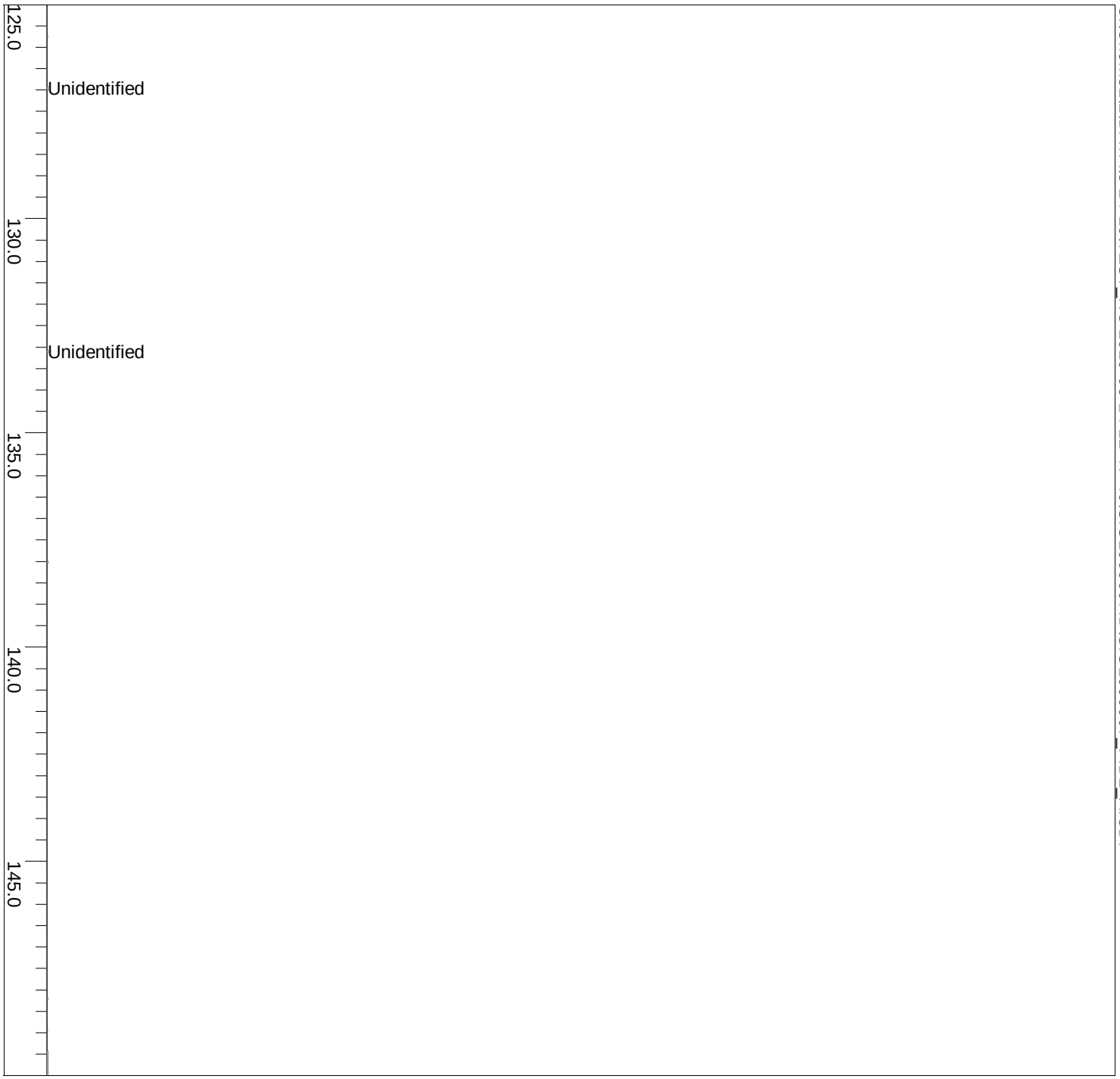
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000007.D\SIG1000007_FID1_A.CDF 24-Aug-10, 03:40:31
Sample: ODDB-91311 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91311
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	8.729	10.455	11.199
I-Paraffins	33.099	36.336	31.006
Aromatics	43.990	38.260	41.128
Mono-Aromatics	42.927	37.407	40.310
Naphthalenes	0.132	0.097	0.098
Naphtheno/Olefino-Benz	0.250	0.212	0.182
Indenes	0.681	0.544	0.538
Naphthenes	5.522	5.473	5.806
Mono-Naphthenes	5.522	5.473	5.806
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.928	7.736	8.677
n-Olefins	3.019	3.458	3.906
Iso-Olefins	3.285	3.670	3.988
Naphtheno-Olefins	0.599	0.582	0.748
Di-Olefins	0.025	0.027	0.035
Oxygenates	0.112	0.106	0.179
Unidentified	1.621	1.634	2.005
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.119	0.116	0.194
C4	2.824	3.680	4.683
C5	11.839	14.117	15.927
C6	11.198	12.147	12.709
C7	22.973	21.095	23.557
C8	31.822	30.516	27.856
C9	10.326	9.865	8.026
C10	6.387	6.004	4.486
C11	0.744	0.701	0.469
C12	0.146	0.124	0.086

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.007	0.011	0.016
	C4	2.583	3.375	4.273
	C5	2.607	3.148	3.474
	C6	1.508	1.729	1.682
	C7	0.876	0.969	0.840
	C8	0.638	0.687	0.537
	C9	0.443	0.467	0.332
	C10	0.057	0.059	0.038
	C11	0.011	0.011	0.007
I-Paraffins	C4	0.054	0.074	0.090
	C5	5.567	6.796	7.419
	C6	4.142	4.765	4.621
	C7	1.860	2.066	1.785
	C8	13.873	14.639	11.678
	C9	4.209	4.480	3.155
	C10	3.000	3.116	2.016
	C11	0.394	0.400	0.242
Mono-Aromatics	C6	0.624	0.537	0.768
	C7	17.346	15.130	18.100
	C8	16.602	14.498	15.035
	C9	5.502	4.776	4.401
	C10	2.395	2.072	1.716
	C11	0.313	0.270	0.203
	C12	0.146	0.124	0.086
Naphthalenes	C10	0.118	0.087	0.088
	C11	0.014	0.011	0.010
Naphtheno/Olefino-Benzs	C10	0.250	0.212	0.182
Indenes	C9	0.122	0.096	0.099
	C10	0.547	0.438	0.431
	C11	0.012	0.009	0.008
Mono-Naphthenes	C5	0.264	0.268	0.362
	C6	2.399	2.387	2.741
	C7	2.135	2.116	2.091
	C8	0.653	0.637	0.560
	C9	0.050	0.045	0.038
	C10	0.021	0.020	0.014

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes				
n-Olefins	C4	0.187	0.232	0.320
	C5	1.604	1.869	2.198
	C6	1.129	1.249	1.289
	C7	0.100	0.108	0.098
Iso-Olefins	C5	1.581	1.819	2.167
	C6	0.991	1.089	1.132
	C7	0.656	0.707	0.643
	C8	0.057	0.055	0.047
Naphtheno-Olefins	C5	0.193	0.189	0.272
	C6	0.406	0.393	0.476
Di-Olefins	C5	0.025	0.027	0.035
Oxygenates	C3	0.112	0.106	0.179

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	22.30	21.82
5%	79.91	79.30
10%	94.11	81.69
15%	121.32	97.04
20%	152.92	138.74
25%	173.34	154.30
30%	208.90	176.97
35%	230.74	210.59
40%	230.84	230.75
45%	230.95	230.87
50%	231.05	230.99
55%	235.77	234.29
60%	238.24	236.99
65%	254.66	241.30
70%	276.24	256.22
75%	280.98	279.06
80%	281.89	281.55
85%	291.84	291.59
90%	324.07	321.56
95%	347.21	336.34
FBP	404.50	401.19

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.390	74-98-6	P3	Propane	0.007	0.011	0.016	1.931
2	8.612	75-28-5	I4	i-Butane	0.054	0.074	0.090	14.889
3	9.405	115-11-7	K4	Isobutene	0.015	0.019	0.025	4.205
4	9.444	106-98-9	K4	Butene-1	0.018	0.023	0.031	5.095
5	9.793	106-97-8	P4	n-Butane	2.583	3.375	4.273	706.418
6	10.268	624-64-6	K4	t-Butene-2	0.071	0.088	0.121	19.989
7	10.390	463-82-1	I5	2,2-Dimethylpropane	0.020	0.026	0.027	5.496
8	10.988	590-18-1	K4	c-Butene-2	0.083	0.102	0.143	23.628
9	13.131	563-45-1	C5	3-Methylbutene-1	0.067	0.081	0.092	19.045
10	14.714	78-78-4	I5	i-Pentane	5.547	6.771	7.392	1527.638
11	16.337	109-67-1	K5	Pentene-1	0.325	0.384	0.446	92.164
12	17.169	563-46-2	C5	2-Methylbutene-1	0.495	0.576	0.679	140.224
13	17.696	109-66-0	P5	n-Pentane	2.607	3.148	3.474	717.875
14	18.207	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.901
15	18.804	646-04-8	K5	t-Pentene-2	0.826	0.964	1.133	234.031
16	19.444		?	Unidentified	0.006	0.007	0.008	1.945
17	19.828	627-20-3	K5	c-Pentene-2	0.452	0.521	0.620	128.015
18	20.489	513-35-9	C5	2-Methylbutene-2	1.018	1.163	1.396	288.432
19	20.825	2004-70-8	E5	1t,3-Pentadiene	0.015	0.016	0.021	4.266
20	22.077		?	Unidentified	0.006	0.006	0.008	1.965
21	22.618	75-83-2	I6	2,2-Dimethylbutane	0.173	0.202	0.193	47.941
22	25.252	142-29-0	B5	Cyclopentene	0.193	0.189	0.272	56.283
23	26.420		?	Unidentified	0.037	0.035	0.059	12.823
24	26.492	71-23-8	X3	n-Propanol	0.112	0.106	0.179	22.154
25	27.105	287-92-3	M5	Cyclopentane	0.264	0.268	0.362	74.721
26	27.837	79-29-8	I6	2,3-Dimethylbutane	0.464	0.530	0.517	128.182
27	28.231		?	Unidentified	0.051	0.052	0.055	17.571
28	28.690	691-38-3	C6	4-Methyl-c-pentene-2	0.043	0.048	0.049	12.156
29	28.909	107-83-5	I6	2-Methylpentane	2.182	2.527	2.435	603.375
30	29.343	674-76-0	C6	4-Methyl-t-pentene-2	0.129	0.145	0.147	36.488
31	31.551	96-14-0	I6	3-Methylpentane	1.323	1.506	1.476	365.693
32	32.728	763-29-1	C6	2-Methylpentene-1	0.222	0.245	0.253	62.795
33	32.942	592-41-6	K6	Hexene-1	0.159	0.178	0.182	45.116
34	35.297	110-54-3	P6	n-Hexane	1.508	1.729	1.682	416.829
35	35.940	13269-52-8	K6	t-Hexene-3	0.260	0.288	0.297	73.558
36	36.412	4050-45-7	K6	t-Hexene-2	0.498	0.551	0.569	141.009
37	36.908	625-27-4	C6	2-Methylpentene-2	0.337	0.369	0.385	95.505
38	37.313	922-62-3	C6	3-Methyl-c-pentene-2	0.260	0.282	0.297	73.741
39	38.244	7688-21-3	K6	c-Hexene-2	0.212	0.232	0.242	60.014
40	39.591	3404-73-7	C7	3,3-Dimethylpentene-1	0.309	0.333	0.303	87.618
41	40.161	96-37-7	M6	Methylcyclopentane	1.457	1.472	1.664	412.630
42	41.741	108-08-7	I7	2,4-Dimethylpentane	0.224	0.252	0.215	62.201
43	42.042	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.014	3.992

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.279	464-06-2	I7	2,2,3-Trimethylbutane	0.025	0.027	0.024	6.945
45	44.937		?	Unidentified	0.012	0.012	0.014	4.097
46	45.140	71-42-3	Q6	Benzene	0.624	0.537	0.768	190.375
47	45.344	693-89-0	B6	1-Methylcyclopentene	0.362	0.351	0.424	105.055
48	46.164	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.015	4.435
49	46.748	3524-73-0	C7	5-Methylhexene-1	0.057	0.062	0.056	16.240
50	47.060	110-82-7	M6	Cyclohexane	0.942	0.915	1.076	266.886
51	47.596		?	Unidentified	0.034	0.037	0.034	11.948
52	48.806	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.044	0.039	11.419
53	49.800	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.055	0.050	14.377
54	50.196	591-76-4	I7	2-Methylhexane	0.978	1.089	0.938	271.379
55	50.674	110-83-8	B6	Cyclohexene	0.044	0.041	0.052	12.514
56	52.032	589-34-4	I7	3-Methylhexane	0.633	0.697	0.608	175.756
57	52.885	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.203	0.205	0.199	57.537
58	53.474	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.163	0.165	0.159	46.110
59	54.094	822-50-4	M7	1t,2-Dimethylcyclopentane	0.241	0.243	0.236	68.257
60	54.398		C7	C7 - Iso-Olefin - 2	0.022	0.023	0.022	6.324
61	54.684	540-84-1	I8	2,2,4-Trimethylpentane	0.250	0.273	0.211	69.577
62	55.028	592-76-7	K7	Heptene-1	0.030	0.032	0.029	8.363
63	56.362	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.014	4.003
64	56.884	14686-14-7	K7	t-Heptene-3	0.032	0.035	0.032	9.165
65	57.246	6094-02-6	C7	2-Methylhexene-1	0.058	0.063	0.056	16.332
66	57.622	142-82-5	P7	n-Heptane	0.876	0.969	0.840	243.113
67	57.837	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.023	6.742
68	58.117	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.026	7.433
69	58.361	3899-36-3	C7	3-Methyl-t-hexene-3	0.020	0.022	0.019	5.618
70	58.745	14686-13-6	K7	t-Heptene-2	0.015	0.016	0.014	4.121
71	59.206	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.018	5.091
72	59.648	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.015	4.321
73	60.432	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.013	3.802
74	61.069	108-87-2	M7	Methylcyclohexane	1.455	1.430	1.425	412.203
75	62.015	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.041	0.041	0.035	11.584
76	62.423	590-73-8	I8	2,2-Dimethylhexane	0.033	0.036	0.028	9.183
77	63.861	1640-89-7	M7	Ethylcyclopentane	0.055	0.055	0.054	15.678
78	64.513	564-02-3	I8	2,2,3-Trimethylpentane	0.422	0.446	0.355	117.429
79	64.757	592-13-2	I8	2,5-Dimethylhexane	0.781	0.852	0.657	217.244
80	65.096	589-43-5	I8	2,4-Dimethylhexane	0.702	0.758	0.591	195.293
81	65.930	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.040	0.040	0.034	11.390
82	66.335	563-16-6	I8	3,3-Dimethylhexane	0.025	0.027	0.021	7.092
83	67.464	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.035	0.035	0.030	9.996
84	68.129	565-75-3	I8	2,3,4-Trimethylpentane	4.456	4.687	3.751	1239.462
85	68.718	108-88-3	Q7	Toluene	17.346	15.130	18.100	5233.747
86	68.837	560-21-4	I8	2,3,3-Trimethylpentane	4.966	5.172	4.180	1381.299

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	70.138		C8	C8 - Diolefin - 1	0.015	0.015	0.013	4.307
88	70.439	584-94-1	I8	2,3-Dimethylhexane	1.244	1.321	1.047	346.086
89	71.704	592-27-8	I8	2-Methylheptane	0.330	0.357	0.277	91.676
90	71.963	589-53-7	I8	4-Methylheptane	0.240	0.258	0.202	66.823
91	72.099		?	Unidentified	0.110	0.115	0.092	38.113
92	72.867		M8	1,3-dimethyl-t-cyclohexane	0.225	0.221	0.193	63.858
93	73.025	589-81-1	I8	3-Methylheptane	0.282	0.302	0.237	78.425
94	73.210	619-99-8	I8	3-Ethylhexane	0.141	0.150	0.119	39.352
95	74.105		?	Unidentified	0.036	0.035	0.031	12.411
96	74.944	3522-94-9	I9	2,2,5-Trimethylhexane	2.875	3.075	2.155	801.339
97	75.274		M8	3c-Ethylmethylcyclopentane	0.013	0.013	0.011	3.696
98	75.495		M8	3t-Ethylmethylcyclopentane	0.018	0.018	0.015	5.120
99	75.911		?	Unidentified	0.021	0.021	0.018	7.347
100	76.197	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.103	0.100	0.088	29.111
101	77.569	111-65-9	P8	n-Octane	0.638	0.687	0.537	177.379
102	78.511		?	Unidentified	0.079	0.077	0.068	27.364
103	80.059	1069-53-0	I9	2,3,5-Trimethylhexane	0.512	0.536	0.384	142.627
104	80.618		C8	C9 - IsoOlefin - 1	0.021	0.021	0.018	6.075
105	81.057	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.019	0.018	0.016	5.270
106	81.235	1071-26-7	I9	2,4-Dimethylheptane	0.096	0.102	0.072	26.839
107	81.870	1678-91-7	M8	Ethylcyclohexane	0.148	0.143	0.127	41.964
108	82.197	1072-05-5	I9	2,6-Dimethylheptane	0.152	0.162	0.114	42.338
109	82.675		?	Unidentified	0.032	0.031	0.027	11.121
110	83.135		I9	2,5-Dimethylheptane	0.303	0.320	0.227	84.432
111	83.309	926-82-9	I9	3,5-Dimethylheptane	0.032	0.034	0.024	8.993
112	84.459	100-41-4	Q8	Ethylbenzene	2.932	2.558	2.656	878.098
113	84.623		?	Unidentified	0.039	0.040	0.030	13.534
114	84.866		?	Unidentified	0.049	0.047	0.037	16.845
115	85.717	108-38-3	Q8	m-Xylene	7.862	6.880	7.121	2354.451
116	85.858	106-42-3	Q8	p-Xylene	3.682	3.234	3.334	1102.488
117	86.224		C8	C9-IsoOlefin-3	0.020	0.020	0.015	5.719
118	86.330		?	Unidentified	0.019	0.019	0.015	6.658
119	87.020	2216-34-4	I9	4-Methyloctane	0.062	0.065	0.046	17.238
120	87.152	3221-61-2	I9	2-Methyloctane	0.084	0.089	0.063	23.458
121	88.016	2216-33-3	I9	3-Methyloctane	0.092	0.097	0.069	25.706
122	88.484		?	Unidentified	0.198	0.219	0.151	68.672
123	88.667	95-47-6	Q8	o-Xylene	2.125	1.826	1.925	636.409
124	89.069		I10	C10 - IsoParaffin - 1	0.626	0.650	0.423	174.741
125	89.490	3728-57-2	M8	Cyclopentane, 1-methyl-2-propyl-	0.010	0.009	0.009	3.090
126	89.644		M9	trans-1,3-Diethylcyclopentane	0.026	0.022	0.020	7.669
127	89.916	14720-74-2	I10	2,2,4-trimethylheptane	0.439	0.457	0.297	122.677
128	91.480	111-84-2	P9	n-Nonane	0.443	0.467	0.332	123.591
129	92.067	4926-90-3	M9	1,1-Methylethylcyclohexane	0.025	0.023	0.019	7.022

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	92.838	98-82-8	Q9	i-Propylbenzene	0.038	0.033	0.030	11.256
131	93.029		?	Unidentified	0.022	0.021	0.017	7.692
132	93.029		?	Unidentified	0.022	0.024	0.015	7.692
133	93.029		?	Unidentified	0.022	0.017	0.015	7.692
134	93.601		?	Unidentified	0.128	0.134	0.087	44.490
135	93.824	15869-87-1	I10	2,2-Dimethyloctane	0.045	0.047	0.030	12.529
136	94.269		?	Unidentified	0.008	0.006	0.778	2.807
137	94.269		?	Unidentified	0.008	0.009	0.006	2.807
138	94.625	15869-89-3	I10	2,5-Dimethyloctane	0.068	0.070	0.046	18.921
139	95.101	2040-95-1	I10	2,7-Dimethyloctane	0.025	0.026	0.017	7.109
140	95.266	2051-30-1	I10	2,4-Dimethyloctane	0.103	0.108	0.070	28.899
141	95.661		I10	2,6-Dimethyloctane	0.038	0.039	0.026	10.618
142	96.305	103-65-1	Q9	n-Propylbenzene	0.307	0.269	0.246	91.310
143	97.156	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.153	1.008	0.922	342.957
144	97.389	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.535	0.470	0.428	159.175
145	98.015	108-67-8	Q9	1,3,5-Trimethylbenzene	0.722	0.631	0.578	214.872
146	98.685	17301-94-8	I10	4-Methylnonane	0.014	0.015	0.010	4.015
147	98.891		I10	2,2,6-Trimethyloctane	1.445	1.504	0.976	403.485
148	99.099	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.398	0.342	0.319	118.476
149	99.662	5911-04-6	I10	3-Methylnonane	0.018	0.019	0.012	5.094
150	100.128		?	Unidentified	0.079	0.060	0.049	27.488
151	100.254		?	Unidentified	0.216	0.220	0.133	75.093
152	100.478		I11	C11-Isoparaffin-2	0.115	0.117	0.071	32.107
153	100.739	95-63-6	Q9	1,2,4-Trimethylbenzene	2.029	1.752	1.623	603.617
154	100.942		?	Unidentified	0.128	0.138	0.088	44.457
155	101.063		?	Unidentified	0.076	0.078	0.051	26.411
156	101.320	1678-98-4	M10	i-Butylcyclohexane	0.021	0.020	0.014	5.975
157	102.108	17302-01-1	I10	3-Ethyl-3-methylheptane	0.178	0.181	0.109	49.656
158	102.461	538-93-2	Q10	i-Butylbenzene	0.183	0.162	0.131	54.023
159	102.652	124-18-5	P10	n-Decane	0.057	0.059	0.038	15.850
160	102.975		?	Unidentified	0.040	0.041	0.025	13.917
161	103.611	526-73-8	Q9	1,2,3-Trimethylbenzene	0.320	0.271	0.256	95.211
162	103.986	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.023	0.020	0.017	6.854
163	104.192		I11	C11 Isoparaffin-4	0.018	0.018	0.011	4.995
164	104.396		?	Unidentified	0.079	0.069	0.056	27.282
165	104.802		J9	Indan	0.122	0.096	0.099	36.951
166	105.430		J10	Indene	0.384	0.301	0.312	116.086
167	106.146		I11	C11-Isoparaffin-7	0.116	0.118	0.071	32.444
168	106.332	141-93-5	Q10	1,3-Diethylbenzene	0.041	0.036	0.029	12.074
169	106.617	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.432	0.379	0.309	127.788
170	106.948	105-05-5	Q10	1,4-Diethylbenzene	0.171	0.150	0.122	50.580
171	107.174	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.149	0.128	0.107	44.095
172	107.439	135-01-3	Q10	1,2-Diethylbenzene	0.025	0.021	0.018	7.329

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	107.886		?	Unidentified	0.017	0.017	0.010	5.741
174	108.025	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.053	0.046	0.038	15.777
175	108.364		I11	C11- Isoparaffin-11	0.145	0.147	0.089	40.533
176	108.549		?	Unidentified	0.030	0.030	0.018	10.360
177	108.876	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.128	0.110	0.092	37.874
178	109.038	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.184	0.158	0.132	54.362
179	109.196		J10	2-Methylindan	0.018	0.014	0.013	5.371
180	109.544	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.296	0.256	0.212	87.465
181	110.097	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.034	0.029	0.024	9.934
182	111.012		Q11	1-Methyl-4-t-butylbenzene	0.018	0.016	0.012	5.316
183	111.222	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.082	0.069	0.059	24.230
184	111.527	1120-21-4	P11	n-Undecane	0.011	0.011	0.007	2.979
185	112.163		Q10	1,2,4,5-Tetramethylbenzene	0.247	0.211	0.177	73.163
186	112.429	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.349	0.297	0.250	103.312
187	113.288		?	Unidentified	0.008	0.008	0.005	2.737
188	113.581		Q11	C11 - Aromatic - 3	0.034	0.029	0.022	10.028
189	113.763	874-35-1	H10	5-Methylindan	0.107	0.091	0.077	31.523
190	113.903		Q12	1,2-Di-i-propylbenzene	0.039	0.034	0.023	11.589
191	114.117	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.058	0.049	0.038	17.138
192	114.274		Q11	C11 - Aromatic - 4	0.030	0.026	0.020	8.867
193	114.514	824-22-6	J10	4-Methylindan	0.145	0.123	0.106	42.951
194	114.765	824-63-5	H10	2-Methylindan	0.143	0.122	0.104	42.465
195	114.978		?	Unidentified	0.010	0.008	0.006	3.345
196	115.091	538-68-1	Q11	n-Pentylbenzene	0.013	0.011	0.009	3.937
197	115.320		Q11	tert-Pentylbenzene	0.059	0.050	0.038	17.315
198	115.633	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.026	0.022	0.017	7.799
199	115.743		Q11	C11 - Aromatic - 7	0.033	0.029	0.021	9.683
200	116.205	100-18-5	Q12	1,4-Di-i-propylbenzene	0.049	0.042	0.029	14.472
201	116.632	91-20-3	G10	Naphthalene	0.118	0.087	0.088	36.509
202	117.090		J11	1,1-Dimethyl Indane	0.012	0.009	0.008	3.651
203	117.431	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.013	0.011	0.008	3.857
204	117.737		Q12	1,3-Di-n-propylbenzene	0.044	0.037	0.026	12.870
205	117.847		Q11	C11 - Aromatic - 11	0.025	0.022	0.016	7.224
206	118.402	17851-27-2	Q11	1-ethyl-2,4,5-trimethylbenzen	0.017	0.015	0.011	4.960
207	123.282	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.006	2.848
208	124.149	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.530

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.390	74-98-6	Propane	0.007	0.011	0.016	1.931
	9.793	106-97-8	n-Butane	2.583	3.375	4.273	706.418
	17.696	109-66-0	n-Pentane	2.607	3.148	3.474	717.875
	35.297	110-54-3	n-Hexane	1.508	1.729	1.682	416.829
	57.622	142-82-5	n-Heptane	0.876	0.969	0.840	243.113
	77.569	111-65-9	n-Octane	0.638	0.687	0.537	177.379
	91.480	111-84-2	n-Nonane	0.443	0.467	0.332	123.591
	102.652	124-18-5	n-Decane	0.057	0.059	0.038	15.850
	111.527	1120-21-4	n-Undecane	0.011	0.011	0.007	2.979
I-Paraffins	8.612	75-28-5	i-Butane	0.054	0.074	0.090	14.889
	10.390	463-82-1	2,2-Dimethylpropane	0.020	0.026	0.027	5.496
	14.714	78-78-4	i-Pentane	5.547	6.771	7.392	1527.638
	22.618	75-83-2	2,2-Dimethylbutane	0.173	0.202	0.193	47.941
	27.837	79-29-8	2,3-Dimethylbutane	0.464	0.530	0.517	128.182
	28.909	107-83-5	2-Methylpentane	2.182	2.527	2.435	603.375
	31.551	96-14-0	3-Methylpentane	1.323	1.506	1.476	365.693
	41.741	108-08-7	2,4-Dimethylpentane	0.224	0.252	0.215	62.201
	42.279	464-06-2	2,2,3-Trimethylbutane	0.025	0.027	0.024	6.945
	50.196	591-76-4	2-Methylhexane	0.978	1.089	0.938	271.379
	52.032	589-34-4	3-Methylhexane	0.633	0.697	0.608	175.756
	54.684	540-84-1	2,2,4-Trimethylpentane	0.250	0.273	0.211	69.577
	62.423	590-73-8	2,2-Dimethylhexane	0.033	0.036	0.028	9.183
	64.513	564-02-3	2,2,3-Trimethylpentane	0.422	0.446	0.355	117.429
	64.757	592-13-2	2,5-Dimethylhexane	0.781	0.852	0.657	217.244
	65.096	589-43-5	2,4-Dimethylhexane	0.702	0.758	0.591	195.293
	66.335	563-16-6	3,3-Dimethylhexane	0.025	0.027	0.021	7.092
	68.129	565-75-3	2,3,4-Trimethylpentane	4.456	4.687	3.751	1239.462
	68.837	560-21-4	2,3,3-Trimethylpentane	4.966	5.172	4.180	1381.299
	70.439	584-94-1	2,3-Dimethylhexane	1.244	1.321	1.047	346.086
	71.704	592-27-8	2-Methylheptane	0.330	0.357	0.277	91.676
	71.963	589-53-7	4-Methylheptane	0.240	0.258	0.202	66.823
	73.025	589-81-1	3-Methylheptane	0.282	0.302	0.237	78.425
	73.210	619-99-8	3-Ethylhexane	0.141	0.150	0.119	39.352
	74.944	3522-94-9	2,2,5-Trimethylhexane	2.875	3.075	2.155	801.339
	80.059	1069-53-0	2,3,5-Trimethylhexane	0.512	0.536	0.384	142.627
	81.235	1071-26-7	2,4-Dimethylheptane	0.096	0.102	0.072	26.839
	82.197	1072-05-5	2,6-Dimethylheptane	0.152	0.162	0.114	42.338
	83.135		2,5-Dimethylheptane	0.303	0.320	0.227	84.432
	83.309	926-82-9	3,5-Dimethylheptane	0.032	0.034	0.024	8.993
	87.020	2216-34-4	4-Methyloctane	0.062	0.065	0.046	17.238
	87.152	3221-61-2	2-Methyloctane	0.084	0.089	0.063	23.458
	88.016	2216-33-3	3-Methyloctane	0.092	0.097	0.069	25.706
	89.069		C10 - IsoParaffin - 1	0.626	0.650	0.423	174.741
	89.91614720-74-2		2,2,4-trimethylheptane	0.439	0.457	0.297	122.677
	93.82415869-87-1		2,2-Dimethyloctane	0.045	0.047	0.030	12.529
	94.62515869-89-3		2,5-Dimethyloctane	0.068	0.070	0.046	18.921

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	95.101	2040-95-1	2,7-Dimethyloctane	0.025	0.026	0.017	7.109
	95.266	2051-30-1	2,4-Dimethyloctane	0.103	0.108	0.070	28.899
	95.661		2,6-Dimethyloctane	0.038	0.039	0.026	10.618
	98.685	17301-94-8	4-Methylnonane	0.014	0.015	0.010	4.015
	98.891		2,2,6-Trimethyloctane	1.445	1.504	0.976	403.485
	99.662	5911-04-6	3-Methylnonane	0.018	0.019	0.012	5.094
	100.478		C11-Isoparaffin-2	0.115	0.117	0.071	32.107
	102.108	17302-01-1	3-Ethyl-3-methylheptane	0.178	0.181	0.109	49.656
	104.192		C11 Isoparaffin-4	0.018	0.018	0.011	4.995
	106.146		C11-Isoparaffin-7	0.116	0.118	0.071	32.444
	108.364		C11- Isoparaffin-11	0.145	0.147	0.089	40.533
Aromatics							
Mono-Aromatics	45.140	71-42-3	Benzene	0.624	0.537	0.768	190.375
	68.718	108-88-3	Toluene	17.346	15.130	18.100	5233.747
	84.459	100-41-4	Ethylbenzene	2.932	2.558	2.656	878.098
	85.717	108-38-3	m-Xylene	7.862	6.880	7.121	2354.451
	85.858	106-42-3	p-Xylene	3.682	3.234	3.334	1102.488
	88.667	95-47-6	o-Xylene	2.125	1.826	1.925	636.409
	92.838	98-82-8	i-Propylbenzene	0.038	0.033	0.030	11.256
	96.305	103-65-1	n-Propylbenzene	0.307	0.269	0.246	91.310
	97.156	620-14-4	1-Methyl-3-ethylbenzene	1.153	1.008	0.922	342.957
	97.389	622-96-8	1-Methyl-4-ethylbenzene	0.535	0.470	0.428	159.175
	98.015	108-67-8	1,3,5-Trimethylbenzene	0.722	0.631	0.578	214.872
	99.099	611-14-3	1-Methyl-2-ethylbenzene	0.398	0.342	0.319	118.476
	100.739	95-63-6	1,2,4-Trimethylbenzene	2.029	1.752	1.623	603.617
	102.461	538-93-2	i-Butylbenzene	0.183	0.162	0.131	54.023
	103.611	526-73-8	1,2,3-Trimethylbenzene	0.320	0.271	0.256	95.211
	103.986	535-77-3	1-Methyl-3-i-propylbenzene	0.023	0.020	0.017	6.854
	106.332	141-93-5	1,3-Diethylbenzene	0.041	0.036	0.029	12.074
	106.617	1074-43-7	1-Methyl-3-n-propylbenzene	0.432	0.379	0.309	127.788
	106.948	105-05-5	1,4-Diethylbenzene	0.171	0.150	0.122	50.580
	107.174	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.149	0.128	0.107	44.095
	107.439	135-01-3	1,2-Diethylbenzene	0.025	0.021	0.018	7.329
	108.025	1074-17-5	1-Methyl-2-n-propylbenzene	0.053	0.046	0.038	15.777
	108.876	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.128	0.110	0.092	37.874
	109.038	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.184	0.158	0.132	54.362
	109.544	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.296	0.256	0.212	87.465
	110.097	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.034	0.029	0.024	9.934
	111.012		1-Methyl-4-t-butylbenzene	0.018	0.016	0.012	5.316
	111.222	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.082	0.069	0.059	24.230
	112.163		1,2,4,5-Tetramethylbenzene	0.247	0.211	0.177	73.163
	112.429	527-53-7	1,2,3,5-Tetramethylbenzene	0.349	0.297	0.250	103.312
	113.581		C11 - Aromatic - 3	0.034	0.029	0.022	10.028
	113.903		1,2-Di-i-propylbenzene	0.039	0.034	0.023	11.589
	114.117	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.058	0.049	0.038	17.138
	114.274		C11 - Aromatic - 4	0.030	0.026	0.020	8.867

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.091	538-68-1	n-Pentylbenzene	0.013	0.011	0.009	3.937
	115.320		tert-Pentylbenzene	0.059	0.050	0.038	17.315
	115.633	577-55-9	1-Methyl-2-n-butylbenzene	0.026	0.022	0.017	7.799
	115.743		C11 - Aromatic - 7	0.033	0.029	0.021	9.683
	116.205	100-18-5	1,4-Di-i-propylbenzene	0.049	0.042	0.029	14.472
	117.431	7364-19-4	1t-Butyl-4-ethylbenzene	0.013	0.011	0.008	3.857
	117.737		1,3-Di-n-propylbenzene	0.044	0.037	0.026	12.870
	117.847		C11 - Aromatic - 11	0.025	0.022	0.016	7.224
	118.402	17851-27-2	1-ethyl-2,4,5-trimethylbenzen	0.017	0.015	0.011	4.960
Naphthalenes	116.632	91-20-3	Naphthalene	0.118	0.087	0.088	36.509
	123.282	91-57-6	2-Methylnaphthalene	0.009	0.007	0.006	2.848
	124.149	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.530
Naphtheno/Olefir	113.763	874-35-1	5-Methylindan	0.107	0.091	0.077	31.523
	114.765	824-63-5	2-Methylindan	0.143	0.122	0.104	42.465
Indenes	104.802		Indan	0.122	0.096	0.099	36.951
	105.430		Indene	0.384	0.301	0.312	116.086
	109.196		2-Methylindan	0.018	0.014	0.013	5.371
	114.514	824-22-6	4-Methylindan	0.145	0.123	0.106	42.951
	117.090		1,1-Dimethyl Indane	0.012	0.009	0.008	3.651
Naphthenes							
Mono-Naphthene	27.105	287-92-3	Cyclopentane	0.264	0.268	0.362	74.721
	40.161	96-37-7	Methylcyclopentane	1.457	1.472	1.664	412.630
	47.060	110-82-7	Cyclohexane	0.942	0.915	1.076	266.886
	52.885	1759-58-6	1t,3-Dimethylcyclopentane	0.203	0.205	0.199	57.537
	53.474	2532-58-3	1c,3-Dimethylcyclopentane	0.163	0.165	0.159	46.110
	54.094	822-50-4	1t,2-Dimethylcyclopentane	0.241	0.243	0.236	68.257
	59.206	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.018	5.091
	61.069	108-87-2	Methylcyclohexane	1.455	1.430	1.425	412.203
	62.015	4516-69-2	1,1,3-Trimethylcyclopentane	0.041	0.041	0.035	11.584
	63.861	1640-89-7	Ethylcyclopentane	0.055	0.055	0.054	15.678
	65.930	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.040	0.040	0.034	11.390
	67.464	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.035	0.035	0.030	9.996
	72.867		1,3-dimethyl-t-cyclohexane	0.225	0.221	0.193	63.858
	75.274		3c-Ethylmethylcyclopentane	0.013	0.013	0.011	3.696
	75.495		3t-Ethylmethylcyclopentane	0.018	0.018	0.015	5.120
	76.197	2207-03-6	1t,3-Dimethylcyclohexane	0.103	0.100	0.088	29.111
	81.057	2207-01-4	1c,2-Dimethylcyclohexane	0.019	0.018	0.016	5.270
	81.870	1678-91-7	Ethylcyclohexane	0.148	0.143	0.127	41.964
	89.490	3728-57-2	Cyclopentane, 1-methyl-2-propyl-	0.010	0.009	0.009	3.090
	89.644		trans-1,3-Diethylcyclopentane	0.026	0.022	0.020	7.669
	92.067	4926-90-3	1,1-Methylethylcyclohexane	0.025	0.023	0.019	7.022
	101.320	1678-98-4	i-Butylcyclohexane	0.021	0.020	0.014	5.975
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.405	115-11-7	Isobutene	0.015	0.019	0.025	4.205

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.ADF 24-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	9.444	106-98-9	Butene-1	0.018	0.023	0.031	5.095
	10.268	624-64-6	t-Butene-2	0.071	0.088	0.121	19.989
	10.988	590-18-1	c-Butene-2	0.083	0.102	0.143	23.628
	16.337	109-67-1	Pentene-1	0.325	0.384	0.446	92.164
	18.804	646-04-8	t-Pentene-2	0.826	0.964	1.133	234.031
	19.828	627-20-3	c-Pentene-2	0.452	0.521	0.620	128.015
	32.942	592-41-6	Hexene-1	0.159	0.178	0.182	45.116
	35.940	13269-52-8	t-Hexene-3	0.260	0.288	0.297	73.558
	36.412	4050-45-7	t-Hexene-2	0.498	0.551	0.569	141.009
	38.244	7688-21-3	c-Hexene-2	0.212	0.232	0.242	60.014
	55.028	592-76-7	Heptene-1	0.030	0.032	0.029	8.363
	56.884	14686-14-7	t-Heptene-3	0.032	0.035	0.032	9.165
	57.837	7642-10-6	c-Heptene-3	0.024	0.026	0.023	6.742
	58.745	14686-13-6	t-Heptene-2	0.015	0.016	0.014	4.121
Iso-Olefins	13.131	563-45-1	3-Methylbutene-1	0.067	0.081	0.092	19.045
	17.169	563-46-2	2-Methylbutene-1	0.495	0.576	0.679	140.224
	20.489	513-35-9	2-Methylbutene-2	1.018	1.163	1.396	288.432
	28.690	691-38-3	4-Methyl-c-pentene-2	0.043	0.048	0.049	12.156
	29.343	674-76-0	4-Methyl-t-pentene-2	0.129	0.145	0.147	36.488
	32.728	763-29-1	2-Methylpentene-1	0.222	0.245	0.253	62.795
	36.908	625-27-4	2-Methylpentene-2	0.337	0.369	0.385	95.505
	37.313	922-62-3	3-Methyl-c-pentene-2	0.260	0.282	0.297	73.741
	39.591	3404-73-7	3,3-Dimethylpentene-1	0.309	0.333	0.303	87.618
	42.042	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.014	3.992
	46.164	3404-61-3	3-Methylhexene-1	0.016	0.017	0.015	4.435
	46.748	3524-73-0	5-Methylhexene-1	0.057	0.062	0.056	16.240
	48.806	15840-60-5	2-Methyl-c-hexene-3	0.040	0.044	0.039	11.419
	49.800	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.055	0.050	14.377
	54.398		C7 - Iso-Olefin - 2	0.022	0.023	0.022	6.324
	56.362	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.014	4.003
	57.246	6094-02-6	2-Methylhexene-1	0.058	0.063	0.056	16.332
	58.117	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.026	7.433
	58.361	3899-36-3	3-Methyl-t-hexene-3	0.020	0.022	0.019	5.618
	59.648	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.015	4.321
	60.432	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.013	3.802
	70.138		C8 - Diolefin - 1	0.015	0.015	0.013	4.307
	80.618		C9 - IsoOlefin - 1	0.021	0.021	0.018	6.075
	86.224		C9-IsoOlefin-3	0.020	0.020	0.015	5.719
Naphtheno-Olefir	25.252	142-29-0	Cyclopentene	0.193	0.189	0.272	56.283
	45.344	693-89-0	1-Methylcyclopentene	0.362	0.351	0.424	105.055
	50.674	110-83-8	Cyclohexene	0.044	0.041	0.052	12.514
Di-Olefins	18.207	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.901
	20.825	2004-70-8	1t,3-Pentadiene	0.015	0.016	0.021	4.266
Oxygenates	26.492	71-23-8	n-Propanol	0.112	0.106	0.179	22.154

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Components by Group

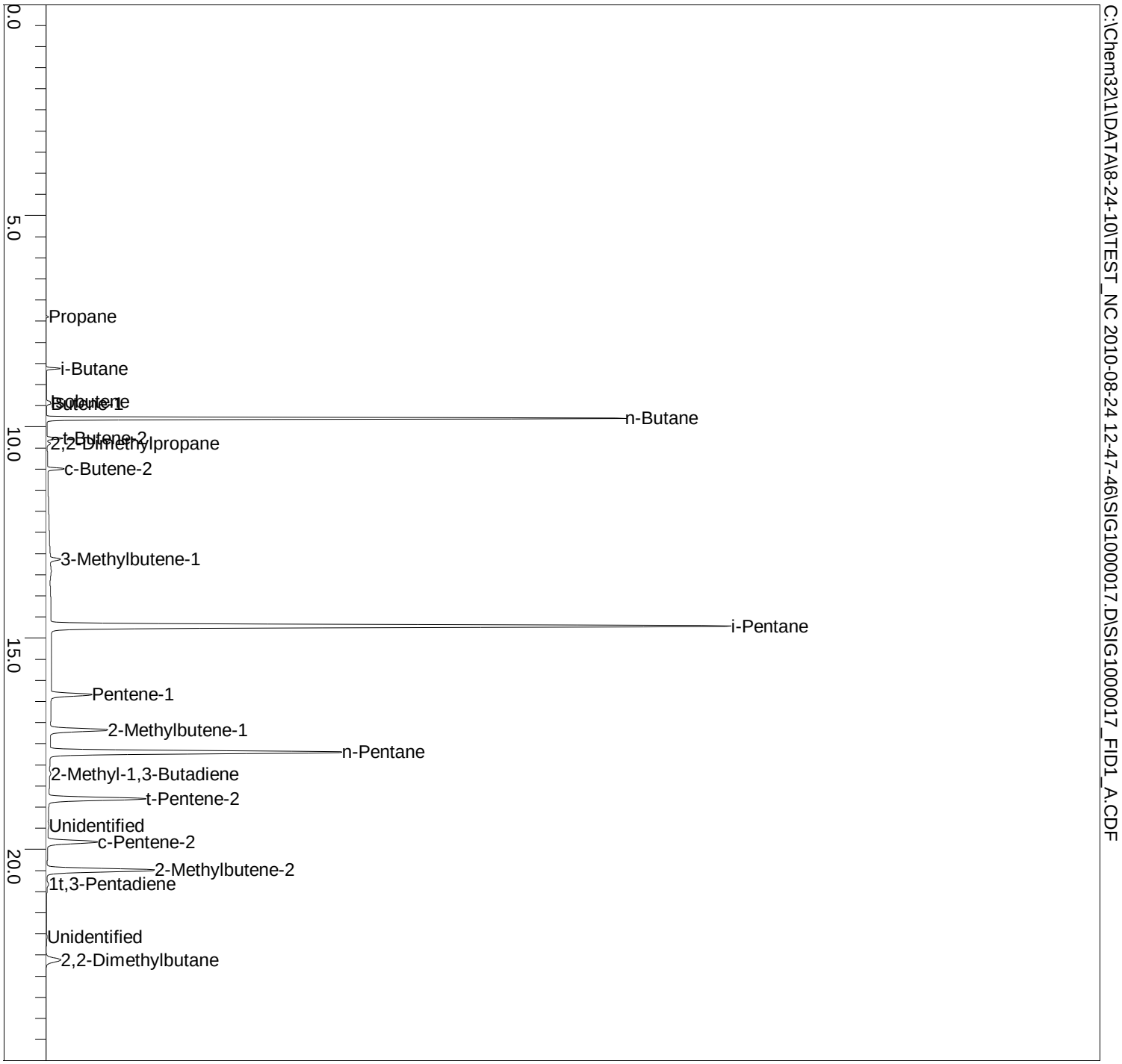
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Oxygenates							
Unidentified	19.444		Unidentified	0.006	0.007	0.008	1.945
	22.077		Unidentified	0.006	0.006	0.008	1.965
	26.420		Unidentified	0.037	0.035	0.059	12.823
	28.231		Unidentified	0.051	0.052	0.055	17.571
	44.937		Unidentified	0.012	0.012	0.014	4.097
	47.596		Unidentified	0.034	0.037	0.034	11.948
	72.099		Unidentified	0.110	0.115	0.092	38.113
	74.105		Unidentified	0.036	0.035	0.031	12.411
	75.911		Unidentified	0.021	0.021	0.018	7.347
	78.511		Unidentified	0.079	0.077	0.068	27.364
	82.675		Unidentified	0.032	0.031	0.027	11.121
	84.623		Unidentified	0.039	0.040	0.030	13.534
	84.866		Unidentified	0.049	0.047	0.037	16.845
	86.330		Unidentified	0.019	0.019	0.015	6.658
	88.484		Unidentified	0.198	0.219	0.151	68.672
	93.029		Unidentified	0.022	0.021	0.017	7.692
	93.029		Unidentified	0.022	0.024	0.015	7.692
	93.029		Unidentified	0.022	0.017	0.015	7.692
	93.601		Unidentified	0.128	0.134	0.087	44.490
	94.269		Unidentified	0.008	0.006	0.778	2.807
	94.269		Unidentified	0.008	0.009	0.006	2.807
	100.128		Unidentified	0.079	0.060	0.049	27.488
	100.254		Unidentified	0.216	0.220	0.133	75.093
	100.942		Unidentified	0.128	0.138	0.088	44.457
	101.063		Unidentified	0.076	0.078	0.051	26.411
	102.975		Unidentified	0.040	0.041	0.025	13.917
	104.396		Unidentified	0.079	0.069	0.056	27.282
	107.886		Unidentified	0.017	0.017	0.010	5.741
	108.549		Unidentified	0.030	0.030	0.018	10.360
	113.288		Unidentified	0.008	0.008	0.005	2.737
	114.978		Unidentified	0.010	0.008	0.006	3.345

Plus

Recovery = 100.00

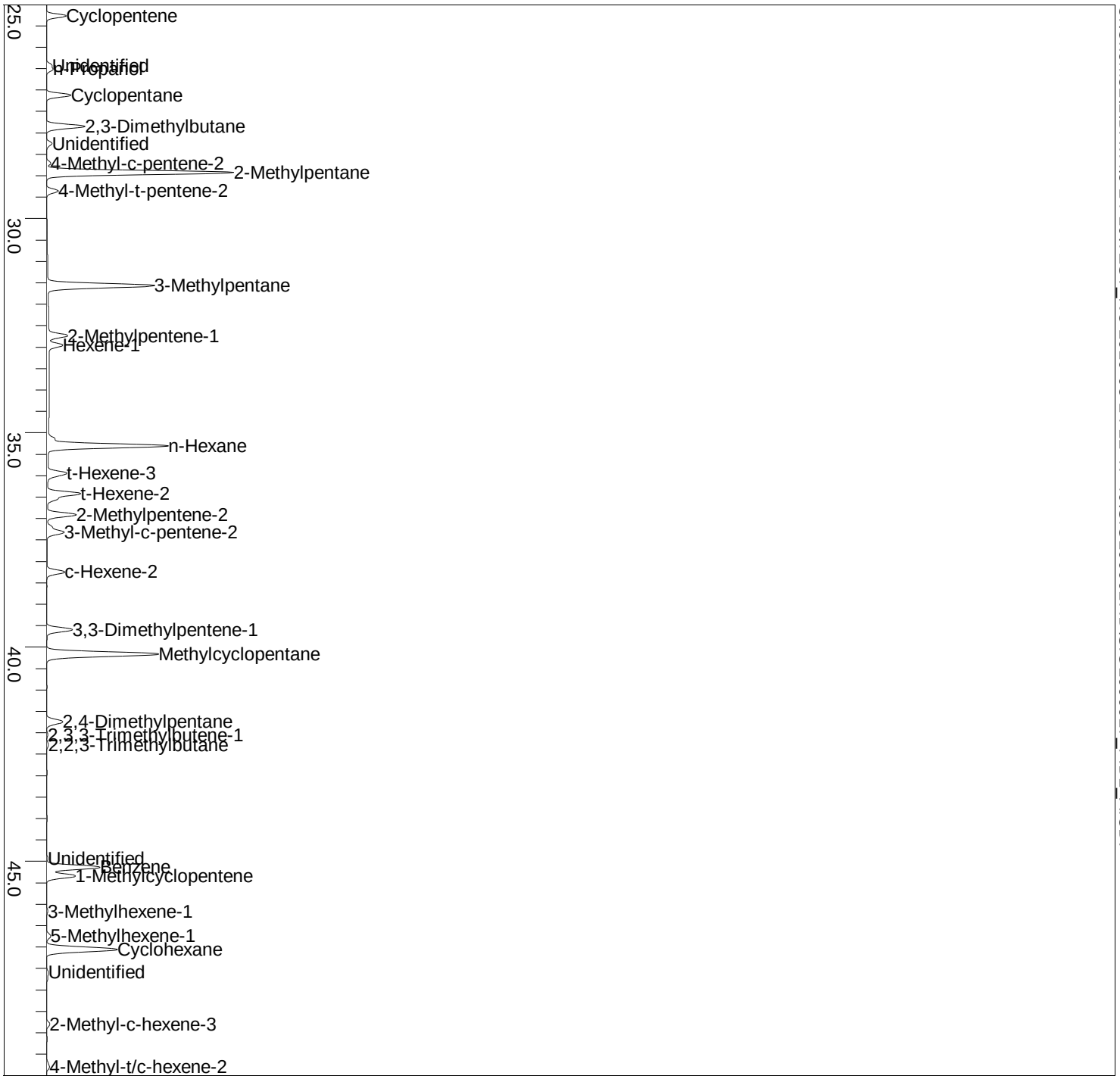
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1_A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram

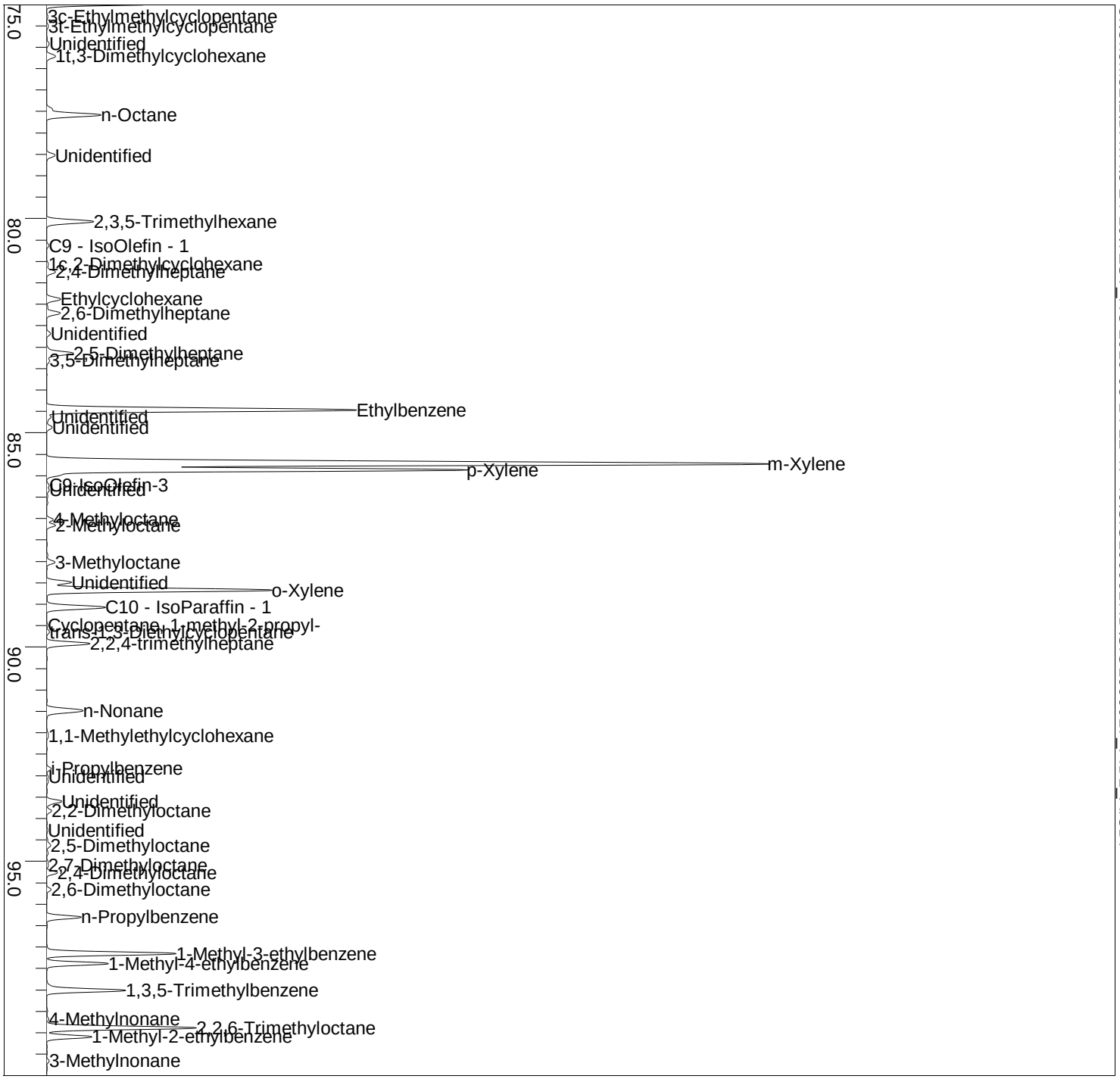


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1_A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram

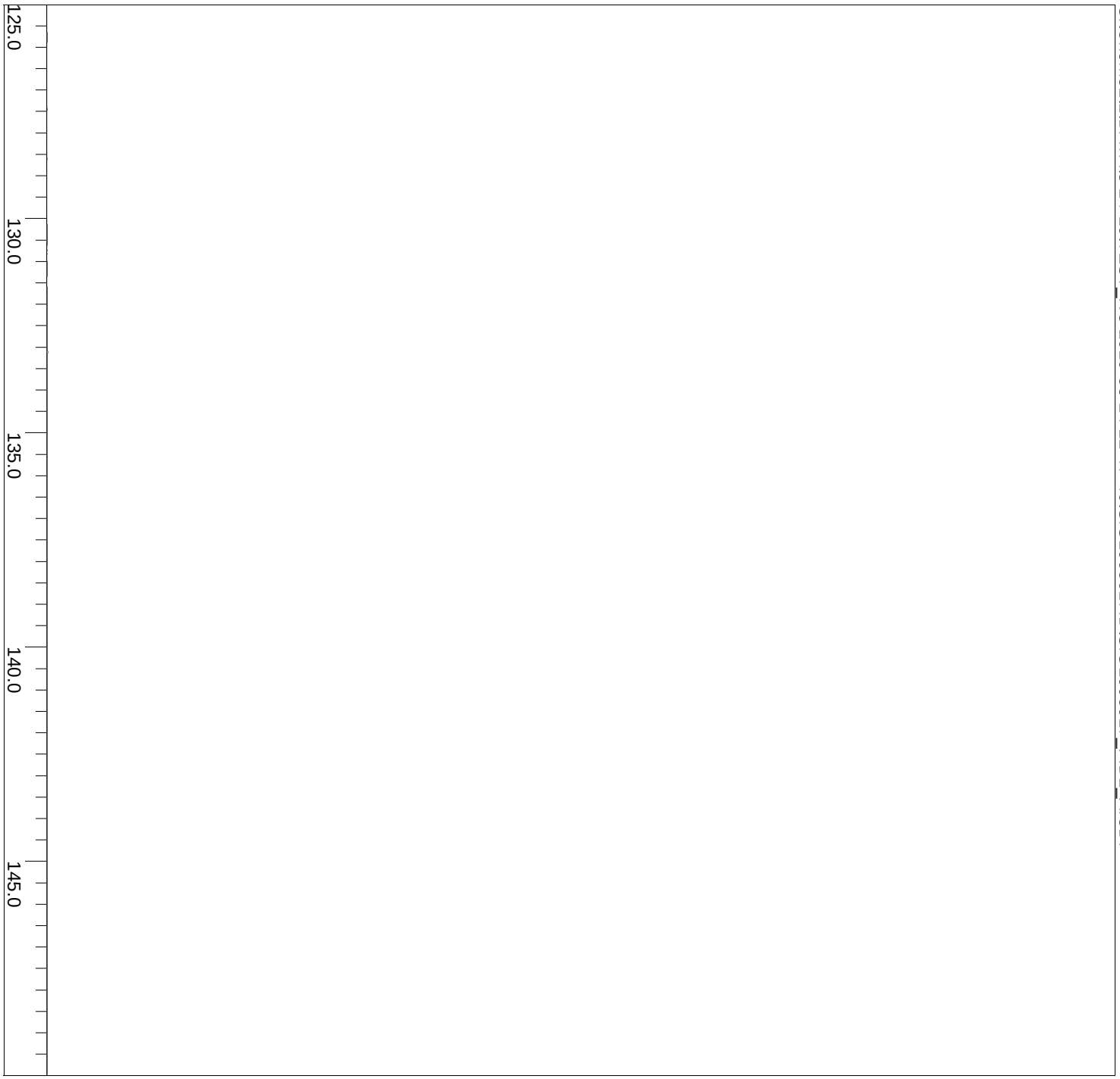


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000017.D\SIG1000017_FID1_A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91312 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91312
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	6.856	7.845	7.555
I-Paraffins	41.626	44.836	35.885
Aromatics	24.375	20.489	19.484
Mono-Aromatics	21.929	18.602	17.708
Naphthalenes	0.104	0.075	0.070
Naphtheno/Olefino-Benz	0.194	0.161	0.129
Indenes	2.148	1.652	1.577
Naphthenes	3.309	3.216	3.407
Mono-Naphthenes	3.309	3.216	3.407
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	8.753	9.551	9.904
n-Olefins	4.609	5.098	5.225
Iso-Olefins	3.506	3.844	3.944
Naphtheno-Olefins	0.613	0.580	0.702
Di-Olefins	0.026	0.028	0.033
Oxygenates	9.688	9.057	18.459
Unidentified	5.393	5.006	5.305
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	9.506	8.889	18.193
C3	0.182	0.168	0.267
C4	1.266	1.602	1.931
C5	8.230	9.515	10.198
C6	24.737	26.860	25.571
C7	9.511	9.020	8.796
C8	19.219	19.034	15.155
C9	7.222	6.401	5.228
C10	11.881	10.772	7.732
C11	2.677	2.581	1.529
C12	0.178	0.153	0.096

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.ch 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	1.053	1.342	1.597
	C5	0.830	0.978	1.014
	C6	4.467	4.998	4.571
	C7	0.210	0.226	0.184
	C8	0.025	0.026	0.019
	C9	0.107	0.110	0.073
	C10	0.060	0.060	0.037
	C11	0.105	0.104	0.059
I-Paraffins	C4	0.021	0.028	0.032
	C5	3.608	4.296	4.409
	C6	12.698	14.234	12.992
	C7	2.835	3.081	2.494
	C8	13.722	14.348	10.591
	C9	1.439	1.496	0.989
	C10	5.219	5.287	3.205
	C11	2.046	2.029	1.154
	C12	0.038	0.037	0.019
Mono-Aromatics	C6	0.830	0.697	0.937
	C7	5.273	4.487	5.046
	C8	5.472	4.660	4.545
	C9	5.488	4.651	4.026
	C10	4.320	3.652	2.838
	C11	0.405	0.339	0.241
	C12	0.140	0.116	0.076
Naphthalenes	C10	0.086	0.062	0.059
	C11	0.018	0.013	0.011
Naphtheno/Olefino-Benzs	C10	0.194	0.161	0.129
Indenes	C9	0.184	0.141	0.137
	C10	1.936	1.489	1.423
	C11	0.028	0.021	0.017
Mono-Naphthenes	C5	0.134	0.133	0.168
	C6	2.711	2.632	2.840
	C7	0.399	0.390	0.358
	C9	0.004	0.004	0.003
	C10	0.061	0.057	0.039
n-Olefins	C4	0.192	0.232	0.302

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.637	1.862	2.058
	C6	2.601	2.820	2.725
	C7	0.104	0.110	0.094
	C11	0.075	0.074	0.047
Iso-Olefins	C5	1.798	2.030	2.261
	C6	1.013	1.085	1.061
	C7	0.690	0.725	0.620
	C10	0.004	0.004	0.003
Naphtheno-Olefins	C5	0.197	0.188	0.255
	C6	0.416	0.392	0.447
Di-Olefins	C5	0.026	0.028	0.033
Oxygenates	C2	9.506	8.889	18.193
	C3	0.182	0.168	0.267

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	25.07	24.01
5%	81.73	80.99
10%	133.69	100.24
15%	139.15	138.19
20%	144.63	140.31
25%	153.05	145.52
30%	155.55	154.43
35%	172.46	157.59
40%	173.02	172.60
45%	177.21	173.21
50%	209.56	193.46
55%	228.46	209.90
60%	230.79	229.87
65%	237.35	232.45
70%	277.56	239.32
75%	303.39	281.69
80%	331.87	322.74
85%	336.04	332.54
90%	358.69	352.22
95%	363.20	363.20
FBP	402.18	393.64

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.611	75-28-5	I4	i-Butane	0.021	0.028	0.032	5.507
2	9.404	115-11-7	K4	Isobutene	0.015	0.019	0.024	4.181
3	9.442	106-98-9	K4	Butene-1	0.019	0.023	0.029	5.037
4	9.791	106-97-8	P4	n-Butane	1.053	1.342	1.597	275.365
5	10.265	624-64-6	K4	t-Butene-2	0.073	0.089	0.114	19.651
6	10.387	463-82-1	I5	2,2-Dimethylpropane	0.008	0.010	0.010	2.212
7	10.986	590-18-1	K4	c-Butene-2	0.086	0.102	0.135	23.193
8	12.745	64-17-5	X2	Ethanol	9.506	8.889	18.193	1107.028
9	13.121	563-45-1	C5	3-Methylbutene-1	0.258	0.303	0.324	69.877
10	14.703	78-78-4	I5	i-Pentane	3.599	4.286	4.398	948.107
11	16.329	109-67-1	K5	Pentene-1	0.332	0.382	0.417	89.856
12	17.170	563-46-2	C5	2-Methylbutene-1	0.504	0.571	0.633	136.420
13	17.690	109-66-0	P5	n-Pentane	0.830	0.978	1.014	218.613
14	18.200	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.910
15	18.796	646-04-8	K5	t-Pentene-2	0.843	0.959	1.059	228.284
16	19.820	627-20-3	K5	c-Pentene-2	0.463	0.521	0.581	125.316
17	20.489	513-35-9	C5	2-Methylbutene-2	1.037	1.155	1.304	280.960
18	20.818	2004-70-8	E5	1t,3-Pentadiene	0.015	0.017	0.020	4.247
19	22.065		?	Unidentified	0.006	0.006	0.008	1.914
20	22.615	75-83-2	I6	2,2-Dimethylbutane	0.101	0.115	0.103	26.713
21	25.246	142-29-0	B5	Cyclopentene	0.197	0.188	0.255	54.978
22	26.486	71-23-8	X3	n-Propanol	0.182	0.168	0.267	34.488
23	27.097	287-92-3	M5	Cyclopentane	0.134	0.133	0.168	36.306
24	27.829	79-29-8	I6	2,3-Dimethylbutane	1.479	1.649	1.513	391.141
25	28.236		?	Unidentified	0.050	0.050	0.050	16.756
26	28.688	691-38-3	C6	4-Methyl-c-pentene-2	0.043	0.047	0.045	11.722
27	28.927	107-83-5	I6	2-Methylpentane	6.385	7.213	6.533	1688.583
28	29.333	674-76-0	C6	4-Methyl-t-pentene-2	0.131	0.144	0.137	35.501
29	31.568	96-14-0	I6	3-Methylpentane	4.733	5.257	4.843	1251.770
30	32.719	763-29-1	C6	2-Methylpentene-1	0.224	0.241	0.235	60.708
31	32.943	592-41-6	K6	Hexene-1	1.605	1.747	1.682	434.942
32	35.306	110-54-3	P6	n-Hexane	4.467	4.998	4.571	1181.419
33	35.934	13269-52-8	K6	t-Hexene-3	0.269	0.291	0.282	72.948
34	36.403	4050-45-7	K6	t-Hexene-2	0.510	0.551	0.534	138.223
35	36.896	625-27-4	C6	2-Methylpentene-2	0.345	0.368	0.361	93.457
36	37.312	922-62-3	C6	3-Methyl-c-pentene-2	0.269	0.285	0.282	72.981
37	38.230	7688-21-3	K6	c-Hexene-2	0.216	0.231	0.227	58.623
38	39.580	3404-73-7	C7	3,3-Dimethylpentene-1	0.318	0.334	0.286	86.204
39	40.153	96-37-7	M6	Methylcyclopentane	1.672	1.648	1.751	452.929
40	41.731	108-08-7	I7	2,4-Dimethylpentane	0.857	0.940	0.754	227.620
41	42.032	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.014	0.012	3.663
42	42.272	464-06-2	I7	2,2,3-Trimethylbutane	0.072	0.077	0.063	19.045
43	44.929		?	Unidentified	0.012	0.012	0.013	3.921

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	45.131	71-42-3	Q6	Benzene	0.830	0.697	0.937	242.286
45	45.334	693-89-0	B6	1-Methylcyclopentene	0.370	0.350	0.397	102.706
46	46.159	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.014	4.268
47	46.742	3524-73-0	C7	5-Methylhexene-1	0.063	0.067	0.057	17.127
48	47.050	110-82-7	M6	Cyclohexane	1.039	0.985	1.088	281.457
49	47.593		?	Unidentified	0.035	0.037	0.032	11.652
50	48.800	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.037	11.222
51	49.146	3769-23-1	C7	4-Methylhexene-1	0.011	0.011	0.010	2.927
52	49.791	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.053	0.055	0.047	14.243
53	50.196	591-76-4	I7	2-Methylhexane	1.344	1.461	1.182	356.780
54	50.669	110-83-8	B6	Cyclohexene	0.046	0.042	0.049	12.422
55	52.025	589-34-4	I7	3-Methylhexane	0.562	0.603	0.494	149.213
56	52.879	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.116	0.115	0.104	31.489
57	53.466	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.080	0.080	0.072	21.787
58	54.096	822-50-4	M7	1t,2-Dimethylcyclopentane	0.094	0.093	0.085	25.565
59	54.418		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.021	6.216
60	54.725	540-84-1	I8	2,2,4-Trimethylpentane	5.835	6.222	4.504	1552.483
61	55.019	592-76-7	K7	Heptene-1	0.030	0.032	0.027	8.231
62	56.355	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.013	3.864
63	56.878	14686-14-7	K7	t-Heptene-3	0.033	0.034	0.029	8.876
64	57.239	6094-02-6	C7	2-Methylhexene-1	0.058	0.062	0.052	15.835
65	57.611	142-82-5	P7	n-Heptane	0.210	0.226	0.184	55.631
66	57.831	7642-10-6	K7	c-Heptene-3	0.025	0.026	0.023	6.797
67	58.110	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.027	0.024	7.119
68	58.355	3899-36-3	C7	3-Methyl-t-hexene-3	0.020	0.021	0.018	5.432
69	58.740	14686-13-6	K7	t-Heptene-2	0.016	0.017	0.014	4.353
70	59.200	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.019	0.018	0.017	5.035
71	59.641	20710-38-8	C7	3-Methyl-t-hexene-2	0.016	0.016	0.014	4.306
72	60.425	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.017	0.017	0.015	4.615
73	61.051	108-87-2	M7	Methylcyclohexane	0.089	0.085	0.080	24.121
74	63.108		?	Unidentified	0.019	0.020	0.015	6.363
75	64.507	564-02-3	I8	2,2,3-Trimethylpentane	0.324	0.334	0.250	86.182
76	64.750	592-13-2	I8	2,5-Dimethylhexane	0.740	0.787	0.571	196.892
77	65.089	589-43-5	I8	2,4-Dimethylhexane	0.711	0.749	0.549	189.097
78	68.091	565-75-3	I8	2,3,4-Trimethylpentane	2.613	2.681	2.017	695.175
79	68.621	108-88-3	Q7	Toluene	5.273	4.487	5.046	1521.901
80	68.764	560-21-4	I8	2,3,3-Trimethylpentane	2.646	2.689	2.042	704.029
81	70.428	584-94-1	I8	2,3-Dimethylhexane	0.691	0.716	0.533	183.818
82	71.695	592-27-8	I8	2-Methylheptane	0.043	0.045	0.033	11.357
83	71.961	589-53-7	I8	4-Methylheptane	0.077	0.081	0.060	20.531
84	72.092		?	Unidentified	0.054	0.055	0.041	17.834
85	73.020	589-81-1	I8	3-Methylheptane	0.042	0.044	0.032	11.085
86	74.926	3522-94-9	I9	2,2,5-Trimethylhexane	1.122	1.170	0.771	299.057

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	75.907		?	Unidentified	0.009	0.008	0.006	2.826
88	77.563	111-65-9	P8	n-Octane	0.025	0.026	0.019	6.608
89	78.506		?	Unidentified	0.026	0.026	0.018	8.529
90	80.054	1069-53-0	I9	2,3,5-Trimethylhexane	0.176	0.180	0.121	46.915
91	81.233	1071-26-7	I9	2,4-Dimethylheptane	0.027	0.028	0.019	7.264
92	82.194	1072-05-5	I9	2,6-Dimethylheptane	0.030	0.031	0.020	7.894
93	83.128		I9	2,5-Dimethylheptane	0.077	0.080	0.053	20.613
94	84.440	100-41-4	Q8	Ethylbenzene	0.982	0.835	0.815	281.186
95	84.617		?	Unidentified	0.012	0.012	0.008	3.921
96	84.859		?	Unidentified	0.010	0.009	0.007	3.248
97	85.669	108-38-3	Q8	m-Xylene	2.519	2.151	2.092	721.507
98	85.817	106-42-3	Q8	p-Xylene	1.160	0.994	0.963	332.176
99	85.963		?	Unidentified	0.026	0.026	0.018	8.624
100	88.011	2216-33-3	I9	3-Methyloctane	0.007	0.007	0.005	1.752
101	88.479		?	Unidentified	0.048	0.052	0.034	15.974
102	88.652	95-47-6	Q8	o-Xylene	0.812	0.681	0.674	232.555
103	89.067		I10	C10 - IsoParaffin - 1	0.172	0.174	0.107	45.911
104	89.913	14720-74-2	I10	2,2,4-trimethylheptane	0.122	0.123	0.075	32.507
105	91.460	111-84-2	P9	n-Nonane	0.107	0.110	0.073	28.498
106	92.085		?	Unidentified	0.011	0.010	0.007	3.546
107	92.838	98-82-8	Q9	i-Propylbenzene	0.030	0.026	0.022	8.569
108	93.028		?	Unidentified	0.011	0.010	0.008	3.580
109	93.028		?	Unidentified	0.011	0.011	0.007	3.580
110	93.028		?	Unidentified	0.011	0.008	0.007	3.580
111	93.138	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.004	0.004	0.003	1.142
112	93.138		C10	C10-IsoOlefin-4	0.004	0.004	0.003	1.142
113	93.138		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.142
114	93.602		?	Unidentified	0.159	0.162	0.099	52.853
115	93.825	15869-87-1	I10	2,2-Dimethyloctane	0.055	0.056	0.034	14.762
116	94.267		?	Unidentified	0.022	0.016	1.949	7.338
117	94.267		?	Unidentified	0.022	0.023	0.014	7.338
118	94.487		?	Unidentified	0.021	0.019	0.015	6.923
119	94.625	15869-89-3	I10	2,5-Dimethyloctane	0.092	0.092	0.057	24.444
120	95.019		?	Unidentified	0.021	0.021	0.013	6.923
121	95.104	2040-95-1	I10	2,7-Dimethyloctane	0.026	0.026	0.016	6.899
122	95.268	2051-30-1	I10	2,4-Dimethyloctane	0.243	0.246	0.151	64.889
123	95.661		I10	2,6-Dimethyloctane	0.069	0.070	0.043	18.544
124	96.306	103-65-1	Q9	n-Propylbenzene	0.331	0.284	0.243	94.310
125	97.155	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.193	1.018	0.875	339.465
126	97.389	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.543	0.465	0.399	154.616
127	98.015	108-67-8	Q9	1,3,5-Trimethylbenzene	0.758	0.646	0.556	215.659
128	98.690	17301-94-8	I10	4-Methylnonane	0.013	0.013	0.008	3.465
129	98.907		I10	2,2,6-Trimethyloctane	3.876	3.937	2.402	1035.316

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	99.100	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.395	0.331	0.290	112.335
131	99.475		?	Unidentified	0.012	0.012	0.007	3.902
132	99.665	5911-04-6	I10	3-Methylnonane	0.019	0.019	0.012	5.104
133	99.841		?	Unidentified	0.011	0.011	0.007	3.552
134	100.131		?	Unidentified	0.222	0.164	0.125	73.829
135	100.258		?	Unidentified	0.622	0.617	0.351	206.582
136	100.481		I11	C11-Isoparaffin-2	0.329	0.326	0.185	87.844
137	100.740	95-63-6	Q9	1,2,4-Trimethylbenzene	2.000	1.685	1.467	569.076
138	100.946		?	Unidentified	0.372	0.391	0.234	123.449
139	101.068		?	Unidentified	0.220	0.222	0.137	73.129
140	101.324	1678-98-4	M10	i-Butylcyclohexane	0.059	0.055	0.037	16.027
141	101.969		?	Unidentified	0.025	0.023	0.016	8.214
142	102.112	17302-01-1	I10	3-Ethyl-3-methylheptane	0.533	0.529	0.301	142.528
143	102.323		?	Unidentified	0.140	0.121	0.092	46.622
144	102.465		?	Unidentified	0.331	0.286	0.217	109.800
145	102.660	124-18-5	P10	n-Decane	0.060	0.060	0.037	15.982
146	102.976		?	Unidentified	0.146	0.145	0.082	48.425
147	103.468		?	Unidentified	0.017	0.014	0.013	5.658
148	103.614	526-73-8	Q9	1,2,3-Trimethylbenzene	0.238	0.196	0.174	67.684
149	103.977	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.039	0.033	0.025	10.974
150	104.193		I11	C11 Isoparaffin-4	0.062	0.061	0.035	16.566
151	104.398		?	Unidentified	0.325	0.280	0.213	107.836
152	104.808		J9	Indan	0.184	0.141	0.137	53.261
153	105.061		I11	C11-Isoparaffin-5	0.027	0.027	0.015	7.346
154	105.442		J10	Indene	1.660	1.270	1.238	480.056
155	105.856		M10	n-ButylCyclohexane	0.002	0.002	0.001	0.589
156	105.995		?	Unidentified	0.013	0.012	0.008	4.456
157	106.156		I11	C11-Isoparaffin-7	0.601	0.596	0.339	160.585
158	106.336	141-93-5	Q10	1,3-Diethylbenzene	0.025	0.022	0.017	7.189
159	106.638	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.731	1.484	1.137	490.089
160	106.904	105-05-5	Q10	1,4-Diethylbenzene	0.439	0.376	0.288	124.232
161	107.177	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.102	0.085	0.067	28.836
162	107.423	135-01-3	Q10	1,2-Diethylbenzene	0.128	0.107	0.084	36.211
163	107.890		?	Unidentified	0.140	0.139	0.079	46.418
164	108.027	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.046	0.039	0.031	13.154
165	108.164		?	Unidentified	0.138	0.137	0.079	45.652
166	108.245		?	Unidentified	0.126	0.125	0.071	41.797
167	108.370		I11	C11- Isoparaffin-11	1.028	1.019	0.580	274.780
168	108.550		?	Unidentified	0.328	0.326	0.185	109.027
169	108.983		?	Unidentified	0.928	0.781	0.610	308.045
170	109.206		J10	2-Methylindan	0.153	0.117	0.102	44.354
171	109.544	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.345	0.291	0.227	97.622
172	109.703		?	Unidentified	0.066	0.050	0.044	21.863

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	110.102	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.834	0.691	0.548	236.002
174	110.528		?	Unidentified	0.034	0.031	0.019	11.232
175	110.730	693-61-8	K11	2-Undecene, (E)-	0.075	0.074	0.047	19.997
176	110.858		?	Unidentified	0.161	0.160	0.101	53.348
177	111.131		?	Unidentified	0.143	0.124	0.085	47.335
178	111.214	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.070	0.058	0.046	19.869
179	111.531	1120-21-4	P11	n-Undecane	0.105	0.104	0.059	28.170
180	111.687	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.114	0.095	0.068	32.259
181	111.798		?	Unidentified	0.080	0.066	0.048	26.517
182	112.164		Q10	1,2,4,5-Tetramethylbenzene	0.242	0.201	0.159	68.488
183	112.430	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.319	0.264	0.209	90.269
184	112.654		?	Unidentified	0.015	0.012	0.009	4.881
185	112.784		?	Unidentified	0.022	0.018	0.015	7.391
186	112.966		I12	C12 - IsoParaffin - 1	0.030	0.030	0.016	8.132
187	113.294		?	Unidentified	0.036	0.036	0.019	11.991
188	113.448		?	Unidentified	0.014	0.014	0.007	4.649
189	113.585		Q11	C11 - Aromatic - 3	0.029	0.024	0.017	8.230
190	113.654		?	Unidentified	0.040	0.033	0.024	13.292
191	113.761	874-35-1	H10	5-Methylindan	0.097	0.080	0.065	27.430
192	113.901		Q12	1,2-Di-i-propylbenzene	0.043	0.036	0.023	12.053
193	114.117	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.058	0.048	0.034	16.342
194	114.293		Q11	C11 - Aromatic - 4	0.037	0.030	0.022	10.358
195	114.514	824-22-6	J10	4-Methylindan	0.123	0.102	0.082	34.770
196	114.682		?	Unidentified	0.028	0.023	0.017	9.294
197	114.765	824-63-5	H10	2-Methylindan	0.097	0.081	0.065	27.522
198	114.978		?	Unidentified	0.012	0.010	0.007	4.092
199	115.090	538-68-1	Q11	n-Pentylbenzene	0.014	0.012	0.009	4.060
200	115.320		Q11	tert-Pentylbenzene	0.053	0.044	0.032	15.033
201	115.633	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.027	0.022	0.016	7.536
202	115.744		Q11	C11 - Aromatic - 7	0.042	0.036	0.025	11.771
203	116.093		I12	C12 - IsoParaffin - 4	0.007	0.007	0.004	2.022
204	116.206	100-18-5	Q12	1,4-Di-i-propylbenzene	0.048	0.040	0.026	13.409
205	116.635	91-20-3	G10	Naphthalene	0.086	0.062	0.059	25.500
206	116.797		J11	4,7-Dimethyl Indane	0.016	0.013	0.010	4.756
207	116.972		?	Unidentified	0.006	0.005	0.003	1.841
208	117.080		J11	1,1-Dimethyl Indane	0.011	0.009	0.007	3.301
209	117.432	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.015	0.013	0.008	4.263
210	117.735		Q12	1,3-Di-n-propylbenzene	0.034	0.028	0.019	9.625
211	117.847		Q11	C11 - Aromatic - 11	0.018	0.016	0.011	5.154
212	118.402		Q11	C11 - Aromatic - 12	0.012	0.011	0.007	3.456
213	123.281	91-57-6	G11	2-Methylnaphthalene	0.012	0.009	0.007	3.554
214	124.145	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.616
215	125.444		?	Unidentified	0.003	0.003	0.002	1.118

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	126.172		?	Unidentified	0.006	0.005	0.003	2.120
217	126.172		?	Unidentified	0.006	0.005	0.003	2.120
218	126.172		?	Unidentified	0.006	0.006	0.003	2.120
219	129.864		?	Unidentified	0.003	0.003	0.002	1.106

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	9.791	106-97-8	n-Butane	1.053	1.342	1.597	275.365
	17.690	109-66-0	n-Pentane	0.830	0.978	1.014	218.613
	35.306	110-54-3	n-Hexane	4.467	4.998	4.571	1181.419
	57.611	142-82-5	n-Heptane	0.210	0.226	0.184	55.631
	77.563	111-65-9	n-Octane	0.025	0.026	0.019	6.608
	91.460	111-84-2	n-Nonane	0.107	0.110	0.073	28.498
	102.660	124-18-5	n-Decane	0.060	0.060	0.037	15.982
	111.531	1120-21-4	n-Undecane	0.105	0.104	0.059	28.170
I-Paraffins	8.611	75-28-5	i-Butane	0.021	0.028	0.032	5.507
	10.387	463-82-1	2,2-Dimethylpropane	0.008	0.010	0.010	2.212
	14.703	78-78-4	i-Pentane	3.599	4.286	4.398	948.107
	22.615	75-83-2	2,2-Dimethylbutane	0.101	0.115	0.103	26.713
	27.829	79-29-8	2,3-Dimethylbutane	1.479	1.649	1.513	391.141
	28.927	107-83-5	2-Methylpentane	6.385	7.213	6.533	1688.583
	31.568	96-14-0	3-Methylpentane	4.733	5.257	4.843	1251.770
	41.731	108-08-7	2,4-Dimethylpentane	0.857	0.940	0.754	227.620
	42.272	464-06-2	2,2,3-Trimethylbutane	0.072	0.077	0.063	19.045
	50.196	591-76-4	2-Methylhexane	1.344	1.461	1.182	356.780
	52.025	589-34-4	3-Methylhexane	0.562	0.603	0.494	149.213
	54.725	540-84-1	2,2,4-Trimethylpentane	5.835	6.222	4.504	1552.483
	64.507	564-02-3	2,2,3-Trimethylpentane	0.324	0.334	0.250	86.182
	64.750	592-13-2	2,5-Dimethylhexane	0.740	0.787	0.571	196.892
	65.089	589-43-5	2,4-Dimethylhexane	0.711	0.749	0.549	189.097
	68.091	565-75-3	2,3,4-Trimethylpentane	2.613	2.681	2.017	695.175
	68.764	560-21-4	2,3,3-Trimethylpentane	2.646	2.689	2.042	704.029
	70.428	584-94-1	2,3-Dimethylhexane	0.691	0.716	0.533	183.818
	71.695	592-27-8	2-Methylheptane	0.043	0.045	0.033	11.357
	71.961	589-53-7	4-Methylheptane	0.077	0.081	0.060	20.531
	73.020	589-81-1	3-Methylheptane	0.042	0.044	0.032	11.085
	74.926	3522-94-9	2,2,5-Trimethylhexane	1.122	1.170	0.771	299.057
	80.054	1069-53-0	2,3,5-Trimethylhexane	0.176	0.180	0.121	46.915
	81.233	1071-26-7	2,4-Dimethylheptane	0.027	0.028	0.019	7.264
	82.194	1072-05-5	2,6-Dimethylheptane	0.030	0.031	0.020	7.894
	83.128		2,5-Dimethylheptane	0.077	0.080	0.053	20.613
	88.011	2216-33-3	3-Methyloctane	0.007	0.007	0.005	1.752
	89.067		C10 - IsoParaffin - 1	0.172	0.174	0.107	45.911
	89.913	14720-74-2	2,2,4-trimethylheptane	0.122	0.123	0.075	32.507
	93.138		C10-isoparaffin-x	0.000	0.000	0.000	1.142
	93.825	15869-87-1	2,2-Dimethyloctane	0.055	0.056	0.034	14.762
	94.625	15869-89-3	2,5-Dimethyloctane	0.092	0.092	0.057	24.444
	95.104	2040-95-1	2,7-Dimethyloctane	0.026	0.026	0.016	6.899
	95.268	2051-30-1	2,4-Dimethyloctane	0.243	0.246	0.151	64.889
	95.661		2,6-Dimethyloctane	0.069	0.070	0.043	18.544
	98.690	17301-94-8	4-Methylnonane	0.013	0.013	0.008	3.465
	98.907		2,2,6-Trimethyloctane	3.876	3.937	2.402	1035.316
	99.665	5911-04-6	3-Methylnonane	0.019	0.019	0.012	5.104

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	100.481		C11-Isoparaffin-2	0.329	0.326	0.185	87.844
	102.112	17302-01-1	3-Ethyl-3-methylheptane	0.533	0.529	0.301	142.528
	104.193		C11 Isoparaffin-4	0.062	0.061	0.035	16.566
	105.061		C11-Isoparaffin-5	0.027	0.027	0.015	7.346
	106.156		C11-Isoparaffin-7	0.601	0.596	0.339	160.585
	108.370		C11- Isoparaffin-11	1.028	1.019	0.580	274.780
	112.966		C12 - IsoParaffin - 1	0.030	0.030	0.016	8.132
	116.093		C12 - IsoParaffin - 4	0.007	0.007	0.004	2.022
Aromatics							
Mono-Aromatics	45.131	71-42-3	Benzene	0.830	0.697	0.937	242.286
	68.621	108-88-3	Toluene	5.273	4.487	5.046	1521.901
	84.440	100-41-4	Ethylbenzene	0.982	0.835	0.815	281.186
	85.669	108-38-3	m-Xylene	2.519	2.151	2.092	721.507
	85.817	106-42-3	p-Xylene	1.160	0.994	0.963	332.176
	88.652	95-47-6	o-Xylene	0.812	0.681	0.674	232.555
	92.838	98-82-8	i-Propylbenzene	0.030	0.026	0.022	8.569
	96.306	103-65-1	n-Propylbenzene	0.331	0.284	0.243	94.310
	97.155	620-14-4	1-Methyl-3-ethylbenzene	1.193	1.018	0.875	339.465
	97.389	622-96-8	1-Methyl-4-ethylbenzene	0.543	0.465	0.399	154.616
	98.015	108-67-8	1,3,5-Trimethylbenzene	0.758	0.646	0.556	215.659
	99.100	611-14-3	1-Methyl-2-ethylbenzene	0.395	0.331	0.290	112.335
	100.740	95-63-6	1,2,4-Trimethylbenzene	2.000	1.685	1.467	569.076
	103.614	526-73-8	1,2,3-Trimethylbenzene	0.238	0.196	0.174	67.684
	103.977	535-77-3	1-Methyl-3-i-propylbenzene	0.039	0.033	0.025	10.974
	106.336	141-93-5	1,3-Diethylbenzene	0.025	0.022	0.017	7.189
	106.638	1074-43-7	1-Methyl-3-n-propylbenzene	1.731	1.484	1.137	490.089
	106.904	105-05-5	1,4-Diethylbenzene	0.439	0.376	0.288	124.232
	107.177	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.102	0.085	0.067	28.836
	107.423	135-01-3	1,2-Diethylbenzene	0.128	0.107	0.084	36.211
	108.027	1074-17-5	1-Methyl-2-n-propylbenzene	0.046	0.039	0.031	13.154
	109.544	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.345	0.291	0.227	97.622
	110.102	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.834	0.691	0.548	236.002
	111.214	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.070	0.058	0.046	19.869
	111.687	4218-48-8	1-Ethyl-4-i-propylbenzene	0.114	0.095	0.068	32.259
	112.164		1,2,4,5-Tetramethylbenzene	0.242	0.201	0.159	68.488
	112.430	527-53-7	1,2,3,5-Tetramethylbenzene	0.319	0.264	0.209	90.269
	113.585		C11 - Aromatic - 3	0.029	0.024	0.017	8.230
	113.901		1,2-Di-i-propylbenzene	0.043	0.036	0.023	12.053
	114.117	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.058	0.048	0.034	16.342
	114.293		C11 - Aromatic - 4	0.037	0.030	0.022	10.358
	115.090	538-68-1	n-Pentylbenzene	0.014	0.012	0.009	4.060
	115.320		tert-Pentylbenzene	0.053	0.044	0.032	15.033
	115.633	577-55-9	1-Methyl-2-n-butylbenzene	0.027	0.022	0.016	7.536
	115.744		C11 - Aromatic - 7	0.042	0.036	0.025	11.771
	116.206	100-18-5	1,4-Di-i-propylbenzene	0.048	0.040	0.026	13.409
	117.432	7364-19-4	1t-Butyl-4-ethylbenzene	0.015	0.013	0.008	4.263

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	117.735		1,3-Di-n-propylbenzene	0.034	0.028	0.019	9.625
	117.847		C11 - Aromatic - 11	0.018	0.016	0.011	5.154
	118.402		C11 - Aromatic - 12	0.012	0.011	0.007	3.456
Naphthalenes	116.635	91-20-3	Naphthalene	0.086	0.062	0.059	25.500
	123.281	91-57-6	2-Methylnaphthalene	0.012	0.009	0.007	3.554
	124.145	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.616
Naphtheno/Olefir	113.761	874-35-1	5-Methylindan	0.097	0.080	0.065	27.430
	114.765	824-63-5	2-Methylindan	0.097	0.081	0.065	27.522
Indenes	104.808		Indan	0.184	0.141	0.137	53.261
	105.442		Indene	1.660	1.270	1.238	480.056
	109.206		2-Methylindan	0.153	0.117	0.102	44.354
	114.514	824-22-6	4-Methylindan	0.123	0.102	0.082	34.770
	116.797		4,7-Dimethyl Indane	0.016	0.013	0.010	4.756
	117.080		1,1-Dimethyl Indane	0.011	0.009	0.007	3.301
Naphthenes							
Mono-Naphthene	27.097	287-92-3	Cyclopentane	0.134	0.133	0.168	36.306
	40.153	96-37-7	Methylcyclopentane	1.672	1.648	1.751	452.929
	47.050	110-82-7	Cyclohexane	1.039	0.985	1.088	281.457
	52.879	1759-58-6	1t,3-Dimethylcyclopentane	0.116	0.115	0.104	31.489
	53.466	2532-58-3	1c,3-Dimethylcyclopentane	0.080	0.080	0.072	21.787
	54.096	822-50-4	1t,2-Dimethylcyclopentane	0.094	0.093	0.085	25.565
	59.200	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.019	0.018	0.017	5.035
	61.051	108-87-2	Methylcyclohexane	0.089	0.085	0.080	24.121
	93.138	696-29-7	1-Methyl-2-propyl-cyclopentan	0.004	0.004	0.003	1.142
	101.324	1678-98-4	i-Butylcyclohexane	0.059	0.055	0.037	16.027
	105.856		n-ButylCyclohexane	0.002	0.002	0.001	0.589
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.404	115-11-7	Isobutene	0.015	0.019	0.024	4.181
	9.442	106-98-9	Butene-1	0.019	0.023	0.029	5.037
	10.265	624-64-6	t-Butene-2	0.073	0.089	0.114	19.651
	10.986	590-18-1	c-Butene-2	0.086	0.102	0.135	23.193
	16.329	109-67-1	Pentene-1	0.332	0.382	0.417	89.856
	18.796	646-04-8	t-Pentene-2	0.843	0.959	1.059	228.284
	19.820	627-20-3	c-Pentene-2	0.463	0.521	0.581	125.316
	32.943	592-41-6	Hexene-1	1.605	1.747	1.682	434.942
	35.934	13269-52-8	t-Hexene-3	0.269	0.291	0.282	72.948
	36.403	4050-45-7	t-Hexene-2	0.510	0.551	0.534	138.223
	38.230	7688-21-3	c-Hexene-2	0.216	0.231	0.227	58.623
	55.019	592-76-7	Heptene-1	0.030	0.032	0.027	8.231
	56.878	14686-14-7	t-Heptene-3	0.033	0.034	0.029	8.876
	57.831	7642-10-6	c-Heptene-3	0.025	0.026	0.023	6.797

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	58.740	14686-13-6	t-Heptene-2	0.016	0.017	0.014	4.353
	110.730	693-61-8	2-Undecene, (E)-	0.075	0.074	0.047	19.997
Iso-Olefins	13.121	563-45-1	3-Methylbutene-1	0.258	0.303	0.324	69.877
	17.170	563-46-2	2-Methylbutene-1	0.504	0.571	0.633	136.420
	20.489	513-35-9	2-Methylbutene-2	1.037	1.155	1.304	280.960
	28.688	691-38-3	4-Methyl-c-pentene-2	0.043	0.047	0.045	11.722
	29.333	674-76-0	4-Methyl-t-pentene-2	0.131	0.144	0.137	35.501
	32.719	763-29-1	2-Methylpentene-1	0.224	0.241	0.235	60.708
	36.896	625-27-4	2-Methylpentene-2	0.345	0.368	0.361	93.457
	37.312	922-62-3	3-Methyl-c-pentene-2	0.269	0.285	0.282	72.981
	39.580	3404-73-7	3,3-Dimethylpentene-1	0.318	0.334	0.286	86.204
	42.032	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.014	0.012	3.663
	46.159	3404-61-3	3-Methylhexene-1	0.016	0.017	0.014	4.268
	46.742	3524-73-0	5-Methylhexene-1	0.063	0.067	0.057	17.127
	48.800	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.037	11.222
	49.146	3769-23-1	4-Methylhexene-1	0.011	0.011	0.010	2.927
	49.791	3404-55-5	4-Methyl-t/c-hexene-2	0.053	0.055	0.047	14.243
	54.418		C7 - Iso-Olefin - 2	0.023	0.024	0.021	6.216
	56.355	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.013	3.864
	57.239	6094-02-6	2-Methylhexene-1	0.058	0.062	0.052	15.835
	58.110	2738-19-4	2-Methyl-2-hexene	0.026	0.027	0.024	7.119
	58.355	3899-36-3	3-Methyl-t-hexene-3	0.020	0.021	0.018	5.432
	59.641	20710-38-8	3-Methyl-t-hexene-2	0.016	0.016	0.014	4.306
	60.425	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.017	0.017	0.015	4.615
	93.138		C10-IsoOlefin-4	0.004	0.004	0.003	1.142
Naphtheno-Olefir	25.246	142-29-0	Cyclopentene	0.197	0.188	0.255	54.978
	45.334	693-89-0	1-Methylcyclopentene	0.370	0.350	0.397	102.706
	50.669	110-83-8	Cyclohexene	0.046	0.042	0.049	12.422
Di-Olefins	18.200	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.910
	20.818	2004-70-8	1t,3-Pentadiene	0.015	0.017	0.020	4.247
Oxygenates	12.745	64-17-5	Ethanol	9.506	8.889	18.193	1107.028
	26.486	71-23-8	n-Propanol	0.182	0.168	0.267	34.488
Unidentified	22.065		Unidentified	0.006	0.006	0.008	1.914
	28.236		Unidentified	0.050	0.050	0.050	16.756
	44.929		Unidentified	0.012	0.012	0.013	3.921
	47.593		Unidentified	0.035	0.037	0.032	11.652
	63.108		Unidentified	0.019	0.020	0.015	6.363
	72.092		Unidentified	0.054	0.055	0.041	17.834
	75.907		Unidentified	0.009	0.008	0.006	2.826
	78.506		Unidentified	0.026	0.026	0.018	8.529
	84.617		Unidentified	0.012	0.012	0.008	3.921
	84.859		Unidentified	0.010	0.009	0.007	3.248

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	85.963		Unidentified	0.026	0.026	0.018	8.624
	88.479		Unidentified	0.048	0.052	0.034	15.974
	92.085		Unidentified	0.011	0.010	0.007	3.546
	93.028		Unidentified	0.011	0.010	0.008	3.580
	93.028		Unidentified	0.011	0.011	0.007	3.580
	93.028		Unidentified	0.011	0.008	0.007	3.580
	93.602		Unidentified	0.159	0.162	0.099	52.853
	94.267		Unidentified	0.022	0.016	1.949	7.338
	94.267		Unidentified	0.022	0.023	0.014	7.338
	94.487		Unidentified	0.021	0.019	0.015	6.923
	95.019		Unidentified	0.021	0.021	0.013	6.923
	99.475		Unidentified	0.012	0.012	0.007	3.902
	99.841		Unidentified	0.011	0.011	0.007	3.552
	100.131		Unidentified	0.222	0.164	0.125	73.829
	100.258		Unidentified	0.622	0.617	0.351	206.582
	100.946		Unidentified	0.372	0.391	0.234	123.449
	101.068		Unidentified	0.220	0.222	0.137	73.129
	101.969		Unidentified	0.025	0.023	0.016	8.214
	102.323		Unidentified	0.140	0.121	0.092	46.622
	102.465		Unidentified	0.331	0.286	0.217	109.800
	102.976		Unidentified	0.146	0.145	0.082	48.425
	103.468		Unidentified	0.017	0.014	0.013	5.658
	104.398		Unidentified	0.325	0.280	0.213	107.836
	105.995		Unidentified	0.013	0.012	0.008	4.456
	107.890		Unidentified	0.140	0.139	0.079	46.418
	108.164		Unidentified	0.138	0.137	0.079	45.652
	108.245		Unidentified	0.126	0.125	0.071	41.797
	108.550		Unidentified	0.328	0.326	0.185	109.027
	108.983		Unidentified	0.928	0.781	0.610	308.045
	109.703		Unidentified	0.066	0.050	0.044	21.863
	110.528		Unidentified	0.034	0.031	0.019	11.232
	110.858		Unidentified	0.161	0.160	0.101	53.348
	111.131		Unidentified	0.143	0.124	0.085	47.335
	111.798		Unidentified	0.080	0.066	0.048	26.517
	112.654		Unidentified	0.015	0.012	0.009	4.881
	112.784		Unidentified	0.022	0.018	0.015	7.391
	113.294		Unidentified	0.036	0.036	0.019	11.991
	113.448		Unidentified	0.014	0.014	0.007	4.649
	113.654		Unidentified	0.040	0.033	0.024	13.292
	114.682		Unidentified	0.028	0.023	0.017	9.294
	114.978		Unidentified	0.012	0.010	0.007	4.092
	116.972		Unidentified	0.006	0.005	0.003	1.841
	125.444		Unidentified	0.003	0.003	0.002	1.118
	126.172		Unidentified	0.006	0.005	0.003	2.120
	126.172		Unidentified	0.006	0.005	0.003	2.120
	126.172		Unidentified	0.006	0.006	0.003	2.120
	129.864		Unidentified	0.003	0.003	0.002	1.106

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

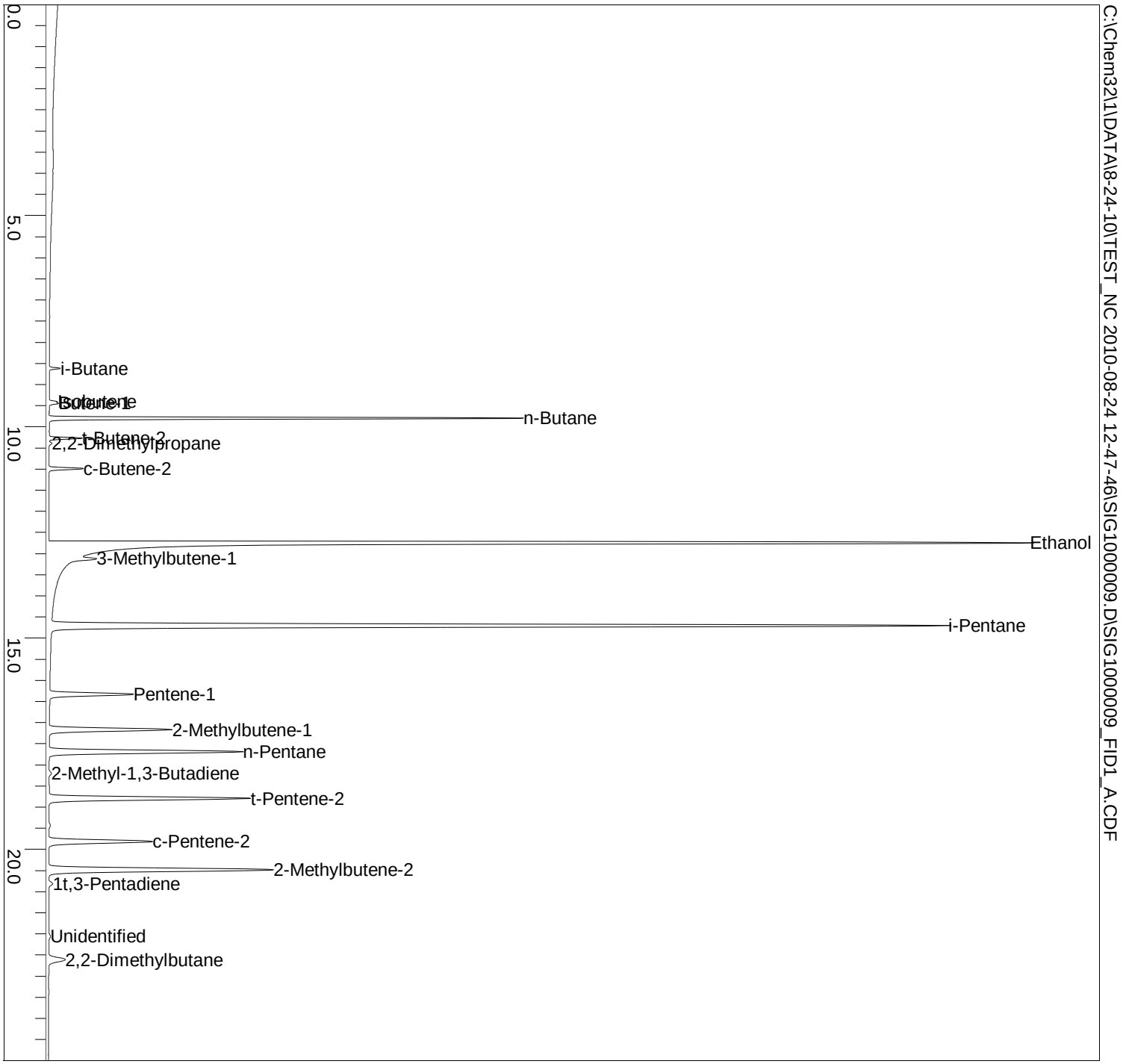
Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified Plus							

Recovery = 100.00

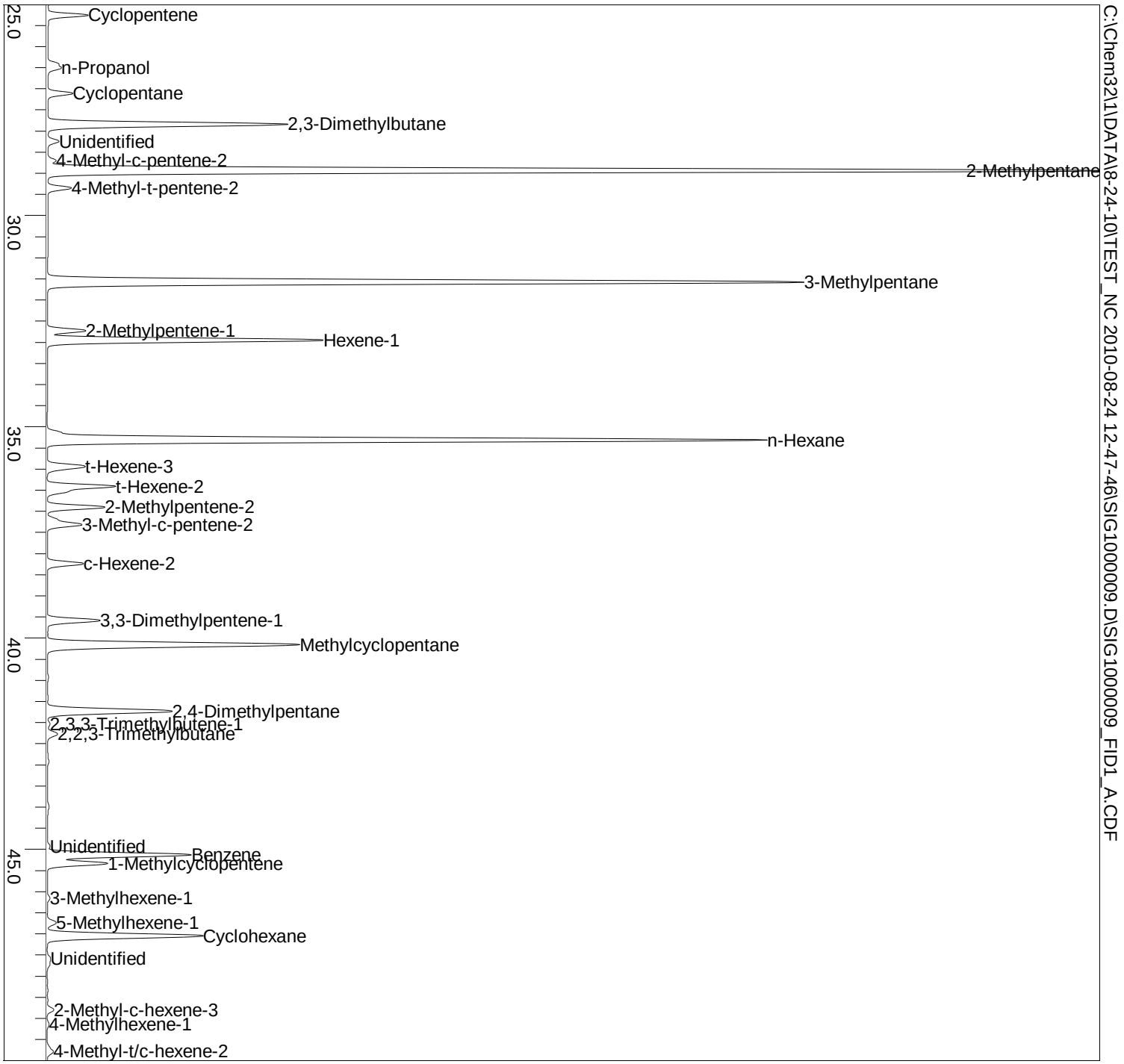
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



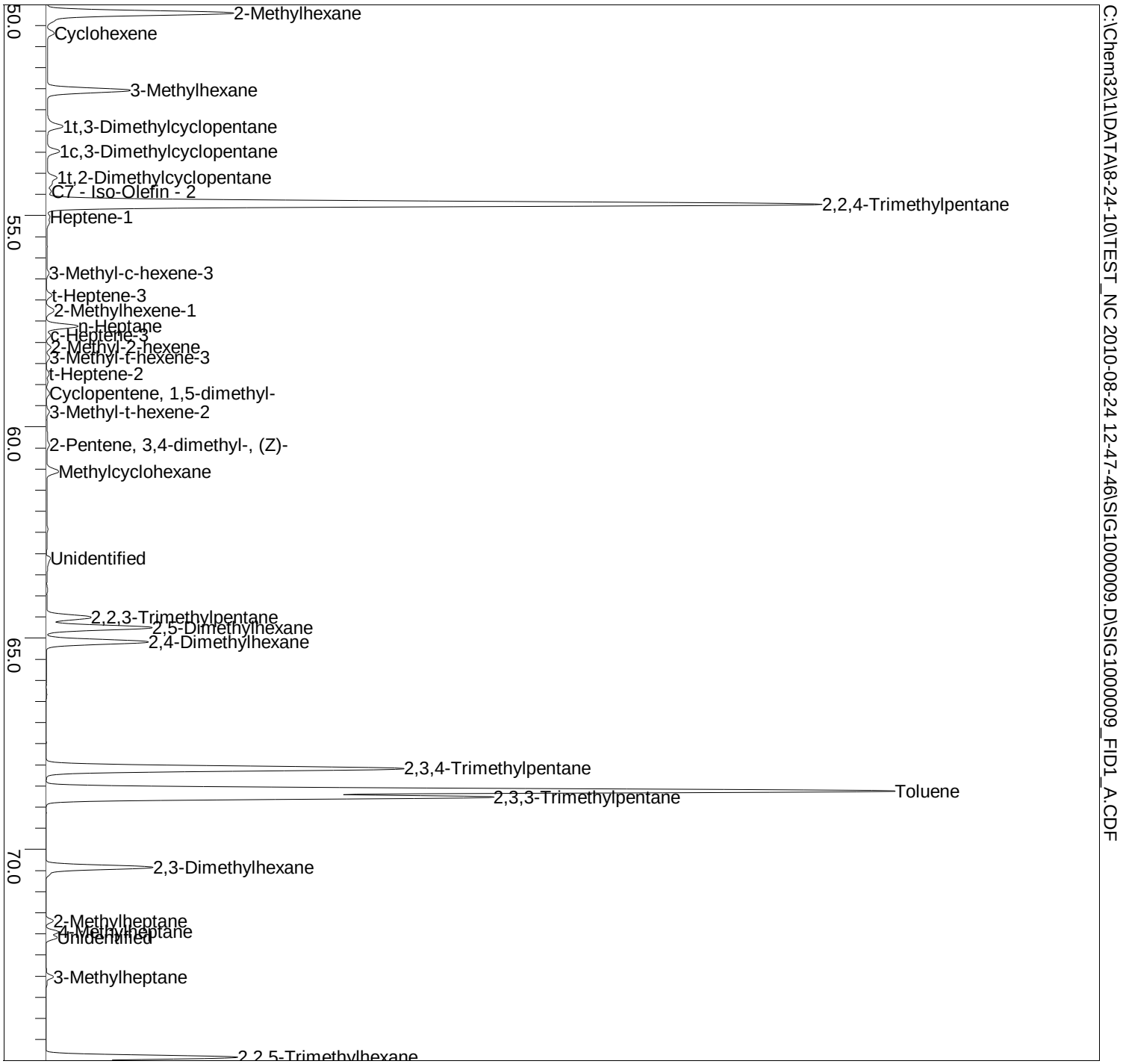
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



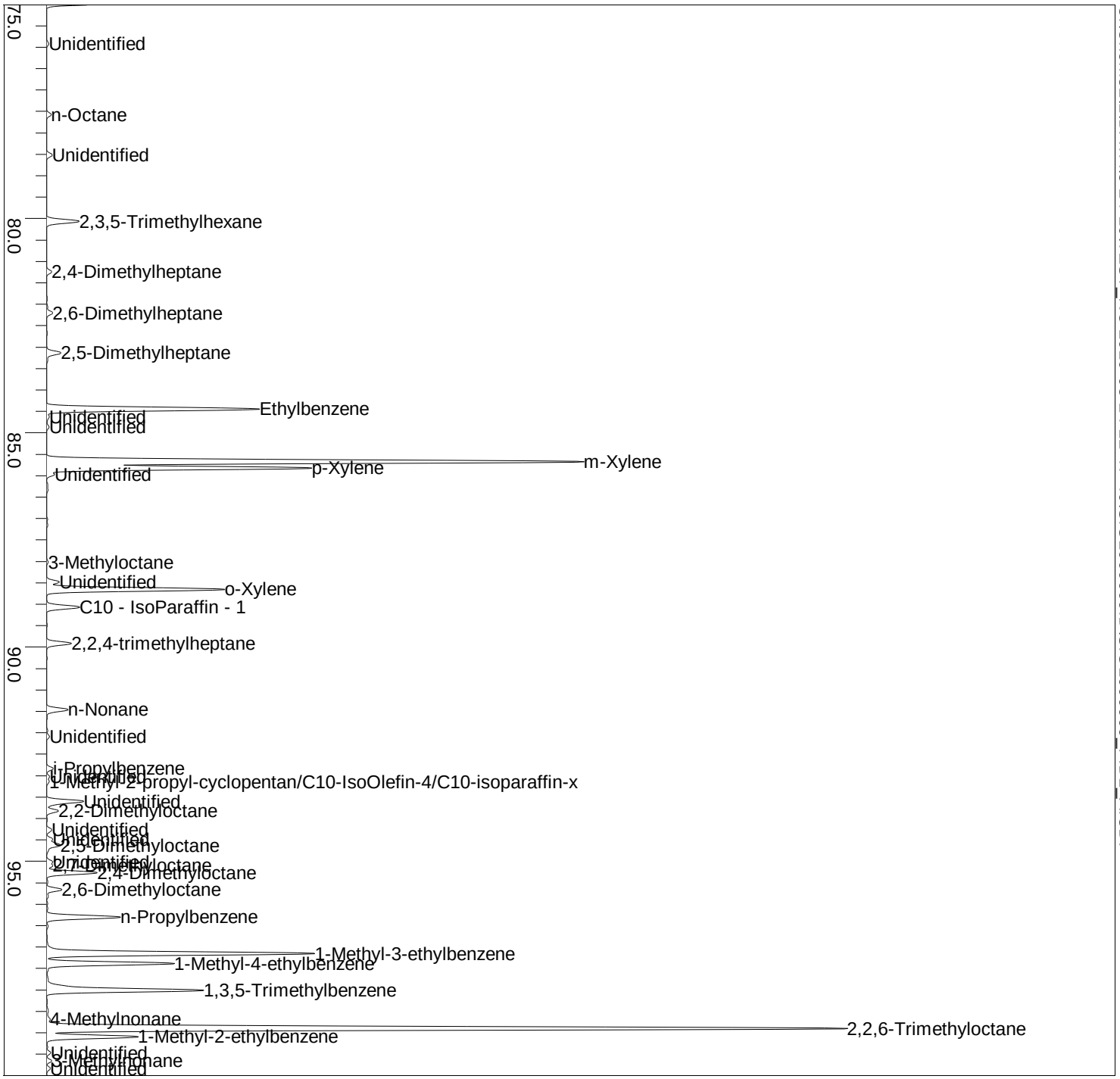
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



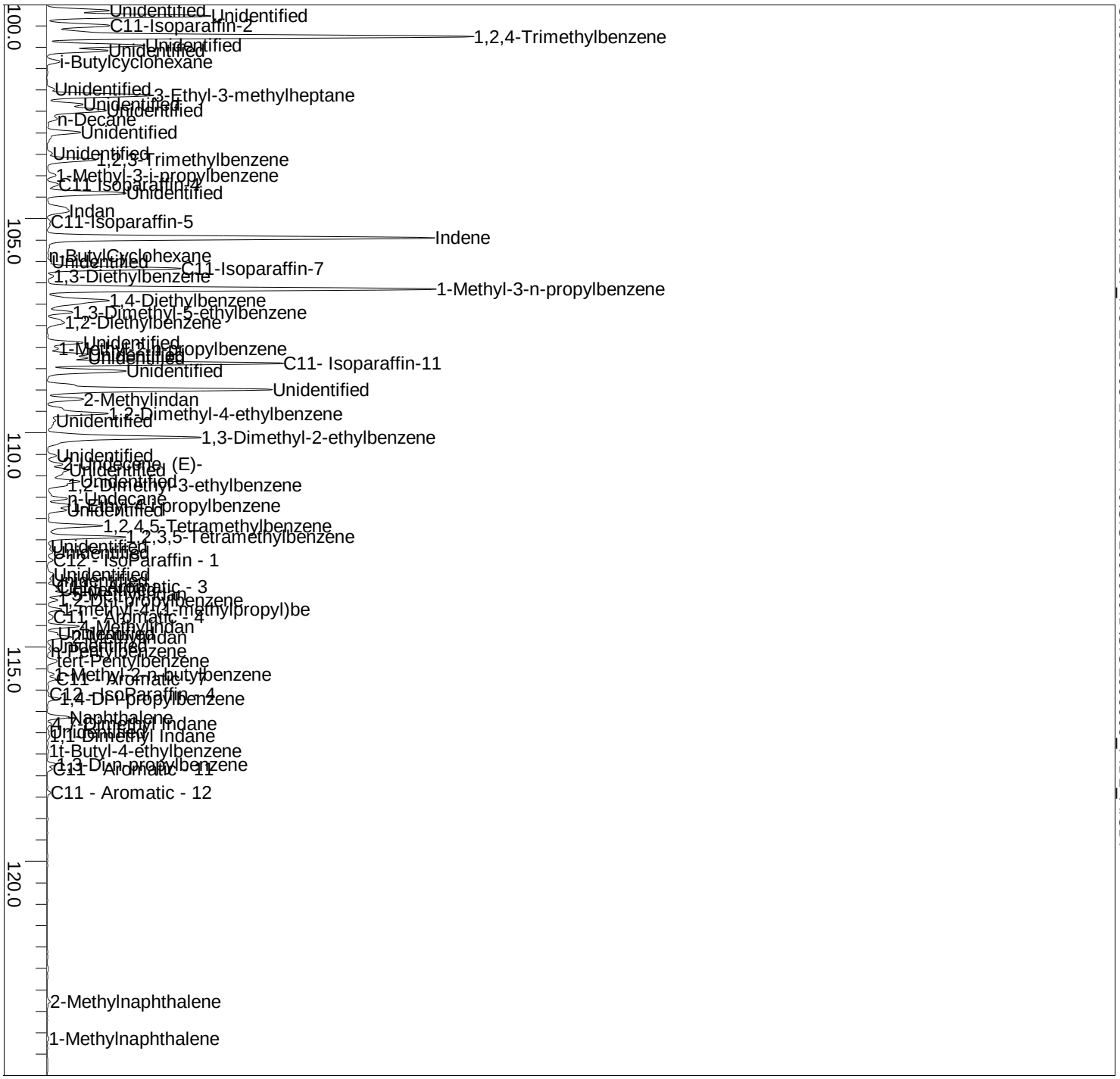
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



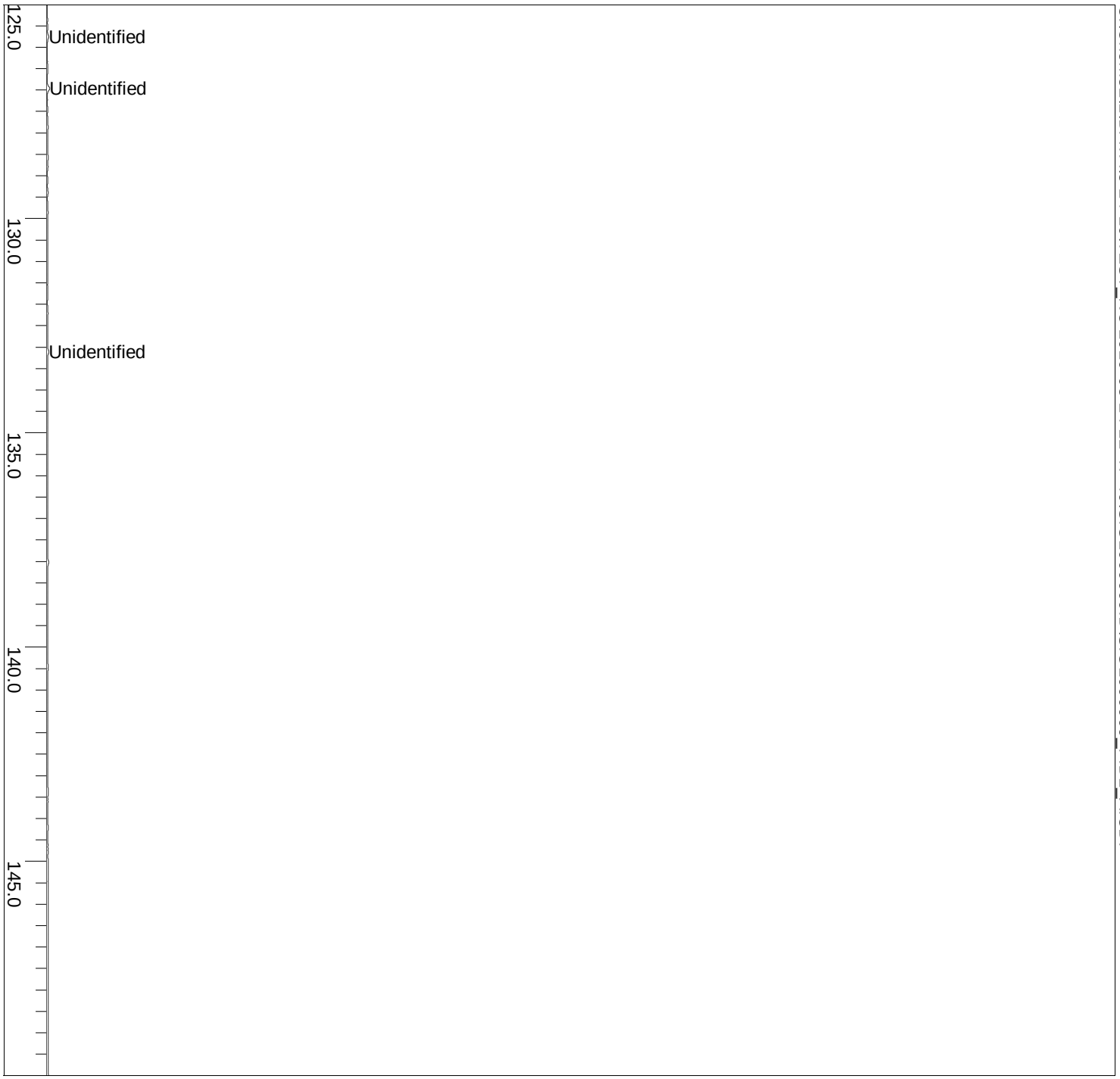
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 24-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000009.D\SIG1000009_FID1_A.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91313 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91313
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	11.444	12.660	13.176
I-Paraffins	47.226	50.315	45.963
Aromatics	23.314	19.187	20.473
Mono-Aromatics	22.309	18.420	19.717
Naphthalenes	0.099	0.069	0.071
Naphtheno/Olefino-Benz	0.240	0.193	0.170
Indenes	0.666	0.504	0.514
Naphthenes	9.372	8.840	10.478
Mono-Naphthenes	9.372	8.840	10.478
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.522	6.949	8.098
n-Olefins	2.912	3.177	3.731
Iso-Olefins	3.065	3.267	3.697
Naphtheno-Olefins	0.523	0.482	0.640
Di-Olefins	0.021	0.022	0.029
Oxygenates	0.174	0.156	0.272
Unidentified	1.947	1.893	1.540
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.175	0.158	0.275
C4	0.719	0.879	1.175
C5	18.645	21.048	24.460
C6	24.413	25.345	26.918
C7	12.717	11.707	12.509
C8	27.374	26.719	22.917
C9	7.744	6.749	5.953
C10	5.363	4.708	3.701
C11	0.775	0.690	0.478
C12	0.128	0.103	0.074

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.002
	C4	0.455	0.564	0.735
	C5	3.315	3.800	4.315
	C6	6.645	7.234	7.242
	C7	0.582	0.611	0.546
	C8	0.173	0.177	0.142
	C9	0.192	0.192	0.141
	C10	0.066	0.065	0.043
	C11	0.016	0.015	0.010
I-Paraffins	C4	0.032	0.041	0.052
	C5	10.489	12.156	13.655
	C6	8.513	9.287	9.278
	C7	3.404	3.596	3.191
	C8	20.493	20.961	16.850
	C9	1.859	1.880	1.361
	C10	2.046	2.017	1.342
	C11	0.391	0.377	0.235
Mono-Aromatics	C6	0.683	0.558	0.822
	C7	6.716	5.561	6.846
	C8	6.490	5.378	5.741
	C9	5.555	4.575	4.341
	C10	2.401	1.971	1.680
	C11	0.335	0.274	0.212
	C12	0.128	0.103	0.074
Naphthalenes	C10	0.081	0.056	0.059
	C11	0.018	0.013	0.012
Naphtheno/Olefino-Benzs	C10	0.240	0.193	0.170
Indenes	C9	0.138	0.103	0.110
	C10	0.513	0.390	0.394
	C11	0.015	0.011	0.010
Mono-Naphthenes	C5	1.465	1.411	1.962
	C6	6.166	5.792	6.882
	C7	1.506	1.418	1.440
	C8	0.218	0.203	0.183
	C10	0.017	0.015	0.011
n-Olefins	C4	0.232	0.274	0.389

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.585	1.754	2.123
	C6	1.079	1.133	1.204
	C7	0.016	0.016	0.015
Iso-Olefins	C5	1.591	1.739	2.131
	C6	0.981	1.023	1.095
	C7	0.493	0.505	0.472
Naphtheno-Olefins	C5	0.177	0.165	0.245
	C6	0.346	0.317	0.396
Di-Olefins	C5	0.021	0.022	0.029
Oxygenates	C3	0.174	0.156	0.272

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	30.37	28.15
5%	80.03	79.82
10%	81.59	81.16
15%	96.32	94.14
20%	121.26	100.81
25%	140.51	138.19
30%	154.23	144.81
35%	155.31	154.54
40%	167.48	155.54
45%	177.35	176.43
50%	209.18	191.39
55%	209.80	209.34
60%	210.42	209.93
65%	230.75	210.53
70%	231.02	230.81
75%	237.03	232.66
80%	261.17	238.72
85%	281.92	279.02
90%	323.28	320.50
95%	345.33	335.88
FBP	403.15	390.91

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.390	74-98-6	P3	Propane	0.001	0.001	0.002	0.261
2	8.611	75-28-5	I4	i-Butane	0.032	0.041	0.052	8.316
3	9.404	115-11-7	K4	Isobutene	0.020	0.024	0.034	5.483
4	9.443	106-98-9	K4	Butene-1	0.024	0.029	0.040	6.413
5	9.792	106-97-8	P4	n-Butane	0.455	0.564	0.735	118.589
6	10.266	624-64-6	K4	t-Butene-2	0.088	0.105	0.148	23.854
7	10.388	463-82-1	I5	2,2-Dimethylpropane	0.045	0.055	0.059	11.868
8	10.987	590-18-1	K4	c-Butene-2	0.100	0.116	0.168	27.050
9	13.128	563-45-1	C5	3-Methylbutene-1	0.069	0.079	0.092	18.571
10	14.719	78-78-4	I5	i-Pentane	10.444	12.101	13.596	2743.138
11	16.335	109-67-1	K5	Pentene-1	0.317	0.356	0.425	85.773
12	17.168	563-46-2	C5	2-Methylbutene-1	0.497	0.549	0.666	134.306
13	17.701	109-66-0	P5	n-Pentane	3.315	3.800	4.315	870.648
14	18.206	78-79-5	E5	2-Methyl-1,3-Butadiene	0.009	0.009	0.012	2.388
15	18.801	646-04-8	K5	t-Pentene-2	0.820	0.908	1.098	221.406
16	19.824	627-20-3	K5	c-Pentene-2	0.448	0.491	0.600	121.087
17	20.489	513-35-9	C5	2-Methylbutene-2	1.025	1.111	1.373	276.986
18	20.825	2004-70-8	E5	1t,3-Pentadiene	0.012	0.013	0.017	3.464
19	22.615	75-83-2	I6	2,2-Dimethylbutane	0.615	0.680	0.670	162.169
20	25.243	142-29-0	B5	Cyclopentene	0.177	0.165	0.245	49.352
21	26.491	71-23-8	X3	n-Propanol	0.174	0.156	0.272	32.976
22	27.108	287-92-3	M5	Cyclopentane	1.465	1.411	1.962	395.865
23	27.829	79-29-8	I6	2,3-Dimethylbutane	0.972	1.055	1.060	256.443
24	28.230		?	Unidentified	0.050	0.049	0.053	16.558
25	28.689	691-38-3	C6	4-Methyl-c-pentene-2	0.043	0.045	0.048	11.528
26	28.913	107-83-5	I6	2-Methylpentane	3.670	4.034	4.000	967.867
27	29.337	674-76-0	C6	4-Methyl-t-pentene-2	0.129	0.137	0.144	34.767
28	31.556	96-14-0	I6	3-Methylpentane	3.255	3.517	3.547	858.234
29	32.715	763-29-1	C6	2-Methylpentene-1	0.220	0.230	0.245	59.344
30	32.937	592-41-6	K6	Hexene-1	0.149	0.158	0.167	40.364
31	35.323	110-54-3	P6	n-Hexane	6.645	7.234	7.242	1752.162
32	35.936	13269-52-8	K6	t-Hexene-3	0.251	0.265	0.281	67.927
33	36.408	4050-45-7	K6	t-Hexene-2	0.476	0.501	0.531	128.613
34	36.897	625-27-4	C6	2-Methylpentene-2	0.334	0.347	0.373	90.341
35	37.313	922-62-3	C6	3-Methyl-c-pentene-2	0.256	0.263	0.285	69.049
36	38.233	7688-21-3	K6	c-Hexene-2	0.202	0.210	0.226	54.614
37	39.584	3404-73-7	C7	3,3-Dimethylpentene-1	0.304	0.311	0.291	82.063
38	40.165	96-37-7	M6	Methylcyclopentane	2.886	2.768	3.221	779.767
39	41.733	108-08-7	I7	2,4-Dimethylpentane	0.700	0.746	0.656	185.196
40	42.273	464-06-2	I7	2,2,3-Trimethylbutane	0.088	0.092	0.083	23.332
41	45.136	71-42-3	Q6	Benzene	0.683	0.558	0.822	198.819
42	45.334	693-89-0	B6	1-Methylcyclopentene	0.313	0.288	0.358	86.500
43	46.164	3404-61-3	C7	3-Methylhexene-1	0.012	0.012	0.011	3.214

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	46.752	3524-73-0	C7	5-Methylhexene-1	0.088	0.091	0.084	23.815
45	47.067	110-82-7	M6	Cyclohexane	3.280	3.024	3.660	886.034
46	47.590		?	Unidentified	0.027	0.028	0.026	8.919
47	48.807	15840-60-5	C7	2-Methyl-c-hexene-3	0.030	0.031	0.029	8.066
48	49.797	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.035	0.036	0.033	9.433
49	50.199	591-76-4	I7	2-Methylhexane	1.862	1.969	1.745	492.861
50	50.670	110-83-8	B6	Cyclohexene	0.033	0.029	0.038	8.993
51	52.032	589-34-4	I7	3-Methylhexane	0.755	0.789	0.708	199.861
52	52.883	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.161	0.155	0.154	43.594
53	53.470	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.130	0.126	0.125	35.193
54	54.097	822-50-4	M7	1t,2-Dimethylcyclopentane	0.203	0.194	0.195	54.936
55	54.766	540-84-1	I8	2,2,4-Trimethylpentane	11.643	12.080	9.574	3088.711
56	56.884	14686-14-7	K7	t-Heptene-3	0.016	0.016	0.015	4.191
57	57.240	6094-02-6	C7	2-Methylhexene-1	0.024	0.025	0.023	6.589
58	57.617	142-82-5	P7	n-Heptane	0.582	0.611	0.546	154.096
59	59.432		?	Unidentified	0.459	0.458	0.439	151.754
60	61.062	108-87-2	M7	Methylcyclohexane	0.977	0.912	0.935	264.025
61	62.013	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.021	0.020	0.017	5.577
62	62.420	590-73-8	I8	2,2-Dimethylhexane	0.018	0.019	0.015	4.870
63	63.642		?	Unidentified	0.123	0.118	0.105	40.622
64	63.857	1640-89-7	M7	Ethylcyclopentane	0.033	0.031	0.032	8.981
65	64.510		?	Unidentified	0.321	0.322	0.264	106.239
66	64.754	592-13-2	I8	2,5-Dimethylhexane	0.971	1.005	0.798	257.600
67	65.092	589-43-5	I8	2,4-Dimethylhexane	0.846	0.868	0.696	224.550
68	65.926	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.019	0.017	0.015	5.002
69	67.456	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.015	0.014	0.012	3.928
70	68.096	565-75-3	I8	2,3,4-Trimethylpentane	2.888	2.883	2.375	766.099
71	68.634	108-88-3	Q7	Toluene	6.716	5.561	6.846	1932.795
72	68.773	560-21-4	I8	2,3,3-Trimethylpentane	2.982	2.948	2.452	791.102
73	70.428	584-94-1	I8	2,3-Dimethylhexane	0.740	0.746	0.609	196.347
74	71.695	592-27-8	I8	2-Methylheptane	0.123	0.127	0.101	32.635
75	71.958	589-53-7	I8	4-Methylheptane	0.113	0.115	0.093	29.883
76	72.091		?	Unidentified	0.059	0.059	0.048	19.489
77	72.860		M8	1,3-dimethyl-t-cyclohexane	0.086	0.080	0.072	23.209
78	73.019	589-81-1	I8	3-Methylheptane	0.112	0.113	0.092	29.592
79	73.203	619-99-8	I8	3-Ethylhexane	0.056	0.057	0.046	14.916
80	74.102		?	Unidentified	0.013	0.012	0.011	4.428
81	74.927	3522-94-9	I9	2,2,5-Trimethylhexane	1.370	1.391	1.004	364.251
82	75.904		?	Unidentified	0.010	0.010	0.007	3.365
83	76.189	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.035	0.032	0.029	9.362
84	77.562	111-65-9	P8	n-Octane	0.173	0.177	0.142	45.940
85	78.506		?	Unidentified	0.035	0.033	0.030	11.721
86	80.054	1069-53-0	I9	2,3,5-Trimethylhexane	0.233	0.232	0.171	61.917

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	81.232	1071-26-7	I9	2,4-Dimethylheptane	0.037	0.038	0.027	9.960
88	81.867	1678-91-7	M8	Ethylcyclohexane	0.044	0.040	0.037	11.911
89	82.193	1072-05-5	I9	2,6-Dimethylheptane	0.051	0.052	0.038	13.683
90	82.672		?	Unidentified	0.008	0.007	0.007	2.581
91	83.127		I9	2,5-Dimethylheptane	0.114	0.114	0.083	30.182
92	84.439	100-41-4	Q8	Ethylbenzene	1.230	1.018	1.088	351.186
93	84.858		?	Unidentified	0.018	0.017	0.013	5.985
94	85.671	108-38-3	Q8	m-Xylene	2.930	2.434	2.592	836.731
95	85.819	106-42-3	Q8	p-Xylene	1.400	1.167	1.238	399.740
96	86.326		?	Unidentified	0.015	0.015	0.011	4.852
97	87.013	2216-34-4	I9	4-Methyloctane	0.014	0.014	0.010	3.801
98	87.146	3221-61-2	I9	2-Methyloctane	0.019	0.019	0.014	5.133
99	88.011	2216-33-3	I9	3-Methyloctane	0.020	0.019	0.014	5.192
100	88.478		?	Unidentified	0.082	0.086	0.061	27.065
101	88.651	95-47-6	Q8	o-Xylene	0.931	0.759	0.823	265.782
102	89.065		I10	C10 - IsoParaffin - 1	0.274	0.271	0.181	73.080
103	89.912	14720-74-2	I10	2,2,4-trimethylheptane	0.197	0.194	0.130	52.342
104	91.465	111-84-2	P9	n-Nonane	0.192	0.192	0.141	51.004
105	92.836	98-82-8	Q9	i-Propylbenzene	0.031	0.026	0.024	8.887
106	93.028		?	Unidentified	0.014	0.013	0.010	4.670
107	93.028		?	Unidentified	0.014	0.014	0.009	4.670
108	93.028		?	Unidentified	0.014	0.010	0.009	4.670
109	93.600		?	Unidentified	0.099	0.098	0.065	32.754
110	93.823	15869-87-1	I10	2,2-Dimethyloctane	0.033	0.033	0.022	8.823
111	94.623	15869-89-3	I10	2,5-Dimethyloctane	0.032	0.031	0.021	8.489
112	95.099	2040-95-1	I10	2,7-Dimethyloctane	0.019	0.018	0.012	4.952
113	95.265	2051-30-1	I10	2,4-Dimethyloctane	0.087	0.086	0.057	23.138
114	95.659		I10	2,6-Dimethyloctane	0.029	0.029	0.019	7.772
115	96.304	103-65-1	Q9	n-Propylbenzene	0.276	0.230	0.216	78.426
116	97.153	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.074	0.892	0.840	304.872
117	97.387	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.513	0.428	0.401	145.593
118	98.014	108-67-8	Q9	1,3,5-Trimethylbenzene	0.709	0.589	0.554	201.264
119	98.684	17301-94-8	I10	4-Methylnonane	0.011	0.011	0.007	2.958
120	98.887		I10	2,2,6-Trimethyloctane	1.203	1.188	0.794	320.293
121	99.098	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.417	0.340	0.325	118.194
122	99.660	5911-04-6	I10	3-Methylnonane	0.015	0.015	0.010	4.023
123	100.127		?	Unidentified	0.063	0.045	0.038	20.795
124	100.252		?	Unidentified	0.177	0.171	0.107	58.693
125	100.476		I11	C11-Isoparaffin-2	0.092	0.089	0.056	24.662
126	100.737	95-63-6	Q9	1,2,4-Trimethylbenzene	2.152	1.764	1.681	610.516
127	100.941		?	Unidentified	0.103	0.105	0.069	34.022
128	101.062		?	Unidentified	0.061	0.060	0.040	20.207
129	101.319	1678-98-4	M10	i-Butylcyclohexane	0.017	0.015	0.011	4.544

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	102.10717	302-01-1	I10	3-Ethyl-3-methylheptane	0.147	0.142	0.088	39.105
131	102.454	538-93-2	Q10	i-Butylbenzene	0.162	0.136	0.113	45.695
132	102.656	124-18-5	P10	n-Decane	0.066	0.065	0.043	17.520
133	102.974		?	Unidentified	0.032	0.031	0.019	10.714
134	103.610	526-73-8	Q9	1,2,3-Trimethylbenzene	0.382	0.307	0.299	108.469
135	103.997	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.017	0.014	0.012	4.874
136	104.190		I11	C11 Isoparaffin-4	0.015	0.014	0.009	3.998
137	104.393		?	Unidentified	0.069	0.058	0.048	22.878
138	104.800		J9	Indan	0.138	0.103	0.110	39.897
139	105.428		J10	Indene	0.358	0.266	0.284	103.114
140	106.145		I11	C11-Isoparaffin-7	0.111	0.107	0.067	29.611
141	106.330	141-93-5	Q10	1,3-Diethylbenzene	0.052	0.043	0.037	14.730
142	106.614	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.436	0.364	0.305	123.082
143	106.947	105-05-5	Q10	1,4-Diethylbenzene	0.174	0.145	0.122	49.151
144	107.172	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.143	0.116	0.100	40.294
145	107.440	135-01-3	Q10	1,2-Diethylbenzene	0.027	0.022	0.019	7.499
146	107.884		?	Unidentified	0.017	0.017	0.010	5.756
147	108.023	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.054	0.044	0.038	15.164
148	108.362		I11	C11- Isoparaffin-11	0.172	0.166	0.103	45.876
149	108.548		?	Unidentified	0.036	0.035	0.022	11.972
150	108.875	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.120	0.098	0.084	33.898
151	109.032	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.208	0.171	0.146	58.813
152	109.197		J10	2-Methylindan	0.019	0.014	0.014	5.522
153	109.542	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.275	0.226	0.192	77.546
154	110.097	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.075	0.061	0.053	21.236
155	111.009		Q11	1-Methyl-4-t-butylbenzene	0.020	0.017	0.013	5.753
156	111.219	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.098	0.079	0.068	27.607
157	111.525	1120-21-4	P11	n-Undecane	0.016	0.015	0.010	4.243
158	111.689	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.012	0.010	0.008	3.383
159	112.160		Q10	1,2,4,5-Tetramethylbenzene	0.232	0.188	0.162	65.445
160	112.427	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.329	0.265	0.230	92.747
161	113.289		?	Unidentified	0.009	0.009	0.005	3.017
162	113.581		Q11	C11 - Aromatic - 3	0.042	0.034	0.027	11.936
163	113.761	874-35-1	H10	5-Methylindan	0.098	0.079	0.069	27.578
164	113.901		Q12	1,2-Di-i-propylbenzene	0.042	0.034	0.024	11.683
165	114.115	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.060	0.048	0.038	16.861
166	114.275		Q11	C11 - Aromatic - 4	0.030	0.024	0.019	8.505
167	114.512	824-22-6	J10	4-Methylindan	0.136	0.110	0.097	38.420
168	114.763	824-63-5	H10	2-Methylindan	0.142	0.115	0.101	40.068
169	114.977		?	Unidentified	0.011	0.009	0.007	3.521
170	115.089	538-68-1	Q11	n-Pentylbenzene	0.015	0.012	0.009	4.099
171	115.321		Q11	tert-Pentylbenzene	0.060	0.049	0.038	16.961
172	115.631	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.026	0.021	0.016	7.304

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	115.741		Q11	C11 - Aromatic - 7	0.034	0.029	0.022	9.625
174	116.204	100-18-5	Q12	1,4-Di-i-propylbenzene	0.048	0.038	0.028	13.326
175	116.631	91-20-3	G10	Naphthalene	0.081	0.056	0.059	23.838
176	116.801		?	Unidentified	0.008	0.006	0.005	2.530
177	117.080		J11	1,1-Dimethyl Indane	0.015	0.011	0.010	4.275
178	117.734		Q12	1,3-Di-n-propylbenzene	0.039	0.031	0.023	10.934
179	117.845		Q11	C11 - Aromatic - 11	0.021	0.018	0.014	6.036
180	118.400		Q11	C11 - Aromatic - 12	0.013	0.011	0.008	3.740
181	123.280	91-57-6	G11	2-Methylnaphthalene	0.012	0.009	0.008	3.622
182	124.145	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.004	1.781

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.390	74-98-6	Propane	0.001	0.001	0.002	0.261
	9.792	106-97-8	n-Butane	0.455	0.564	0.735	118.589
	17.701	109-66-0	n-Pentane	3.315	3.800	4.315	870.648
	35.323	110-54-3	n-Hexane	6.645	7.234	7.242	1752.162
	57.617	142-82-5	n-Heptane	0.582	0.611	0.546	154.096
	77.562	111-65-9	n-Octane	0.173	0.177	0.142	45.940
	91.465	111-84-2	n-Nonane	0.192	0.192	0.141	51.004
	102.656	124-18-5	n-Decane	0.066	0.065	0.043	17.520
	111.525	1120-21-4	n-Undecane	0.016	0.015	0.010	4.243
I-Paraffins	8.611	75-28-5	i-Butane	0.032	0.041	0.052	8.316
	10.388	463-82-1	2,2-Dimethylpropane	0.045	0.055	0.059	11.868
	14.719	78-78-4	i-Pentane	10.444	12.101	13.596	2743.138
	22.615	75-83-2	2,2-Dimethylbutane	0.615	0.680	0.670	162.169
	27.829	79-29-8	2,3-Dimethylbutane	0.972	1.055	1.060	256.443
	28.913	107-83-5	2-Methylpentane	3.670	4.034	4.000	967.867
	31.556	96-14-0	3-Methylpentane	3.255	3.517	3.547	858.234
	41.733	108-08-7	2,4-Dimethylpentane	0.700	0.746	0.656	185.196
	42.273	464-06-2	2,2,3-Trimethylbutane	0.088	0.092	0.083	23.332
	50.199	591-76-4	2-Methylhexane	1.862	1.969	1.745	492.861
	52.032	589-34-4	3-Methylhexane	0.755	0.789	0.708	199.861
	54.766	540-84-1	2,2,4-Trimethylpentane	11.643	12.080	9.574	3088.711
	62.420	590-73-8	2,2-Dimethylhexane	0.018	0.019	0.015	4.870
	64.754	592-13-2	2,5-Dimethylhexane	0.971	1.005	0.798	257.600
	65.092	589-43-5	2,4-Dimethylhexane	0.846	0.868	0.696	224.550
	68.096	565-75-3	2,3,4-Trimethylpentane	2.888	2.883	2.375	766.099
	68.773	560-21-4	2,3,3-Trimethylpentane	2.982	2.948	2.452	791.102
	70.428	584-94-1	2,3-Dimethylhexane	0.740	0.746	0.609	196.347
	71.695	592-27-8	2-Methylheptane	0.123	0.127	0.101	32.635
	71.958	589-53-7	4-Methylheptane	0.113	0.115	0.093	29.883
	73.019	589-81-1	3-Methylheptane	0.112	0.113	0.092	29.592
	73.203	619-99-8	3-Ethylhexane	0.056	0.057	0.046	14.916
	74.927	3522-94-9	2,2,5-Trimethylhexane	1.370	1.391	1.004	364.251
	80.054	1069-53-0	2,3,5-Trimethylhexane	0.233	0.232	0.171	61.917
	81.232	1071-26-7	2,4-Dimethylheptane	0.037	0.038	0.027	9.960
	82.193	1072-05-5	2,6-Dimethylheptane	0.051	0.052	0.038	13.683
	83.127		2,5-Dimethylheptane	0.114	0.114	0.083	30.182
	87.013	2216-34-4	4-Methyloctane	0.014	0.014	0.010	3.801
	87.146	3221-61-2	2-Methyloctane	0.019	0.019	0.014	5.133
	88.011	2216-33-3	3-Methyloctane	0.020	0.019	0.014	5.192
	89.065		C10 - IsoParaffin - 1	0.274	0.271	0.181	73.080
	89.912	14720-74-2	2,2,4-trimethylheptane	0.197	0.194	0.130	52.342
	93.823	15869-87-1	2,2-Dimethyloctane	0.033	0.033	0.022	8.823
	94.623	15869-89-3	2,5-Dimethyloctane	0.032	0.031	0.021	8.489
	95.099	2040-95-1	2,7-Dimethyloctane	0.019	0.018	0.012	4.952
	95.265	2051-30-1	2,4-Dimethyloctane	0.087	0.086	0.057	23.138
	95.659		2,6-Dimethyloctane	0.029	0.029	0.019	7.772

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	98.684	17301-94-8	4-Methylnonane	0.011	0.011	0.007	2.958
	98.887		2,2,6-Trimethyloctane	1.203	1.188	0.794	320.293
	99.660	5911-04-6	3-Methylnonane	0.015	0.015	0.010	4.023
	100.476		C11-Isoparaffin-2	0.092	0.089	0.056	24.662
	102.107	17302-01-1	3-Ethyl-3-methylheptane	0.147	0.142	0.088	39.105
	104.190		C11 Isoparaffin-4	0.015	0.014	0.009	3.998
	106.145		C11-Isoparaffin-7	0.111	0.107	0.067	29.611
	108.362		C11- Isoparaffin-11	0.172	0.166	0.103	45.876
Aromatics							
Mono-Aromatics	45.136	71-42-3	Benzene	0.683	0.558	0.822	198.819
	68.634	108-88-3	Toluene	6.716	5.561	6.846	1932.795
	84.439	100-41-4	Ethylbenzene	1.230	1.018	1.088	351.186
	85.671	108-38-3	m-Xylene	2.930	2.434	2.592	836.731
	85.819	106-42-3	p-Xylene	1.400	1.167	1.238	399.740
	88.651	95-47-6	o-Xylene	0.931	0.759	0.823	265.782
	92.836	98-82-8	i-Propylbenzene	0.031	0.026	0.024	8.887
	96.304	103-65-1	n-Propylbenzene	0.276	0.230	0.216	78.426
	97.153	620-14-4	1-Methyl-3-ethylbenzene	1.074	0.892	0.840	304.872
	97.387	622-96-8	1-Methyl-4-ethylbenzene	0.513	0.428	0.401	145.593
	98.014	108-67-8	1,3,5-Trimethylbenzene	0.709	0.589	0.554	201.264
	99.098	611-14-3	1-Methyl-2-ethylbenzene	0.417	0.340	0.325	118.194
	100.737	95-63-6	1,2,4-Trimethylbenzene	2.152	1.764	1.681	610.516
	102.454	538-93-2	i-Butylbenzene	0.162	0.136	0.113	45.695
	103.610	526-73-8	1,2,3-Trimethylbenzene	0.382	0.307	0.299	108.469
	103.997	535-77-3	1-Methyl-3-i-propylbenzene	0.017	0.014	0.012	4.874
	106.330	141-93-5	1,3-Diethylbenzene	0.052	0.043	0.037	14.730
	106.614	1074-43-7	1-Methyl-3-n-propylbenzene	0.436	0.364	0.305	123.082
	106.947	105-05-5	1,4-Diethylbenzene	0.174	0.145	0.122	49.151
	107.172	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.143	0.116	0.100	40.294
	107.440	135-01-3	1,2-Diethylbenzene	0.027	0.022	0.019	7.499
	108.023	1074-17-5	1-Methyl-2-n-propylbenzene	0.054	0.044	0.038	15.164
	108.875	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.120	0.098	0.084	33.898
	109.032	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.208	0.171	0.146	58.813
	109.542	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.275	0.226	0.192	77.546
	110.097	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.075	0.061	0.053	21.236
	111.009		1-Methyl-4-t-butylbenzene	0.020	0.017	0.013	5.753
	111.219	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.098	0.079	0.068	27.607
	111.689	4218-48-8	1-Ethyl-4-i-propylbenzene	0.012	0.010	0.008	3.383
	112.160		1,2,4,5-Tetramethylbenzene	0.232	0.188	0.162	65.445
	112.427	527-53-7	1,2,3,5-Tetramethylbenzene	0.329	0.265	0.230	92.747
	113.581		C11 - Aromatic - 3	0.042	0.034	0.027	11.936
	113.901		1,2-Di-i-propylbenzene	0.042	0.034	0.024	11.683
	114.115	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.060	0.048	0.038	16.861
	114.275		C11 - Aromatic - 4	0.030	0.024	0.019	8.505
	115.089	538-68-1	n-Pentylbenzene	0.015	0.012	0.009	4.099
	115.321		tert-Pentylbenzene	0.060	0.049	0.038	16.961

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.631	577-55-9	1-Methyl-2-n-butylbenzene	0.026	0.021	0.016	7.304
	115.741		C11 - Aromatic - 7	0.034	0.029	0.022	9.625
	116.204	100-18-5	1,4-Di-i-propylbenzene	0.048	0.038	0.028	13.326
	117.734		1,3-Di-n-propylbenzene	0.039	0.031	0.023	10.934
	117.845		C11 - Aromatic - 11	0.021	0.018	0.014	6.036
	118.400		C11 - Aromatic - 12	0.013	0.011	0.008	3.740
Naphthalenes	116.631	91-20-3	Naphthalene	0.081	0.056	0.059	23.838
	123.280	91-57-6	2-Methylnaphthalene	0.012	0.009	0.008	3.622
	124.145	90-12-0	1-Methylnaphthalene	0.006	0.004	0.004	1.781
Naphtheno/Olefir	113.761	874-35-1	5-Methylindan	0.098	0.079	0.069	27.578
	114.763	824-63-5	2-Methylindan	0.142	0.115	0.101	40.068
Indenes	104.800		Indan	0.138	0.103	0.110	39.897
	105.428		Indene	0.358	0.266	0.284	103.114
	109.197		2-Methylindan	0.019	0.014	0.014	5.522
	114.512	824-22-6	4-Methylindan	0.136	0.110	0.097	38.420
	117.080		1,1-Dimethyl Indane	0.015	0.011	0.010	4.275
Naphthenes							
Mono-Naphthene	27.108	287-92-3	Cyclopentane	1.465	1.411	1.962	395.865
	40.165	96-37-7	Methylcyclopentane	2.886	2.768	3.221	779.767
	47.067	110-82-7	Cyclohexane	3.280	3.024	3.660	886.034
	52.883	1759-58-6	1t,3-Dimethylcyclopentane	0.161	0.155	0.154	43.594
	53.470	2532-58-3	1c,3-Dimethylcyclopentane	0.130	0.126	0.125	35.193
	54.097	822-50-4	1t,2-Dimethylcyclopentane	0.203	0.194	0.195	54.936
	61.062	108-87-2	Methylcyclohexane	0.977	0.912	0.935	264.025
	62.013	4516-69-2	1,1,3-Trimethylcyclopentane	0.021	0.020	0.017	5.577
	63.857	1640-89-7	Ethylcyclopentane	0.033	0.031	0.032	8.981
	65.926	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.019	0.017	0.015	5.002
	67.456	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.015	0.014	0.012	3.928
	72.860		1,3-dimethyl-t-cyclohexane	0.086	0.080	0.072	23.209
	76.189	2207-03-6	1t,3-Dimethylcyclohexane	0.035	0.032	0.029	9.362
	81.867	1678-91-7	Ethylcyclohexane	0.044	0.040	0.037	11.911
	101.319	1678-98-4	i-Butylcyclohexane	0.017	0.015	0.011	4.544
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.404	115-11-7	Isobutene	0.020	0.024	0.034	5.483
	9.443	106-98-9	Butene-1	0.024	0.029	0.040	6.413
	10.266	624-64-6	t-Butene-2	0.088	0.105	0.148	23.854
	10.987	590-18-1	c-Butene-2	0.100	0.116	0.168	27.050
	16.335	109-67-1	Pentene-1	0.317	0.356	0.425	85.773
	18.801	646-04-8	t-Pentene-2	0.820	0.908	1.098	221.406
	19.824	627-20-3	c-Pentene-2	0.448	0.491	0.600	121.087
	32.937	592-41-6	Hexene-1	0.149	0.158	0.167	40.364

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	35.936	13269-52-8	t-Hexene-3	0.251	0.265	0.281	67.927
	36.408	4050-45-7	t-Hexene-2	0.476	0.501	0.531	128.613
	38.233	7688-21-3	c-Hexene-2	0.202	0.210	0.226	54.614
	56.884	14686-14-7	t-Heptene-3	0.016	0.016	0.015	4.191
Iso-Olefins	13.128	563-45-1	3-Methylbutene-1	0.069	0.079	0.092	18.571
	17.168	563-46-2	2-Methylbutene-1	0.497	0.549	0.666	134.306
	20.489	513-35-9	2-Methylbutene-2	1.025	1.111	1.373	276.986
	28.689	691-38-3	4-Methyl-c-pentene-2	0.043	0.045	0.048	11.528
	29.337	674-76-0	4-Methyl-t-pentene-2	0.129	0.137	0.144	34.767
	32.715	763-29-1	2-Methylpentene-1	0.220	0.230	0.245	59.344
	36.897	625-27-4	2-Methylpentene-2	0.334	0.347	0.373	90.341
	37.313	922-62-3	3-Methyl-c-pentene-2	0.256	0.263	0.285	69.049
	39.584	3404-73-7	3,3-Dimethylpentene-1	0.304	0.311	0.291	82.063
	46.164	3404-61-3	3-Methylhexene-1	0.012	0.012	0.011	3.214
	46.752	3524-73-0	5-Methylhexene-1	0.088	0.091	0.084	23.815
	48.807	15840-60-5	2-Methyl-c-hexene-3	0.030	0.031	0.029	8.066
	49.797	3404-55-5	4-Methyl-t/c-hexene-2	0.035	0.036	0.033	9.433
	57.240	6094-02-6	2-Methylhexene-1	0.024	0.025	0.023	6.589
Naphtheno-Olefir	25.243	142-29-0	Cyclopentene	0.177	0.165	0.245	49.352
	45.334	693-89-0	1-Methylcyclopentene	0.313	0.288	0.358	86.500
	50.670	110-83-8	Cyclohexene	0.033	0.029	0.038	8.993
Di-Olefins	18.206	78-79-5	2-Methyl-1,3-Butadiene	0.009	0.009	0.012	2.388
	20.825	2004-70-8	1t,3-Pentadiene	0.012	0.013	0.017	3.464
Oxygenates	26.491	71-23-8	n-Propanol	0.174	0.156	0.272	32.976
Unidentified	28.230		Unidentified	0.050	0.049	0.053	16.558
	47.590		Unidentified	0.027	0.028	0.026	8.919
	59.432		Unidentified	0.459	0.458	0.439	151.754
	63.642		Unidentified	0.123	0.118	0.105	40.622
	64.510		Unidentified	0.321	0.322	0.264	106.239
	72.091		Unidentified	0.059	0.059	0.048	19.489
	74.102		Unidentified	0.013	0.012	0.011	4.428
	75.904		Unidentified	0.010	0.010	0.007	3.365
	78.506		Unidentified	0.035	0.033	0.030	11.721
	82.672		Unidentified	0.008	0.007	0.007	2.581
	84.858		Unidentified	0.018	0.017	0.013	5.985
	86.326		Unidentified	0.015	0.015	0.011	4.852
	88.478		Unidentified	0.082	0.086	0.061	27.065
	93.028		Unidentified	0.014	0.013	0.010	4.670
	93.028		Unidentified	0.014	0.014	0.009	4.670
	93.028		Unidentified	0.014	0.010	0.009	4.670
	93.600		Unidentified	0.099	0.098	0.065	32.754
	100.127		Unidentified	0.063	0.045	0.038	20.795

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Components by Group

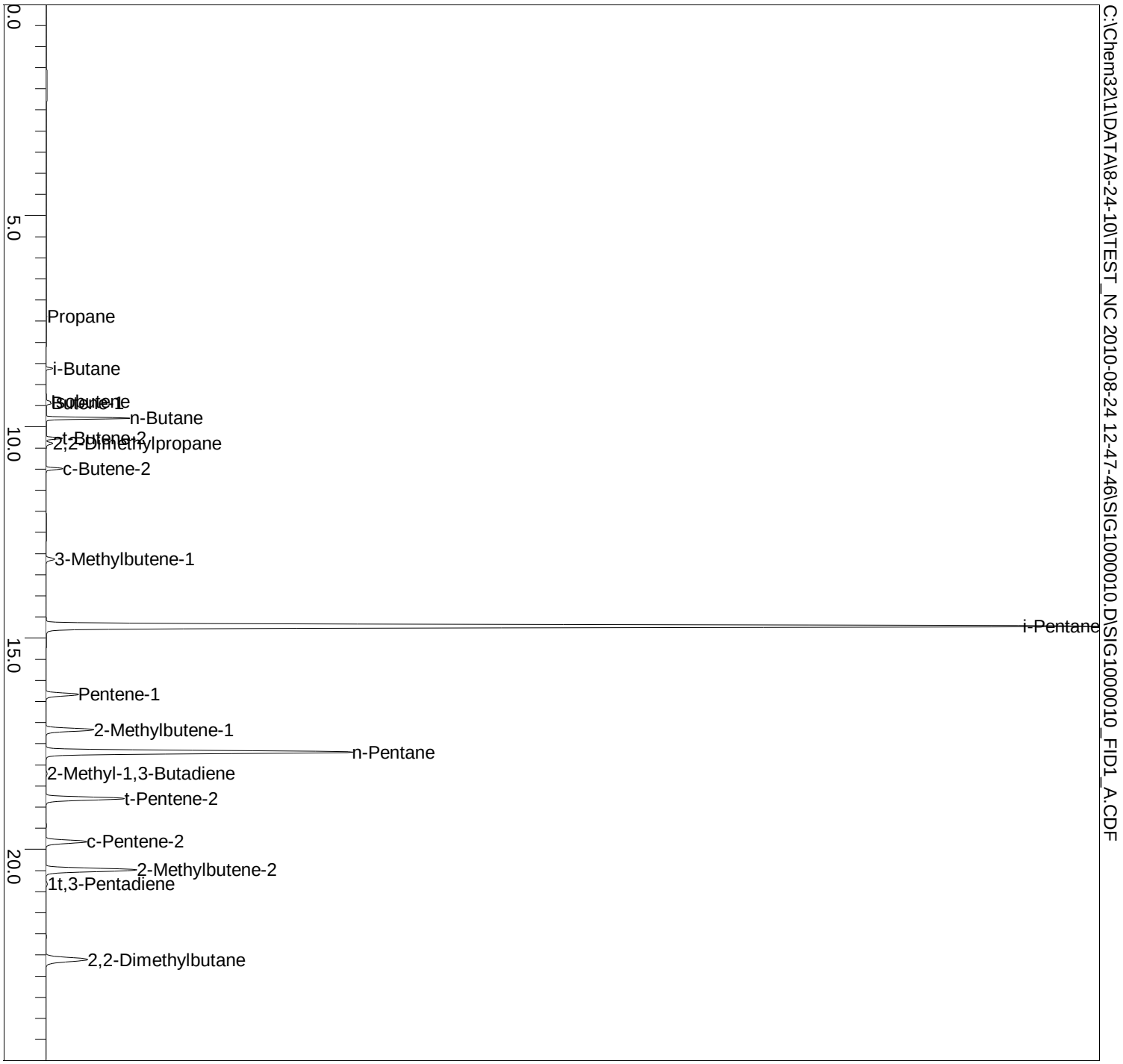
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	100.252		Unidentified	0.177	0.171	0.107	58.693
	100.941		Unidentified	0.103	0.105	0.069	34.022
	101.062		Unidentified	0.061	0.060	0.040	20.207
	102.974		Unidentified	0.032	0.031	0.019	10.714
	104.393		Unidentified	0.069	0.058	0.048	22.878
	107.884		Unidentified	0.017	0.017	0.010	5.756
	108.548		Unidentified	0.036	0.035	0.022	11.972
	113.289		Unidentified	0.009	0.009	0.005	3.017
	114.977		Unidentified	0.011	0.009	0.007	3.521
	116.801		Unidentified	0.008	0.006	0.005	2.530

Plus

Recovery = 100.00

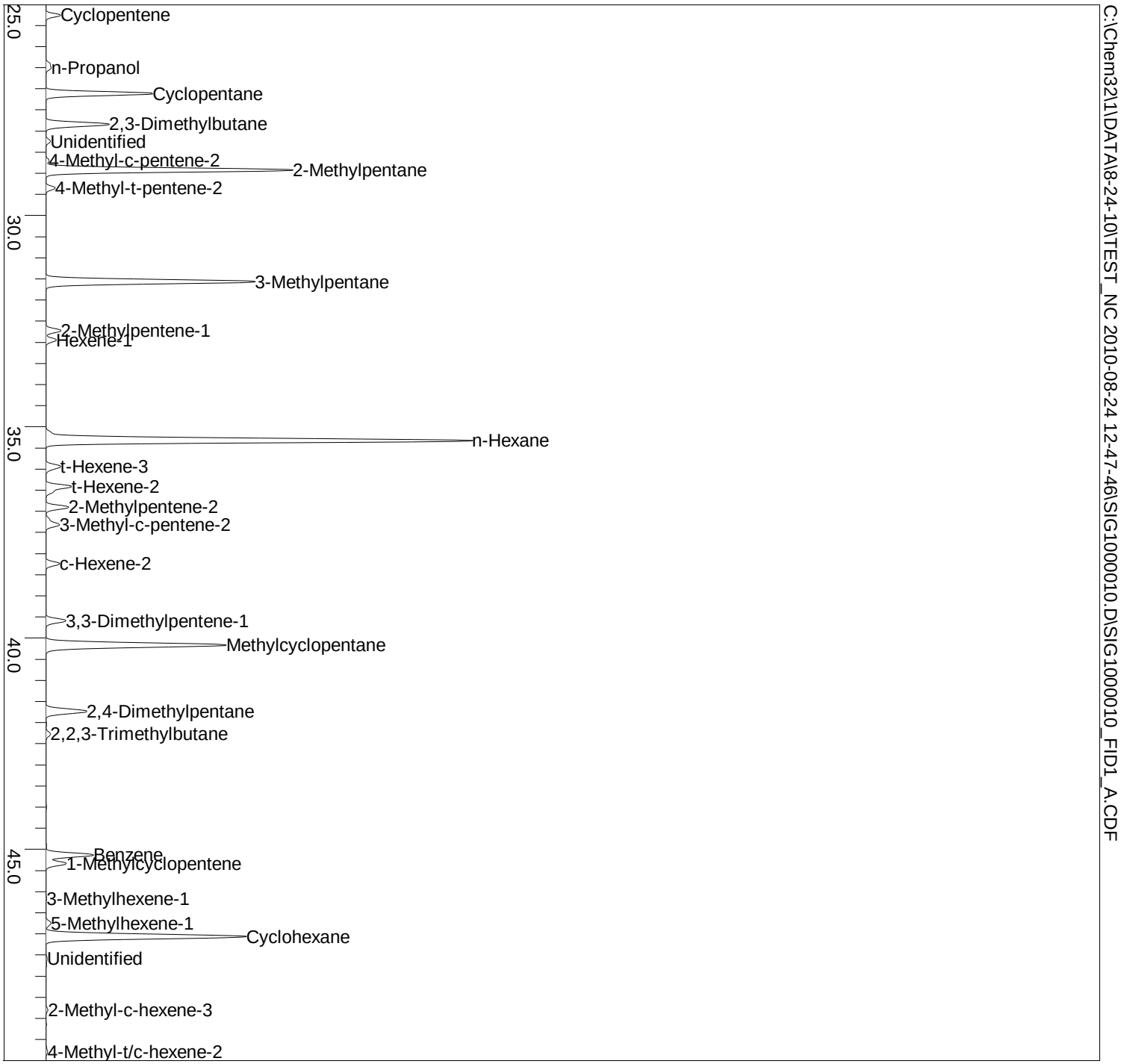
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1_A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1_A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram



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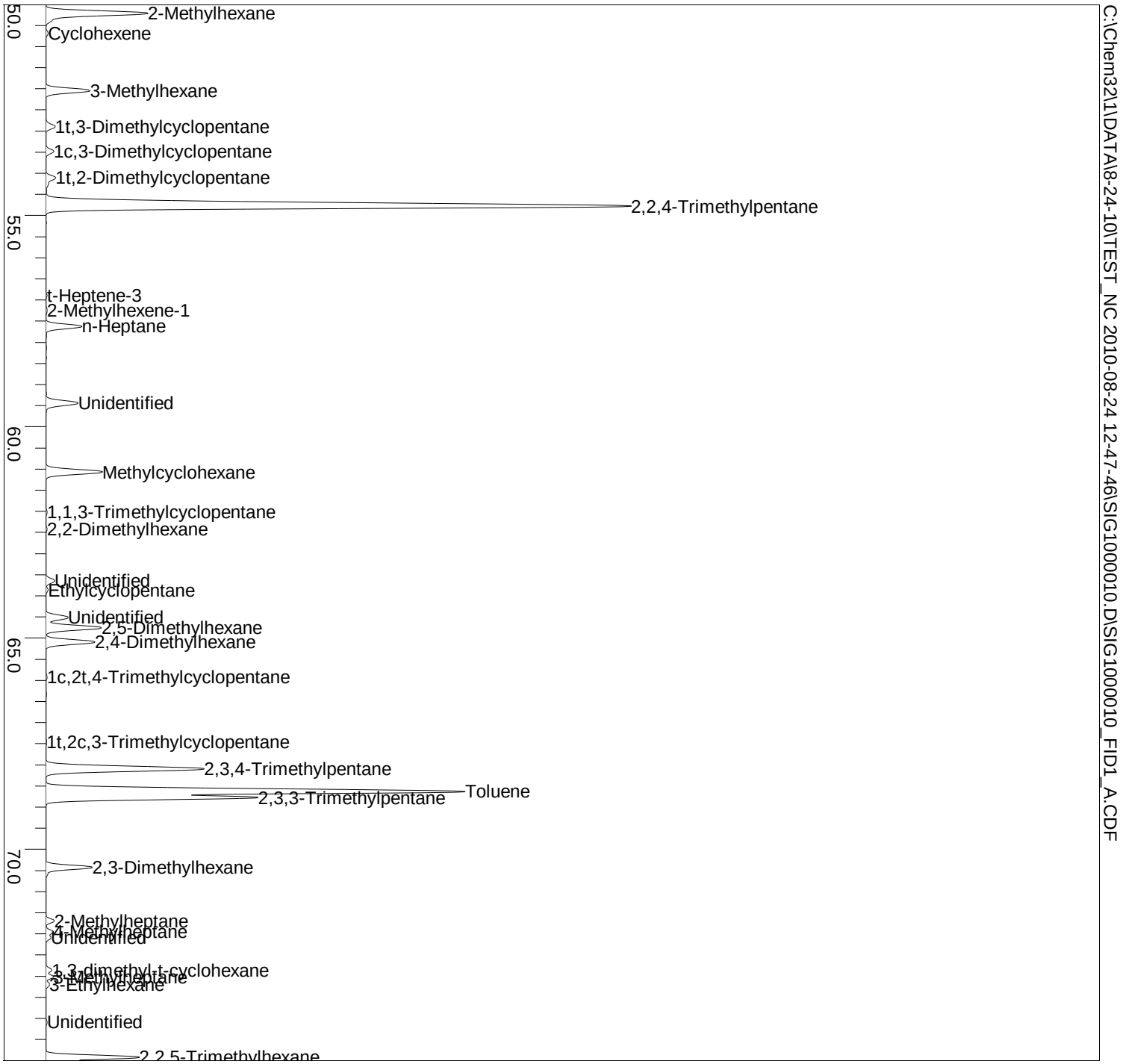
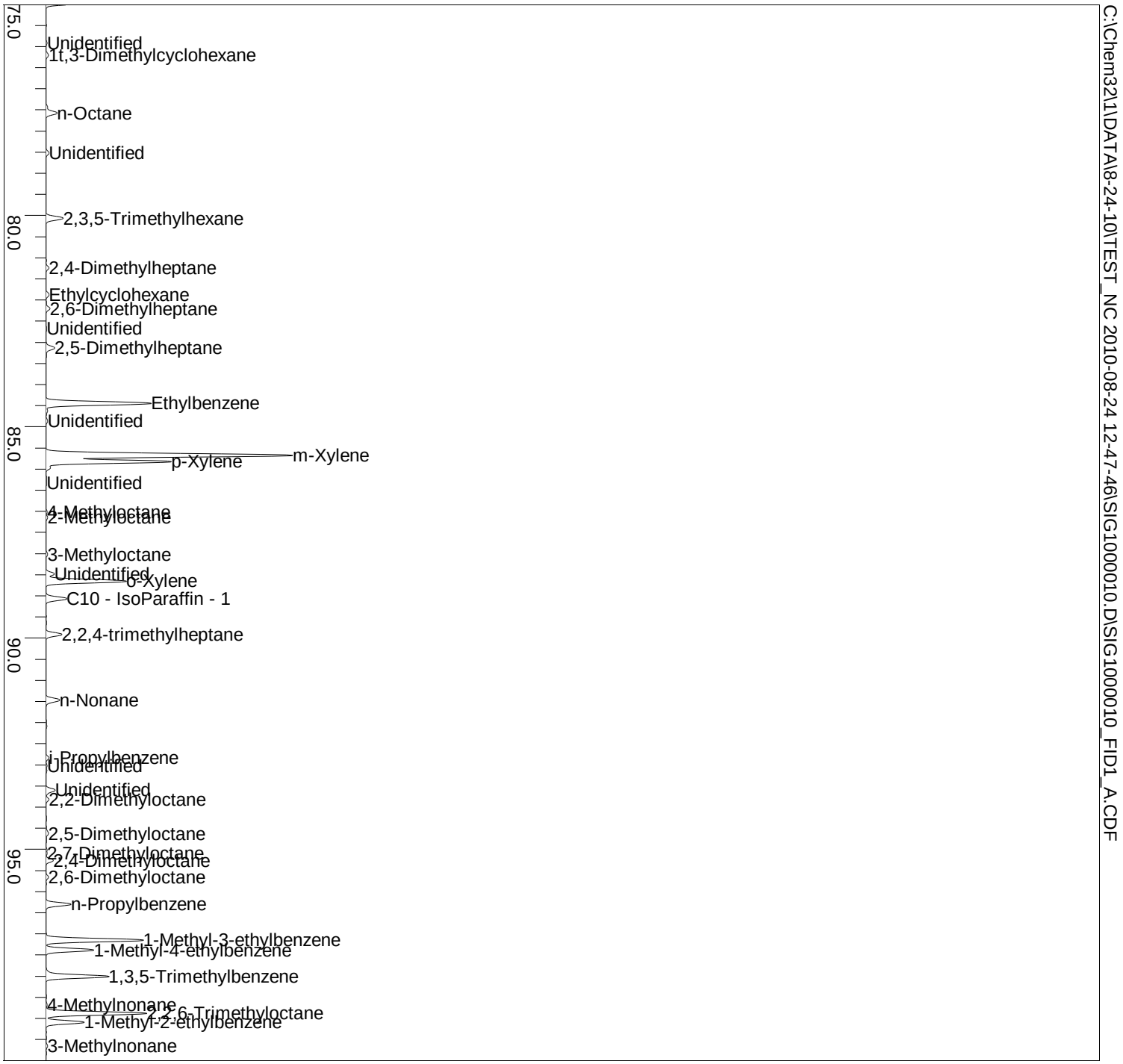
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1_A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram

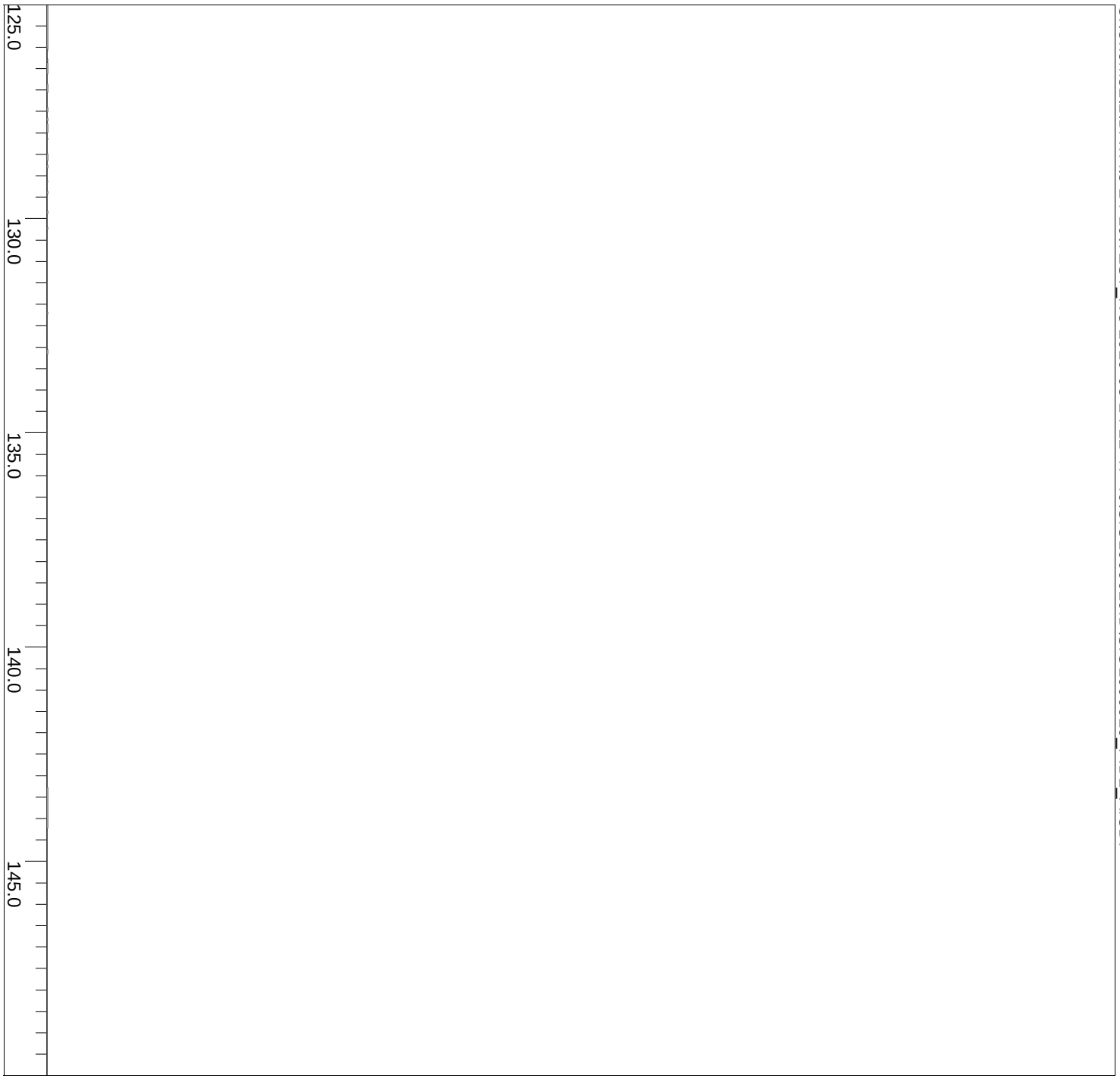


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1_A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000010.D\SIG1000010_FID1_A.CDF 24-Aug-10, 11:02:54
Sample: ODDB-91314 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91314
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	12.781	15.058	18.346
I-Paraffins	51.591	53.212	46.296
Aromatics	22.030	18.057	19.486
Mono-Aromatics	20.939	17.229	18.645
Naphthalenes	0.074	0.052	0.054
Naphtheno/Olefino-Benz	0.209	0.168	0.151
Indenes	0.807	0.608	0.635
Naphthenes	3.670	3.454	4.023
Mono-Naphthenes	3.670	3.454	4.023
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.545	6.950	8.255
n-Olefins	2.929	3.185	3.814
Iso-Olefins	3.070	3.260	3.760
Naphtheno-Olefins	0.525	0.482	0.653
Di-Olefins	0.021	0.022	0.029
Oxygenates	0.176	0.157	0.279
Unidentified	3.207	3.112	3.315
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.177	0.159	0.282
C4	7.792	9.620	12.807
C5	10.224	11.514	13.667
C6	13.177	13.634	14.805
C7	10.004	9.109	10.034
C8	38.591	37.840	32.623
C9	10.411	9.427	8.028
C10	5.492	4.766	3.866
C11	0.820	0.734	0.513
C12	0.104	0.083	0.061

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.002	0.003
	C4	7.517	9.293	12.342
	C5	1.907	2.179	2.523
	C6	2.529	2.745	2.801
	C7	0.297	0.311	0.283
	C8	0.089	0.090	0.074
	C9	0.363	0.362	0.270
	C10	0.062	0.061	0.042
	C11	0.014	0.014	0.009
I-Paraffins	C4	0.040	0.051	0.065
	C5	4.713	5.445	6.234
	C6	5.116	5.562	5.665
	C7	2.617	2.758	2.493
	C8	32.337	32.648	27.014
	C9	4.428	4.463	3.295
	C10	1.881	1.845	1.250
	C11	0.459	0.441	0.280
Mono-Aromatics	C6	0.646	0.526	0.790
	C7	5.772	4.764	5.978
	C8	6.051	4.996	5.439
	C9	5.434	4.459	4.314
	C10	2.617	2.143	1.861
	C11	0.315	0.256	0.203
	C12	0.104	0.083	0.061
Naphthalenes	C10	0.055	0.038	0.041
	C11	0.019	0.013	0.013
Naphtheno/Olefino-Benzs	C10	0.209	0.168	0.151
Indenes	C9	0.156	0.116	0.126
	C10	0.638	0.483	0.501
	C11	0.013	0.009	0.008
Mono-Naphthenes	C5	0.207	0.199	0.282
	C6	2.472	2.328	2.803
	C7	0.843	0.792	0.819
	C8	0.094	0.087	0.080
	C9	0.031	0.027	0.023
	C10	0.023	0.020	0.015

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes				
n-Olefins	C4	0.235	0.276	0.400
	C5	1.595	1.760	2.170
	C6	1.083	1.133	1.228
	C7	0.016	0.016	0.015
Iso-Olefins	C5	1.601	1.744	2.178
	C6	0.984	1.023	1.116
	C7	0.458	0.468	0.445
	C8	0.020	0.018	0.015
	C10	0.006	0.007	0.004
Naphtheno-Olefins	C5	0.179	0.166	0.250
	C6	0.346	0.317	0.402
Di-Olefins	C5	0.021	0.022	0.029
Oxygenates	C3	0.176	0.157	0.279

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.24	21.10
5%	27.49	26.16
10%	80.12	78.85
15%	96.00	81.85
20%	138.22	100.24
25%	154.03	140.27
30%	169.90	154.81
35%	206.70	176.86
40%	209.73	209.26
45%	210.36	209.87
50%	229.51	210.48
55%	230.86	229.99
60%	234.11	231.76
65%	236.86	235.56
70%	238.19	237.39
75%	254.49	238.95
80%	278.11	255.26
85%	292.29	281.91
90%	327.44	321.10
95%	350.87	336.69
FBP	400.85	388.14

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.391	74-98-6	P3	Propane	0.001	0.002	0.003	0.304
2	8.612	75-28-5	I4	i-Butane	0.040	0.051	0.065	9.521
3	9.403	115-11-7	K4	Isobutene	0.020	0.025	0.035	5.059
4	9.442	106-98-9	K4	Butene-1	0.024	0.029	0.041	5.955
5	9.791	106-97-8	P4	n-Butane	7.517	9.293	12.342	1799.592
6	10.265	624-64-6	K4	t-Butene-2	0.089	0.106	0.152	22.150
7	10.388	463-82-1	I5	2,2-Dimethylpropane	0.029	0.035	0.038	6.970
8	10.986	590-18-1	K4	c-Butene-2	0.101	0.117	0.172	25.142
9	13.127	563-45-1	C5	3-Methylbutene-1	0.070	0.079	0.095	17.274
10	14.706	78-78-4	I5	i-Pentane	4.684	5.410	6.195	1129.155
11	16.330	109-67-1	K5	Pentene-1	0.320	0.357	0.435	79.317
12	17.166	563-46-2	C5	2-Methylbutene-1	0.500	0.550	0.681	124.010
13	17.689	109-66-0	P5	n-Pentane	1.907	2.179	2.523	459.763
14	18.203	78-79-5	E5	2-Methyl-1,3-Butadiene	0.008	0.009	0.012	2.169
15	18.795	646-04-8	K5	t-Pentene-2	0.825	0.910	1.122	204.461
16	19.817	627-20-3	K5	c-Pentene-2	0.451	0.492	0.613	111.729
17	20.485	513-35-9	C5	2-Methylbutene-2	1.031	1.114	1.403	255.675
18	20.826	2004-70-8	E5	1t,3-Pentadiene	0.012	0.013	0.017	3.165
19	22.613	75-83-2	I6	2,2-Dimethylbutane	0.124	0.137	0.138	30.126
20	25.243	142-29-0	B5	Cyclopentene	0.179	0.166	0.250	45.591
21	26.486	71-23-8	X3	n-Propanol	0.176	0.157	0.279	30.550
22	27.094	287-92-3	M5	Cyclopentane	0.207	0.199	0.282	51.438
23	27.828	79-29-8	I6	2,3-Dimethylbutane	0.856	0.925	0.948	207.098
24	28.222		?	Unidentified	0.050	0.048	0.054	15.201
25	28.684	691-38-3	C6	4-Methyl-c-pentene-2	0.043	0.046	0.049	10.769
26	28.899	107-83-5	I6	2-Methylpentane	2.394	2.623	2.651	579.326
27	29.332	674-76-0	C6	4-Methyl-t-pentene-2	0.129	0.137	0.147	32.078
28	31.543	96-14-0	I6	3-Methylpentane	1.742	1.877	1.929	421.632
29	32.710	763-29-1	C6	2-Methylpentene-1	0.220	0.230	0.250	54.576
30	32.933	592-41-6	K6	Hexene-1	0.151	0.159	0.171	37.317
31	35.291	110-54-3	P6	n-Hexane	2.529	2.745	2.801	612.125
32	35.929	13269-52-8	K6	t-Hexene-3	0.252	0.264	0.286	62.455
33	36.401	4050-45-7	K6	t-Hexene-2	0.477	0.500	0.541	118.380
34	36.894	625-27-4	C6	2-Methylpentene-2	0.335	0.347	0.380	83.155
35	37.306	922-62-3	C6	3-Methyl-c-pentene-2	0.256	0.263	0.290	63.497
36	38.233	7688-21-3	K6	c-Hexene-2	0.203	0.210	0.230	50.351
37	39.581	3404-73-7	C7	3,3-Dimethylpentene-1	0.305	0.311	0.296	75.555
38	40.153	96-37-7	M6	Methylcyclopentane	1.533	1.465	1.738	380.015
39	41.726	108-08-7	I7	2,4-Dimethylpentane	0.585	0.623	0.557	142.210
40	42.271	464-06-2	I7	2,2,3-Trimethylbutane	0.049	0.051	0.047	11.987
41	45.132	71-42-3	Q6	Benzene	0.646	0.526	0.790	172.575
42	45.337	693-89-0	B6	1-Methylcyclopentene	0.313	0.287	0.364	79.482
43	46.157	3404-61-3	C7	3-Methylhexene-1	0.012	0.012	0.012	3.005

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	46.738	3524-73-0	C7	5-Methylhexene-1	0.054	0.055	0.052	13.343
45	47.047	110-82-7	M6	Cyclohexane	0.939	0.863	1.065	232.871
46	48.801	15840-60-5	C7	2-Methyl-c-hexene-3	0.030	0.031	0.029	7.336
47	49.800	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.033	0.034	0.032	8.173
48	50.197	591-76-4	I7	2-Methylhexane	1.472	1.552	1.402	357.716
49	50.669	110-83-8	B6	Cyclohexene	0.033	0.029	0.039	8.245
50	52.028	589-34-4	I7	3-Methylhexane	0.510	0.532	0.486	124.039
51	52.880	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.112	0.107	0.109	27.833
52	53.473	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.086	0.083	0.084	21.353
53	54.096	822-50-4	M7	1t,2-Dimethylcyclopentane	0.111	0.106	0.108	27.642
54	54.761	540-84-1	I8	2,2,4-Trimethylpentane	11.461	11.852	9.574	2790.355
55	56.884	14686-14-7	K7	t-Heptene-3	0.016	0.016	0.015	3.950
56	57.238	6094-02-6	C7	2-Methylhexene-1	0.025	0.026	0.024	6.224
57	57.615	142-82-5	P7	n-Heptane	0.297	0.311	0.283	72.223
58	61.059	108-87-2	M7	Methylcyclohexane	0.513	0.477	0.499	127.214
59	63.856	1640-89-7	M7	Ethylcyclopentane	0.020	0.019	0.019	4.952
60	64.510	564-02-3	I8	2,2,3-Trimethylpentane	0.663	0.663	0.554	161.495
61	64.758	592-13-2	I8	2,5-Dimethylhexane	1.330	1.373	1.111	323.907
62	65.096	589-43-5	I8	2,4-Dimethylhexane	1.092	1.116	0.912	265.925
63	68.126	565-75-3	I8	2,3,4-Trimethylpentane	6.897	6.863	5.761	1679.101
64	68.633	108-88-3	Q7	Toluene	5.772	4.764	5.978	1524.479
65	68.814	560-21-4	I8	2,3,3-Trimethylpentane	8.803	8.674	7.354	2143.232
66	70.436	584-94-1	I8	2,3-Dimethylhexane	1.645	1.653	1.375	400.609
67	71.698	592-27-8	I8	2-Methylheptane	0.108	0.110	0.090	26.218
68	71.963	589-53-7	I8	4-Methylheptane	0.200	0.203	0.167	48.673
69	72.093		?	Unidentified	0.141	0.141	0.118	42.947
70	72.863		M8	1,3-dimethyl-t-cyclohexane	0.048	0.044	0.040	11.803
71	73.021	589-81-1	I8	3-Methylheptane	0.102	0.104	0.086	24.949
72	73.202	619-99-8	I8	3-Ethylhexane	0.036	0.036	0.030	8.672
73	74.942	3522-94-9	I9	2,2,5-Trimethylhexane	3.275	3.314	2.437	798.940
74	75.909		?	Unidentified	0.025	0.024	0.019	7.558
75	76.194	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.020	0.018	0.017	4.919
76	77.563	111-65-9	P8	n-Octane	0.089	0.090	0.074	21.621
77	78.507		?	Unidentified	0.084	0.081	0.062	25.461
78	80.058	1069-53-0	I9	2,3,5-Trimethylhexane	0.635	0.630	0.473	154.964
79	81.232	1071-26-7	I9	2,4-Dimethylheptane	0.074	0.075	0.055	18.127
80	81.867	1678-91-7	M8	Ethylcyclohexane	0.026	0.024	0.022	6.552
81	82.194	1072-05-5	I9	2,6-Dimethylheptane	0.109	0.110	0.081	26.617
82	82.674		?	Unidentified	0.008	0.009	0.006	2.483
83	83.128		I9	2,5-Dimethylheptane	0.291	0.291	0.217	71.006
84	84.439	100-41-4	Q8	Ethylbenzene	1.019	0.841	0.916	267.051
85	84.617		?	Unidentified	0.046	0.045	0.035	13.925
86	84.857		?	Unidentified	0.038	0.035	0.029	11.560

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	85.669	108-38-3	Q8	m-Xylene	2.759	2.284	2.480	723.115
88	85.817	106-42-3	Q8	p-Xylene	1.267	1.053	1.139	332.164
89	85.963		?	Unidentified	0.095	0.093	0.070	28.711
90	86.219		C8	C9-IsoOlefin-3	0.020	0.018	0.015	4.986
91	86.327		?	Unidentified	0.017	0.017	0.013	5.245
92	87.014	2216-34-4	I9	4-Methyloctane	0.011	0.011	0.008	2.743
93	87.146	3221-61-2	I9	2-Methyloctane	0.016	0.016	0.012	3.945
94	88.011	2216-33-3	I9	3-Methyloctane	0.016	0.016	0.012	3.948
95	88.480		?	Unidentified	0.276	0.289	0.208	83.729
96	88.650	95-47-6	Q8	o-Xylene	1.007	0.818	0.905	263.837
97	89.068		I10	C10 - IsoParaffin - 1	0.808	0.794	0.542	197.423
98	89.914	14720-74-2	I10	2,2,4-trimethylheptane	0.556	0.547	0.373	136.024
99	91.461	111-84-2	P9	n-Nonane	0.363	0.362	0.270	88.528
100	92.083	4926-90-3	M9	1,1-Methylethylcyclohexane	0.024	0.022	0.018	6.022
101	92.837	98-82-8	Q9	i-Propylbenzene	0.033	0.027	0.026	8.478
102	93.028		?	Unidentified	0.017	0.016	0.013	5.221
103	93.028		?	Unidentified	0.017	0.018	0.012	5.221
104	93.028		?	Unidentified	0.017	0.012	0.012	5.221
105	93.133	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.006	0.006	0.005	1.603
106	93.133		C10	C10-IsoOlefin-4	0.006	0.007	0.004	1.603
107	93.133		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.603
108	93.602		?	Unidentified	0.193	0.191	0.129	58.622
109	93.824	15869-87-1	I10	2,2-Dimethyloctane	0.063	0.062	0.042	15.285
110	94.269		?	Unidentified	0.012	0.008	1.105	3.517
111	94.269		?	Unidentified	0.012	0.012	0.008	3.517
112	94.625	15869-89-3	I10	2,5-Dimethyloctane	0.062	0.061	0.042	15.240
113	95.101	2040-95-1	I10	2,7-Dimethyloctane	0.026	0.025	0.017	6.357
114	95.265	2051-30-1	I10	2,4-Dimethyloctane	0.114	0.112	0.076	27.766
115	95.660		I10	2,6-Dimethyloctane	0.037	0.036	0.025	9.036
116	96.303	103-65-1	Q9	n-Propylbenzene	0.262	0.218	0.208	68.313
117	97.152	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.018	0.843	0.808	265.192
118	97.386	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.488	0.406	0.388	127.206
119	98.014	108-67-8	Q9	1,3,5-Trimethylbenzene	0.694	0.574	0.551	180.862
120	98.684	17301-94-8	I10	4-Methylnonane	0.010	0.010	0.007	2.454
121	98.889		?	Unidentified	1.284	1.265	0.861	390.019
122	99.097	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.404	0.329	0.321	105.308
123	99.467		?	Unidentified	0.004	0.004	0.003	1.244
124	99.661	5911-04-6	I10	3-Methylnonane	0.014	0.014	0.009	3.450
125	100.127		?	Unidentified	0.089	0.064	0.054	27.013
126	100.253		?	Unidentified	0.239	0.230	0.146	72.642
127	100.478		I11	C11-Isoparaffin-2	0.128	0.123	0.078	31.380
128	100.736	95-63-6	Q9	1,2,4-Trimethylbenzene	2.134	1.743	1.694	555.657
129	100.941		?	Unidentified	0.143	0.146	0.098	43.555

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	101.063		?	Unidentified	0.086	0.084	0.057	25.995
131	101.320	1678-98-4	M10	i-Butylcyclohexane	0.023	0.020	0.015	5.616
132	101.964		?	Unidentified	0.008	0.007	0.005	2.437
133	102.107	17302-01-1	I10	3-Ethyl-3-methylheptane	0.191	0.184	0.117	46.826
134	102.460	538-93-2	Q10	i-Butylbenzene	0.213	0.179	0.151	55.175
135	102.660	124-18-5	P10	n-Decane	0.062	0.061	0.042	15.250
136	102.974		?	Unidentified	0.045	0.043	0.028	13.737
137	103.611	526-73-8	Q9	1,2,3-Trimethylbenzene	0.400	0.320	0.317	104.112
138	103.992	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.021	0.017	0.015	5.372
139	104.190		I11	C11 Isoparaffin-4	0.021	0.020	0.013	5.086
140	104.395		?	Unidentified	0.093	0.077	0.066	28.152
141	104.800		J9	Indan	0.156	0.116	0.126	41.272
142	105.428		J10	Indene	0.471	0.350	0.381	124.780
143	106.145		I11	C11-Isoparaffin-7	0.147	0.142	0.090	36.015
144	106.331	141-93-5	Q10	1,3-Diethylbenzene	0.055	0.046	0.039	14.329
145	106.617	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.528	0.439	0.376	136.898
146	106.944	105-05-5	Q10	1,4-Diethylbenzene	0.191	0.159	0.136	49.561
147	107.173	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.145	0.118	0.103	37.440
148	107.434	135-01-3	Q10	1,2-Diethylbenzene	0.032	0.026	0.023	8.355
149	107.885		?	Unidentified	0.024	0.023	0.014	7.161
150	108.024	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.051	0.041	0.036	13.086
151	108.160		?	Unidentified	0.024	0.023	0.015	7.141
152	108.242		?	Unidentified	0.021	0.020	0.013	6.319
153	108.362		I11	C11- Isoparaffin-11	0.163	0.156	0.099	39.817
154	108.550		?	Unidentified	0.047	0.045	0.029	14.197
155	108.874	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.114	0.093	0.081	29.579
156	109.028	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.229	0.187	0.163	59.253
157	109.199		J10	2-Methylindan	0.022	0.017	0.016	5.949
158	109.542	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.272	0.223	0.193	70.444
159	110.097	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.090	0.072	0.064	23.357
160	111.009		Q11	1-Methyl-4-t-butylbenzene	0.026	0.022	0.017	6.733
161	111.221	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.099	0.080	0.071	25.729
162	111.528	1120-21-4	P11	n-Undecane	0.014	0.014	0.009	3.507
163	111.689	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.015	0.012	0.010	3.853
164	112.161		Q10	1,2,4,5-Tetramethylbenzene	0.237	0.191	0.169	61.470
165	112.428	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.339	0.273	0.241	87.889
166	113.581		Q11	C11 - Aromatic - 3	0.049	0.040	0.032	12.740
167	113.761	874-35-1	H10	5-Methylindan	0.105	0.084	0.076	27.119
168	113.901		Q12	1,2-Di-i-propylbenzene	0.041	0.033	0.024	10.657
169	114.116	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.058	0.047	0.037	15.015
170	114.278		Q11	C11 - Aromatic - 4	0.027	0.022	0.018	7.015
171	114.512	824-22-6	J10	4-Methylindan	0.145	0.116	0.104	37.454
172	114.680		?	Unidentified	0.026	0.021	0.017	8.049

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	114.764	824-63-5	H10	2-Methylindan	0.104	0.084	0.075	27.061
174	114.977		?	Unidentified	0.010	0.008	0.007	3.113
175	115.089	538-68-1	Q11	n-Pentylbenzene	0.012	0.010	0.008	3.052
176	115.317		Q11	tert-Pentylbenzene	0.056	0.045	0.036	14.562
177	115.632	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.022	0.018	0.014	5.778
178	115.742		Q11	C11 - Aromatic - 7	0.029	0.024	0.019	7.454
179	116.204	100-18-5	Q12	1,4-Di-i-propylbenzene	0.038	0.030	0.022	9.646
180	116.633	91-20-3	G10	Naphthalene	0.055	0.038	0.041	14.950
181	116.797		J11	4,7-Dimethyl Indane	0.008	0.006	0.005	2.148
182	117.080		J11	1,1-Dimethyl Indane	0.005	0.003	0.003	1.223
183	117.735		Q12	1,3-Di-n-propylbenzene	0.025	0.020	0.015	6.398
184	117.846		Q11	C11 - Aromatic - 11	0.012	0.010	0.008	3.082
185	118.401		Q11	C11 - Aromatic - 12	0.008	0.006	0.005	1.973
186	123.280	91-57-6	G11	2-Methylnaphthalene	0.013	0.009	0.009	3.444
187	124.145	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.004	1.708
188	126.171		?	Unidentified	0.004	0.004	0.003	1.353
189	126.171		?	Unidentified	0.004	0.004	0.002	1.353
190	126.171		?	Unidentified	0.004	0.004	0.002	1.353
191	129.863		?	Unidentified	0.004	0.003	0.002	1.077

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.391	74-98-6	Propane	0.001	0.002	0.003	0.304
	9.791	106-97-8	n-Butane	7.517	9.293	12.342	1799.592
	17.689	109-66-0	n-Pentane	1.907	2.179	2.523	459.763
	35.291	110-54-3	n-Hexane	2.529	2.745	2.801	612.125
	57.615	142-82-5	n-Heptane	0.297	0.311	0.283	72.223
	77.563	111-65-9	n-Octane	0.089	0.090	0.074	21.621
	91.461	111-84-2	n-Nonane	0.363	0.362	0.270	88.528
	102.660	124-18-5	n-Decane	0.062	0.061	0.042	15.250
	111.528	1120-21-4	n-Undecane	0.014	0.014	0.009	3.507
I-Paraffins	8.612	75-28-5	i-Butane	0.040	0.051	0.065	9.521
	10.388	463-82-1	2,2-Dimethylpropane	0.029	0.035	0.038	6.970
	14.706	78-78-4	i-Pentane	4.684	5.410	6.195	1129.155
	22.613	75-83-2	2,2-Dimethylbutane	0.124	0.137	0.138	30.126
	27.828	79-29-8	2,3-Dimethylbutane	0.856	0.925	0.948	207.098
	28.899	107-83-5	2-Methylpentane	2.394	2.623	2.651	579.326
	31.543	96-14-0	3-Methylpentane	1.742	1.877	1.929	421.632
	41.726	108-08-7	2,4-Dimethylpentane	0.585	0.623	0.557	142.210
	42.271	464-06-2	2,2,3-Trimethylbutane	0.049	0.051	0.047	11.987
	50.197	591-76-4	2-Methylhexane	1.472	1.552	1.402	357.716
	52.028	589-34-4	3-Methylhexane	0.510	0.532	0.486	124.039
	54.761	540-84-1	2,2,4-Trimethylpentane	11.461	11.852	9.574	2790.355
	64.510	564-02-3	2,2,3-Trimethylpentane	0.663	0.663	0.554	161.495
	64.758	592-13-2	2,5-Dimethylhexane	1.330	1.373	1.111	323.907
	65.096	589-43-5	2,4-Dimethylhexane	1.092	1.116	0.912	265.925
	68.126	565-75-3	2,3,4-Trimethylpentane	6.897	6.863	5.761	1679.101
	68.814	560-21-4	2,3,3-Trimethylpentane	8.803	8.674	7.354	2143.232
	70.436	584-94-1	2,3-Dimethylhexane	1.645	1.653	1.375	400.609
	71.698	592-27-8	2-Methylheptane	0.108	0.110	0.090	26.218
	71.963	589-53-7	4-Methylheptane	0.200	0.203	0.167	48.673
	73.021	589-81-1	3-Methylheptane	0.102	0.104	0.086	24.949
	73.202	619-99-8	3-Ethylhexane	0.036	0.036	0.030	8.672
	74.942	3522-94-9	2,2,5-Trimethylhexane	3.275	3.314	2.437	798.940
	80.058	1069-53-0	2,3,5-Trimethylhexane	0.635	0.630	0.473	154.964
	81.232	1071-26-7	2,4-Dimethylheptane	0.074	0.075	0.055	18.127
	82.194	1072-05-5	2,6-Dimethylheptane	0.109	0.110	0.081	26.617
	83.128		2,5-Dimethylheptane	0.291	0.291	0.217	71.006
	87.014	2216-34-4	4-Methyloctane	0.011	0.011	0.008	2.743
	87.146	3221-61-2	2-Methyloctane	0.016	0.016	0.012	3.945
	88.011	2216-33-3	3-Methyloctane	0.016	0.016	0.012	3.948
	89.068		C10 - IsoParaffin - 1	0.808	0.794	0.542	197.423
	89.914	14720-74-2	2,2,4-trimethylheptane	0.556	0.547	0.373	136.024
	93.133		C10-isoparaffin-x	0.000	0.000	0.000	1.603
	93.824	15869-87-1	2,2-Dimethyloctane	0.063	0.062	0.042	15.285
	94.625	15869-89-3	2,5-Dimethyloctane	0.062	0.061	0.042	15.240
	95.101	2040-95-1	2,7-Dimethyloctane	0.026	0.025	0.017	6.357
	95.265	2051-30-1	2,4-Dimethyloctane	0.114	0.112	0.076	27.766

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	95.660		2,6-Dimethyloctane	0.037	0.036	0.025	9.036
	98.684	17301-94-8	4-Methylnonane	0.010	0.010	0.007	2.454
	99.661	5911-04-6	3-Methylnonane	0.014	0.014	0.009	3.450
	100.478		C11-Isoparaffin-2	0.128	0.123	0.078	31.380
	102.107	17302-01-1	3-Ethyl-3-methylheptane	0.191	0.184	0.117	46.826
	104.190		C11 Isoparaffin-4	0.021	0.020	0.013	5.086
	106.145		C11-Isoparaffin-7	0.147	0.142	0.090	36.015
	108.362		C11- Isoparaffin-11	0.163	0.156	0.099	39.817
Aromatics							
Mono-Aromatics	45.132	71-42-3	Benzene	0.646	0.526	0.790	172.575
	68.633	108-88-3	Toluene	5.772	4.764	5.978	1524.479
	84.439	100-41-4	Ethylbenzene	1.019	0.841	0.916	267.051
	85.669	108-38-3	m-Xylene	2.759	2.284	2.480	723.115
	85.817	106-42-3	p-Xylene	1.267	1.053	1.139	332.164
	88.650	95-47-6	o-Xylene	1.007	0.818	0.905	263.837
	92.837	98-82-8	i-Propylbenzene	0.033	0.027	0.026	8.478
	96.303	103-65-1	n-Propylbenzene	0.262	0.218	0.208	68.313
	97.152	620-14-4	1-Methyl-3-ethylbenzene	1.018	0.843	0.808	265.192
	97.386	622-96-8	1-Methyl-4-ethylbenzene	0.488	0.406	0.388	127.206
	98.014	108-67-8	1,3,5-Trimethylbenzene	0.694	0.574	0.551	180.862
	99.097	611-14-3	1-Methyl-2-ethylbenzene	0.404	0.329	0.321	105.308
	100.736	95-63-6	1,2,4-Trimethylbenzene	2.134	1.743	1.694	555.657
	102.460	538-93-2	i-Butylbenzene	0.213	0.179	0.151	55.175
	103.611	526-73-8	1,2,3-Trimethylbenzene	0.400	0.320	0.317	104.112
	103.992	535-77-3	1-Methyl-3-i-propylbenzene	0.021	0.017	0.015	5.372
	106.331	141-93-5	1,3-Diethylbenzene	0.055	0.046	0.039	14.329
	106.617	1074-43-7	1-Methyl-3-n-propylbenzene	0.528	0.439	0.376	136.898
	106.944	105-05-5	1,4-Diethylbenzene	0.191	0.159	0.136	49.561
	107.173	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.145	0.118	0.103	37.440
	107.434	135-01-3	1,2-Diethylbenzene	0.032	0.026	0.023	8.355
	108.024	1074-17-5	1-Methyl-2-n-propylbenzene	0.051	0.041	0.036	13.086
	108.874	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.114	0.093	0.081	29.579
	109.028	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.229	0.187	0.163	59.253
	109.542	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.272	0.223	0.193	70.444
	110.097	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.090	0.072	0.064	23.357
	111.009		1-Methyl-4-t-butylbenzene	0.026	0.022	0.017	6.733
	111.221	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.099	0.080	0.071	25.729
	111.689	4218-48-8	1-Ethyl-4-i-propylbenzene	0.015	0.012	0.010	3.853
	112.161		1,2,4,5-Tetramethylbenzene	0.237	0.191	0.169	61.470
	112.428	527-53-7	1,2,3,5-Tetramethylbenzene	0.339	0.273	0.241	87.889
	113.581		C11 - Aromatic - 3	0.049	0.040	0.032	12.740
	113.901		1,2-Di-i-propylbenzene	0.041	0.033	0.024	10.657
	114.116	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.058	0.047	0.037	15.015
	114.278		C11 - Aromatic - 4	0.027	0.022	0.018	7.015
	115.089	538-68-1	n-Pentylbenzene	0.012	0.010	0.008	3.052
	115.317		tert-Pentylbenzene	0.056	0.045	0.036	14.562

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.632	577-55-9	1-Methyl-2-n-butylbenzene	0.022	0.018	0.014	5.778
	115.742		C11 - Aromatic - 7	0.029	0.024	0.019	7.454
	116.204	100-18-5	1,4-Di-i-propylbenzene	0.038	0.030	0.022	9.646
	117.735		1,3-Di-n-propylbenzene	0.025	0.020	0.015	6.398
	117.846		C11 - Aromatic - 11	0.012	0.010	0.008	3.082
	118.401		C11 - Aromatic - 12	0.008	0.006	0.005	1.973
Naphthalenes	116.633	91-20-3	Naphthalene	0.055	0.038	0.041	14.950
	123.280	91-57-6	2-Methylnaphthalene	0.013	0.009	0.009	3.444
	124.145	90-12-0	1-Methylnaphthalene	0.006	0.004	0.004	1.708
Naphtheno/Olefir	113.761	874-35-1	5-Methylindan	0.105	0.084	0.076	27.119
	114.764	824-63-5	2-Methylindan	0.104	0.084	0.075	27.061
Indenes	104.800		Indan	0.156	0.116	0.126	41.272
	105.428		Indene	0.471	0.350	0.381	124.780
	109.199		2-Methylindan	0.022	0.017	0.016	5.949
	114.512	824-22-6	4-Methylindan	0.145	0.116	0.104	37.454
	116.797		4,7-Dimethyl Indane	0.008	0.006	0.005	2.148
	117.080		1,1-Dimethyl Indane	0.005	0.003	0.003	1.223
Naphthenes							
Mono-Naphthene	27.094	287-92-3	Cyclopentane	0.207	0.199	0.282	51.438
	40.153	96-37-7	Methylcyclopentane	1.533	1.465	1.738	380.015
	47.047	110-82-7	Cyclohexane	0.939	0.863	1.065	232.871
	52.880	1759-58-6	1t,3-Dimethylcyclopentane	0.112	0.107	0.109	27.833
	53.473	2532-58-3	1c,3-Dimethylcyclopentane	0.086	0.083	0.084	21.353
	54.096	822-50-4	1t,2-Dimethylcyclopentane	0.111	0.106	0.108	27.642
	61.059	108-87-2	Methylcyclohexane	0.513	0.477	0.499	127.214
	63.856	1640-89-7	Ethylcyclopentane	0.020	0.019	0.019	4.952
	72.863		1,3-dimethyl-t-cyclohexane	0.048	0.044	0.040	11.803
	76.194	2207-03-6	1t,3-Dimethylcyclohexane	0.020	0.018	0.017	4.919
	81.867	1678-91-7	Ethylcyclohexane	0.026	0.024	0.022	6.552
	92.083	4926-90-3	1,1-Methylethylcyclohexane	0.024	0.022	0.018	6.022
	93.133	696-29-7	1-Methyl-2-propyl-cyclopentan	0.006	0.006	0.005	1.603
	101.320	1678-98-4	i-Butylcyclohexane	0.023	0.020	0.015	5.616
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.403	115-11-7	Isobutene	0.020	0.025	0.035	5.059
	9.442	106-98-9	Butene-1	0.024	0.029	0.041	5.955
	10.265	624-64-6	t-Butene-2	0.089	0.106	0.152	22.150
	10.986	590-18-1	c-Butene-2	0.101	0.117	0.172	25.142
	16.330	109-67-1	Pentene-1	0.320	0.357	0.435	79.317
	18.795	646-04-8	t-Pentene-2	0.825	0.910	1.122	204.461
	19.817	627-20-3	c-Pentene-2	0.451	0.492	0.613	111.729
	32.933	592-41-6	Hexene-1	0.151	0.159	0.171	37.317

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	35.929	13269-52-8	t-Hexene-3	0.252	0.264	0.286	62.455
	36.401	4050-45-7	t-Hexene-2	0.477	0.500	0.541	118.380
	38.233	7688-21-3	c-Hexene-2	0.203	0.210	0.230	50.351
	56.884	14686-14-7	t-Heptene-3	0.016	0.016	0.015	3.950
Iso-Olefins	13.127	563-45-1	3-Methylbutene-1	0.070	0.079	0.095	17.274
	17.166	563-46-2	2-Methylbutene-1	0.500	0.550	0.681	124.010
	20.485	513-35-9	2-Methylbutene-2	1.031	1.114	1.403	255.675
	28.684	691-38-3	4-Methyl-c-pentene-2	0.043	0.046	0.049	10.769
	29.332	674-76-0	4-Methyl-t-pentene-2	0.129	0.137	0.147	32.078
	32.710	763-29-1	2-Methylpentene-1	0.220	0.230	0.250	54.576
	36.894	625-27-4	2-Methylpentene-2	0.335	0.347	0.380	83.155
	37.306	922-62-3	3-Methyl-c-pentene-2	0.256	0.263	0.290	63.497
	39.581	3404-73-7	3,3-Dimethylpentene-1	0.305	0.311	0.296	75.555
	46.157	3404-61-3	3-Methylhexene-1	0.012	0.012	0.012	3.005
	46.738	3524-73-0	5-Methylhexene-1	0.054	0.055	0.052	13.343
	48.801	15840-60-5	2-Methyl-c-hexene-3	0.030	0.031	0.029	7.336
	49.800	3404-55-5	4-Methyl-t/c-hexene-2	0.033	0.034	0.032	8.173
	57.238	6094-02-6	2-Methylhexene-1	0.025	0.026	0.024	6.224
	86.219		C9-IsoOlefin-3	0.020	0.018	0.015	4.986
	93.133		C10-IsoOlefin-4	0.006	0.007	0.004	1.603
Naphtheno-Olefir	25.243	142-29-0	Cyclopentene	0.179	0.166	0.250	45.591
	45.337	693-89-0	1-Methylcyclopentene	0.313	0.287	0.364	79.482
	50.669	110-83-8	Cyclohexene	0.033	0.029	0.039	8.245
Di-Olefins	18.203	78-79-5	2-Methyl-1,3-Butadiene	0.008	0.009	0.012	2.169
	20.826	2004-70-8	1t,3-Pentadiene	0.012	0.013	0.017	3.165
Oxygenates	26.486	71-23-8	n-Propanol	0.176	0.157	0.279	30.550
Unidentified	28.222		Unidentified	0.050	0.048	0.054	15.201
	72.093		Unidentified	0.141	0.141	0.118	42.947
	75.909		Unidentified	0.025	0.024	0.019	7.558
	78.507		Unidentified	0.084	0.081	0.062	25.461
	82.674		Unidentified	0.008	0.009	0.006	2.483
	84.617		Unidentified	0.046	0.045	0.035	13.925
	84.857		Unidentified	0.038	0.035	0.029	11.560
	85.963		Unidentified	0.095	0.093	0.070	28.711
	86.327		Unidentified	0.017	0.017	0.013	5.245
	88.480		Unidentified	0.276	0.289	0.208	83.729
	93.028		Unidentified	0.017	0.016	0.013	5.221
	93.028		Unidentified	0.017	0.018	0.012	5.221
	93.028		Unidentified	0.017	0.012	0.012	5.221
	93.602		Unidentified	0.193	0.191	0.129	58.622
	94.269		Unidentified	0.012	0.008	1.105	3.517
	94.269		Unidentified	0.012	0.012	0.008	3.517

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Components by Group

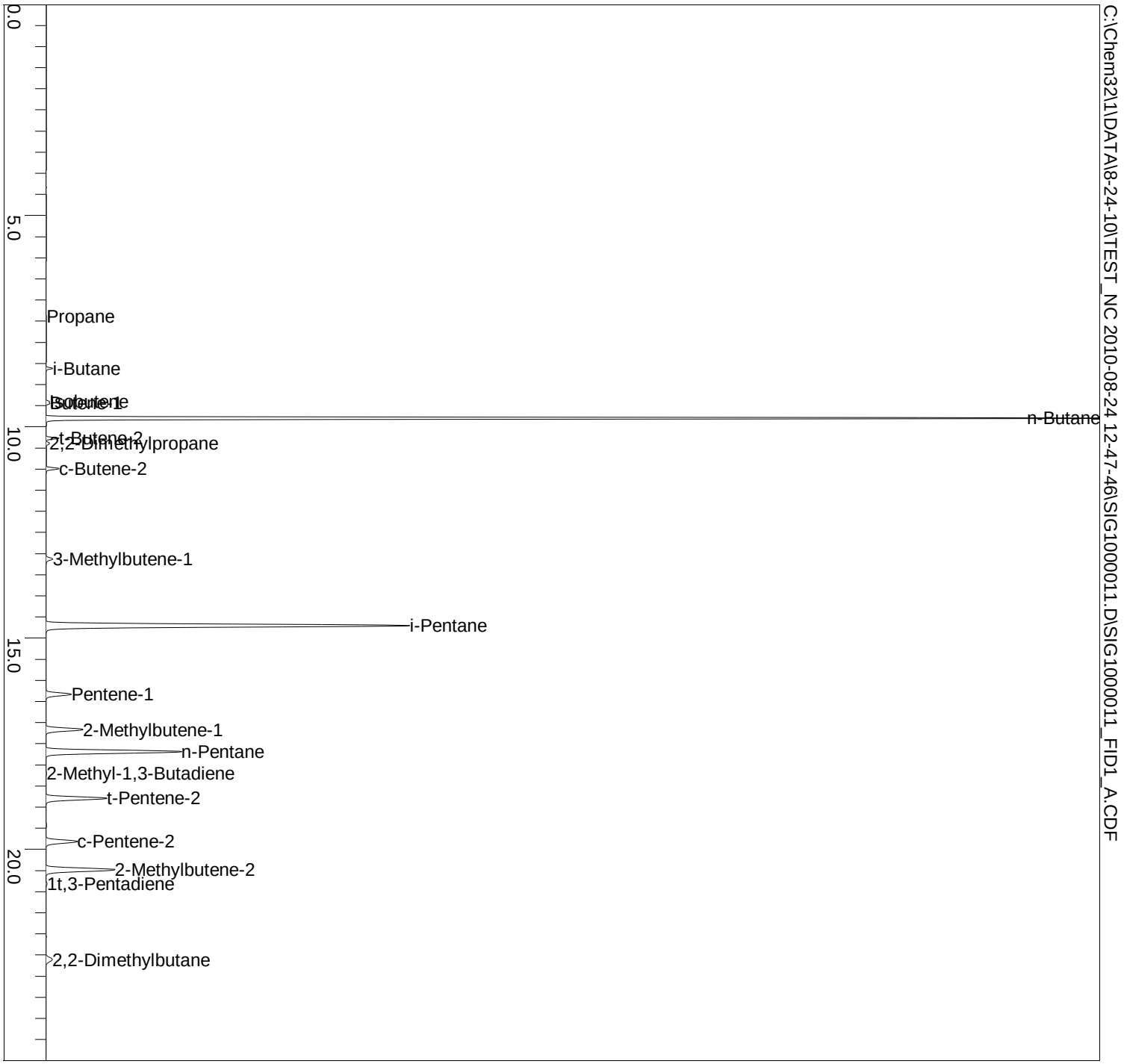
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	98.889		Unidentified	1.284	1.265	0.861	390.019
	99.467		Unidentified	0.004	0.004	0.003	1.244
	100.127		Unidentified	0.089	0.064	0.054	27.013
	100.253		Unidentified	0.239	0.230	0.146	72.642
	100.941		Unidentified	0.143	0.146	0.098	43.555
	101.063		Unidentified	0.086	0.084	0.057	25.995
	101.964		Unidentified	0.008	0.007	0.005	2.437
	102.974		Unidentified	0.045	0.043	0.028	13.737
	104.395		Unidentified	0.093	0.077	0.066	28.152
	107.885		Unidentified	0.024	0.023	0.014	7.161
	108.160		Unidentified	0.024	0.023	0.015	7.141
	108.242		Unidentified	0.021	0.020	0.013	6.319
	108.550		Unidentified	0.047	0.045	0.029	14.197
	114.680		Unidentified	0.026	0.021	0.017	8.049
	114.977		Unidentified	0.010	0.008	0.007	3.113
	126.171		Unidentified	0.004	0.004	0.003	1.353
	126.171		Unidentified	0.004	0.004	0.002	1.353
	126.171		Unidentified	0.004	0.004	0.002	1.353
	129.863		Unidentified	0.004	0.003	0.002	1.077

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1_A.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Sample Chromatogram



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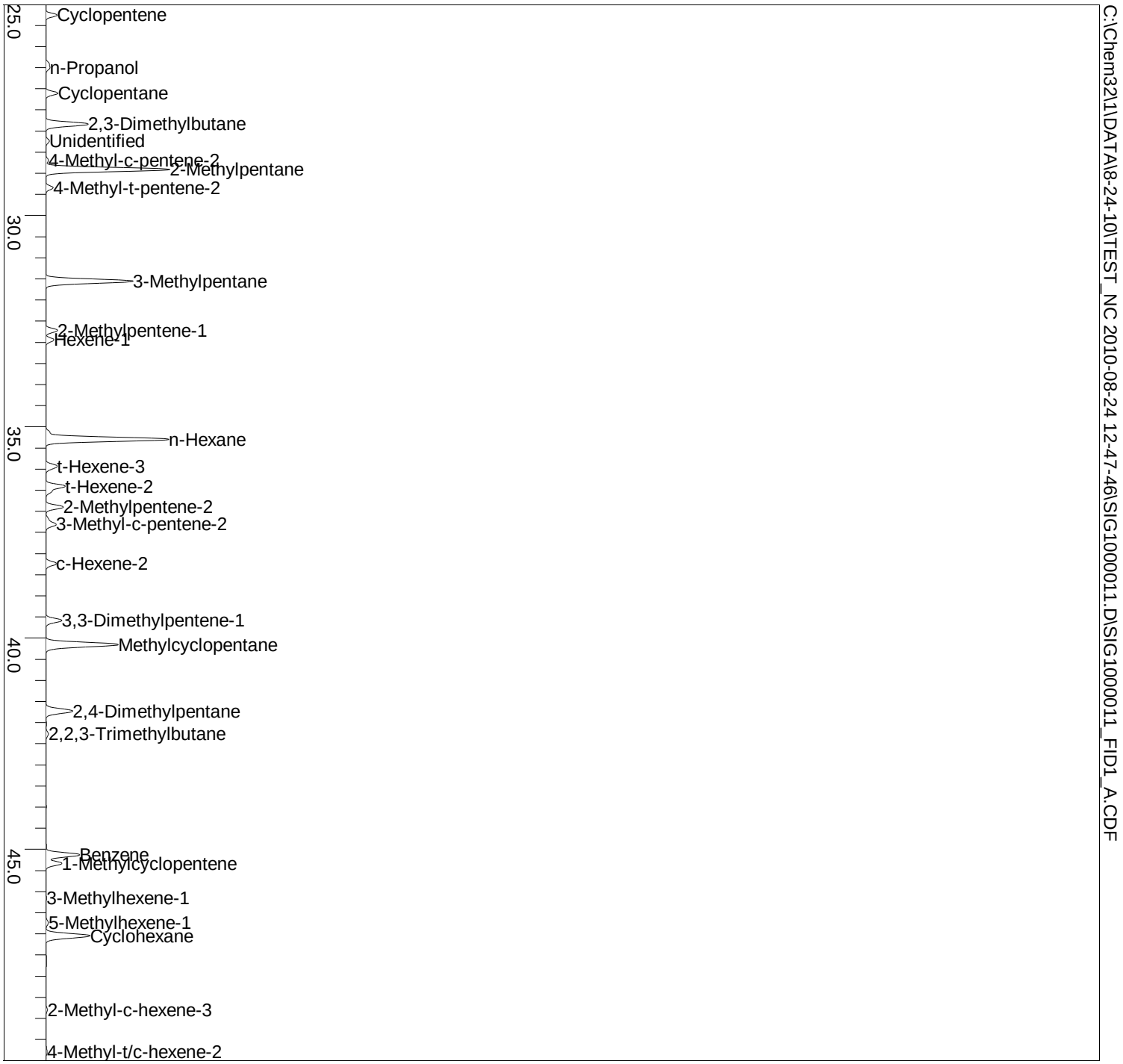
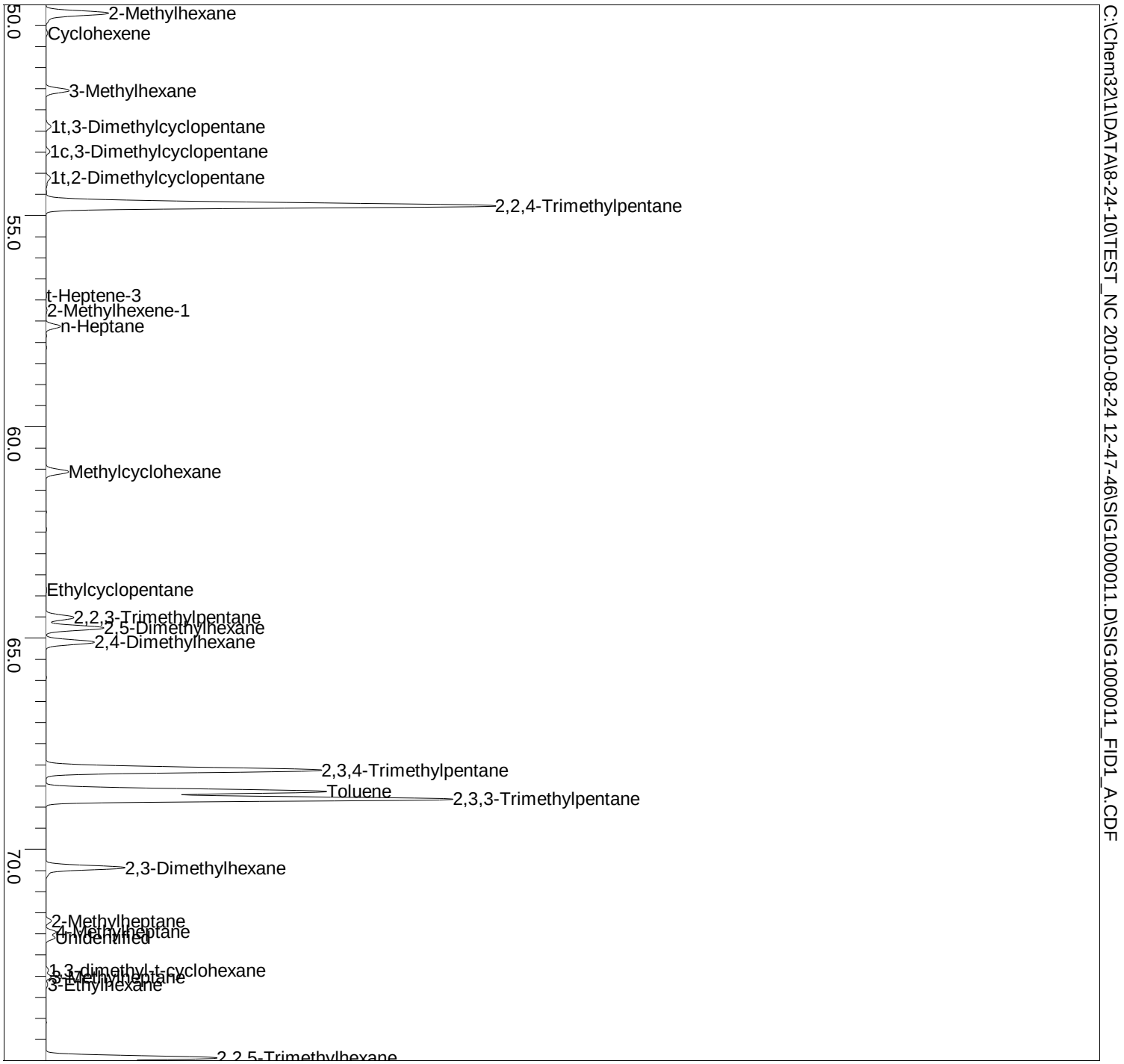
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1_A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1_A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

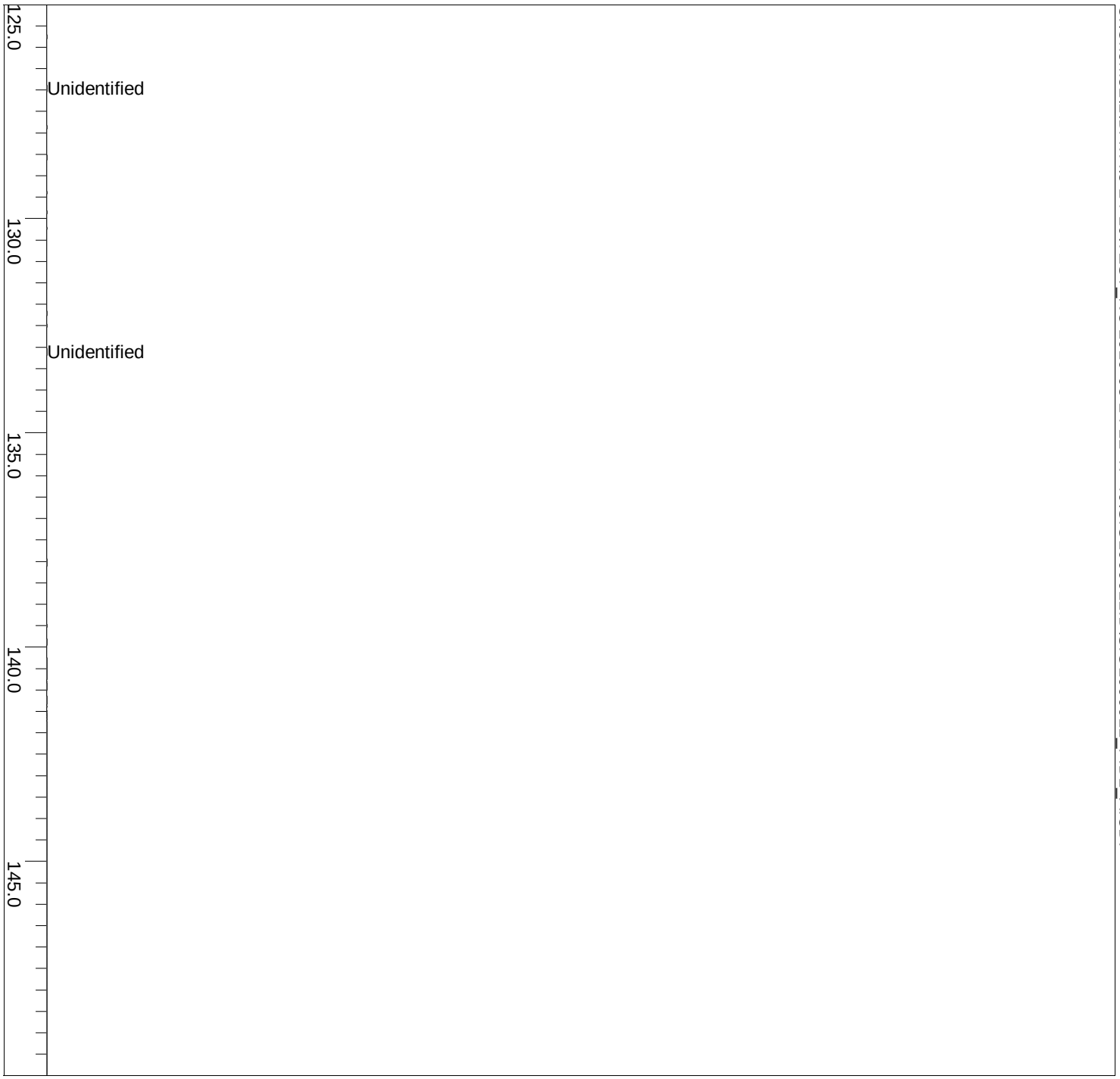
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000011.D\SIG1000011_FID1_A.CDF 24-Aug-10, 13:30:15
Sample: ODDB-91315 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91315
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	13.967	16.585	17.183
I-Paraffins	23.619	27.367	26.260
Aromatics	47.067	40.259	40.242
Mono-Aromatics	44.465	38.173	38.390
Naphthalenes	0.252	0.184	0.177
Naphtheno/Olefino-Benz	0.756	0.634	0.519
Indenes	1.594	1.268	1.156
Naphthenes	5.847	5.746	6.153
Mono-Naphthenes	5.847	5.746	6.153
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.969	7.721	8.350
n-Olefins	3.107	3.525	3.842
Iso-Olefins	3.277	3.632	3.813
Naphtheno-Olefins	0.563	0.539	0.665
Di-Olefins	0.023	0.025	0.030
Oxygenates	0.188	0.175	0.283
Unidentified	2.344	2.148	1.529
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.189	0.177	0.285
C4	4.561	5.869	7.131
C5	18.430	21.880	23.317
C6	21.530	23.383	22.919
C7	22.174	19.947	21.525
C8	13.659	11.870	11.640
C9	3.834	3.286	2.891
C10	10.043	8.526	6.847
C11	2.646	2.415	1.584
C12	0.590	0.499	0.331

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.002	0.002
	C4	4.275	5.515	6.671
	C5	2.361	2.815	2.968
	C6	6.582	7.454	6.928
	C7	0.454	0.495	0.411
	C8	0.122	0.129	0.097
	C9	0.031	0.032	0.022
	C10	0.043	0.044	0.028
	C11	0.099	0.099	0.057
I-Paraffins	C4	0.038	0.052	0.060
	C5	12.244	14.758	15.393
	C6	7.298	8.275	7.681
	C7	2.133	2.341	1.930
	C8	0.286	0.304	0.227
	C9	0.048	0.051	0.034
	C10	0.505	0.517	0.316
	C11	1.033	1.037	0.599
	C12	0.034	0.034	0.018
Mono-Aromatics	C6	0.657	0.558	0.763
	C7	17.964	15.471	17.684
	C8	13.134	11.324	11.221
	C9	3.617	3.097	2.730
	C10	7.134	6.064	4.821
	C11	1.427	1.212	0.873
	C12	0.532	0.446	0.297
Naphthalenes	C10	0.234	0.170	0.165
	C11	0.019	0.014	0.012
Naphtheno/Olefino-Benzs	C10	0.756	0.634	0.519
Indenes	C9	0.138	0.107	0.106
	C10	1.363	1.089	0.993
	C11	0.068	0.053	0.042
	C12	0.025	0.019	0.015
Mono-Naphthenes	C5	0.242	0.242	0.313
	C6	4.406	4.330	4.749
	C7	1.073	1.052	0.991
	C8	0.117	0.114	0.095

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.008	0.008	0.005
n-Olefins	C4	0.247	0.303	0.400
	C5	1.682	1.936	2.175
	C6	1.161	1.268	1.251
	C7	0.017	0.018	0.015
Iso-Olefins	C5	1.689	1.920	2.184
	C6	1.053	1.143	1.135
	C7	0.535	0.570	0.494
Naphtheno-Olefins	C5	0.190	0.184	0.253
	C6	0.373	0.356	0.412
Di-Olefins	C5	0.023	0.025	0.030
Oxygenates	C3	0.188	0.175	0.283

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.67	21.39
5%	78.84	29.91
10%	80.16	79.64
15%	81.49	80.74
20%	96.52	81.84
25%	138.22	97.08
30%	145.29	138.23
35%	154.76	144.89
40%	157.30	154.52
45%	177.16	155.49
50%	229.03	175.61
55%	229.63	207.32
60%	230.23	229.48
65%	230.83	230.18
70%	277.09	230.88
75%	281.55	278.54
80%	291.76	281.93
85%	347.64	329.27
90%	363.20	362.78
95%	381.20	377.97
FBP	408.42	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.389	74-98-6	P3	Propane	0.001	0.002	0.002	0.273
2	8.609	75-28-5	I4	i-Butane	0.038	0.052	0.060	9.972
3	9.400	115-11-7	K4	Isobutene	0.022	0.027	0.035	5.822
4	9.439	106-98-9	K4	Butene-1	0.025	0.032	0.041	6.821
5	9.789	106-97-8	P4	n-Butane	4.275	5.515	6.671	1107.495
6	10.262	624-64-6	K4	t-Butene-2	0.094	0.116	0.152	25.244
7	10.385	463-82-1	I5	2,2-Dimethylpropane	0.044	0.055	0.055	11.450
8	10.983	590-18-1	K4	c-Butene-2	0.106	0.128	0.172	28.488
9	13.123	563-45-1	C5	3-Methylbutene-1	0.073	0.087	0.094	19.585
10	14.712	78-78-4	I5	i-Pentane	12.200	14.703	15.338	3182.770
11	16.328	109-67-1	K5	Pentene-1	0.336	0.392	0.435	90.275
12	17.164	563-46-2	C5	2-Methylbutene-1	0.527	0.605	0.681	141.339
13	17.687	109-66-0	P5	n-Pentane	2.361	2.815	2.968	615.837
14	18.201	78-79-5	E5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.543
15	18.790	646-04-8	K5	t-Pentene-2	0.870	1.002	1.125	233.318
16	19.431		?	Unidentified	0.006	0.007	0.008	2.094
17	19.814	627-20-3	K5	c-Pentene-2	0.476	0.542	0.616	127.733
18	20.484	513-35-9	C5	2-Methylbutene-2	1.089	1.228	1.409	292.249
19	20.815	2004-70-8	E5	1t,3-Pentadiene	0.014	0.015	0.018	3.762
20	22.607	75-83-2	I6	2,2-Dimethylbutane	0.153	0.175	0.161	39.957
21	25.241	142-29-0	B5	Cyclopentene	0.190	0.184	0.253	52.437
22	26.483	71-23-8	X3	n-Propanol	0.188	0.175	0.283	35.238
23	27.089	287-92-3	M5	Cyclopentane	0.242	0.242	0.313	64.950
24	27.820	79-29-8	I6	2,3-Dimethylbutane	0.607	0.686	0.639	159.095
25	28.223		?	Unidentified	0.054	0.054	0.055	17.624
26	28.680	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.051	0.049	12.318
27	28.904	107-83-5	I6	2-Methylpentane	3.380	3.864	3.558	885.263
28	29.330	674-76-0	C6	4-Methyl-t-pentene-2	0.138	0.153	0.149	36.992
29	31.550	96-14-0	I6	3-Methylpentane	3.158	3.550	3.324	827.082
30	32.709	763-29-1	C6	2-Methylpentene-1	0.236	0.257	0.254	63.324
31	32.933	592-41-6	K6	Hexene-1	0.161	0.177	0.174	43.204
32	35.316	110-54-3	P6	n-Hexane	6.582	7.454	6.928	1723.994
33	35.930	13269-52-8	K6	t-Hexene-3	0.270	0.296	0.291	72.486
34	36.401	4050-45-7	K6	t-Hexene-2	0.512	0.560	0.552	137.416
35	36.894	625-27-4	C6	2-Methylpentene-2	0.359	0.388	0.387	96.358
36	37.305	922-62-3	C6	3-Methyl-c-pentene-2	0.275	0.294	0.296	73.686
37	38.232	7688-21-3	K6	c-Hexene-2	0.217	0.235	0.234	58.349
38	39.579	3404-73-7	C7	3,3-Dimethylpentene-1	0.326	0.347	0.302	87.579
39	40.158	96-37-7	M6	Methylcyclopentane	2.720	2.713	2.931	729.812
40	41.728	108-08-7	I7	2,4-Dimethylpentane	0.393	0.436	0.356	103.315
41	42.033	594-56-9	C7	2,3,3-Trimethylbutene-1	0.012	0.013	0.011	3.217
42	42.268	464-06-2	I7	2,2,3-Trimethylbutane	0.057	0.062	0.052	15.032
43	44.924		?	Unidentified	0.011	0.011	0.012	3.559

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	45.129	71-42-3	Q6	Benzene	0.657	0.558	0.763	189.866
45	45.332	693-89-0	B6	1-Methylcyclopentene	0.337	0.323	0.372	92.688
46	46.153	3404-61-3	C7	3-Methylhexene-1	0.013	0.014	0.012	3.391
47	46.738	3524-73-0	C7	5-Methylhexene-1	0.083	0.089	0.077	22.306
48	47.053	110-82-7	M6	Cyclohexane	1.686	1.617	1.817	452.441
49	47.587		?	Unidentified	0.029	0.031	0.027	9.598
50	48.798	15840-60-5	C7	2-Methyl-c-hexene-3	0.032	0.034	0.029	8.532
51	49.792	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.037	0.040	0.035	10.022
52	50.186	591-76-4	I7	2-Methylhexane	1.062	1.168	0.961	279.191
53	50.663	110-83-8	B6	Cyclohexene	0.036	0.033	0.039	9.536
54	52.025	589-34-4	I7	3-Methylhexane	0.621	0.675	0.562	163.233
55	52.878	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.136	0.136	0.126	36.581
56	53.463	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.106	0.106	0.098	28.491
57	54.092	822-50-4	M7	1t,2-Dimethylcyclopentane	0.147	0.146	0.136	39.552
58	54.687	540-84-1	I8	2,2,4-Trimethylpentane	0.016	0.017	0.013	4.154
59	56.880	14686-14-7	K7	t-Heptene-3	0.017	0.018	0.015	4.489
60	57.233	6094-02-6	C7	2-Methylhexene-1	0.026	0.028	0.024	6.915
61	57.612	142-82-5	P7	n-Heptane	0.454	0.495	0.411	119.286
62	58.111	2738-19-4	C7	2-Methyl-2-hexene	0.005	0.006	0.005	1.462
63	61.058	108-87-2	M7	Methylcyclohexane	0.660	0.641	0.610	177.137
64	62.011	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.013	0.013	0.011	3.587
65	63.855	1640-89-7	M7	Ethylcyclopentane	0.023	0.022	0.021	6.158
66	64.744	592-13-2	I8	2,5-Dimethylhexane	0.019	0.021	0.015	5.133
67	65.083	589-43-5	I8	2,4-Dimethylhexane	0.026	0.028	0.021	6.837
68	68.705	108-88-3	Q7	Toluene	17.964	15.471	17.684	5134.580
69	70.427	584-94-1	I8	2,3-Dimethylhexane	0.016	0.017	0.013	4.176
70	71.695	592-27-8	I8	2-Methylheptane	0.072	0.077	0.057	18.891
71	71.947	589-53-7	I8	4-Methylheptane	0.031	0.033	0.025	8.180
72	72.859		M8	1,3-dimethyl-t-cyclohexane	0.056	0.054	0.045	14.932
73	73.019	589-81-1	I8	3-Methylheptane	0.068	0.072	0.054	17.960
74	73.201	619-99-8	I8	3-Ethylhexane	0.038	0.040	0.030	9.984
75	74.100		?	Unidentified	0.008	0.008	0.007	2.767
76	76.187	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.022	0.022	0.018	6.012
77	77.561	111-65-9	P8	n-Octane	0.122	0.129	0.097	32.043
78	81.867	1678-91-7	M8	Ethylcyclohexane	0.026	0.025	0.021	6.986
79	82.193	1072-05-5	I9	2,6-Dimethylheptane	0.007	0.007	0.005	1.855
80	83.130		I9	2,5-Dimethylheptane	0.007	0.008	0.005	1.931
81	84.452	100-41-4	Q8	Ethylbenzene	2.515	2.166	2.148	713.310
82	85.699	108-38-3	Q8	m-Xylene	6.074	5.248	5.189	1722.882
83	85.842	106-42-3	Q8	p-Xylene	2.846	2.468	2.432	807.379
84	87.016	2216-34-4	I9	4-Methyloctane	0.009	0.010	0.007	2.434
85	87.148	3221-61-2	I9	2-Methyloctane	0.012	0.013	0.009	3.191
86	88.012	2216-33-3	I9	3-Methyloctane	0.013	0.013	0.009	3.389

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	88.660	95-47-6	Q8	o-Xylene	1.700	1.442	1.452	482.170
88	91.506	111-84-2	P9	n-Nonane	0.031	0.032	0.022	8.054
89	92.837	98-82-8	Q9	i-Propylbenzene	0.035	0.031	0.027	9.922
90	95.264	2051-30-1	I10	2,4-Dimethyloctane	0.010	0.010	0.006	2.570
91	96.303	103-65-1	Q9	n-Propylbenzene	0.188	0.163	0.142	52.919
92	97.149	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.686	0.592	0.518	193.320
93	97.384	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.325	0.282	0.246	91.710
94	98.011	108-67-8	Q9	1,3,5-Trimethylbenzene	0.420	0.362	0.317	118.327
95	98.680	17301-94-8	I10	4-Methylnonane	0.006	0.006	0.004	1.635
96	98.881		I10	2,2,6-Trimethyloctane	0.378	0.388	0.241	99.894
97	99.096	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.272	0.230	0.205	76.615
98	99.659	5911-04-6	I10	3-Methylnonane	0.009	0.009	0.006	2.374
99	100.126		?	Unidentified	0.028	0.021	0.016	9.328
100	100.251		?	Unidentified	0.085	0.086	0.050	28.048
101	100.476		I11	C11-Isoparaffin-2	0.046	0.046	0.026	12.073
102	100.730	95-63-6	Q9	1,2,4-Trimethylbenzene	1.375	1.172	1.038	387.549
103	100.940		?	Unidentified	0.065	0.069	0.042	21.235
104	101.061		?	Unidentified	0.037	0.037	0.023	12.035
105	101.319	1678-98-4	M10	i-Butylcyclohexane	0.008	0.008	0.005	2.164
106	102.106	17302-01-1	I10	3-Ethyl-3-methylheptane	0.103	0.103	0.060	27.186
107	102.464	538-93-2	Q10	i-Butylbenzene	0.127	0.111	0.086	35.470
108	102.658	124-18-5	P10	n-Decane	0.043	0.044	0.028	11.467
109	102.974		?	Unidentified	0.028	0.028	0.016	9.148
110	103.609	526-73-8	Q9	1,2,3-Trimethylbenzene	0.316	0.264	0.239	89.141
111	103.996	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.018	0.015	0.012	4.966
112	104.191		I11	C11 Isoparaffin-4	0.016	0.016	0.009	4.231
113	104.393		?	Unidentified	0.101	0.088	0.068	33.104
114	104.800		J9	Indan	0.138	0.107	0.106	39.478
115	105.432		J10	Indene	0.703	0.545	0.540	201.463
116	106.150		I11	C11-Isoparaffin-7	0.311	0.312	0.181	82.415
117	106.333	141-93-5	Q10	1,3-Diethylbenzene	0.080	0.069	0.054	22.408
118	106.623	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.065	0.924	0.720	298.653
119	106.949	105-05-5	Q10	1,4-Diethylbenzene	0.490	0.425	0.331	137.395
120	107.177	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.384	0.326	0.259	107.630
121	107.437	135-01-3	Q10	1,2-Diethylbenzene	0.085	0.072	0.057	23.801
122	107.889		?	Unidentified	0.081	0.081	0.047	26.540
123	108.027	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.158	0.135	0.107	44.207
124	108.164		?	Unidentified	0.091	0.092	0.054	29.965
125	108.246		?	Unidentified	0.086	0.086	0.050	28.119
126	108.368		I11	C11- Isoparaffin-11	0.660	0.662	0.383	174.791
127	108.551		?	Unidentified	0.225	0.226	0.131	74.011
128	108.881	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.384	0.327	0.260	107.763
129	108.988		?	Unidentified	0.967	0.823	0.654	317.913

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	109.204		J10	2-Methylindan	0.144	0.111	0.099	41.208
131	109.550	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	1.078	0.921	0.729	302.324
132	110.102	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.681	0.571	0.460	190.938
133	110.529		?	Unidentified	0.019	0.018	0.011	6.391
134	110.731		?	Unidentified	0.045	0.045	0.029	14.765
135	110.860		?	Unidentified	0.068	0.069	0.044	22.412
136	111.008		Q11	1-Methyl-4-t-butylbenzene	0.122	0.107	0.074	33.957
137	111.223	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.435	0.364	0.294	122.052
138	111.533	1120-21-4	P11	n-Undecane	0.099	0.099	0.057	26.223
139	111.690	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.109	0.091	0.066	30.315
140	111.800		?	Unidentified	0.053	0.045	0.033	17.543
141	111.905		Q11	C11 - Aromatic - 1	0.027	0.023	0.017	7.629
142	112.170		Q10	1,2,4,5-Tetramethylbenzene	0.902	0.759	0.610	252.910
143	112.439	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	1.247	1.046	0.842	349.483
144	112.636		?	Unidentified	0.016	0.013	0.010	5.132
145	112.791		?	Unidentified	0.020	0.015	0.012	6.457
146	112.968		I12	C12 - IsoParaffin - 1	0.025	0.026	0.014	6.743
147	113.292		?	Unidentified	0.046	0.047	0.026	15.206
148	113.450		?	Unidentified	0.009	0.009	0.005	2.913
149	113.583		Q11	C11 - Aromatic - 3	0.169	0.142	0.104	47.309
150	113.765	874-35-1	H10	5-Methylindan	0.372	0.312	0.255	104.301
151	113.905		Q12	1,2-Di-i-propylbenzene	0.162	0.136	0.091	45.078
152	114.119	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.230	0.193	0.141	64.194
153	114.278		Q11	C11 - Aromatic - 4	0.114	0.096	0.070	31.873
154	114.518	824-22-6	J10	4-Methylindan	0.516	0.433	0.354	144.733
155	114.680		?	Unidentified	0.121	0.101	0.074	39.611
156	114.768	824-63-5	H10	2-Methylindan	0.384	0.322	0.263	107.582
157	114.979		?	Unidentified	0.041	0.034	0.025	13.462
158	115.091	538-68-1	Q11	n-Pentylbenzene	0.057	0.048	0.035	15.895
159	115.322		Q11	tert-Pentylbenzene	0.235	0.197	0.144	65.468
160	115.633	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.104	0.088	0.064	29.161
161	115.743		Q11	C11 - Aromatic - 7	0.133	0.117	0.081	37.116
162	116.074		I12	C12 - IsoParaffin - 4	0.008	0.008	0.004	2.262
163	116.206	100-18-5	Q12	1,4-Di-i-propylbenzene	0.196	0.164	0.109	54.436
164	116.633	91-20-3	G10	Naphthalene	0.234	0.170	0.165	68.549
165	116.842		J11	4,7-Dimethyl Indane	0.014	0.011	0.008	3.888
166	117.081		J11	1,1-Dimethyl Indane	0.055	0.042	0.034	15.707
167	117.250		J12	Dimethyl Indane - 1	0.019	0.015	0.012	5.461
168	117.431	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.027	0.023	0.015	7.636
169	117.565		J12	Dimethyl Indane - 2	0.006	0.004	0.004	1.643
170	117.736		Q12	1,3-Di-n-propylbenzene	0.141	0.118	0.079	39.207
171	117.847		Q11	C11 - Aromatic - 11	0.078	0.068	0.047	21.663
172	118.401		Q11	C11 - Aromatic - 12	0.043	0.038	0.026	12.064

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	119.031		Q11	C11 - Aromatic - 13	0.006	0.005	0.004	1.658
174	119.341	102-25-0	Q12	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.628
175	123.282	91-57-6	G11	2-Methylnaphthalene	0.012	0.009	0.008	3.511
176	124.148	90-12-0	G11	1-Methylnaphthalene	0.007	0.005	0.004	1.909
177	129.863		?	Unidentified	0.004	0.003	0.002	1.349

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.389	74-98-6	Propane	0.001	0.002	0.002	0.273
	9.789	106-97-8	n-Butane	4.275	5.515	6.671	1107.495
	17.687	109-66-0	n-Pentane	2.361	2.815	2.968	615.837
	35.316	110-54-3	n-Hexane	6.582	7.454	6.928	1723.994
	57.612	142-82-5	n-Heptane	0.454	0.495	0.411	119.286
	77.561	111-65-9	n-Octane	0.122	0.129	0.097	32.043
	91.506	111-84-2	n-Nonane	0.031	0.032	0.022	8.054
	102.658	124-18-5	n-Decane	0.043	0.044	0.028	11.467
	111.533	1120-21-4	n-Undecane	0.099	0.099	0.057	26.223
I-Paraffins	8.609	75-28-5	i-Butane	0.038	0.052	0.060	9.972
	10.385	463-82-1	2,2-Dimethylpropane	0.044	0.055	0.055	11.450
	14.712	78-78-4	i-Pentane	12.200	14.703	15.338	3182.770
	22.607	75-83-2	2,2-Dimethylbutane	0.153	0.175	0.161	39.957
	27.820	79-29-8	2,3-Dimethylbutane	0.607	0.686	0.639	159.095
	28.904	107-83-5	2-Methylpentane	3.380	3.864	3.558	885.263
	31.550	96-14-0	3-Methylpentane	3.158	3.550	3.324	827.082
	41.728	108-08-7	2,4-Dimethylpentane	0.393	0.436	0.356	103.315
	42.268	464-06-2	2,2,3-Trimethylbutane	0.057	0.062	0.052	15.032
	50.186	591-76-4	2-Methylhexane	1.062	1.168	0.961	279.191
	52.025	589-34-4	3-Methylhexane	0.621	0.675	0.562	163.233
	54.687	540-84-1	2,2,4-Trimethylpentane	0.016	0.017	0.013	4.154
	64.744	592-13-2	2,5-Dimethylhexane	0.019	0.021	0.015	5.133
	65.083	589-43-5	2,4-Dimethylhexane	0.026	0.028	0.021	6.837
	70.427	584-94-1	2,3-Dimethylhexane	0.016	0.017	0.013	4.176
	71.695	592-27-8	2-Methylheptane	0.072	0.077	0.057	18.891
	71.947	589-53-7	4-Methylheptane	0.031	0.033	0.025	8.180
	73.019	589-81-1	3-Methylheptane	0.068	0.072	0.054	17.960
	73.201	619-99-8	3-Ethylhexane	0.038	0.040	0.030	9.984
	82.193	1072-05-5	2,6-Dimethylheptane	0.007	0.007	0.005	1.855
	83.130		2,5-Dimethylheptane	0.007	0.008	0.005	1.931
	87.016	2216-34-4	4-Methyloctane	0.009	0.010	0.007	2.434
	87.148	3221-61-2	2-Methyloctane	0.012	0.013	0.009	3.191
	88.012	2216-33-3	3-Methyloctane	0.013	0.013	0.009	3.389
	95.264	2051-30-1	2,4-Dimethyloctane	0.010	0.010	0.006	2.570
	98.680	17301-94-8	4-Methylnonane	0.006	0.006	0.004	1.635
	98.881		2,2,6-Trimethyloctane	0.378	0.388	0.241	99.894
	99.659	5911-04-6	3-Methylnonane	0.009	0.009	0.006	2.374
	100.476		C11-Isoparaffin-2	0.046	0.046	0.026	12.073
	102.106	17302-01-1	3-Ethyl-3-methylheptane	0.103	0.103	0.060	27.186
	104.191		C11 Isoparaffin-4	0.016	0.016	0.009	4.231
	106.150		C11-Isoparaffin-7	0.311	0.312	0.181	82.415
	108.368		C11- Isoparaffin-11	0.660	0.662	0.383	174.791
	112.968		C12 - IsoParaffin - 1	0.025	0.026	0.014	6.743
	116.074		C12 - IsoParaffin - 4	0.008	0.008	0.004	2.262
Aromatics							
Mono-Aromatics	45.129	71-42-3	Benzene	0.657	0.558	0.763	189.866

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	68.705	108-88-3	Toluene	17.964	15.471	17.684	5134.580
	84.452	100-41-4	Ethylbenzene	2.515	2.166	2.148	713.310
	85.699	108-38-3	m-Xylene	6.074	5.248	5.189	1722.882
	85.842	106-42-3	p-Xylene	2.846	2.468	2.432	807.379
	88.660	95-47-6	o-Xylene	1.700	1.442	1.452	482.170
	92.837	98-82-8	i-Propylbenzene	0.035	0.031	0.027	9.922
	96.303	103-65-1	n-Propylbenzene	0.188	0.163	0.142	52.919
	97.149	620-14-4	1-Methyl-3-ethylbenzene	0.686	0.592	0.518	193.320
	97.384	622-96-8	1-Methyl-4-ethylbenzene	0.325	0.282	0.246	91.710
	98.011	108-67-8	1,3,5-Trimethylbenzene	0.420	0.362	0.317	118.327
	99.096	611-14-3	1-Methyl-2-ethylbenzene	0.272	0.230	0.205	76.615
	100.730	95-63-6	1,2,4-Trimethylbenzene	1.375	1.172	1.038	387.549
	102.464	538-93-2	i-Butylbenzene	0.127	0.111	0.086	35.470
	103.609	526-73-8	1,2,3-Trimethylbenzene	0.316	0.264	0.239	89.141
	103.996	535-77-3	1-Methyl-3-i-propylbenzene	0.018	0.015	0.012	4.966
	106.333	141-93-5	1,3-Diethylbenzene	0.080	0.069	0.054	22.408
	106.623	1074-43-7	1-Methyl-3-n-propylbenzene	1.065	0.924	0.720	298.653
	106.949	105-05-5	1,4-Diethylbenzene	0.490	0.425	0.331	137.395
	107.177	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.384	0.326	0.259	107.630
	107.437	135-01-3	1,2-Diethylbenzene	0.085	0.072	0.057	23.801
	108.027	1074-17-5	1-Methyl-2-n-propylbenzene	0.158	0.135	0.107	44.207
	108.881	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.384	0.327	0.260	107.763
	109.550	934-80-5	1,2-Dimethyl-4-ethylbenzene	1.078	0.921	0.729	302.324
	110.102	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.681	0.571	0.460	190.938
	111.008		1-Methyl-4-t-butylbenzene	0.122	0.107	0.074	33.957
	111.223	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.435	0.364	0.294	122.052
	111.690	4218-48-8	1-Ethyl-4-i-propylbenzene	0.109	0.091	0.066	30.315
	111.905		C11 - Aromatic - 1	0.027	0.023	0.017	7.629
	112.170		1,2,4,5-Tetramethylbenzene	0.902	0.759	0.610	252.910
	112.439	527-53-7	1,2,3,5-Tetramethylbenzene	1.247	1.046	0.842	349.483
	113.583		C11 - Aromatic - 3	0.169	0.142	0.104	47.309
	113.905		1,2-Di-i-propylbenzene	0.162	0.136	0.091	45.078
	114.119	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.230	0.193	0.141	64.194
	114.278		C11 - Aromatic - 4	0.114	0.096	0.070	31.873
	115.091	538-68-1	n-Pentylbenzene	0.057	0.048	0.035	15.895
	115.322		tert-Pentylbenzene	0.235	0.197	0.144	65.468
	115.633	577-55-9	1-Methyl-2-n-butylbenzene	0.104	0.088	0.064	29.161
	115.743		C11 - Aromatic - 7	0.133	0.117	0.081	37.116
	116.206	100-18-5	1,4-Di-i-propylbenzene	0.196	0.164	0.109	54.436
	117.431	7364-19-4	1t-Butyl-4-ethylbenzene	0.027	0.023	0.015	7.636
	117.736		1,3-Di-n-propylbenzene	0.141	0.118	0.079	39.207
	117.847		C11 - Aromatic - 11	0.078	0.068	0.047	21.663
	118.401		C11 - Aromatic - 12	0.043	0.038	0.026	12.064
	119.031		C11 - Aromatic - 13	0.006	0.005	0.004	1.658
	119.341	102-25-0	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.628
Naphthalenes	116.633	91-20-3	Naphthalene	0.234	0.170	0.165	68.549

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphthalenes	123.282	91-57-6	2-Methylnaphthalene	0.012	0.009	0.008	3.511
	124.148	90-12-0	1-Methylnaphthalene	0.007	0.005	0.004	1.909
Naphtheno/Olefir	113.765	874-35-1	5-Methylindan	0.372	0.312	0.255	104.301
	114.768	824-63-5	2-Methylindan	0.384	0.322	0.263	107.582
Indenes	104.800		Indan	0.138	0.107	0.106	39.478
	105.432		Indene	0.703	0.545	0.540	201.463
	109.204		2-Methylindan	0.144	0.111	0.099	41.208
	114.518	824-22-6	4-Methylindan	0.516	0.433	0.354	144.733
	116.842		4,7-Dimethyl Indane	0.014	0.011	0.008	3.888
	117.081		1,1-Dimethyl Indane	0.055	0.042	0.034	15.707
	117.250		Dimethyl Indane - 1	0.019	0.015	0.012	5.461
	117.565		Dimethyl Indane - 2	0.006	0.004	0.004	1.643
Naphthenes							
Mono-Naphthene	27.089	287-92-3	Cyclopentane	0.242	0.242	0.313	64.950
	40.158	96-37-7	Methylcyclopentane	2.720	2.713	2.931	729.812
	47.053	110-82-7	Cyclohexane	1.686	1.617	1.817	452.441
	52.878	1759-58-6	1t,3-Dimethylcyclopentane	0.136	0.136	0.126	36.581
	53.463	2532-58-3	1c,3-Dimethylcyclopentane	0.106	0.106	0.098	28.491
	54.092	822-50-4	1t,2-Dimethylcyclopentane	0.147	0.146	0.136	39.552
	61.058	108-87-2	Methylcyclohexane	0.660	0.641	0.610	177.137
	62.011	4516-69-2	1,1,3-Trimethylcyclopentane	0.013	0.013	0.011	3.587
	63.855	1640-89-7	Ethylcyclopentane	0.023	0.022	0.021	6.158
	72.859		1,3-dimethyl-t-cyclohexane	0.056	0.054	0.045	14.932
	76.187	2207-03-6	1t,3-Dimethylcyclohexane	0.022	0.022	0.018	6.012
	81.867	1678-91-7	Ethylcyclohexane	0.026	0.025	0.021	6.986
	101.319	1678-98-4	i-Butylcyclohexane	0.008	0.008	0.005	2.164
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.400	115-11-7	Isobutene	0.022	0.027	0.035	5.822
	9.439	106-98-9	Butene-1	0.025	0.032	0.041	6.821
	10.262	624-64-6	t-Butene-2	0.094	0.116	0.152	25.244
	10.983	590-18-1	c-Butene-2	0.106	0.128	0.172	28.488
	16.328	109-67-1	Pentene-1	0.336	0.392	0.435	90.275
	18.790	646-04-8	t-Pentene-2	0.870	1.002	1.125	233.318
	19.814	627-20-3	c-Pentene-2	0.476	0.542	0.616	127.733
	32.933	592-41-6	Hexene-1	0.161	0.177	0.174	43.204
	35.930	13269-52-8	t-Hexene-3	0.270	0.296	0.291	72.486
	36.401	4050-45-7	t-Hexene-2	0.512	0.560	0.552	137.416
	38.232	7688-21-3	c-Hexene-2	0.217	0.235	0.234	58.349
	56.880	14686-14-7	t-Heptene-3	0.017	0.018	0.015	4.489
Iso-Olefins	13.123	563-45-1	3-Methylbutene-1	0.073	0.087	0.094	19.585
	17.164	563-46-2	2-Methylbutene-1	0.527	0.605	0.681	141.339

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	20.484	513-35-9	2-Methylbutene-2	1.089	1.228	1.409	292.249
	28.680	691-38-3	4-Methyl-c-pentene-2	0.046	0.051	0.049	12.318
	29.330	674-76-0	4-Methyl-t-pentene-2	0.138	0.153	0.149	36.992
	32.709	763-29-1	2-Methylpentene-1	0.236	0.257	0.254	63.324
	36.894	625-27-4	2-Methylpentene-2	0.359	0.388	0.387	96.358
	37.305	922-62-3	3-Methyl-c-pentene-2	0.275	0.294	0.296	73.686
	39.579	3404-73-7	3,3-Dimethylpentene-1	0.326	0.347	0.302	87.579
	42.033	594-56-9	2,3,3-Trimethylbutene-1	0.012	0.013	0.011	3.217
	46.153	3404-61-3	3-Methylhexene-1	0.013	0.014	0.012	3.391
	46.738	3524-73-0	5-Methylhexene-1	0.083	0.089	0.077	22.306
	48.798	15840-60-5	2-Methyl-c-hexene-3	0.032	0.034	0.029	8.532
	49.792	3404-55-5	4-Methyl-t/c-hexene-2	0.037	0.040	0.035	10.022
	57.233	6094-02-6	2-Methylhexene-1	0.026	0.028	0.024	6.915
	58.111	2738-19-4	2-Methyl-2-hexene	0.005	0.006	0.005	1.462
Naphtheno-Olefir	25.241	142-29-0	Cyclopentene	0.190	0.184	0.253	52.437
	45.332	693-89-0	1-Methylcyclopentene	0.337	0.323	0.372	92.688
	50.663	110-83-8	Cyclohexene	0.036	0.033	0.039	9.536
Di-Olefins	18.201	78-79-5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.543
	20.815	2004-70-8	1t,3-Pentadiene	0.014	0.015	0.018	3.762
Oxygenates	26.483	71-23-8	n-Propanol	0.188	0.175	0.283	35.238
Unidentified	19.431		Unidentified	0.006	0.007	0.008	2.094
	28.223		Unidentified	0.054	0.054	0.055	17.624
	44.924		Unidentified	0.011	0.011	0.012	3.559
	47.587		Unidentified	0.029	0.031	0.027	9.598
	74.100		Unidentified	0.008	0.008	0.007	2.767
	100.126		Unidentified	0.028	0.021	0.016	9.328
	100.251		Unidentified	0.085	0.086	0.050	28.048
	100.940		Unidentified	0.065	0.069	0.042	21.235
	101.061		Unidentified	0.037	0.037	0.023	12.035
	102.974		Unidentified	0.028	0.028	0.016	9.148
	104.393		Unidentified	0.101	0.088	0.068	33.104
	107.889		Unidentified	0.081	0.081	0.047	26.540
	108.164		Unidentified	0.091	0.092	0.054	29.965
	108.246		Unidentified	0.086	0.086	0.050	28.119
	108.551		Unidentified	0.225	0.226	0.131	74.011
	108.988		Unidentified	0.967	0.823	0.654	317.913
	110.529		Unidentified	0.019	0.018	0.011	6.391
	110.731		Unidentified	0.045	0.045	0.029	14.765
	110.860		Unidentified	0.068	0.069	0.044	22.412
	111.800		Unidentified	0.053	0.045	0.033	17.543
	112.636		Unidentified	0.016	0.013	0.010	5.132
	112.791		Unidentified	0.020	0.015	0.012	6.457
	113.292		Unidentified	0.046	0.047	0.026	15.206

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Components by Group

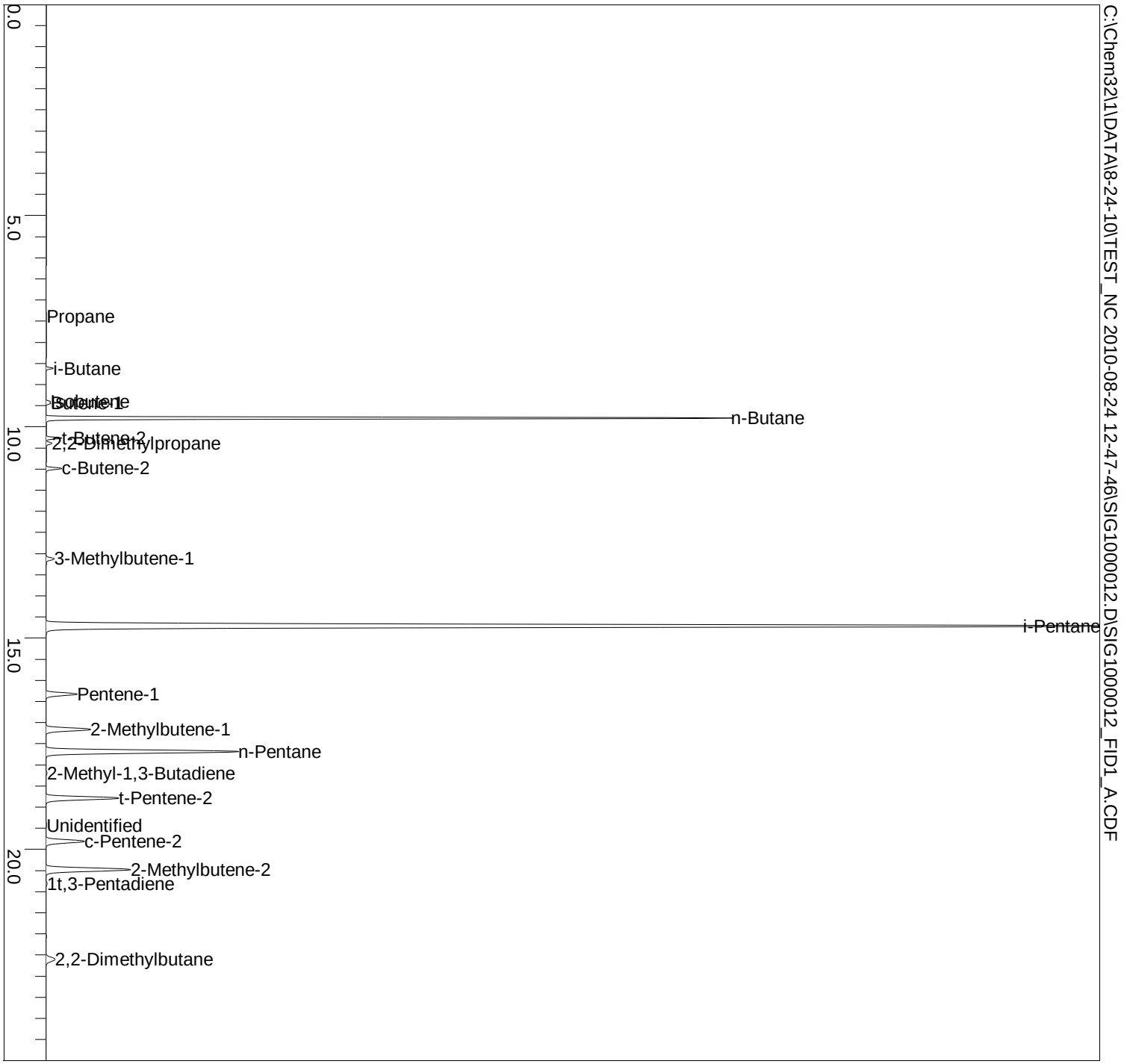
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	113.450		Unidentified	0.009	0.009	0.005	2.913
	114.680		Unidentified	0.121	0.101	0.074	39.611
	114.979		Unidentified	0.041	0.034	0.025	13.462
	129.863		Unidentified	0.004	0.003	0.002	1.349

Plus

Recovery = 100.00

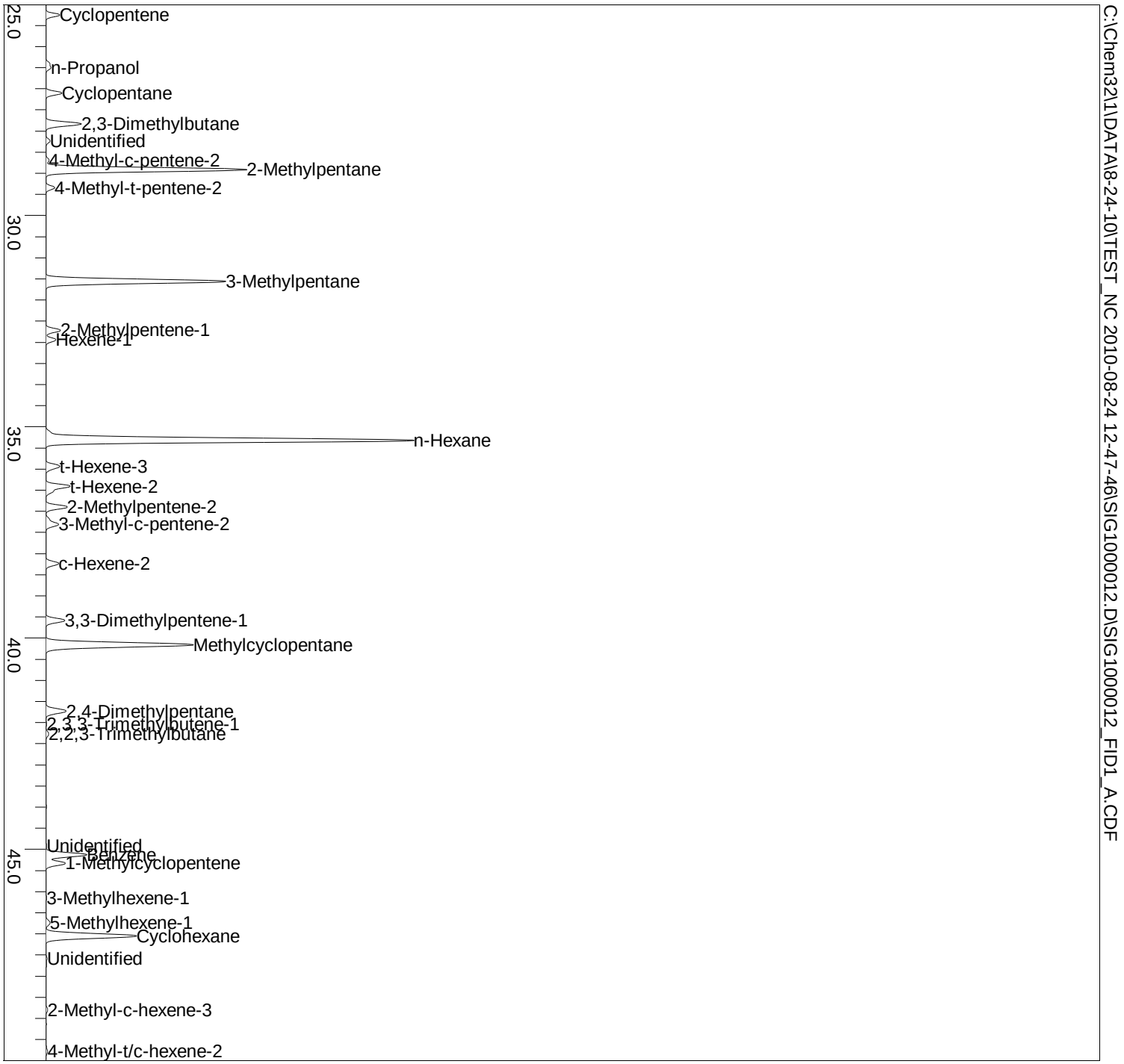
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1_A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1_A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram

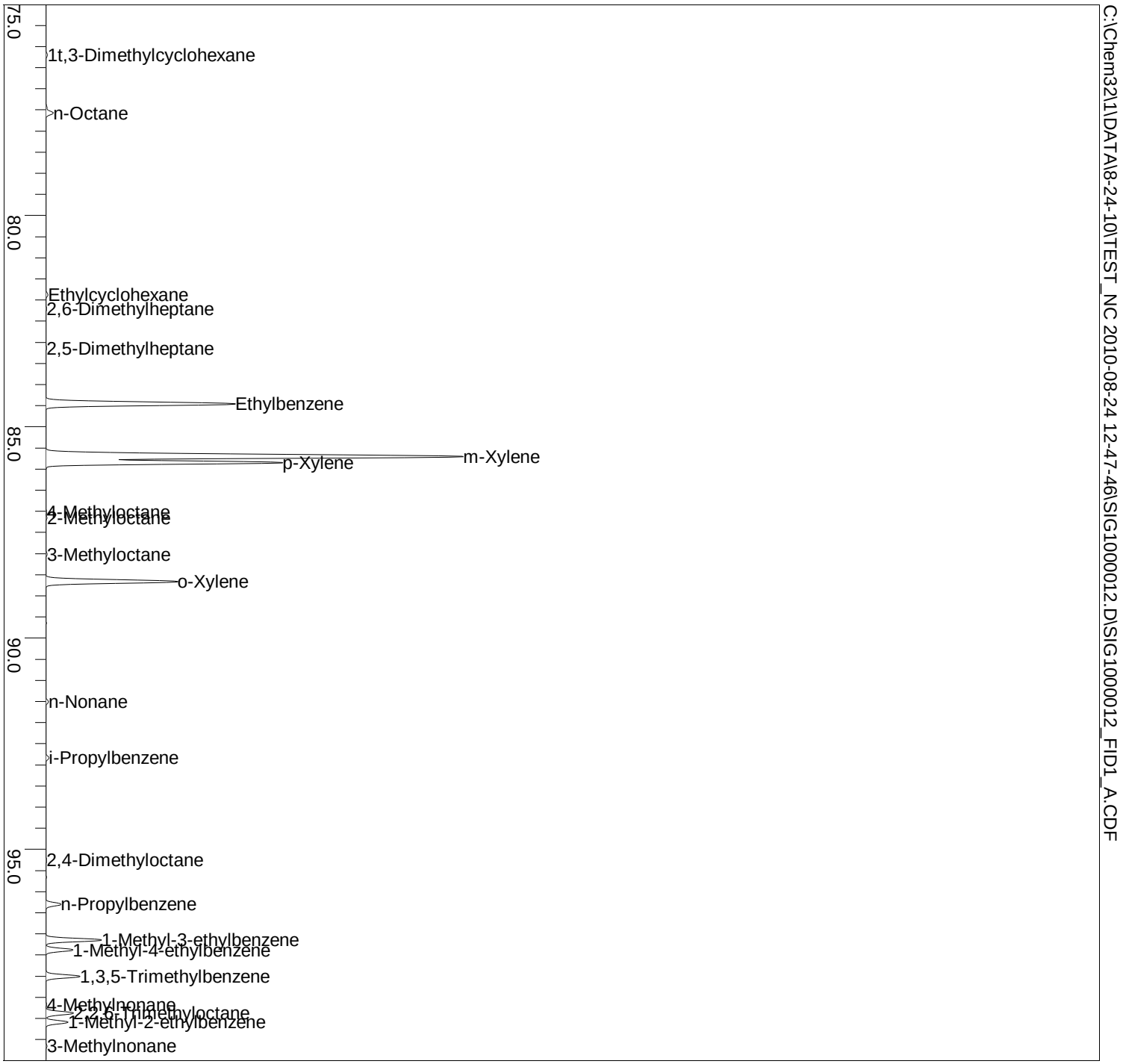


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1_A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1_A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram



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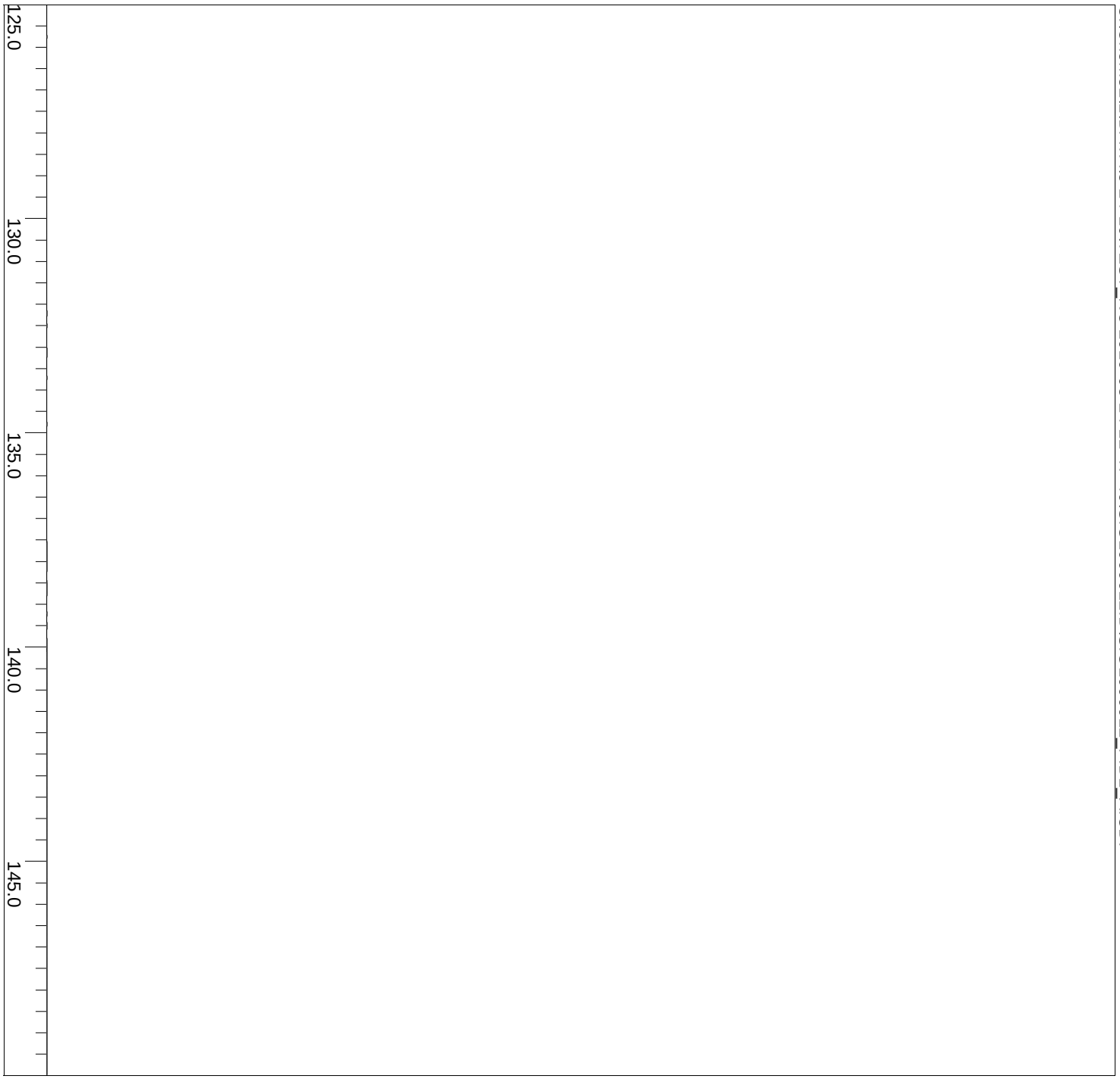
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000012.D\SIG1000012_FID1_A.CDF 24-Aug-10, 15:57:03
Sample: ODDB-91316 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91316
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	7.718	9.218	8.649
I-Paraffins	23.428	26.796	21.984
Aromatics	45.586	40.064	37.081
Mono-Aromatics	42.844	37.837	35.128
Naphthalenes	0.254	0.191	0.175
Naphtheno/Olefino-Benz	0.547	0.472	0.367
Indenes	1.940	1.565	1.411
Naphthenes	4.162	4.207	4.320
Mono-Naphthenes	4.162	4.207	4.320
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.986	7.948	8.103
n-Olefins	2.929	3.406	3.495
Iso-Olefins	3.450	3.941	3.905
Naphtheno-Olefins	0.582	0.573	0.670
Di-Olefins	0.025	0.028	0.032
Oxygenates	8.722	8.486	16.720
Unidentified	3.398	3.280	3.143
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	8.550	8.321	16.466
C3	0.173	0.166	0.255
C4	1.272	1.676	1.951
C5	8.985	10.805	11.192
C6	21.874	24.679	22.737
C7	15.823	14.791	14.981
C8	13.542	12.311	11.224
C9	11.871	10.586	8.731
C10	11.539	10.538	7.609
C11	2.566	2.492	1.487
C12	0.408	0.355	0.224

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.001
	C4	1.079	1.431	1.646
	C5	1.652	2.025	2.031
	C6	4.380	5.100	4.509
	C7	0.285	0.320	0.252
	C8	0.053	0.058	0.041
	C9	0.069	0.074	0.048
	C10	0.102	0.108	0.064
	C11	0.097	0.101	0.055
I-Paraffins	C4	0.015	0.021	0.023
	C5	3.492	4.329	4.295
	C6	11.292	13.190	11.626
	C7	1.869	2.110	1.655
	C8	1.493	1.612	1.160
	C9	0.695	0.752	0.481
	C10	3.040	3.204	1.877
	C11	1.505	1.554	0.854
	C12	0.026	0.027	0.013
Mono-Aromatics	C6	0.645	0.564	0.733
	C7	12.177	10.785	11.726
	C8	11.951	10.597	9.987
	C9	10.810	9.524	7.980
	C10	6.002	5.270	3.968
	C11	0.897	0.785	0.537
	C12	0.361	0.312	0.198
Naphthalenes	C10	0.246	0.184	0.170
	C11	0.009	0.007	0.005
Naphtheno/Olefino-Benzs	C10	0.547	0.472	0.367
Indenes	C9	0.296	0.236	0.222
	C10	1.566	1.267	1.141
	C11	0.057	0.046	0.035
	C12	0.021	0.017	0.013
Mono-Naphthenes	C5	0.296	0.305	0.375
	C6	3.100	3.128	3.268
	C7	0.687	0.695	0.620
	C8	0.045	0.044	0.035

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.035	0.034	0.022
n-Olefins	C4	0.178	0.224	0.282
	C5	1.554	1.840	1.966
	C6	1.099	1.234	1.159
	C7	0.098	0.107	0.088
Iso-Olefins	C5	1.778	2.092	2.249
	C6	0.964	1.076	1.017
	C7	0.708	0.774	0.640
Naphtheno-Olefins	C5	0.188	0.187	0.244
	C6	0.394	0.387	0.426
Di-Olefins	C5	0.025	0.028	0.032
Oxygenates	C2	8.550	8.321	16.466
	C3	0.172	0.165	0.254

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	25.05	23.86
5%	81.79	80.86
10%	111.42	97.15
15%	138.92	137.68
20%	144.65	139.76
25%	154.67	145.26
30%	161.16	154.79
35%	172.76	160.79
40%	176.42	172.76
45%	229.82	176.69
50%	230.34	228.56
55%	230.86	230.39
60%	276.01	230.97
65%	281.34	277.06
70%	291.64	281.77
75%	322.60	320.72
80%	332.52	329.36
85%	341.97	335.97
90%	362.56	359.10
95%	372.56	368.14
FBP	404.60	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.386	74-98-6	P3	Propane	0.001	0.001	0.001	0.159
2	8.607	75-28-5	I4	i-Butane	0.015	0.021	0.023	4.223
3	9.399	115-11-7	K4	Isobutene	0.014	0.018	0.022	4.074
4	9.438	106-98-9	K4	Butene-1	0.017	0.022	0.027	4.884
5	9.787	106-97-8	P4	n-Butane	1.079	1.431	1.646	300.047
6	10.261	624-64-6	K4	t-Butene-2	0.067	0.086	0.107	19.405
7	10.383	463-82-1	I5	2,2-Dimethylpropane	0.009	0.012	0.011	2.575
8	10.981	590-18-1	K4	c-Butene-2	0.080	0.099	0.126	22.975
9	12.739	64-17-5	X2	Ethanol	8.550	8.321	16.466	1058.804
10	13.119	563-45-1	C5	3-Methylbutene-1	0.315	0.386	0.399	90.871
11	14.701	78-78-4	I5	i-Pentane	3.483	4.317	4.283	975.682
12	16.325	109-67-1	K5	Pentene-1	0.315	0.377	0.398	90.649
13	17.162	563-46-2	C5	2-Methylbutene-1	0.478	0.564	0.604	137.656
14	17.687	109-66-0	P5	n-Pentane	1.652	2.025	2.031	462.691
15	18.199	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	2.927
16	18.792	646-04-8	K5	t-Pentene-2	0.801	0.949	1.013	230.692
17	19.812	627-20-3	K5	c-Pentene-2	0.439	0.514	0.556	126.522
18	20.482	513-35-9	C5	2-Methylbutene-2	0.985	1.141	1.245	283.664
19	20.812	2004-70-8	E5	1t,3-Pentadiene	0.015	0.017	0.019	4.358
20	22.061		?	Unidentified	0.006	0.006	0.007	1.971
21	22.606	75-83-2	I6	2,2-Dimethylbutane	0.294	0.348	0.303	82.714
22	25.241	142-29-0	B5	Cyclopentene	0.188	0.187	0.244	55.667
23	26.486	71-23-8	X3	n-Propanol	0.172	0.165	0.254	34.733
24	27.094	287-92-3	M5	Cyclopentane	0.296	0.305	0.375	85.306
25	27.826	79-29-8	I6	2,3-Dimethylbutane	1.092	1.268	1.124	307.138
26	28.226		?	Unidentified	0.048	0.050	0.049	17.082
27	28.687	691-38-3	C6	4-Methyl-c-pentene-2	0.041	0.046	0.043	11.671
28	28.926	107-83-5	I6	2-Methylpentane	6.264	7.365	6.449	1761.717
29	29.334	674-76-0	C6	4-Methyl-t-pentene-2	0.126	0.143	0.133	36.232
30	31.558	96-14-0	I6	3-Methylpentane	3.641	4.209	3.749	1024.040
31	32.713	763-29-1	C6	2-Methylpentene-1	0.215	0.241	0.226	61.837
32	32.937	592-41-6	K6	Hexene-1	0.154	0.175	0.163	44.483
33	35.310	110-54-3	P6	n-Hexane	4.380	5.100	4.509	1231.787
34	35.932	13269-52-8	K6	t-Hexene-3	0.253	0.285	0.267	72.835
35	36.406	4050-45-7	K6	t-Hexene-2	0.486	0.547	0.513	140.069
36	36.898	625-27-4	C6	2-Methylpentene-2	0.329	0.365	0.347	94.769
37	37.310	922-62-3	C6	3-Methyl-c-pentene-2	0.255	0.280	0.268	73.371
38	38.235	7688-21-3	K6	c-Hexene-2	0.206	0.228	0.217	59.259
39	39.585	3404-73-7	C7	3,3-Dimethylpentene-1	0.303	0.331	0.274	87.250
40	40.158	96-37-7	M6	Methylcyclopentane	1.799	1.845	1.896	518.281
41	41.732	108-08-7	I7	2,4-Dimethylpentane	0.331	0.377	0.293	93.328
42	42.035	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.936
43	42.272	464-06-2	I7	2,2,3-Trimethylbutane	0.047	0.053	0.042	13.359

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	44.931		?	Unidentified	0.012	0.012	0.013	4.090
45	45.132	71-42-3	Q6	Benzene	0.645	0.564	0.733	200.223
46	45.337	693-89-0	B6	1-Methylcyclopentene	0.351	0.346	0.379	103.600
47	46.157	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.014	4.490
48	46.743	3524-73-0	C7	5-Methylhexene-1	0.071	0.078	0.064	20.387
49	47.057	110-82-7	M6	Cyclohexane	1.301	1.283	1.371	374.784
50	47.594	3404-72-6	C7	1-Pentene, 2,3-dimethyl-	0.041	0.045	0.037	11.767
51	48.804	15840-60-5	C7	2-Methyl-c-hexene-3	0.039	0.043	0.035	11.187
52	49.148	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.010	3.218
53	49.793	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.054	0.045	14.264
54	50.191	591-76-4	I7	2-Methylhexane	0.946	1.070	0.837	266.976
55	50.668	110-83-8	B6	Cyclohexene	0.043	0.041	0.047	12.431
56	52.029	589-34-4	I7	3-Methylhexane	0.546	0.610	0.484	154.186
57	52.880	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.132	0.135	0.119	37.906
58	53.467	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.096	0.099	0.087	27.606
59	54.091	822-50-4	M7	1t,2-Dimethylcyclopentane	0.122	0.124	0.110	35.025
60	54.391		C7	C7 - Iso-Olefin - 2	0.022	0.024	0.020	6.338
61	54.684	540-84-1	I8	2,2,4-Trimethylpentane	0.048	0.053	0.037	13.557
62	55.023	592-76-7	K7	Heptene-1	0.028	0.031	0.026	8.132
63	56.358	4914-89-0	C7	3-Methyl-c-hexene-3	0.013	0.014	0.012	3.869
64	56.879	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.028	9.019
65	57.241	6094-02-6	C7	2-Methylhexene-1	0.056	0.062	0.051	16.117
66	57.612	142-82-5	P7	n-Heptane	0.285	0.320	0.252	80.332
67	57.832	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.022	6.946
68	58.111	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.023	7.410
69	58.355	3899-36-3	C7	3-Methyl-t-hexene-3	0.020	0.022	0.018	5.647
70	58.741	14686-13-6	K7	t-Heptene-2	0.014	0.015	0.013	4.010
71	59.199	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.016	5.067
72	59.641	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.014	4.308
73	60.425	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.012	3.765
74	61.054	108-87-2	M7	Methylcyclohexane	0.308	0.307	0.278	88.705
75	63.099		?	Unidentified	0.021	0.022	0.017	7.297
76	63.854	1640-89-7	M7	Ethylcyclopentane	0.012	0.012	0.011	3.490
77	64.504		?	Unidentified	0.059	0.064	0.046	20.937
78	64.742	592-13-2	I8	2,5-Dimethylhexane	0.135	0.150	0.105	38.210
79	65.081	589-43-5	I8	2,4-Dimethylhexane	0.126	0.138	0.098	35.610
80	68.080	565-75-3	I8	2,3,4-Trimethylpentane	0.806	0.861	0.626	228.114
81	68.666	108-88-3	Q7	Toluene	12.177	10.785	11.726	3737.342
82	70.423	584-94-1	I8	2,3-Dimethylhexane	0.224	0.241	0.174	63.268
83	71.693	592-27-8	I8	2-Methylheptane	0.048	0.052	0.037	13.473
84	71.954	589-53-7	I8	4-Methylheptane	0.043	0.047	0.033	12.104
85	72.088		?	Unidentified	0.021	0.022	0.016	7.318
86	72.858		M8	1,3-dimethyl-t-cyclohexane	0.022	0.022	0.017	6.349

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	73.017	589-81-1	I8	3-Methylheptane	0.046	0.050	0.036	13.078
88	73.196	619-99-8	I8	3-Ethylhexane	0.018	0.019	0.014	5.079
89	74.919	3522-94-9	I9	2,2,5-Trimethylhexane	0.520	0.565	0.360	147.522
90	76.186	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.009	0.009	0.007	2.691
91	77.560	111-65-9	P8	n-Octane	0.053	0.058	0.041	15.111
92	78.505		?	Unidentified	0.014	0.014	0.011	4.905
93	80.053	1069-53-0	I9	2,3,5-Trimethylhexane	0.090	0.096	0.062	25.466
94	81.231	1071-26-7	I9	2,4-Dimethylheptane	0.014	0.015	0.009	3.862
95	81.865	1678-91-7	M8	Ethylcyclohexane	0.013	0.013	0.011	3.837
96	82.193	1072-05-5	I9	2,6-Dimethylheptane	0.020	0.022	0.014	5.736
97	83.129		I9	2,5-Dimethylheptane	0.043	0.046	0.030	12.123
98	84.449	100-41-4	Q8	Ethylbenzene	2.212	1.959	1.849	673.769
99	85.698	108-38-3	Q8	m-Xylene	5.682	5.049	4.749	1730.792
100	85.840	106-42-3	Q8	p-Xylene	2.586	2.306	2.161	787.582
101	88.011	2216-33-3	I9	3-Methyloctane	0.008	0.009	0.006	2.369
102	88.479		?	Unidentified	0.031	0.035	0.022	11.052
103	88.657	95-47-6	Q8	o-Xylene	1.471	1.283	1.229	447.970
104	89.064		I10	C10 - IsoParaffin - 1	0.108	0.114	0.068	30.799
105	89.910	14720-74-2	I10	2,2,4-trimethylheptane	0.076	0.080	0.047	21.586
106	91.463	111-84-2	P9	n-Nonane	0.069	0.074	0.048	19.654
107	92.836	98-82-8	Q9	i-Propylbenzene	0.032	0.029	0.024	9.820
108	93.600		?	Unidentified	0.078	0.083	0.049	27.637
109	93.823	15869-87-1	I10	2,2-Dimethyloctane	0.028	0.029	0.017	7.829
110	94.265		?	Unidentified	0.011	0.009	1.002	3.987
111	94.265		?	Unidentified	0.011	0.012	0.007	3.987
112	94.621	15869-89-3	I10	2,5-Dimethyloctane	0.064	0.067	0.040	18.208
113	95.101	2040-95-1	I10	2,7-Dimethyloctane	0.028	0.029	0.017	7.876
114	95.266	2051-30-1	I10	2,4-Dimethyloctane	0.126	0.133	0.078	35.702
115	95.663		I10	2,6-Dimethyloctane	0.038	0.040	0.023	10.683
116	96.307	103-65-1	Q9	n-Propylbenzene	0.540	0.481	0.399	163.527
117	97.165	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.178	1.935	1.608	659.245
118	97.395	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.026	0.915	0.757	310.465
119	98.021	108-67-8	Q9	1,3,5-Trimethylbenzene	1.362	1.209	1.006	412.315
120	98.499	15869-85-9	I10	5-Methylnonane	0.010	0.010	0.006	2.777
121	98.690	17301-94-8	I10	4-Methylnonane	0.023	0.024	0.014	6.550
122	98.896		I10	2,2,6-Trimethyloctane	2.172	2.296	1.354	616.965
123	99.103	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.807	0.703	0.595	244.090
124	99.470		?	Unidentified	0.005	0.005	0.003	1.784
125	99.664	5911-04-6	I10	3-Methylnonane	0.033	0.035	0.021	9.423
126	99.843		?	Unidentified	0.006	0.006	0.004	2.067
127	100.130		?	Unidentified	0.127	0.098	0.072	44.950
128	100.258		?	Unidentified	0.361	0.372	0.205	127.351
129	100.480		I11	C11-Isoparaffin-2	0.192	0.198	0.109	54.676

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	100.758	95-63-6	Q9	1,2,4-Trimethylbenzene	4.131	3.622	3.049	1250.078
131	100.944		?	Unidentified	0.220	0.241	0.139	77.618
132	101.065		?	Unidentified	0.131	0.137	0.082	46.234
133	101.321	1678-98-4	M10	i-Butylcyclohexane	0.035	0.034	0.022	10.205
134	102.110	17302-01-1	I10	3-Ethyl-3-methylheptane	0.335	0.346	0.190	95.287
135	102.460	538-93-2	Q10	i-Butylbenzene	0.370	0.333	0.245	111.470
136	102.661	124-18-5	P10	n-Decane	0.102	0.108	0.064	29.086
137	102.975		?	Unidentified	0.085	0.087	0.048	29.901
138	103.616	526-73-8	Q9	1,2,3-Trimethylbenzene	0.734	0.630	0.542	222.095
139	103.990	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.036	0.032	0.024	10.803
140	104.191		I11	C11 Isoparaffin-4	0.038	0.040	0.022	10.895
141	104.394		?	Unidentified	0.211	0.189	0.140	74.544
142	104.802		J9	Indan	0.296	0.236	0.222	90.988
143	105.058		I11	C11-Isoparaffin-5	0.020	0.021	0.011	5.758
144	105.437		J10	Indene	1.131	0.901	0.849	347.983
145	106.153		I11	C11-Isoparaffin-7	0.437	0.451	0.248	124.343
146	106.333	141-93-5	Q10	1,3-Diethylbenzene	0.095	0.085	0.063	28.625
147	106.629	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.477	1.318	0.976	444.653
148	106.940	105-05-5	Q10	1,4-Diethylbenzene	0.493	0.439	0.326	148.512
149	107.176	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.298	0.260	0.197	89.714
150	107.430	135-01-3	Q10	1,2-Diethylbenzene	0.099	0.087	0.066	29.908
151	107.889		?	Unidentified	0.100	0.103	0.057	35.174
152	108.026	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.116	0.102	0.077	34.861
153	108.166		?	Unidentified	0.107	0.111	0.062	37.912
154	108.245		?	Unidentified	0.091	0.094	0.052	32.152
155	108.369		I11	C11- Isoparaffin-11	0.817	0.843	0.464	232.339
156	108.551		?	Unidentified	0.260	0.269	0.148	91.943
157	108.986		?	Unidentified	1.060	0.928	0.700	373.988
158	109.204		J10	2-Methylindan	0.144	0.115	0.097	44.389
159	109.547	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.763	0.670	0.504	229.534
160	110.101	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.683	0.589	0.452	205.632
161	110.528		?	Unidentified	0.028	0.026	0.016	9.800
162	110.729		?	Unidentified	0.048	0.050	0.030	16.947
163	110.859		?	Unidentified	0.075	0.077	0.047	26.330
164	111.000		Q11	1-Methyl-4-t-butylbenzene	0.091	0.082	0.055	27.344
165	111.221	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.312	0.269	0.206	93.946
166	111.531	1120-21-4	P11	n-Undecane	0.097	0.101	0.055	27.701
167	111.689	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.099	0.086	0.060	29.800
168	111.798		?	Unidentified	0.064	0.055	0.038	22.505
169	112.166		Q10	1,2,4,5-Tetramethylbenzene	0.547	0.473	0.361	164.526
170	112.433	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.713	0.615	0.471	214.572
171	112.641		?	Unidentified	0.015	0.013	0.009	5.301
172	112.785		?	Unidentified	0.017	0.014	0.010	6.092

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	112.965		I12	C12 - IsoParaffin - 1	0.026	0.027	0.013	7.357
174	113.291		?	Unidentified	0.052	0.055	0.028	18.438
175	113.583		Q11	C11 - Aromatic - 3	0.094	0.081	0.056	28.237
176	113.763	874-35-1	H10	5-Methylindan	0.235	0.203	0.158	70.839
177	113.903		Q12	1,2-Di-i-propylbenzene	0.085	0.073	0.046	25.263
178	114.118	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.123	0.107	0.074	37.010
179	114.275		Q11	C11 - Aromatic - 4	0.071	0.061	0.042	21.163
180	114.514	824-22-6	J10	4-Methylindan	0.291	0.251	0.195	87.481
181	114.766	824-63-5	H10	2-Methylindan	0.311	0.269	0.209	93.740
182	114.979		?	Unidentified	0.023	0.020	0.014	8.140
183	115.089	538-68-1	Q11	n-Pentylbenzene	0.038	0.033	0.023	11.495
184	115.320		Q11	tert-Pentylbenzene	0.130	0.112	0.078	38.972
185	115.632	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.060	0.052	0.036	18.055
186	115.743		Q11	C11 - Aromatic - 7	0.080	0.072	0.048	23.836
187	116.205	100-18-5	Q12	1,4-Di-i-propylbenzene	0.123	0.106	0.067	36.682
188	116.632	91-20-3	G10	Naphthalene	0.246	0.184	0.170	77.392
189	116.841		J11	4,7-Dimethyl Indane	0.014	0.011	0.008	4.183
190	117.091		J11	1,1-Dimethyl Indane	0.044	0.035	0.026	13.403
191	117.249		J12	Dimethyl Indane - 1	0.021	0.017	0.013	6.512
192	117.430	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.028	0.024	0.015	8.268
193	117.737		Q12	1,3-Di-n-propylbenzene	0.107	0.093	0.059	32.110
194	117.845		Q11	C11 - Aromatic - 11	0.060	0.054	0.036	17.968
195	118.401		Q11	C11 - Aromatic - 12	0.043	0.039	0.026	12.929
196	119.028		Q11	C11 - Aromatic - 13	0.007	0.006	0.004	2.108
197	119.340	102-25-0	Q12	1,3,5-Triethylbenzene	0.012	0.011	0.007	3.721
198	119.990		Q12	C12 - Aromatic - 1	0.006	0.005	0.003	1.898
199	123.281	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.005	2.733

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.386	74-98-6	Propane	0.001	0.001	0.001	0.159
	9.787	106-97-8	n-Butane	1.079	1.431	1.646	300.047
	17.687	109-66-0	n-Pentane	1.652	2.025	2.031	462.691
	35.310	110-54-3	n-Hexane	4.380	5.100	4.509	1231.787
	57.612	142-82-5	n-Heptane	0.285	0.320	0.252	80.332
	77.560	111-65-9	n-Octane	0.053	0.058	0.041	15.111
	91.463	111-84-2	n-Nonane	0.069	0.074	0.048	19.654
	102.661	124-18-5	n-Decane	0.102	0.108	0.064	29.086
	111.531	1120-21-4	n-Undecane	0.097	0.101	0.055	27.701
I-Paraffins	8.607	75-28-5	i-Butane	0.015	0.021	0.023	4.223
	10.383	463-82-1	2,2-Dimethylpropane	0.009	0.012	0.011	2.575
	14.701	78-78-4	i-Pentane	3.483	4.317	4.283	975.682
	22.606	75-83-2	2,2-Dimethylbutane	0.294	0.348	0.303	82.714
	27.826	79-29-8	2,3-Dimethylbutane	1.092	1.268	1.124	307.138
	28.926	107-83-5	2-Methylpentane	6.264	7.365	6.449	1761.717
	31.558	96-14-0	3-Methylpentane	3.641	4.209	3.749	1024.040
	41.732	108-08-7	2,4-Dimethylpentane	0.331	0.377	0.293	93.328
	42.272	464-06-2	2,2,3-Trimethylbutane	0.047	0.053	0.042	13.359
	50.191	591-76-4	2-Methylhexane	0.946	1.070	0.837	266.976
	52.029	589-34-4	3-Methylhexane	0.546	0.610	0.484	154.186
	54.684	540-84-1	2,2,4-Trimethylpentane	0.048	0.053	0.037	13.557
	64.742	592-13-2	2,5-Dimethylhexane	0.135	0.150	0.105	38.210
	65.081	589-43-5	2,4-Dimethylhexane	0.126	0.138	0.098	35.610
	68.080	565-75-3	2,3,4-Trimethylpentane	0.806	0.861	0.626	228.114
	70.423	584-94-1	2,3-Dimethylhexane	0.224	0.241	0.174	63.268
	71.693	592-27-8	2-Methylheptane	0.048	0.052	0.037	13.473
	71.954	589-53-7	4-Methylheptane	0.043	0.047	0.033	12.104
	73.017	589-81-1	3-Methylheptane	0.046	0.050	0.036	13.078
	73.196	619-99-8	3-Ethylhexane	0.018	0.019	0.014	5.079
	74.919	3522-94-9	2,2,5-Trimethylhexane	0.520	0.565	0.360	147.522
	80.053	1069-53-0	2,3,5-Trimethylhexane	0.090	0.096	0.062	25.466
	81.231	1071-26-7	2,4-Dimethylheptane	0.014	0.015	0.009	3.862
	82.193	1072-05-5	2,6-Dimethylheptane	0.020	0.022	0.014	5.736
	83.129		2,5-Dimethylheptane	0.043	0.046	0.030	12.123
	88.011	2216-33-3	3-Methyloctane	0.008	0.009	0.006	2.369
	89.064		C10 - IsoParaffin - 1	0.108	0.114	0.068	30.799
	89.910	14720-74-2	2,2,4-trimethylheptane	0.076	0.080	0.047	21.586
	93.823	15869-87-1	2,2-Dimethyloctane	0.028	0.029	0.017	7.829
	94.621	15869-89-3	2,5-Dimethyloctane	0.064	0.067	0.040	18.208
	95.101	2040-95-1	2,7-Dimethyloctane	0.028	0.029	0.017	7.876
	95.266	2051-30-1	2,4-Dimethyloctane	0.126	0.133	0.078	35.702
	95.663		2,6-Dimethyloctane	0.038	0.040	0.023	10.683
	98.499	15869-85-9	5-Methylnonane	0.010	0.010	0.006	2.777
	98.690	17301-94-8	4-Methylnonane	0.023	0.024	0.014	6.550
	98.896		2,2,6-Trimethyloctane	2.172	2.296	1.354	616.965
	99.664	5911-04-6	3-Methylnonane	0.033	0.035	0.021	9.423

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	100.480		C11-Isoparaffin-2	0.192	0.198	0.109	54.676
	102.110	17302-01-1	3-Ethyl-3-methylheptane	0.335	0.346	0.190	95.287
	104.191		C11 Isoparaffin-4	0.038	0.040	0.022	10.895
	105.058		C11-Isoparaffin-5	0.020	0.021	0.011	5.758
	106.153		C11-Isoparaffin-7	0.437	0.451	0.248	124.343
	108.369		C11- Isoparaffin-11	0.817	0.843	0.464	232.339
	112.965		C12 - IsoParaffin - 1	0.026	0.027	0.013	7.357
Aromatics							
Mono-Aromatics	45.132	71-42-3	Benzene	0.645	0.564	0.733	200.223
	68.666	108-88-3	Toluene	12.177	10.785	11.726	3737.342
	84.449	100-41-4	Ethylbenzene	2.212	1.959	1.849	673.769
	85.698	108-38-3	m-Xylene	5.682	5.049	4.749	1730.792
	85.840	106-42-3	p-Xylene	2.586	2.306	2.161	787.582
	88.657	95-47-6	o-Xylene	1.471	1.283	1.229	447.970
	92.836	98-82-8	i-Propylbenzene	0.032	0.029	0.024	9.820
	96.307	103-65-1	n-Propylbenzene	0.540	0.481	0.399	163.527
	97.165	620-14-4	1-Methyl-3-ethylbenzene	2.178	1.935	1.608	659.245
	97.395	622-96-8	1-Methyl-4-ethylbenzene	1.026	0.915	0.757	310.465
	98.021	108-67-8	1,3,5-Trimethylbenzene	1.362	1.209	1.006	412.315
	99.103	611-14-3	1-Methyl-2-ethylbenzene	0.807	0.703	0.595	244.090
	100.758	95-63-6	1,2,4-Trimethylbenzene	4.131	3.622	3.049	1250.078
	102.460	538-93-2	i-Butylbenzene	0.370	0.333	0.245	111.470
	103.616	526-73-8	1,2,3-Trimethylbenzene	0.734	0.630	0.542	222.095
	103.990	535-77-3	1-Methyl-3-i-propylbenzene	0.036	0.032	0.024	10.803
	106.333	141-93-5	1,3-Diethylbenzene	0.095	0.085	0.063	28.625
	106.629	1074-43-7	1-Methyl-3-n-propylbenzene	1.477	1.318	0.976	444.653
	106.940	105-05-5	1,4-Diethylbenzene	0.493	0.439	0.326	148.512
	107.176	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.298	0.260	0.197	89.714
	107.430	135-01-3	1,2-Diethylbenzene	0.099	0.087	0.066	29.908
	108.026	1074-17-5	1-Methyl-2-n-propylbenzene	0.116	0.102	0.077	34.861
	109.547	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.763	0.670	0.504	229.534
	110.101	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.683	0.589	0.452	205.632
	111.000		1-Methyl-4-t-butylbenzene	0.091	0.082	0.055	27.344
	111.221	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.312	0.269	0.206	93.946
	111.689	4218-48-8	1-Ethyl-4-i-propylbenzene	0.099	0.086	0.060	29.800
	112.166		1,2,4,5-Tetramethylbenzene	0.547	0.473	0.361	164.526
	112.433	527-53-7	1,2,3,5-Tetramethylbenzene	0.713	0.615	0.471	214.572
	113.583		C11 - Aromatic - 3	0.094	0.081	0.056	28.237
	113.903		1,2-Di-i-propylbenzene	0.085	0.073	0.046	25.263
	114.118	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.123	0.107	0.074	37.010
	114.275		C11 - Aromatic - 4	0.071	0.061	0.042	21.163
	115.089	538-68-1	n-Pentylbenzene	0.038	0.033	0.023	11.495
	115.320		tert-Pentylbenzene	0.130	0.112	0.078	38.972
	115.632	577-55-9	1-Methyl-2-n-butylbenzene	0.060	0.052	0.036	18.055
	115.743		C11 - Aromatic - 7	0.080	0.072	0.048	23.836
	116.205	100-18-5	1,4-Di-i-propylbenzene	0.123	0.106	0.067	36.682

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	117.430	7364-19-4	1t-Butyl-4-ethylbenzene	0.028	0.024	0.015	8.268
	117.737		1,3-Di-n-propylbenzene	0.107	0.093	0.059	32.110
	117.845		C11 - Aromatic - 11	0.060	0.054	0.036	17.968
	118.401		C11 - Aromatic - 12	0.043	0.039	0.026	12.929
	119.028		C11 - Aromatic - 13	0.007	0.006	0.004	2.108
	119.340	102-25-0	1,3,5-Triethylbenzene	0.012	0.011	0.007	3.721
	119.990		C12 - Aromatic - 1	0.006	0.005	0.003	1.898
Naphthalenes	116.632	91-20-3	Naphthalene	0.246	0.184	0.170	77.392
	123.281	91-57-6	2-Methylnaphthalene	0.009	0.007	0.005	2.733
Naphtheno/Olefir	113.763	874-35-1	5-Methylindan	0.235	0.203	0.158	70.839
	114.766	824-63-5	2-Methylindan	0.311	0.269	0.209	93.740
Indenes	104.802		Indan	0.296	0.236	0.222	90.988
	105.437		Indene	1.131	0.901	0.849	347.983
	109.204		2-Methylindan	0.144	0.115	0.097	44.389
	114.514	824-22-6	4-Methylindan	0.291	0.251	0.195	87.481
	116.841		4,7-Dimethyl Indane	0.014	0.011	0.008	4.183
	117.091		1,1-Dimethyl Indane	0.044	0.035	0.026	13.403
	117.249		Dimethyl Indane - 1	0.021	0.017	0.013	6.512
Naphthenes							
Mono-Naphthene	27.094	287-92-3	Cyclopentane	0.296	0.305	0.375	85.306
	40.158	96-37-7	Methylcyclopentane	1.799	1.845	1.896	518.281
	47.057	110-82-7	Cyclohexane	1.301	1.283	1.371	374.784
	52.880	1759-58-6	1t,3-Dimethylcyclopentane	0.132	0.135	0.119	37.906
	53.467	2532-58-3	1c,3-Dimethylcyclopentane	0.096	0.099	0.087	27.606
	54.091	822-50-4	1t,2-Dimethylcyclopentane	0.122	0.124	0.110	35.025
	59.199	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.016	5.067
	61.054	108-87-2	Methylcyclohexane	0.308	0.307	0.278	88.705
	63.854	1640-89-7	Ethylcyclopentane	0.012	0.012	0.011	3.490
	72.858		1,3-dimethyl-t-cyclohexane	0.022	0.022	0.017	6.349
	76.186	2207-03-6	1t,3-Dimethylcyclohexane	0.009	0.009	0.007	2.691
	81.865	1678-91-7	Ethylcyclohexane	0.013	0.013	0.011	3.837
	101.321	1678-98-4	i-Butylcyclohexane	0.035	0.034	0.022	10.205
Di/Bicyclo-Naphth							
Olefins							
n-Olefins	9.399	115-11-7	Isobutene	0.014	0.018	0.022	4.074
	9.438	106-98-9	Butene-1	0.017	0.022	0.027	4.884
	10.261	624-64-6	t-Butene-2	0.067	0.086	0.107	19.405
	10.981	590-18-1	c-Butene-2	0.080	0.099	0.126	22.975
	16.325	109-67-1	Pentene-1	0.315	0.377	0.398	90.649
	18.792	646-04-8	t-Pentene-2	0.801	0.949	1.013	230.692
	19.812	627-20-3	c-Pentene-2	0.439	0.514	0.556	126.522
	32.937	592-41-6	Hexene-1	0.154	0.175	0.163	44.483

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	35.932	13269-52-8	t-Hexene-3	0.253	0.285	0.267	72.835
	36.406	4050-45-7	t-Hexene-2	0.486	0.547	0.513	140.069
	38.235	7688-21-3	c-Hexene-2	0.206	0.228	0.217	59.259
	55.023	592-76-7	Heptene-1	0.028	0.031	0.026	8.132
	56.879	14686-14-7	t-Heptene-3	0.031	0.034	0.028	9.019
	57.832	7642-10-6	c-Heptene-3	0.024	0.026	0.022	6.946
	58.741	14686-13-6	t-Heptene-2	0.014	0.015	0.013	4.010
Iso-Olefins	13.119	563-45-1	3-Methylbutene-1	0.315	0.386	0.399	90.871
	17.162	563-46-2	2-Methylbutene-1	0.478	0.564	0.604	137.656
	20.482	513-35-9	2-Methylbutene-2	0.985	1.141	1.245	283.664
	28.687	691-38-3	4-Methyl-c-pentene-2	0.041	0.046	0.043	11.671
	29.334	674-76-0	4-Methyl-t-pentene-2	0.126	0.143	0.133	36.232
	32.713	763-29-1	2-Methylpentene-1	0.215	0.241	0.226	61.837
	36.898	625-27-4	2-Methylpentene-2	0.329	0.365	0.347	94.769
	37.310	922-62-3	3-Methyl-c-pentene-2	0.255	0.280	0.268	73.371
	39.585	3404-73-7	3,3-Dimethylpentene-1	0.303	0.331	0.274	87.250
	42.035	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.936
	46.157	3404-61-3	3-Methylhexene-1	0.016	0.017	0.014	4.490
	46.743	3524-73-0	5-Methylhexene-1	0.071	0.078	0.064	20.387
	47.594	3404-72-6	1-Pentene, 2,3-dimethyl-	0.041	0.045	0.037	11.767
	48.804	15840-60-5	2-Methyl-c-hexene-3	0.039	0.043	0.035	11.187
	49.148	3769-23-1	4-Methylhexene-1	0.011	0.012	0.010	3.218
	49.793	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.054	0.045	14.264
	54.391		C7 - Iso-Olefin - 2	0.022	0.024	0.020	6.338
	56.358	4914-89-0	3-Methyl-c-hexene-3	0.013	0.014	0.012	3.869
	57.241	6094-02-6	2-Methylhexene-1	0.056	0.062	0.051	16.117
	58.111	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.023	7.410
	58.355	3899-36-3	3-Methyl-t-hexene-3	0.020	0.022	0.018	5.647
	59.641	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.014	4.308
	60.425	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.012	3.765
Naphtheno-Olefir	25.241	142-29-0	Cyclopentene	0.188	0.187	0.244	55.667
	45.337	693-89-0	1-Methylcyclopentene	0.351	0.346	0.379	103.600
	50.668	110-83-8	Cyclohexene	0.043	0.041	0.047	12.431
Di-Olefins	18.199	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	2.927
	20.812	2004-70-8	1t,3-Pentadiene	0.015	0.017	0.019	4.358
Oxygenates	12.739	64-17-5	Ethanol	8.550	8.321	16.466	1058.804
	26.486	71-23-8	n-Propanol	0.172	0.165	0.254	34.733
Unidentified	22.061		Unidentified	0.006	0.006	0.007	1.971
	28.226		Unidentified	0.048	0.050	0.049	17.082
	44.931		Unidentified	0.012	0.012	0.013	4.090
	63.099		Unidentified	0.021	0.022	0.017	7.297
	64.504		Unidentified	0.059	0.064	0.046	20.937

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Components by Group

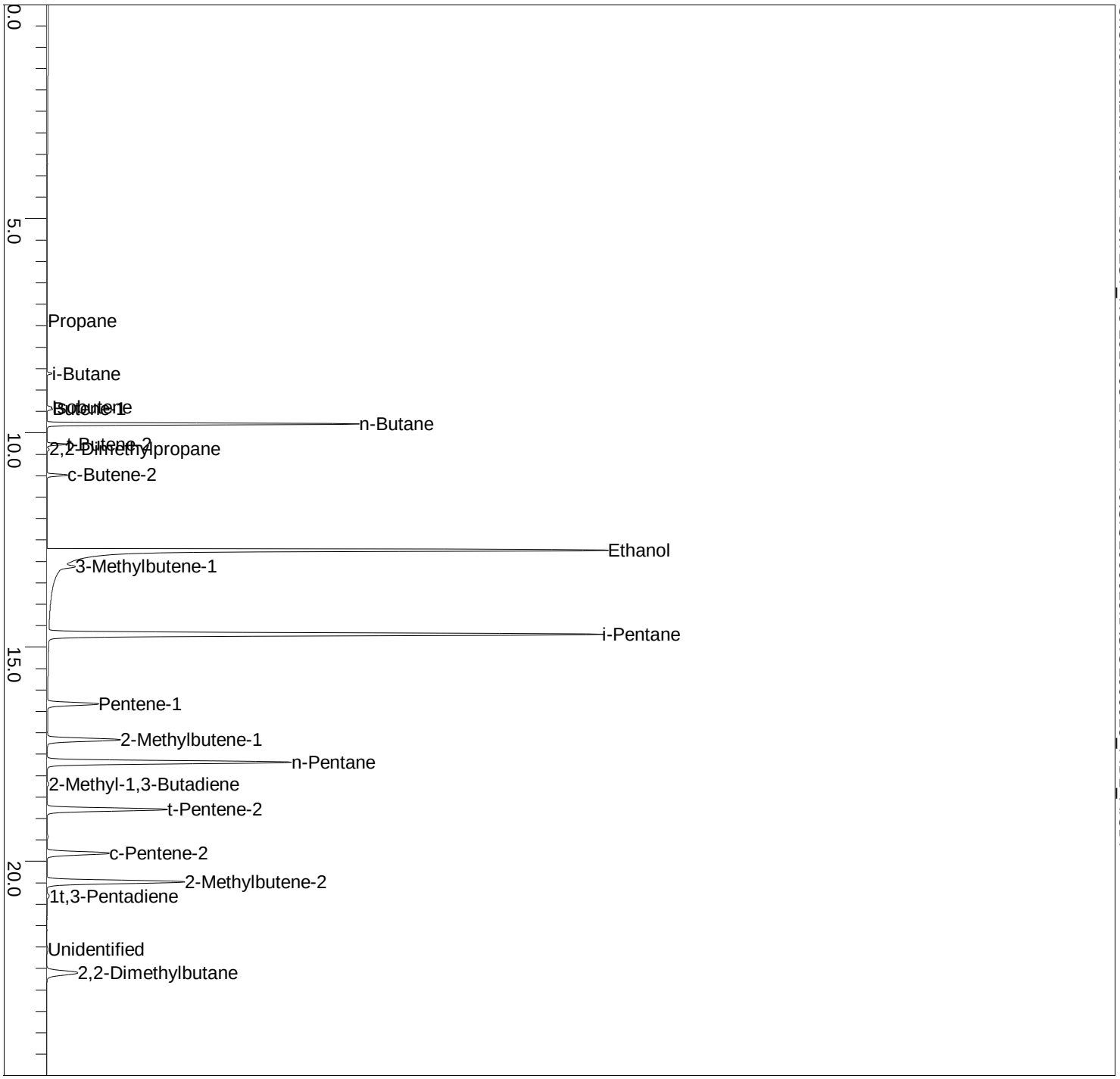
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	72.088		Unidentified	0.021	0.022	0.016	7.318
	78.505		Unidentified	0.014	0.014	0.011	4.905
	88.479		Unidentified	0.031	0.035	0.022	11.052
	93.600		Unidentified	0.078	0.083	0.049	27.637
	94.265		Unidentified	0.011	0.009	1.002	3.987
	94.265		Unidentified	0.011	0.012	0.007	3.987
	99.470		Unidentified	0.005	0.005	0.003	1.784
	99.843		Unidentified	0.006	0.006	0.004	2.067
	100.130		Unidentified	0.127	0.098	0.072	44.950
	100.258		Unidentified	0.361	0.372	0.205	127.351
	100.944		Unidentified	0.220	0.241	0.139	77.618
	101.065		Unidentified	0.131	0.137	0.082	46.234
	102.975		Unidentified	0.085	0.087	0.048	29.901
	104.394		Unidentified	0.211	0.189	0.140	74.544
	107.889		Unidentified	0.100	0.103	0.057	35.174
	108.166		Unidentified	0.107	0.111	0.062	37.912
	108.245		Unidentified	0.091	0.094	0.052	32.152
	108.551		Unidentified	0.260	0.269	0.148	91.943
	108.986		Unidentified	1.060	0.928	0.700	373.988
	110.528		Unidentified	0.028	0.026	0.016	9.800
	110.729		Unidentified	0.048	0.050	0.030	16.947
	110.859		Unidentified	0.075	0.077	0.047	26.330
	111.798		Unidentified	0.064	0.055	0.038	22.505
	112.641		Unidentified	0.015	0.013	0.009	5.301
	112.785		Unidentified	0.017	0.014	0.010	6.092
	113.291		Unidentified	0.052	0.055	0.028	18.438
	114.979		Unidentified	0.023	0.020	0.014	8.140

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1_A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

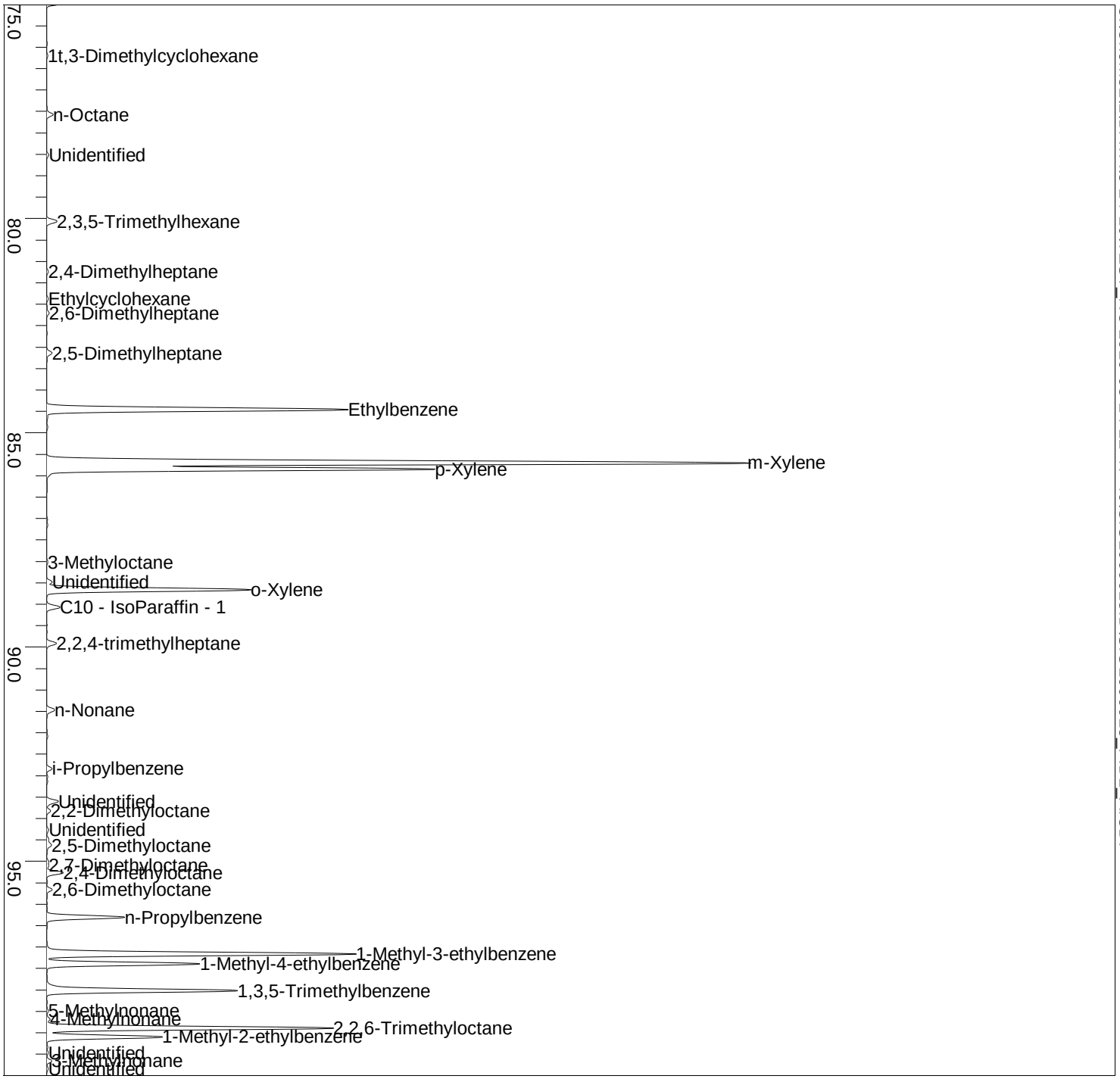
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1_A.CDF 24-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1_A.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Sample Chromatogram



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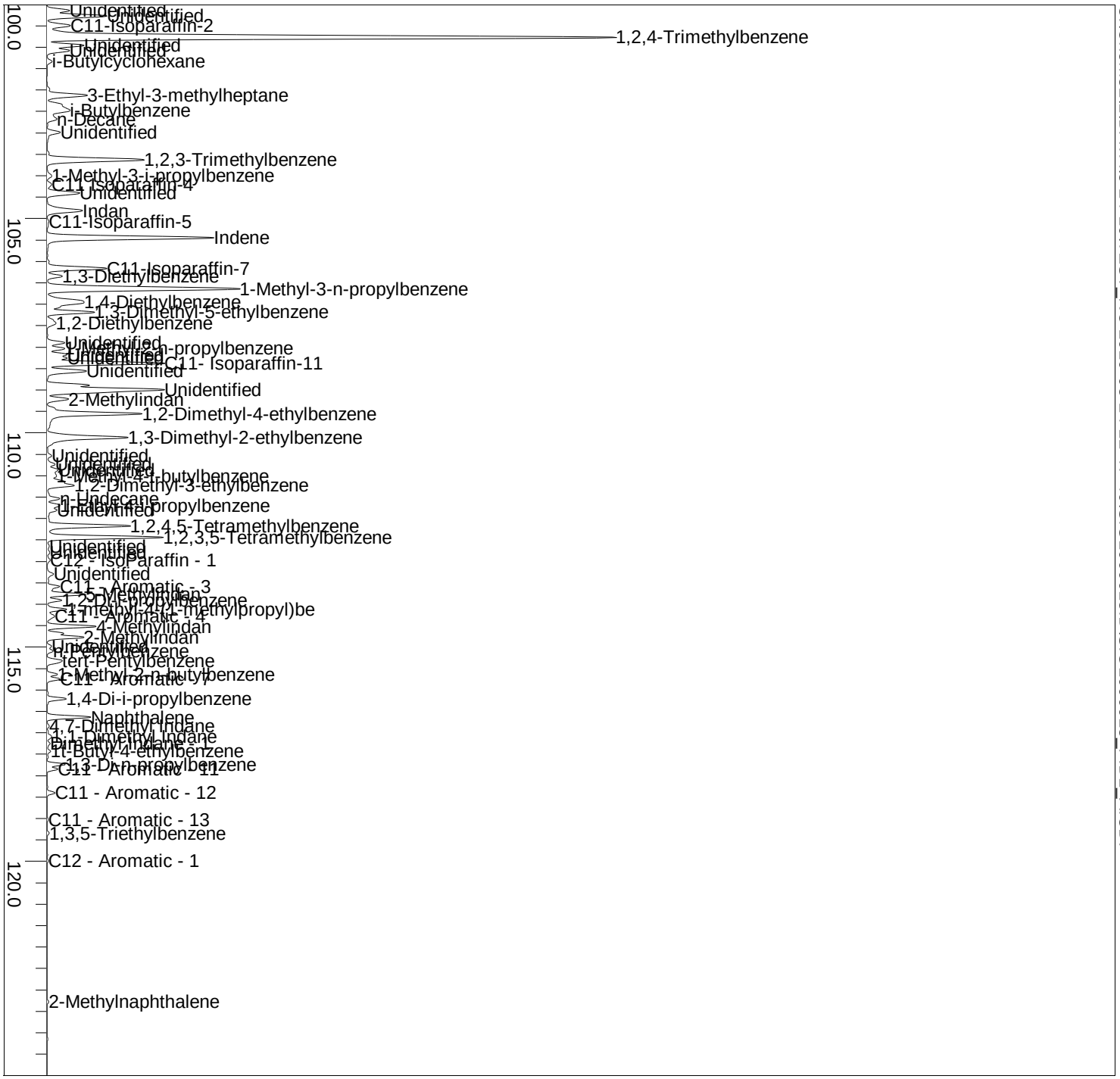
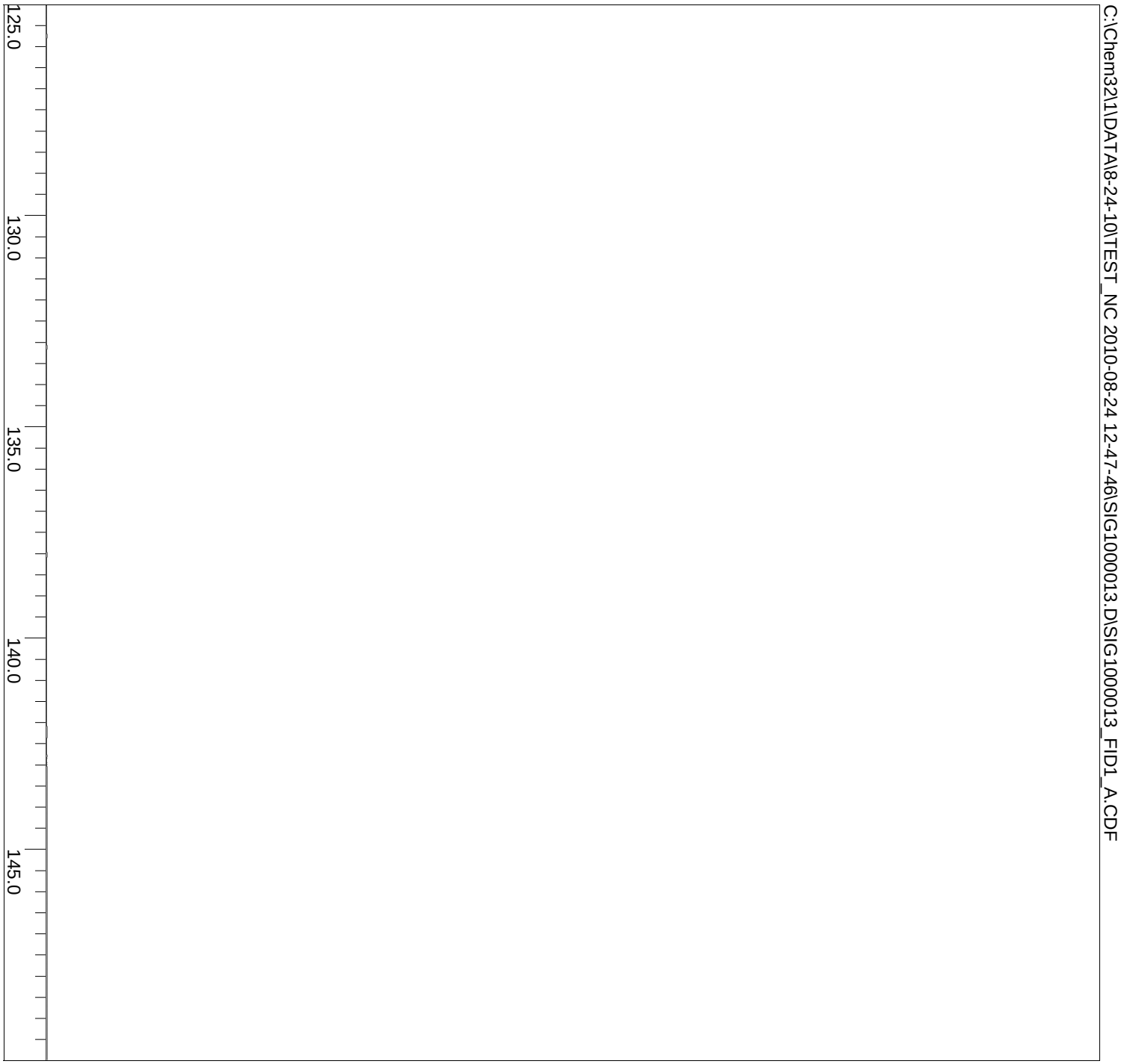
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000013.D\SIG1000013_FID1_A.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91317 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91317
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	13.004	15.663	14.829
I-Paraffins	17.787	20.361	16.768
Aromatics	44.642	38.930	36.630
Mono-Aromatics	43.740	38.197	36.029
Naphthalenes	0.095	0.070	0.061
Naphtheno/Olefino-Benz	0.272	0.232	0.174
Indenes	0.536	0.431	0.366
Naphthenes	7.088	7.041	6.622
Mono-Naphthenes	7.088	7.041	6.622
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.367	8.272	8.138
n-Olefins	3.095	3.554	3.520
Iso-Olefins	3.632	4.092	3.912
Naphtheno-Olefins	0.614	0.597	0.673
Di-Olefins	0.026	0.029	0.032
Oxygenates	8.901	8.549	16.245
Unidentified	1.211	1.183	0.768
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	8.719	8.377	15.990
C3	0.189	0.184	0.270
C4	4.445	5.813	6.472
C5	11.832	14.125	13.999
C6	16.432	17.990	16.331
C7	23.846	22.104	21.435
C8	21.370	19.463	16.779
C9	7.528	6.857	5.219
C10	3.692	3.251	2.329
C11	0.583	0.523	0.328
C12	0.152	0.129	0.079

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.008	0.012	0.015
	C4	4.179	5.473	6.075
	C5	2.838	3.435	3.323
	C6	3.854	4.431	3.779
	C7	0.983	1.090	0.829
	C8	0.785	0.847	0.581
	C9	0.276	0.291	0.182
	C10	0.055	0.057	0.033
	C11	0.025	0.026	0.014
I-Paraffins	C4	0.072	0.099	0.105
	C5	4.963	6.074	5.812
	C6	5.724	6.594	5.611
	C7	2.425	2.700	2.044
	C8	2.630	2.814	1.945
	C9	1.340	1.424	0.882
	C10	0.512	0.533	0.302
	C11	0.122	0.124	0.066
Mono-Aromatics	C6	0.653	0.563	0.706
	C7	17.283	15.111	15.847
	C8	17.130	14.993	13.632
	C9	5.784	5.036	4.065
	C10	2.329	2.011	1.466
	C11	0.411	0.354	0.234
	C12	0.152	0.129	0.079
Naphthalenes	C10	0.080	0.059	0.053
	C11	0.015	0.011	0.009
Naphtheno/Olefino-Benzs	C10	0.272	0.232	0.174
Indenes	C9	0.081	0.064	0.058
	C10	0.444	0.359	0.302
	C11	0.010	0.008	0.006
Mono-Naphthenes	C5	0.284	0.289	0.342
	C6	3.615	3.600	3.629
	C7	2.361	2.345	2.032
	C8	0.781	0.765	0.588
	C9	0.047	0.042	0.032
n-Olefins	C4	0.194	0.241	0.292

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.646	1.924	1.983
	C6	1.155	1.280	1.159
	C7	0.101	0.109	0.087
Iso-Olefins	C5	1.877	2.180	2.261
	C6	1.016	1.119	1.020
	C7	0.694	0.749	0.597
	C8	0.045	0.044	0.034
Naphtheno-Olefins	C5	0.198	0.195	0.246
	C6	0.416	0.403	0.428
Di-Olefins	C5	0.026	0.029	0.032
Oxygenates	C2	8.719	8.377	15.990
	C3	0.182	0.172	0.255

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.62	21.32
5%	78.81	29.90
10%	82.90	80.72
15%	100.10	94.99
20%	140.24	116.45
25%	154.52	143.98
30%	160.39	154.56
35%	172.71	159.50
40%	174.38	172.68
45%	197.39	174.38
50%	230.74	197.31
55%	230.85	230.74
60%	230.95	230.86
65%	231.05	230.97
70%	257.58	235.35
75%	279.25	276.89
80%	281.48	280.86
85%	282.26	281.96
90%	321.38	300.27
95%	345.48	336.13
FBP	404.50	401.94

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.389	74-98-6	P3	Propane	0.008	0.012	0.015	1.988
2	8.610	75-28-5	I4	i-Butane	0.072	0.099	0.105	18.561
3	9.403	115-11-7	K4	Isobutene	0.015	0.020	0.023	4.088
4	9.443	106-98-9	K4	Butene-1	0.019	0.024	0.028	4.985
5	9.791	106-97-8	P4	n-Butane	4.179	5.473	6.075	1071.032
6	10.265	624-64-6	K4	t-Butene-2	0.073	0.092	0.110	19.366
7	10.387	463-82-1	I5	2,2-Dimethylpropane	0.021	0.027	0.025	5.505
8	10.986	590-18-1	K4	c-Butene-2	0.087	0.106	0.130	22.981
9	12.742	64-17-5	X2	Ethanol	8.719	8.377	15.990	994.782
10	13.125	563-45-1	C5	3-Methylbutene-1	0.329	0.398	0.397	87.383
11	14.710	78-78-4	I5	i-Pentane	4.942	6.046	5.787	1275.307
12	16.334	109-67-1	K5	Pentene-1	0.334	0.395	0.402	88.578
13	17.172	563-46-2	C5	2-Methylbutene-1	0.507	0.591	0.610	134.487
14	17.700	109-66-0	P5	n-Pentane	2.838	3.435	3.323	732.268
15	18.208	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.012	0.013	2.859
16	18.803	646-04-8	K5	t-Pentene-2	0.847	0.991	1.021	224.950
17	19.442		?	Unidentified	0.006	0.007	0.007	1.857
18	19.825	627-20-3	K5	c-Pentene-2	0.465	0.538	0.560	123.392
19	20.494	513-35-9	C5	2-Methylbutene-2	1.041	1.192	1.255	276.421
20	20.825	2004-70-8	E5	1t,3-Pentadiene	0.016	0.017	0.019	4.254
21	22.078		?	Unidentified	0.006	0.006	0.008	1.924
22	22.622	75-83-2	I6	2,2-Dimethylbutane	0.187	0.218	0.183	48.371
23	25.256	142-29-0	B5	Cyclopentene	0.198	0.195	0.246	54.138
24	26.501	71-23-8	X3	n-Propanol	0.182	0.172	0.255	33.724
25	27.110	287-92-3	M5	Cyclopentane	0.284	0.289	0.342	75.365
26	27.840	79-29-8	I6	2,3-Dimethylbutane	0.550	0.630	0.539	142.540
27	28.242		?	Unidentified	0.051	0.052	0.049	16.633
28	28.701	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.050	0.045	11.856
29	28.922	107-83-5	I6	2-Methylpentane	2.834	3.289	2.778	734.135
30	29.350	674-76-0	C6	4-Methyl-t-pentene-2	0.132	0.149	0.133	35.035
31	31.564	96-14-0	I6	3-Methylpentane	2.153	2.457	2.111	557.837
32	32.730	763-29-1	C6	2-Methylpentene-1	0.226	0.250	0.227	59.949
33	32.953	592-41-6	K6	Hexene-1	0.162	0.181	0.163	43.077
34	35.320	110-54-3	P6	n-Hexane	3.854	4.431	3.779	998.635
35	35.947	13269-52-8	K6	t-Hexene-3	0.266	0.295	0.267	70.539
36	36.422	4050-45-7	K6	t-Hexene-2	0.511	0.567	0.512	135.510
37	36.913	625-27-4	C6	2-Methylpentene-2	0.346	0.379	0.347	91.750
38	37.324	922-62-3	C6	3-Methyl-c-pentene-2	0.268	0.291	0.269	71.051
39	38.250	7688-21-3	K6	c-Hexene-2	0.216	0.237	0.217	57.376
40	39.598	3404-73-7	C7	3,3-Dimethylpentene-1	0.317	0.342	0.273	84.077
41	40.172	96-37-7	M6	Methylcyclopentane	2.055	2.081	2.063	545.518
42	41.744	108-08-7	I7	2,4-Dimethylpentane	0.320	0.361	0.270	83.311
43	42.044	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.834

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.283	464-06-2	I7	2,2,3-Trimethylbutane	0.046	0.051	0.039	11.990
45	44.940		?	Unidentified	0.012	0.012	0.012	3.942
46	45.142	71-42-3	Q6	Benzene	0.653	0.563	0.706	186.666
47	45.346	693-89-0	B6	1-Methylcyclopentene	0.370	0.360	0.381	100.625
48	46.168	3404-61-3	C7	3-Methylhexene-1	0.016	0.018	0.014	4.337
49	46.750	3524-73-0	C7	5-Methylhexene-1	0.082	0.089	0.070	21.674
50	47.066	110-82-7	M6	Cyclohexane	1.559	1.519	1.565	413.927
51	47.602		?	Unidentified	0.035	0.038	0.030	11.476
52	48.809	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.045	0.036	10.972
53	49.804	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.052	0.056	0.045	13.774
54	50.197	591-76-4	I7	2-Methylhexane	1.265	1.413	1.067	329.111
55	50.673	110-83-8	B6	Cyclohexene	0.045	0.043	0.047	12.073
56	52.032	589-34-4	I7	3-Methylhexane	0.793	0.875	0.669	206.268
57	52.883	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.223	0.225	0.191	59.064
58	53.470	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.179	0.183	0.154	47.601
59	54.096	822-50-4	M7	1t,2-Dimethylcyclopentane	0.273	0.276	0.235	72.579
60	54.393		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.019	5.981
61	54.687	540-84-1	I8	2,2,4-Trimethylpentane	0.065	0.071	0.048	16.966
62	55.027	592-76-7	K7	Heptene-1	0.030	0.032	0.026	7.899
63	56.359	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.823
64	56.880	14686-14-7	K7	t-Heptene-3	0.033	0.036	0.028	8.752
65	57.241	6094-02-6	C7	2-Methylhexene-1	0.058	0.064	0.050	15.505
66	57.617	142-82-5	P7	n-Heptane	0.983	1.090	0.829	255.710
67	57.834	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.021	6.362
68	58.112	2738-19-4	C7	2-Methyl-2-hexene	0.027	0.028	0.023	7.104
69	58.354	3899-36-3	C7	3-Methyl-t-hexene-3	0.020	0.022	0.018	5.441
70	58.742	14686-13-6	K7	t-Heptene-2	0.014	0.015	0.012	3.722
71	59.199	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.016	4.931
72	59.643	20710-38-8	C7	3-Methyl-t-hexene-2	0.016	0.017	0.014	4.182
73	60.425	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.012	3.576
74	61.063	108-87-2	M7	Methylcyclohexane	1.610	1.586	1.385	427.242
75	62.010	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.045	0.045	0.034	11.895
76	62.414	590-73-8	I8	2,2-Dimethylhexane	0.036	0.039	0.026	9.292
77	63.852	1640-89-7	M7	Ethylcyclopentane	0.058	0.057	0.050	15.280
78	64.502	564-02-3	I8	2,2,3-Trimethylpentane	0.079	0.084	0.059	20.632
79	64.741	592-13-2	I8	2,5-Dimethylhexane	0.197	0.215	0.146	51.360
80	65.079	589-43-5	I8	2,4-Dimethylhexane	0.192	0.208	0.142	50.169
81	65.919	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.045	0.045	0.034	11.970
82	66.322	563-16-6	I8	3,3-Dimethylhexane	0.029	0.031	0.021	7.459
83	67.450	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.040	0.039	0.030	10.560
84	68.081	565-75-3	I8	2,3,4-Trimethylpentane	0.815	0.859	0.602	212.324
85	68.691	108-88-3	Q7	Toluene	17.283	15.111	15.847	4886.507
86	70.125		C8	C8 - Diolefin - 1	0.017	0.017	0.013	4.553

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	70.421	584-94-1	I8	2,3-Dimethylhexane	0.270	0.287	0.200	70.337
88	71.693	592-27-8	I8	2-Methylheptane	0.332	0.361	0.246	86.538
89	71.947	589-53-7	I8	4-Methylheptane	0.171	0.184	0.126	44.481
90	72.857		M8	1,3-dimethyl-t-cyclohexane	0.269	0.265	0.202	71.384
91	73.016	589-81-1	I8	3-Methylheptane	0.281	0.302	0.208	73.278
92	73.201	619-99-8	I8	3-Ethylhexane	0.163	0.174	0.121	42.581
93	74.097		?	Unidentified	0.043	0.042	0.032	13.913
94	74.917	3522-94-9	I9	2,2,5-Trimethylhexane	0.545	0.584	0.359	142.398
95	75.264		M8	3c-Ethylmethylcyclopentane	0.015	0.015	0.012	4.111
96	75.483		M8	3t-Ethylmethylcyclopentane	0.022	0.022	0.016	5.793
97	76.184	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.124	0.121	0.093	32.920
98	77.562	111-65-9	P8	n-Octane	0.785	0.847	0.581	204.704
99	78.506		?	Unidentified	0.018	0.018	0.014	5.922
100	80.050	1069-53-0	I9	2,3,5-Trimethylhexane	0.103	0.108	0.068	26.782
101	80.613		C8	C9 - IsoOlefin - 1	0.027	0.027	0.021	7.296
102	81.048	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.023	0.022	0.018	6.223
103	81.230	1071-26-7	I9	2,4-Dimethylheptane	0.051	0.055	0.034	13.351
104	81.864	1678-91-7	M8	Ethylcyclohexane	0.197	0.191	0.149	52.401
105	82.191	1072-05-5	I9	2,6-Dimethylheptane	0.097	0.104	0.064	25.415
106	82.669		?	Unidentified	0.041	0.040	0.031	13.439
107	83.128		I9	2,5-Dimethylheptane	0.144	0.152	0.095	37.561
108	83.318	926-82-9	I9	3,5-Dimethylheptane	0.028	0.030	0.019	7.398
109	84.454	100-41-4	Q8	Ethylbenzene	3.147	2.751	2.504	882.957
110	84.863		?	Unidentified	0.028	0.027	0.019	9.026
111	85.710	108-38-3	Q8	m-Xylene	7.983	7.002	6.353	2240.073
112	85.852	106-42-3	Q8	p-Xylene	3.714	3.270	2.956	1042.294
113	86.326		?	Unidentified	0.019	0.018	0.012	6.062
114	86.466		I9	3,5-Dimethylheptane	0.017	0.018	0.011	4.511
115	86.617	1067-20-5	I9	3,3-Diethylpentane	0.014	0.014	0.009	3.578
116	87.016	2216-34-4	I9	4-Methyloctane	0.088	0.093	0.058	23.092
117	87.149	3221-61-2	I9	2-Methyloctane	0.119	0.126	0.078	31.018
118	87.848	15869-80-4	I9	Heptane, 3-ethyl-	0.017	0.018	0.011	4.392
119	88.011	2216-33-3	I9	3-Methyloctane	0.116	0.122	0.077	30.351
120	88.481		?	Unidentified	0.035	0.039	0.023	11.275
121	88.664	95-47-6	Q8	o-Xylene	2.286	1.969	1.819	641.414
122	89.064		I10	C10 - IsoParaffin - 1	0.118	0.123	0.070	30.833
123	89.640		M9	trans-1,3-Diethylcyclopentane	0.031	0.027	0.021	8.749
124	89.914	14720-74-2	I10	2,2,4-trimethylheptane	0.103	0.107	0.061	26.851
125	91.501	111-84-2	P9	n-Nonane	0.276	0.291	0.182	72.003
126	92.026	4926-90-3	M9	1,1-Methylethylcyclohexane	0.016	0.015	0.011	4.243
127	92.836	98-82-8	Q9	i-Propylbenzene	0.040	0.035	0.028	11.076
128	93.591		?	Unidentified	0.017	0.018	0.010	5.603
129	93.817	15869-87-1	I10	2,2-Dimethyloctane	0.011	0.011	0.006	2.807

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	94.627	15869-89-3	I10	2,5-Dimethyloctane	0.009	0.009	0.005	2.341
131	94.812		I10	C10 - IsoParaffin - 2	0.015	0.015	0.009	3.863
132	95.657		I10	2,6-Dimethyloctane	0.011	0.011	0.007	2.892
133	96.303	103-65-1	Q9	n-Propylbenzene	0.331	0.291	0.232	92.212
134	97.154	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.283	1.125	0.902	357.818
135	97.386	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.597	0.525	0.420	166.416
136	98.013	108-67-8	Q9	1,3,5-Trimethylbenzene	0.762	0.667	0.535	212.349
137	98.490	15869-85-9	I10	5-Methylnonane	0.007	0.007	0.004	1.884
138	98.680	17301-94-8	I10	4-Methylnonane	0.018	0.018	0.011	4.644
139	98.881		I10	2,2,6-Trimethyloctane	0.162	0.169	0.096	42.483
140	99.097	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.440	0.379	0.309	122.667
141	99.659	5911-04-6	I10	3-Methylnonane	0.023	0.024	0.014	6.009
142	100.250		?	Unidentified	0.041	0.042	0.022	13.256
143	100.473		I11	C11-Isoparaffin-2	0.016	0.017	0.009	4.264
144	100.735	95-63-6	Q9	1,2,4-Trimethylbenzene	2.073	1.794	1.457	577.860
145	100.937		?	Unidentified	0.023	0.024	0.014	7.368
146	101.060		?	Unidentified	0.011	0.012	0.007	3.680
147	102.105	17302-01-1	I10	3-Ethyl-3-methylheptane	0.036	0.037	0.020	9.473
148	102.384	538-93-2	Q10	i-Butylbenzene	0.054	0.048	0.034	14.909
149	102.592	124-18-5	P10	n-Decane	0.055	0.057	0.033	14.422
150	102.972		?	Unidentified	0.009	0.010	0.005	3.040
151	103.608	526-73-8	Q9	1,2,3-Trimethylbenzene	0.259	0.219	0.182	72.104
152	104.391		?	Unidentified	0.035	0.035	0.019	11.324
153	104.799		J9	Indan	0.081	0.064	0.058	23.076
154	105.426		J10	Indene	0.241	0.190	0.172	68.367
155	106.145		I11	C11-Isoparaffin-7	0.106	0.108	0.057	27.667
156	106.330	141-93-5	Q10	1,3-Diethylbenzene	0.030	0.026	0.019	8.247
157	106.616	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.397	0.350	0.250	110.209
158	106.942	105-05-5	Q10	1,4-Diethylbenzene	0.169	0.149	0.107	46.976
159	107.172	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.131	0.113	0.082	36.330
160	107.433	135-01-3	Q10	1,2-Diethylbenzene	0.030	0.026	0.019	8.401
161	107.885		?	Unidentified	0.027	0.028	0.015	8.893
162	108.023	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.055	0.048	0.035	15.209
163	108.160		?	Unidentified	0.032	0.033	0.017	10.388
164	108.242		?	Unidentified	0.027	0.028	0.015	8.911
165	108.363		?	Unidentified	0.202	0.206	0.109	65.743
166	108.547		?	Unidentified	0.080	0.082	0.043	26.148
167	108.876	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.123	0.106	0.077	34.029
168	108.984		?	Unidentified	0.329	0.284	0.207	106.864
169	109.201		J10	2-Methylindan	0.048	0.037	0.030	13.509
170	109.542	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.327	0.283	0.206	90.659
171	110.097	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.231	0.197	0.145	64.083
172	110.526		?	Unidentified	0.007	0.006	0.004	2.163

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	110.727		?	Unidentified	0.014	0.014	0.008	4.513
174	110.857		?	Unidentified	0.023	0.024	0.014	7.518
175	111.003		Q11	1-Methyl-4-t-butylbenzene	0.036	0.032	0.021	9.986
176	111.218	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.134	0.114	0.084	37.125
177	111.529	1120-21-4	P11	n-Undecane	0.025	0.026	0.014	6.667
178	111.687	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.031	0.027	0.018	8.663
179	111.796		?	Unidentified	0.015	0.013	0.009	5.035
180	112.162		Q10	1,2,4,5-Tetramethylbenzene	0.268	0.229	0.169	74.447
181	112.428	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.379	0.323	0.239	105.147
182	113.289		?	Unidentified	0.013	0.013	0.006	4.107
183	113.581		Q11	C11 - Aromatic - 3	0.049	0.041	0.028	13.434
184	113.761	874-35-1	H10	5-Methylindan	0.112	0.095	0.071	30.969
185	113.901		Q12	1,2-Di-i-propylbenzene	0.047	0.040	0.024	12.929
186	114.115	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.067	0.057	0.038	18.623
187	114.275		Q11	C11 - Aromatic - 4	0.033	0.028	0.019	9.094
188	114.512	824-22-6	J10	4-Methylindan	0.155	0.132	0.099	42.969
189	114.764	824-63-5	H10	2-Methylindan	0.161	0.137	0.103	44.520
190	114.977		?	Unidentified	0.012	0.012	0.006	3.857
191	115.089	538-68-1	Q11	n-Pentylbenzene	0.017	0.014	0.009	4.567
192	115.321		Q11	tert-Pentylbenzene	0.069	0.059	0.040	19.185
193	115.631	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.031	0.026	0.017	8.461
194	115.741		Q11	C11 - Aromatic - 7	0.040	0.035	0.023	10.964
195	116.204	100-18-5	Q12	1,4-Di-i-propylbenzene	0.055	0.047	0.029	15.267
196	116.630	91-20-3	G10	Naphthalene	0.080	0.059	0.053	23.163
197	117.080		J11	1,1-Dimethyl Indane	0.010	0.008	0.006	2.894
198	117.429	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.006	0.005	0.003	1.664
199	117.735		Q12	1,3-Di-n-propylbenzene	0.043	0.037	0.022	11.851
200	117.845		Q11	C11 - Aromatic - 11	0.024	0.021	0.014	6.605
201	118.400	17851-27-2	Q11	1-ethyl-2,4,5-trimethylbenzen	0.014	0.012	0.008	3.807
202	123.281	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.006	2.742
203	124.147	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.501

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.389	74-98-6	Propane	0.008	0.012	0.015	1.988
	9.791	106-97-8	n-Butane	4.179	5.473	6.075	1071.032
	17.700	109-66-0	n-Pentane	2.838	3.435	3.323	732.268
	35.320	110-54-3	n-Hexane	3.854	4.431	3.779	998.635
	57.617	142-82-5	n-Heptane	0.983	1.090	0.829	255.710
	77.562	111-65-9	n-Octane	0.785	0.847	0.581	204.704
	91.501	111-84-2	n-Nonane	0.276	0.291	0.182	72.003
	102.592	124-18-5	n-Decane	0.055	0.057	0.033	14.422
	111.529	1120-21-4	n-Undecane	0.025	0.026	0.014	6.667
I-Paraffins	8.610	75-28-5	i-Butane	0.072	0.099	0.105	18.561
	10.387	463-82-1	2,2-Dimethylpropane	0.021	0.027	0.025	5.505
	14.710	78-78-4	i-Pentane	4.942	6.046	5.787	1275.307
	22.622	75-83-2	2,2-Dimethylbutane	0.187	0.218	0.183	48.371
	27.840	79-29-8	2,3-Dimethylbutane	0.550	0.630	0.539	142.540
	28.922	107-83-5	2-Methylpentane	2.834	3.289	2.778	734.135
	31.564	96-14-0	3-Methylpentane	2.153	2.457	2.111	557.837
	41.744	108-08-7	2,4-Dimethylpentane	0.320	0.361	0.270	83.311
	42.283	464-06-2	2,2,3-Trimethylbutane	0.046	0.051	0.039	11.990
	50.197	591-76-4	2-Methylhexane	1.265	1.413	1.067	329.111
	52.032	589-34-4	3-Methylhexane	0.793	0.875	0.669	206.268
	54.687	540-84-1	2,2,4-Trimethylpentane	0.065	0.071	0.048	16.966
	62.414	590-73-8	2,2-Dimethylhexane	0.036	0.039	0.026	9.292
	64.502	564-02-3	2,2,3-Trimethylpentane	0.079	0.084	0.059	20.632
	64.741	592-13-2	2,5-Dimethylhexane	0.197	0.215	0.146	51.360
	65.079	589-43-5	2,4-Dimethylhexane	0.192	0.208	0.142	50.169
	66.322	563-16-6	3,3-Dimethylhexane	0.029	0.031	0.021	7.459
	68.081	565-75-3	2,3,4-Trimethylpentane	0.815	0.859	0.602	212.324
	70.421	584-94-1	2,3-Dimethylhexane	0.270	0.287	0.200	70.337
	71.693	592-27-8	2-Methylheptane	0.332	0.361	0.246	86.538
	71.947	589-53-7	4-Methylheptane	0.171	0.184	0.126	44.481
	73.016	589-81-1	3-Methylheptane	0.281	0.302	0.208	73.278
	73.201	619-99-8	3-Ethylhexane	0.163	0.174	0.121	42.581
	74.917	3522-94-9	2,2,5-Trimethylhexane	0.545	0.584	0.359	142.398
	80.050	1069-53-0	2,3,5-Trimethylhexane	0.103	0.108	0.068	26.782
	81.230	1071-26-7	2,4-Dimethylheptane	0.051	0.055	0.034	13.351
	82.191	1072-05-5	2,6-Dimethylheptane	0.097	0.104	0.064	25.415
	83.128		2,5-Dimethylheptane	0.144	0.152	0.095	37.561
	83.318	926-82-9	3,5-Dimethylheptane	0.028	0.030	0.019	7.398
	86.466		3,5-Dimethylheptane	0.017	0.018	0.011	4.511
	86.617	1067-20-5	3,3-Diethylpentane	0.014	0.014	0.009	3.578
	87.016	2216-34-4	4-Methyloctane	0.088	0.093	0.058	23.092
	87.149	3221-61-2	2-Methyloctane	0.119	0.126	0.078	31.018
	87.848	15869-80-4	Heptane, 3-ethyl-	0.017	0.018	0.011	4.392
	88.011	2216-33-3	3-Methyloctane	0.116	0.122	0.077	30.351
	89.064		C10 - IsoParaffin - 1	0.118	0.123	0.070	30.833
	89.914	14720-74-2	2,2,4-trimethylheptane	0.103	0.107	0.061	26.851

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	93.817	15869-87-1	2,2-Dimethyloctane	0.011	0.011	0.006	2.807
	94.627	15869-89-3	2,5-Dimethyloctane	0.009	0.009	0.005	2.341
	94.812		C10 - IsoParaffin - 2	0.015	0.015	0.009	3.863
	95.657		2,6-Dimethyloctane	0.011	0.011	0.007	2.892
	98.490	15869-85-9	5-Methylnonane	0.007	0.007	0.004	1.884
	98.680	17301-94-8	4-Methylnonane	0.018	0.018	0.011	4.644
	98.881		2,2,6-Trimethyloctane	0.162	0.169	0.096	42.483
	99.659	5911-04-6	3-Methylnonane	0.023	0.024	0.014	6.009
	100.473		C11-Isoparaffin-2	0.016	0.017	0.009	4.264
	102.105	17302-01-1	3-Ethyl-3-methylheptane	0.036	0.037	0.020	9.473
	106.145		C11-Isoparaffin-7	0.106	0.108	0.057	27.667
Aromatics							
Mono-Aromatics	45.142	71-42-3	Benzene	0.653	0.563	0.706	186.666
	68.691	108-88-3	Toluene	17.283	15.111	15.847	4886.507
	84.454	100-41-4	Ethylbenzene	3.147	2.751	2.504	882.957
	85.710	108-38-3	m-Xylene	7.983	7.002	6.353	2240.073
	85.852	106-42-3	p-Xylene	3.714	3.270	2.956	1042.294
	88.664	95-47-6	o-Xylene	2.286	1.969	1.819	641.414
	92.836	98-82-8	i-Propylbenzene	0.040	0.035	0.028	11.076
	96.303	103-65-1	n-Propylbenzene	0.331	0.291	0.232	92.212
	97.154	620-14-4	1-Methyl-3-ethylbenzene	1.283	1.125	0.902	357.818
	97.386	622-96-8	1-Methyl-4-ethylbenzene	0.597	0.525	0.420	166.416
	98.013	108-67-8	1,3,5-Trimethylbenzene	0.762	0.667	0.535	212.349
	99.097	611-14-3	1-Methyl-2-ethylbenzene	0.440	0.379	0.309	122.667
	100.735	95-63-6	1,2,4-Trimethylbenzene	2.073	1.794	1.457	577.860
	102.384	538-93-2	i-Butylbenzene	0.054	0.048	0.034	14.909
	103.608	526-73-8	1,2,3-Trimethylbenzene	0.259	0.219	0.182	72.104
	106.330	141-93-5	1,3-Diethylbenzene	0.030	0.026	0.019	8.247
	106.616	1074-43-7	1-Methyl-3-n-propylbenzene	0.397	0.350	0.250	110.209
	106.942	105-05-5	1,4-Diethylbenzene	0.169	0.149	0.107	46.976
	107.172	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.131	0.113	0.082	36.330
	107.433	135-01-3	1,2-Diethylbenzene	0.030	0.026	0.019	8.401
	108.023	1074-17-5	1-Methyl-2-n-propylbenzene	0.055	0.048	0.035	15.209
	108.876	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.123	0.106	0.077	34.029
	109.542	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.327	0.283	0.206	90.659
	110.097	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.231	0.197	0.145	64.083
	111.003		1-Methyl-4-t-butylbenzene	0.036	0.032	0.021	9.986
	111.218	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.134	0.114	0.084	37.125
	111.687	4218-48-8	1-Ethyl-4-i-propylbenzene	0.031	0.027	0.018	8.663
	112.162		1,2,4,5-Tetramethylbenzene	0.268	0.229	0.169	74.447
	112.428	527-53-7	1,2,3,5-Tetramethylbenzene	0.379	0.323	0.239	105.147
	113.581		C11 - Aromatic - 3	0.049	0.041	0.028	13.434
	113.901		1,2-Di-i-propylbenzene	0.047	0.040	0.024	12.929
	114.115	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.067	0.057	0.038	18.623
	114.275		C11 - Aromatic - 4	0.033	0.028	0.019	9.094
	115.089	538-68-1	n-Pentylbenzene	0.017	0.014	0.009	4.567

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.321		tert-Pentylbenzene	0.069	0.059	0.040	19.185
	115.631	577-55-9	1-Methyl-2-n-butylbenzene	0.031	0.026	0.017	8.461
	115.741		C11 - Aromatic - 7	0.040	0.035	0.023	10.964
	116.204	100-18-5	1,4-Di-i-propylbenzene	0.055	0.047	0.029	15.267
	117.429	7364-19-4	1t-Butyl-4-ethylbenzene	0.006	0.005	0.003	1.664
	117.735		1,3-Di-n-propylbenzene	0.043	0.037	0.022	11.851
	117.845		C11 - Aromatic - 11	0.024	0.021	0.014	6.605
	118.400	17851-27-2	1-ethyl-2,4,5-trimethylbenzen	0.014	0.012	0.008	3.807
Naphthalenes	116.630	91-20-3	Naphthalene	0.080	0.059	0.053	23.163
	123.281	91-57-6	2-Methylnaphthalene	0.010	0.007	0.006	2.742
	124.147	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.501
Naphtheno/Olefir	113.761	874-35-1	5-Methylindan	0.112	0.095	0.071	30.969
	114.764	824-63-5	2-Methylindan	0.161	0.137	0.103	44.520
Indenes	104.799		Indan	0.081	0.064	0.058	23.076
	105.426		Indene	0.241	0.190	0.172	68.367
	109.201		2-Methylindan	0.048	0.037	0.030	13.509
	114.512	824-22-6	4-Methylindan	0.155	0.132	0.099	42.969
	117.080		1,1-Dimethyl Indane	0.010	0.008	0.006	2.894
Naphthenes							
Mono-Naphthene	27.110	287-92-3	Cyclopentane	0.284	0.289	0.342	75.365
	40.172	96-37-7	Methylcyclopentane	2.055	2.081	2.063	545.518
	47.066	110-82-7	Cyclohexane	1.559	1.519	1.565	413.927
	52.883	1759-58-6	1t,3-Dimethylcyclopentane	0.223	0.225	0.191	59.064
	53.470	2532-58-3	1c,3-Dimethylcyclopentane	0.179	0.183	0.154	47.601
	54.096	822-50-4	1t,2-Dimethylcyclopentane	0.273	0.276	0.235	72.579
	59.199	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.016	4.931
	61.063	108-87-2	Methylcyclohexane	1.610	1.586	1.385	427.242
	62.010	4516-69-2	1,1,3-Trimethylcyclopentane	0.045	0.045	0.034	11.895
	63.852	1640-89-7	Ethylcyclopentane	0.058	0.057	0.050	15.280
	65.919	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.045	0.045	0.034	11.970
	67.450	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.040	0.039	0.030	10.560
	72.857		1,3-dimethyl-t-cyclohexane	0.269	0.265	0.202	71.384
	75.264		3c-Ethylmethylcyclopentane	0.015	0.015	0.012	4.111
	75.483		3t-Ethylmethylcyclopentane	0.022	0.022	0.016	5.793
	76.184	2207-03-6	1t,3-Dimethylcyclohexane	0.124	0.121	0.093	32.920
	81.048	2207-01-4	1c,2-Dimethylcyclohexane	0.023	0.022	0.018	6.223
	81.864	1678-91-7	Ethylcyclohexane	0.197	0.191	0.149	52.401
	89.640		trans-1,3-Diethylcyclopentane	0.031	0.027	0.021	8.749
	92.026	4926-90-3	1,1-Methylethylcyclohexane	0.016	0.015	0.011	4.243
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.403	115-11-7	Isobutene	0.015	0.020	0.023	4.088

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	9.443	106-98-9	Butene-1	0.019	0.024	0.028	4.985
	10.265	624-64-6	t-Butene-2	0.073	0.092	0.110	19.366
	10.986	590-18-1	c-Butene-2	0.087	0.106	0.130	22.981
	16.334	109-67-1	Pentene-1	0.334	0.395	0.402	88.578
	18.803	646-04-8	t-Pentene-2	0.847	0.991	1.021	224.950
	19.825	627-20-3	c-Pentene-2	0.465	0.538	0.560	123.392
	32.953	592-41-6	Hexene-1	0.162	0.181	0.163	43.077
	35.947	13269-52-8	t-Hexene-3	0.266	0.295	0.267	70.539
	36.422	4050-45-7	t-Hexene-2	0.511	0.567	0.512	135.510
	38.250	7688-21-3	c-Hexene-2	0.216	0.237	0.217	57.376
	55.027	592-76-7	Heptene-1	0.030	0.032	0.026	7.899
	56.880	14686-14-7	t-Heptene-3	0.033	0.036	0.028	8.752
	57.834	7642-10-6	c-Heptene-3	0.024	0.026	0.021	6.362
	58.742	14686-13-6	t-Heptene-2	0.014	0.015	0.012	3.722
Iso-Olefins	13.125	563-45-1	3-Methylbutene-1	0.329	0.398	0.397	87.383
	17.172	563-46-2	2-Methylbutene-1	0.507	0.591	0.610	134.487
	20.494	513-35-9	2-Methylbutene-2	1.041	1.192	1.255	276.421
	28.701	691-38-3	4-Methyl-c-pentene-2	0.045	0.050	0.045	11.856
	29.350	674-76-0	4-Methyl-t-pentene-2	0.132	0.149	0.133	35.035
	32.730	763-29-1	2-Methylpentene-1	0.226	0.250	0.227	59.949
	36.913	625-27-4	2-Methylpentene-2	0.346	0.379	0.347	91.750
	37.324	922-62-3	3-Methyl-c-pentene-2	0.268	0.291	0.269	71.051
	39.598	3404-73-7	3,3-Dimethylpentene-1	0.317	0.342	0.273	84.077
	42.044	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.834
	46.168	3404-61-3	3-Methylhexene-1	0.016	0.018	0.014	4.337
	46.750	3524-73-0	5-Methylhexene-1	0.082	0.089	0.070	21.674
	48.809	15840-60-5	2-Methyl-c-hexene-3	0.041	0.045	0.036	10.972
	49.804	3404-55-5	4-Methyl-t/c-hexene-2	0.052	0.056	0.045	13.774
	54.393		C7 - Iso-Olefin - 2	0.023	0.024	0.019	5.981
	56.359	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.823
	57.241	6094-02-6	2-Methylhexene-1	0.058	0.064	0.050	15.505
	58.112	2738-19-4	2-Methyl-2-hexene	0.027	0.028	0.023	7.104
	58.354	3899-36-3	3-Methyl-t-hexene-3	0.020	0.022	0.018	5.441
	59.643	20710-38-8	3-Methyl-t-hexene-2	0.016	0.017	0.014	4.182
	60.425	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.012	3.576
	70.125		C8 - Diolefin - 1	0.017	0.017	0.013	4.553
	80.613		C9 - IsoOlefin - 1	0.027	0.027	0.021	7.296
Naphtheno-Olefir	25.256	142-29-0	Cyclopentene	0.198	0.195	0.246	54.138
	45.346	693-89-0	1-Methylcyclopentene	0.370	0.360	0.381	100.625
	50.673	110-83-8	Cyclohexene	0.045	0.043	0.047	12.073
Di-Olefins	18.208	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.012	0.013	2.859
	20.825	2004-70-8	1t,3-Pentadiene	0.016	0.017	0.019	4.254
Oxygenates	12.742	64-17-5	Ethanol	8.719	8.377	15.990	994.782

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Components by Group

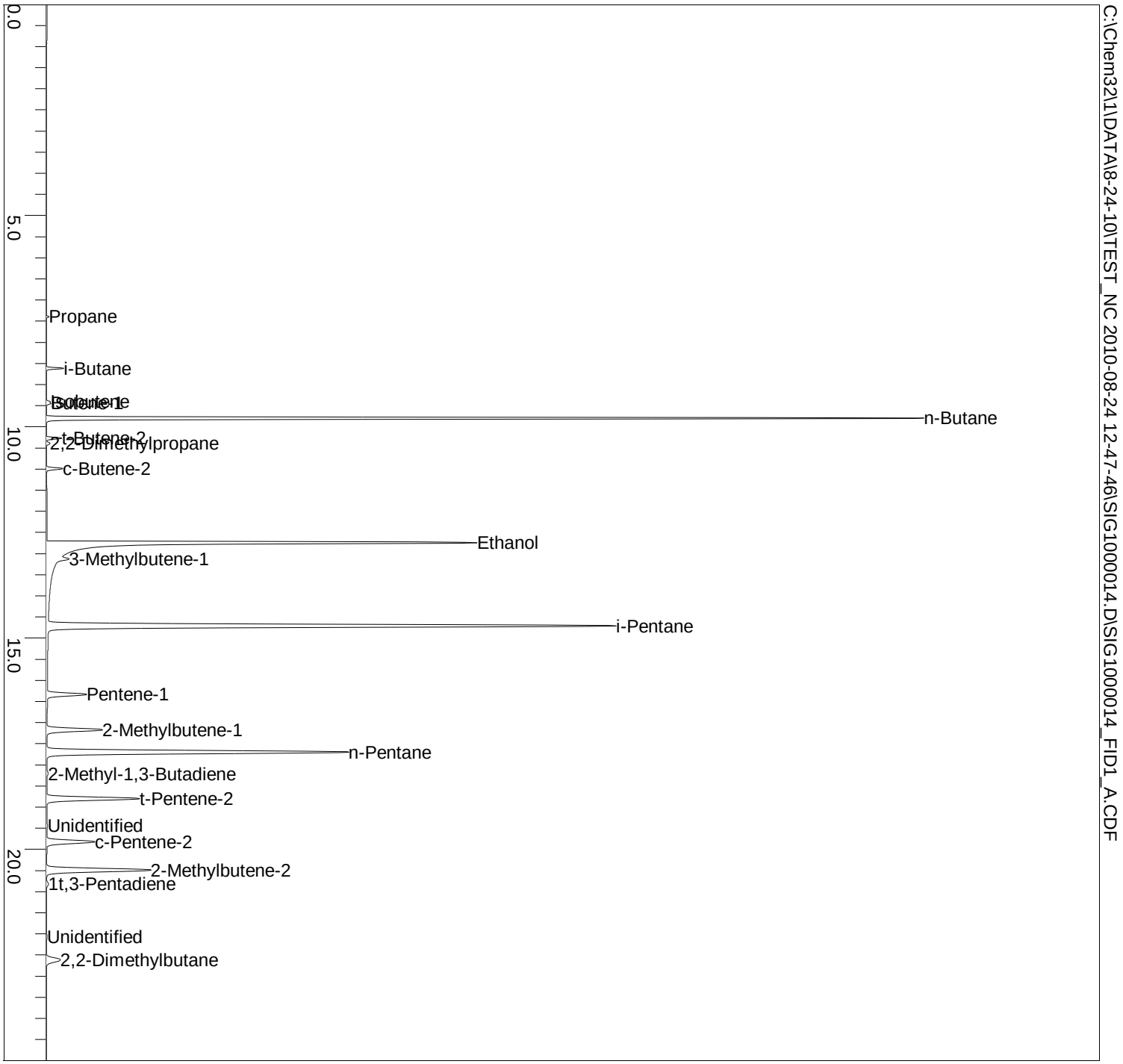
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Oxygenates	26.501	71-23-8	n-Propanol	0.182	0.172	0.255	33.724
Unidentified	19.442		Unidentified	0.006	0.007	0.007	1.857
	22.078		Unidentified	0.006	0.006	0.008	1.924
	28.242		Unidentified	0.051	0.052	0.049	16.633
	44.940		Unidentified	0.012	0.012	0.012	3.942
	47.602		Unidentified	0.035	0.038	0.030	11.476
	74.097		Unidentified	0.043	0.042	0.032	13.913
	78.506		Unidentified	0.018	0.018	0.014	5.922
	82.669		Unidentified	0.041	0.040	0.031	13.439
	84.863		Unidentified	0.028	0.027	0.019	9.026
	86.326		Unidentified	0.019	0.018	0.012	6.062
	88.481		Unidentified	0.035	0.039	0.023	11.275
	93.591		Unidentified	0.017	0.018	0.010	5.603
	100.250		Unidentified	0.041	0.042	0.022	13.256
	100.937		Unidentified	0.023	0.024	0.014	7.368
	101.060		Unidentified	0.011	0.012	0.007	3.680
	102.972		Unidentified	0.009	0.010	0.005	3.040
	104.391		Unidentified	0.035	0.035	0.019	11.324
	107.885		Unidentified	0.027	0.028	0.015	8.893
	108.160		Unidentified	0.032	0.033	0.017	10.388
	108.242		Unidentified	0.027	0.028	0.015	8.911
	108.363		Unidentified	0.202	0.206	0.109	65.743
	108.547		Unidentified	0.080	0.082	0.043	26.148
	108.984		Unidentified	0.329	0.284	0.207	106.864
	110.526		Unidentified	0.007	0.006	0.004	2.163
	110.727		Unidentified	0.014	0.014	0.008	4.513
	110.857		Unidentified	0.023	0.024	0.014	7.518
	111.796		Unidentified	0.015	0.013	0.009	5.035
	113.289		Unidentified	0.013	0.013	0.006	4.107
	114.977		Unidentified	0.012	0.012	0.006	3.857

Plus

Recovery = 100.00

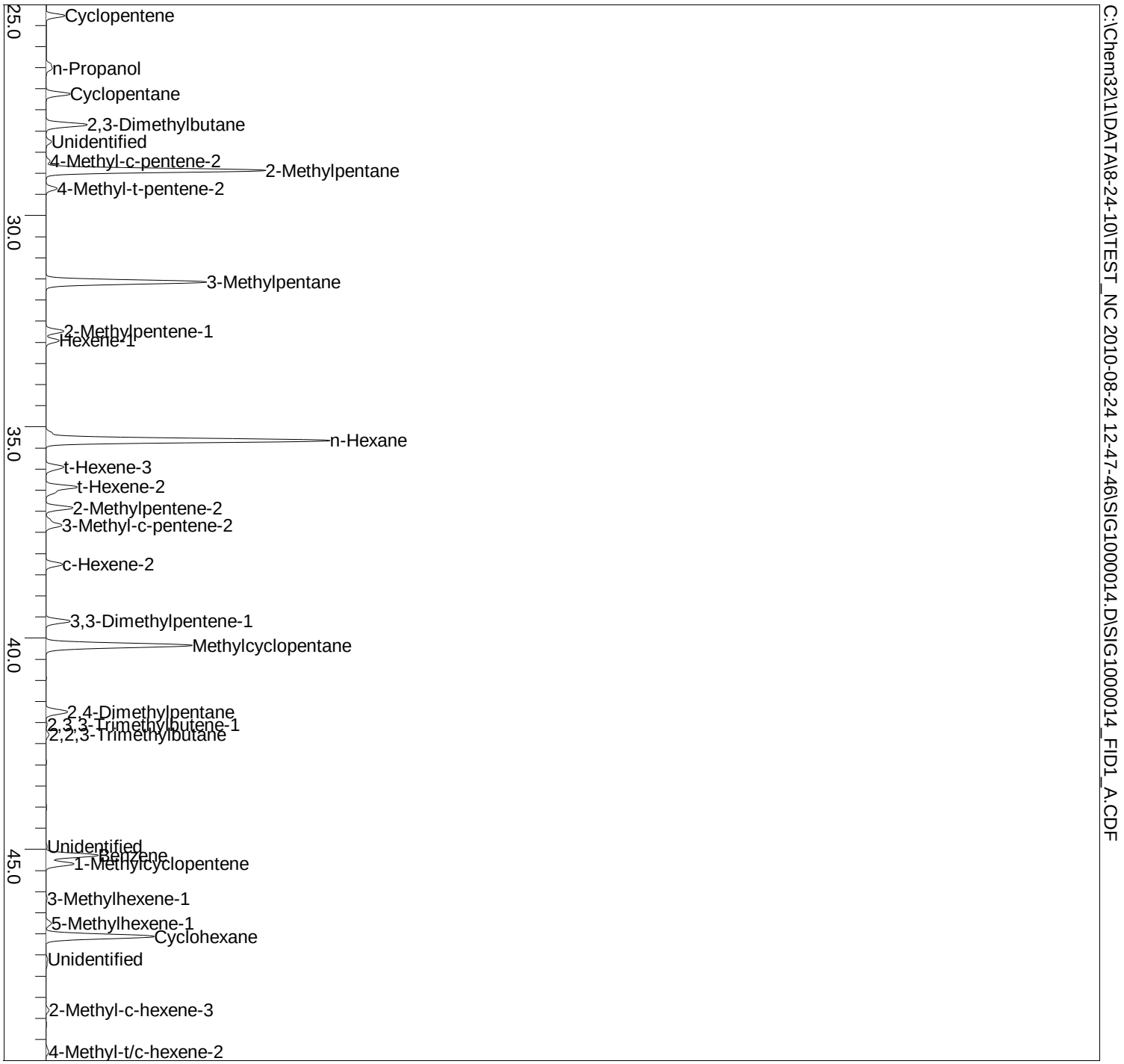
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1_A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1_A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1_A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

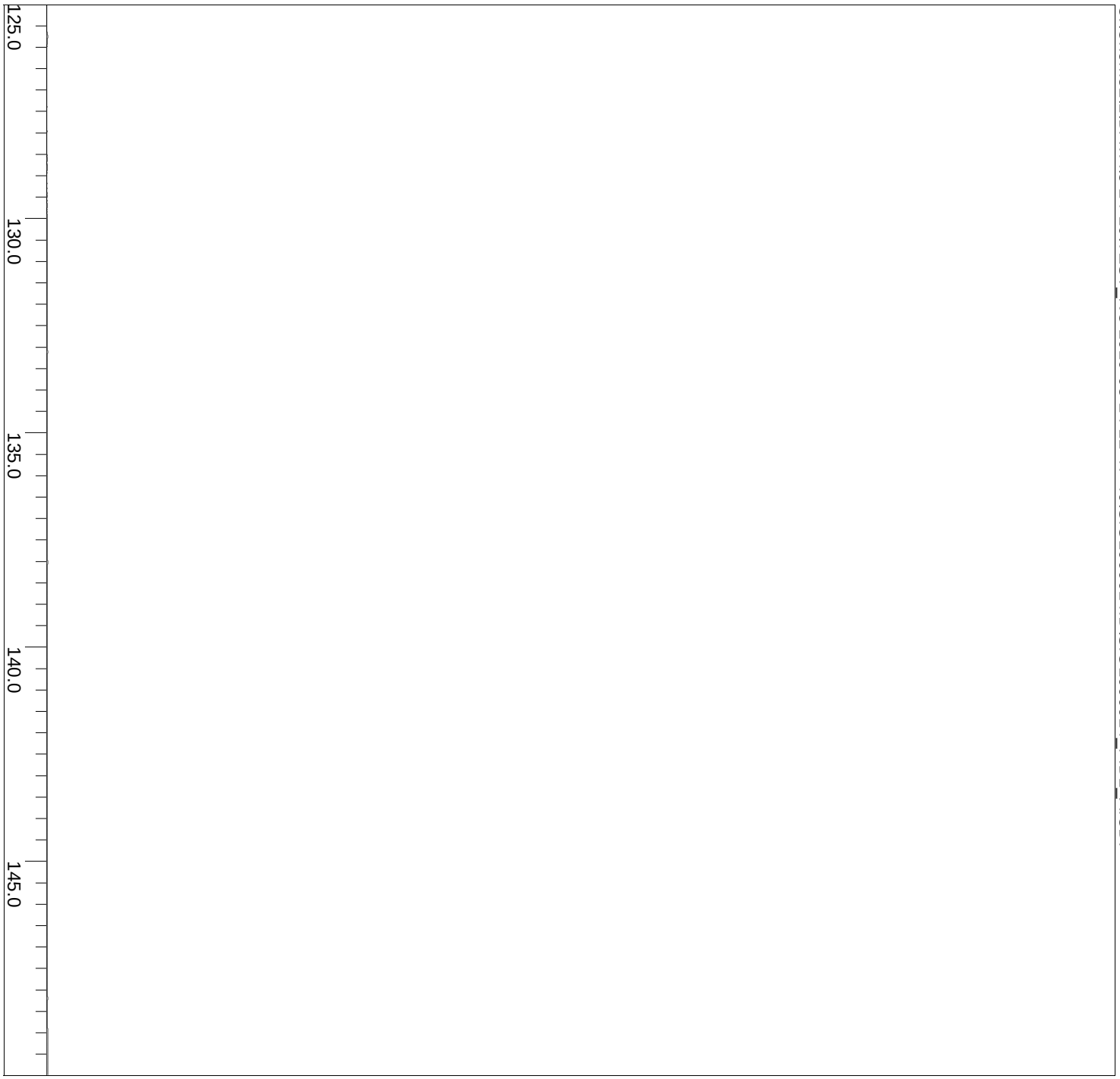
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000014.D\SIG1000014_FID1_A.CDF 24-Aug-10, 20:51:55
Sample: ODDB-91318 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91318
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	3.414	4.204	4.355
I-Paraffins	32.566	37.842	34.129
Aromatics	45.272	38.847	34.931
Mono-Aromatics	42.987	37.004	33.407
Naphthalenes	0.232	0.170	0.154
Naphtheno/Olefino-Benz	0.716	0.603	0.462
Indenes	1.336	1.071	0.908
Naphthenes	1.386	1.385	1.418
Mono-Naphthenes	1.386	1.385	1.418
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.518	8.347	8.389
n-Olefins	3.187	3.614	3.642
Iso-Olefins	3.676	4.100	4.018
Naphtheno-Olefins	0.628	0.604	0.696
Di-Olefins	0.026	0.029	0.033
Oxygenates	8.732	8.292	16.092
Unidentified	1.112	1.083	0.684
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	8.547	8.118	15.829
C3	0.186	0.174	0.264
C4	2.115	2.727	3.115
C5	17.135	20.403	20.410
C6	23.265	26.011	23.201
C7	12.808	11.495	11.727
C8	11.687	10.125	9.388
C9	11.137	9.554	7.909
C10	9.362	7.949	5.994
C11	2.102	1.901	1.191
C12	0.546	0.462	0.288

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	1.890	2.448	2.775
	C5	0.819	0.981	0.969
	C6	0.426	0.484	0.422
	C7	0.095	0.104	0.081
	C8	0.018	0.019	0.013
	C10	0.099	0.102	0.060
	C11	0.066	0.066	0.036
I-Paraffins	C4	0.029	0.039	0.043
	C5	12.234	14.800	14.467
	C6	18.582	21.182	18.398
	C7	0.882	0.972	0.751
	C8	0.047	0.050	0.035
	C10	0.129	0.131	0.074
	C11	0.644	0.649	0.351
	C12	0.019	0.019	0.010
Mono-Aromatics	C6	0.707	0.603	0.773
	C7	10.784	9.322	9.986
	C8	11.622	10.056	9.340
	C9	10.885	9.357	7.727
	C10	7.203	6.147	4.579
	C11	1.283	1.094	0.738
	C12	0.504	0.424	0.265
Naphthalenes	C10	0.218	0.159	0.145
	C11	0.014	0.011	0.009
Naphtheno/Olefino-Benzs	C10	0.716	0.603	0.462
Indenes	C9	0.252	0.196	0.182
	C10	0.997	0.807	0.675
	C11	0.064	0.050	0.037
	C12	0.023	0.018	0.014
Mono-Naphthenes	C5	0.270	0.272	0.329
	C6	0.829	0.827	0.840
	C7	0.287	0.286	0.249
n-Olefins	C4	0.195	0.240	0.297
	C5	1.675	1.935	2.037
	C6	1.184	1.298	1.200

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C7	0.102	0.109	0.089
	C11	0.032	0.032	0.019
Iso-Olefins	C5	1.908	2.190	2.321
	C6	1.110	1.208	1.126
	C7	0.658	0.702	0.572
Naphtheno-Olefins	C5	0.202	0.196	0.253
	C6	0.426	0.408	0.442
Di-Olefins	C5	0.026	0.029	0.033
Oxygenates	C2	8.547	8.118	15.829
	C3	0.186	0.174	0.264

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	23.07	22.44
5%	79.42	79.17
10%	80.75	80.26
15%	83.61	81.36
20%	133.76	96.69
25%	138.48	135.45
30%	139.95	138.57
35%	144.73	139.85
40%	154.11	144.40
45%	172.56	145.94
50%	173.20	172.35
55%	216.24	173.01
60%	224.33	214.14
65%	264.63	223.50
70%	281.36	266.81
75%	286.57	281.60
80%	325.06	320.98
85%	336.00	334.33
90%	362.58	355.82
95%	380.31	374.05
FBP	407.09	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.618	75-28-5	I4	i-Butane	0.029	0.039	0.043	7.802
2	9.412	115-11-7	K4	Isobutene	0.016	0.020	0.024	4.346
3	9.452	106-98-9	K4	Butene-1	0.019	0.024	0.029	5.219
4	9.801	106-97-8	P4	n-Butane	1.890	2.448	2.775	506.033
5	10.277	624-64-6	K4	t-Butene-2	0.074	0.091	0.112	20.424
6	10.399	463-82-1	I5	2,2-Dimethylpropane	0.029	0.036	0.034	7.749
7	11.000	590-18-1	K4	c-Butene-2	0.087	0.105	0.133	24.178
8	12.764	64-17-5	X2	Ethanol	8.547	8.118	15.829	1018.567
9	13.145	563-45-1	C5	3-Methylbutene-1	0.331	0.396	0.403	91.846
10	14.745	78-78-4	I5	i-Pentane	12.205	14.763	14.433	3290.084
11	16.360	109-67-1	K5	Pentene-1	0.339	0.397	0.412	93.993
12	17.198	563-46-2	C5	2-Methylbutene-1	0.515	0.593	0.627	142.805
13	17.722	109-66-0	P5	n-Pentane	0.819	0.981	0.969	220.865
14	18.234	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	3.049
15	18.830	646-04-8	K5	t-Pentene-2	0.862	0.997	1.049	239.110
16	19.469		?	Unidentified	0.006	0.007	0.007	1.974
17	19.852	627-20-3	K5	c-Pentene-2	0.473	0.541	0.576	131.228
18	20.523	513-35-9	C5	2-Methylbutene-2	1.061	1.201	1.291	294.302
19	20.853	2004-70-8	E5	1t,3-Pentadiene	0.016	0.018	0.020	4.514
20	22.104		?	Unidentified	0.006	0.006	0.008	2.024
21	22.649	75-83-2	I6	2,2-Dimethylbutane	0.322	0.371	0.318	87.037
22	25.284	142-29-0	B5	Cyclopentene	0.202	0.196	0.253	57.731
23	26.530	71-23-8	X3	n-Propanol	0.186	0.174	0.264	36.052
24	27.137	287-92-3	M5	Cyclopentane	0.270	0.272	0.329	74.922
25	27.871	79-29-8	I6	2,3-Dimethylbutane	1.591	1.803	1.575	430.647
26	28.273		?	Unidentified	0.053	0.053	0.051	17.943
27	28.738	691-38-3	C6	4-Methyl-c-pentene-2	0.043	0.048	0.044	12.008
28	28.992	107-83-5	I6	2-Methylpentane	10.430	11.969	10.327	2822.785
29	29.383	674-76-0	C6	4-Methyl-t-pentene-2	0.136	0.151	0.137	37.578
30	31.616	96-14-0	I6	3-Methylpentane	6.239	7.039	6.177	1688.612
31	32.755	763-29-1	C6	2-Methylpentene-1	0.232	0.254	0.235	64.237
32	32.979	592-41-6	K6	Hexene-1	0.166	0.184	0.168	46.069
33	35.165	760-21-4	C6	2-Ethylbutene-1	0.071	0.077	0.072	19.694
34	35.323	110-54-3	P6	n-Hexane	0.426	0.484	0.422	115.358
35	35.967	13269-52-8	K6	t-Hexene-3	0.273	0.300	0.276	75.589
36	36.441	4050-45-7	K6	t-Hexene-2	0.523	0.574	0.530	145.033
37	36.933	625-27-4	C6	2-Methylpentene-2	0.354	0.384	0.359	98.249
38	37.344	922-62-3	C6	3-Methyl-c-pentene-2	0.274	0.295	0.278	76.109
39	38.268	7688-21-3	K6	c-Hexene-2	0.222	0.240	0.225	61.522
40	39.613	3404-73-7	C7	3,3-Dimethylpentene-1	0.325	0.348	0.283	90.243
41	40.181	96-37-7	M6	Methylcyclopentane	0.763	0.764	0.774	211.574
42	41.768	108-08-7	I7	2,4-Dimethylpentane	0.152	0.169	0.129	41.289
43	42.062	594-56-9	C7	2,3,3-Trimethylbutene-1	0.011	0.011	0.009	2.930

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	44.952		?	Unidentified	0.012	0.012	0.013	4.227
45	45.154	71-42-3	Q6	Benzene	0.707	0.603	0.773	211.249
46	45.357	693-89-0	B6	1-Methylcyclopentene	0.379	0.365	0.394	107.702
47	46.176	3404-61-3	C7	3-Methylhexene-1	0.017	0.018	0.014	4.587
48	46.760	3524-73-0	C7	5-Methylhexene-1	0.023	0.025	0.020	6.502
49	47.068	110-82-7	M6	Cyclohexane	0.066	0.063	0.067	18.243
50	47.610		?	Unidentified	0.036	0.038	0.031	12.157
51	48.815	15840-60-5	C7	2-Methyl-c-hexene-3	0.042	0.045	0.037	11.660
52	49.160	3769-23-1	C7	4-Methylhexene-1	0.012	0.013	0.011	3.352
53	49.807	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.053	0.056	0.046	14.686
54	50.198	591-76-4	I7	2-Methylhexane	0.444	0.491	0.378	120.723
55	50.676	110-83-8	B6	Cyclohexene	0.046	0.043	0.048	12.859
56	52.032	589-34-4	I7	3-Methylhexane	0.286	0.312	0.243	77.645
57	52.884	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.100	0.100	0.087	27.704
58	53.472	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.067	0.067	0.058	18.498
59	54.098	822-50-4	M7	1t,2-Dimethylcyclopentane	0.059	0.059	0.052	16.442
60	54.396		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.020	6.406
61	55.024	592-76-7	K7	Heptene-1	0.028	0.030	0.024	7.779
62	56.358	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.013	4.011
63	56.879	14686-14-7	K7	t-Heptene-3	0.034	0.036	0.029	9.321
64	57.237	6094-02-6	C7	2-Methylhexene-1	0.060	0.064	0.052	16.594
65	57.610	142-82-5	P7	n-Heptane	0.095	0.104	0.081	25.819
66	57.830	7642-10-6	K7	c-Heptene-3	0.027	0.029	0.023	7.450
67	58.109	2738-19-4	C7	2-Methyl-2-hexene	0.027	0.028	0.024	7.502
68	58.353	3899-36-3	C7	3-Methyl-t-hexene-3	0.021	0.022	0.018	5.726
69	58.737	14686-13-6	K7	t-Heptene-2	0.014	0.014	0.012	3.753
70	59.196	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.016	5.253
71	59.637	20710-38-8	C7	3-Methyl-t-hexene-2	0.016	0.017	0.014	4.475
72	60.423	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.012	3.778
73	61.035	108-87-2	M7	Methylcyclohexane	0.042	0.041	0.037	11.658
74	68.651	108-88-3	Q7	Toluene	10.784	9.322	9.986	3184.956
75	71.685	592-27-8	I8	2-Methylheptane	0.017	0.018	0.013	4.680
76	71.938	589-53-7	I8	4-Methylheptane	0.010	0.010	0.007	2.625
77	73.011	589-81-1	I8	3-Methylheptane	0.020	0.021	0.015	5.419
78	77.555	111-65-9	P8	n-Octane	0.018	0.019	0.013	4.885
79	84.445	100-41-4	Q8	Ethylbenzene	2.185	1.889	1.756	640.555
80	85.692	108-38-3	Q8	m-Xylene	5.346	4.637	4.297	1567.149
81	85.836	106-42-3	Q8	p-Xylene	2.512	2.187	2.019	736.435
82	88.657	95-47-6	Q8	o-Xylene	1.578	1.343	1.268	462.494
83	92.836	98-82-8	Q9	i-Propylbenzene	0.039	0.034	0.028	11.462
84	95.265	2051-30-1	I10	2,4-Dimethyloctane	0.008	0.008	0.005	2.089
85	96.305	103-65-1	Q9	n-Propylbenzene	0.490	0.426	0.348	142.603
86	97.164	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.108	1.827	1.496	613.883

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	97.394	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.013	0.882	0.719	295.144
88	98.022	108-67-8	Q9	1,3,5-Trimethylbenzene	1.391	1.205	0.988	405.233
89	98.496	15869-85-9	I10	5-Methylnonane	0.007	0.007	0.004	1.941
90	98.685	17301-94-8	I10	4-Methylnonane	0.018	0.018	0.011	4.889
91	98.885		?	Unidentified	0.212	0.219	0.127	72.155
92	99.102	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.819	0.697	0.582	238.610
93	99.663	5911-04-6	I10	3-Methylnonane	0.035	0.036	0.021	9.549
94	100.128		?	Unidentified	0.018	0.013	0.010	5.995
95	100.255		?	Unidentified	0.053	0.053	0.029	17.901
96	100.476		I11	C11-Isoparaffin-2	0.029	0.029	0.016	8.000
97	100.757	95-63-6	Q9	1,2,4-Trimethylbenzene	4.265	3.650	3.028	1242.251
98	100.941		?	Unidentified	0.038	0.041	0.023	12.875
99	101.062		?	Unidentified	0.021	0.022	0.013	7.243
100	102.107	17302-01-1	I10	3-Ethyl-3-methylheptane	0.062	0.062	0.034	16.838
101	102.384	538-93-2	Q10	i-Butylbenzene	0.119	0.105	0.076	34.516
102	102.662	124-18-5	P10	n-Decane	0.099	0.102	0.060	27.135
103	102.973		?	Unidentified	0.016	0.017	0.010	5.594
104	103.614	526-73-8	Q9	1,2,3-Trimethylbenzene	0.758	0.635	0.538	220.858
105	104.011	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.022	0.019	0.014	6.377
106	104.192		I11	C11 Isoparaffin-4	0.011	0.011	0.006	2.959
107	104.393		?	Unidentified	0.062	0.054	0.039	20.934
108	104.802		J9	Indan	0.252	0.196	0.182	74.684
109	105.430		J10	Indene	0.411	0.319	0.297	121.557
110	106.149		I11	C11-Isoparaffin-7	0.184	0.185	0.100	50.221
111	106.333	141-93-5	Q10	1,3-Diethylbenzene	0.121	0.105	0.077	35.120
112	106.612	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.847	0.737	0.538	245.270
113	106.952	105-05-5	Q10	1,4-Diethylbenzene	0.352	0.306	0.224	101.935
114	107.049	104-51-8	Q10	n-Butylbenzene	0.077	0.067	0.049	22.398
115	107.176	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.417	0.355	0.265	120.839
116	107.449	135-01-3	Q10	1,2-Diethylbenzene	0.059	0.050	0.037	17.075
117	107.888		?	Unidentified	0.046	0.046	0.025	15.665
118	108.025	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.156	0.134	0.099	45.234
119	108.163		?	Unidentified	0.054	0.055	0.030	18.347
120	108.244		?	Unidentified	0.048	0.048	0.026	16.228
121	108.366		I11	C11- Isoparaffin-11	0.420	0.423	0.229	114.992
122	108.551		?	Unidentified	0.136	0.137	0.074	46.154
123	108.880	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.385	0.329	0.245	111.500
124	109.036	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.830	0.709	0.528	240.423
125	109.201		J10	2-Methylindan	0.093	0.072	0.060	27.469
126	109.549	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.975	0.836	0.620	282.584
127	110.099	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.412	0.347	0.262	119.420
128	110.528		?	Unidentified	0.011	0.010	0.006	3.669
129	110.729	693-61-8	K11	2-Undecene, (E)-	0.032	0.032	0.019	8.655

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	110.859		?	Unidentified	0.039	0.039	0.024	13.207
131	111.010		Q11	1-Methyl-4-t-butylbenzene	0.099	0.088	0.057	28.659
132	111.223	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.370	0.311	0.235	107.190
133	111.533	1120-21-4	P11	n-Undecane	0.066	0.066	0.036	17.952
134	111.691	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.070	0.059	0.041	20.330
135	111.799		?	Unidentified	0.029	0.025	0.017	9.917
136	111.904		Q11	C11 - Aromatic - 1	0.016	0.014	0.009	4.647
137	112.169		Q10	1,2,4,5-Tetramethylbenzene	0.867	0.732	0.551	251.079
138	112.438	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	1.193	1.004	0.758	345.596
139	112.624		?	Unidentified	0.010	0.008	0.006	3.329
140	112.796		?	Unidentified	0.011	0.009	0.007	3.813
141	112.967		I12	C12 - IsoParaffin - 1	0.012	0.012	0.006	3.388
142	113.291		?	Unidentified	0.031	0.032	0.016	10.619
143	113.583		Q11	C11 - Aromatic - 3	0.153	0.129	0.088	44.075
144	113.766	874-35-1	H10	5-Methylindan	0.350	0.295	0.226	101.485
145	113.904		Q12	1,2-Di-i-propylbenzene	0.152	0.128	0.080	43.793
146	114.119	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.217	0.183	0.125	62.662
147	114.278		Q11	C11 - Aromatic - 4	0.105	0.088	0.060	30.286
148	114.517	824-22-6	J10	4-Methylindan	0.493	0.415	0.318	142.830
149	114.680		?	Unidentified	0.115	0.097	0.066	38.983
150	114.768	824-63-5	H10	2-Methylindan	0.366	0.308	0.236	106.043
151	114.979		?	Unidentified	0.038	0.032	0.022	12.859
152	115.091	538-68-1	Q11	n-Pentylbenzene	0.053	0.045	0.031	15.365
153	115.322		Q11	tert-Pentylbenzene	0.224	0.188	0.129	64.488
154	115.634	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.099	0.083	0.057	28.520
155	115.743		Q11	C11 - Aromatic - 7	0.125	0.110	0.072	36.010
156	116.073		I12	C12 - IsoParaffin - 4	0.007	0.007	0.003	1.960
157	116.206	100-18-5	Q12	1,4-Di-i-propylbenzene	0.185	0.156	0.097	53.144
158	116.633	91-20-3	G10	Naphthalene	0.218	0.159	0.145	66.044
159	116.843		J11	4,7-Dimethyl Indane	0.012	0.009	0.007	3.597
160	117.081		J11	1,1-Dimethyl Indane	0.052	0.040	0.030	15.309
161	117.250		J12	Dimethyl Indane - 1	0.018	0.014	0.011	5.350
162	117.431	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.026	0.022	0.014	7.479
163	117.565		J12	Dimethyl Indane - 2	0.005	0.004	0.003	1.557
164	117.735		Q12	1,3-Di-n-propylbenzene	0.135	0.113	0.071	38.715
165	117.847		Q11	C11 - Aromatic - 11	0.074	0.065	0.043	21.340
166	118.402		Q11	C11 - Aromatic - 12	0.042	0.037	0.024	12.031
167	119.030		Q11	C11 - Aromatic - 13	0.006	0.005	0.003	1.606
168	119.340	102-25-0	Q12	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.696
169	123.282	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.006	2.828
170	124.147	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.515
171	125.443		?	Unidentified	0.004	0.003	0.002	1.502
172	129.864		?	Unidentified	0.003	0.002	0.002	1.017

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	132.811		?	Unidentified	0.004	0.004	0.001	1.250

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	9.801	106-97-8	n-Butane	1.890	2.448	2.775	506.033
	17.722	109-66-0	n-Pentane	0.819	0.981	0.969	220.865
	35.323	110-54-3	n-Hexane	0.426	0.484	0.422	115.358
	57.610	142-82-5	n-Heptane	0.095	0.104	0.081	25.819
	77.555	111-65-9	n-Octane	0.018	0.019	0.013	4.885
	102.662	124-18-5	n-Decane	0.099	0.102	0.060	27.135
	111.533	1120-21-4	n-Undecane	0.066	0.066	0.036	17.952
I-Paraffins	8.618	75-28-5	i-Butane	0.029	0.039	0.043	7.802
	10.399	463-82-1	2,2-Dimethylpropane	0.029	0.036	0.034	7.749
	14.745	78-78-4	i-Pentane	12.205	14.763	14.433	3290.084
	22.649	75-83-2	2,2-Dimethylbutane	0.322	0.371	0.318	87.037
	27.871	79-29-8	2,3-Dimethylbutane	1.591	1.803	1.575	430.647
	28.992	107-83-5	2-Methylpentane	10.430	11.969	10.327	2822.785
	31.616	96-14-0	3-Methylpentane	6.239	7.039	6.177	1688.612
	41.768	108-08-7	2,4-Dimethylpentane	0.152	0.169	0.129	41.289
	50.198	591-76-4	2-Methylhexane	0.444	0.491	0.378	120.723
	52.032	589-34-4	3-Methylhexane	0.286	0.312	0.243	77.645
	71.685	592-27-8	2-Methylheptane	0.017	0.018	0.013	4.680
	71.938	589-53-7	4-Methylheptane	0.010	0.010	0.007	2.625
	73.011	589-81-1	3-Methylheptane	0.020	0.021	0.015	5.419
	95.265	2051-30-1	2,4-Dimethyloctane	0.008	0.008	0.005	2.089
	98.496	15869-85-9	5-Methylnonane	0.007	0.007	0.004	1.941
	98.685	17301-94-8	4-Methylnonane	0.018	0.018	0.011	4.889
	99.663	5911-04-6	3-Methylnonane	0.035	0.036	0.021	9.549
	100.476		C11-Isoparaffin-2	0.029	0.029	0.016	8.000
	102.107	17302-01-1	3-Ethyl-3-methylheptane	0.062	0.062	0.034	16.838
	104.192		C11 Isoparaffin-4	0.011	0.011	0.006	2.959
	106.149		C11-Isoparaffin-7	0.184	0.185	0.100	50.221
	108.366		C11- Isoparaffin-11	0.420	0.423	0.229	114.992
	112.967		C12 - IsoParaffin - 1	0.012	0.012	0.006	3.388
	116.073		C12 - IsoParaffin - 4	0.007	0.007	0.003	1.960
Aromatics							
Mono-Aromatics	45.154	71-42-3	Benzene	0.707	0.603	0.773	211.249
	68.651	108-88-3	Toluene	10.784	9.322	9.986	3184.956
	84.445	100-41-4	Ethylbenzene	2.185	1.889	1.756	640.555
	85.692	108-38-3	m-Xylene	5.346	4.637	4.297	1567.149
	85.836	106-42-3	p-Xylene	2.512	2.187	2.019	736.435
	88.657	95-47-6	o-Xylene	1.578	1.343	1.268	462.494
	92.836	98-82-8	i-Propylbenzene	0.039	0.034	0.028	11.462
	96.305	103-65-1	n-Propylbenzene	0.490	0.426	0.348	142.603
	97.164	620-14-4	1-Methyl-3-ethylbenzene	2.108	1.827	1.496	613.883
	97.394	622-96-8	1-Methyl-4-ethylbenzene	1.013	0.882	0.719	295.144
	98.022	108-67-8	1,3,5-Trimethylbenzene	1.391	1.205	0.988	405.233
	99.102	611-14-3	1-Methyl-2-ethylbenzene	0.819	0.697	0.582	238.610
	100.757	95-63-6	1,2,4-Trimethylbenzene	4.265	3.650	3.028	1242.251

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	102.384	538-93-2	i-Butylbenzene	0.119	0.105	0.076	34.516
	103.614	526-73-8	1,2,3-Trimethylbenzene	0.758	0.635	0.538	220.858
	104.011	535-77-3	1-Methyl-3-i-propylbenzene	0.022	0.019	0.014	6.377
	106.333	141-93-5	1,3-Diethylbenzene	0.121	0.105	0.077	35.120
	106.612	1074-43-7	1-Methyl-3-n-propylbenzene	0.847	0.737	0.538	245.270
	106.952	105-05-5	1,4-Diethylbenzene	0.352	0.306	0.224	101.935
	107.049	104-51-8	n-Butylbenzene	0.077	0.067	0.049	22.398
	107.176	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.417	0.355	0.265	120.839
	107.449	135-01-3	1,2-Diethylbenzene	0.059	0.050	0.037	17.075
	108.025	1074-17-5	1-Methyl-2-n-propylbenzene	0.156	0.134	0.099	45.234
	108.880	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.385	0.329	0.245	111.500
	109.036	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.830	0.709	0.528	240.423
	109.549	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.975	0.836	0.620	282.584
	110.099	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.412	0.347	0.262	119.420
	111.010		1-Methyl-4-t-butylbenzene	0.099	0.088	0.057	28.659
	111.223	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.370	0.311	0.235	107.190
	111.691	4218-48-8	1-Ethyl-4-i-propylbenzene	0.070	0.059	0.041	20.330
	111.904		C11 - Aromatic - 1	0.016	0.014	0.009	4.647
	112.169		1,2,4,5-Tetramethylbenzene	0.867	0.732	0.551	251.079
	112.438	527-53-7	1,2,3,5-Tetramethylbenzene	1.193	1.004	0.758	345.596
	113.583		C11 - Aromatic - 3	0.153	0.129	0.088	44.075
	113.904		1,2-Di-i-propylbenzene	0.152	0.128	0.080	43.793
	114.119	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.217	0.183	0.125	62.662
	114.278		C11 - Aromatic - 4	0.105	0.088	0.060	30.286
	115.091	538-68-1	n-Pentylbenzene	0.053	0.045	0.031	15.365
	115.322		tert-Pentylbenzene	0.224	0.188	0.129	64.488
	115.634	577-55-9	1-Methyl-2-n-butylbenzene	0.099	0.083	0.057	28.520
	115.743		C11 - Aromatic - 7	0.125	0.110	0.072	36.010
	116.206	100-18-5	1,4-Di-i-propylbenzene	0.185	0.156	0.097	53.144
	117.431	7364-19-4	1t-Butyl-4-ethylbenzene	0.026	0.022	0.014	7.479
	117.735		1,3-Di-n-propylbenzene	0.135	0.113	0.071	38.715
	117.847		C11 - Aromatic - 11	0.074	0.065	0.043	21.340
	118.402		C11 - Aromatic - 12	0.042	0.037	0.024	12.031
	119.030		C11 - Aromatic - 13	0.006	0.005	0.003	1.606
	119.340	102-25-0	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.696
Naphthalenes	116.633	91-20-3	Naphthalene	0.218	0.159	0.145	66.044
	123.282	91-57-6	2-Methylnaphthalene	0.009	0.007	0.006	2.828
	124.147	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.515
Naphtheno/Olefir	113.766	874-35-1	5-Methylindan	0.350	0.295	0.226	101.485
	114.768	824-63-5	2-Methylindan	0.366	0.308	0.236	106.043
Indenes	104.802		Indan	0.252	0.196	0.182	74.684
	105.430		Indene	0.411	0.319	0.297	121.557
	109.201		2-Methylindan	0.093	0.072	0.060	27.469
	114.517	824-22-6	4-Methylindan	0.493	0.415	0.318	142.830

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Indenes	116.843		4,7-Dimethyl Indane	0.012	0.009	0.007	3.597
	117.081		1,1-Dimethyl Indane	0.052	0.040	0.030	15.309
	117.250		Dimethyl Indane - 1	0.018	0.014	0.011	5.350
	117.565		Dimethyl Indane - 2	0.005	0.004	0.003	1.557
Naphthenes							
Mono-Naphthene	27.137	287-92-3	Cyclopentane	0.270	0.272	0.329	74.922
	40.181	96-37-7	Methylcyclopentane	0.763	0.764	0.774	211.574
	47.068	110-82-7	Cyclohexane	0.066	0.063	0.067	18.243
	52.884	1759-58-6	1t,3-Dimethylcyclopentane	0.100	0.100	0.087	27.704
	53.472	2532-58-3	1c,3-Dimethylcyclopentane	0.067	0.067	0.058	18.498
	54.098	822-50-4	1t,2-Dimethylcyclopentane	0.059	0.059	0.052	16.442
	59.196	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.016	5.253
	61.035	108-87-2	Methylcyclohexane	0.042	0.041	0.037	11.658
Di/Bicyclo-Naphth							
Olefins							
n-Olefins	9.412	115-11-7	Isobutene	0.016	0.020	0.024	4.346
	9.452	106-98-9	Butene-1	0.019	0.024	0.029	5.219
	10.277	624-64-6	t-Butene-2	0.074	0.091	0.112	20.424
	11.000	590-18-1	c-Butene-2	0.087	0.105	0.133	24.178
	16.360	109-67-1	Pentene-1	0.339	0.397	0.412	93.993
	18.830	646-04-8	t-Pentene-2	0.862	0.997	1.049	239.110
	19.852	627-20-3	c-Pentene-2	0.473	0.541	0.576	131.228
	32.979	592-41-6	Hexene-1	0.166	0.184	0.168	46.069
	35.967	13269-52-8	t-Hexene-3	0.273	0.300	0.276	75.589
	36.441	4050-45-7	t-Hexene-2	0.523	0.574	0.530	145.033
	38.268	7688-21-3	c-Hexene-2	0.222	0.240	0.225	61.522
	55.024	592-76-7	Heptene-1	0.028	0.030	0.024	7.779
	56.879	14686-14-7	t-Heptene-3	0.034	0.036	0.029	9.321
	57.830	7642-10-6	c-Heptene-3	0.027	0.029	0.023	7.450
	58.737	14686-13-6	t-Heptene-2	0.014	0.014	0.012	3.753
	110.729	693-61-8	2-Undecene, (E)-	0.032	0.032	0.019	8.655
Iso-Olefins	13.145	563-45-1	3-Methylbutene-1	0.331	0.396	0.403	91.846
	17.198	563-46-2	2-Methylbutene-1	0.515	0.593	0.627	142.805
	20.523	513-35-9	2-Methylbutene-2	1.061	1.201	1.291	294.302
	28.738	691-38-3	4-Methyl-c-pentene-2	0.043	0.048	0.044	12.008
	29.383	674-76-0	4-Methyl-t-pentene-2	0.136	0.151	0.137	37.578
	32.755	763-29-1	2-Methylpentene-1	0.232	0.254	0.235	64.237
	35.165	760-21-4	2-Ethylbutene-1	0.071	0.077	0.072	19.694
	36.933	625-27-4	2-Methylpentene-2	0.354	0.384	0.359	98.249
	37.344	922-62-3	3-Methyl-c-pentene-2	0.274	0.295	0.278	76.109
	39.613	3404-73-7	3,3-Dimethylpentene-1	0.325	0.348	0.283	90.243
	42.062	594-56-9	2,3,3-Trimethylbutene-1	0.011	0.011	0.009	2.930
	46.176	3404-61-3	3-Methylhexene-1	0.017	0.018	0.014	4.587
	46.760	3524-73-0	5-Methylhexene-1	0.023	0.025	0.020	6.502

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	48.815	15840-60-5	2-Methyl-c-hexene-3	0.042	0.045	0.037	11.660
	49.160	3769-23-1	4-Methylhexene-1	0.012	0.013	0.011	3.352
	49.807	3404-55-5	4-Methyl-t/c-hexene-2	0.053	0.056	0.046	14.686
	54.396		C7 - Iso-Olefin - 2	0.023	0.024	0.020	6.406
	56.358	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.013	4.011
	57.237	6094-02-6	2-Methylhexene-1	0.060	0.064	0.052	16.594
	58.109	2738-19-4	2-Methyl-2-hexene	0.027	0.028	0.024	7.502
	58.353	3899-36-3	3-Methyl-t-hexene-3	0.021	0.022	0.018	5.726
	59.637	20710-38-8	3-Methyl-t-hexene-2	0.016	0.017	0.014	4.475
	60.423	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.014	0.014	0.012	3.778
Naphtheno-Olefir	25.284	142-29-0	Cyclopentene	0.202	0.196	0.253	57.731
	45.357	693-89-0	1-Methylcyclopentene	0.379	0.365	0.394	107.702
	50.676	110-83-8	Cyclohexene	0.046	0.043	0.048	12.859
Di-Olefins	18.234	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	3.049
	20.853	2004-70-8	1t,3-Pentadiene	0.016	0.018	0.020	4.514
Oxygenates	12.764	64-17-5	Ethanol	8.547	8.118	15.829	1018.567
	26.530	71-23-8	n-Propanol	0.186	0.174	0.264	36.052
Unidentified	19.469		Unidentified	0.006	0.007	0.007	1.974
	22.104		Unidentified	0.006	0.006	0.008	2.024
	28.273		Unidentified	0.053	0.053	0.051	17.943
	44.952		Unidentified	0.012	0.012	0.013	4.227
	47.610		Unidentified	0.036	0.038	0.031	12.157
	98.885		Unidentified	0.212	0.219	0.127	72.155
	100.128		Unidentified	0.018	0.013	0.010	5.995
	100.255		Unidentified	0.053	0.053	0.029	17.901
	100.941		Unidentified	0.038	0.041	0.023	12.875
	101.062		Unidentified	0.021	0.022	0.013	7.243
	102.973		Unidentified	0.016	0.017	0.010	5.594
	104.393		Unidentified	0.062	0.054	0.039	20.934
	107.888		Unidentified	0.046	0.046	0.025	15.665
	108.163		Unidentified	0.054	0.055	0.030	18.347
	108.244		Unidentified	0.048	0.048	0.026	16.228
	108.551		Unidentified	0.136	0.137	0.074	46.154
	110.528		Unidentified	0.011	0.010	0.006	3.669
	110.859		Unidentified	0.039	0.039	0.024	13.207
	111.799		Unidentified	0.029	0.025	0.017	9.917
	112.624		Unidentified	0.010	0.008	0.006	3.329
	112.796		Unidentified	0.011	0.009	0.007	3.813
	113.291		Unidentified	0.031	0.032	0.016	10.619
	114.680		Unidentified	0.115	0.097	0.066	38.983
	114.979		Unidentified	0.038	0.032	0.022	12.859
	125.443		Unidentified	0.004	0.003	0.002	1.502
	129.864		Unidentified	0.003	0.002	0.002	1.017

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Components by Group

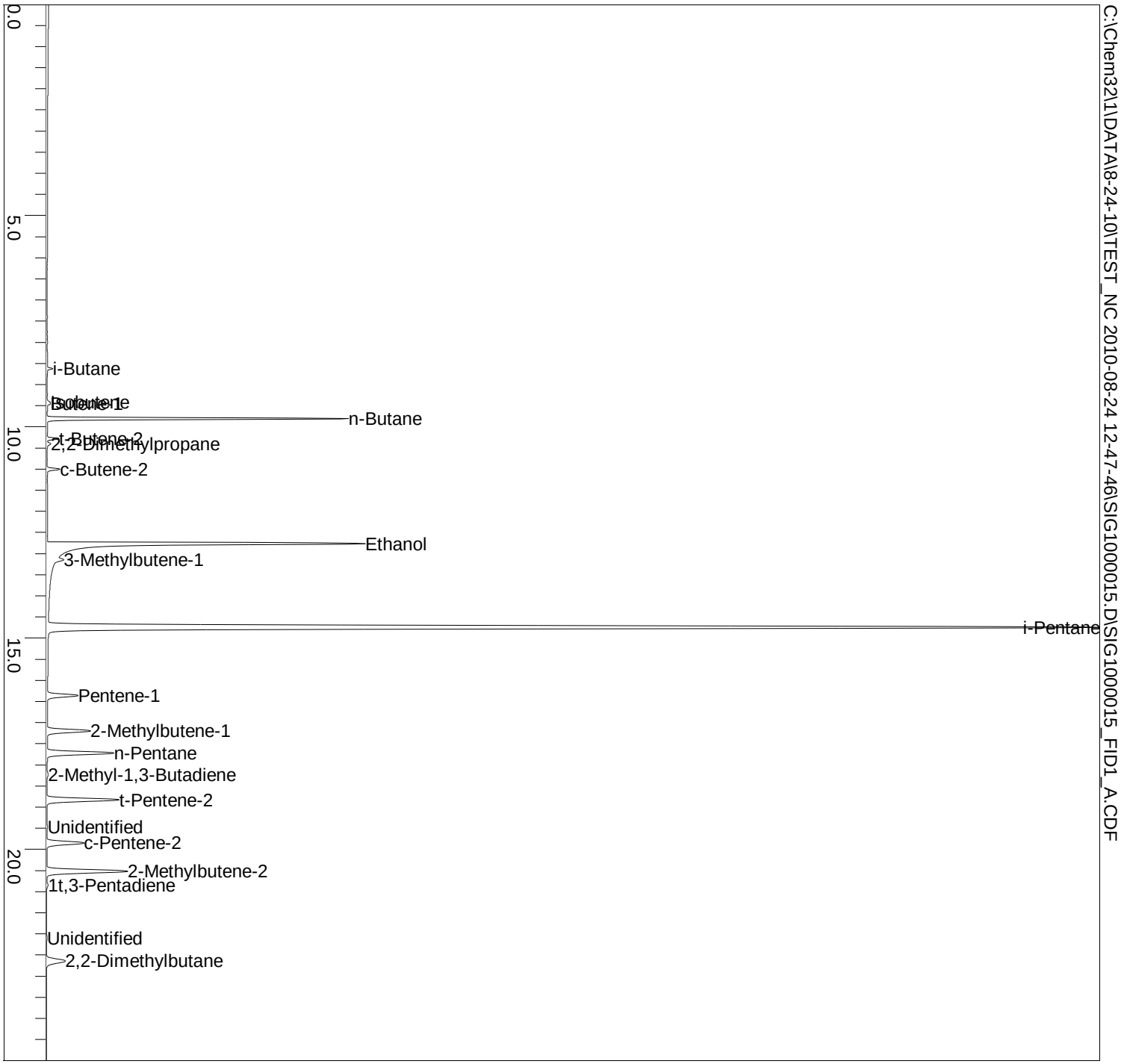
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	132.811		Unidentified	0.004	0.004	0.001	1.250

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1_A.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram



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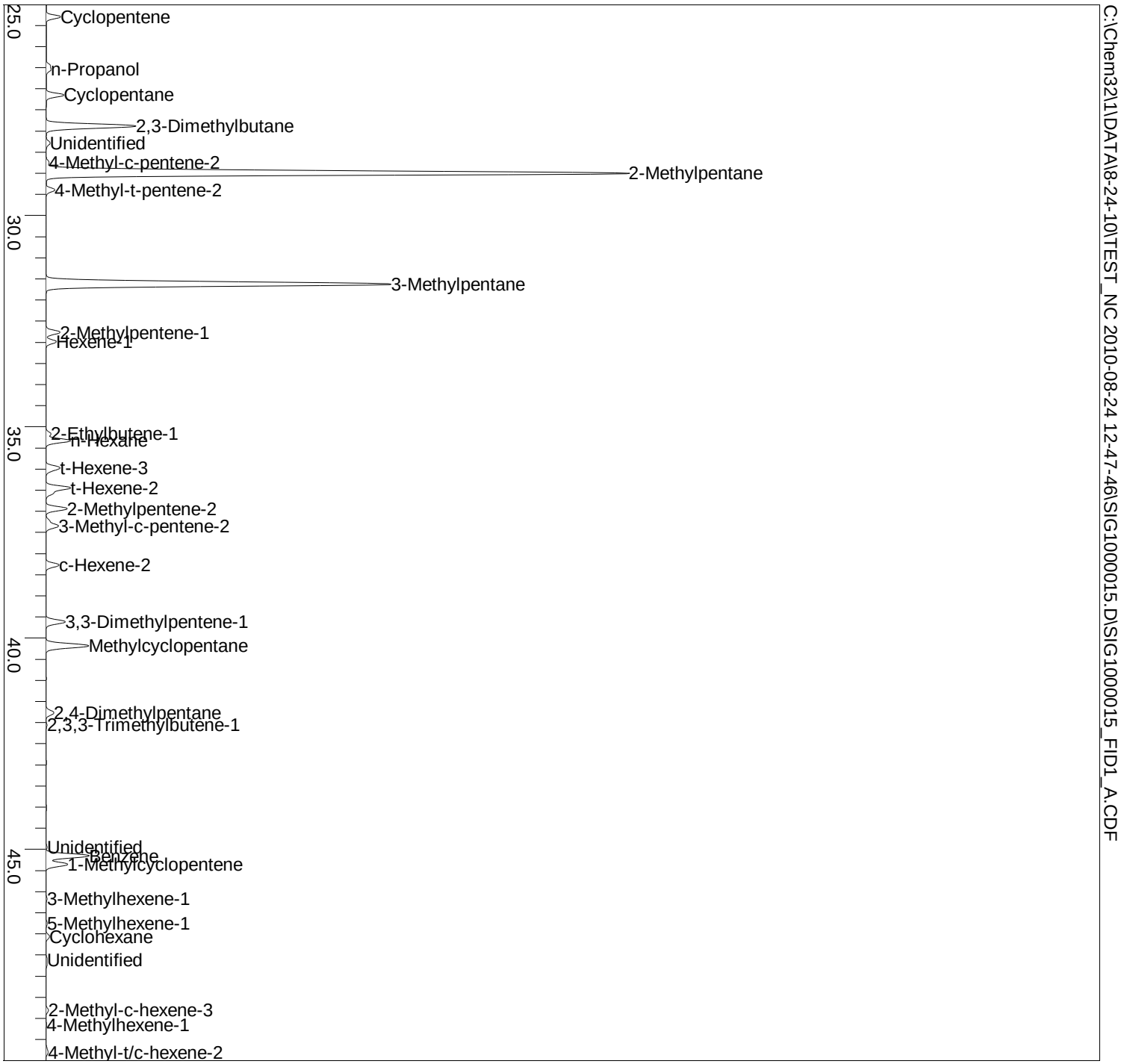
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram



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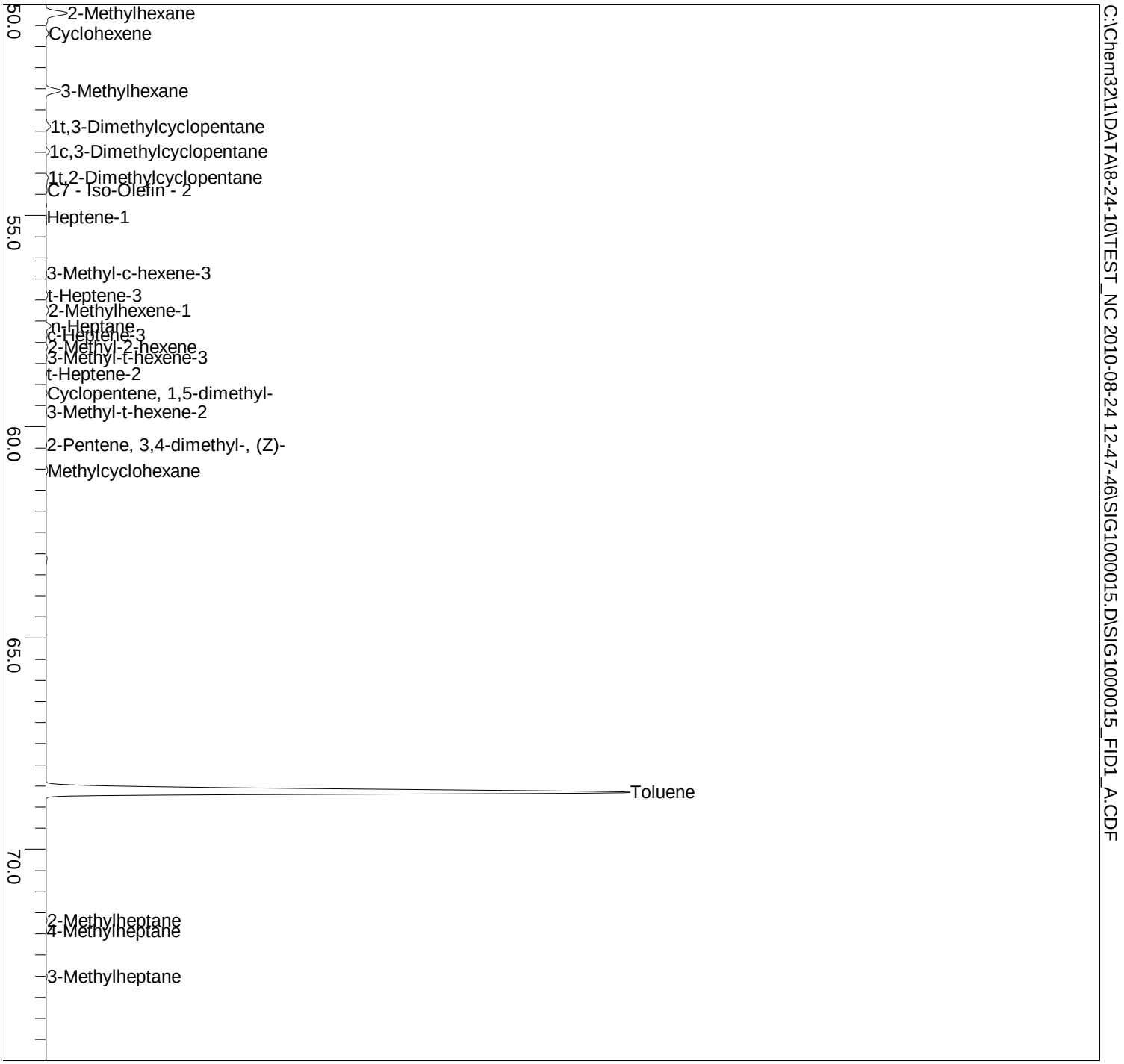
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram



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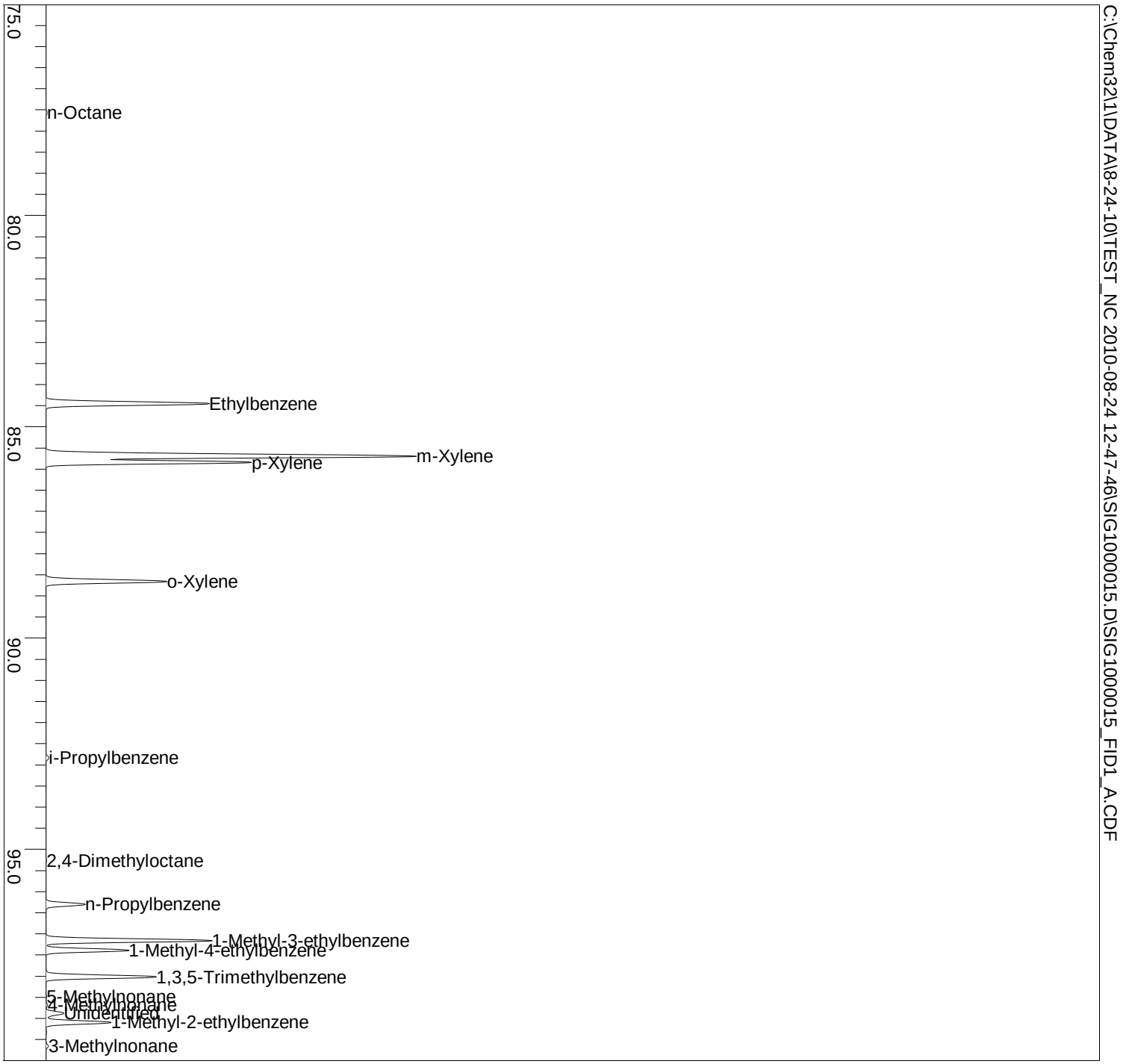
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram

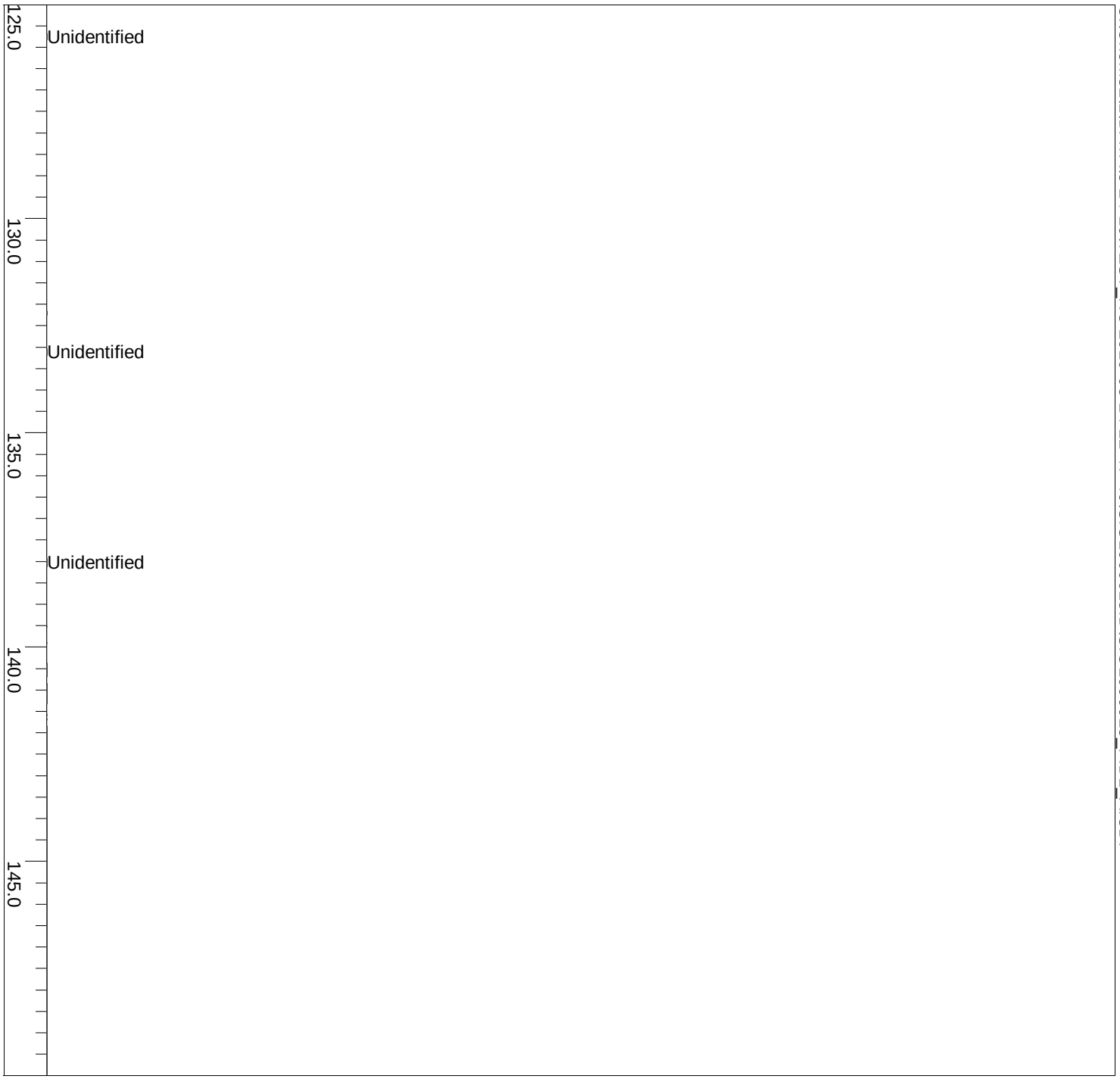


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1_A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000015.D\SIG1000015_FID1_A.CDF 24-Aug-10, 23:27:47
Sample: ODDB-91319 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91319
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	9.210	10.918	11.430
I-Paraffins	28.756	32.600	29.644
Aromatics	47.072	40.840	42.347
Mono-Aromatics	44.838	39.031	40.637
Naphthalenes	0.123	0.091	0.090
Naphtheno/Olefino-Benz	0.578	0.492	0.420
Indenes	1.533	1.227	1.198
Naphthenes	5.419	5.392	5.997
Mono-Naphthenes	5.419	5.392	5.997
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	6.741	7.568	8.511
n-Olefins	3.069	3.521	3.963
Iso-Olefins	3.117	3.504	3.850
Naphtheno-Olefins	0.534	0.519	0.668
Di-Olefins	0.022	0.024	0.031
Oxygenates	0.111	0.105	0.178
Unidentified	2.692	2.578	1.894
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.112	0.107	0.180
C4	1.807	2.349	3.002
C5	13.617	16.303	18.294
C6	17.895	19.659	20.208
C7	21.903	20.227	22.445
C8	19.824	19.193	17.370
C9	11.545	10.253	9.175
C10	8.125	7.009	5.879
C11	2.165	2.048	1.369
C12	0.315	0.273	0.186

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.002	0.002
	C4	1.534	2.006	2.536
	C5	2.607	3.152	3.473
	C6	4.196	4.818	4.681
	C7	0.431	0.478	0.414
	C8	0.152	0.164	0.128
	C9	0.086	0.090	0.064
	C10	0.106	0.110	0.072
	C11	0.096	0.098	0.059
I-Paraffins	C4	0.037	0.051	0.062
	C5	7.294	8.915	9.718
	C6	6.924	7.962	7.724
	C7	3.071	3.424	2.946
	C8	8.807	9.516	7.412
	C9	1.139	1.215	0.854
	C10	0.401	0.414	0.264
	C11	1.056	1.075	0.650
	C12	0.027	0.028	0.015
Mono-Aromatics	C6	0.610	0.526	0.751
	C7	16.637	14.528	17.357
	C8	10.697	9.348	9.686
	C9	10.024	8.704	8.017
	C10	5.705	4.926	4.086
	C11	0.877	0.754	0.569
	C12	0.288	0.245	0.171
Naphthalenes	C10	0.102	0.075	0.076
	C11	0.021	0.016	0.014
Naphtheno/Olefino-Benzs	C10	0.578	0.492	0.420
Indenes	C9	0.261	0.205	0.213
	C10	1.223	0.983	0.954
	C11	0.049	0.038	0.032
Mono-Naphthenes	C5	0.279	0.283	0.383
	C6	3.710	3.690	4.237
	C7	1.252	1.243	1.226
	C8	0.168	0.165	0.144
	C10	0.010	0.009	0.007

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes				
n-Olefins	C4	0.236	0.293	0.404
	C5	1.614	1.884	2.212
	C6	1.102	1.221	1.259
	C7	0.016	0.018	0.016
	C9	0.035	0.039	0.027
	C11	0.065	0.067	0.045
Iso-Olefins	C5	1.621	1.868	2.222
	C6	1.000	1.100	1.142
	C7	0.496	0.536	0.486
Naphtheno-Olefins	C5	0.181	0.177	0.255
	C6	0.353	0.342	0.413
Di-Olefins	C5	0.022	0.024	0.031
Oxygenates	C3	0.111	0.105	0.178

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	23.50	22.69
5%	80.11	79.67
10%	87.52	81.50
15%	101.34	96.27
20%	140.23	135.33
25%	154.41	144.17
30%	158.84	154.55
35%	187.04	158.56
40%	209.76	182.15
45%	229.83	209.58
50%	230.21	228.41
55%	230.58	230.18
60%	230.96	230.61
65%	254.84	231.04
70%	281.15	275.47
75%	291.57	281.55
80%	323.22	318.96
85%	335.58	334.04
90%	358.77	352.22
95%	372.94	368.42
FBP	404.60	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.389	74-98-6	P3	Propane	0.001	0.002	0.002	0.267
2	8.610	75-28-5	I4	i-Butane	0.037	0.051	0.062	9.903
3	9.402	115-11-7	K4	Isobutene	0.020	0.026	0.035	5.622
4	9.441	106-98-9	K4	Butene-1	0.024	0.031	0.042	6.677
5	9.790	106-97-8	P4	n-Butane	1.534	2.006	2.536	406.830
6	10.264	624-64-6	K4	t-Butene-2	0.089	0.112	0.153	24.556
7	10.386	463-82-1	I5	2,2-Dimethylpropane	0.034	0.044	0.046	9.189
8	10.984	590-18-1	K4	c-Butene-2	0.102	0.124	0.174	27.905
9	13.124	563-45-1	C5	3-Methylbutene-1	0.070	0.085	0.096	19.337
10	14.709	78-78-4	I5	i-Pentane	7.259	8.871	9.673	1939.149
11	16.326	109-67-1	K5	Pentene-1	0.323	0.382	0.443	88.811
12	17.162	563-46-2	C5	2-Methylbutene-1	0.507	0.590	0.694	139.210
13	17.690	109-66-0	P5	n-Pentane	2.607	3.152	3.473	696.284
14	18.203	78-79-5	E5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.473
15	18.796	646-04-8	K5	t-Pentene-2	0.835	0.975	1.144	229.307
16	19.815	627-20-3	K5	c-Pentene-2	0.456	0.527	0.625	125.356
17	20.488	513-35-9	C5	2-Methylbutene-2	1.044	1.193	1.431	286.849
18	20.820	2004-70-8	E5	1t,3-Pentadiene	0.013	0.014	0.018	3.642
19	22.069		?	Unidentified	0.005	0.005	0.007	1.531
20	22.613	75-83-2	I6	2,2-Dimethylbutane	0.183	0.213	0.204	49.009
21	25.240	142-29-0	B5	Cyclopentene	0.181	0.177	0.255	51.071
22	26.411		?	Unidentified	0.038	0.036	0.061	12.774
23	26.477	71-23-8	X3	n-Propanol	0.111	0.105	0.178	21.352
24	27.089	287-92-3	M5	Cyclopentane	0.279	0.283	0.383	76.677
25	27.824	79-29-8	I6	2,3-Dimethylbutane	1.230	1.407	1.372	329.850
26	28.224		?	Unidentified	0.051	0.052	0.056	17.235
27	28.682	691-38-3	C6	4-Methyl-c-pentene-2	0.044	0.049	0.050	12.103
28	28.903	107-83-5	I6	2-Methylpentane	3.098	3.591	3.455	830.722
29	29.336	674-76-0	C6	4-Methyl-t-pentene-2	0.132	0.148	0.150	36.167
30	31.543	96-14-0	I6	3-Methylpentane	2.414	2.751	2.692	647.278
31	32.710	763-29-1	C6	2-Methylpentene-1	0.224	0.248	0.256	61.558
32	32.936	592-41-6	K6	Hexene-1	0.155	0.173	0.177	42.683
33	35.302	110-54-3	P6	n-Hexane	4.196	4.818	4.681	1125.424
34	35.928	13269-52-8	K6	t-Hexene-3	0.256	0.284	0.292	70.339
35	36.399	4050-45-7	K6	t-Hexene-2	0.484	0.537	0.553	133.118
36	36.895	625-27-4	C6	2-Methylpentene-2	0.340	0.373	0.388	93.437
37	37.305	922-62-3	C6	3-Methyl-c-pentene-2	0.260	0.282	0.297	71.432
38	38.233	7688-21-3	K6	c-Hexene-2	0.207	0.226	0.236	56.757
39	39.578	3404-73-7	C7	3,3-Dimethylpentene-1	0.311	0.335	0.304	85.343
40	40.155	96-37-7	M6	Methylcyclopentane	2.129	2.153	2.431	584.826
41	41.729	108-08-7	I7	2,4-Dimethylpentane	0.897	1.009	0.860	241.393
42	42.269	464-06-2	I7	2,2,3-Trimethylbutane	0.099	0.109	0.095	26.755
43	44.927		?	Unidentified	0.010	0.010	0.012	3.400

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	45.128	71-42-3	Q6	Benzene	0.610	0.526	0.751	180.590
45	45.336	693-89-0	B6	1-Methylcyclopentene	0.319	0.310	0.373	89.771
46	46.154	3404-61-3	C7	3-Methylhexene-1	0.011	0.012	0.011	3.112
47	46.741	3524-73-0	C7	5-Methylhexene-1	0.080	0.087	0.078	21.944
48	47.056	110-82-7	M6	Cyclohexane	1.581	1.538	1.806	434.417
49	47.589		?	Unidentified	0.028	0.030	0.027	9.343
50	48.800	15840-60-5	C7	2-Methyl-c-hexene-3	0.030	0.033	0.029	8.239
51	49.793	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.034	0.037	0.033	9.400
52	50.192	591-76-4	I7	2-Methylhexane	1.456	1.625	1.397	392.129
53	50.665	110-83-8	B6	Cyclohexene	0.034	0.032	0.040	9.367
54	52.027	589-34-4	I7	3-Methylhexane	0.619	0.682	0.593	166.545
55	52.878	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.146	0.148	0.143	40.200
56	53.467	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.116	0.117	0.113	31.756
57	54.093	822-50-4	M7	1t,2-Dimethylcyclopentane	0.158	0.159	0.155	43.438
58	54.711	540-84-1	I8	2,2,4-Trimethylpentane	4.501	4.926	3.788	1214.468
59	56.879	14686-14-7	K7	t-Heptene-3	0.016	0.018	0.016	4.478
60	57.232	6094-02-6	C7	2-Methylhexene-1	0.025	0.027	0.025	6.952
61	57.613	142-82-5	P7	n-Heptane	0.431	0.478	0.414	116.130
62	58.113	2738-19-4	C7	2-Methyl-2-hexene	0.005	0.005	0.005	1.277
63	61.060	108-87-2	M7	Methylcyclohexane	0.802	0.789	0.785	220.262
64	62.012	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.017	0.017	0.014	4.630
65	62.419	590-73-8	I8	2,2-Dimethylhexane	0.020	0.022	0.017	5.419
66	63.856	1640-89-7	M7	Ethylcyclopentane	0.030	0.030	0.030	8.309
67	64.508	564-02-3	I8	2,2,3-Trimethylpentane	0.296	0.313	0.249	79.766
68	64.750	592-13-2	I8	2,5-Dimethylhexane	0.684	0.747	0.576	184.579
69	65.089	589-43-5	I8	2,4-Dimethylhexane	0.570	0.616	0.479	153.656
70	65.926	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.016	0.016	0.014	4.377
71	68.097	565-75-3	I8	2,3,4-Trimethylpentane	1.925	2.027	1.620	519.307
72	68.693	108-88-3	Q7	Toluene	16.637	14.528	17.357	4869.130
73	70.428	584-94-1	I8	2,3-Dimethylhexane	0.490	0.521	0.412	132.194
74	71.697	592-27-8	I8	2-Methylheptane	0.101	0.109	0.085	27.231
75	71.957	589-53-7	I8	4-Methylheptane	0.081	0.087	0.068	21.896
76	72.092		?	Unidentified	0.037	0.039	0.032	12.619
77	72.862		M8	1,3-dimethyl-t-cyclohexane	0.071	0.070	0.061	19.490
78	73.021	589-81-1	I8	3-Methylheptane	0.092	0.099	0.077	24.815
79	73.204	619-99-8	I8	3-Ethylhexane	0.047	0.050	0.040	12.715
80	74.103		?	Unidentified	0.011	0.010	0.009	3.639
81	74.925	3522-94-9	I9	2,2,5-Trimethylhexane	0.862	0.923	0.646	232.996
82	76.189	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.028	0.027	0.024	7.713
83	77.563	111-65-9	P8	n-Octane	0.152	0.164	0.128	41.057
84	78.507		?	Unidentified	0.017	0.017	0.015	5.779
85	80.054	1069-53-0	I9	2,3,5-Trimethylhexane	0.123	0.129	0.092	33.233
86	81.232	1071-26-7	I9	2,4-Dimethylheptane	0.019	0.020	0.014	5.151

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	81.867	1678-91-7	M8	Ethylcyclohexane	0.037	0.035	0.031	10.074
88	82.194	1072-05-5	I9	2,6-Dimethylheptane	0.032	0.034	0.024	8.706
89	83.130		I9	2,5-Dimethylheptane	0.061	0.065	0.046	16.484
90	84.446	100-41-4	Q8	Ethylbenzene	1.798	1.570	1.628	522.199
91	84.861		?	Unidentified	0.008	0.007	0.006	2.531
92	85.692	108-38-3	Q8	m-Xylene	4.994	4.376	4.523	1450.718
93	85.835	106-42-3	Q8	p-Xylene	2.297	2.020	2.080	667.297
94	87.016	2216-34-4	I9	4-Methyloctane	0.011	0.012	0.008	3.053
95	87.149	3221-61-2	I9	2-Methyloctane	0.015	0.016	0.011	4.036
96	88.012	2216-33-3	I9	3-Methyloctane	0.016	0.016	0.012	4.198
97	88.481		K9	C9-isoolefin	0.035	0.039	0.027	9.721
98	88.659	95-47-6	Q8	o-Xylene	1.607	1.382	1.455	466.792
99	89.067		I10	C10 - IsoParaffin - 1	0.115	0.120	0.078	31.233
100	89.913	14720-74-2	I10	2,2,4-trimethylheptane	0.081	0.085	0.055	22.023
101	91.477	111-84-2	P9	n-Nonane	0.086	0.090	0.064	23.168
102	92.837	98-82-8	Q9	i-Propylbenzene	0.038	0.034	0.031	11.070
103	93.600		?	Unidentified	0.028	0.029	0.019	9.494
104	93.822	15869-87-1	I10	2,2-Dimethyloctane	0.010	0.010	0.007	2.698
105	95.266	2051-30-1	I10	2,4-Dimethyloctane	0.022	0.023	0.015	5.950
106	95.662		I10	2,6-Dimethyloctane	0.010	0.010	0.007	2.644
107	96.307	103-65-1	Q9	n-Propylbenzene	0.431	0.379	0.345	124.442
108	97.163	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.886	1.651	1.508	544.214
109	97.393	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.916	0.805	0.733	264.365
110	98.022	108-67-8	Q9	1,3,5-Trimethylbenzene	1.278	1.118	1.022	368.823
111	98.687	17301-94-8	I10	4-Methylnonane	0.017	0.017	0.011	4.512
112	98.887		?	Unidentified	0.426	0.444	0.288	143.526
113	99.103	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.755	0.649	0.604	217.809
114	99.664	5911-04-6	I10	3-Methylnonane	0.029	0.030	0.020	7.929
115	100.130		?	Unidentified	0.036	0.027	0.022	12.175
116	100.256		?	Unidentified	0.104	0.106	0.064	35.042
117	100.478		I11	C11-Isoparaffin-2	0.059	0.060	0.036	16.005
118	100.755	95-63-6	Q9	1,2,4-Trimethylbenzene	3.994	3.452	3.194	1152.541
119	100.943		?	Unidentified	0.078	0.084	0.053	26.125
120	101.064		?	Unidentified	0.045	0.046	0.030	15.025
121	101.322	1678-98-4	M10	i-Butylcyclohexane	0.010	0.009	0.007	2.651
122	102.109	17302-01-1	I10	3-Ethyl-3-methylheptane	0.117	0.119	0.072	31.663
123	102.388	538-93-2	Q10	i-Butylbenzene	0.176	0.156	0.126	50.492
124	102.662	124-18-5	P10	n-Decane	0.106	0.110	0.072	28.825
125	102.976		?	Unidentified	0.033	0.034	0.020	11.176
126	103.615	526-73-8	Q9	1,2,3-Trimethylbenzene	0.726	0.615	0.581	209.610
127	104.006	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.026	0.023	0.019	7.534
128	104.193		I11	C11 Isoparaffin-4	0.019	0.019	0.011	5.039
129	104.396		?	Unidentified	0.105	0.093	0.075	35.312

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	104.804		J9	Indan	0.261	0.205	0.213	76.622
131	105.434		J10	Indene	0.745	0.585	0.606	218.479
132	106.151		I11	C11-Isoparaffin-7	0.321	0.327	0.198	87.090
133	106.334	141-93-5	Q10	1,3-Diethylbenzene	0.107	0.094	0.077	30.811
134	106.623	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.079	0.949	0.773	309.837
135	106.943	105-05-5	Q10	1,4-Diethylbenzene	0.424	0.373	0.304	121.822
136	107.177	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.299	0.257	0.214	85.906
137	107.434	135-01-3	Q10	1,2-Diethylbenzene	0.085	0.073	0.061	24.410
138	107.889		?	Unidentified	0.083	0.084	0.051	27.896
139	108.027	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.104	0.090	0.074	29.713
140	108.165		?	Unidentified	0.095	0.097	0.059	31.866
141	108.246		?	Unidentified	0.085	0.087	0.052	28.648
142	108.369		I11	C11- Isoparaffin-11	0.658	0.669	0.404	178.339
143	108.552		?	Unidentified	0.225	0.229	0.138	75.739
144	108.882	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.222	0.192	0.159	63.736
145	108.987		?	Unidentified	0.837	0.722	0.600	281.737
146	109.206		J10	2-Methylindan	0.132	0.104	0.096	38.666
147	109.547	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.740	0.640	0.530	212.344
148	110.102	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.710	0.604	0.509	203.833
149	110.529		?	Unidentified	0.029	0.027	0.018	9.678
150	110.730	693-61-8	K11	2-Undecene, (E)-	0.065	0.067	0.045	17.715
151	110.861		?	Unidentified	0.077	0.078	0.052	25.772
152	111.000		Q11	1-Methyl-4-t-butylbenzene	0.090	0.080	0.058	25.705
153	111.222	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.331	0.281	0.237	95.136
154	111.533	1120-21-4	P11	n-Undecane	0.096	0.098	0.059	26.131
155	111.691	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.105	0.090	0.068	30.145
156	111.799		?	Unidentified	0.073	0.062	0.047	24.589
157	112.167		Q10	1,2,4,5-Tetramethylbenzene	0.587	0.501	0.420	168.482
158	112.435	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.814	0.692	0.583	233.637
159	112.649		?	Unidentified	0.014	0.012	0.009	4.800
160	112.788		?	Unidentified	0.022	0.018	0.016	7.298
161	112.967		I12	C12 - IsoParaffin - 1	0.027	0.028	0.015	7.328
162	113.295		?	Unidentified	0.040	0.041	0.023	13.337
163	113.449		?	Unidentified	0.012	0.012	0.007	4.069
164	113.585		Q11	C11 - Aromatic - 3	0.119	0.102	0.077	34.127
165	113.765	874-35-1	H10	5-Methylindan	0.261	0.222	0.190	74.824
166	113.904		Q12	1,2-Di-i-propylbenzene	0.105	0.089	0.062	29.918
167	114.119	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.145	0.123	0.094	41.447
168	114.282		Q11	C11 - Aromatic - 4	0.071	0.060	0.046	20.327
169	114.516	824-22-6	J10	4-Methylindan	0.346	0.295	0.252	99.408
170	114.768	824-63-5	H10	2-Methylindan	0.317	0.270	0.231	91.139
171	114.980		?	Unidentified	0.027	0.023	0.018	9.117
172	115.092	538-68-1	Q11	n-Pentylbenzene	0.030	0.026	0.020	8.691

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	115.323		Q11	tert-Pentylbenzene	0.138	0.118	0.090	39.540
174	115.634	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.058	0.049	0.038	16.606
175	115.744		Q11	C11 - Aromatic - 7	0.079	0.070	0.051	22.475
176	116.207	100-18-5	Q12	1,4-Di-i-propylbenzene	0.110	0.094	0.065	31.401
177	116.636	91-20-3	G10	Naphthalene	0.102	0.075	0.076	30.582
178	116.800		J11	4,7-Dimethyl Indane	0.021	0.016	0.014	6.122
179	117.083		J11	1,1-Dimethyl Indane	0.028	0.022	0.018	8.232
180	117.433	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.022	0.019	0.013	6.377
181	117.736		Q12	1,3-Di-n-propylbenzene	0.051	0.043	0.030	14.398
182	117.847		Q11	C11 - Aromatic - 11	0.026	0.024	0.017	7.558
183	118.403		Q11	C11 - Aromatic - 12	0.014	0.013	0.009	4.018
184	123.282	91-57-6	G11	2-Methylnaphthalene	0.015	0.011	0.010	4.326
185	124.147	90-12-0	G11	1-Methylnaphthalene	0.007	0.005	0.004	1.945
186	126.173		?	Unidentified	0.007	0.006	0.004	2.416
187	126.173		?	Unidentified	0.007	0.007	0.003	2.416

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.389	74-98-6	Propane	0.001	0.002	0.002	0.267
	9.790	106-97-8	n-Butane	1.534	2.006	2.536	406.830
	17.690	109-66-0	n-Pentane	2.607	3.152	3.473	696.284
	35.302	110-54-3	n-Hexane	4.196	4.818	4.681	1125.424
	57.613	142-82-5	n-Heptane	0.431	0.478	0.414	116.130
	77.563	111-65-9	n-Octane	0.152	0.164	0.128	41.057
	91.477	111-84-2	n-Nonane	0.086	0.090	0.064	23.168
	102.662	124-18-5	n-Decane	0.106	0.110	0.072	28.825
	111.533	1120-21-4	n-Undecane	0.096	0.098	0.059	26.131
I-Paraffins	8.610	75-28-5	i-Butane	0.037	0.051	0.062	9.903
	10.386	463-82-1	2,2-Dimethylpropane	0.034	0.044	0.046	9.189
	14.709	78-78-4	i-Pentane	7.259	8.871	9.673	1939.149
	22.613	75-83-2	2,2-Dimethylbutane	0.183	0.213	0.204	49.009
	27.824	79-29-8	2,3-Dimethylbutane	1.230	1.407	1.372	329.850
	28.903	107-83-5	2-Methylpentane	3.098	3.591	3.455	830.722
	31.543	96-14-0	3-Methylpentane	2.414	2.751	2.692	647.278
	41.729	108-08-7	2,4-Dimethylpentane	0.897	1.009	0.860	241.393
	42.269	464-06-2	2,2,3-Trimethylbutane	0.099	0.109	0.095	26.755
	50.192	591-76-4	2-Methylhexane	1.456	1.625	1.397	392.129
	52.027	589-34-4	3-Methylhexane	0.619	0.682	0.593	166.545
	54.711	540-84-1	2,2,4-Trimethylpentane	4.501	4.926	3.788	1214.468
	62.419	590-73-8	2,2-Dimethylhexane	0.020	0.022	0.017	5.419
	64.508	564-02-3	2,2,3-Trimethylpentane	0.296	0.313	0.249	79.766
	64.750	592-13-2	2,5-Dimethylhexane	0.684	0.747	0.576	184.579
	65.089	589-43-5	2,4-Dimethylhexane	0.570	0.616	0.479	153.656
	68.097	565-75-3	2,3,4-Trimethylpentane	1.925	2.027	1.620	519.307
	70.428	584-94-1	2,3-Dimethylhexane	0.490	0.521	0.412	132.194
	71.697	592-27-8	2-Methylheptane	0.101	0.109	0.085	27.231
	71.957	589-53-7	4-Methylheptane	0.081	0.087	0.068	21.896
	73.021	589-81-1	3-Methylheptane	0.092	0.099	0.077	24.815
	73.204	619-99-8	3-Ethylhexane	0.047	0.050	0.040	12.715
	74.925	3522-94-9	2,2,5-Trimethylhexane	0.862	0.923	0.646	232.996
	80.054	1069-53-0	2,3,5-Trimethylhexane	0.123	0.129	0.092	33.233
	81.232	1071-26-7	2,4-Dimethylheptane	0.019	0.020	0.014	5.151
	82.194	1072-05-5	2,6-Dimethylheptane	0.032	0.034	0.024	8.706
	83.130		2,5-Dimethylheptane	0.061	0.065	0.046	16.484
	87.016	2216-34-4	4-Methyloctane	0.011	0.012	0.008	3.053
	87.149	3221-61-2	2-Methyloctane	0.015	0.016	0.011	4.036
	88.012	2216-33-3	3-Methyloctane	0.016	0.016	0.012	4.198
	89.067		C10 - IsoParaffin - 1	0.115	0.120	0.078	31.233
	89.913	14720-74-2	2,2,4-trimethylheptane	0.081	0.085	0.055	22.023
	93.822	15869-87-1	2,2-Dimethyloctane	0.010	0.010	0.007	2.698
	95.266	2051-30-1	2,4-Dimethyloctane	0.022	0.023	0.015	5.950
	95.662		2,6-Dimethyloctane	0.010	0.010	0.007	2.644
	98.687	17301-94-8	4-Methylnonane	0.017	0.017	0.011	4.512
	99.664	5911-04-6	3-Methylnonane	0.029	0.030	0.020	7.929

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	100.478		C11-Isoparaffin-2	0.059	0.060	0.036	16.005
	102.109	17302-01-1	3-Ethyl-3-methylheptane	0.117	0.119	0.072	31.663
	104.193		C11 Isoparaffin-4	0.019	0.019	0.011	5.039
	106.151		C11-Isoparaffin-7	0.321	0.327	0.198	87.090
	108.369		C11- Isoparaffin-11	0.658	0.669	0.404	178.339
	112.967		C12 - IsoParaffin - 1	0.027	0.028	0.015	7.328
Aromatics							
Mono-Aromatics	45.128	71-42-3	Benzene	0.610	0.526	0.751	180.590
	68.693	108-88-3	Toluene	16.637	14.528	17.357	4869.130
	84.446	100-41-4	Ethylbenzene	1.798	1.570	1.628	522.199
	85.692	108-38-3	m-Xylene	4.994	4.376	4.523	1450.718
	85.835	106-42-3	p-Xylene	2.297	2.020	2.080	667.297
	88.659	95-47-6	o-Xylene	1.607	1.382	1.455	466.792
	92.837	98-82-8	i-Propylbenzene	0.038	0.034	0.031	11.070
	96.307	103-65-1	n-Propylbenzene	0.431	0.379	0.345	124.442
	97.163	620-14-4	1-Methyl-3-ethylbenzene	1.886	1.651	1.508	544.214
	97.393	622-96-8	1-Methyl-4-ethylbenzene	0.916	0.805	0.733	264.365
	98.022	108-67-8	1,3,5-Trimethylbenzene	1.278	1.118	1.022	368.823
	99.103	611-14-3	1-Methyl-2-ethylbenzene	0.755	0.649	0.604	217.809
	100.755	95-63-6	1,2,4-Trimethylbenzene	3.994	3.452	3.194	1152.541
	102.388	538-93-2	i-Butylbenzene	0.176	0.156	0.126	50.492
	103.615	526-73-8	1,2,3-Trimethylbenzene	0.726	0.615	0.581	209.610
	104.006	535-77-3	1-Methyl-3-i-propylbenzene	0.026	0.023	0.019	7.534
	106.334	141-93-5	1,3-Diethylbenzene	0.107	0.094	0.077	30.811
	106.623	1074-43-7	1-Methyl-3-n-propylbenzene	1.079	0.949	0.773	309.837
	106.943	105-05-5	1,4-Diethylbenzene	0.424	0.373	0.304	121.822
	107.177	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.299	0.257	0.214	85.906
	107.434	135-01-3	1,2-Diethylbenzene	0.085	0.073	0.061	24.410
	108.027	1074-17-5	1-Methyl-2-n-propylbenzene	0.104	0.090	0.074	29.713
	108.882	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.222	0.192	0.159	63.736
	109.547	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.740	0.640	0.530	212.344
	110.102	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.710	0.604	0.509	203.833
	111.000		1-Methyl-4-t-butylbenzene	0.090	0.080	0.058	25.705
	111.222	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.331	0.281	0.237	95.136
	111.691	4218-48-8	1-Ethyl-4-i-propylbenzene	0.105	0.090	0.068	30.145
	112.167		1,2,4,5-Tetramethylbenzene	0.587	0.501	0.420	168.482
	112.435	527-53-7	1,2,3,5-Tetramethylbenzene	0.814	0.692	0.583	233.637
	113.585		C11 - Aromatic - 3	0.119	0.102	0.077	34.127
	113.904		1,2-Di-i-propylbenzene	0.105	0.089	0.062	29.918
	114.119	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.145	0.123	0.094	41.447
	114.282		C11 - Aromatic - 4	0.071	0.060	0.046	20.327
	115.092	538-68-1	n-Pentylbenzene	0.030	0.026	0.020	8.691
	115.323		tert-Pentylbenzene	0.138	0.118	0.090	39.540
	115.634	577-55-9	1-Methyl-2-n-butylbenzene	0.058	0.049	0.038	16.606
	115.744		C11 - Aromatic - 7	0.079	0.070	0.051	22.475
	116.207	100-18-5	1,4-Di-i-propylbenzene	0.110	0.094	0.065	31.401

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	117.433	7364-19-4	1t-Butyl-4-ethylbenzene	0.022	0.019	0.013	6.377
	117.736		1,3-Di-n-propylbenzene	0.051	0.043	0.030	14.398
	117.847		C11 - Aromatic - 11	0.026	0.024	0.017	7.558
	118.403		C11 - Aromatic - 12	0.014	0.013	0.009	4.018
Naphthalenes	116.636	91-20-3	Naphthalene	0.102	0.075	0.076	30.582
	123.282	91-57-6	2-Methylnaphthalene	0.015	0.011	0.010	4.326
	124.147	90-12-0	1-Methylnaphthalene	0.007	0.005	0.004	1.945
Naphtheno/Olefir	113.765	874-35-1	5-Methylindan	0.261	0.222	0.190	74.824
	114.768	824-63-5	2-Methylindan	0.317	0.270	0.231	91.139
Indenes	104.804		Indan	0.261	0.205	0.213	76.622
	105.434		Indene	0.745	0.585	0.606	218.479
	109.206		2-Methylindan	0.132	0.104	0.096	38.666
	114.516	824-22-6	4-Methylindan	0.346	0.295	0.252	99.408
	116.800		4,7-Dimethyl Indane	0.021	0.016	0.014	6.122
	117.083		1,1-Dimethyl Indane	0.028	0.022	0.018	8.232
Naphthenes							
Mono-Naphthene	27.089	287-92-3	Cyclopentane	0.279	0.283	0.383	76.677
	40.155	96-37-7	Methylcyclopentane	2.129	2.153	2.431	584.826
	47.056	110-82-7	Cyclohexane	1.581	1.538	1.806	434.417
	52.878	1759-58-6	1t,3-Dimethylcyclopentane	0.146	0.148	0.143	40.200
	53.467	2532-58-3	1c,3-Dimethylcyclopentane	0.116	0.117	0.113	31.756
	54.093	822-50-4	1t,2-Dimethylcyclopentane	0.158	0.159	0.155	43.438
	61.060	108-87-2	Methylcyclohexane	0.802	0.789	0.785	220.262
	62.012	4516-69-2	1,1,3-Trimethylcyclopentane	0.017	0.017	0.014	4.630
	63.856	1640-89-7	Ethylcyclopentane	0.030	0.030	0.030	8.309
	65.926	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.016	0.016	0.014	4.377
	72.862		1,3-dimethyl-t-cyclohexane	0.071	0.070	0.061	19.490
	76.189	2207-03-6	1t,3-Dimethylcyclohexane	0.028	0.027	0.024	7.713
	81.867	1678-91-7	Ethylcyclohexane	0.037	0.035	0.031	10.074
	101.322	1678-98-4	i-Butylcyclohexane	0.010	0.009	0.007	2.651
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.402	115-11-7	Isobutene	0.020	0.026	0.035	5.622
	9.441	106-98-9	Butene-1	0.024	0.031	0.042	6.677
	10.264	624-64-6	t-Butene-2	0.089	0.112	0.153	24.556
	10.984	590-18-1	c-Butene-2	0.102	0.124	0.174	27.905
	16.326	109-67-1	Pentene-1	0.323	0.382	0.443	88.811
	18.796	646-04-8	t-Pentene-2	0.835	0.975	1.144	229.307
	19.815	627-20-3	c-Pentene-2	0.456	0.527	0.625	125.356
	32.936	592-41-6	Hexene-1	0.155	0.173	0.177	42.683
	35.928	13269-52-8	t-Hexene-3	0.256	0.284	0.292	70.339
	36.399	4050-45-7	t-Hexene-2	0.484	0.537	0.553	133.118

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	38.233	7688-21-3	c-Hexene-2	0.207	0.226	0.236	56.757
	56.879	14686-14-7	t-Heptene-3	0.016	0.018	0.016	4.478
	88.481		C9-isoolefin	0.035	0.039	0.027	9.721
	110.730	693-61-8	2-Undecene, (E)-	0.065	0.067	0.045	17.715
Iso-Olefins	13.124	563-45-1	3-Methylbutene-1	0.070	0.085	0.096	19.337
	17.162	563-46-2	2-Methylbutene-1	0.507	0.590	0.694	139.210
	20.488	513-35-9	2-Methylbutene-2	1.044	1.193	1.431	286.849
	28.682	691-38-3	4-Methyl-c-pentene-2	0.044	0.049	0.050	12.103
	29.336	674-76-0	4-Methyl-t-pentene-2	0.132	0.148	0.150	36.167
	32.710	763-29-1	2-Methylpentene-1	0.224	0.248	0.256	61.558
	36.895	625-27-4	2-Methylpentene-2	0.340	0.373	0.388	93.437
	37.305	922-62-3	3-Methyl-c-pentene-2	0.260	0.282	0.297	71.432
	39.578	3404-73-7	3,3-Dimethylpentene-1	0.311	0.335	0.304	85.343
	46.154	3404-61-3	3-Methylhexene-1	0.011	0.012	0.011	3.112
	46.741	3524-73-0	5-Methylhexene-1	0.080	0.087	0.078	21.944
	48.800	15840-60-5	2-Methyl-c-hexene-3	0.030	0.033	0.029	8.239
	49.793	3404-55-5	4-Methyl-t/c-hexene-2	0.034	0.037	0.033	9.400
	57.232	6094-02-6	2-Methylhexene-1	0.025	0.027	0.025	6.952
	58.113	2738-19-4	2-Methyl-2-hexene	0.005	0.005	0.005	1.277
Naphtheno-Olefir	25.240	142-29-0	Cyclopentene	0.181	0.177	0.255	51.071
	45.336	693-89-0	1-Methylcyclopentene	0.319	0.310	0.373	89.771
	50.665	110-83-8	Cyclohexene	0.034	0.032	0.040	9.367
Di-Olefins	18.203	78-79-5	2-Methyl-1,3-Butadiene	0.009	0.010	0.012	2.473
	20.820	2004-70-8	1t,3-Pentadiene	0.013	0.014	0.018	3.642
Oxygenates	26.477	71-23-8	n-Propanol	0.111	0.105	0.178	21.352
Unidentified	22.069		Unidentified	0.005	0.005	0.007	1.531
	26.411		Unidentified	0.038	0.036	0.061	12.774
	28.224		Unidentified	0.051	0.052	0.056	17.235
	44.927		Unidentified	0.010	0.010	0.012	3.400
	47.589		Unidentified	0.028	0.030	0.027	9.343
	72.092		Unidentified	0.037	0.039	0.032	12.619
	74.103		Unidentified	0.011	0.010	0.009	3.639
	78.507		Unidentified	0.017	0.017	0.015	5.779
	84.861		Unidentified	0.008	0.007	0.006	2.531
	93.600		Unidentified	0.028	0.029	0.019	9.494
	98.887		Unidentified	0.426	0.444	0.288	143.526
	100.130		Unidentified	0.036	0.027	0.022	12.175
	100.256		Unidentified	0.104	0.106	0.064	35.042
	100.943		Unidentified	0.078	0.084	0.053	26.125
	101.064		Unidentified	0.045	0.046	0.030	15.025
	102.976		Unidentified	0.033	0.034	0.020	11.176
	104.396		Unidentified	0.105	0.093	0.075	35.312

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 24-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Components by Group

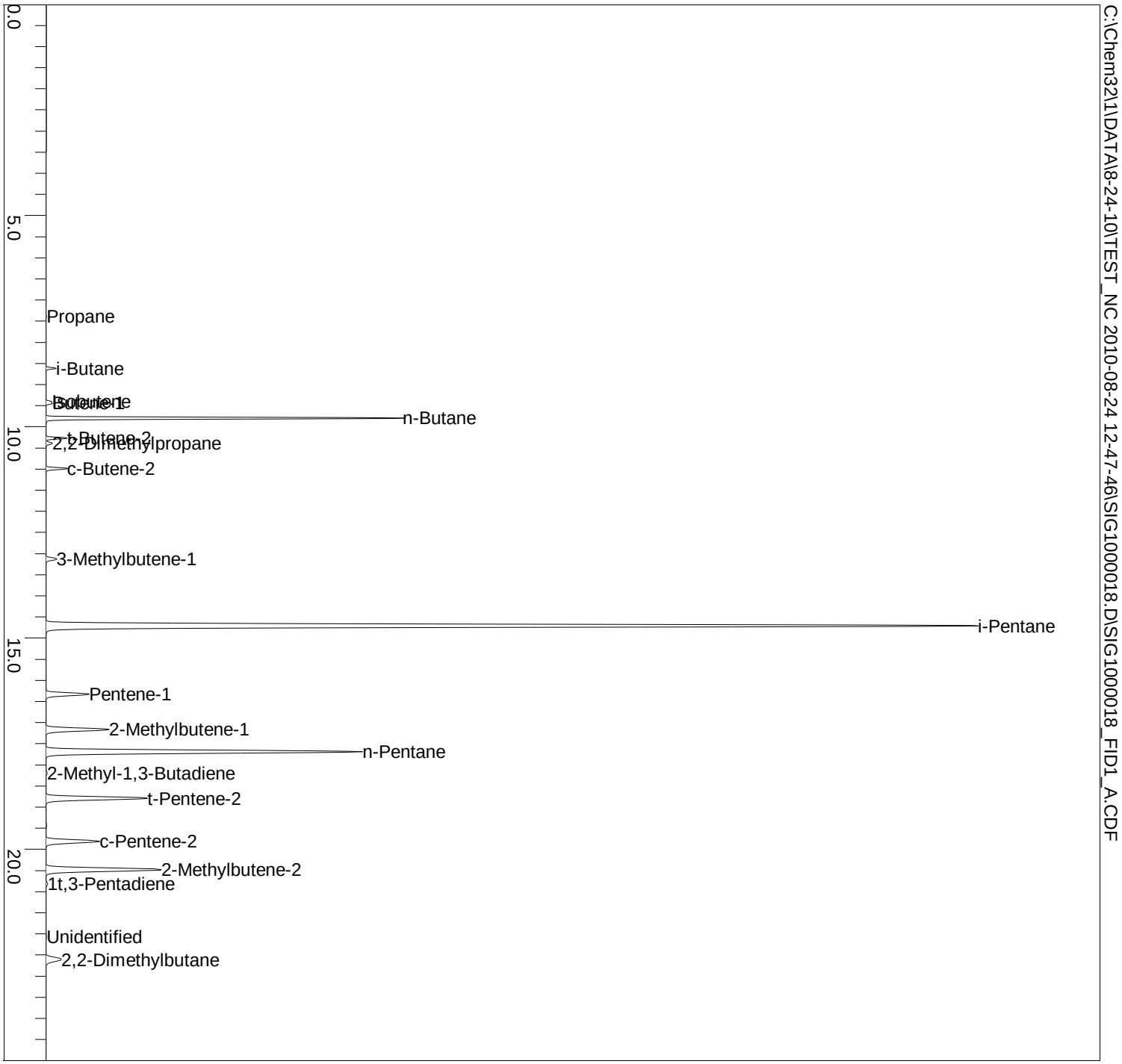
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	107.889		Unidentified	0.083	0.084	0.051	27.896
	108.165		Unidentified	0.095	0.097	0.059	31.866
	108.246		Unidentified	0.085	0.087	0.052	28.648
	108.552		Unidentified	0.225	0.229	0.138	75.739
	108.987		Unidentified	0.837	0.722	0.600	281.737
	110.529		Unidentified	0.029	0.027	0.018	9.678
	110.861		Unidentified	0.077	0.078	0.052	25.772
	111.799		Unidentified	0.073	0.062	0.047	24.589
	112.649		Unidentified	0.014	0.012	0.009	4.800
	112.788		Unidentified	0.022	0.018	0.016	7.298
	113.295		Unidentified	0.040	0.041	0.023	13.337
	113.449		Unidentified	0.012	0.012	0.007	4.069
	114.980		Unidentified	0.027	0.023	0.018	9.117
	126.173		Unidentified	0.007	0.006	0.004	2.416
	126.173		Unidentified	0.007	0.007	0.003	2.416

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1_A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram



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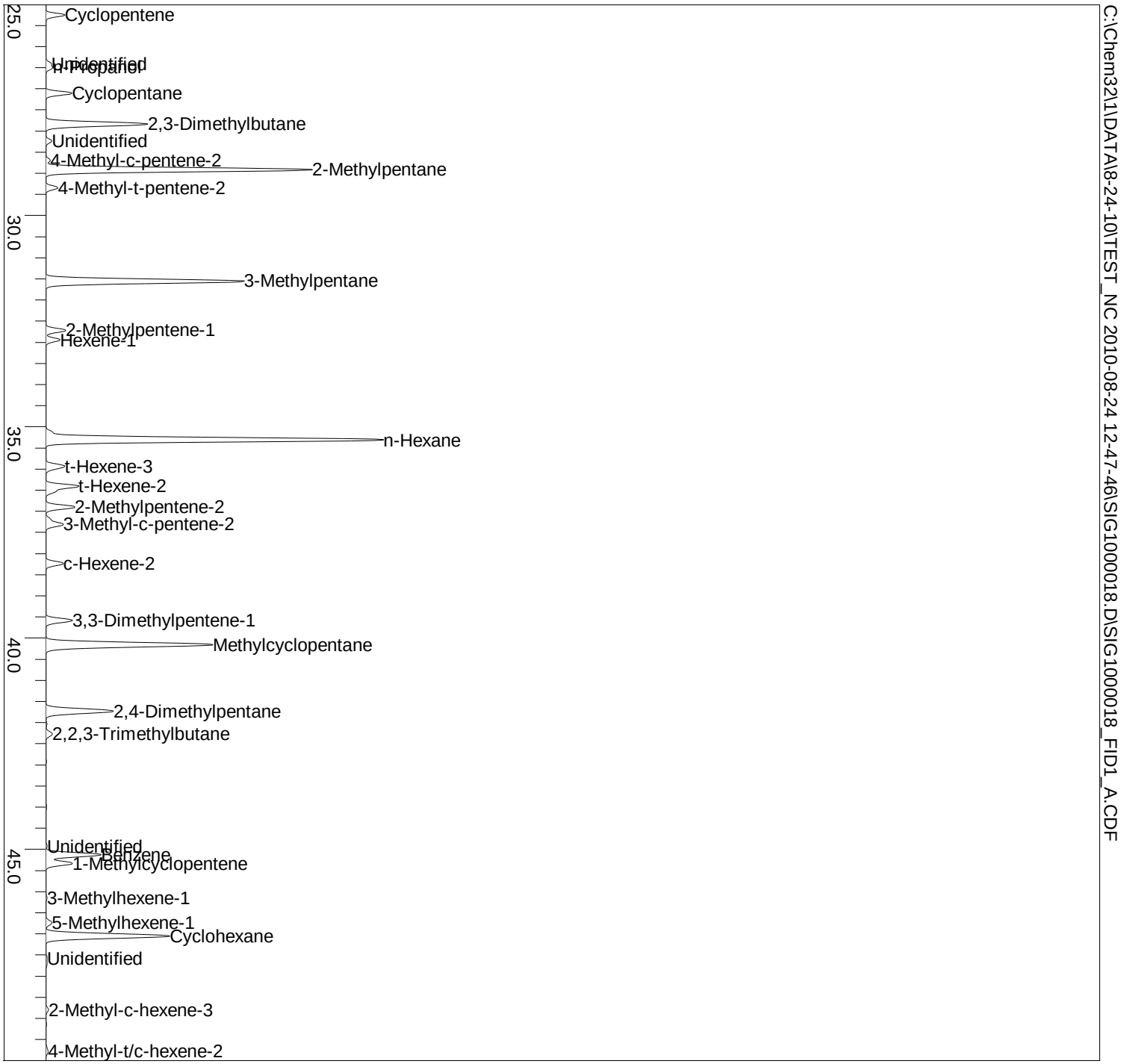
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram



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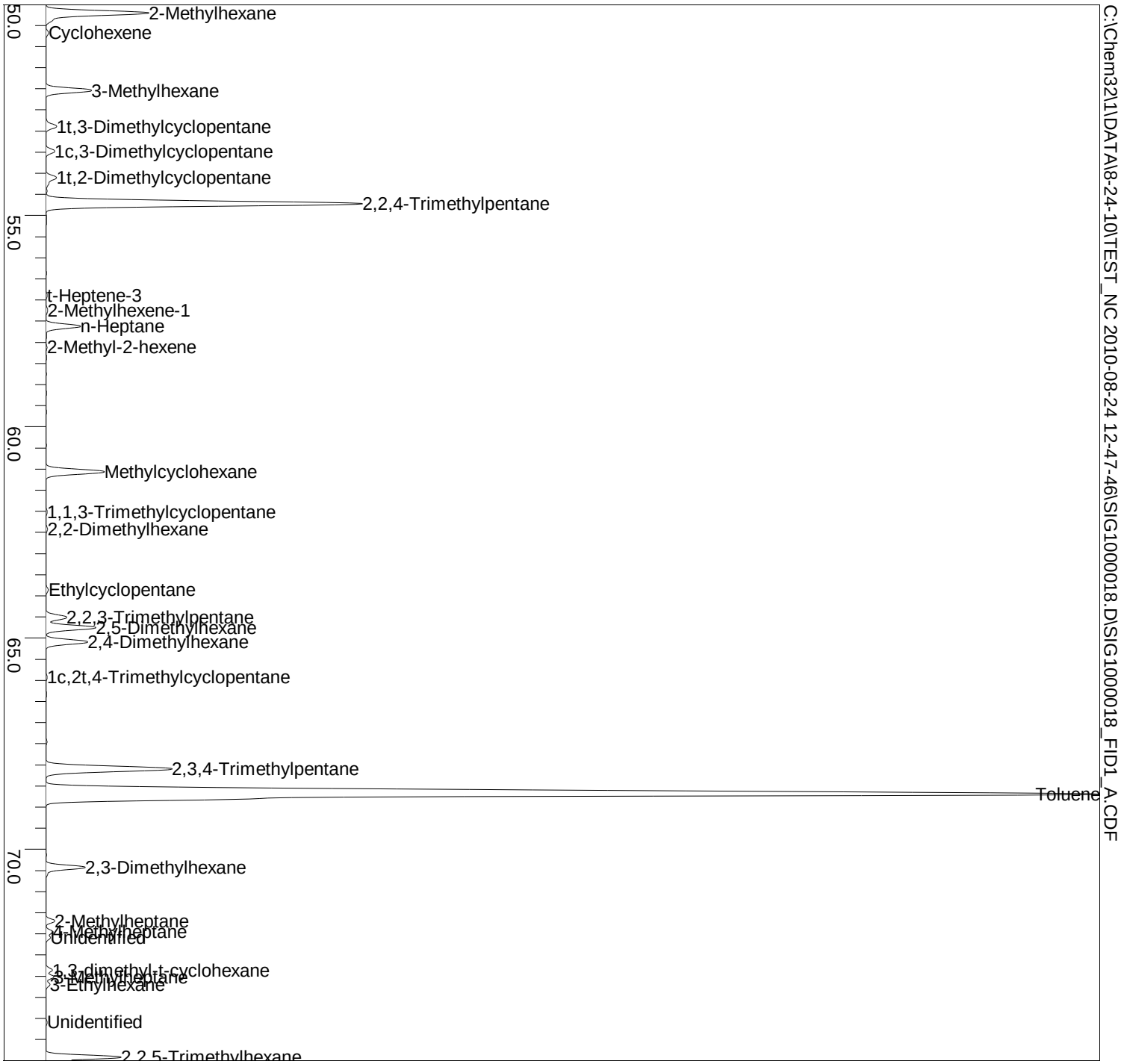
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram



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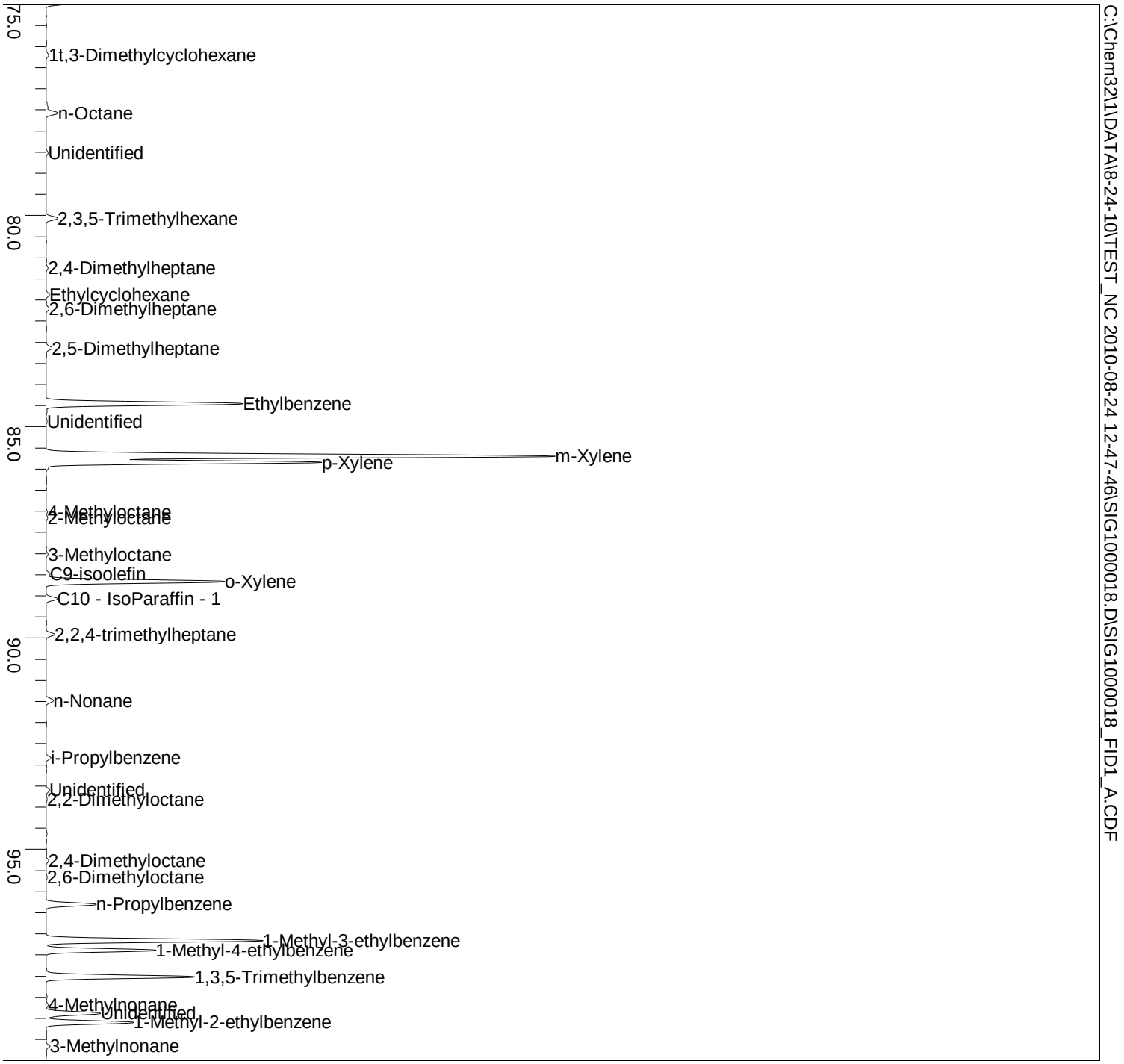
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram

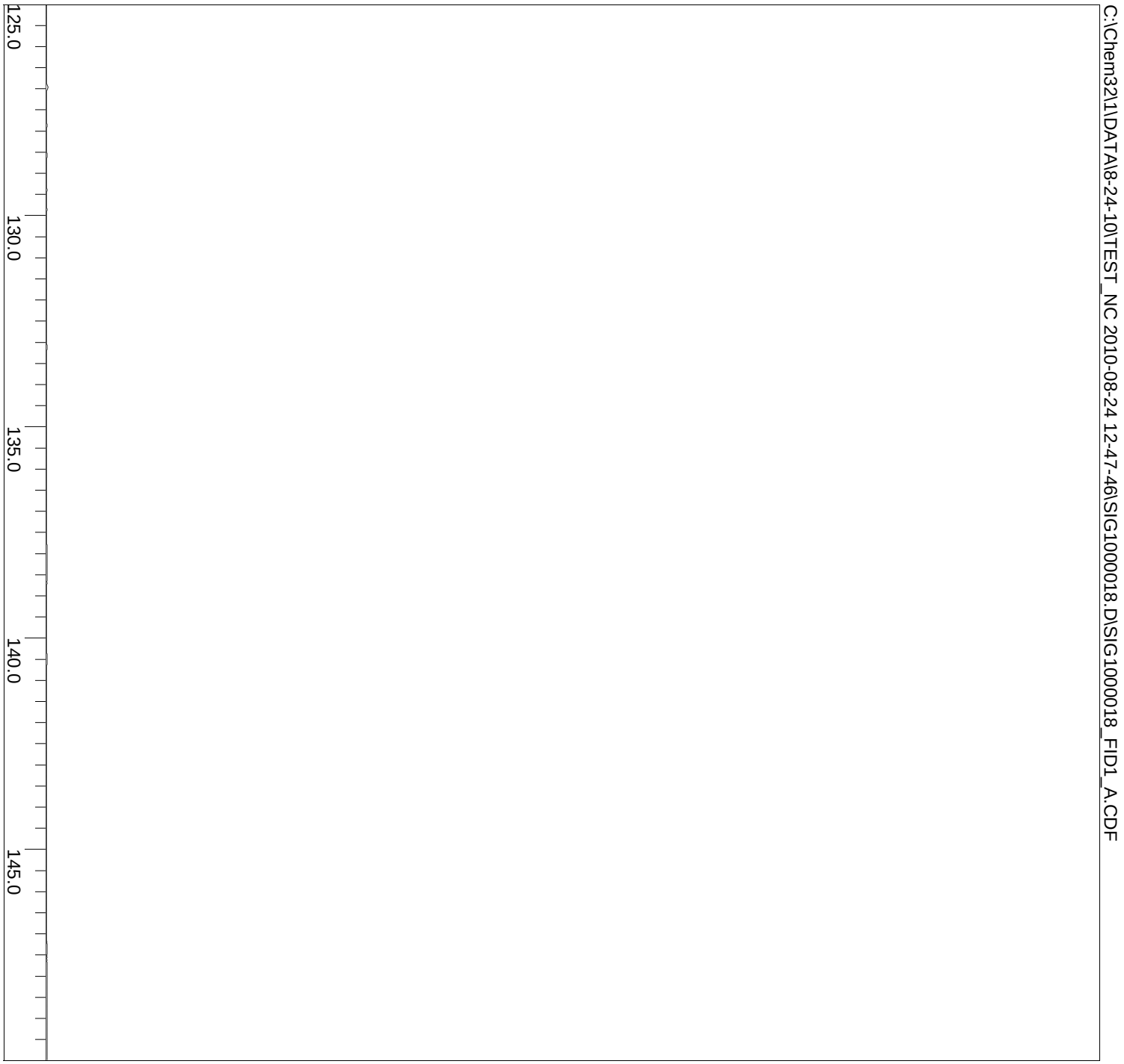


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG1000018.D\SIG1000018_FID1_A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91320 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91320
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	10.491	11.676	12.131
I-Paraffins	43.167	46.627	43.041
Aromatics	25.125	20.714	21.444
Mono-Aromatics	23.036	19.123	19.847
Naphthalenes	0.129	0.091	0.093
Naphtheno/Olefino-Benz	0.306	0.248	0.218
Indenes	1.654	1.252	1.285
Naphthenes	8.794	8.354	9.942
Mono-Naphthenes	8.794	8.354	9.942
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.782	8.327	9.682
n-Olefins	3.409	3.739	4.367
Iso-Olefins	3.609	3.872	4.379
Naphtheno-Olefins	0.724	0.675	0.883
Di-Olefins	0.040	0.042	0.052
Oxygenates	0.132	0.119	0.192
Unidentified	4.509	4.182	3.567
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.082	0.074	0.129
C4	0.744	0.896	1.207
C5	19.256	21.845	25.413
C6	23.872	24.945	26.466
C7	11.566	10.774	11.420
C8	24.611	24.311	20.711
C9	5.555	4.684	4.341
C10	7.232	5.939	5.168
C11	2.325	2.144	1.433
C12	0.249	0.207	0.144

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.002
	C4	0.379	0.473	0.616
	C5	2.987	3.446	3.908
	C6	6.286	6.888	6.887
	C7	0.502	0.530	0.473
	C8	0.144	0.148	0.119
	C9	0.062	0.063	0.046
	C10	0.042	0.042	0.028
	C11	0.088	0.086	0.053
I-Paraffins	C4	0.035	0.045	0.056
	C5	10.747	12.534	14.062
	C6	8.301	9.115	9.093
	C7	3.307	3.516	3.116
	C8	18.410	19.094	15.215
	C9	0.436	0.443	0.321
	C10	0.448	0.440	0.284
	C11	1.451	1.409	0.877
	C12	0.032	0.031	0.018
Mono-Aromatics	C6	0.652	0.536	0.788
	C7	5.884	4.903	6.029
	C8	5.884	4.907	5.232
	C9	4.884	4.048	3.836
	C10	4.859	4.017	3.418
	C11	0.664	0.543	0.423
	C12	0.208	0.169	0.121
Naphthalenes	C10	0.109	0.077	0.080
	C11	0.020	0.014	0.013
Naphtheno/Olefino-Benzs	C10	0.306	0.248	0.218
Indenes	C9	0.167	0.125	0.134
	C10	1.447	1.097	1.126
	C11	0.030	0.023	0.020
	C12	0.009	0.006	0.006
Mono-Naphthenes	C5	1.519	1.472	2.044
	C6	5.809	5.496	6.516
	C7	1.268	1.202	1.219
	C8	0.173	0.162	0.145

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.005	0.004	0.004
	C10	0.020	0.018	0.014
n-Olefins	C4	0.280	0.331	0.470
	C5	1.879	2.092	2.529
	C6	1.162	1.228	1.303
	C7	0.018	0.018	0.017
	C11	0.071	0.069	0.048
Iso-Olefins	C5	1.883	2.071	2.535
	C6	1.154	1.212	1.295
	C7	0.572	0.589	0.550
Naphtheno-Olefins	C5	0.216	0.203	0.299
	C6	0.508	0.472	0.584
Di-Olefins	C5	0.025	0.027	0.035
	C7	0.015	0.015	0.017
Oxygenates	C3	0.081	0.073	0.127
	C4	0.051	0.046	0.065

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	32.41	29.23
5%	80.02	79.81
10%	81.54	81.11
15%	96.23	93.70
20%	120.18	100.22
25%	140.09	137.63
30%	153.23	144.34
35%	155.20	154.35
40%	161.11	155.40
45%	177.26	172.56
50%	209.20	190.14
55%	209.71	209.29
60%	210.23	209.78
65%	228.48	210.28
70%	230.98	228.77
75%	257.41	231.05
80%	282.29	277.93
85%	332.39	321.66
90%	352.22	348.98
95%	365.79	363.20
FBP	404.60	404.08

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.553	74-98-6	P3	Propane	0.001	0.001	0.002	0.235
2	8.810	75-28-5	I4	i-Butane	0.035	0.045	0.056	9.068
3	9.623	115-11-7	K4	Isobutene	0.026	0.031	0.043	7.006
4	9.664	106-98-9	K4	Butene-1	0.028	0.034	0.047	7.552
5	10.024	106-97-8	P4	n-Butane	0.379	0.473	0.616	99.231
6	10.510	624-64-6	K4	t-Butene-2	0.106	0.127	0.179	28.830
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.040	0.048	0.052	10.455
8	11.252	590-18-1	K4	c-Butene-2	0.119	0.139	0.201	32.379
9	13.455	563-45-1	C5	3-Methylbutene-1	0.081	0.094	0.110	22.084
10	15.090	78-78-4	I5	i-Pentane	10.707	12.485	14.010	2821.802
11	16.729	109-67-1	K5	Pentene-1	0.377	0.426	0.508	102.255
12	17.582	563-46-2	C5	2-Methylbutene-1	0.589	0.654	0.792	159.588
13	18.121	109-66-0	P5	n-Pentane	2.987	3.446	3.908	787.160
14	18.628	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.801
15	19.239	646-04-8	K5	t-Pentene-2	0.971	1.082	1.307	263.114
16	19.883		?	Unidentified	0.007	0.008	0.009	2.310
17	20.272	627-20-3	K5	c-Pentene-2	0.531	0.585	0.715	143.898
18	20.947	513-35-9	C5	2-Methylbutene-2	1.213	1.323	1.633	328.791
19	21.277	2004-70-8	E5	1t,3-Pentadiene	0.015	0.016	0.021	4.277
20	22.539	1574-41-0	B5	1,3-Cyclopentadiene	0.006	0.007	0.009	1.746
21	23.096	75-83-2	I6	2,2-Dimethylbutane	0.612	0.681	0.671	161.972
22	25.742	142-29-0	B5	Cyclopentene	0.210	0.196	0.290	58.464
23	26.912	71-23-8	X3	n-Propanol	0.081	0.073	0.127	15.363
24	26.992		?	Unidentified	0.071	0.077	0.080	23.617
25	27.612	287-92-3	M5	Cyclopentane	1.519	1.472	2.044	411.671
26	28.339	79-29-8	I6	2,3-Dimethylbutane	0.857	0.936	0.938	226.672
27	28.738		?	Unidentified	0.065	0.064	0.070	21.715
28	29.205	691-38-3	C6	4-Methyl-c-pentene-2	0.053	0.057	0.059	14.376
29	29.427	107-83-5	I6	2-Methylpentane	3.627	4.012	3.973	959.623
30	29.847	674-76-0	C6	4-Methyl-t-pentene-2	0.152	0.163	0.171	41.215
31	32.083	96-14-0	I6	3-Methylpentane	3.205	3.486	3.511	847.965
32	33.234	763-29-1	C6	2-Methylpentene-1	0.259	0.273	0.290	70.189
33	33.459	592-41-6	K6	Hexene-1	0.176	0.187	0.197	47.682
34	35.847	110-54-3	P6	n-Hexane	6.286	6.888	6.887	1663.319
35	36.445	13269-52-8	K6	t-Hexene-3	0.295	0.313	0.331	80.091
36	36.921	4050-45-7	K6	t-Hexene-2	0.452	0.479	0.508	122.651
37	37.045	1120-62-3	B6	3-Methylcyclopentene	0.107	0.101	0.123	28.971
38	37.412	625-27-4	C6	2-Methylpentene-2	0.392	0.410	0.440	106.242
39	37.828	922-62-3	C6	3-Methyl-c-pentene-2	0.298	0.309	0.335	80.887
40	38.749	7688-21-3	K6	c-Hexene-2	0.238	0.248	0.267	64.468
41	40.098	3404-73-7	C7	3,3-Dimethylpentene-1	0.353	0.364	0.340	95.773
42	40.687	96-37-7	M6	Methylcyclopentane	2.831	2.732	3.175	767.258
43	42.240	108-08-7	I7	2,4-Dimethylpentane	0.582	0.625	0.548	154.532

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.538	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.013	0.012	3.408
45	42.784	464-06-2	I7	2,2,3-Trimethylbutane	0.064	0.067	0.060	17.052
46	45.435	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.017	4.082
47	45.641	71-42-3	Q6	Benzene	0.652	0.536	0.788	190.432
48	45.840	693-89-0	B6	1-Methylcyclopentene	0.362	0.336	0.417	100.617
49	46.649	3404-61-3	C7	3-Methylhexene-1	0.013	0.014	0.013	3.607
50	47.245	3524-73-0	C7	5-Methylhexene-1	0.082	0.085	0.078	22.121
51	47.577	110-82-7	M6	Cyclohexane	2.978	2.764	3.341	807.279
52	48.063	71-36-3	X4	n-Butanol	0.051	0.046	0.065	10.479
53	49.278	15840-60-5	C7	2-Methyl-c-hexene-3	0.035	0.036	0.033	9.363
54	50.273	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.041	0.042	0.039	11.053
55	50.679	591-76-4	I7	2-Methylhexane	1.937	2.062	1.825	514.592
56	51.161	110-83-8	B6	Cyclohexene	0.039	0.035	0.045	10.544
57	52.502	589-34-4	I7	3-Methylhexane	0.724	0.762	0.682	192.398
58	53.360	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.150	0.145	0.144	40.687
59	53.947	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.118	0.115	0.114	32.108
60	54.572	822-50-4	M7	1t,2-Dimethylcyclopentane	0.177	0.170	0.170	47.914
61	55.260	540-84-1	I8	2,2,4-Trimethylpentane	13.971	14.589	11.546	3718.827
62	57.340	14686-14-7	K7	t-Heptene-3	0.018	0.018	0.017	4.826
63	57.685	6094-02-6	C7	2-Methylhexene-1	0.028	0.029	0.027	7.647
64	58.062	142-82-5	P7	n-Heptane	0.502	0.530	0.473	133.309
65	58.555	2738-19-4	C7	2-Methyl-2-hexene	0.007	0.007	0.007	1.965
66	59.882		?	Unidentified	0.278	0.280	0.267	92.350
67	61.523	108-87-2	M7	Methylcyclohexane	0.795	0.746	0.764	215.396
68	62.463	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.016	0.016	0.014	4.465
69	62.852	590-73-8	I8	2,2-Dimethylhexane	0.016	0.016	0.013	4.183
70	64.072		?	Unidentified	0.075	0.073	0.064	24.985
71	64.305	1640-89-7	M7	Ethylcyclopentane	0.028	0.026	0.027	7.559
72	64.953	564-02-3	I8	2,2,3-Trimethylpentane	0.277	0.279	0.229	73.640
73	65.180	592-13-2	I8	2,5-Dimethylhexane	0.748	0.780	0.619	199.218
74	65.518	589-43-5	I8	2,4-Dimethylhexane	0.620	0.640	0.513	165.139
75	66.352	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.015	0.014	0.013	4.144
76	66.745	563-16-6	I8	3,3-Dimethylhexane	0.011	0.011	0.009	2.828
77	67.864	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.012	0.011	0.010	3.129
78	68.484	565-75-3	I8	2,3,4-Trimethylpentane	1.267	1.273	1.047	337.123
79	69.030	108-88-3	Q7	Toluene	5.884	4.903	6.029	1699.030
80	69.156	560-21-4	I8	2,3,3-Trimethylpentane	0.944	0.939	0.780	251.324
81	70.796	584-94-1	I8	2,3-Dimethylhexane	0.277	0.281	0.229	73.630
82	72.048	592-27-8	I8	2-Methylheptane	0.092	0.095	0.076	24.474
83	72.309	589-53-7	I8	4-Methylheptane	0.056	0.057	0.046	14.917
84	72.451		?	Unidentified	0.018	0.018	0.015	6.056
85	73.227		M8	1,3-dimethyl-t-cyclohexane	0.068	0.064	0.057	18.470
86	73.364	589-81-1	I8	3-Methylheptane	0.086	0.088	0.071	22.762

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	73.563	619-99-8	I8	3-Ethylhexane	0.046	0.047	0.038	12.239
88	74.463		?	Unidentified	0.011	0.010	0.009	3.534
89	75.251	3522-94-9	I9	2,2,5-Trimethylhexane	0.294	0.300	0.216	78.349
90	76.533	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.027	0.025	0.022	7.184
91	77.871	111-65-9	P8	n-Octane	0.144	0.148	0.119	38.212
92	78.825		?	Unidentified	0.007	0.007	0.006	2.319
93	80.355	1069-53-0	I9	2,3,5-Trimethylhexane	0.043	0.043	0.032	11.415
94	81.522	1071-26-7	I9	2,4-Dimethylheptane	0.012	0.013	0.009	3.281
95	82.177	1678-91-7	M8	Ethylcyclohexane	0.035	0.032	0.029	9.472
96	82.478	1072-05-5	I9	2,6-Dimethylheptane	0.018	0.018	0.013	4.765
97	83.408		I9	2,5-Dimethylheptane	0.028	0.029	0.021	7.530
98	84.734	100-41-4	Q8	Ethylbenzene	1.104	0.920	0.982	316.388
99	85.151		?	Unidentified	0.005	0.005	0.004	1.742
100	85.959	108-38-3	Q8	m-Xylene	2.669	2.231	2.373	764.768
101	86.105	106-42-3	Q8	p-Xylene	1.242	1.042	1.105	355.958
102	87.276	2216-34-4	I9	4-Methyloctane	0.011	0.011	0.008	2.940
103	87.407	3221-61-2	I9	2-Methyloctane	0.014	0.015	0.011	3.853
104	88.272	2216-33-3	I9	3-Methyloctane	0.015	0.015	0.011	4.114
105	88.746		?	Unidentified	0.009	0.009	0.006	2.830
106	88.930	95-47-6	Q8	o-Xylene	0.869	0.714	0.773	249.125
107	89.324		I10	C10 - IsoParaffin - 1	0.035	0.035	0.024	9.468
108	89.913		M9	trans-1,3-Diethylcyclopentane	0.005	0.004	0.004	1.560
109	90.168	14720-74-2	I10	2,2,4-trimethylheptane	0.031	0.030	0.020	8.169
110	91.737	111-84-2	P9	n-Nonane	0.062	0.063	0.046	16.584
111	93.096	98-82-8	Q9	i-Propylbenzene	0.032	0.026	0.025	8.984
112	93.843		?	Unidentified	0.043	0.043	0.029	14.413
113	94.066	15869-87-1	I10	2,2-Dimethyloctane	0.016	0.016	0.011	4.374
114	94.527		?	Unidentified	0.004	0.003	0.411	1.444
115	94.527		?	Unidentified	0.004	0.004	0.003	1.444
116	94.862	15869-89-3	I10	2,5-Dimethyloctane	0.019	0.019	0.013	5.116
117	95.327	2040-95-1	I10	2,7-Dimethyloctane	0.015	0.015	0.010	3.998
118	95.508	2051-30-1	I10	2,4-Dimethyloctane	0.068	0.068	0.045	18.171
119	95.895		I10	2,6-Dimethyloctane	0.020	0.020	0.013	5.383
120	96.555	103-65-1	Q9	n-Propylbenzene	0.249	0.209	0.196	70.985
121	97.401	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.939	0.785	0.738	267.484
122	97.635	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.446	0.374	0.350	126.991
123	98.261	108-67-8	Q9	1,3,5-Trimethylbenzene	0.608	0.507	0.477	173.016
124	98.911	17301-94-8	I10	4-Methylnonane	0.010	0.010	0.007	2.667
125	99.122		?	Unidentified	0.998	0.993	0.662	331.444
126	99.347	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.366	0.300	0.288	104.234
127	99.704		?	Unidentified	0.003	0.003	0.002	1.104
128	99.889	5911-04-6	I10	3-Methylnonane	0.014	0.013	0.009	3.649
129	100.354		?	Unidentified	0.079	0.057	0.048	26.357

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	100.486		?	Unidentified	0.219	0.213	0.133	72.879
131	100.703		I11	C11-Isoparaffin-2	0.117	0.113	0.070	31.207
132	100.980	95-63-6	Q9	1,2,4-Trimethylbenzene	1.887	1.557	1.482	537.379
133	101.167		?	Unidentified	0.148	0.152	0.099	49.063
134	101.289		?	Unidentified	0.085	0.084	0.057	28.354
135	101.553	1678-98-4	M10	i-Butylcyclohexane	0.020	0.018	0.014	5.475
136	102.195		?	Unidentified	0.008	0.008	0.006	2.786
137	102.339	17302-01-1	I10	3-Ethyl-3-methylheptane	0.220	0.213	0.133	58.813
138	102.548		?	Unidentified	0.059	0.057	0.036	19.569
139	102.686	538-93-2	Q10	i-Butylbenzene	0.195	0.165	0.137	55.333
140	102.899	124-18-5	P10	n-Decane	0.042	0.042	0.028	11.236
141	103.201		?	Unidentified	0.058	0.057	0.039	19.391
142	103.689		?	Unidentified	0.008	0.007	0.007	2.795
143	103.854	526-73-8	Q9	1,2,3-Trimethylbenzene	0.357	0.288	0.280	101.644
144	104.204	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.025	0.021	0.018	7.074
145	104.412		I11	C11 Isoparaffin-4	0.030	0.029	0.018	7.968
146	104.619	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.194	0.164	0.137	55.009
147	105.048		J9	Indan	0.167	0.125	0.134	48.420
148	105.648		J10	Indene	1.086	0.814	0.868	314.254
149	106.205		?	Unidentified	0.008	0.007	0.005	2.588
150	106.362		I11	C11-Isoparaffin-7	0.445	0.432	0.269	118.933
151	106.551	141-93-5	Q10	1,3-Diethylbenzene	0.057	0.048	0.040	16.096
152	106.843	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.291	1.084	0.908	365.741
153	107.109	105-05-5	Q10	1,4-Diethylbenzene	0.425	0.356	0.299	120.424
154	107.386	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.182	0.149	0.128	51.507
155	107.623	135-01-3	Q10	1,2-Diethylbenzene	0.106	0.087	0.075	30.062
156	108.086		?	Unidentified	0.111	0.107	0.067	36.719
157	108.237	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.073	0.060	0.051	20.594
158	108.361		?	Unidentified	0.123	0.099	0.096	40.729
159	108.440		?	Unidentified	0.117	0.113	0.070	38.722
160	108.569		I11	C11- Isoparaffin-11	0.860	0.836	0.520	230.181
161	108.749		?	Unidentified	0.291	0.283	0.176	96.728
162	109.173		?	Unidentified	1.032	0.850	0.726	342.565
163	109.398		J10	2-Methylindan	0.158	0.118	0.113	45.732
164	109.745	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.489	0.404	0.344	138.531
165	109.872		?	Unidentified	0.039	0.032	0.027	12.898
166	109.968		?	Unidentified	0.030	0.022	0.021	9.926
167	110.290	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.846	0.686	0.595	239.497
168	110.713		?	Unidentified	0.028	0.025	0.017	9.282
169	110.908	693-61-8	K11	2-Undecene, (E)-	0.071	0.069	0.048	19.099
170	111.042		?	Unidentified	0.161	0.157	0.108	53.412
171	111.313		?	Unidentified	0.138	0.112	0.088	45.861
172	111.414	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.114	0.092	0.080	32.246

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	111.714	1120-21-4	P11	n-Undecane	0.088	0.086	0.053	23.597
174	111.864	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.110	0.089	0.070	31.016
175	111.975		?	Unidentified	0.064	0.052	0.041	21.126
176	112.352		Q10	1,2,4,5-Tetramethylbenzene	0.364	0.296	0.256	102.987
177	112.618	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.498	0.404	0.350	141.055
178	112.825		?	Unidentified	0.012	0.010	0.008	4.127
179	112.958		?	Unidentified	0.017	0.014	0.012	5.787
180	113.132		I12	C12 - IsoParaffin - 1	0.027	0.027	0.015	7.355
181	113.481		?	Unidentified	0.039	0.038	0.021	12.854
182	113.614		?	Unidentified	0.012	0.012	0.007	4.006
183	113.761		Q11	C11 - Aromatic - 3	0.098	0.080	0.063	27.733
184	113.948	874-35-1	H10	5-Methylindan	0.153	0.124	0.109	43.398
185	114.072		Q12	1,2-Di-i-propylbenzene	0.066	0.053	0.038	18.466
186	114.287	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.092	0.074	0.058	25.870
187	114.449		Q11	C11 - Aromatic - 4	0.053	0.043	0.034	14.853
188	114.697	824-22-6	J10	4-Methylindan	0.203	0.165	0.145	57.573
189	114.849	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.058	0.047	0.037	16.408
190	114.944	824-63-5	H10	2-Methylindan	0.153	0.124	0.109	43.236
191	115.147		?	Unidentified	0.018	0.015	0.012	6.016
192	115.259	538-68-1	Q11	n-Pentylbenzene	0.023	0.018	0.014	6.387
193	115.488		Q11	tert-Pentylbenzene	0.091	0.074	0.058	25.596
194	115.800	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.038	0.031	0.024	10.842
195	115.910		Q11	C11 - Aromatic - 7	0.051	0.043	0.032	14.356
196	116.245		I12	C12 - IsoParaffin - 4	0.005	0.004	0.003	1.312
197	116.370	100-18-5	Q12	1,4-Di-i-propylbenzene	0.073	0.059	0.043	20.562
198	116.812	91-20-3	G10	Naphthalene	0.109	0.077	0.080	32.240
199	116.948		J11	4,7-Dimethyl Indane	0.008	0.006	0.005	2.403
200	117.242		J11	1,1-Dimethyl Indane	0.022	0.017	0.014	6.416
201	117.414		J12	Dimethyl Indane - 1	0.009	0.006	0.006	2.471
202	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.013	0.011	0.008	3.785
203	117.894		Q12	1,3-Di-n-propylbenzene	0.056	0.045	0.033	15.718
204	118.006		Q11	C11 - Aromatic - 11	0.031	0.027	0.020	8.794
205	118.559		Q11	C11 - Aromatic - 12	0.019	0.016	0.012	5.268
206	123.439	91-57-6	G11	2-Methylnaphthalene	0.013	0.009	0.009	3.794
207	124.306	90-12-0	G11	1-Methylnaphthalene	0.007	0.005	0.005	2.049
208	130.002		?	Unidentified	0.004	0.003	0.002	1.337

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.553	74-98-6	Propane	0.001	0.001	0.002	0.235
	10.024	106-97-8	n-Butane	0.379	0.473	0.616	99.231
	18.121	109-66-0	n-Pentane	2.987	3.446	3.908	787.160
	35.847	110-54-3	n-Hexane	6.286	6.888	6.887	1663.319
	58.062	142-82-5	n-Heptane	0.502	0.530	0.473	133.309
	77.871	111-65-9	n-Octane	0.144	0.148	0.119	38.212
	91.737	111-84-2	n-Nonane	0.062	0.063	0.046	16.584
	102.899	124-18-5	n-Decane	0.042	0.042	0.028	11.236
	111.714	1120-21-4	n-Undecane	0.088	0.086	0.053	23.597
I-Paraffins	8.810	75-28-5	i-Butane	0.035	0.045	0.056	9.068
	10.637	463-82-1	2,2-Dimethylpropane	0.040	0.048	0.052	10.455
	15.090	78-78-4	i-Pentane	10.707	12.485	14.010	2821.802
	23.096	75-83-2	2,2-Dimethylbutane	0.612	0.681	0.671	161.972
	28.339	79-29-8	2,3-Dimethylbutane	0.857	0.936	0.938	226.672
	29.427	107-83-5	2-Methylpentane	3.627	4.012	3.973	959.623
	32.083	96-14-0	3-Methylpentane	3.205	3.486	3.511	847.965
	42.240	108-08-7	2,4-Dimethylpentane	0.582	0.625	0.548	154.532
	42.784	464-06-2	2,2,3-Trimethylbutane	0.064	0.067	0.060	17.052
	50.679	591-76-4	2-Methylhexane	1.937	2.062	1.825	514.592
	52.502	589-34-4	3-Methylhexane	0.724	0.762	0.682	192.398
	55.260	540-84-1	2,2,4-Trimethylpentane	13.971	14.589	11.546	3718.827
	62.852	590-73-8	2,2-Dimethylhexane	0.016	0.016	0.013	4.183
	64.953	564-02-3	2,2,3-Trimethylpentane	0.277	0.279	0.229	73.640
	65.180	592-13-2	2,5-Dimethylhexane	0.748	0.780	0.619	199.218
	65.518	589-43-5	2,4-Dimethylhexane	0.620	0.640	0.513	165.139
	66.745	563-16-6	3,3-Dimethylhexane	0.011	0.011	0.009	2.828
	68.484	565-75-3	2,3,4-Trimethylpentane	1.267	1.273	1.047	337.123
	69.156	560-21-4	2,3,3-Trimethylpentane	0.944	0.939	0.780	251.324
	70.796	584-94-1	2,3-Dimethylhexane	0.277	0.281	0.229	73.630
	72.048	592-27-8	2-Methylheptane	0.092	0.095	0.076	24.474
	72.309	589-53-7	4-Methylheptane	0.056	0.057	0.046	14.917
	73.364	589-81-1	3-Methylheptane	0.086	0.088	0.071	22.762
	73.563	619-99-8	3-Ethylhexane	0.046	0.047	0.038	12.239
	75.251	3522-94-9	2,2,5-Trimethylhexane	0.294	0.300	0.216	78.349
	80.355	1069-53-0	2,3,5-Trimethylhexane	0.043	0.043	0.032	11.415
	81.522	1071-26-7	2,4-Dimethylheptane	0.012	0.013	0.009	3.281
	82.478	1072-05-5	2,6-Dimethylheptane	0.018	0.018	0.013	4.765
	83.408		2,5-Dimethylheptane	0.028	0.029	0.021	7.530
	87.276	2216-34-4	4-Methyloctane	0.011	0.011	0.008	2.940
	87.407	3221-61-2	2-Methyloctane	0.014	0.015	0.011	3.853
	88.272	2216-33-3	3-Methyloctane	0.015	0.015	0.011	4.114
	89.324		C10 - IsoParaffin - 1	0.035	0.035	0.024	9.468
	90.16814720-74-2		2,2,4-trimethylheptane	0.031	0.030	0.020	8.169
	94.06615869-87-1		2,2-Dimethyloctane	0.016	0.016	0.011	4.374
	94.86215869-89-3		2,5-Dimethyloctane	0.019	0.019	0.013	5.116
	95.327	2040-95-1	2,7-Dimethyloctane	0.015	0.015	0.010	3.998

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	95.508	2051-30-1	2,4-Dimethyloctane	0.068	0.068	0.045	18.171
	95.895		2,6-Dimethyloctane	0.020	0.020	0.013	5.383
	98.911	17301-94-8	4-Methylnonane	0.010	0.010	0.007	2.667
	99.889	5911-04-6	3-Methylnonane	0.014	0.013	0.009	3.649
	100.703		C11-Isoparaffin-2	0.117	0.113	0.070	31.207
	102.339	17302-01-1	3-Ethyl-3-methylheptane	0.220	0.213	0.133	58.813
	104.412		C11 Isoparaffin-4	0.030	0.029	0.018	7.968
	106.362		C11-Isoparaffin-7	0.445	0.432	0.269	118.933
	108.569		C11- Isoparaffin-11	0.860	0.836	0.520	230.181
	113.132		C12 - IsoParaffin - 1	0.027	0.027	0.015	7.355
	116.245		C12 - IsoParaffin - 4	0.005	0.004	0.003	1.312
Aromatics							
Mono-Aromatics	45.641	71-42-3	Benzene	0.652	0.536	0.788	190.432
	69.030	108-88-3	Toluene	5.884	4.903	6.029	1699.030
	84.734	100-41-4	Ethylbenzene	1.104	0.920	0.982	316.388
	85.959	108-38-3	m-Xylene	2.669	2.231	2.373	764.768
	86.105	106-42-3	p-Xylene	1.242	1.042	1.105	355.958
	88.930	95-47-6	o-Xylene	0.869	0.714	0.773	249.125
	93.096	98-82-8	i-Propylbenzene	0.032	0.026	0.025	8.984
	96.555	103-65-1	n-Propylbenzene	0.249	0.209	0.196	70.985
	97.401	620-14-4	1-Methyl-3-ethylbenzene	0.939	0.785	0.738	267.484
	97.635	622-96-8	1-Methyl-4-ethylbenzene	0.446	0.374	0.350	126.991
	98.261	108-67-8	1,3,5-Trimethylbenzene	0.608	0.507	0.477	173.016
	99.347	611-14-3	1-Methyl-2-ethylbenzene	0.366	0.300	0.288	104.234
	100.980	95-63-6	1,2,4-Trimethylbenzene	1.887	1.557	1.482	537.379
	102.686	538-93-2	i-Butylbenzene	0.195	0.165	0.137	55.333
	103.854	526-73-8	1,2,3-Trimethylbenzene	0.357	0.288	0.280	101.644
	104.204	535-77-3	1-Methyl-3-i-propylbenzene	0.025	0.021	0.018	7.074
	104.619	99-87-6	1-Methyl-4-i-propylbenzene	0.194	0.164	0.137	55.009
	106.551	141-93-5	1,3-Diethylbenzene	0.057	0.048	0.040	16.096
	106.843	1074-43-7	1-Methyl-3-n-propylbenzene	1.291	1.084	0.908	365.741
	107.109	105-05-5	1,4-Diethylbenzene	0.425	0.356	0.299	120.424
	107.386	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.182	0.149	0.128	51.507
	107.623	135-01-3	1,2-Diethylbenzene	0.106	0.087	0.075	30.062
	108.237	1074-17-5	1-Methyl-2-n-propylbenzene	0.073	0.060	0.051	20.594
	109.745	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.489	0.404	0.344	138.531
	110.290	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.846	0.686	0.595	239.497
	111.414	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.114	0.092	0.080	32.246
	111.864	4218-48-8	1-Ethyl-4-i-propylbenzene	0.110	0.089	0.070	31.016
	112.352		1,2,4,5-Tetramethylbenzene	0.364	0.296	0.256	102.987
	112.618	527-53-7	1,2,3,5-Tetramethylbenzene	0.498	0.404	0.350	141.055
	113.761		C11 - Aromatic - 3	0.098	0.080	0.063	27.733
	114.072		1,2-Di-i-propylbenzene	0.066	0.053	0.038	18.466
	114.287	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.092	0.074	0.058	25.870
	114.449		C11 - Aromatic - 4	0.053	0.043	0.034	14.853
	114.849	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.058	0.047	0.037	16.408

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	115.259	538-68-1	n-Pentylbenzene	0.023	0.018	0.014	6.387
	115.488		tert-Pentylbenzene	0.091	0.074	0.058	25.596
	115.800	577-55-9	1-Methyl-2-n-butylbenzene	0.038	0.031	0.024	10.842
	115.910		C11 - Aromatic - 7	0.051	0.043	0.032	14.356
	116.370	100-18-5	1,4-Di-i-propylbenzene	0.073	0.059	0.043	20.562
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.013	0.011	0.008	3.785
	117.894		1,3-Di-n-propylbenzene	0.056	0.045	0.033	15.718
	118.006		C11 - Aromatic - 11	0.031	0.027	0.020	8.794
	118.559		C11 - Aromatic - 12	0.019	0.016	0.012	5.268
Naphthalenes	116.812	91-20-3	Naphthalene	0.109	0.077	0.080	32.240
	123.439	91-57-6	2-Methylnaphthalene	0.013	0.009	0.009	3.794
	124.306	90-12-0	1-Methylnaphthalene	0.007	0.005	0.005	2.049
Naphtheno/Olefir	113.948	874-35-1	5-Methylindan	0.153	0.124	0.109	43.398
	114.944	824-63-5	2-Methylindan	0.153	0.124	0.109	43.236
Indenes	105.048		Indan	0.167	0.125	0.134	48.420
	105.648		Indene	1.086	0.814	0.868	314.254
	109.398		2-Methylindan	0.158	0.118	0.113	45.732
	114.697	824-22-6	4-Methylindan	0.203	0.165	0.145	57.573
	116.948		4,7-Dimethyl Indane	0.008	0.006	0.005	2.403
	117.242		1,1-Dimethyl Indane	0.022	0.017	0.014	6.416
	117.414		Dimethyl Indane - 1	0.009	0.006	0.006	2.471
Naphthenes							
Mono-Naphthene	27.612	287-92-3	Cyclopentane	1.519	1.472	2.044	411.671
	40.687	96-37-7	Methylcyclopentane	2.831	2.732	3.175	767.258
	47.577	110-82-7	Cyclohexane	2.978	2.764	3.341	807.279
	53.360	1759-58-6	1t,3-Dimethylcyclopentane	0.150	0.145	0.144	40.687
	53.947	2532-58-3	1c,3-Dimethylcyclopentane	0.118	0.115	0.114	32.108
	54.572	822-50-4	1t,2-Dimethylcyclopentane	0.177	0.170	0.170	47.914
	61.523	108-87-2	Methylcyclohexane	0.795	0.746	0.764	215.396
	62.463	4516-69-2	1,1,3-Trimethylcyclopentane	0.016	0.016	0.014	4.465
	64.305	1640-89-7	Ethylcyclopentane	0.028	0.026	0.027	7.559
	66.352	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.015	0.014	0.013	4.144
	67.864	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.012	0.011	0.010	3.129
	73.227		1,3-dimethyl-t-cyclohexane	0.068	0.064	0.057	18.470
	76.533	2207-03-6	1t,3-Dimethylcyclohexane	0.027	0.025	0.022	7.184
	82.177	1678-91-7	Ethylcyclohexane	0.035	0.032	0.029	9.472
	89.913		trans-1,3-Diethylcyclopentane	0.005	0.004	0.004	1.560
	101.553	1678-98-4	i-Butylcyclohexane	0.020	0.018	0.014	5.475
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.623	115-11-7	Isobutene	0.026	0.031	0.043	7.006
	9.664	106-98-9	Butene-1	0.028	0.034	0.047	7.552

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	10.510	624-64-6	t-Butene-2	0.106	0.127	0.179	28.830
	11.252	590-18-1	c-Butene-2	0.119	0.139	0.201	32.379
	16.729	109-67-1	Pentene-1	0.377	0.426	0.508	102.255
	19.239	646-04-8	t-Pentene-2	0.971	1.082	1.307	263.114
	20.272	627-20-3	c-Pentene-2	0.531	0.585	0.715	143.898
	33.459	592-41-6	Hexene-1	0.176	0.187	0.197	47.682
	36.445	13269-52-8	t-Hexene-3	0.295	0.313	0.331	80.091
	36.921	4050-45-7	t-Hexene-2	0.452	0.479	0.508	122.651
	38.749	7688-21-3	c-Hexene-2	0.238	0.248	0.267	64.468
	57.340	14686-14-7	t-Heptene-3	0.018	0.018	0.017	4.826
	110.908	693-61-8	2-Undecene, (E)-	0.071	0.069	0.048	19.099
Iso-Olefins	13.455	563-45-1	3-Methylbutene-1	0.081	0.094	0.110	22.084
	17.582	563-46-2	2-Methylbutene-1	0.589	0.654	0.792	159.588
	20.947	513-35-9	2-Methylbutene-2	1.213	1.323	1.633	328.791
	29.205	691-38-3	4-Methyl-c-pentene-2	0.053	0.057	0.059	14.376
	29.847	674-76-0	4-Methyl-t-pentene-2	0.152	0.163	0.171	41.215
	33.234	763-29-1	2-Methylpentene-1	0.259	0.273	0.290	70.189
	37.412	625-27-4	2-Methylpentene-2	0.392	0.410	0.440	106.242
	37.828	922-62-3	3-Methyl-c-pentene-2	0.298	0.309	0.335	80.887
	40.098	3404-73-7	3,3-Dimethylpentene-1	0.353	0.364	0.340	95.773
	42.538	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.013	0.012	3.408
	46.649	3404-61-3	3-Methylhexene-1	0.013	0.014	0.013	3.607
	47.245	3524-73-0	5-Methylhexene-1	0.082	0.085	0.078	22.121
	49.278	15840-60-5	2-Methyl-c-hexene-3	0.035	0.036	0.033	9.363
	50.273	3404-55-5	4-Methyl-t/c-hexene-2	0.041	0.042	0.039	11.053
	57.685	6094-02-6	2-Methylhexene-1	0.028	0.029	0.027	7.647
	58.555	2738-19-4	2-Methyl-2-hexene	0.007	0.007	0.007	1.965
Naphtheno-Olefir	22.539	1574-41-0	1,3-Cyclopentadiene	0.006	0.007	0.009	1.746
	25.742	142-29-0	Cyclopentene	0.210	0.196	0.290	58.464
	37.045	1120-62-3	3-Methylcyclopentene	0.107	0.101	0.123	28.971
	45.840	693-89-0	1-Methylcyclopentene	0.362	0.336	0.417	100.617
	51.161	110-83-8	Cyclohexene	0.039	0.035	0.045	10.544
Di-Olefins	18.628	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.014	2.801
	21.277	2004-70-8	1t,3-Pentadiene	0.015	0.016	0.021	4.277
	45.435	1528-30-9	C6-Diolefin-1	0.015	0.015	0.017	4.082
Oxygenates	26.912	71-23-8	n-Propanol	0.081	0.073	0.127	15.363
	48.063	71-36-3	n-Butanol	0.051	0.046	0.065	10.479
Unidentified	19.883		Unidentified	0.007	0.008	0.009	2.310
	26.992		Unidentified	0.071	0.077	0.080	23.617
	28.738		Unidentified	0.065	0.064	0.070	21.715
	59.882		Unidentified	0.278	0.280	0.267	92.350
	64.072		Unidentified	0.075	0.073	0.064	24.985

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2A.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Components by Group

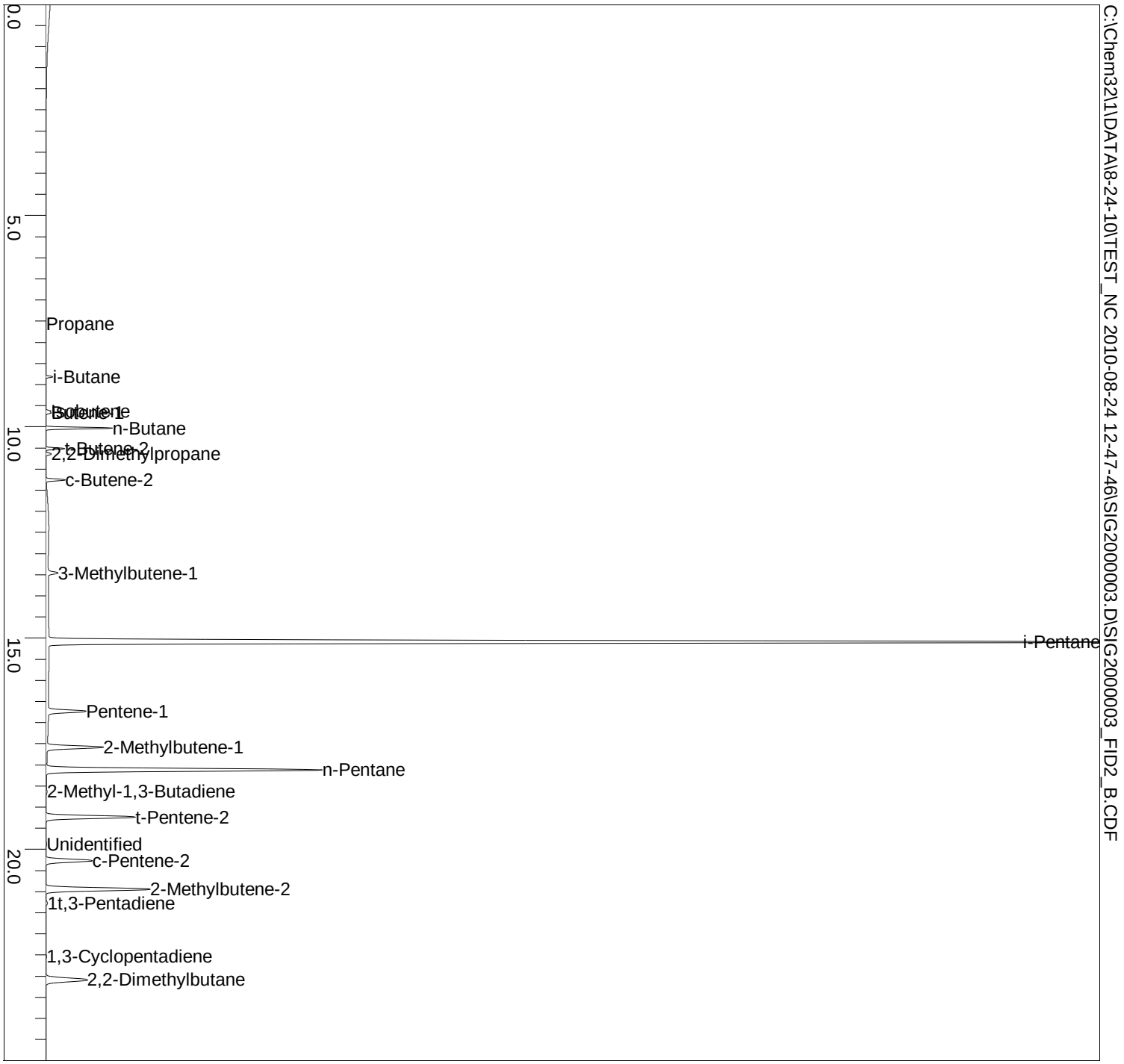
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	72.451		Unidentified	0.018	0.018	0.015	6.056
	74.463		Unidentified	0.011	0.010	0.009	3.534
	78.825		Unidentified	0.007	0.007	0.006	2.319
	85.151		Unidentified	0.005	0.005	0.004	1.742
	88.746		Unidentified	0.009	0.009	0.006	2.830
	93.843		Unidentified	0.043	0.043	0.029	14.413
	94.527		Unidentified	0.004	0.003	0.411	1.444
	94.527		Unidentified	0.004	0.004	0.003	1.444
	99.122		Unidentified	0.998	0.993	0.662	331.444
	99.704		Unidentified	0.003	0.003	0.002	1.104
	100.354		Unidentified	0.079	0.057	0.048	26.357
	100.486		Unidentified	0.219	0.213	0.133	72.879
	101.167		Unidentified	0.148	0.152	0.099	49.063
	101.289		Unidentified	0.085	0.084	0.057	28.354
	102.195		Unidentified	0.008	0.008	0.006	2.786
	102.548		Unidentified	0.059	0.057	0.036	19.569
	103.201		Unidentified	0.058	0.057	0.039	19.391
	103.689		Unidentified	0.008	0.007	0.007	2.795
	106.205		Unidentified	0.008	0.007	0.005	2.588
	108.086		Unidentified	0.111	0.107	0.067	36.719
	108.361		Unidentified	0.123	0.099	0.096	40.729
	108.440		Unidentified	0.117	0.113	0.070	38.722
	108.749		Unidentified	0.291	0.283	0.176	96.728
	109.173		Unidentified	1.032	0.850	0.726	342.565
	109.872		Unidentified	0.039	0.032	0.027	12.898
	109.968		Unidentified	0.030	0.022	0.021	9.926
	110.713		Unidentified	0.028	0.025	0.017	9.282
	111.042		Unidentified	0.161	0.157	0.108	53.412
	111.313		Unidentified	0.138	0.112	0.088	45.861
	111.975		Unidentified	0.064	0.052	0.041	21.126
	112.825		Unidentified	0.012	0.010	0.008	4.127
	112.958		Unidentified	0.017	0.014	0.012	5.787
	113.481		Unidentified	0.039	0.038	0.021	12.854
	113.614		Unidentified	0.012	0.012	0.007	4.006
	115.147		Unidentified	0.018	0.015	0.012	6.016
	130.002		Unidentified	0.004	0.003	0.002	1.337

Plus

Recovery = 100.00

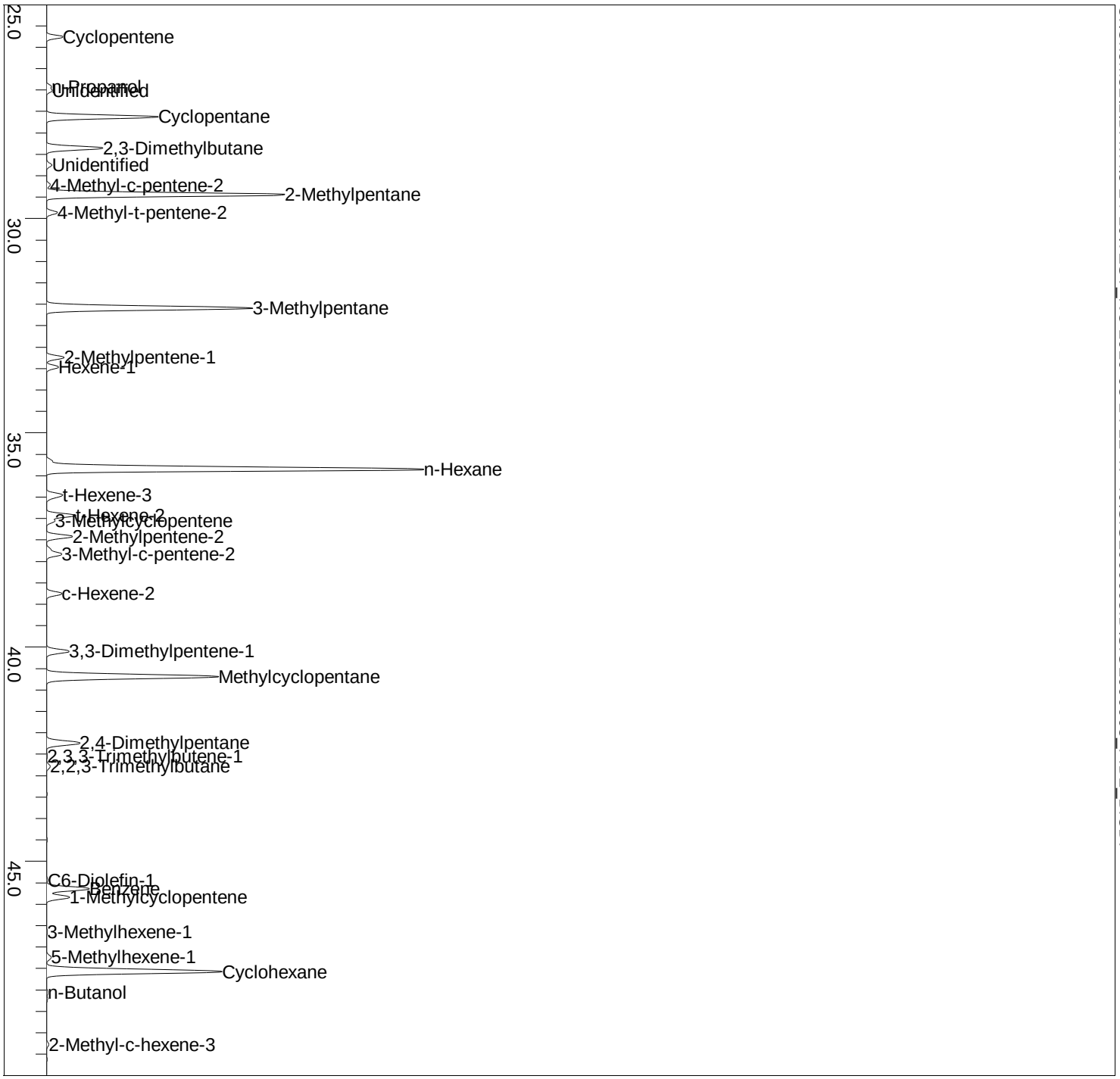
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Sample Chromatogram



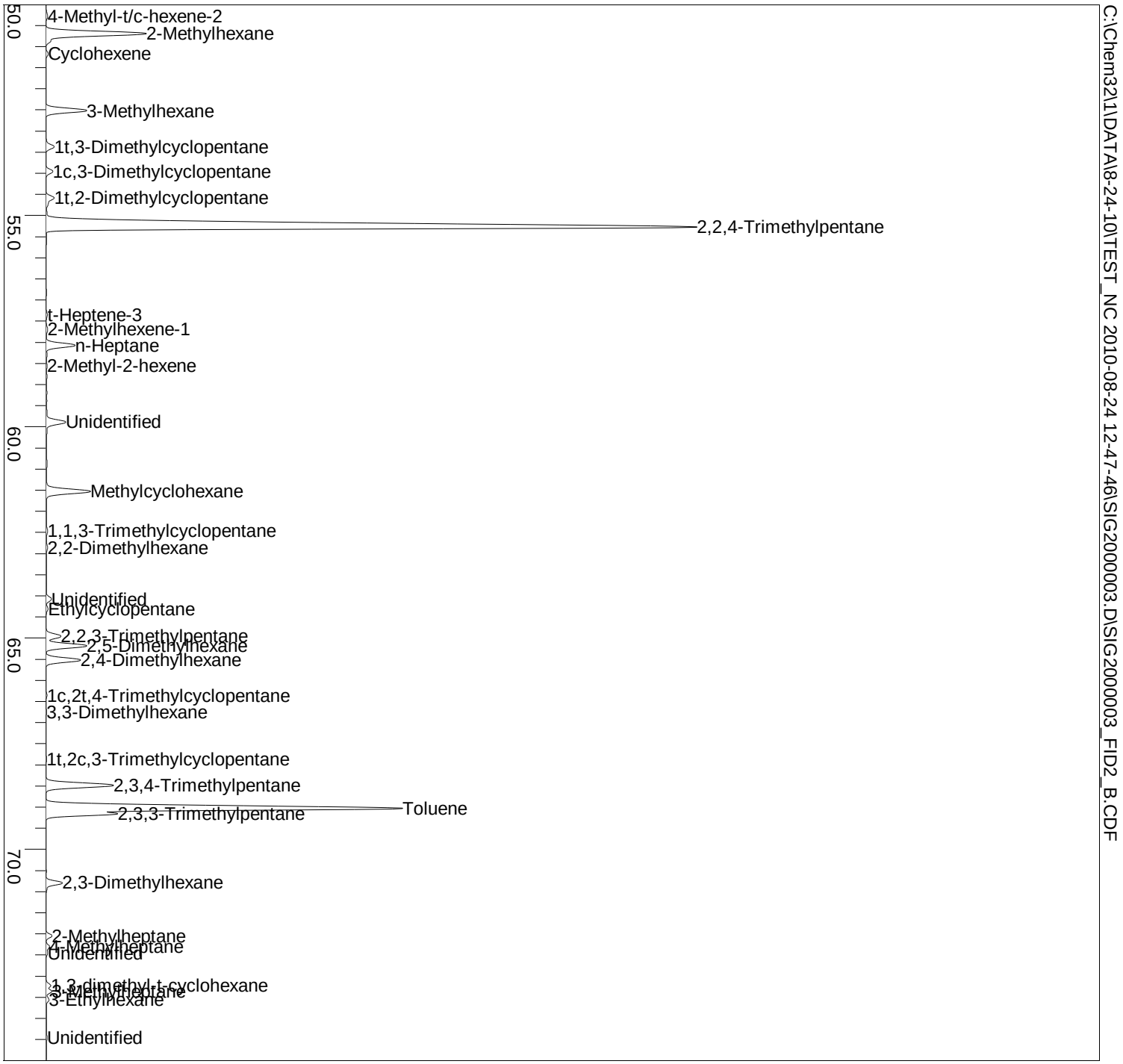
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

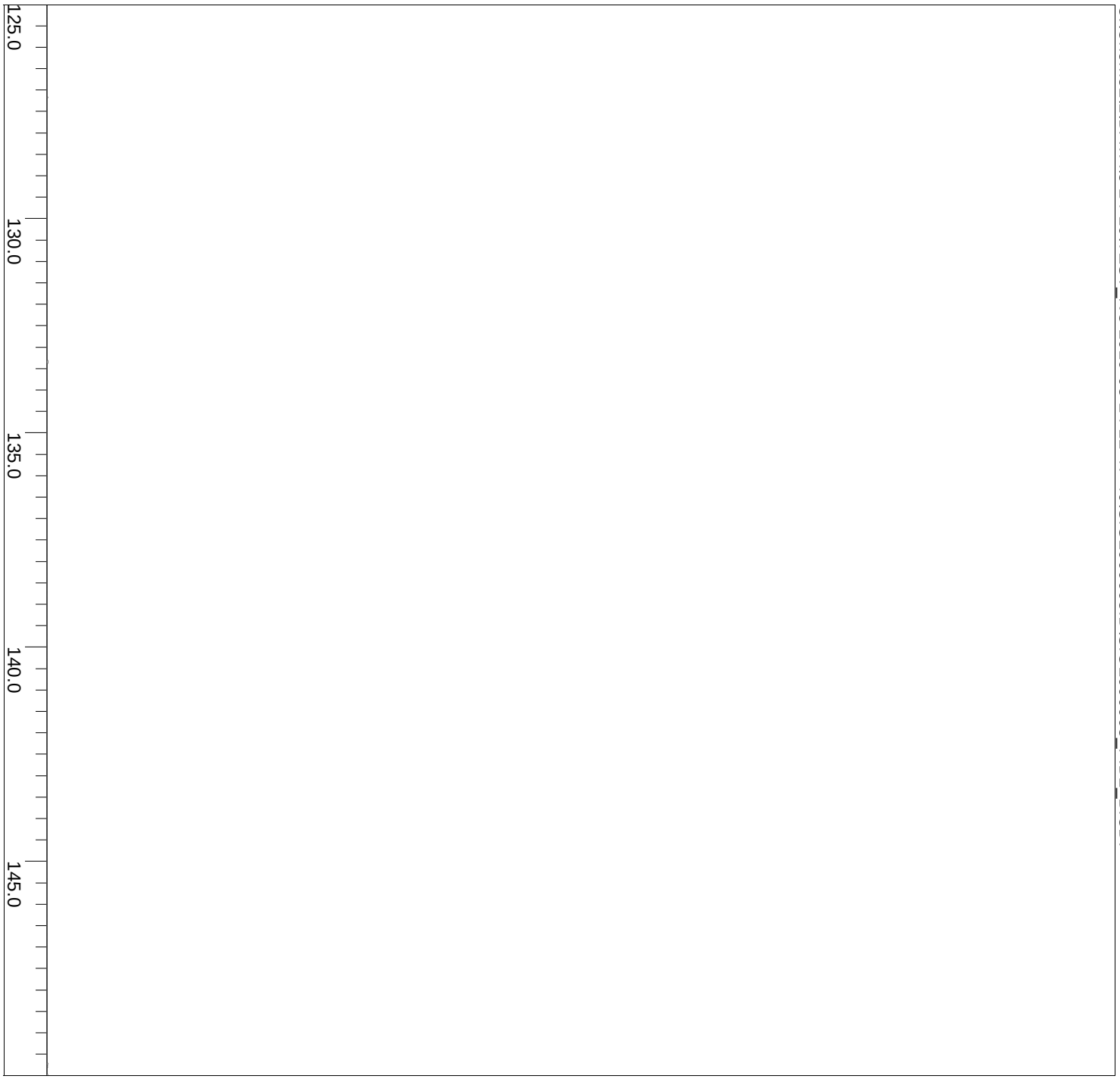
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000003.D\SIG2000003_FID2_B.CDF 24-Aug-10, 17:46:58
Sample: ODDB-91321 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91321
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	15.166	17.813	18.361
I-Paraffins	26.340	30.029	28.307
Aromatics	43.085	36.374	36.975
Mono-Aromatics	42.174	35.661	36.340
Naphthalenes	0.096	0.069	0.064
Naphtheno/Olefino-Benz	0.224	0.185	0.149
Indenes	0.591	0.460	0.422
Naphthenes	6.544	6.325	6.605
Mono-Naphthenes	6.544	6.325	6.605
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.575	8.247	8.786
n-Olefins	3.303	3.690	3.961
Iso-Olefins	3.530	3.851	3.982
Naphtheno-Olefins	0.702	0.665	0.796
Di-Olefins	0.039	0.041	0.047
Oxygenates	0.125	0.115	0.169
Unidentified	1.165	1.097	0.797
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C3	0.079	0.073	0.116
C4	5.216	6.583	7.854
C5	21.676	25.287	26.455
C6	21.269	22.686	21.854
C7	24.293	21.482	22.749
C8	16.388	14.374	13.367
C9	5.486	4.668	3.982
C10	3.365	2.800	2.218
C11	0.902	0.815	0.521
C12	0.164	0.136	0.088

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.002	0.002	0.003
	C4	4.842	6.142	7.292
	C5	3.777	4.428	4.582
	C6	5.710	6.357	5.799
	C7	0.558	0.599	0.487
	C8	0.174	0.182	0.133
	C9	0.049	0.050	0.033
	C10	0.026	0.026	0.016
	C11	0.027	0.027	0.015
I-Paraffins	C4	0.043	0.057	0.065
	C5	13.536	16.041	16.419
	C6	7.755	8.650	7.876
	C7	2.129	2.299	1.860
	C8	2.138	2.241	1.638
	C9	0.254	0.262	0.174
	C10	0.100	0.100	0.059
	C11	0.376	0.371	0.210
	C12	0.008	0.008	0.004
Mono-Aromatics	C6	0.637	0.532	0.713
	C7	19.510	16.520	18.532
	C8	13.890	11.774	11.450
	C9	5.058	4.260	3.683
	C10	2.462	2.062	1.605
	C11	0.462	0.385	0.273
	C12	0.156	0.128	0.084
Naphthalenes	C10	0.079	0.056	0.054
	C11	0.017	0.013	0.011
Naphtheno/Olefino-Benzs	C10	0.224	0.185	0.149
Indenes	C9	0.117	0.089	0.087
	C10	0.473	0.370	0.335
Mono-Naphthenes	C5	0.367	0.362	0.458
	C6	4.460	4.313	4.638
	C7	1.524	1.467	1.359
	C8	0.186	0.177	0.145
	C9	0.007	0.006	0.005
n-Olefins	C4	0.282	0.340	0.440

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.877	2.125	2.343
	C6	1.107	1.188	1.151
	C7	0.017	0.018	0.015
	C11	0.020	0.019	0.012
Iso-Olefins	C5	1.880	2.101	2.346
	C6	1.111	1.185	1.155
	C7	0.539	0.565	0.481
Naphtheno-Olefins	C5	0.213	0.204	0.275
	C6	0.489	0.462	0.521
Di-Olefins	C5	0.025	0.027	0.032
	C7	0.014	0.014	0.015
Oxygenates	C3	0.077	0.071	0.113
	C4	0.047	0.044	0.056

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.53	21.30
5%	32.49	28.95
10%	79.90	79.44
15%	81.10	80.46
20%	93.48	81.47
25%	99.16	94.27
30%	138.85	99.90
35%	145.72	138.61
40%	154.99	145.16
45%	160.31	154.68
50%	190.98	158.41
55%	230.73	177.10
60%	230.82	210.94
65%	230.91	230.80
70%	231.00	230.91
75%	245.77	231.02
80%	279.56	276.00
85%	281.87	281.34
90%	320.98	291.67
95%	350.02	336.40
FBP	403.28	398.03

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.553	74-98-6	P3	Propane	0.002	0.002	0.003	0.390
2	8.809	75-28-5	I4	i-Butane	0.043	0.057	0.065	10.908
3	9.622	115-11-7	K4	Isobutene	0.026	0.032	0.040	6.684
4	9.664	106-98-9	K4	Butene-1	0.028	0.034	0.043	7.220
5	10.023	106-97-8	P4	n-Butane	4.842	6.142	7.292	1214.581
6	10.509	624-64-6	K4	t-Butene-2	0.107	0.130	0.167	27.870
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.060	0.074	0.073	15.132
8	11.251	590-18-1	K4	c-Butene-2	0.121	0.144	0.189	31.554
9	13.453	563-45-1	C5	3-Methylbutene-1	0.083	0.097	0.103	21.504
10	15.091	78-78-4	I5	i-Pentane	13.476	15.966	16.347	3403.446
11	16.727	109-67-1	K5	Pentene-1	0.378	0.433	0.471	98.111
12	17.581	563-46-2	C5	2-Methylbutene-1	0.590	0.666	0.737	153.394
13	18.121	109-66-0	P5	n-Pentane	3.777	4.428	4.582	953.910
14	18.628	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	2.693
15	19.234	646-04-8	K5	t-Pentene-2	0.970	1.098	1.210	251.892
16	19.878		?	Unidentified	0.007	0.008	0.009	2.217
17	20.265	627-20-3	K5	c-Pentene-2	0.530	0.593	0.661	137.684
18	20.949	513-35-9	C5	2-Methylbutene-2	1.207	1.338	1.506	313.560
19	21.271	2004-70-8	E5	1t,3-Pentadiene	0.015	0.016	0.019	3.977
20	22.541	1574-41-0	B5	1,3-Cyclopentadiene	0.006	0.007	0.008	1.675
21	23.086	75-83-2	I6	2,2-Dimethylbutane	0.251	0.283	0.254	63.532
22	25.750	142-29-0	B5	Cyclopentene	0.207	0.197	0.266	55.409
23	26.904	71-23-8	X3	n-Propanol	0.077	0.071	0.113	14.067
24	26.992		?	Unidentified	0.070	0.077	0.073	22.337
25	27.607	287-92-3	M5	Cyclopentane	0.367	0.362	0.458	95.385
26	28.341	79-29-8	I6	2,3-Dimethylbutane	0.804	0.892	0.817	203.889
27	28.735		?	Unidentified	0.063	0.062	0.062	19.922
28	29.196	691-38-3	C6	4-Methyl-c-pentene-2	0.052	0.056	0.054	13.440
29	29.430	107-83-5	I6	2-Methylpentane	3.651	4.104	3.708	925.860
30	29.838	674-76-0	C6	4-Methyl-t-pentene-2	0.147	0.160	0.153	38.256
31	32.081	96-14-0	I6	3-Methylpentane	3.049	3.370	3.097	773.214
32	33.235	763-29-1	C6	2-Methylpentene-1	0.250	0.268	0.260	64.935
33	33.459	592-41-6	K6	Hexene-1	0.169	0.183	0.176	43.925
34	35.835	110-54-3	P6	n-Hexane	5.710	6.357	5.799	1447.834
35	36.437	13269-52-8	K6	t-Hexene-3	0.283	0.305	0.294	73.510
36	36.916	4050-45-7	K6	t-Hexene-2	0.428	0.460	0.445	111.062
37	37.052	1120-62-3	B6	3-Methylcyclopentene	0.109	0.105	0.116	28.297
38	37.411	625-27-4	C6	2-Methylpentene-2	0.376	0.399	0.391	97.588
39	37.821	922-62-3	C6	3-Methyl-c-pentene-2	0.286	0.301	0.297	74.313
40	38.749	7688-21-3	K6	c-Hexene-2	0.227	0.241	0.236	59.038
41	40.087	3404-73-7	C7	3,3-Dimethylpentene-1	0.338	0.353	0.301	87.687
42	40.684	96-37-7	M6	Methylcyclopentane	2.852	2.796	2.965	740.776
43	42.234	108-08-7	I7	2,4-Dimethylpentane	0.456	0.497	0.398	115.963

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.536	594-56-9	C7	2,3,3-Trimethylbutene-1	0.010	0.010	0.009	2.522
45	42.782	464-06-2	I7	2,2,3-Trimethylbutane	0.053	0.057	0.047	13.584
46	45.426	1528-30-9	E7	C6-Diolefin-1	0.014	0.014	0.015	3.691
47	45.637	71-42-3	Q6	Benzene	0.637	0.532	0.713	178.108
48	45.836	693-89-0	B6	1-Methylcyclopentene	0.344	0.324	0.366	91.415
49	46.642	3404-61-3	C7	3-Methylhexene-1	0.012	0.013	0.011	3.208
50	47.234	3524-73-0	C7	5-Methylhexene-1	0.076	0.081	0.068	19.858
51	47.560	110-82-7	M6	Cyclohexane	1.609	1.517	1.673	417.909
52	48.060	71-36-3	X4	n-Butanol	0.047	0.044	0.056	9.334
53	49.272	15840-60-5	C7	2-Methyl-c-hexene-3	0.033	0.034	0.029	8.463
54	50.266	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.038	0.040	0.034	9.955
55	50.663	591-76-4	I7	2-Methylhexane	1.013	1.096	0.885	257.982
56	50.840		?	Unidentified	0.065	0.069	0.059	20.803
57	51.155	110-83-8	B6	Cyclohexene	0.036	0.033	0.039	9.472
58	52.493	589-34-4	I7	3-Methylhexane	0.607	0.649	0.530	154.584
59	53.354	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.163	0.160	0.145	42.386
60	53.940	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.132	0.130	0.118	34.376
61	54.562	822-50-4	M7	1t,2-Dimethylcyclopentane	0.187	0.182	0.166	48.511
62	55.147	540-84-1	I8	2,2,4-Trimethylpentane	1.008	1.069	0.772	257.064
63	57.332	14686-14-7	K7	t-Heptene-3	0.017	0.018	0.015	4.363
64	57.681	6094-02-6	C7	2-Methylhexene-1	0.027	0.028	0.024	6.925
65	58.057	142-82-5	P7	n-Heptane	0.558	0.599	0.487	142.091
66	58.548	2738-19-4	C7	2-Methyl-2-hexene	0.006	0.006	0.005	1.512
67	61.520	108-87-2	M7	Methylcyclohexane	1.007	0.961	0.898	261.594
68	62.459	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.021	0.021	0.016	5.446
69	62.848	590-73-8	I8	2,2-Dimethylhexane	0.017	0.018	0.013	4.369
70	64.301	1640-89-7	M7	Ethylcyclopentane	0.035	0.034	0.031	9.101
71	64.946	564-02-3	I8	2,2,3-Trimethylpentane	0.047	0.048	0.036	11.955
72	65.169	592-13-2	I8	2,5-Dimethylhexane	0.136	0.144	0.104	34.691
73	65.507	589-43-5	I8	2,4-Dimethylhexane	0.143	0.150	0.110	36.524
74	66.347	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.019	0.019	0.015	4.998
75	66.743	563-16-6	I8	3,3-Dimethylhexane	0.012	0.013	0.009	3.092
76	67.864	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.015	0.014	0.012	3.904
77	68.483	565-75-3	I8	2,3,4-Trimethylpentane	0.352	0.359	0.270	89.806
78	69.119	108-88-3	Q7	Toluene	19.510	16.520	18.532	5398.904
79	70.795	584-94-1	I8	2,3-Dimethylhexane	0.110	0.113	0.084	28.064
80	72.048	592-27-8	I8	2-Methylheptane	0.103	0.109	0.079	26.387
81	72.303	589-53-7	I8	4-Methylheptane	0.060	0.062	0.046	15.241
82	73.225		M8	1,3-dimethyl-t-cyclohexane	0.087	0.083	0.068	22.674
83	73.361	589-81-1	I8	3-Methylheptane	0.094	0.098	0.072	24.015
84	73.563	619-99-8	I8	3-Ethylhexane	0.056	0.057	0.043	14.257
85	74.459		?	Unidentified	0.013	0.012	0.010	4.134
86	75.247	3522-94-9	I9	2,2,5-Trimethylhexane	0.143	0.148	0.097	36.462

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	76.530		?	Unidentified	0.028	0.026	0.022	8.891
88	77.869	111-65-9	P8	n-Octane	0.174	0.182	0.133	44.393
89	80.353	1069-53-0	I9	2,3,5-Trimethylhexane	0.021	0.021	0.014	5.275
90	81.522	1071-26-7	I9	2,4-Dimethylheptane	0.009	0.010	0.006	2.354
91	82.174	1678-91-7	M8	Ethylcyclohexane	0.043	0.040	0.034	11.217
92	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.015	0.016	0.010	3.844
93	82.976		?	Unidentified	0.006	0.006	0.005	1.855
94	83.409		I9	2,5-Dimethylheptane	0.020	0.021	0.014	5.170
95	84.745	100-41-4	Q8	Ethylbenzene	2.658	2.251	2.191	729.994
96	85.989	108-38-3	Q8	m-Xylene	6.429	5.461	5.300	1765.617
97	86.130	106-42-3	Q8	p-Xylene	3.031	2.584	2.499	832.419
98	87.277	2216-34-4	I9	4-Methyloctane	0.013	0.013	0.009	3.221
99	87.408	3221-61-2	I9	2-Methyloctane	0.017	0.017	0.011	4.258
100	88.271	2216-33-3	I9	3-Methyloctane	0.017	0.018	0.012	4.407
101	88.938	95-47-6	Q8	o-Xylene	1.771	1.477	1.460	486.459
102	89.322		I10	C10 - IsoParaffin - 1	0.015	0.015	0.009	3.722
103	89.911		M9	trans-1,3-Diethylcyclopentane	0.007	0.006	0.005	1.877
104	90.171	14720-74-2	I10	2,2,4-trimethylheptane	0.016	0.016	0.010	4.036
105	91.746	111-84-2	P9	n-Nonane	0.049	0.050	0.033	12.527
106	93.095	98-82-8	Q9	i-Propylbenzene	0.035	0.030	0.025	9.521
107	95.505	2051-30-1	I10	2,4-Dimethyloctane	0.006	0.006	0.004	1.633
108	96.554	103-65-1	Q9	n-Propylbenzene	0.249	0.212	0.181	67.984
109	97.400	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.988	0.839	0.719	269.512
110	97.634	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.472	0.402	0.343	128.663
111	98.260	108-67-8	Q9	1,3,5-Trimethylbenzene	0.626	0.531	0.456	170.850
112	98.907	17301-94-8	I10	4-Methylnonane	0.009	0.009	0.006	2.307
113	99.114		?	Unidentified	0.135	0.136	0.083	42.887
114	99.345	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.384	0.320	0.280	104.820
115	99.886	5911-04-6	I10	3-Methylnonane	0.015	0.015	0.009	3.896
116	100.352		?	Unidentified	0.012	0.009	0.007	3.889
117	100.483		?	Unidentified	0.034	0.034	0.019	10.877
118	100.697		I11	C11-Isoparaffin-2	0.019	0.019	0.011	4.922
119	100.977	95-63-6	Q9	1,2,4-Trimethylbenzene	1.950	1.634	1.420	532.008
120	101.163		?	Unidentified	0.026	0.028	0.016	8.382
121	101.286		?	Unidentified	0.014	0.014	0.009	4.511
122	102.335	17302-01-1	I10	3-Ethyl-3-methylheptane	0.039	0.039	0.022	10.039
123	102.625	538-93-2	Q10	i-Butylbenzene	0.065	0.056	0.042	17.548
124	102.804	124-18-5	P10	n-Decane	0.026	0.026	0.016	6.699
125	102.900		?	Unidentified	0.027	0.023	0.018	8.576
126	103.198		?	Unidentified	0.011	0.011	0.006	3.587
127	103.851	526-73-8	Q9	1,2,3-Trimethylbenzene	0.355	0.291	0.259	96.871
128	104.242	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.009	0.008	0.006	2.572
129	104.617	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.042	0.036	0.028	11.524

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	105.044		J9	Indan	0.117	0.089	0.087	32.576
131	105.638		J10	Indene	0.271	0.206	0.201	75.147
132	106.354		I11	C11-Isoparaffin-7	0.115	0.113	0.064	29.383
133	106.547	141-93-5	Q10	1,3-Diethylbenzene	0.051	0.043	0.033	13.806
134	106.825	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.433	0.369	0.282	117.435
135	107.163	105-05-5	Q10	1,4-Diethylbenzene	0.164	0.139	0.107	44.426
136	107.261	104-51-8	Q10	n-Butylbenzene	0.030	0.025	0.019	8.061
137	107.382	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.150	0.125	0.098	40.765
138	107.628	135-01-3	Q10	1,2-Diethylbenzene	0.032	0.027	0.021	8.819
139	108.080		?	Unidentified	0.030	0.029	0.017	9.489
140	108.233	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.058	0.049	0.038	15.841
141	108.354		?	Unidentified	0.034	0.034	0.020	10.972
142	108.435		?	Unidentified	0.032	0.032	0.018	10.312
143	108.562		I11	C11- Isoparaffin-11	0.242	0.239	0.136	62.077
144	108.745		?	Unidentified	0.083	0.082	0.046	26.352
145	109.079	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.119	0.100	0.078	32.365
146	109.168		?	Unidentified	0.344	0.288	0.225	109.572
147	109.395		J10	2-Methylindan	0.051	0.039	0.034	14.229
148	109.741	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.330	0.277	0.215	89.447
149	110.286	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.252	0.208	0.165	68.481
150	110.710		?	Unidentified	0.007	0.006	0.004	2.286
151	110.905	693-61-8	K11	2-Undecene, (E)-	0.020	0.019	0.012	5.034
152	111.039		?	Unidentified	0.025	0.025	0.016	7.993
153	111.195		Q11	1-Methyl-4-t-butylbenzene	0.038	0.032	0.022	10.136
154	111.314		?	Unidentified	0.039	0.032	0.023	12.538
155	111.413	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.095	0.078	0.062	25.748
156	111.710	1120-21-4	P11	n-Undecane	0.027	0.027	0.015	7.046
157	111.864	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.034	0.028	0.020	9.070
158	111.973		?	Unidentified	0.016	0.013	0.010	5.202
159	112.349		Q10	1,2,4,5-Tetramethylbenzene	0.265	0.219	0.173	71.832
160	112.614	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.367	0.302	0.239	99.520
161	113.132		I12	C12 - IsoParaffin - 1	0.008	0.008	0.004	2.058
162	113.482		?	Unidentified	0.016	0.016	0.008	4.955
163	113.755		Q11	C11 - Aromatic - 3	0.053	0.044	0.031	14.402
164	113.946	874-35-1	H10	5-Methylindan	0.109	0.090	0.072	29.604
165	114.071		Q12	1,2-Di-i-propylbenzene	0.047	0.038	0.025	12.530
166	114.285	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.066	0.055	0.039	17.931
167	114.444		Q11	C11 - Aromatic - 4	0.035	0.029	0.021	9.434
168	114.695	824-22-6	J10	4-Methylindan	0.151	0.125	0.100	41.010
169	114.847	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.043	0.035	0.025	11.552
170	114.942	824-63-5	H10	2-Methylindan	0.115	0.095	0.076	31.306
171	115.146		?	Unidentified	0.012	0.012	0.006	3.874
172	115.258	538-68-1	Q11	n-Pentylbenzene	0.017	0.014	0.010	4.471

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	115.487		Q11	tert-Pentylbenzene	0.069	0.057	0.041	18.737
174	115.799	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.030	0.025	0.018	8.150
175	115.908		Q11	C11 - Aromatic - 6	0.039	0.034	0.023	10.674
176	116.368	100-18-5	Q12	1,4-Di-i-propylbenzene	0.054	0.044	0.029	14.492
177	116.811	91-20-3	G10	Naphthalene	0.079	0.056	0.054	22.369
178	117.241		?	Unidentified	0.010	0.008	0.005	3.091
179	117.593	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.013	0.011	0.007	3.552
180	117.894		Q12	1,3-Di-n-propylbenzene	0.042	0.035	0.023	11.349
181	118.005		Q11	C11 - Aromatic - 11	0.024	0.020	0.014	6.397
182	118.559		Q11	C11 - Aromatic - 12	0.014	0.012	0.008	3.792
183	123.439	91-57-6	G11	2-Methylnaphthalene	0.011	0.008	0.007	3.197
184	124.306	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.004	1.712
185	130.003		?	Unidentified	0.003	0.003	0.002	1.090

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.553	74-98-6	Propane	0.002	0.002	0.003	0.390
	10.023	106-97-8	n-Butane	4.842	6.142	7.292	1214.581
	18.121	109-66-0	n-Pentane	3.777	4.428	4.582	953.910
	35.835	110-54-3	n-Hexane	5.710	6.357	5.799	1447.834
	58.057	142-82-5	n-Heptane	0.558	0.599	0.487	142.091
	77.869	111-65-9	n-Octane	0.174	0.182	0.133	44.393
	91.746	111-84-2	n-Nonane	0.049	0.050	0.033	12.527
	102.804	124-18-5	n-Decane	0.026	0.026	0.016	6.699
	111.710	1120-21-4	n-Undecane	0.027	0.027	0.015	7.046
I-Paraffins	8.809	75-28-5	i-Butane	0.043	0.057	0.065	10.908
	10.637	463-82-1	2,2-Dimethylpropane	0.060	0.074	0.073	15.132
	15.091	78-78-4	i-Pentane	13.476	15.966	16.347	3403.446
	23.086	75-83-2	2,2-Dimethylbutane	0.251	0.283	0.254	63.532
	28.341	79-29-8	2,3-Dimethylbutane	0.804	0.892	0.817	203.889
	29.430	107-83-5	2-Methylpentane	3.651	4.104	3.708	925.860
	32.081	96-14-0	3-Methylpentane	3.049	3.370	3.097	773.214
	42.234	108-08-7	2,4-Dimethylpentane	0.456	0.497	0.398	115.963
	42.782	464-06-2	2,2,3-Trimethylbutane	0.053	0.057	0.047	13.584
	50.663	591-76-4	2-Methylhexane	1.013	1.096	0.885	257.982
	52.493	589-34-4	3-Methylhexane	0.607	0.649	0.530	154.584
	55.147	540-84-1	2,2,4-Trimethylpentane	1.008	1.069	0.772	257.064
	62.848	590-73-8	2,2-Dimethylhexane	0.017	0.018	0.013	4.369
	64.946	564-02-3	2,2,3-Trimethylpentane	0.047	0.048	0.036	11.955
	65.169	592-13-2	2,5-Dimethylhexane	0.136	0.144	0.104	34.691
	65.507	589-43-5	2,4-Dimethylhexane	0.143	0.150	0.110	36.524
	66.743	563-16-6	3,3-Dimethylhexane	0.012	0.013	0.009	3.092
	68.483	565-75-3	2,3,4-Trimethylpentane	0.352	0.359	0.270	89.806
	70.795	584-94-1	2,3-Dimethylhexane	0.110	0.113	0.084	28.064
	72.048	592-27-8	2-Methylheptane	0.103	0.109	0.079	26.387
	72.303	589-53-7	4-Methylheptane	0.060	0.062	0.046	15.241
	73.361	589-81-1	3-Methylheptane	0.094	0.098	0.072	24.015
	73.563	619-99-8	3-Ethylhexane	0.056	0.057	0.043	14.257
	75.247	3522-94-9	2,2,5-Trimethylhexane	0.143	0.148	0.097	36.462
	80.353	1069-53-0	2,3,5-Trimethylhexane	0.021	0.021	0.014	5.275
	81.522	1071-26-7	2,4-Dimethylheptane	0.009	0.010	0.006	2.354
	82.476	1072-05-5	2,6-Dimethylheptane	0.015	0.016	0.010	3.844
	83.409		2,5-Dimethylheptane	0.020	0.021	0.014	5.170
	87.277	2216-34-4	4-Methyloctane	0.013	0.013	0.009	3.221
	87.408	3221-61-2	2-Methyloctane	0.017	0.017	0.011	4.258
	88.271	2216-33-3	3-Methyloctane	0.017	0.018	0.012	4.407
	89.322		C10 - IsoParaffin - 1	0.015	0.015	0.009	3.722
	90.171	14720-74-2	2,2,4-trimethylheptane	0.016	0.016	0.010	4.036
	95.505	2051-30-1	2,4-Dimethyloctane	0.006	0.006	0.004	1.633
	98.907	17301-94-8	4-Methylnonane	0.009	0.009	0.006	2.307
	99.886	5911-04-6	3-Methylnonane	0.015	0.015	0.009	3.896
	100.697		C11-Isoparaffin-2	0.019	0.019	0.011	4.922

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	102.335	17302-01-1	3-Ethyl-3-methylheptane	0.039	0.039	0.022	10.039
	106.354		C11-Isoparaffin-7	0.115	0.113	0.064	29.383
	108.562		C11- Isoparaffin-11	0.242	0.239	0.136	62.077
	113.132		C12 - IsoParaffin - 1	0.008	0.008	0.004	2.058
Aromatics							
Mono-Aromatics	45.637	71-42-3	Benzene	0.637	0.532	0.713	178.108
	69.119	108-88-3	Toluene	19.510	16.520	18.532	5398.904
	84.745	100-41-4	Ethylbenzene	2.658	2.251	2.191	729.994
	85.989	108-38-3	m-Xylene	6.429	5.461	5.300	1765.617
	86.130	106-42-3	p-Xylene	3.031	2.584	2.499	832.419
	88.938	95-47-6	o-Xylene	1.771	1.477	1.460	486.459
	93.095	98-82-8	i-Propylbenzene	0.035	0.030	0.025	9.521
	96.554	103-65-1	n-Propylbenzene	0.249	0.212	0.181	67.984
	97.400	620-14-4	1-Methyl-3-ethylbenzene	0.988	0.839	0.719	269.512
	97.634	622-96-8	1-Methyl-4-ethylbenzene	0.472	0.402	0.343	128.663
	98.260	108-67-8	1,3,5-Trimethylbenzene	0.626	0.531	0.456	170.850
	99.345	611-14-3	1-Methyl-2-ethylbenzene	0.384	0.320	0.280	104.820
	100.977	95-63-6	1,2,4-Trimethylbenzene	1.950	1.634	1.420	532.008
	102.625	538-93-2	i-Butylbenzene	0.065	0.056	0.042	17.548
	103.851	526-73-8	1,2,3-Trimethylbenzene	0.355	0.291	0.259	96.871
	104.242	535-77-3	1-Methyl-3-i-propylbenzene	0.009	0.008	0.006	2.572
	104.617	99-87-6	1-Methyl-4-i-propylbenzene	0.042	0.036	0.028	11.524
	106.547	141-93-5	1,3-Diethylbenzene	0.051	0.043	0.033	13.806
	106.825	1074-43-7	1-Methyl-3-n-propylbenzene	0.433	0.369	0.282	117.435
	107.163	105-05-5	1,4-Diethylbenzene	0.164	0.139	0.107	44.426
	107.261	104-51-8	n-Butylbenzene	0.030	0.025	0.019	8.061
	107.382	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.150	0.125	0.098	40.765
	107.628	135-01-3	1,2-Diethylbenzene	0.032	0.027	0.021	8.819
	108.233	1074-17-5	1-Methyl-2-n-propylbenzene	0.058	0.049	0.038	15.841
	109.079	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.119	0.100	0.078	32.365
	109.741	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.330	0.277	0.215	89.447
	110.286	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.252	0.208	0.165	68.481
	111.195		1-Methyl-4-t-butylbenzene	0.038	0.032	0.022	10.136
	111.413	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.095	0.078	0.062	25.748
	111.864	4218-48-8	1-Ethyl-4-i-propylbenzene	0.034	0.028	0.020	9.070
	112.349		1,2,4,5-Tetramethylbenzene	0.265	0.219	0.173	71.832
	112.614	527-53-7	1,2,3,5-Tetramethylbenzene	0.367	0.302	0.239	99.520
	113.755		C11 - Aromatic - 3	0.053	0.044	0.031	14.402
	114.071		1,2-Di-i-propylbenzene	0.047	0.038	0.025	12.530
	114.285	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.066	0.055	0.039	17.931
	114.444		C11 - Aromatic - 4	0.035	0.029	0.021	9.434
	114.847	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.043	0.035	0.025	11.552
	115.258	538-68-1	n-Pentylbenzene	0.017	0.014	0.010	4.471
	115.487		tert-Pentylbenzene	0.069	0.057	0.041	18.737
	115.799	577-55-9	1-Methyl-2-n-butylbenzene	0.030	0.025	0.018	8.150
	115.908		C11 - Aromatic - 6	0.039	0.034	0.023	10.674

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	116.368	100-18-5	1,4-Di-i-propylbenzene	0.054	0.044	0.029	14.492
	117.593	7364-19-4	1t-Butyl-4-ethylbenzene	0.013	0.011	0.007	3.552
	117.894		1,3-Di-n-propylbenzene	0.042	0.035	0.023	11.349
	118.005		C11 - Aromatic - 11	0.024	0.020	0.014	6.397
	118.559		C11 - Aromatic - 12	0.014	0.012	0.008	3.792
Naphthalenes	116.811	91-20-3	Naphthalene	0.079	0.056	0.054	22.369
	123.439	91-57-6	2-Methylnaphthalene	0.011	0.008	0.007	3.197
	124.306	90-12-0	1-Methylnaphthalene	0.006	0.004	0.004	1.712
Naphtheno/Olefir	113.946	874-35-1	5-Methylindan	0.109	0.090	0.072	29.604
	114.942	824-63-5	2-Methylindan	0.115	0.095	0.076	31.306
Indenes	105.044		Indan	0.117	0.089	0.087	32.576
	105.638		Indene	0.271	0.206	0.201	75.147
	109.395		2-Methylindan	0.051	0.039	0.034	14.229
	114.695	824-22-6	4-Methylindan	0.151	0.125	0.100	41.010
Naphthenes							
Mono-Naphthene	27.607	287-92-3	Cyclopentane	0.367	0.362	0.458	95.385
	40.684	96-37-7	Methylcyclopentane	2.852	2.796	2.965	740.776
	47.560	110-82-7	Cyclohexane	1.609	1.517	1.673	417.909
	53.354	1759-58-6	1t,3-Dimethylcyclopentane	0.163	0.160	0.145	42.386
	53.940	2532-58-3	1c,3-Dimethylcyclopentane	0.132	0.130	0.118	34.376
	54.562	822-50-4	1t,2-Dimethylcyclopentane	0.187	0.182	0.166	48.511
	61.520	108-87-2	Methylcyclohexane	1.007	0.961	0.898	261.594
	62.459	4516-69-2	1,1,3-Trimethylcyclopentane	0.021	0.021	0.016	5.446
	64.301	1640-89-7	Ethylcyclopentane	0.035	0.034	0.031	9.101
	66.347	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.019	0.019	0.015	4.998
	67.864	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.015	0.014	0.012	3.904
	73.225		1,3-dimethyl-t-cyclohexane	0.087	0.083	0.068	22.674
	82.174	1678-91-7	Ethylcyclohexane	0.043	0.040	0.034	11.217
	89.911		trans-1,3-Diethylcyclopentane	0.007	0.006	0.005	1.877
Di/Bicyclo-Naphth							
Olefins							
n-Olefins	9.622	115-11-7	Isobutene	0.026	0.032	0.040	6.684
	9.664	106-98-9	Butene-1	0.028	0.034	0.043	7.220
	10.509	624-64-6	t-Butene-2	0.107	0.130	0.167	27.870
	11.251	590-18-1	c-Butene-2	0.121	0.144	0.189	31.554
	16.727	109-67-1	Pentene-1	0.378	0.433	0.471	98.111
	19.234	646-04-8	t-Pentene-2	0.970	1.098	1.210	251.892
	20.265	627-20-3	c-Pentene-2	0.530	0.593	0.661	137.684
	33.459	592-41-6	Hexene-1	0.169	0.183	0.176	43.925
	36.437	13269-52-8	t-Hexene-3	0.283	0.305	0.294	73.510
	36.916	4050-45-7	t-Hexene-2	0.428	0.460	0.445	111.062
	38.749	7688-21-3	c-Hexene-2	0.227	0.241	0.236	59.038

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	57.332	14686-14-7	t-Heptene-3	0.017	0.018	0.015	4.363
	110.905	693-61-8	2-Undecene, (E)-	0.020	0.019	0.012	5.034
Iso-Olefins	13.453	563-45-1	3-Methylbutene-1	0.083	0.097	0.103	21.504
	17.581	563-46-2	2-Methylbutene-1	0.590	0.666	0.737	153.394
	20.949	513-35-9	2-Methylbutene-2	1.207	1.338	1.506	313.560
	29.196	691-38-3	4-Methyl-c-pentene-2	0.052	0.056	0.054	13.440
	29.838	674-76-0	4-Methyl-t-pentene-2	0.147	0.160	0.153	38.256
	33.235	763-29-1	2-Methylpentene-1	0.250	0.268	0.260	64.935
	37.411	625-27-4	2-Methylpentene-2	0.376	0.399	0.391	97.588
	37.821	922-62-3	3-Methyl-c-pentene-2	0.286	0.301	0.297	74.313
	40.087	3404-73-7	3,3-Dimethylpentene-1	0.338	0.353	0.301	87.687
	42.536	594-56-9	2,3,3-Trimethylbutene-1	0.010	0.010	0.009	2.522
	46.642	3404-61-3	3-Methylhexene-1	0.012	0.013	0.011	3.208
	47.234	3524-73-0	5-Methylhexene-1	0.076	0.081	0.068	19.858
	49.272	15840-60-5	2-Methyl-c-hexene-3	0.033	0.034	0.029	8.463
	50.266	3404-55-5	4-Methyl-t/c-hexene-2	0.038	0.040	0.034	9.955
	57.681	6094-02-6	2-Methylhexene-1	0.027	0.028	0.024	6.925
	58.548	2738-19-4	2-Methyl-2-hexene	0.006	0.006	0.005	1.512
Naphtheno-Olefir	22.541	1574-41-0	1,3-Cyclopentadiene	0.006	0.007	0.008	1.675
	25.750	142-29-0	Cyclopentene	0.207	0.197	0.266	55.409
	37.052	1120-62-3	3-Methylcyclopentene	0.109	0.105	0.116	28.297
	45.836	693-89-0	1-Methylcyclopentene	0.344	0.324	0.366	91.415
	51.155	110-83-8	Cyclohexene	0.036	0.033	0.039	9.472
Di-Olefins	18.628	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	2.693
	21.271	2004-70-8	1t,3-Pentadiene	0.015	0.016	0.019	3.977
	45.426	1528-30-9	C6-Diolefin-1	0.014	0.014	0.015	3.691
Oxygenates	26.904	71-23-8	n-Propanol	0.077	0.071	0.113	14.067
	48.060	71-36-3	n-Butanol	0.047	0.044	0.056	9.334
Unidentified	19.878		Unidentified	0.007	0.008	0.009	2.217
	26.992		Unidentified	0.070	0.077	0.073	22.337
	28.735		Unidentified	0.063	0.062	0.062	19.922
	50.840		Unidentified	0.065	0.069	0.059	20.803
	74.459		Unidentified	0.013	0.012	0.010	4.134
	76.530		Unidentified	0.028	0.026	0.022	8.891
	82.976		Unidentified	0.006	0.006	0.005	1.855
	99.114		Unidentified	0.135	0.136	0.083	42.887
	100.352		Unidentified	0.012	0.009	0.007	3.889
	100.483		Unidentified	0.034	0.034	0.019	10.877
	101.163		Unidentified	0.026	0.028	0.016	8.382
	101.286		Unidentified	0.014	0.014	0.009	4.511
	102.900		Unidentified	0.027	0.023	0.018	8.576
	103.198		Unidentified	0.011	0.011	0.006	3.587

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2A.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Components by Group

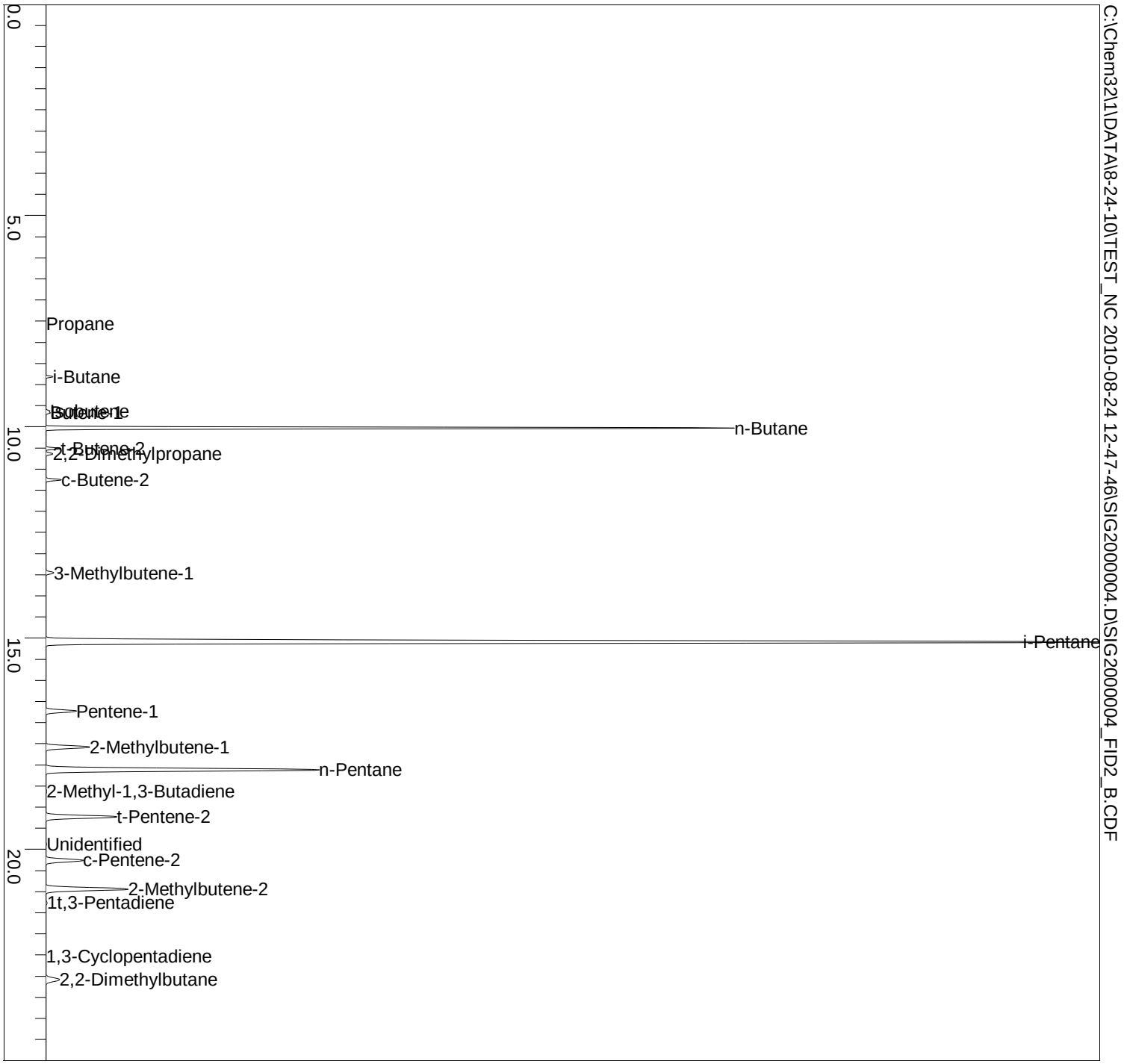
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	108.080		Unidentified	0.030	0.029	0.017	9.489
	108.354		Unidentified	0.034	0.034	0.020	10.972
	108.435		Unidentified	0.032	0.032	0.018	10.312
	108.745		Unidentified	0.083	0.082	0.046	26.352
	109.168		Unidentified	0.344	0.288	0.225	109.572
	110.710		Unidentified	0.007	0.006	0.004	2.286
	111.039		Unidentified	0.025	0.025	0.016	7.993
	111.314		Unidentified	0.039	0.032	0.023	12.538
	111.973		Unidentified	0.016	0.013	0.010	5.202
	113.482		Unidentified	0.016	0.016	0.008	4.955
	115.146		Unidentified	0.012	0.012	0.006	3.874
	117.241		Unidentified	0.010	0.008	0.005	3.091
	130.003		Unidentified	0.003	0.003	0.002	1.090

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2_B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Sample Chromatogram



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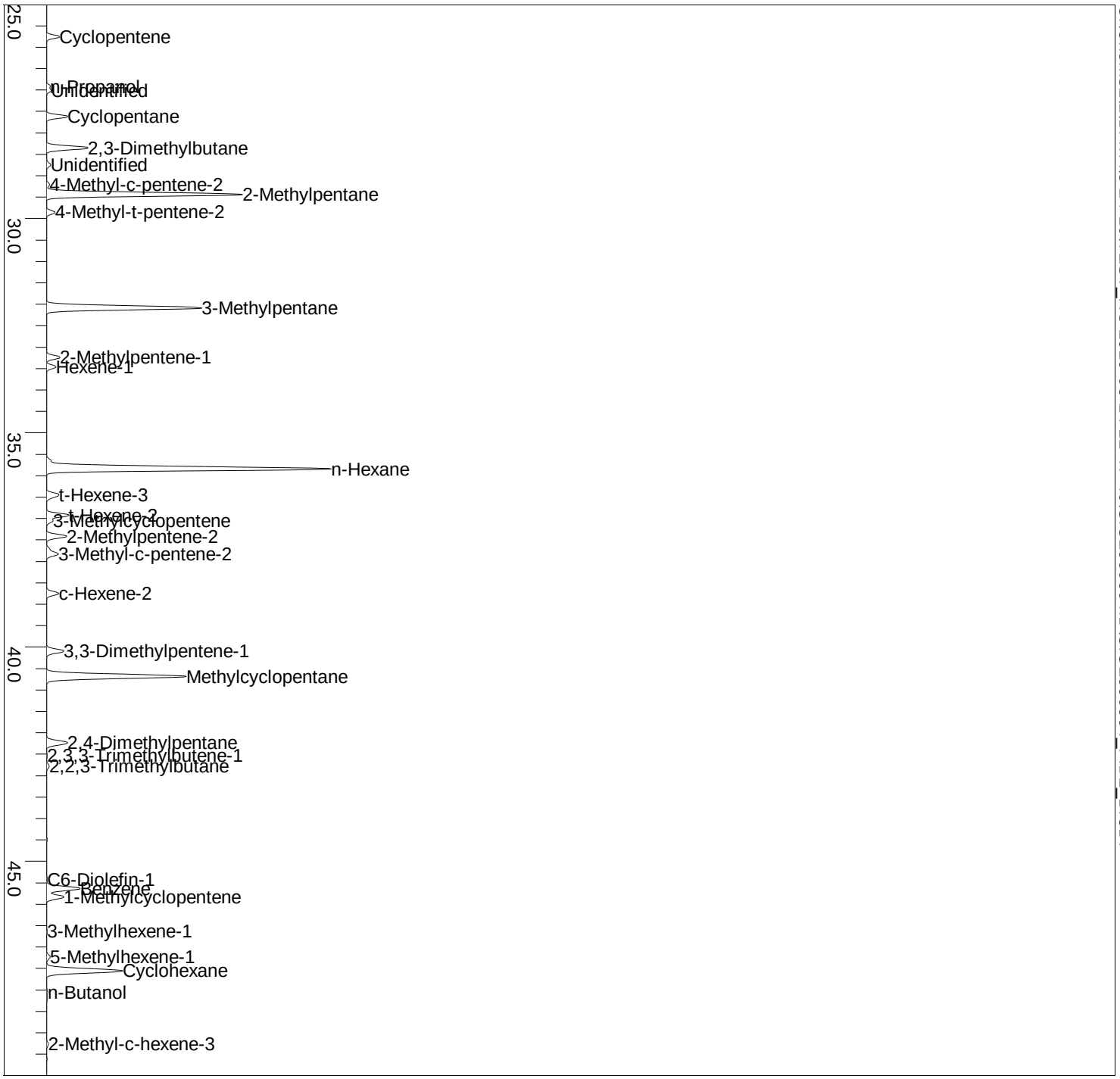
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2_B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

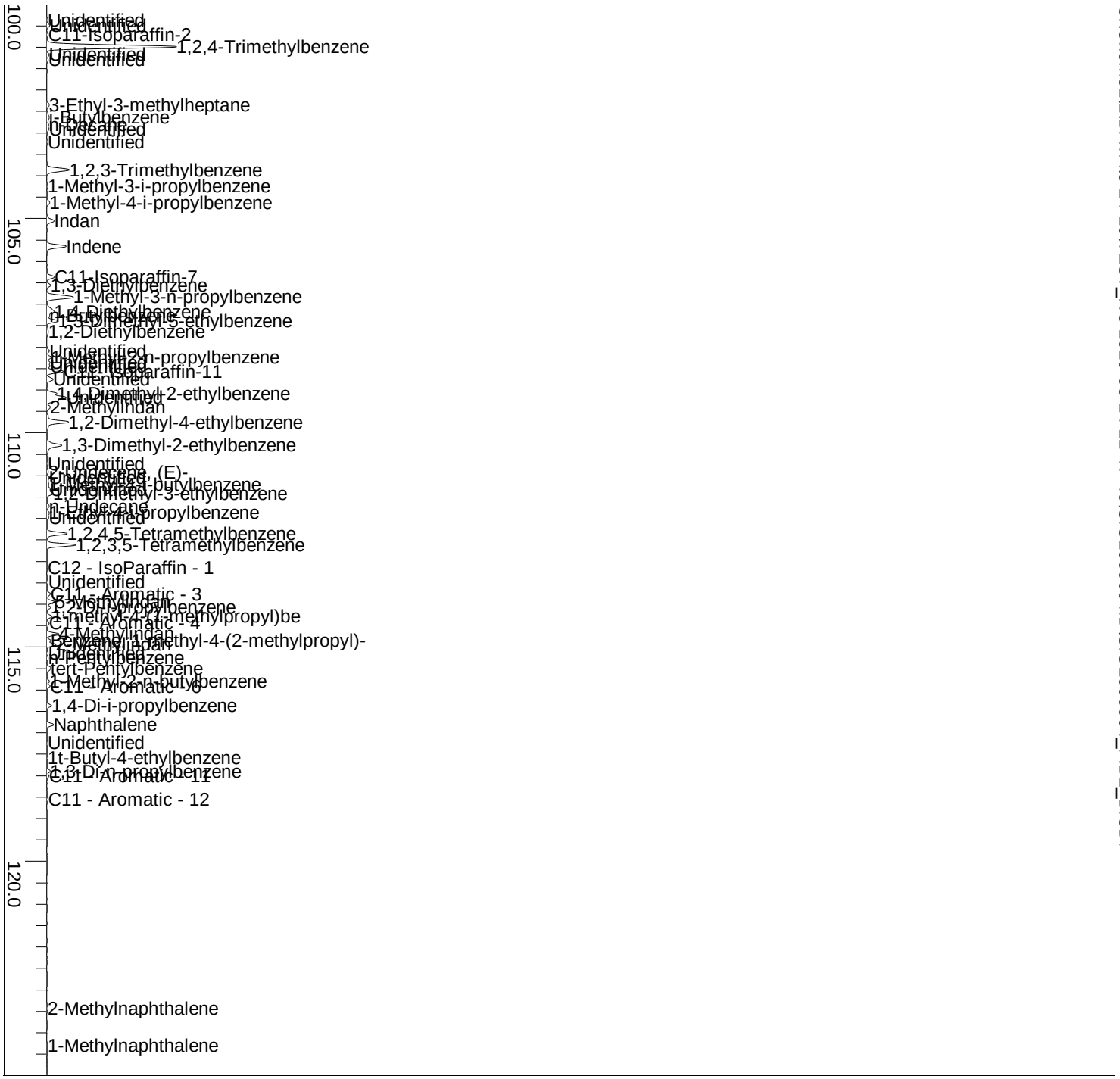
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2_B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000004.D\SIG2000004_FID2_B.CDF 24-Aug-10, 20:15:02
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Sample Chromatogram



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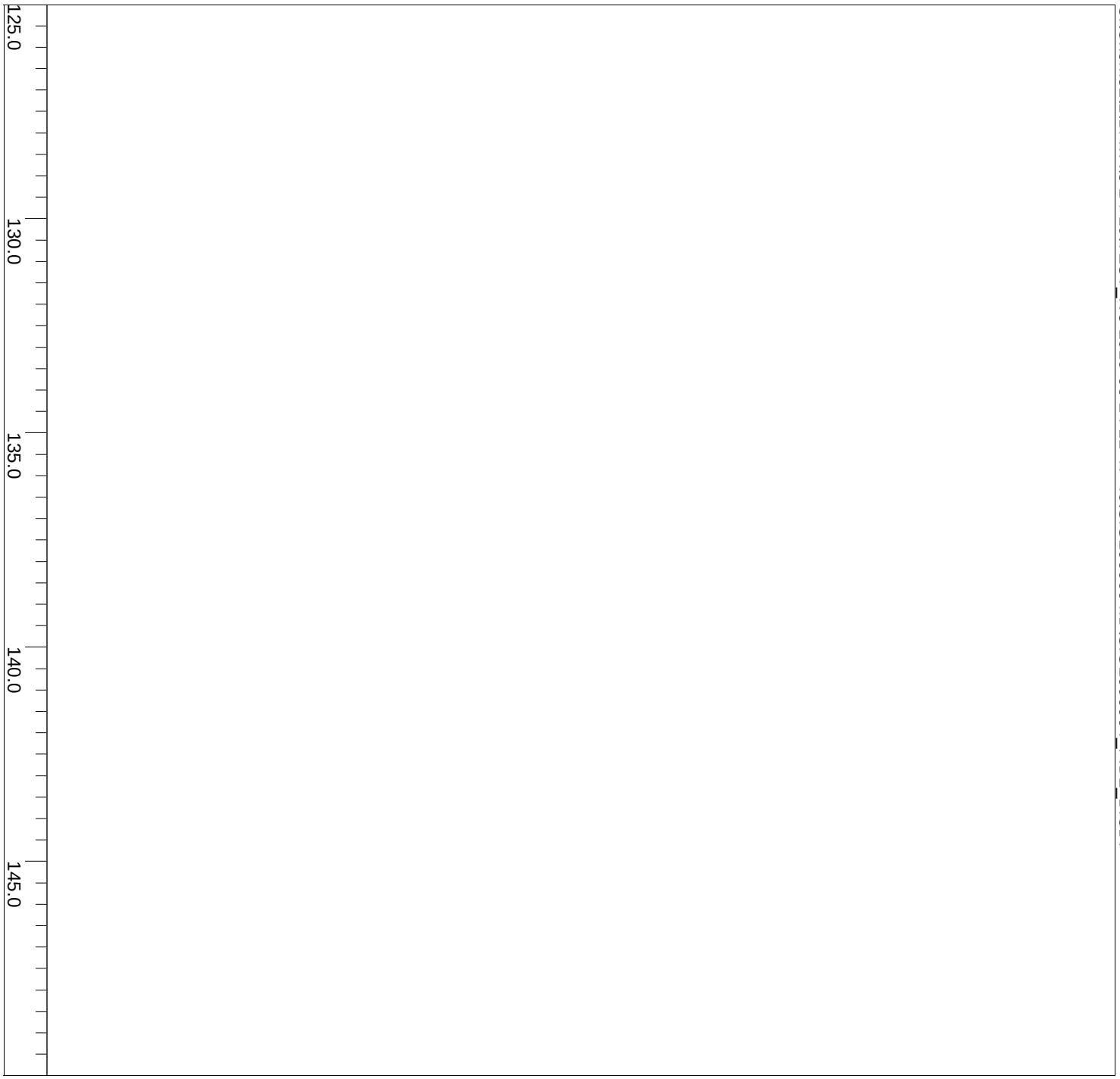
Sample: ODDB-91322 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91322
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	6.906	8.243	7.693
I-Paraffins	28.366	31.684	24.604
Aromatics	41.804	36.628	34.990
Mono-Aromatics	40.963	35.943	34.418
Naphthalenes	0.100	0.074	0.066
Naphtheno/Olefino-Benz	0.226	0.193	0.147
Indenes	0.516	0.418	0.360
Naphthenes	3.699	3.711	3.664
Mono-Naphthenes	3.699	3.711	3.664
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.039	7.921	7.918
n-Olefins	2.948	3.404	3.421
Iso-Olefins	3.351	3.787	3.674
Naphtheno-Olefins	0.699	0.686	0.776
Di-Olefins	0.040	0.044	0.048
Oxygenates	10.889	10.511	20.262
Unidentified	1.297	1.302	0.868
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	10.756	10.385	20.087
C3	0.079	0.076	0.113
C4	1.304	1.685	1.923
C5	10.808	12.963	13.025
C6	13.960	15.359	14.147
C7	20.559	18.912	18.923
C8	28.531	27.577	22.379
C9	7.887	7.411	5.528
C10	3.784	3.378	2.424
C11	0.854	0.798	0.485
C12	0.181	0.155	0.096

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.002
	C4	1.038	1.366	1.537
	C5	2.215	2.694	2.641
	C6	3.053	3.527	3.048
	C7	0.327	0.365	0.281
	C8	0.074	0.080	0.056
	C9	0.156	0.166	0.105
	C10	0.017	0.018	0.010
	C11	0.024	0.025	0.013
I-Paraffins	C4	0.020	0.028	0.030
	C5	4.839	5.950	5.770
	C6	5.137	5.945	5.128
	C7	2.103	2.358	1.805
	C8	12.748	13.664	9.601
	C9	2.460	2.640	1.650
	C10	0.716	0.749	0.431
	C11	0.341	0.350	0.188
	C12	0.001	0.001	0.001
Mono-Aromatics	C6	0.762	0.660	0.839
	C7	16.516	14.511	15.421
	C8	15.555	13.681	12.605
	C9	5.195	4.545	3.718
	C10	2.306	2.002	1.478
	C11	0.456	0.395	0.265
	C12	0.174	0.150	0.092
Naphthalenes	C10	0.085	0.063	0.057
	C11	0.015	0.011	0.009
Naphtheno/Olefino-Benzs	C10	0.226	0.193	0.147
Indenes	C9	0.076	0.060	0.055
	C10	0.434	0.353	0.301
	C12	0.005	0.004	0.003
Mono-Naphthenes	C5	0.211	0.216	0.259
	C6	2.497	2.504	2.553
	C7	0.847	0.849	0.742
	C8	0.144	0.142	0.111
n-Olefins	C4	0.191	0.238	0.293

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.620	1.902	1.987
	C6	1.022	1.139	1.045
	C7	0.098	0.107	0.086
	C11	0.017	0.017	0.010
Iso-Olefins	C5	1.697	1.973	2.082
	C6	0.990	1.096	1.012
	C7	0.653	0.708	0.572
	C8	0.011	0.010	0.007
Naphtheno-Olefins	C5	0.201	0.199	0.254
	C6	0.498	0.488	0.522
Di-Olefins	C5	0.026	0.029	0.032
	C7	0.015	0.015	0.015
Oxygenates	C2	10.756	10.385	20.087
	C3	0.078	0.074	0.112
	C4	0.055	0.052	0.064

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	25.14	23.93
5%	81.10	80.44
10%	97.22	94.84
15%	139.57	131.76
20%	154.53	144.68
25%	172.23	155.08
30%	172.73	172.33
35%	173.24	172.85
40%	197.42	176.07
45%	228.41	209.29
50%	230.13	228.91
55%	230.51	230.22
60%	230.89	230.65
65%	234.98	231.22
70%	239.92	237.34
75%	276.50	255.09
80%	281.21	278.79
85%	282.09	281.76
90%	320.72	292.60
95%	339.72	335.93
FBP	403.56	399.20

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.554	74-98-6	P3	Propane	0.001	0.001	0.002	0.237
2	8.810	75-28-5	I4	i-Butane	0.020	0.028	0.030	5.687
3	9.623	115-11-7	K4	Isobutene	0.016	0.020	0.024	4.578
4	9.665	106-98-9	K4	Butene-1	0.018	0.023	0.027	5.141
5	10.023	106-97-8	P4	n-Butane	1.038	1.366	1.537	289.748
6	10.510	624-64-6	K4	t-Butene-2	0.072	0.091	0.111	20.857
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.016	0.021	0.020	4.627
8	11.251	590-18-1	K4	c-Butene-2	0.085	0.104	0.131	24.611
9	13.062	64-17-5	X2	Ethanol	10.756	10.385	20.087	1280.145
10	13.450	563-45-1	C5	3-Methylbutene-1	0.173	0.210	0.213	50.077
11	15.082	78-78-4	I5	i-Pentane	4.822	5.929	5.750	1355.113
12	16.730	109-67-1	K5	Pentene-1	0.328	0.391	0.403	94.912
13	17.580	563-46-2	C5	2-Methylbutene-1	0.499	0.584	0.612	144.229
14	18.114	109-66-0	P5	n-Pentane	2.215	2.694	2.641	622.394
15	18.626	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	3.050
16	19.233	646-04-8	K5	t-Pentene-2	0.834	0.980	1.023	241.073
17	19.880		?	Unidentified	0.006	0.007	0.007	2.020
18	20.262	627-20-3	K5	c-Pentene-2	0.457	0.531	0.561	132.177
19	20.944	513-35-9	C5	2-Methylbutene-2	1.025	1.179	1.257	296.164
20	21.268	2004-70-8	E5	1t,3-Pentadiene	0.015	0.017	0.019	4.549
21	22.531	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.009	2.052
22	23.095	75-83-2	I6	2,2-Dimethylbutane	0.121	0.142	0.121	34.238
23	25.744	142-29-0	B5	Cyclopentene	0.194	0.191	0.245	57.679
24	26.900	71-23-8	X3	n-Propanol	0.078	0.074	0.112	15.799
25	26.989		?	Unidentified	0.056	0.064	0.058	19.922
26	27.606	287-92-3	M5	Cyclopentane	0.211	0.216	0.259	61.042
27	28.333	79-29-8	I6	2,3-Dimethylbutane	0.750	0.863	0.748	211.474
28	28.732		?	Unidentified	0.052	0.053	0.051	18.373
29	29.193	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.051	0.046	13.117
30	29.418	107-83-5	I6	2-Methylpentane	2.416	2.818	2.412	681.717
31	29.841	674-76-0	C6	4-Methyl-t-pentene-2	0.129	0.146	0.132	37.315
32	32.067	96-14-0	I6	3-Methylpentane	1.850	2.121	1.846	521.798
33	33.229	763-29-1	C6	2-Methylpentene-1	0.221	0.245	0.226	63.771
34	33.450	592-41-6	K6	Hexene-1	0.157	0.177	0.161	45.517
35	35.821	110-54-3	P6	n-Hexane	3.053	3.527	3.048	861.460
36	36.440	13269-52-8	K6	t-Hexene-3	0.259	0.289	0.265	74.877
37	36.916	4050-45-7	K6	t-Hexene-2	0.395	0.441	0.404	114.209
38	37.036	1120-62-3	B6	3-Methylcyclopentene	0.101	0.101	0.106	29.186
39	37.407	625-27-4	C6	2-Methylpentene-2	0.336	0.370	0.343	97.066
40	37.818	922-62-3	C6	3-Methyl-c-pentene-2	0.259	0.283	0.265	74.916
41	38.740	7688-21-3	K6	c-Hexene-2	0.211	0.232	0.215	60.847
42	40.089	3404-73-7	C7	3,3-Dimethylpentene-1	0.305	0.331	0.267	88.098
43	40.675	96-37-7	M6	Methylcyclopentane	1.565	1.592	1.599	452.199

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.230	108-08-7	I7	2,4-Dimethylpentane	0.538	0.609	0.462	152.407
45	42.534	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.014	0.011	3.763
46	42.781	464-06-2	I7	2,2,3-Trimethylbutane	0.047	0.051	0.040	13.209
47	45.426	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.015	4.249
48	45.634	71-42-3	Q6	Benzene	0.762	0.660	0.839	237.175
49	45.833	693-89-0	B6	1-Methylcyclopentene	0.353	0.345	0.370	104.623
50	46.638	3404-61-3	C7	3-Methylhexene-1	0.015	0.016	0.013	4.354
51	47.231	3524-73-0	C7	5-Methylhexene-1	0.054	0.059	0.048	15.678
52	47.553	110-82-7	M6	Cyclohexane	0.932	0.912	0.953	269.515
53	48.056	71-36-3	X4	n-Butanol	0.055	0.052	0.064	11.986
54	49.271	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.044	0.035	11.538
55	49.619	3769-23-1	C7	4-Methylhexene-1	0.012	0.013	0.010	3.337
56	50.261	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.054	0.044	14.467
57	50.664	591-76-4	I7	2-Methylhexane	1.003	1.126	0.861	284.040
58	50.836		?	Unidentified	0.039	0.043	0.035	13.977
59	51.151	110-83-8	B6	Cyclohexene	0.044	0.041	0.046	12.672
60	52.490	589-34-4	I7	3-Methylhexane	0.515	0.571	0.442	145.972
61	53.351	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.139	0.142	0.122	40.249
62	53.937	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.103	0.105	0.090	29.742
63	54.562	822-50-4	M7	1t,2-Dimethylcyclopentane	0.133	0.135	0.116	38.375
64	54.855		C7	C7 - Iso-Olefin - 2	0.022	0.023	0.019	6.381
65	55.166	540-84-1	I8	2,2,4-Trimethylpentane	3.105	3.418	2.338	881.243
66	55.468	592-76-7	K7	Heptene-1	0.029	0.031	0.025	8.271
67	56.801	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.977
68	57.328	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.028	9.103
69	57.683	6094-02-6	C7	2-Methylhexene-1	0.056	0.062	0.049	16.277
70	58.053	142-82-5	P7	n-Heptane	0.327	0.365	0.281	92.763
71	58.271	7642-10-6	K7	c-Heptene-3	0.025	0.027	0.022	7.113
72	58.547	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.027	0.022	7.371
73	58.790	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.021	0.017	5.576
74	59.172	14686-13-6	K7	t-Heptene-2	0.014	0.015	0.012	3.949
75	59.649	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.016	5.236
76	60.074	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.013	4.351
77	60.859	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.672
78	61.513	108-87-2	M7	Methylcyclohexane	0.430	0.425	0.376	124.148
79	63.384		?	Unidentified	0.027	0.029	0.021	9.577
80	64.295	1640-89-7	M7	Ethylcyclopentane	0.024	0.024	0.021	6.964
81	64.948	564-02-3	I8	2,2,3-Trimethylpentane	0.358	0.381	0.270	101.573
82	65.177	592-13-2	I8	2,5-Dimethylhexane	0.729	0.801	0.549	207.023
83	65.514	589-43-5	I8	2,4-Dimethylhexane	0.670	0.728	0.504	190.076
84	68.513	565-75-3	I8	2,3,4-Trimethylpentane	3.335	3.533	2.511	946.399
85	69.118	108-88-3	Q7	Toluene	16.516	14.511	15.421	5084.878
86	69.224	560-21-4	I8	2,3,3-Trimethylpentane	3.366	3.531	2.535	955.458

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	70.801	584-94-1	I8	2,3-Dimethylhexane	0.888	0.950	0.669	252.112
88	72.047	592-27-8	I8	2-Methylheptane	0.080	0.088	0.060	22.779
89	72.316	589-53-7	I8	4-Methylheptane	0.114	0.124	0.086	32.426
90	72.449		?	Unidentified	0.075	0.080	0.057	26.628
91	73.225		M8	1,3-dimethyl-t-cyclohexane	0.033	0.033	0.025	9.569
92	73.361	589-81-1	I8	3-Methylheptane	0.076	0.082	0.057	21.485
93	73.555	619-99-8	I8	3-Ethylhexane	0.026	0.028	0.020	7.458
94	75.260	3522-94-9	I9	2,2,5-Trimethylhexane	1.861	2.004	1.248	529.196
95	76.235	3875-51-2	M8	i-Propylcyclopentane	0.018	0.017	0.013	5.059
96	76.534	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.014	0.014	0.011	4.150
97	77.867	111-65-9	P8	n-Octane	0.074	0.080	0.056	21.014
98	78.820		M8	C8 - MonoNaph - 3	0.058	0.058	0.045	16.896
99	80.353	1069-53-0	I9	2,3,5-Trimethylhexane	0.323	0.340	0.216	91.736
100	81.519	1071-26-7	I9	2,4-Dimethylheptane	0.045	0.048	0.030	12.839
101	82.171	1678-91-7	M8	Ethylcyclohexane	0.021	0.020	0.016	5.986
102	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.058	0.063	0.039	16.547
103	83.411		I9	2,5-Dimethylheptane	0.145	0.155	0.098	41.337
104	84.749	100-41-4	Q8	Ethylbenzene	2.921	2.566	2.367	892.510
105	84.900		?	Unidentified	0.020	0.021	0.014	7.125
106	85.148		?	Unidentified	0.020	0.019	0.013	6.955
107	86.000	108-38-3	Q8	m-Xylene	7.170	6.320	5.810	2190.845
108	86.140	106-42-3	Q8	p-Xylene	3.429	3.034	2.779	1047.780
109	86.490		C8	C9-IsoOlefin-3	0.011	0.010	0.007	3.096
110	86.597		?	Unidentified	0.009	0.009	0.006	3.115
111	87.277	2216-34-4	I9	4-Methyloctane	0.007	0.008	0.005	2.113
112	87.409	3221-61-2	I9	2-Methyloctane	0.010	0.011	0.007	2.976
113	88.270	2216-33-3	I9	3-Methyloctane	0.010	0.011	0.007	2.970
114	88.747		?	Unidentified	0.119	0.133	0.081	42.266
115	88.942	95-47-6	Q8	o-Xylene	2.035	1.761	1.649	621.671
116	89.323		I10	C10 - IsoParaffin - 1	0.371	0.388	0.224	105.583
117	90.165	14720-74-2	I10	2,2,4-trimethylheptane	0.250	0.262	0.151	71.304
118	91.711	111-84-2	P9	n-Nonane	0.156	0.166	0.105	44.343
119	93.094	98-82-8	Q9	i-Propylbenzene	0.032	0.029	0.023	9.854
120	93.840		?	Unidentified	0.043	0.045	0.026	15.189
121	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.014	0.015	0.008	3.989
122	94.865	15869-89-3	I10	2,5-Dimethyloctane	0.005	0.005	0.003	1.487
123	95.505	2051-30-1	I10	2,4-Dimethyloctane	0.011	0.012	0.007	3.199
124	96.553	103-65-1	Q9	n-Propylbenzene	0.297	0.262	0.212	90.093
125	97.401	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.153	1.016	0.825	349.962
126	97.635	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.536	0.474	0.383	162.579
127	98.259	108-67-8	Q9	1,3,5-Trimethylbenzene	0.678	0.597	0.485	205.829
128	98.906	17301-94-8	I10	4-Methylnonane	0.010	0.011	0.006	2.956
129	99.113		?	Unidentified	0.166	0.174	0.100	58.751

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	99.344	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.394	0.341	0.282	119.695
131	99.884	5911-04-6	I10	3-Methylnonane	0.016	0.017	0.010	4.631
132	100.351		?	Unidentified	0.013	0.010	0.007	4.764
133	100.481		?	Unidentified	0.037	0.037	0.020	12.966
134	100.697		I11	C11-Isoparaffin-2	0.020	0.021	0.011	5.847
135	100.977	95-63-6	Q9	1,2,4-Trimethylbenzene	1.871	1.627	1.339	568.018
136	101.163		?	Unidentified	0.026	0.028	0.016	9.046
137	101.284		?	Unidentified	0.015	0.015	0.009	5.207
138	102.334	17302-01-1	I10	3-Ethyl-3-methylheptane	0.038	0.039	0.021	10.942
139	102.627	538-93-2	Q10	i-Butylbenzene	0.054	0.048	0.034	16.250
140	102.801	124-18-5	P10	n-Decane	0.017	0.018	0.010	4.852
141	102.899		?	Unidentified	0.017	0.015	0.011	6.081
142	103.197		?	Unidentified	0.011	0.011	0.006	3.792
143	103.849	526-73-8	Q9	1,2,3-Trimethylbenzene	0.234	0.199	0.167	71.027
144	104.614	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.039	0.035	0.025	11.844
145	105.043		J9	Indan	0.076	0.060	0.055	23.343
146	105.637		J10	Indene	0.239	0.189	0.174	73.690
147	106.352		I11	C11-Isoparaffin-7	0.099	0.101	0.054	28.124
148	106.546	141-93-5	Q10	1,3-Diethylbenzene	0.028	0.025	0.018	8.585
149	106.826	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.365	0.323	0.234	110.217
150	107.162	105-05-5	Q10	1,4-Diethylbenzene	0.140	0.123	0.090	42.193
151	107.260	104-51-8	Q10	n-Butylbenzene	0.024	0.021	0.015	7.124
152	107.381	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.128	0.111	0.082	38.708
153	107.627	135-01-3	Q10	1,2-Diethylbenzene	0.028	0.024	0.018	8.497
154	108.079		?	Unidentified	0.025	0.026	0.014	8.864
155	108.232	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.054	0.047	0.034	16.172
156	108.354		?	Unidentified	0.029	0.030	0.016	10.424
157	108.435		?	Unidentified	0.027	0.028	0.015	9.667
158	108.561		I11	C11- Isoparaffin-11	0.222	0.228	0.122	63.417
159	108.743		?	Unidentified	0.072	0.073	0.039	25.407
160	109.078	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.120	0.104	0.077	36.272
161	109.167		?	Unidentified	0.311	0.270	0.199	110.054
162	109.394		J10	2-Methylindan	0.042	0.033	0.028	13.032
163	109.741	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.328	0.285	0.210	98.972
164	110.286	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.219	0.188	0.141	66.200
165	110.709		?	Unidentified	0.006	0.006	0.004	2.242
166	110.903	693-61-8	K11	2-Undecene, (E)-	0.017	0.017	0.010	4.845
167	111.038		?	Unidentified	0.022	0.023	0.014	7.882
168	111.195		Q11	1-Methyl-4-t-butylbenzene	0.034	0.030	0.020	10.192
169	111.413	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.133	0.113	0.085	40.093
170	111.711	1120-21-4	P11	n-Undecane	0.024	0.025	0.013	6.966
171	111.865	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.030	0.026	0.018	9.085
172	111.972		?	Unidentified	0.015	0.013	0.009	5.198

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	112.348		Q10	1,2,4,5-Tetramethylbenzene	0.269	0.231	0.172	81.212
174	112.614	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.377	0.323	0.242	113.923
175	113.131		I12	C12 - IsoParaffin - 1	0.001	0.001	0.001	0.286
176	113.484		?	Unidentified	0.013	0.014	0.007	4.765
177	113.754		Q11	C11 - Aromatic - 3	0.053	0.045	0.031	15.844
178	113.945	874-35-1	H10	5-Methylindan	0.109	0.094	0.071	33.009
179	114.071		Q12	1,2-Di-i-propylbenzene	0.046	0.040	0.025	13.902
180	114.285	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.066	0.057	0.038	19.852
181	114.445		Q11	C11 - Aromatic - 4	0.035	0.030	0.020	10.503
182	114.694	824-22-6	J10	4-Methylindan	0.153	0.131	0.100	46.330
183	114.846	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.043	0.037	0.025	13.009
184	114.942	824-63-5	H10	2-Methylindan	0.116	0.099	0.076	35.088
185	115.145		?	Unidentified	0.012	0.013	0.006	4.426
186	115.258	538-68-1	Q11	n-Pentylbenzene	0.017	0.015	0.010	5.102
187	115.487		Q11	tert-Pentylbenzene	0.070	0.060	0.040	20.966
188	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.030	0.026	0.017	9.011
189	115.908		Q11	C11 - Aromatic - 6	0.040	0.036	0.023	11.982
190	116.368	100-18-5	Q12	1,4-Di-i-propylbenzene	0.058	0.050	0.031	17.460
191	116.810	91-20-3	G10	Naphthalene	0.085	0.063	0.057	26.861
192	116.945		?	Unidentified	0.007	0.008	0.004	2.642
193	117.241		Q12	C12-Aromatic-1	0.017	0.016	0.009	5.222
194	117.413		J12	Dimethyl Indane - 1	0.005	0.004	0.003	1.693
195	117.593	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.009	0.008	0.005	2.825
196	117.893		Q12	1,3-Di-n-propylbenzene	0.043	0.037	0.023	12.830
197	118.005		Q11	C11 - Aromatic - 11	0.024	0.021	0.014	7.124
198	118.558		Q11	C11 - Aromatic - 12	0.015	0.013	0.009	4.427
199	123.439	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.006	3.084
200	124.305	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.565
201	126.297		?	Unidentified	0.003	0.003	0.001	1.031
202	130.003		?	Unidentified	0.003	0.002	0.002	1.044

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.001	0.001	0.002	0.237
	10.023	106-97-8	n-Butane	1.038	1.366	1.537	289.748
	18.114	109-66-0	n-Pentane	2.215	2.694	2.641	622.394
	35.821	110-54-3	n-Hexane	3.053	3.527	3.048	861.460
	58.053	142-82-5	n-Heptane	0.327	0.365	0.281	92.763
	77.867	111-65-9	n-Octane	0.074	0.080	0.056	21.014
	91.711	111-84-2	n-Nonane	0.156	0.166	0.105	44.343
	102.801	124-18-5	n-Decane	0.017	0.018	0.010	4.852
	111.711	1120-21-4	n-Undecane	0.024	0.025	0.013	6.966
I-Paraffins	8.810	75-28-5	i-Butane	0.020	0.028	0.030	5.687
	10.637	463-82-1	2,2-Dimethylpropane	0.016	0.021	0.020	4.627
	15.082	78-78-4	i-Pentane	4.822	5.929	5.750	1355.113
	23.095	75-83-2	2,2-Dimethylbutane	0.121	0.142	0.121	34.238
	28.333	79-29-8	2,3-Dimethylbutane	0.750	0.863	0.748	211.474
	29.418	107-83-5	2-Methylpentane	2.416	2.818	2.412	681.717
	32.067	96-14-0	3-Methylpentane	1.850	2.121	1.846	521.798
	42.230	108-08-7	2,4-Dimethylpentane	0.538	0.609	0.462	152.407
	42.781	464-06-2	2,2,3-Trimethylbutane	0.047	0.051	0.040	13.209
	50.664	591-76-4	2-Methylhexane	1.003	1.126	0.861	284.040
	52.490	589-34-4	3-Methylhexane	0.515	0.571	0.442	145.972
	55.166	540-84-1	2,2,4-Trimethylpentane	3.105	3.418	2.338	881.243
	64.948	564-02-3	2,2,3-Trimethylpentane	0.358	0.381	0.270	101.573
	65.177	592-13-2	2,5-Dimethylhexane	0.729	0.801	0.549	207.023
	65.514	589-43-5	2,4-Dimethylhexane	0.670	0.728	0.504	190.076
	68.513	565-75-3	2,3,4-Trimethylpentane	3.335	3.533	2.511	946.399
	69.224	560-21-4	2,3,3-Trimethylpentane	3.366	3.531	2.535	955.458
	70.801	584-94-1	2,3-Dimethylhexane	0.888	0.950	0.669	252.112
	72.047	592-27-8	2-Methylheptane	0.080	0.088	0.060	22.779
	72.316	589-53-7	4-Methylheptane	0.114	0.124	0.086	32.426
	73.361	589-81-1	3-Methylheptane	0.076	0.082	0.057	21.485
	73.555	619-99-8	3-Ethylhexane	0.026	0.028	0.020	7.458
	75.260	3522-94-9	2,2,5-Trimethylhexane	1.861	2.004	1.248	529.196
	80.353	1069-53-0	2,3,5-Trimethylhexane	0.323	0.340	0.216	91.736
	81.519	1071-26-7	2,4-Dimethylheptane	0.045	0.048	0.030	12.839
	82.476	1072-05-5	2,6-Dimethylheptane	0.058	0.063	0.039	16.547
	83.411		2,5-Dimethylheptane	0.145	0.155	0.098	41.337
	87.277	2216-34-4	4-Methyloctane	0.007	0.008	0.005	2.113
	87.409	3221-61-2	2-Methyloctane	0.010	0.011	0.007	2.976
	88.270	2216-33-3	3-Methyloctane	0.010	0.011	0.007	2.970
	89.323		C10 - IsoParaffin - 1	0.371	0.388	0.224	105.583
	90.165	14720-74-2	2,2,4-trimethylheptane	0.250	0.262	0.151	71.304
	94.064	15869-87-1	2,2-Dimethyloctane	0.014	0.015	0.008	3.989
	94.865	15869-89-3	2,5-Dimethyloctane	0.005	0.005	0.003	1.487
	95.505	2051-30-1	2,4-Dimethyloctane	0.011	0.012	0.007	3.199
	98.906	17301-94-8	4-Methylnonane	0.010	0.011	0.006	2.956
	99.884	5911-04-6	3-Methylnonane	0.016	0.017	0.010	4.631

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	100.697		C11-Isoparaffin-2	0.020	0.021	0.011	5.847
	102.334	17302-01-1	3-Ethyl-3-methylheptane	0.038	0.039	0.021	10.942
	106.352		C11-Isoparaffin-7	0.099	0.101	0.054	28.124
	108.561		C11- Isoparaffin-11	0.222	0.228	0.122	63.417
	113.131		C12 - IsoParaffin - 1	0.001	0.001	0.001	0.286
Aromatics							
Mono-Aromatics	45.634	71-42-3	Benzene	0.762	0.660	0.839	237.175
	69.118	108-88-3	Toluene	16.516	14.511	15.421	5084.878
	84.749	100-41-4	Ethylbenzene	2.921	2.566	2.367	892.510
	86.000	108-38-3	m-Xylene	7.170	6.320	5.810	2190.845
	86.140	106-42-3	p-Xylene	3.429	3.034	2.779	1047.780
	88.942	95-47-6	o-Xylene	2.035	1.761	1.649	621.671
	93.094	98-82-8	i-Propylbenzene	0.032	0.029	0.023	9.854
	96.553	103-65-1	n-Propylbenzene	0.297	0.262	0.212	90.093
	97.401	620-14-4	1-Methyl-3-ethylbenzene	1.153	1.016	0.825	349.962
	97.635	622-96-8	1-Methyl-4-ethylbenzene	0.536	0.474	0.383	162.579
	98.259	108-67-8	1,3,5-Trimethylbenzene	0.678	0.597	0.485	205.829
	99.344	611-14-3	1-Methyl-2-ethylbenzene	0.394	0.341	0.282	119.695
	100.977	95-63-6	1,2,4-Trimethylbenzene	1.871	1.627	1.339	568.018
	102.627	538-93-2	i-Butylbenzene	0.054	0.048	0.034	16.250
	103.849	526-73-8	1,2,3-Trimethylbenzene	0.234	0.199	0.167	71.027
	104.614	99-87-6	1-Methyl-4-i-propylbenzene	0.039	0.035	0.025	11.844
	106.546	141-93-5	1,3-Diethylbenzene	0.028	0.025	0.018	8.585
	106.826	1074-43-7	1-Methyl-3-n-propylbenzene	0.365	0.323	0.234	110.217
	107.162	105-05-5	1,4-Diethylbenzene	0.140	0.123	0.090	42.193
	107.260	104-51-8	n-Butylbenzene	0.024	0.021	0.015	7.124
	107.381	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.128	0.111	0.082	38.708
	107.627	135-01-3	1,2-Diethylbenzene	0.028	0.024	0.018	8.497
	108.232	1074-17-5	1-Methyl-2-n-propylbenzene	0.054	0.047	0.034	16.172
	109.078	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.120	0.104	0.077	36.272
	109.741	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.328	0.285	0.210	98.972
	110.286	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.219	0.188	0.141	66.200
	111.195		1-Methyl-4-t-butylbenzene	0.034	0.030	0.020	10.192
	111.413	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.133	0.113	0.085	40.093
	111.865	4218-48-8	1-Ethyl-4-i-propylbenzene	0.030	0.026	0.018	9.085
	112.348		1,2,4,5-Tetramethylbenzene	0.269	0.231	0.172	81.212
	112.614	527-53-7	1,2,3,5-Tetramethylbenzene	0.377	0.323	0.242	113.923
	113.754		C11 - Aromatic - 3	0.053	0.045	0.031	15.844
	114.071		1,2-Di-i-propylbenzene	0.046	0.040	0.025	13.902
	114.285	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.066	0.057	0.038	19.852
	114.445		C11 - Aromatic - 4	0.035	0.030	0.020	10.503
	114.846	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.043	0.037	0.025	13.009
	115.258	538-68-1	n-Pentylbenzene	0.017	0.015	0.010	5.102
	115.487		tert-Pentylbenzene	0.070	0.060	0.040	20.966
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.030	0.026	0.017	9.011
	115.908		C11 - Aromatic - 6	0.040	0.036	0.023	11.982

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	116.368	100-18-5	1,4-Di-i-propylbenzene	0.058	0.050	0.031	17.460
	117.241		C12-Aromatic-1	0.017	0.016	0.009	5.222
	117.593	7364-19-4	1t-Butyl-4-ethylbenzene	0.009	0.008	0.005	2.825
	117.893		1,3-Di-n-propylbenzene	0.043	0.037	0.023	12.830
	118.005		C11 - Aromatic - 11	0.024	0.021	0.014	7.124
	118.558		C11 - Aromatic - 12	0.015	0.013	0.009	4.427
Naphthalenes	116.810	91-20-3	Naphthalene	0.085	0.063	0.057	26.861
	123.439	91-57-6	2-Methylnaphthalene	0.010	0.007	0.006	3.084
	124.305	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.565
Naphtheno/Olefir	113.945	874-35-1	5-Methylindan	0.109	0.094	0.071	33.009
	114.942	824-63-5	2-Methylindan	0.116	0.099	0.076	35.088
Indenes	105.043		Indan	0.076	0.060	0.055	23.343
	105.637		Indene	0.239	0.189	0.174	73.690
	109.394		2-Methylindan	0.042	0.033	0.028	13.032
	114.694	824-22-6	4-Methylindan	0.153	0.131	0.100	46.330
	117.413		Dimethyl Indane - 1	0.005	0.004	0.003	1.693
Naphthenes							
Mono-Naphthene	27.606	287-92-3	Cyclopentane	0.211	0.216	0.259	61.042
	40.675	96-37-7	Methylcyclopentane	1.565	1.592	1.599	452.199
	47.553	110-82-7	Cyclohexane	0.932	0.912	0.953	269.515
	53.351	1759-58-6	1t,3-Dimethylcyclopentane	0.139	0.142	0.122	40.249
	53.937	2532-58-3	1c,3-Dimethylcyclopentane	0.103	0.105	0.090	29.742
	54.562	822-50-4	1t,2-Dimethylcyclopentane	0.133	0.135	0.116	38.375
	59.649	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.016	5.236
	61.513	108-87-2	Methylcyclohexane	0.430	0.425	0.376	124.148
	64.295	1640-89-7	Ethylcyclopentane	0.024	0.024	0.021	6.964
	73.225		1,3-dimethyl-t-cyclohexane	0.033	0.033	0.025	9.569
	76.235	3875-51-2	i-Propylcyclopentane	0.018	0.017	0.013	5.059
	76.534	2207-03-6	1t,3-Dimethylcyclohexane	0.014	0.014	0.011	4.150
	78.820		C8 - MonoNaph - 3	0.058	0.058	0.045	16.896
	82.171	1678-91-7	Ethylcyclohexane	0.021	0.020	0.016	5.986
Di/Bicyclo-Naphth							
Olefins							
n-Olefins	9.623	115-11-7	Isobutene	0.016	0.020	0.024	4.578
	9.665	106-98-9	Butene-1	0.018	0.023	0.027	5.141
	10.510	624-64-6	t-Butene-2	0.072	0.091	0.111	20.857
	11.251	590-18-1	c-Butene-2	0.085	0.104	0.131	24.611
	16.730	109-67-1	Pentene-1	0.328	0.391	0.403	94.912
	19.233	646-04-8	t-Pentene-2	0.834	0.980	1.023	241.073
	20.262	627-20-3	c-Pentene-2	0.457	0.531	0.561	132.177
	33.450	592-41-6	Hexene-1	0.157	0.177	0.161	45.517
	36.440	13269-52-8	t-Hexene-3	0.259	0.289	0.265	74.877

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	36.916	4050-45-7	t-Hexene-2	0.395	0.441	0.404	114.209
	38.740	7688-21-3	c-Hexene-2	0.211	0.232	0.215	60.847
	55.468	592-76-7	Heptene-1	0.029	0.031	0.025	8.271
	57.328	14686-14-7	t-Heptene-3	0.031	0.034	0.028	9.103
	58.271	7642-10-6	c-Heptene-3	0.025	0.027	0.022	7.113
	59.172	14686-13-6	t-Heptene-2	0.014	0.015	0.012	3.949
	110.903	693-61-8	2-Undecene, (E)-	0.017	0.017	0.010	4.845
Iso-Olefins	13.450	563-45-1	3-Methylbutene-1	0.173	0.210	0.213	50.077
	17.580	563-46-2	2-Methylbutene-1	0.499	0.584	0.612	144.229
	20.944	513-35-9	2-Methylbutene-2	1.025	1.179	1.257	296.164
	29.193	691-38-3	4-Methyl-c-pentene-2	0.045	0.051	0.046	13.117
	29.841	674-76-0	4-Methyl-t-pentene-2	0.129	0.146	0.132	37.315
	33.229	763-29-1	2-Methylpentene-1	0.221	0.245	0.226	63.771
	37.407	625-27-4	2-Methylpentene-2	0.336	0.370	0.343	97.066
	37.818	922-62-3	3-Methyl-c-pentene-2	0.259	0.283	0.265	74.916
	40.089	3404-73-7	3,3-Dimethylpentene-1	0.305	0.331	0.267	88.098
	42.534	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.014	0.011	3.763
	46.638	3404-61-3	3-Methylhexene-1	0.015	0.016	0.013	4.354
	47.231	3524-73-0	5-Methylhexene-1	0.054	0.059	0.048	15.678
	49.271	15840-60-5	2-Methyl-c-hexene-3	0.040	0.044	0.035	11.538
	49.619	3769-23-1	4-Methylhexene-1	0.012	0.013	0.010	3.337
	50.261	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.054	0.044	14.467
	54.855		C7 - Iso-Olefin - 2	0.022	0.023	0.019	6.381
	56.801	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.977
	57.683	6094-02-6	2-Methylhexene-1	0.056	0.062	0.049	16.277
	58.547	2738-19-4	2-Methyl-2-hexene	0.026	0.027	0.022	7.371
	58.790	10574-36-4	3-Methyl-c-hexene-2	0.019	0.021	0.017	5.576
	60.074	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.013	4.351
	60.859	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.672
	86.490		C9-IsoOlefin-3	0.011	0.010	0.007	3.096
Naphtheno-Olefir	22.531	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.009	2.052
	25.744	142-29-0	Cyclopentene	0.194	0.191	0.245	57.679
	37.036	1120-62-3	3-Methylcyclopentene	0.101	0.101	0.106	29.186
	45.833	693-89-0	1-Methylcyclopentene	0.353	0.345	0.370	104.623
	51.151	110-83-8	Cyclohexene	0.044	0.041	0.046	12.672
Di-Olefins	18.626	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.011	0.013	3.050
	21.268	2004-70-8	1t,3-Pentadiene	0.015	0.017	0.019	4.549
	45.426	1528-30-9	C6-Diolefin-1	0.015	0.015	0.015	4.249
Oxygenates	13.062	64-17-5	Ethanol	10.756	10.385	20.087	1280.145
	26.900	71-23-8	n-Propanol	0.078	0.074	0.112	15.799
	48.056	71-36-3	n-Butanol	0.055	0.052	0.064	11.986
Unidentified	19.880		Unidentified	0.006	0.007	0.007	2.020

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2A.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Components by Group

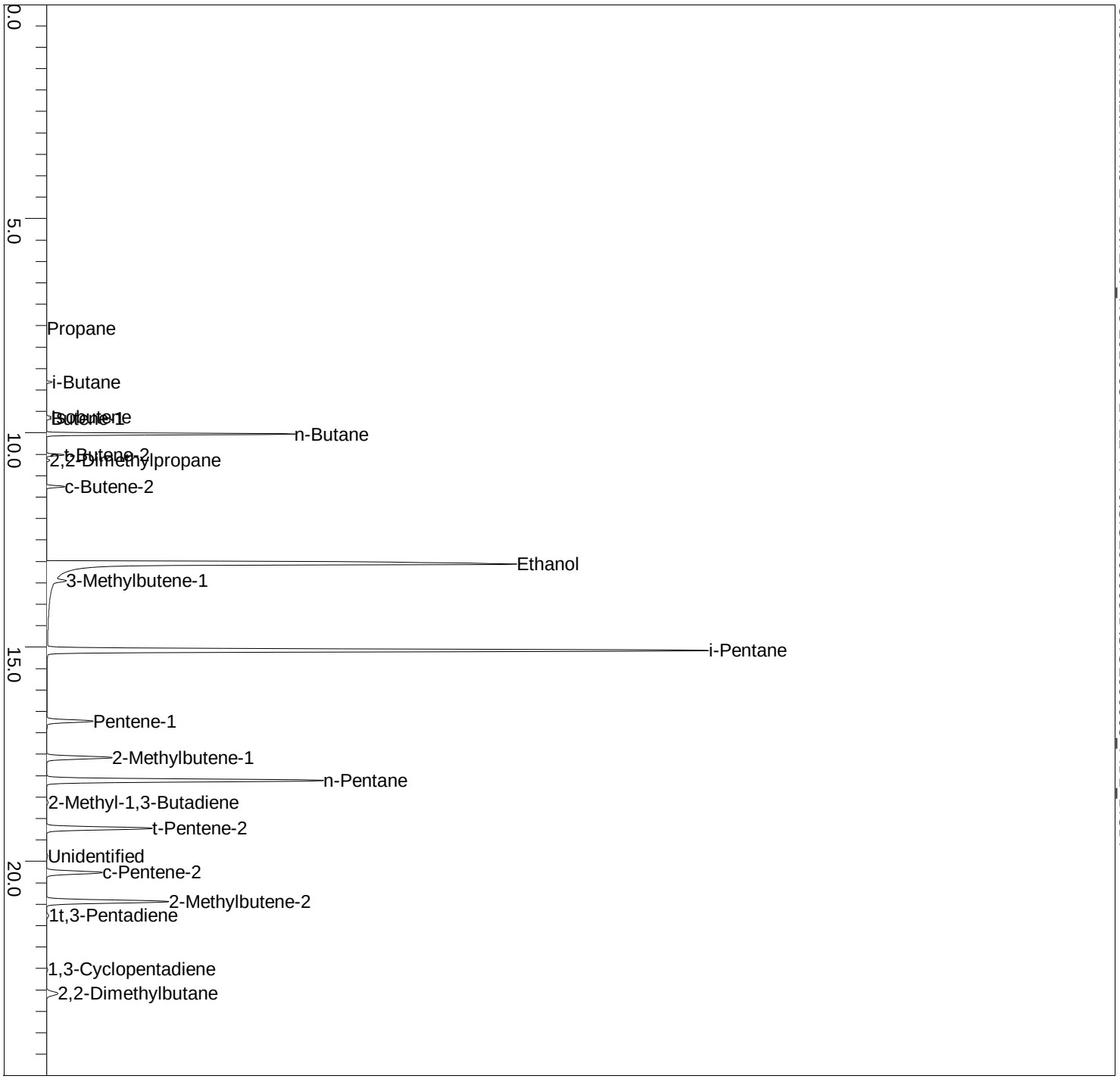
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	26.989		Unidentified	0.056	0.064	0.058	19.922
	28.732		Unidentified	0.052	0.053	0.051	18.373
	50.836		Unidentified	0.039	0.043	0.035	13.977
	63.384		Unidentified	0.027	0.029	0.021	9.577
	72.449		Unidentified	0.075	0.080	0.057	26.628
	84.900		Unidentified	0.020	0.021	0.014	7.125
	85.148		Unidentified	0.020	0.019	0.013	6.955
	86.597		Unidentified	0.009	0.009	0.006	3.115
	88.747		Unidentified	0.119	0.133	0.081	42.266
	93.840		Unidentified	0.043	0.045	0.026	15.189
	99.113		Unidentified	0.166	0.174	0.100	58.751
	100.351		Unidentified	0.013	0.010	0.007	4.764
	100.481		Unidentified	0.037	0.037	0.020	12.966
	101.163		Unidentified	0.026	0.028	0.016	9.046
	101.284		Unidentified	0.015	0.015	0.009	5.207
	102.899		Unidentified	0.017	0.015	0.011	6.081
	103.197		Unidentified	0.011	0.011	0.006	3.792
	108.079		Unidentified	0.025	0.026	0.014	8.864
	108.354		Unidentified	0.029	0.030	0.016	10.424
	108.435		Unidentified	0.027	0.028	0.015	9.667
	108.743		Unidentified	0.072	0.073	0.039	25.407
	109.167		Unidentified	0.311	0.270	0.199	110.054
	110.709		Unidentified	0.006	0.006	0.004	2.242
	111.038		Unidentified	0.022	0.023	0.014	7.882
	111.972		Unidentified	0.015	0.013	0.009	5.198
	113.484		Unidentified	0.013	0.014	0.007	4.765
	115.145		Unidentified	0.012	0.013	0.006	4.426
	116.945		Unidentified	0.007	0.008	0.004	2.642
	126.297		Unidentified	0.003	0.003	0.001	1.031
	130.003		Unidentified	0.003	0.002	0.002	1.044

Plus

Recovery = 100.00

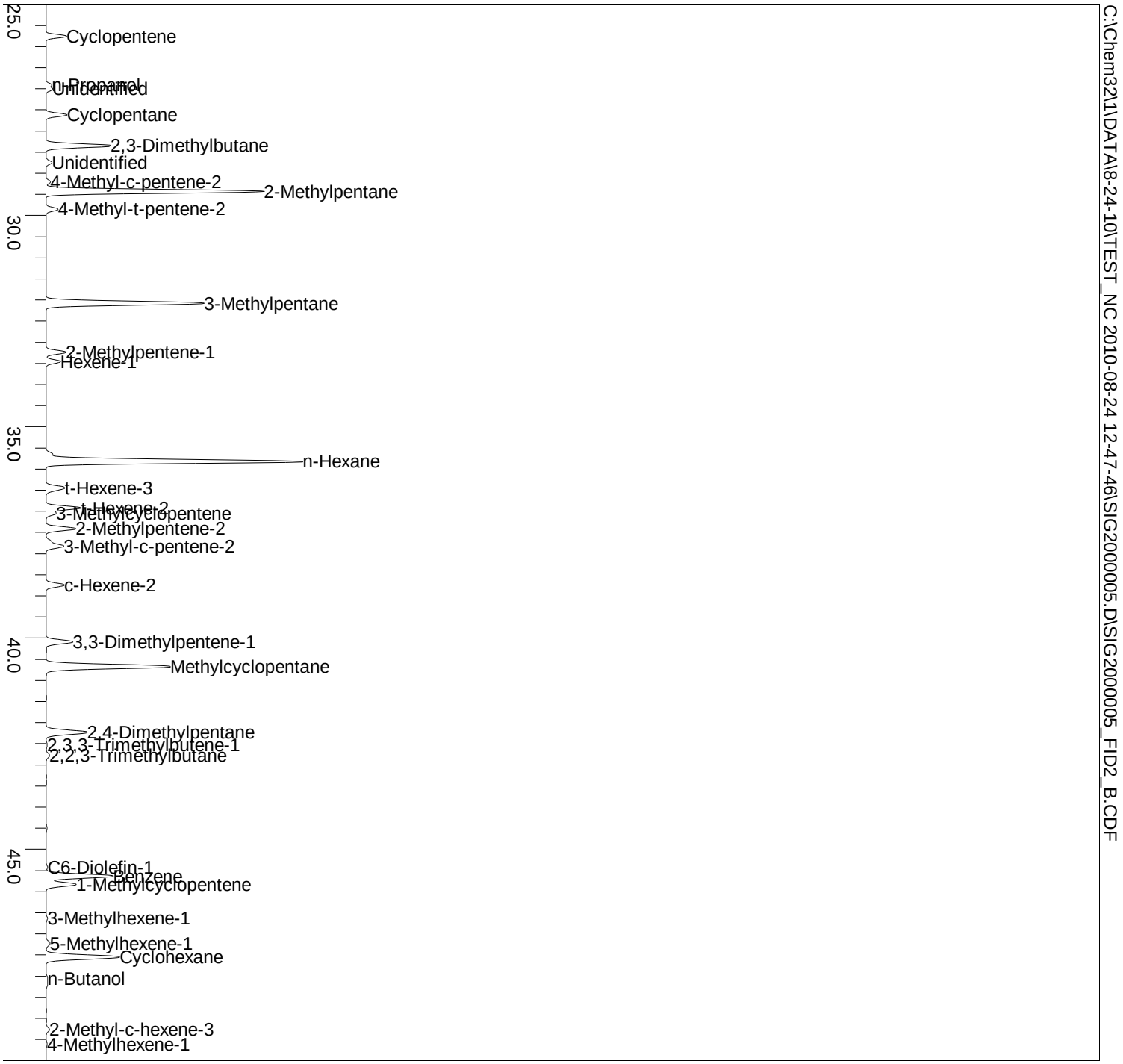
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



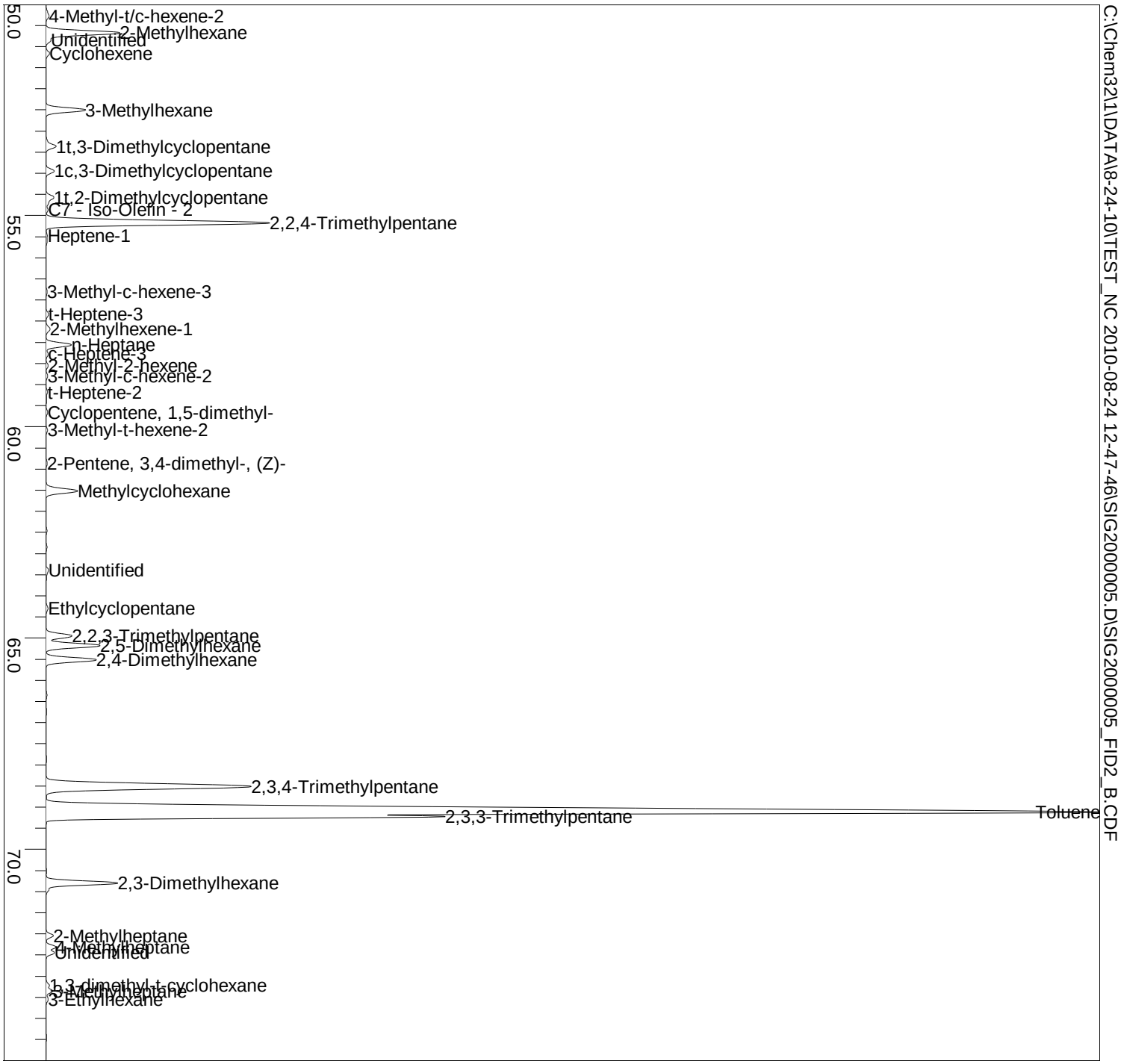
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



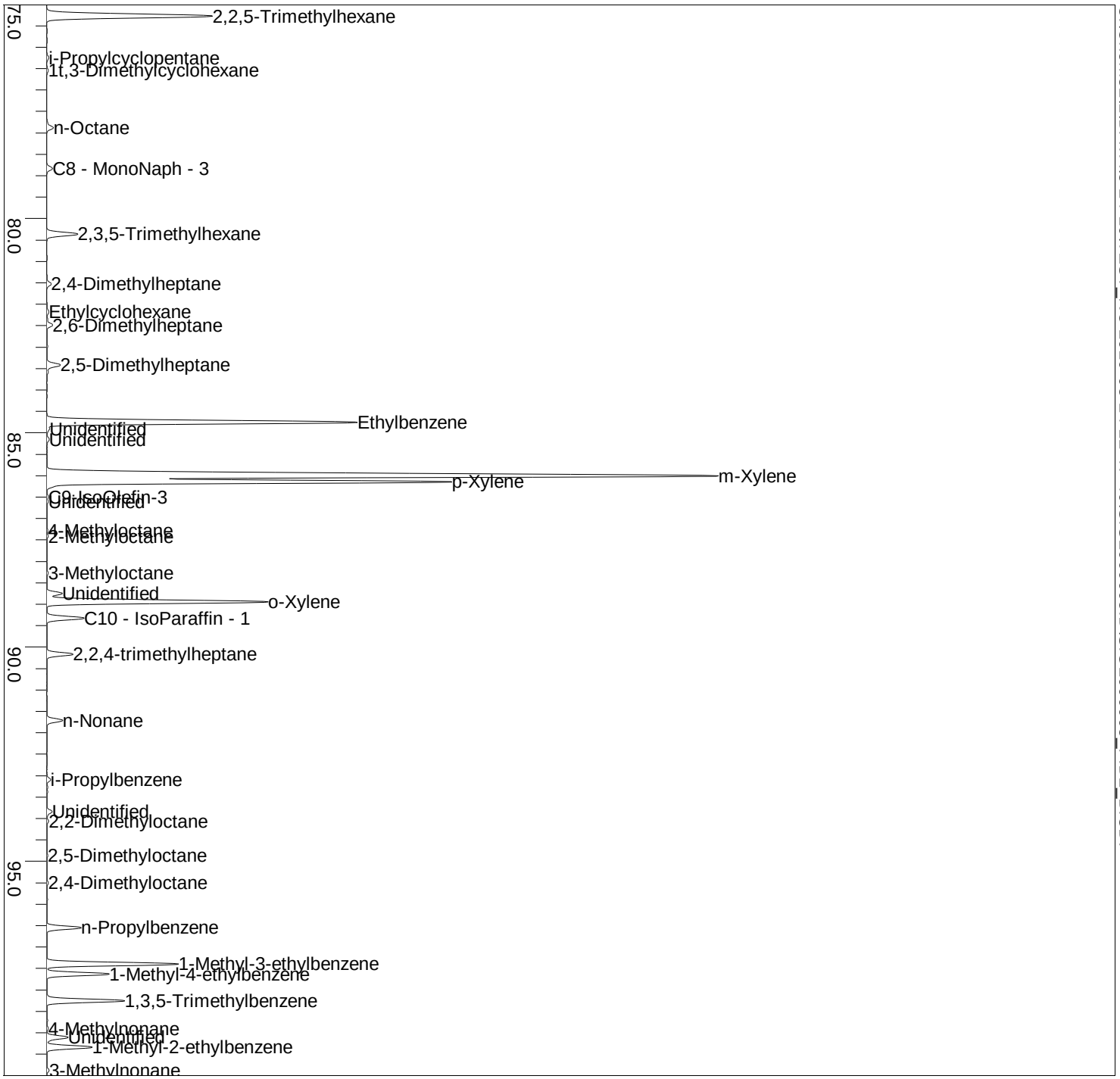
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



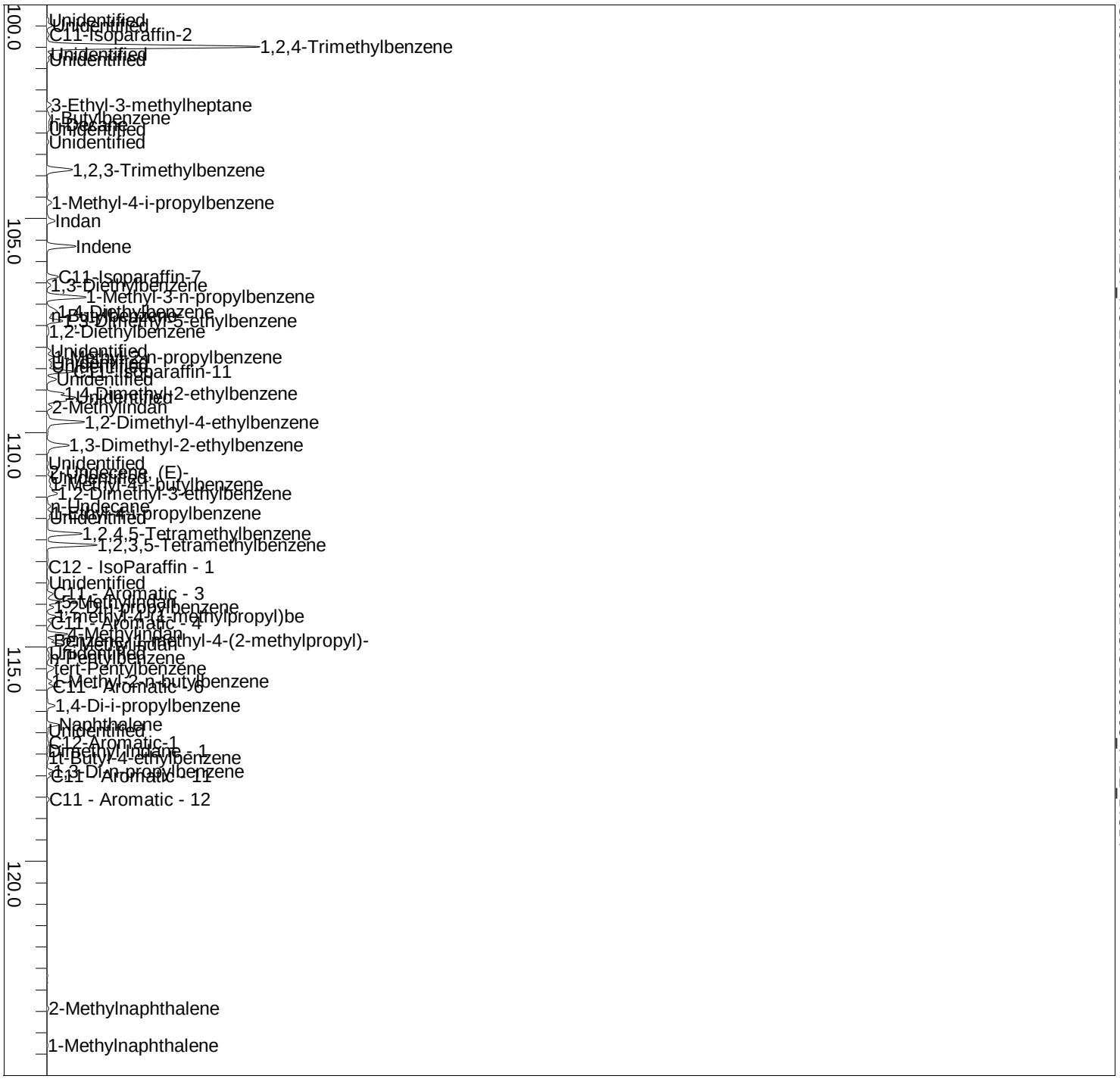
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



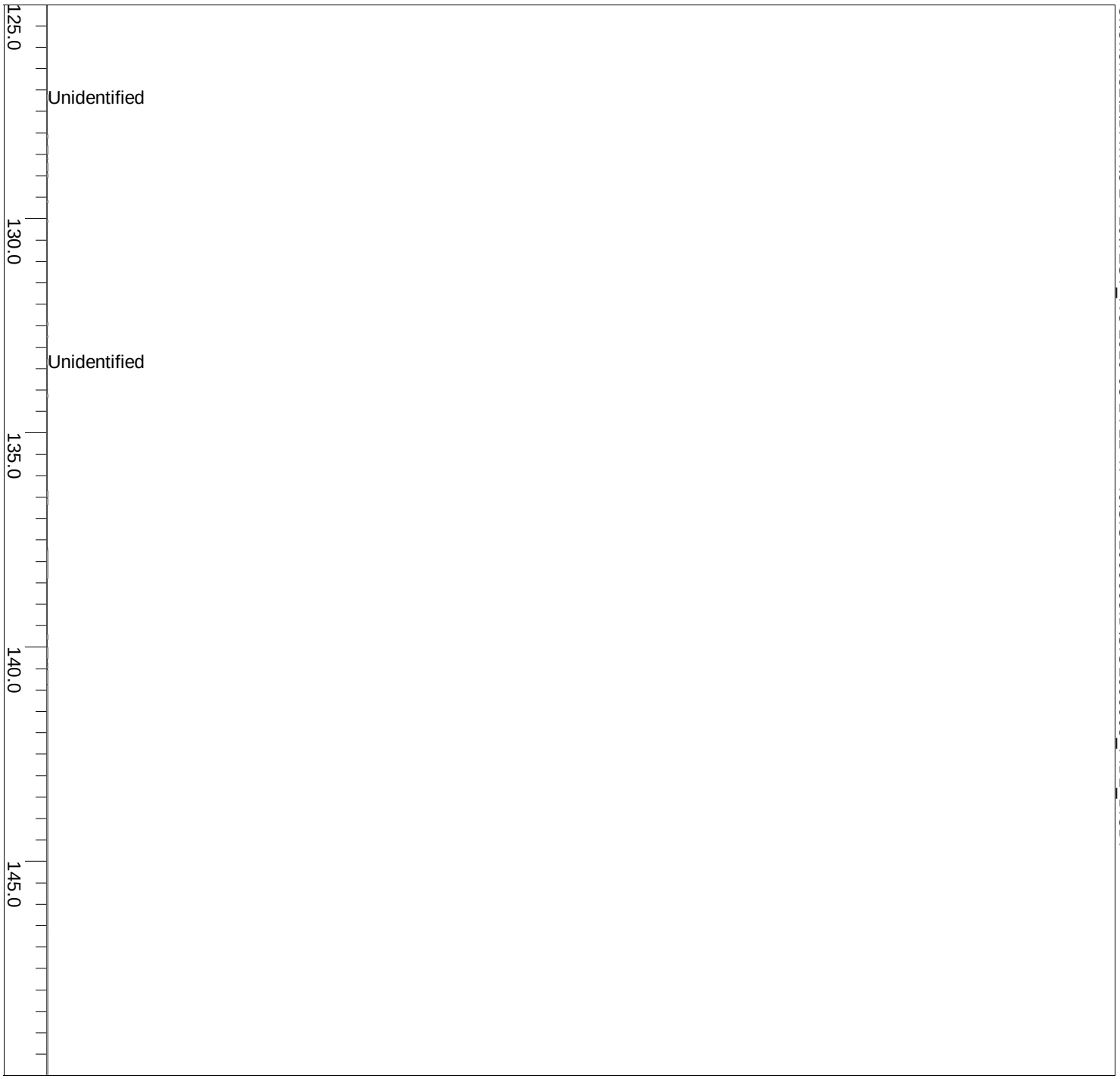
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000005.D\SIG2000005_FID2_B.CDF 24-Aug-10, 22:43:27
Sample: ODDB-91323 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91323
LIMS Id:

Sample Chromatogram



File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	7.234	8.810	9.515
I-Paraffins	22.271	24.875	21.153
Aromatics	37.108	32.516	33.093
Mono-Aromatics	36.003	31.605	32.266
Naphthalenes	0.165	0.127	0.121
Naphtheno/Olefino-Benz	0.497	0.427	0.366
Indenes	0.336	0.267	0.277
Naphthenes	21.259	20.874	23.909
Mono-Naphthenes	20.986	20.612	23.717
Di/Bicyclo-Naphthenes	0.083	0.079	0.052
Olefins	7.129	8.023	8.698
n-Olefins	2.777	3.193	3.564
Iso-Olefins	3.420	3.858	4.130
Naphtheno-Olefins	0.267	0.260	0.362
Di-Olefins	0.227	0.242	0.259
Oxygenates	0.116	0.120	0.128
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C4	3.876	5.106	6.498
C5	7.910	9.450	10.785
C6	26.058	26.494	30.087
C7	11.034	10.318	11.449
C8	20.377	19.845	18.095
C9	16.174	14.853	12.909
C10	7.142	6.810	5.063
C11	1.997	1.851	1.287
C12	0.513	0.456	0.305
C13	0.034	0.034	0.018

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	3.709	4.895	6.211
	C5	0.862	1.051	1.162
	C6	0.555	0.643	0.627
	C7	0.088	0.098	0.085
	C8	0.102	0.111	0.087
	C9	0.699	0.744	0.530
	C10	0.933	0.976	0.638
	C11	0.236	0.242	0.147
	C12	0.036	0.037	0.021
	C13	0.014	0.014	0.007
I-Paraffins	C4	0.030	0.041	0.050
	C5	3.458	4.266	4.663
	C6	3.513	4.076	3.967
	C7	1.536	1.730	1.492
	C8	8.775	9.559	7.475
	C9	2.009	2.136	1.524
	C10	2.381	2.480	1.628
	C11	0.548	0.566	0.341
	C13	0.020	0.020	0.011
Aromatics	C12	0.106	0.091	0.063
Mono-Aromatics	C6	0.710	0.617	0.885
	C7	8.300	7.312	8.766
	C8	11.138	9.812	10.210
	C9	12.056	10.565	9.761
	C10	2.395	2.095	1.736
	C11	1.128	0.968	0.743
	C12	0.275	0.236	0.165
Naphthalenes	C10	0.132	0.103	0.098
	C11	0.033	0.025	0.022
Naphtheno/Olefino-Benzs	C10	0.497	0.427	0.366
Indenes	C10	0.336	0.267	0.277
Naphthenes	C8	0.011	0.011	0.010
	C9	0.115	0.112	0.089
	C10	0.011	0.010	0.007
	C11	0.052	0.050	0.033
Mono-Naphthenes	C5	0.104	0.106	0.144

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C6	19.262	18.921	22.272
	C7	0.289	0.293	0.286
	C8	0.222	0.219	0.193
	C9	0.826	0.804	0.637
	C10	0.187	0.175	0.130
	C12	0.096	0.092	0.056
Di/Bicyclo-Naphthenes	C10	0.083	0.079	0.052
Olefins	C4	0.000	0.000	0.000
	C6	0.058	0.064	0.067
	C7	0.048	0.053	0.048
	C8	0.016	0.017	0.016
	C9	0.317	0.337	0.252
n-Olefins	C4	0.137	0.170	0.237
	C5	1.492	1.756	2.070
	C6	0.903	1.009	1.044
	C7	0.090	0.098	0.090
	C8	0.036	0.038	0.031
	C9	0.119	0.121	0.092
Iso-Olefins	C5	1.626	1.891	2.257
	C6	0.961	1.070	1.111
	C7	0.614	0.663	0.608
	C9	0.032	0.035	0.025
	C10	0.187	0.198	0.130
Naphtheno-Olefins	C5	0.191	0.189	0.273
	C6	0.076	0.071	0.090
Di-Olefins	C5	0.062	0.071	0.089
	C6	0.020	0.022	0.024
	C7	0.068	0.070	0.073
	C8	0.076	0.078	0.073
Oxygenates	C5	0.116	0.120	0.128

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
1	8.665	75-28-5	I4	i-Butane	0.030	0.041	0.050
2	9.390	115-11-7	O4	isobutene	0.000	0.000	0.000
3	9.430	106-98-9	K4	Butene-1	0.013	0.017	0.023
4	9.737	106-97-8	P4	n-Butane	3.709	4.895	6.211
5	10.183	624-64-6	K4	t-Butene-2	0.038	0.048	0.065
6	10.265	463-82-1	I5	2,2-Dimethylpropane	0.064	0.083	0.087
7	10.825	590-18-1	K4	c-Butene-2	0.086	0.106	0.149
8	12.802	563-45-1	C5	3-Methylbutene-1	0.078	0.095	0.108
9	14.153	78-78-4	I5	i-Pentane	3.393	4.183	4.576
10	15.639	109-67-1	K5	Pentene-1	0.294	0.351	0.408
11	16.404	563-46-2	C5	2-Methylbutene-1	0.497	0.584	0.690
12	16.870	109-66-0	P5	n-Pentane	0.862	1.051	1.162
13	17.412	78-79-5	E5	2-Methyl-1,3-Butadiene	0.018	0.020	0.026
14	17.907	646-04-8	K5	t-Pentene-2	0.757	0.892	1.050
15	18.484	598-25-4	E5	3-Methylbutadiene-1,2	0.031	0.037	0.044
16	18.852	627-20-3	K5	c-Pentene-2	0.441	0.513	0.611
17	19.472	513-35-9	C5	2-Methylbutene-2	1.051	1.212	1.459
20	21.064	1574-41-0	E5	1c,3-Pentadiene	0.013	0.014	0.019
21	21.415	75-83-2	I6	2,2-Dimethylbutane	0.081	0.095	0.092
22	23.926	142-29-0	B5	Cyclopentene	0.191	0.189	0.273
24	25.084	691-37-2	C6	4-Methylpentene-1	0.085	0.097	0.098
25	25.643	287-92-3	M5	Cyclopentane	0.104	0.106	0.144
26	26.327	79-29-8	I6	2,3-Dimethylbutane	0.885	1.021	0.999
27	26.739	1634-04-4	X5	Methyl-t-butylether	0.116	0.120	0.128
28	27.175	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.052	0.053
29	27.366	107-83-5	I6	2-Methylpentane	1.568	1.834	1.771
30	27.797	674-76-0	C6	4-Methyl-t-pentene-2	0.146	0.166	0.169
31	29.878	96-14-0	I6	3-Methylpentane	0.979	1.126	1.106
32	31.033	763-29-1	C6	2-Methylpentene-1	0.182	0.203	0.211
33	31.253	592-41-6	K6	Hexene-1	0.140	0.158	0.162
35	33.480	110-54-3	P6	n-Hexane	0.555	0.643	0.627
36	34.149	13269-52-8	K6	t-Hexene-3	0.203	0.227	0.235
37	34.609	4050-45-7	K6	t-Hexene-2	0.380	0.426	0.440
38	35.080	625-27-4	C6	2-Methylpentene-2	0.277	0.306	0.320
39	35.333		O6	O13	0.058	0.064	0.067
40	35.465	922-62-3	C6	3-Methyl-c-pentene-2	0.225	0.246	0.260
41	36.378	7688-21-3	K6	c-Hexene-2	0.179	0.198	0.207
43	37.682	3404-73-7	C7	3,3-Dimethylpentene-1	0.234	0.255	0.232
45	38.162	96-37-7	M6	Methylcyclopentane	0.616	0.628	0.712
46	38.970	563-79-1	E7	2,3-Dimethyl-2-Butene	0.017	0.018	0.020
48	39.715	108-08-7	I7	2,4-Dimethylpentane	0.605	0.687	0.587
49	40.217	464-06-2	I7	2,2,3-Trimethylbutane	0.063	0.069	0.061
52	41.934	762-63-0	C7	4,4-Dimethyl-c-pentene-2	0.018	0.019	0.018
53	42.875		E6	Diolefin	0.020	0.022	0.024

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
54	43.156	71-42-3	Q6	Benzene	0.710	0.617	0.885
55	44.152		C7	2-Methyl-c-hexene-3	0.042	0.046	0.042
56	45.167	110-82-7	M6	Cyclohexane	18.646	18.293	21.560
58	45.604	692-24-0	C7	2-Methyl-t-hexene-3	0.033	0.037	0.033
62	46.682	7357-93-9	C7	2-Ethyl-3-methylbutene-1	0.038	0.041	0.038
63	47.002	3769-23-1	C7	4-Methylhexene-1	0.022	0.024	0.022
66	47.632	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.034	0.037	0.034
67	47.983	591-76-4	I7	2-Methylhexane	0.594	0.668	0.577
69	48.455	110-83-8	B6	Cyclohexene	0.076	0.071	0.090
74	49.779	589-34-4	I7	3-Methylhexane	0.275	0.306	0.267
75	50.579	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.095	0.097	0.094
76	51.157	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.069	0.070	0.068
78	51.768	822-50-4	M7	1t,2-Dimethylcyclopentane	0.037	0.038	0.037
80	52.461	540-84-1	I8	2,2,4-Trimethylpentane	4.369	4.823	3.722
81	52.940	1541-23-7	E7	1,5-Heptadiene	0.051	0.052	0.054
83	54.104	4914-89-0	C7	3-Methyl-c-hexene-3	0.032	0.034	0.032
84	54.582	14686-14-7	K7	t-Heptene-3	0.037	0.041	0.037
85	54.904		O7	C7-Olefin2	0.038	0.042	0.038
86	55.289	142-82-5	P7	n-Heptane	0.088	0.098	0.085
87	55.533	7642-10-6	K7	c-Heptene-3	0.032	0.035	0.032
88	55.856	2738-19-4	C7	2-Methyl-2-hexene	0.027	0.029	0.027
89	56.075	10574-36-4	C7	3-Methyl-c-hexene-2	0.044	0.047	0.043
90	56.611	816-79-5	C7	3-Ethylpentene-2	0.020	0.022	0.020
91	56.835		C7	1,5-DM-Cyclopentene	0.040	0.042	0.040
92	57.365	20710-38-8	C7	3-Methyl-t-hexene-2	0.028	0.030	0.028
94	58.099	6443-92-1	K7	c-Heptene-2	0.021	0.023	0.021
95	58.576	108-87-2	M7	Methylcyclohexane	0.058	0.057	0.057
96	58.978	1192-18-3	M7	1c,2-Dimethylcyclopentane	0.013	0.014	0.013
98	59.535	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.014	0.014	0.012
105	61.384	1640-89-7	M7	Ethylcyclopentane	0.017	0.017	0.017
106	62.004	564-02-3	I8	2,2,3-Trimethylpentane	0.282	0.301	0.240
107	62.305	592-13-2	I8	2,5-Dimethylhexane	0.592	0.652	0.504
108	62.628	589-43-5	I8	2,4-Dimethylhexane	0.547	0.597	0.466
109	63.418	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.014	0.014	0.012
111	63.852	563-16-6	I8	3,3-Dimethylhexane	0.017	0.019	0.015
112	64.156		O7	O38	0.010	0.010	0.010
115	64.995		O8	C8-Olefin2	0.016	0.017	0.016
116	65.708	565-75-3	I8	2,3,4-Trimethylpentane	1.855	1.970	1.580
117	66.486	108-88-3	Q7	Toluene	8.300	7.312	8.766
118	67.750		E8	C8-Diolefin3	0.054	0.056	0.054
119	68.152	584-94-1	I8	2,3-Dimethylhexane	0.779	0.836	0.664
120	69.499	592-27-8	I8	2-Methylheptane	0.083	0.090	0.070
121	69.733	589-53-7	I8	4-Methylheptane	0.082	0.089	0.070
124	70.866	589-81-1	I8	3-Methylheptane	0.169	0.183	0.144

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
125	71.864	1002-33-1	E8	1,3-Octadiene	0.022	0.022	0.020
128	72.818	3522-94-9	I9	2,2,5-Trimethylhexane	0.772	0.834	0.586
129	73.097		M8	3c-Ethylmethylcyclopentane	0.021	0.021	0.018
130	73.348		M8	3t-Ethylmethylcyclopentane	0.021	0.021	0.019
131	73.604	111-66-0	M8	2t-Ethylmethylcyclopentane	0.017	0.017	0.015
132	73.783	14850-23-8	K8	t-Octene-4	0.028	0.030	0.025
133	74.031	16747-50-5	M8	1,1-Methylethylcyclopentane	0.038	0.037	0.033
135	74.341	16747-26-5	I9	2,2,4-Trimethylhexane	0.018	0.019	0.014
137	74.776	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.012	0.012	0.010
139	75.130	19549-89-4	C9	3,3-Dimethylheptene-1	0.015	0.015	0.011
140	75.316		M8	1c,2c,3-Trimethylcyclopentane	0.030	0.029	0.026
141	75.601	111-65-9	P8	n-Octane	0.102	0.111	0.087
142	76.451		O9	C9-Olefin1	0.072	0.077	0.063
143	77.055		O9	C9-Olefin2	0.019	0.020	0.015
146	77.622	7642-04-8	K8	c-Octene-2	0.008	0.008	0.007
148	78.070	921-47-1	I9	2,3,4-Trimethylhexane	0.146	0.151	0.111
152	79.304	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.037	0.035	0.032
154	79.868	1071-26-7	I9	2,2-Dimethylheptane	0.071	0.077	0.054
155	80.135	19550-75-6	C9	t-2,2-Dimethylheptene-3	0.017	0.019	0.013
156	80.296	16747-25-4	I9	2,2,3-Trimethylhexane	0.075	0.080	0.057
157	80.677	1068-19-5	I9	4,4-Dimethylheptane	0.049	0.052	0.037
158	81.028	1678-91-7	M8	Ethylcyclohexane	0.020	0.019	0.017
159	81.245	1795-27-3	M9	1c,3c,5-Trimethylcyclohexane	0.089	0.088	0.068
160	81.418	4032-86-4	I9	3,3-Dimethylheptane	0.032	0.034	0.024
162	81.926	3074-75-7	I9	2-Methyl-4-ethylhexane	0.026	0.027	0.020
164	82.409		N8	N8	0.011	0.011	0.010
165	82.776	100-41-4	Q8	Ethylbenzene	9.943	8.759	9.114
166	82.993	7667-60-9	M9	1c,2t,4t-Trimethylcyclohexane	0.396	0.388	0.306
168	83.880	108-38-3	Q8	m-Xylene	0.377	0.334	0.346
169	84.052	106-42-3	Q8	p-Xylene	0.476	0.422	0.436
171	84.793	1067-20-5	I9	3,3-Diethylpentane	0.133	0.135	0.101
172	85.212	2216-34-4	I9	4-Methyloctane	0.117	0.124	0.089
173	85.350	3221-61-2	I9	2-Methyloctane	0.188	0.202	0.143
175	86.046		M9	1c,2t,4c-Trimethylcyclohexane	0.066	0.065	0.050
176	86.228	2216-33-3	I9	3-Methyloctane	0.198	0.210	0.150
178	86.897	95-47-6	Q8	o-Xylene	0.341	0.296	0.313
179	87.278		O9	C9-Olefin4	0.226	0.240	0.174
180	87.636		N9	N18	0.045	0.044	0.035
182	88.113		I9	C9-Isoparaffin1	0.184	0.192	0.140
185	89.356	20237-46-0	K9	c-Nonene-3	0.036	0.040	0.028
187	89.785	111-84-2	P9	n-Nonane	0.699	0.744	0.530
188	90.189	4926-90-3	M9	1,1-Methylethylcyclohexane	0.130	0.123	0.100
189	90.546	4984-01-4	C10	3,7-Dimethyloctene-1	0.095	0.104	0.066
190	91.144	98-82-8	Q9	i-Propylbenzene	0.100	0.089	0.081

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
191	91.440	6434-77-1	K9	c-Nonene-2	0.083	0.081	0.064
192	91.741		N9	N26	0.044	0.042	0.034
193	91.854	696-29-7	M9	i-Propylcyclohexane	0.066	0.063	0.051
194	92.088	15869-87-1	I10	2,2-Dimethyloctane	0.116	0.122	0.079
195	92.267		N9	N28	0.026	0.025	0.020
196	92.360	4032-94-4	I10	2,4-Dimethyloctane	0.059	0.062	0.040
197	92.777	2051-30-1	I10	2,6-Dimethyloctane	0.065	0.069	0.045
198	92.922	15869-89-3	I10	2,5-Dimethyloctane	0.088	0.092	0.060
201	93.403		I10	I12	0.071	0.074	0.048
202	93.526	2040-95-1	M9	n-Butylcyclopentane	0.079	0.077	0.061
203	93.774		N10	N30	0.011	0.010	0.007
204	93.958	4110-44-5	I10	3,3-Dimethyloctane	0.182	0.188	0.125
205	94.091		I10	I14	0.056	0.059	0.039
207	94.625	103-65-1	Q9	n-Propylbenzene	0.586	0.519	0.474
208	94.807	52896-90-9	I10	3-Methyl-5-ethylheptane	0.166	0.174	0.113
212	95.517	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.398	2.118	1.941
213	95.733	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.381	1.225	1.118
215	96.365	108-67-8	Q9	1,3,5-Trimethylbenzene	1.504	1.327	1.217
217	96.825	15869-85-9	I10	5-Methylnonane	0.172	0.180	0.118
218	97.016	17301-94-8	I10	4-Methylnonane	0.268	0.279	0.183
219	97.167	871-83-0	I10	2-Methylnonane	0.199	0.209	0.136
221	97.421	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.893	0.775	0.723
222	97.666	5881-17-4	I10	3-Ethyloctane	0.156	0.161	0.107
223	98.002	5911-04-6	I10	3-Methylnonane	0.355	0.370	0.243
226	98.558		I10	C10-Isoparaffin1	0.071	0.073	0.048
227	98.797		I10	I19	0.084	0.086	0.057
228	99.127	95-63-6	Q9	1,2,4-Trimethylbenzene	4.188	3.652	3.391
229	99.484		I10	I21	0.174	0.180	0.119
230	99.713		I10	C10-Isoparaffin2	0.099	0.103	0.068
232	100.388	19781-18-0	C10	2,3-Dimethyloctene-2	0.092	0.095	0.064
234	100.721	135-98-8	Q10	sec-Butylbenzene	0.093	0.082	0.067
235	100.943	124-18-5	P10	n-Decane	0.933	0.976	0.638
236	101.260		I11	I26	0.063	0.066	0.040
237	101.406		I11	C11-Isoparaffin1	0.061	0.063	0.038
238	101.646		N11	N39	0.052	0.050	0.033
240	101.929	526-73-8	Q9	1,2,3-Trimethylbenzene	1.006	0.859	0.815
241	102.363	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.076	0.067	0.055
245	102.734	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.055	0.049	0.040
247	103.104	496-11-7	J10	2,3-Dihydroindene	0.336	0.267	0.277
248	103.375	7058-01-7	M10	sec-Butylcyclohexane	0.187	0.175	0.130
249	103.744	527-84-4	Q10	1-Methyl-2-i-propylbenzene	0.161	0.141	0.117
250	103.870	17362-11-3	I11	3-Ethylnonane	0.062	0.063	0.038
255	104.726	141-93-5	Q10	1,3-Diethylbenzene	0.130	0.115	0.094
256	104.963	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.418	0.371	0.303

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
258	105.376	105-05-5	Q10	1,4-Diethylbenzene	0.147	0.130	0.106
259	105.600	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.325	0.282	0.236
260	105.859	135-01-3	Q10	1,2-Diethylbenzene	0.088	0.076	0.064
262	106.338	493-02-7	D10	t-Decahydronaphthalene	0.083	0.079	0.052
263	106.626		I11	C11-Isoparaffin3	0.183	0.189	0.114
265	106.934		I11	C11-Isoparaffin4	0.094	0.097	0.058
267	107.263		I11	C11-Isoparaffin5	0.085	0.088	0.053
269	107.626	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.181	0.157	0.131
272	108.189	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.342	0.299	0.248
274	108.761	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.202	0.173	0.146
276	109.533		Q11	4M-1tC4Benz	0.040	0.034	0.029
279	109.939		Q11	1-Methyl-4-t-butylbenzene	0.066	0.059	0.043
280	110.112	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.116	0.099	0.084
281	110.462	1120-21-4	P11	n-Undecane	0.236	0.242	0.147
282	110.643	95-93-2	Q10	1,2,4,5-Tetramethylbenzene	0.062	0.054	0.045
285	111.188		Q11	1-Methyl-1-n-butylbenzene	0.266	0.228	0.175
286	111.499	1074-92-6	Q11	1-t-Butyl-2-methylbenzene	0.374	0.321	0.245
294	112.992		Q11	C11-Aromatic1	0.067	0.058	0.044
295	113.130	874-35-1	H10	5-Methylindan	0.121	0.104	0.089
296	113.327		Q11	C11-Aromatic2	0.092	0.079	0.061
297	113.607		Q11	C11-Aromatic3	0.157	0.135	0.103
298	114.011	824-22-6	H10	4-Methylindan	0.191	0.164	0.141
299	114.347	824-63-5	H10	2-Methylindan	0.185	0.159	0.136
302	115.130		M12	1t-M-2-(4-MP)cyclopentane	0.096	0.092	0.056
305	115.513		Q11	1-Methyl-2-n-butylbenzene	0.038	0.033	0.025
306	115.652	100-18-5	Q12	1,4-Di-i-propylbenzene	0.105	0.090	0.063
308	116.284	119-64-2	G10	1,2,3,4-Tetrahydronaphthalene	0.096	0.076	0.071
310	116.785	91-20-3	G10	Naphthalene	0.036	0.027	0.027
313	117.363		Q12	1t-Butyl-4-ethylbenzene	0.046	0.039	0.027
317	118.243		Q12	1,3-Di-n-propylbenzene	0.053	0.046	0.032
318	118.374		A12	A5	0.106	0.091	0.063
319	119.065	112-40-3	P12	n-Dodecane	0.036	0.037	0.021
325	120.531	102-25-0	Q12	1,3,5-Triethylbenzene	0.011	0.010	0.007
329	121.198	877-44-1	Q12	1,2,4-Triethylbenzene	0.027	0.023	0.016
336	122.541		Q12	1-Methyl-4-n-pentylbenzene	0.021	0.018	0.013
342	123.524	1077-16-3	Q12	n-Hexylbenzene	0.012	0.010	0.007
343	123.748		I13	I49	0.020	0.020	0.011
350	124.932	700-12-9	Q11	Pentamethylbenzene	0.028	0.021	0.018
354	125.810	91-57-6	G11	2-Methylnaphthalene	0.020	0.015	0.013
357	126.386	90-12-0	G11	1-Methylnaphthalene	0.013	0.010	0.009
360	126.764	629-50-5	P13	n-Tridecane	0.014	0.014	0.007

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Paraffin	9.737	106-97-8	n-Butane	3.709	4.895	6.211
	16.870	109-66-0	n-Pentane	0.862	1.051	1.162
	33.480	110-54-3	n-Hexane	0.555	0.643	0.627
	55.289	142-82-5	n-Heptane	0.088	0.098	0.085
	75.601	111-65-9	n-Octane	0.102	0.111	0.087
	89.785	111-84-2	n-Nonane	0.699	0.744	0.530
	100.943	124-18-5	n-Decane	0.933	0.976	0.638
	110.462	1120-21-4	n-Undecane	0.236	0.242	0.147
	119.065	112-40-3	n-Dodecane	0.036	0.037	0.021
	126.764	629-50-5	n-Tridecane	0.014	0.014	0.007
I-Paraffins	8.665	75-28-5	i-Butane	0.030	0.041	0.050
	10.265	463-82-1	2,2-Dimethylpropane	0.064	0.083	0.087
	14.153	78-78-4	i-Pentane	3.393	4.183	4.576
	21.415	75-83-2	2,2-Dimethylbutane	0.081	0.095	0.092
	26.327	79-29-8	2,3-Dimethylbutane	0.885	1.021	0.999
	27.366	107-83-5	2-Methylpentane	1.568	1.834	1.771
	29.878	96-14-0	3-Methylpentane	0.979	1.126	1.106
	39.715	108-08-7	2,4-Dimethylpentane	0.605	0.687	0.587
	40.217	464-06-2	2,2,3-Trimethylbutane	0.063	0.069	0.061
	47.983	591-76-4	2-Methylhexane	0.594	0.668	0.577
	49.779	589-34-4	3-Methylhexane	0.275	0.306	0.267
	52.461	540-84-1	2,2,4-Trimethylpentane	4.369	4.823	3.722
	62.004	564-02-3	2,2,3-Trimethylpentane	0.282	0.301	0.240
	62.305	592-13-2	2,5-Dimethylhexane	0.592	0.652	0.504
	62.628	589-43-5	2,4-Dimethylhexane	0.547	0.597	0.466
	63.852	563-16-6	3,3-Dimethylhexane	0.017	0.019	0.015
	65.708	565-75-3	2,3,4-Trimethylpentane	1.855	1.970	1.580
	68.152	584-94-1	2,3-Dimethylhexane	0.779	0.836	0.664
	69.499	592-27-8	2-Methylheptane	0.083	0.090	0.070
	69.733	589-53-7	4-Methylheptane	0.082	0.089	0.070
	70.866	589-81-1	3-Methylheptane	0.169	0.183	0.144
	72.818	3522-94-9	2,2,5-Trimethylhexane	0.772	0.834	0.586
	74.341	16747-26-5	2,2,4-Trimethylhexane	0.018	0.019	0.014
	78.070	921-47-1	2,3,4-Trimethylhexane	0.146	0.151	0.111
	79.868	1071-26-7	2,2-Dimethylheptane	0.071	0.077	0.054
	80.296	16747-25-4	2,2,3-Trimethylhexane	0.075	0.080	0.057
	80.677	1068-19-5	4,4-Dimethylheptane	0.049	0.052	0.037
	81.418	4032-86-4	3,3-Dimethylheptane	0.032	0.034	0.024
	81.926	3074-75-7	2-Methyl-4-ethylhexane	0.026	0.027	0.020
	84.793	1067-20-5	3,3-Diethylpentane	0.133	0.135	0.101
	85.212	2216-34-4	4-Methyloctane	0.117	0.124	0.089
	85.350	3221-61-2	2-Methyloctane	0.188	0.202	0.143
	86.228	2216-33-3	3-Methyloctane	0.198	0.210	0.150
	88.113		C9-Isoparaffin1	0.184	0.192	0.140
	92.088	15869-87-1	2,2-Dimethyloctane	0.116	0.122	0.079
	92.360	4032-94-4	2,4-Dimethyloctane	0.059	0.062	0.040
	92.777	2051-30-1	2,6-Dimethyloctane	0.065	0.069	0.045

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
I-Paraffins	92.922	15869-89-3	2,5-Dimethyloctane	0.088	0.092	0.060
	93.403		I12	0.071	0.074	0.048
	93.958	4110-44-5	3,3-Dimethyloctane	0.182	0.188	0.125
	94.091		I14	0.056	0.059	0.039
	94.807	52896-90-9	3-Methyl-5-ethylheptane	0.166	0.174	0.113
	96.825	15869-85-9	5-Methylnonane	0.172	0.180	0.118
	97.016	17301-94-8	4-Methylnonane	0.268	0.279	0.183
	97.167	871-83-0	2-Methylnonane	0.199	0.209	0.136
	97.666	5881-17-4	3-Ethyloctane	0.156	0.161	0.107
	98.002	5911-04-6	3-Methylnonane	0.355	0.370	0.243
	98.558		C10-Isoparaffin1	0.071	0.073	0.048
	98.797		I19	0.084	0.086	0.057
	99.484		I21	0.174	0.180	0.119
	99.713		C10-Isoparaffin2	0.099	0.103	0.068
	101.260		I26	0.063	0.066	0.040
	101.406		C11-Isoparaffin1	0.061	0.063	0.038
	103.870	17362-11-3	3-Ethylnonane	0.062	0.063	0.038
	106.626		C11-Isoparaffin3	0.183	0.189	0.114
	106.934		C11-Isoparaffin4	0.094	0.097	0.058
	107.263		C11-Isoparaffin5	0.085	0.088	0.053
	123.748		I49	0.020	0.020	0.011
Aromatics	118.374		A5	0.106	0.091	0.063
Mono-Aromatics	43.156	71-42-3	Benzene	0.710	0.617	0.885
	66.486	108-88-3	Toluene	8.300	7.312	8.766
	82.776	100-41-4	Ethylbenzene	9.943	8.759	9.114
	83.880	108-38-3	m-Xylene	0.377	0.334	0.346
	84.052	106-42-3	p-Xylene	0.476	0.422	0.436
	86.897	95-47-6	o-Xylene	0.341	0.296	0.313
	91.144	98-82-8	i-Propylbenzene	0.100	0.089	0.081
	94.625	103-65-1	n-Propylbenzene	0.586	0.519	0.474
	95.517	620-14-4	1-Methyl-3-ethylbenzene	2.398	2.118	1.941
	95.733	622-96-8	1-Methyl-4-ethylbenzene	1.381	1.225	1.118
	96.365	108-67-8	1,3,5-Trimethylbenzene	1.504	1.327	1.217
	97.421	611-14-3	1-Methyl-2-ethylbenzene	0.893	0.775	0.723
	99.127	95-63-6	1,2,4-Trimethylbenzene	4.188	3.652	3.391
	100.721	135-98-8	sec-Butylbenzene	0.093	0.082	0.067
	101.929	526-73-8	1,2,3-Trimethylbenzene	1.006	0.859	0.815
	102.363	535-77-3	1-Methyl-3-i-propylbenzene	0.076	0.067	0.055
	102.734	99-87-6	1-Methyl-4-i-propylbenzene	0.055	0.049	0.040
	103.744	527-84-4	1-Methyl-2-i-propylbenzene	0.161	0.141	0.117
	104.726	141-93-5	1,3-Diethylbenzene	0.130	0.115	0.094
	104.963	1074-43-7	1-Methyl-3-n-propylbenzene	0.418	0.371	0.303
	105.376	105-05-5	1,4-Diethylbenzene	0.147	0.130	0.106
	105.600	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.325	0.282	0.236
	105.859	135-01-3	1,2-Diethylbenzene	0.088	0.076	0.064
	107.626	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.181	0.157	0.131

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Mono-Aromatics	108.189	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.342	0.299	0.248
	108.761	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.202	0.173	0.146
	109.533		4M-1tC4Benz	0.040	0.034	0.029
	109.939		1-Methyl-4-t-butylbenzene	0.066	0.059	0.043
	110.112	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.116	0.099	0.084
	110.643	95-93-2	1,2,4,5-Tetramethylbenzene	0.062	0.054	0.045
	111.188		1-Methyl-1-n-butylbenzene	0.266	0.228	0.175
	111.499	1074-92-6	1-t-Butyl-2-methylbenzene	0.374	0.321	0.245
	112.992		C11-Aromatic1	0.067	0.058	0.044
	113.327		C11-Aromatic2	0.092	0.079	0.061
	113.607		C11-Aromatic3	0.157	0.135	0.103
	115.513		1-Methyl-2-n-butylbenzene	0.038	0.033	0.025
	115.652	100-18-5	1,4-Di-i-propylbenzene	0.105	0.090	0.063
	117.363		1t-Butyl-4-ethylbenzene	0.046	0.039	0.027
	118.243		1,3-Di-n-propylbenzene	0.053	0.046	0.032
	120.531	102-25-0	1,3,5-Triethylbenzene	0.011	0.010	0.007
	121.198	877-44-1	1,2,4-Triethylbenzene	0.027	0.023	0.016
	122.541		1-Methyl-4-n-pentylbenzene	0.021	0.018	0.013
	123.524	1077-16-3	n-Hexylbenzene	0.012	0.010	0.007
	124.932	700-12-9	Pentamethylbenzene	0.028	0.021	0.018
Naphthalenes	116.284	119-64-2	1,2,3,4-Tetrahydronaphthalene	0.096	0.076	0.071
	116.785	91-20-3	Naphthalene	0.036	0.027	0.027
	125.810	91-57-6	2-Methylnaphthalene	0.020	0.015	0.013
	126.386	90-12-0	1-Methylnaphthalene	0.013	0.010	0.009
Naphtheno/Olefir	113.130	874-35-1	5-Methylindan	0.121	0.104	0.089
	114.011	824-22-6	4-Methylindan	0.191	0.164	0.141
	114.347	824-63-5	2-Methylindan	0.185	0.159	0.136
Indenes	103.104	496-11-7	2,3-Dihydroindene	0.336	0.267	0.277
Naphthenes	82.409		N8	0.011	0.011	0.010
	87.636		N18	0.045	0.044	0.035
	91.741		N26	0.044	0.042	0.034
	92.267		N28	0.026	0.025	0.020
	93.774		N30	0.011	0.010	0.007
	101.646		N39	0.052	0.050	0.033
Mono-Naphthene	25.643	287-92-3	Cyclopentane	0.104	0.106	0.144
	38.162	96-37-7	Methylcyclopentane	0.616	0.628	0.712
	45.167	110-82-7	Cyclohexane	18.646	18.293	21.560
	50.579	2532-58-3	1c,3-Dimethylcyclopentane	0.095	0.097	0.094
	51.157	1759-58-6	1t,3-Dimethylcyclopentane	0.069	0.070	0.068
	51.768	822-50-4	1t,2-Dimethylcyclopentane	0.037	0.038	0.037
	58.576	108-87-2	Methylcyclohexane	0.058	0.057	0.057
	58.978	1192-18-3	1c,2-Dimethylcyclopentane	0.013	0.014	0.013
	59.535	4516-69-2	1,1,3-Trimethylcyclopentane	0.014	0.014	0.012

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Mono-Naphthene	61.384	1640-89-7	Ethylcyclopentane	0.017	0.017	0.017
	63.418	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.014	0.014	0.012
	73.097		3c-Ethylmethylcyclopentane	0.021	0.021	0.018
	73.348		3t-Ethylmethylcyclopentane	0.021	0.021	0.019
	73.604	111-66-0	2t-Ethylmethylcyclopentane	0.017	0.017	0.015
	74.031	16747-50-5	1,1-Methylethylcyclopentane	0.038	0.037	0.033
	74.776	2207-03-6	1t,3-Dimethylcyclohexane	0.012	0.012	0.010
	75.316		1c,2c,3-Trimethylcyclopentane	0.030	0.029	0.026
	79.304	2207-01-4	1c,2-Dimethylcyclohexane	0.037	0.035	0.032
	81.028	1678-91-7	Ethylcyclohexane	0.020	0.019	0.017
	81.245	1795-27-3	1c,3c,5-Trimethylcyclohexane	0.089	0.088	0.068
	82.993	7667-60-9	1c,2t,4t-Trimethylcyclohexane	0.396	0.388	0.306
	86.046		1c,2t,4c-Trimethylcyclohexane	0.066	0.065	0.050
	90.189	4926-90-3	1,1-Methylethylcyclohexane	0.130	0.123	0.100
	91.854	696-29-7	i-Propylcyclohexane	0.066	0.063	0.051
	93.526	2040-95-1	n-Butylcyclopentane	0.079	0.077	0.061
	103.375	7058-01-7	sec-Butylcyclohexane	0.187	0.175	0.130
	115.130		1t-M-2-(4-MP)cyclopentane	0.096	0.092	0.056
Di/Bicyclo-Naphth	106.338	493-02-7	t-Decahydronaphthalene	0.083	0.079	0.052
Olefins	9.390	115-11-7	isobutene	0.000	0.000	0.000
	35.333		O13	0.058	0.064	0.067
	54.904		C7-Olefin2	0.038	0.042	0.038
	64.156		O38	0.010	0.010	0.010
	64.995		C8-Olefin2	0.016	0.017	0.016
	76.451		C9-Olefin1	0.072	0.077	0.063
	77.055		C9-Olefin2	0.019	0.020	0.015
	87.278		C9-Olefin4	0.226	0.240	0.174
n-Olefins	9.430	106-98-9	Butene-1	0.013	0.017	0.023
	10.183	624-64-6	t-Butene-2	0.038	0.048	0.065
	10.825	590-18-1	c-Butene-2	0.086	0.106	0.149
	15.639	109-67-1	Pentene-1	0.294	0.351	0.408
	17.907	646-04-8	t-Pentene-2	0.757	0.892	1.050
	18.852	627-20-3	c-Pentene-2	0.441	0.513	0.611
	31.253	592-41-6	Hexene-1	0.140	0.158	0.162
	34.149	13269-52-8	t-Hexene-3	0.203	0.227	0.235
	34.609	4050-45-7	t-Hexene-2	0.380	0.426	0.440
	36.378	7688-21-3	c-Hexene-2	0.179	0.198	0.207
	54.582	14686-14-7	t-Heptene-3	0.037	0.041	0.037
	55.533	7642-10-6	c-Heptene-3	0.032	0.035	0.032
	58.099	6443-92-1	c-Heptene-2	0.021	0.023	0.021
	73.783	14850-23-8	t-Octene-4	0.028	0.030	0.025
	77.622	7642-04-8	c-Octene-2	0.008	0.008	0.007
	89.356	20237-46-0	c-Nonene-3	0.036	0.040	0.028
	91.440	6434-77-1	c-Nonene-2	0.083	0.081	0.064
Iso-Olefins	12.802	563-45-1	3-Methylbutene-1	0.078	0.095	0.108

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Iso-Olefins	16.404	563-46-2	2-Methylbutene-1	0.497	0.584	0.690
	19.472	513-35-9	2-Methylbutene-2	1.051	1.212	1.459
	25.084	691-37-2	4-Methylpentene-1	0.085	0.097	0.098
	27.175	691-38-3	4-Methyl-c-pentene-2	0.046	0.052	0.053
	27.797	674-76-0	4-Methyl-t-pentene-2	0.146	0.166	0.169
	31.033	763-29-1	2-Methylpentene-1	0.182	0.203	0.211
	35.080	625-27-4	2-Methylpentene-2	0.277	0.306	0.320
	35.465	922-62-3	3-Methyl-c-pentene-2	0.225	0.246	0.260
	37.682	3404-73-7	3,3-Dimethylpentene-1	0.234	0.255	0.232
	41.934	762-63-0	4,4-Dimethyl-c-pentene-2	0.018	0.019	0.018
	44.152		2-Methyl-c-hexene-3	0.042	0.046	0.042
	45.604	692-24-0	2-Methyl-t-hexene-3	0.033	0.037	0.033
	46.682	7357-93-9	2-Ethyl-3-methylbutene-1	0.038	0.041	0.038
	47.002	3769-23-1	4-Methylhexene-1	0.022	0.024	0.022
	47.632	3404-55-5	4-Methyl-t/c-hexene-2	0.034	0.037	0.034
	54.104	4914-89-0	3-Methyl-c-hexene-3	0.032	0.034	0.032
	55.856	2738-19-4	2-Methyl-2-hexene	0.027	0.029	0.027
	56.075	10574-36-4	3-Methyl-c-hexene-2	0.044	0.047	0.043
	56.611	816-79-5	3-Ethylpentene-2	0.020	0.022	0.020
	56.835		1,5-DM-Cyclopentene	0.040	0.042	0.040
	57.365	20710-38-8	3-Methyl-t-hexene-2	0.028	0.030	0.028
	75.130	19549-89-4	3,3-Dimethylheptene-1	0.015	0.015	0.011
	80.135	19550-75-6	t-2,2-Dimethylheptene-3	0.017	0.019	0.013
	90.546	4984-01-4	3,7-Dimethyloctene-1	0.095	0.104	0.066
	100.388	19781-18-0	2,3-Dimethyloctene-2	0.092	0.095	0.064
Naphtheno-Olefi	23.926	142-29-0	Cyclopentene	0.191	0.189	0.273
	48.455	110-83-8	Cyclohexene	0.076	0.071	0.090
Di-Olefins	17.412	78-79-5	2-Methyl-1,3-Butadiene	0.018	0.020	0.026
	18.484	598-25-4	3-Methylbutadiene-1,2	0.031	0.037	0.044
	21.064	1574-41-0	1c,3-Pentadiene	0.013	0.014	0.019
	38.970	563-79-1	2,3-Dimethyl-2-Butene	0.017	0.018	0.020
	42.875		Diolefin	0.020	0.022	0.024
	52.940	1541-23-7	1,5-Heptadiene	0.051	0.052	0.054
	67.750		C8-Diolefin3	0.054	0.056	0.054
	71.864	1002-33-1	1,3-Octadiene	0.022	0.022	0.020
Oxygenates	26.739	1634-04-4	Methyl-t-butylether	0.116	0.120	0.128

Plus

Recovery = 100.00

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-69590
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

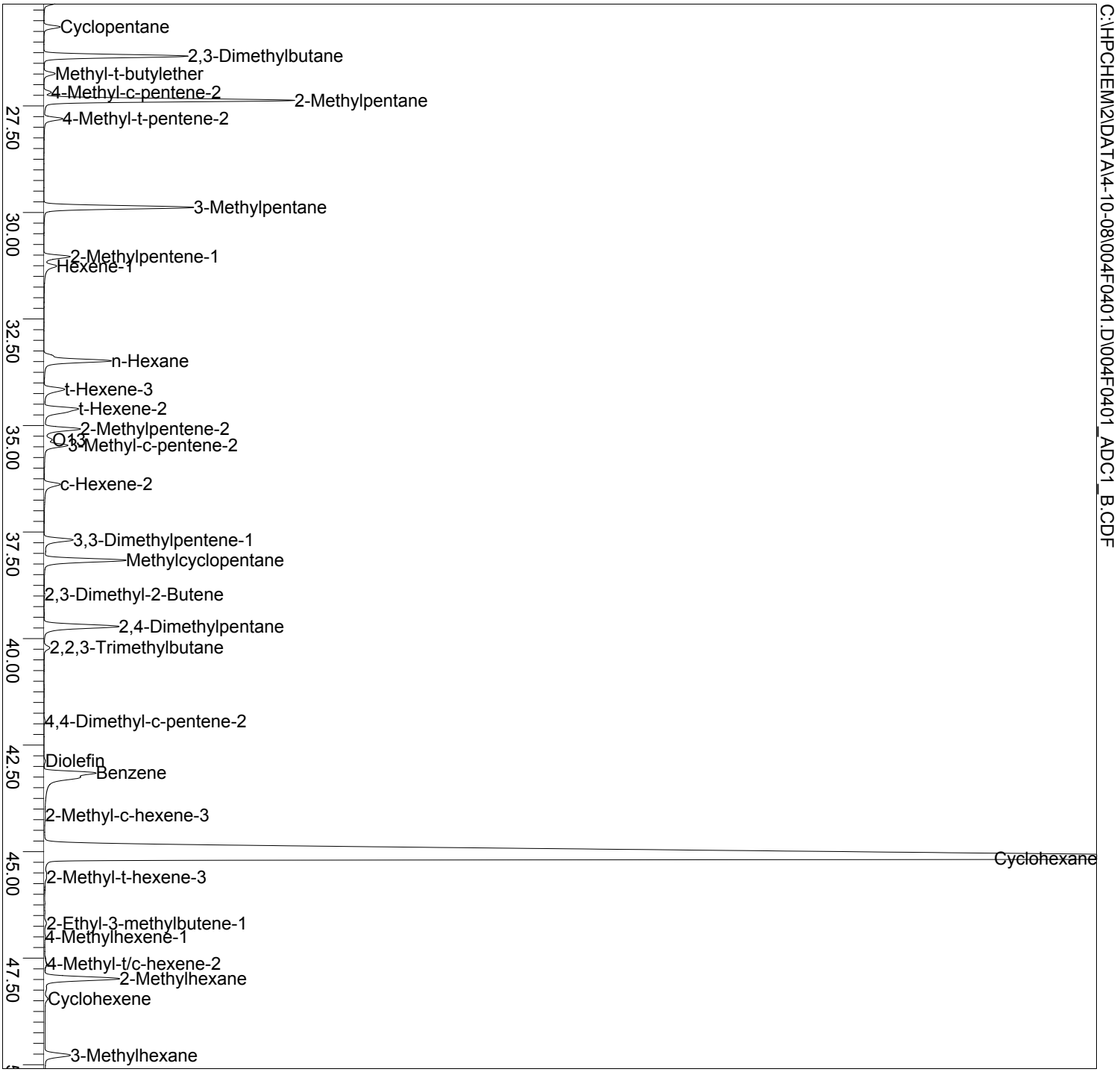
10-Apr-08, 17:29:10
Operator: AAD

Sample Chromatogram

File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-69590
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

10-Apr-08, 17:29:10
Operator: AAD

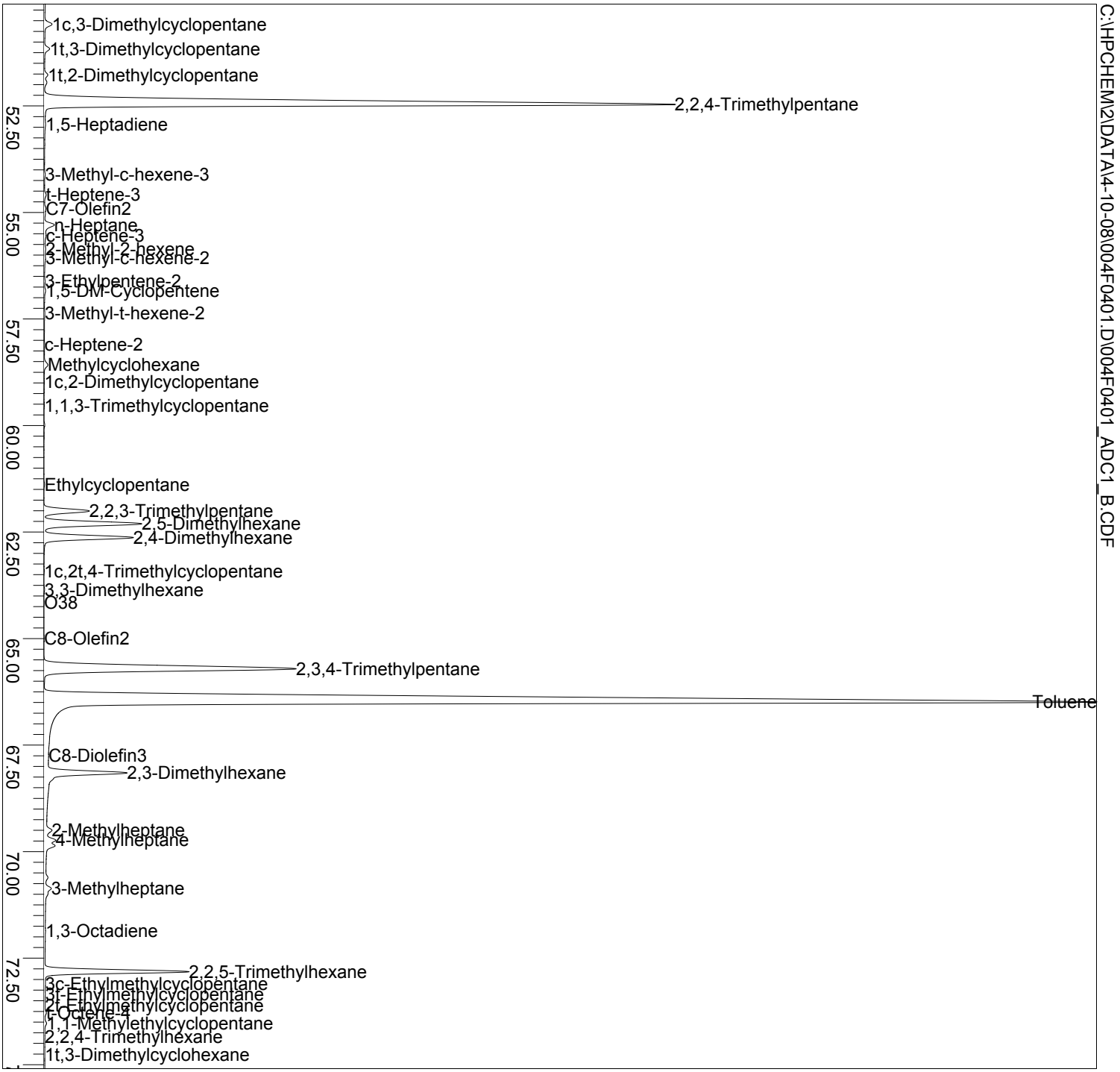
Sample Chromatogram



File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-69590
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

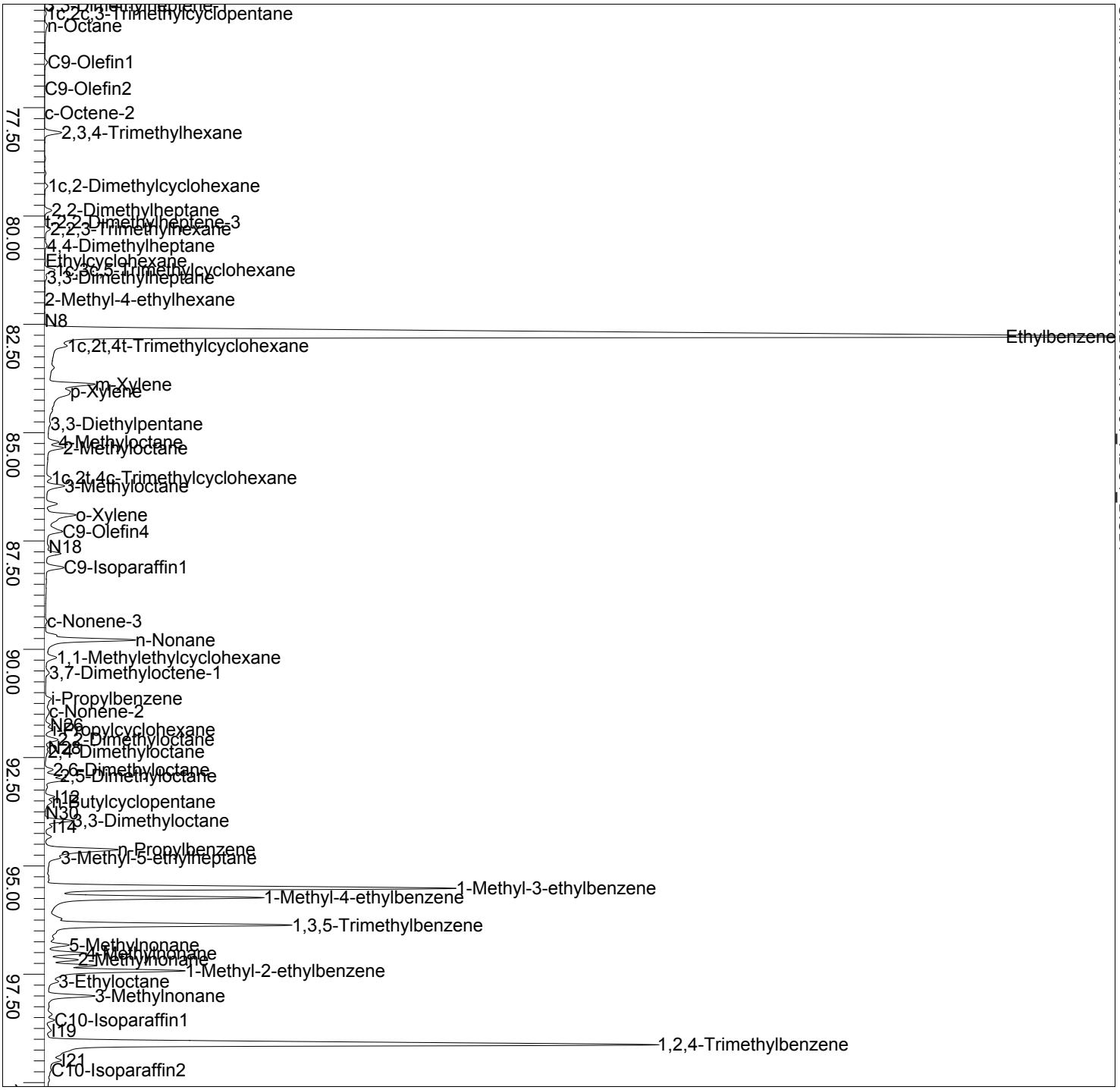
10-Apr-08, 17:29:10
Operator: AAD

Sample Chromatogram



File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF 10-Apr-08, 17:29:10
Sample: ODDB-69590 Operator: AAD
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

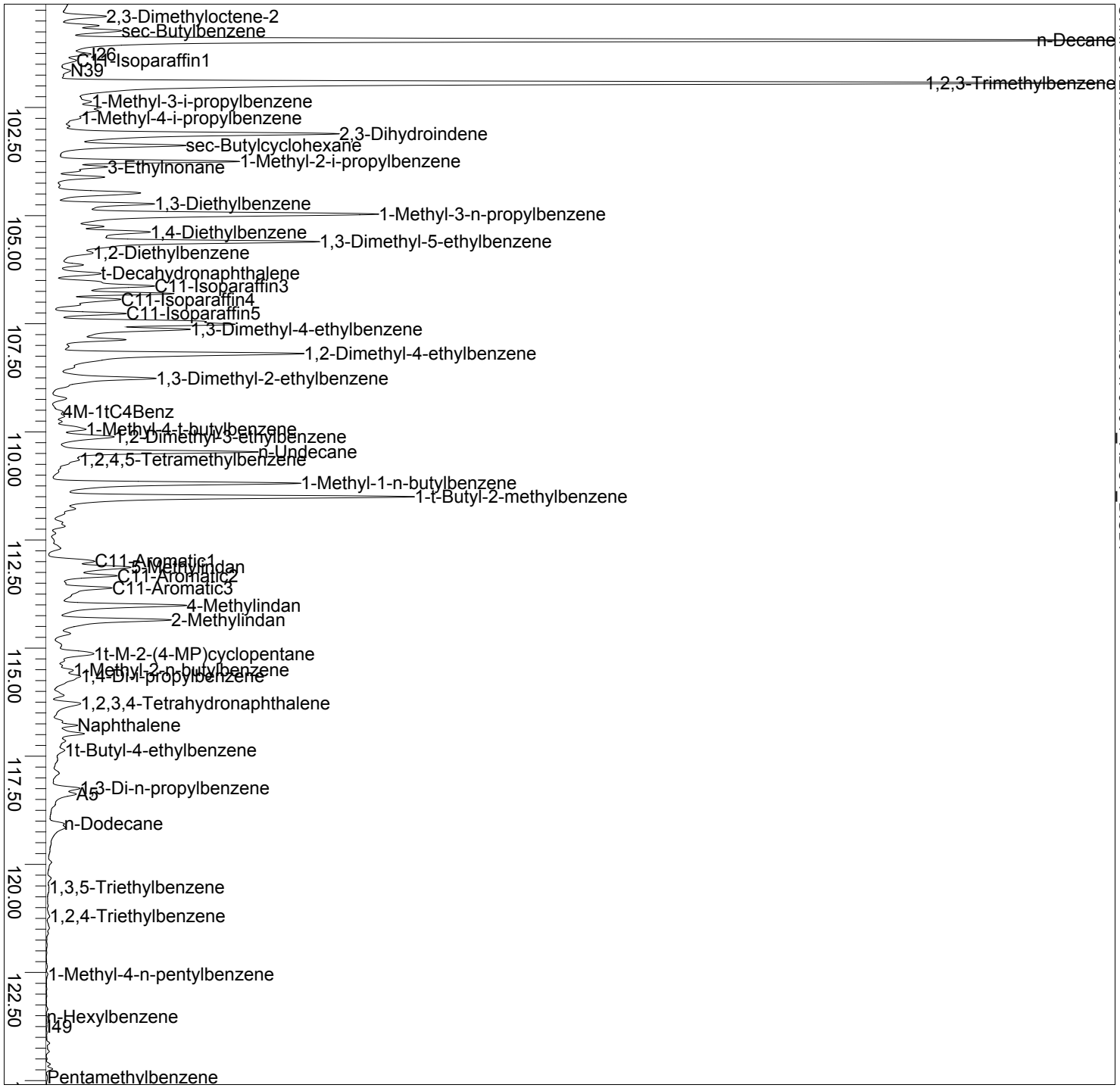
Sample Chromatogram



File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-69590
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

10-Apr-08, 17:29:10
Operator: AAD

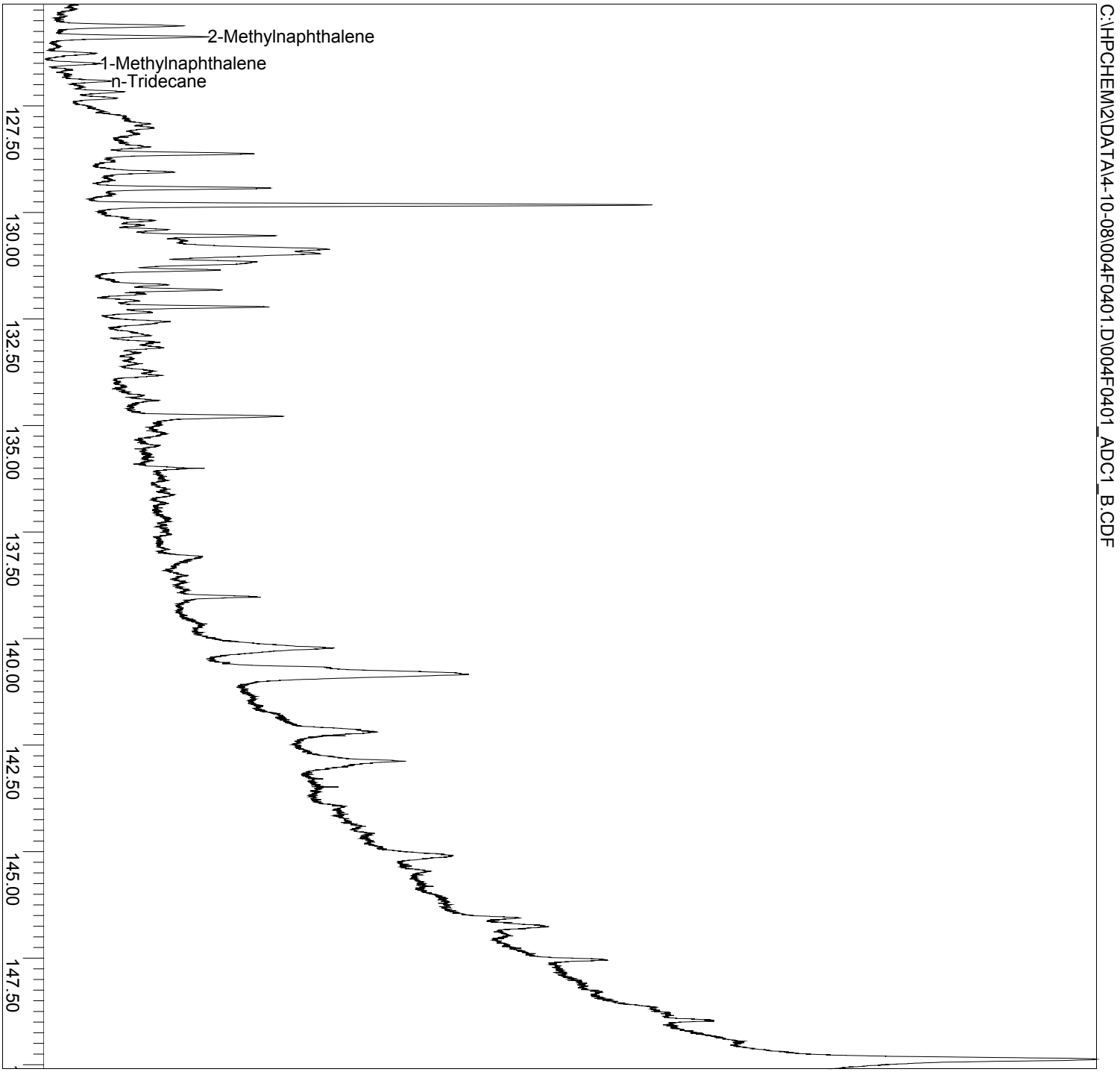
Sample Chromatogram



File: C:\HPCHEM\2\DATA\4-10-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-69590
Parameter: C:\HPCHEM\HCE40\ODDB-69590
ODDB-69590

10-Apr-08, 17:29:10
Operator: AAD

Sample Chromatogram



File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	10.240	12.177	11.986
I-Paraffins	20.915	22.900	17.480
Aromatics	31.538	27.621	26.882
Mono-Aromatics	31.231	27.379	26.646
Naphthalenes	0.015	0.011	0.010
Naphtheno/Olefino-Benz	0.009	0.008	0.006
Indenes	0.283	0.223	0.219
Naphthenes	17.329	16.922	17.717
Mono-Naphthenes	17.222	16.820	17.650
Di/Bicyclo-Naphthenes	0.078	0.075	0.047
Olefins	5.647	6.250	5.779
n-Olefins	4.777	5.347	5.155
Iso-Olefins	0.594	0.616	0.401
Naphtheno-Olefins	0.000	0.000	0.000
Di-Olefins	0.097	0.099	0.085
Oxygenates	7.659	7.383	15.209
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	7.659	7.383	15.209
C4	2.846	3.741	4.479
C5	1.207	1.467	1.532
C6	28.262	29.900	30.538
C7	13.297	12.911	12.764
C8	16.110	15.267	13.559
C9	13.687	12.450	10.262
C10	9.738	9.629	6.402
C11	0.511	0.494	0.302
C12	0.006	0.006	0.003
C13	0.005	0.005	0.002

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	2.807	3.688	4.418
	C5	0.410	0.498	0.520
	C6	5.403	6.232	5.735
	C7	0.597	0.664	0.545
	C8	0.607	0.657	0.486
	C9	0.238	0.253	0.170
	C10	0.152	0.158	0.098
	C11	0.016	0.016	0.009
	C12	0.006	0.006	0.003
	C13	0.005	0.005	0.002
I-Paraffins	C4	0.039	0.053	0.061
	C5	0.749	0.920	0.950
	C6	4.172	4.814	4.429
	C7	3.836	4.308	3.502
	C8	4.269	4.632	3.419
	C9	1.389	1.472	0.991
	C10	5.977	6.233	3.843
	C11	0.485	0.470	0.287
Mono-Aromatics	C6	0.722	0.625	0.846
	C7	7.495	6.575	7.441
	C8	10.457	9.206	9.011
	C9	9.937	8.670	7.563
	C10	2.614	2.298	1.781
	C11	0.006	0.005	0.003
Naphthalenes	C10	0.011	0.008	0.008
	C11	0.004	0.003	0.003
Naphtheno/Olefino-Benzs	C10	0.009	0.008	0.006
Indenes	C10	0.283	0.223	0.219
Naphthenes	C9	0.028	0.028	0.021
Mono-Naphthenes	C5	0.048	0.048	0.062
	C6	13.284	12.978	14.440
	C7	1.346	1.339	1.254
	C8	0.615	0.607	0.501
	C9	1.850	1.772	1.341
	C10	0.079	0.075	0.052
Di/Bicyclo-Naphthenes	C10	0.078	0.075	0.047

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Di/Bicyclo-Naphthenes				
Olefins	C8	0.054	0.056	0.048
	C9	0.125	0.132	0.090
n-Olefins	C6	4.669	5.238	5.075
	C7	0.004	0.005	0.004
	C8	0.011	0.012	0.009
	C9	0.082	0.082	0.060
	C10	0.010	0.011	0.007
Iso-Olefins	C6	0.012	0.013	0.013
	C7	0.019	0.021	0.018
	C9	0.037	0.042	0.027
	C10	0.525	0.541	0.343
Di-Olefins	C8	0.097	0.099	0.085
Oxygenates	C2	7.659	7.383	15.209

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
1	8.732	75-28-5	I4	i-Butane	0.039	0.053	0.061
2	9.790	106-97-8	P4	n-Butane	2.807	3.688	4.418
3	10.322	463-82-1	I5	2,2-Dimethylpropane	0.011	0.014	0.014
4	12.696	64-17-5	X2	Ethanol	7.659	7.383	15.209
5	14.142	78-78-4	I5	i-Pentane	0.738	0.906	0.936
6	16.834	109-66-0	P5	n-Pentane	0.410	0.498	0.520
7	21.364	75-83-2	I6	2,2-Dimethylbutane	0.056	0.065	0.059
8	25.538	287-92-3	M5	Cyclopentane	0.048	0.048	0.062
9	26.218	79-29-8	I6	2,3-Dimethylbutane	0.457	0.526	0.485
10	27.257	107-83-5	I6	2-Methylpentane	1.720	2.003	1.826
11	29.772	96-14-0	I6	3-Methylpentane	1.939	2.220	2.058
12	31.175	592-41-6	K6	Hexene-1	4.669	5.238	5.075
13	33.440	110-54-3	P6	n-Hexane	5.403	6.232	5.735
15	35.315	922-62-3	C6	3-Methyl-c-pentene-2	0.012	0.013	0.013
16	37.505	3404-73-7	C7	3,3-Dimethylpentene-1	0.008	0.009	0.008
17	38.004	590-35-2	I7	2,2-Dimethylpentane	1.608	1.816	1.468
18	39.553	108-08-7	I7	2,4-Dimethylpentane	0.495	0.559	0.452
19	40.073	464-06-2	I7	2,2,3-Trimethylbutane	0.083	0.092	0.076
20	42.853	71-42-3	Q6	Benzene	0.722	0.625	0.846
21	44.937	110-82-7	M6	Cyclohexane	13.284	12.978	14.440
22	45.344	692-24-0	C7	2-Methyl-t-hexene-3	0.006	0.007	0.006
23	47.828	591-76-4	I7	2-Methylhexane	1.120	1.256	1.023
24	49.613	589-34-4	I7	3-Methylhexane	0.529	0.585	0.483
25	50.414	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.099	0.101	0.092
26	50.987	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.088	0.090	0.082
27	51.592	822-50-4	M7	1t,2-Dimethylcyclopentane	0.130	0.131	0.121
29	52.217	540-84-1	I8	2,2,4-Trimethylpentane	1.830	2.012	1.466
30	55.114	142-82-5	P7	n-Heptane	0.597	0.664	0.545
31	55.804	10574-36-4	C7	3-Methyl-c-hexene-2	0.005	0.005	0.004
34	57.895	6443-92-1	K7	c-Heptene-2	0.004	0.005	0.004
35	58.417	108-87-2	M7	Methylcyclohexane	1.022	1.010	0.952
36	58.815	1192-18-3	M7	1c,2-Dimethylcyclopentane	0.007	0.007	0.006
37	59.374	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.037	0.038	0.030
38	59.822	590-73-8	I8	2,2-Dimethylhexane	0.033	0.036	0.026
41	61.834	564-02-3	I8	2,2,3-Trimethylpentane	0.115	0.122	0.092
42	62.121	592-13-2	I8	2,5-Dimethylhexane	0.283	0.311	0.227
43	62.444	589-43-5	I8	2,4-Dimethylhexane	0.254	0.276	0.203
45	63.238	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.037	0.037	0.030
46	63.677	563-16-6	I8	3,3-Dimethylhexane	0.025	0.026	0.020
47	64.820		O8	C8-Olefin2	0.031	0.033	0.029
48	65.504	565-75-3	I8	2,3,4-Trimethylpentane	0.717	0.758	0.574
49	66.212	108-88-3	Q7	Toluene	7.495	6.575	7.441
50	67.285		E8	C8-Diolefin3	0.015	0.016	0.014
51	67.614		E8	C8-Diolefin4	0.030	0.031	0.028

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
52	67.976	609-26-7	I8	2-Methyl-3-ethylpentane	0.239	0.255	0.191
53	68.289	4259-00-1	M8	1,1,2-Trimethylcyclopentane	0.010	0.010	0.008
54	68.507		O8	C8-Olefin3	0.023	0.024	0.018
55	69.334	592-27-8	I8	2-Methylheptane	0.281	0.306	0.225
56	69.581	589-53-7	I8	4-Methylheptane	0.116	0.125	0.093
58	69.935	583-48-2	I8	3,4-Dimethylhexane	0.012	0.013	0.010
59	70.438	2207-04-7	M8	1t,4-Dimethylcyclohexane	0.224	0.224	0.183
60	70.693	589-81-1	I8	3-Methylheptane	0.227	0.245	0.182
61	70.807	619-99-8	I8	3-Ethylhexane	0.137	0.146	0.110
62	71.709	1002-33-1	E8	1,3-Octadiene	0.052	0.051	0.043
65	72.652	3522-94-9	I9	2,2,5-Trimethylhexane	0.303	0.326	0.216
66	72.950		M8	3c-Ethylmethylcyclopentane	0.018	0.018	0.015
67	73.175		M8	3t-Ethylmethylcyclopentane	0.023	0.023	0.019
68	73.439	111-66-0	M8	2t-Ethylmethylcyclopentane	0.009	0.009	0.007
69	73.629	14850-23-8	K8	t-Octene-4	0.006	0.006	0.005
70	73.862	16747-50-5	M8	1,1-Methylethylcyclopentane	0.107	0.104	0.087
71	74.100	16747-26-5	I9	2,2,4-Trimethylhexane	0.005	0.006	0.004
72	74.859	14919-01-8	K8	t-Octene-3	0.005	0.005	0.004
73	75.159		M8	1c,2c,3-Trimethylcyclopentane	0.070	0.068	0.057
74	75.419	111-65-9	P8	n-Octane	0.607	0.657	0.486
76	76.425	3875-51-2	M8	i-Propylcyclopentane	0.005	0.005	0.004
78	77.927	921-47-1	I9	2,3,4-Trimethylhexane	0.053	0.054	0.038
81	79.158	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.045	0.043	0.036
83	79.713	1071-26-7	I9	2,2-Dimethylheptane	0.181	0.194	0.129
84	79.972	19550-75-6	C9	t-2,2-Dimethylheptene-3	0.019	0.021	0.014
85	80.158	16747-25-4	I9	2,2,3-Trimethylhexane	0.123	0.131	0.088
86	80.535	1068-19-5	I9	4,4-Dimethylheptane	0.091	0.097	0.065
87	80.889	1678-91-7	M8	Ethylcyclohexane	0.031	0.030	0.025
88	81.110	1795-27-3	M9	1c,3c,5-Trimethylcyclohexane	0.112	0.111	0.081
89	81.286	4032-86-4	I9	3,3-Dimethylheptane	0.042	0.044	0.030
91	81.784	3074-75-7	I9	2-Methyl-4-ethylhexane	0.017	0.018	0.012
93	82.441	100-41-4	Q8	Ethylbenzene	1.981	1.738	1.707
95	82.790	7667-60-9	M9	1c,2t,4t-Trimethylcyclohexane	0.061	0.059	0.044
96	83.043	4588-18-5	C9	2-Methyloctene-1	0.014	0.015	0.010
99	83.797	108-38-3	Q8	m-Xylene	5.953	5.239	5.130
100	83.928	106-42-3	Q8	p-Xylene	2.523	2.229	2.174
101	84.247	3074-71-3	I9	2,3-Dimethylheptane	0.032	0.034	0.023
103	84.672	1067-20-5	I9	3,3-Diethylpentane	0.062	0.062	0.044
104	85.094	2216-34-4	I9	4-Methyloctane	0.110	0.116	0.078
105	85.235	3221-61-2	I9	2-Methyloctane	0.142	0.151	0.101
106	85.547		O9	C9-Olefin3	0.038	0.040	0.027
107	85.924		M9	1c,2t,4c-Trimethylcyclohexane	0.040	0.040	0.029
108	86.101	2216-33-3	I9	3-Methyloctane	0.139	0.146	0.099
111	86.698	7094-26-0	M9	1,1,2-Trimethylcyclohexane	1.013	0.963	0.734

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
113	87.163		O9	C9-Olefin4	0.087	0.092	0.063
114	87.516		N9	N18	0.021	0.020	0.015
116	87.997		I9	C9-Isoparaffin1	0.089	0.092	0.063
118	88.495	3788-32-7	M9	i-Butylcyclopentane	0.012	0.011	0.008
120	88.983	20063-92-8	C9	t-7-Methyloctene-3	0.005	0.005	0.003
121	89.230	20237-46-0	K9	c-Nonene-3	0.015	0.016	0.011
124	89.654	111-84-2	P9	n-Nonane	0.238	0.253	0.170
125	90.103	6434-78-2	K9	t-Nonene-2	0.048	0.047	0.035
126	90.402	4984-01-4	C10	3,7-Dimethyloctene-1	0.012	0.013	0.008
128	90.925	98-82-8	Q9	i-Propylbenzene	0.050	0.044	0.038
130	91.256	6434-77-1	K9	c-Nonene-2	0.020	0.019	0.014
132	91.743	696-29-7	M9	i-Propylcyclohexane	0.263	0.249	0.191
133	91.963	15869-87-1	I10	2,2-Dimethyloctane	0.083	0.088	0.054
134	92.125		N9	N28	0.007	0.007	0.005
135	92.309	4032-94-4	I10	2,4-Dimethyloctane	0.046	0.048	0.029
136	92.637	2051-30-1	I10	2,6-Dimethyloctane	0.064	0.067	0.041
137	92.810	15869-89-3	I10	2,5-Dimethyloctane	0.097	0.101	0.063
139	93.402	2040-95-1	M9	n-Butylcyclopentane	0.350	0.339	0.253
140	93.851	4110-44-5	I10	3,3-Dimethyloctane	0.121	0.125	0.078
142	94.431	103-65-1	Q9	n-Propylbenzene	0.480	0.423	0.365
143	94.703	52896-90-9	I10	3-Methyl-5-ethylheptane	0.014	0.014	0.009
146	95.347	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.983	1.745	1.509
147	95.564	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.972	0.859	0.740
150	96.203	108-67-8	Q9	1,3,5-Trimethylbenzene	1.271	1.117	0.967
154	97.160	871-83-0	I10	2-Methylnonane	4.358	4.563	2.802
155	97.254	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.637	0.550	0.485
157	97.902	5911-04-6	I10	3-Methylnonane	0.046	0.047	0.029
161	98.477		I10	C10-Isoparaffin1	0.786	0.808	0.506
162	98.712		I10	I19	0.361	0.371	0.232
163	98.990	95-63-6	Q9	1,2,4-Trimethylbenzene	3.751	3.257	2.855
168	99.833	872-05-9	K10	Decene-1	0.010	0.011	0.007
169	100.156		M10	1t-Methyl-2-n-propylcyclohexanR□	0.040	0.038	0.026
170	100.296	19781-18-0	C10	2,3-Dimethyloctene-2	0.513	0.528	0.335
171	100.526	135-98-8	Q10	sec-Butylbenzene	0.226	0.199	0.154
173	100.823	124-18-5	P10	n-Decane	0.152	0.158	0.098
175	101.284		I11	C11-Isoparaffin1	0.047	0.049	0.028
177	101.771	526-73-8	Q9	1,2,3-Trimethylbenzene	0.793	0.675	0.604
179	102.177	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.070	0.062	0.048
181	102.560	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.312	0.276	0.212
182	102.915	496-11-7	J10	2,3-Dihydroindene	0.283	0.223	0.219
184	103.275	7058-01-7	M10	sec-Butylcyclohexane	0.039	0.036	0.025
190	104.390		I11	C11-Isoparaffin2	0.370	0.352	0.220
191	104.537	141-93-5	Q10	1,3-Diethylbenzene	0.095	0.083	0.065
192	104.866	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.097	0.969	0.747

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
194	105.161	105-05-5	Q10	1,4-Diethylbenzene	0.261	0.230	0.178
195	105.441	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.114	0.098	0.078
196	105.719	135-01-3	Q10	1,2-Diethylbenzene	0.078	0.068	0.053
198	106.219	493-02-7	D10	t-Decahydronaphthalene	0.078	0.075	0.047
199	106.316	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.018	0.015	0.012
200	106.508		I11	C11-Isoparaffin3	0.067	0.069	0.039
204	107.264	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.018	0.016	0.013
205	107.419	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.177	0.153	0.120
207	107.987	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.029	0.025	0.020
209	108.652	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.098	0.083	0.067
213	109.649		Q11	1-Methyl-4-t-butylbenzene	0.006	0.005	0.003
214	109.835	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.014	0.012	0.010
215	110.337	1120-21-4	P11	n-Undecane	0.016	0.016	0.009
216	110.486	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.007	0.006	0.005
219	112.903	874-35-1	H10	5-Methylindan	0.009	0.008	0.006
221	116.685	91-20-3	G10	Naphthalene	0.011	0.008	0.008
223	118.896	112-40-3	P12	n-Dodecane	0.006	0.006	0.003
224	126.247	90-12-0	G11	1-Methylnaphthalene	0.004	0.003	0.003
225	126.686	629-50-5	P13	n-Tridecane	0.005	0.005	0.002

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Paraffin	9.790	106-97-8	n-Butane	2.807	3.688	4.418
	16.834	109-66-0	n-Pentane	0.410	0.498	0.520
	33.440	110-54-3	n-Hexane	5.403	6.232	5.735
	55.114	142-82-5	n-Heptane	0.597	0.664	0.545
	75.419	111-65-9	n-Octane	0.607	0.657	0.486
	89.654	111-84-2	n-Nonane	0.238	0.253	0.170
	100.823	124-18-5	n-Decane	0.152	0.158	0.098
	110.337	1120-21-4	n-Undecane	0.016	0.016	0.009
	118.896	112-40-3	n-Dodecane	0.006	0.006	0.003
	126.686	629-50-5	n-Tridecane	0.005	0.005	0.002
I-Paraffins	8.732	75-28-5	i-Butane	0.039	0.053	0.061
	10.322	463-82-1	2,2-Dimethylpropane	0.011	0.014	0.014
	14.142	78-78-4	i-Pentane	0.738	0.906	0.936
	21.364	75-83-2	2,2-Dimethylbutane	0.056	0.065	0.059
	26.218	79-29-8	2,3-Dimethylbutane	0.457	0.526	0.485
	27.257	107-83-5	2-Methylpentane	1.720	2.003	1.826
	29.772	96-14-0	3-Methylpentane	1.939	2.220	2.058
	38.004	590-35-2	2,2-Dimethylpentane	1.608	1.816	1.468
	39.553	108-08-7	2,4-Dimethylpentane	0.495	0.559	0.452
	40.073	464-06-2	2,2,3-Trimethylbutane	0.083	0.092	0.076
	47.828	591-76-4	2-Methylhexane	1.120	1.256	1.023
	49.613	589-34-4	3-Methylhexane	0.529	0.585	0.483
	52.217	540-84-1	2,2,4-Trimethylpentane	1.830	2.012	1.466
	59.822	590-73-8	2,2-Dimethylhexane	0.033	0.036	0.026
	61.834	564-02-3	2,2,3-Trimethylpentane	0.115	0.122	0.092
	62.121	592-13-2	2,5-Dimethylhexane	0.283	0.311	0.227
	62.444	589-43-5	2,4-Dimethylhexane	0.254	0.276	0.203
	63.677	563-16-6	3,3-Dimethylhexane	0.025	0.026	0.020
	65.504	565-75-3	2,3,4-Trimethylpentane	0.717	0.758	0.574
	67.976	609-26-7	2-Methyl-3-ethylpentane	0.239	0.255	0.191
	69.334	592-27-8	2-Methylheptane	0.281	0.306	0.225
	69.581	589-53-7	4-Methylheptane	0.116	0.125	0.093
	69.935	583-48-2	3,4-Dimethylhexane	0.012	0.013	0.010
	70.693	589-81-1	3-Methylheptane	0.227	0.245	0.182
	70.807	619-99-8	3-Ethylhexane	0.137	0.146	0.110
	72.652	3522-94-9	2,2,5-Trimethylhexane	0.303	0.326	0.216
	74.100	16747-26-5	2,2,4-Trimethylhexane	0.005	0.006	0.004
	77.927	921-47-1	2,3,4-Trimethylhexane	0.053	0.054	0.038
	79.713	1071-26-7	2,2-Dimethylheptane	0.181	0.194	0.129
	80.158	16747-25-4	2,2,3-Trimethylhexane	0.123	0.131	0.088
	80.535	1068-19-5	4,4-Dimethylheptane	0.091	0.097	0.065
	81.286	4032-86-4	3,3-Dimethylheptane	0.042	0.044	0.030
	81.784	3074-75-7	2-Methyl-4-ethylhexane	0.017	0.018	0.012
	84.247	3074-71-3	2,3-Dimethylheptane	0.032	0.034	0.023
	84.672	1067-20-5	3,3-Diethylpentane	0.062	0.062	0.044
	85.094	2216-34-4	4-Methyloctane	0.110	0.116	0.078
	85.235	3221-61-2	2-Methyloctane	0.142	0.151	0.101

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
I-Paraffins	86.101	2216-33-3	3-Methyloctane	0.139	0.146	0.099
	87.997		C9-Isoparaffin1	0.089	0.092	0.063
	91.963	15869-87-1	2,2-Dimethyloctane	0.083	0.088	0.054
	92.309	4032-94-4	2,4-Dimethyloctane	0.046	0.048	0.029
	92.637	2051-30-1	2,6-Dimethyloctane	0.064	0.067	0.041
	92.810	15869-89-3	2,5-Dimethyloctane	0.097	0.101	0.063
	93.851	4110-44-5	3,3-Dimethyloctane	0.121	0.125	0.078
	94.703	52896-90-9	3-Methyl-5-ethylheptane	0.014	0.014	0.009
	97.160	871-83-0	2-Methylnonane	4.358	4.563	2.802
	97.902	5911-04-6	3-Methylnonane	0.046	0.047	0.029
	98.477		C10-Isoparaffin1	0.786	0.808	0.506
	98.712		I19	0.361	0.371	0.232
	101.284		C11-Isoparaffin1	0.047	0.049	0.028
	104.390		C11-Isoparaffin2	0.370	0.352	0.220
	106.508		C11-Isoparaffin3	0.067	0.069	0.039
Aromatics						
Mono-Aromatics	42.853	71-42-3	Benzene	0.722	0.625	0.846
	66.212	108-88-3	Toluene	7.495	6.575	7.441
	82.441	100-41-4	Ethylbenzene	1.981	1.738	1.707
	83.797	108-38-3	m-Xylene	5.953	5.239	5.130
	83.928	106-42-3	p-Xylene	2.523	2.229	2.174
	90.925	98-82-8	i-Propylbenzene	0.050	0.044	0.038
	94.431	103-65-1	n-Propylbenzene	0.480	0.423	0.365
	95.347	620-14-4	1-Methyl-3-ethylbenzene	1.983	1.745	1.509
	95.564	622-96-8	1-Methyl-4-ethylbenzene	0.972	0.859	0.740
	96.203	108-67-8	1,3,5-Trimethylbenzene	1.271	1.117	0.967
	97.254	611-14-3	1-Methyl-2-ethylbenzene	0.637	0.550	0.485
	98.990	95-63-6	1,2,4-Trimethylbenzene	3.751	3.257	2.855
	100.526	135-98-8	sec-Butylbenzene	0.226	0.199	0.154
	101.771	526-73-8	1,2,3-Trimethylbenzene	0.793	0.675	0.604
	102.177	535-77-3	1-Methyl-3-i-propylbenzene	0.070	0.062	0.048
	102.560	99-87-6	1-Methyl-4-i-propylbenzene	0.312	0.276	0.212
	104.537	141-93-5	1,3-Diethylbenzene	0.095	0.083	0.065
	104.866	1074-43-7	1-Methyl-3-n-propylbenzene	1.097	0.969	0.747
	105.161	105-05-5	1,4-Diethylbenzene	0.261	0.230	0.178
	105.441	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.114	0.098	0.078
	105.719	135-01-3	1,2-Diethylbenzene	0.078	0.068	0.053
	106.316	1074-17-5	1-Methyl-2-n-propylbenzene	0.018	0.015	0.012
	107.264	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.018	0.016	0.013
	107.419	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.177	0.153	0.120
	107.987	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.029	0.025	0.020
	108.652	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.098	0.083	0.067
	109.649		1-Methyl-4-t-butylbenzene	0.006	0.005	0.003
	109.835	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.014	0.012	0.010
	110.486	527-53-7	1,2,3,5-Tetramethylbenzene	0.007	0.006	0.005
Naphthalenes	116.685	91-20-3	Naphthalene	0.011	0.008	0.008

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Naphthalenes	126.247	90-12-0	1-Methylnaphthalene	0.004	0.003	0.003
Naphtheno/Olefir	112.903	874-35-1	5-Methylindan	0.009	0.008	0.006
Indenes	102.915	496-11-7	2,3-Dihydroindene	0.283	0.223	0.219
Naphthenes	87.516		N18	0.021	0.020	0.015
	92.125		N28	0.007	0.007	0.005
Mono-Naphthene	25.538	287-92-3	Cyclopentane	0.048	0.048	0.062
	44.937	110-82-7	Cyclohexane	13.284	12.978	14.440
	50.414	2532-58-3	1c,3-Dimethylcyclopentane	0.099	0.101	0.092
	50.987	1759-58-6	1t,3-Dimethylcyclopentane	0.088	0.090	0.082
	51.592	822-50-4	1t,2-Dimethylcyclopentane	0.130	0.131	0.121
	58.417	108-87-2	Methylcyclohexane	1.022	1.010	0.952
	58.815	1192-18-3	1c,2-Dimethylcyclopentane	0.007	0.007	0.006
	59.374	4516-69-2	1,1,3-Trimethylcyclopentane	0.037	0.038	0.030
	63.238	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.037	0.037	0.030
	68.289	4259-00-1	1,1,2-Trimethylcyclopentane	0.010	0.010	0.008
	70.438	2207-04-7	1t,4-Dimethylcyclohexane	0.224	0.224	0.183
	72.950		3c-Ethylmethylcyclopentane	0.018	0.018	0.015
	73.175		3t-Ethylmethylcyclopentane	0.023	0.023	0.019
	73.439	111-66-0	2t-Ethylmethylcyclopentane	0.009	0.009	0.007
	73.862	16747-50-5	1,1-Methylethylcyclopentane	0.107	0.104	0.087
	75.159		1c,2c,3-Trimethylcyclopentane	0.070	0.068	0.057
	76.425	3875-51-2	i-Propylcyclopentane	0.005	0.005	0.004
	79.158	2207-01-4	1c,2-Dimethylcyclohexane	0.045	0.043	0.036
	80.889	1678-91-7	Ethylcyclohexane	0.031	0.030	0.025
	81.110	1795-27-3	1c,3c,5-Trimethylcyclohexane	0.112	0.111	0.081
	82.790	7667-60-9	1c,2t,4t-Trimethylcyclohexane	0.061	0.059	0.044
	85.924		1c,2t,4c-Trimethylcyclohexane	0.040	0.040	0.029
	86.698	7094-26-0	1,1,2-Trimethylcyclohexane	1.013	0.963	0.734
	88.495	3788-32-7	i-Butylcyclopentane	0.012	0.011	0.008
	91.743	696-29-7	i-Propylcyclohexane	0.263	0.249	0.191
	93.402	2040-95-1	n-Butylcyclopentane	0.350	0.339	0.253
	100.156		1t-Methyl-2-n-propylcyclohexanR□	0.040	0.038	0.026
	103.275	7058-01-7	sec-Butylcyclohexane	0.039	0.036	0.025
Di/Bicyclo-Naphth	106.219	493-02-7	t-Decahydronaphthalene	0.078	0.075	0.047
Olefins	64.820		C8-Olefin2	0.031	0.033	0.029
	68.507		C8-Olefin3	0.023	0.024	0.018
	85.547		C9-Olefin3	0.038	0.040	0.027
	87.163		C9-Olefin4	0.087	0.092	0.063
n-Olefins	31.175	592-41-6	Hexene-1	4.669	5.238	5.075
	57.895	6443-92-1	c-Heptene-2	0.004	0.005	0.004
	73.629	14850-23-8	t-Octene-4	0.006	0.006	0.005

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
n-Olefins	74.859	14919-01-8	t-Octene-3	0.005	0.005	0.004
	89.230	20237-46-0	c-Nonene-3	0.015	0.016	0.011
	90.103	6434-78-2	t-Nonene-2	0.048	0.047	0.035
	91.256	6434-77-1	c-Nonene-2	0.020	0.019	0.014
	99.833	872-05-9	Decene-1	0.010	0.011	0.007
Iso-Olefins	35.315	922-62-3	3-Methyl-c-pentene-2	0.012	0.013	0.013
	37.505	3404-73-7	3,3-Dimethylpentene-1	0.008	0.009	0.008
	45.344	692-24-0	2-Methyl-t-hexene-3	0.006	0.007	0.006
	55.804	10574-36-4	3-Methyl-c-hexene-2	0.005	0.005	0.004
	79.972	19550-75-6	t-2,2-Dimethylheptene-3	0.019	0.021	0.014
	83.043	4588-18-5	2-Methyloctene-1	0.014	0.015	0.010
	88.983	20063-92-8	t-7-Methyloctene-3	0.005	0.005	0.003
	90.402	4984-01-4	3,7-Dimethyloctene-1	0.012	0.013	0.008
	100.296	19781-18-0	2,3-Dimethyloctene-2	0.513	0.528	0.335
Naphtheno-Olefi						
Di-Olefins	67.285		C8-Diolefin3	0.015	0.016	0.014
	67.614		C8-Diolefin4	0.030	0.031	0.028
	71.709	1002-33-1	1,3-Octadiene	0.052	0.051	0.043
Oxygenates	12.696	64-17-5	Ethanol	7.659	7.383	15.209

Plus

Recovery = 100.00

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF
Sample: ODDB-71719
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

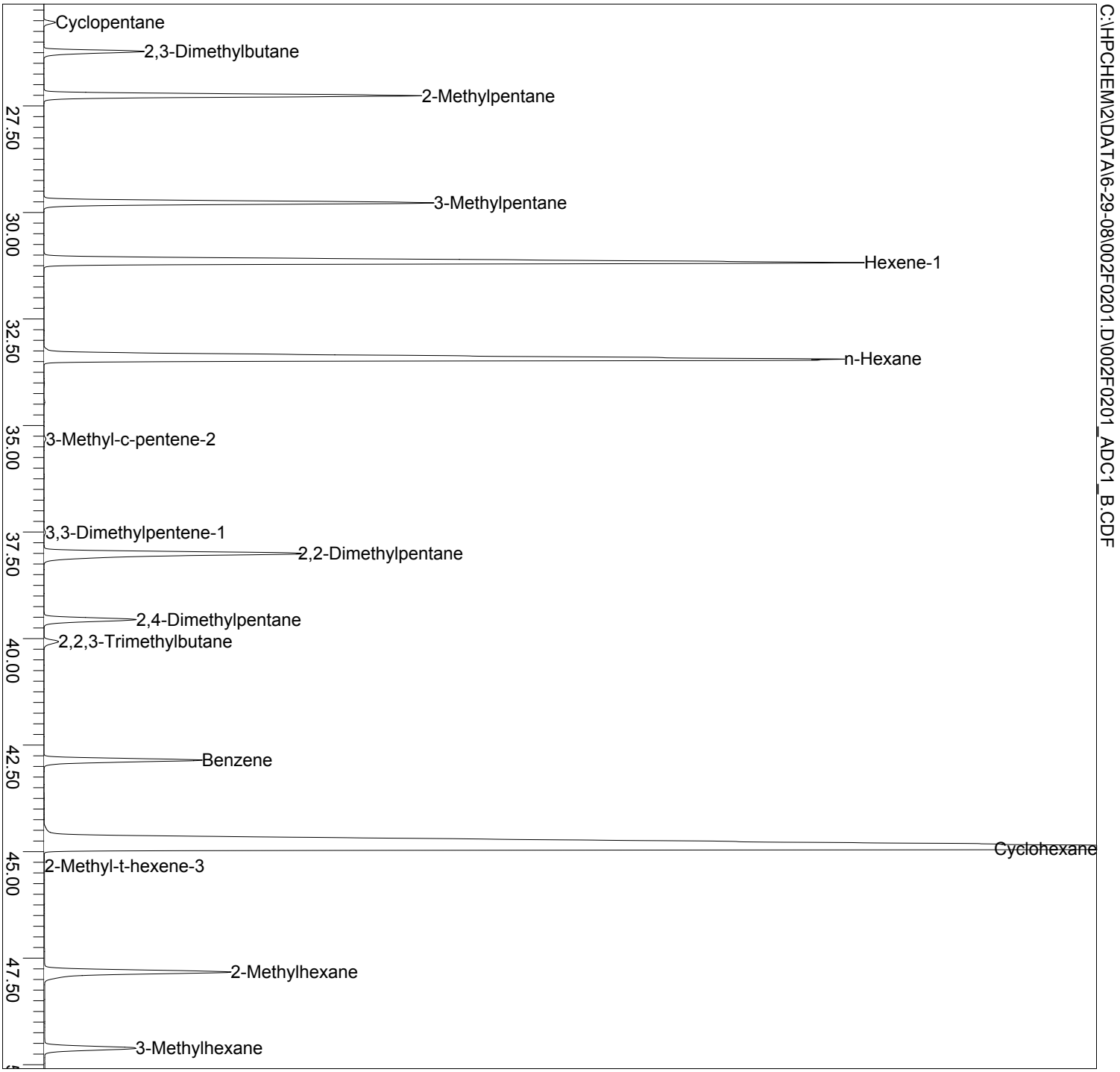
29-Jun-08, 15:09:16
Operator: RAS

Sample Chromatogram

File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF
Sample: ODDB-71719
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

29-Jun-08, 15:09:16
Operator: RAS

Sample Chromatogram



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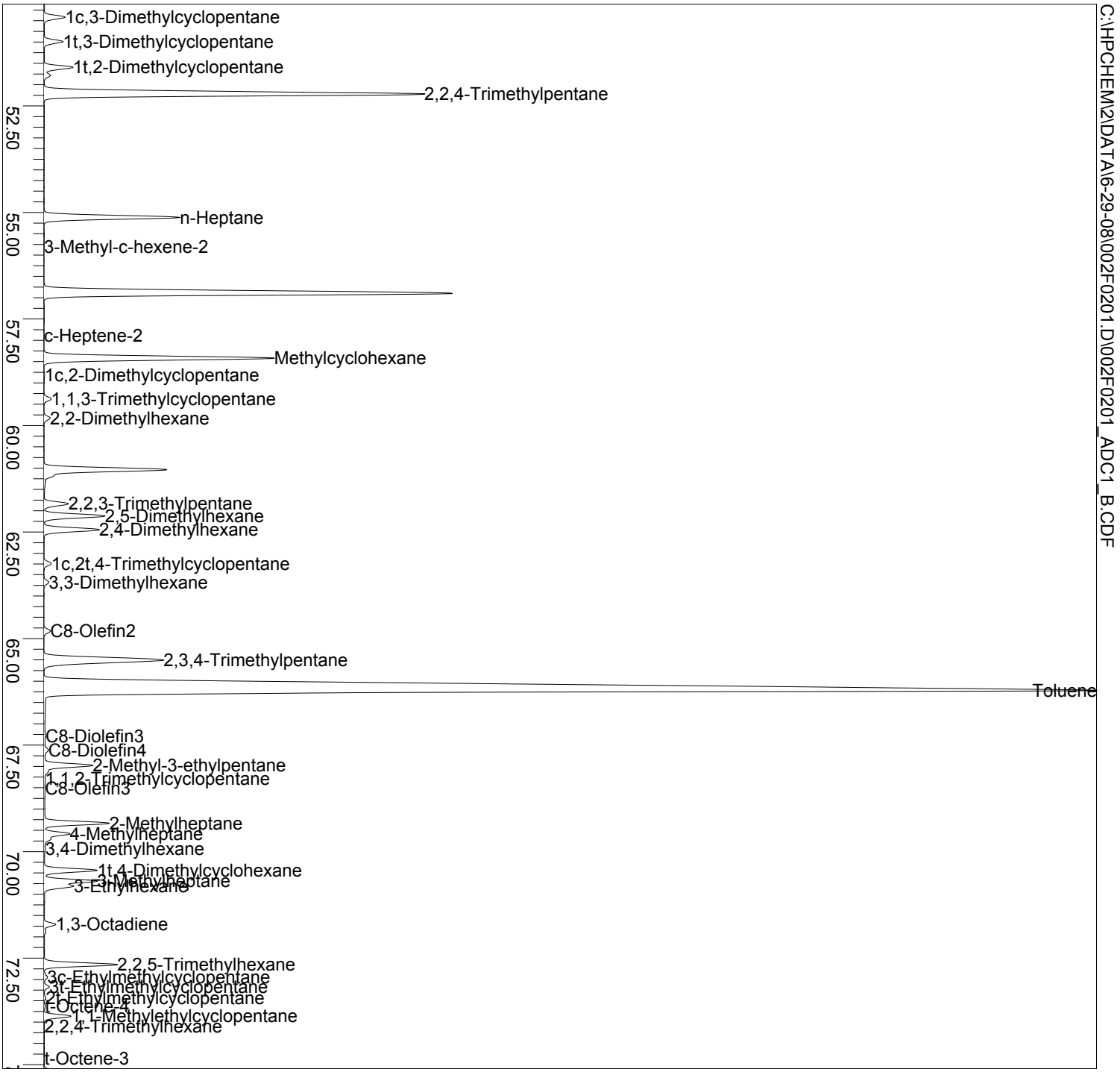
Sample: ODDB-71719
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

29-Jun-08, 15:09:16
Operator: RAS

Sample Chromatogram



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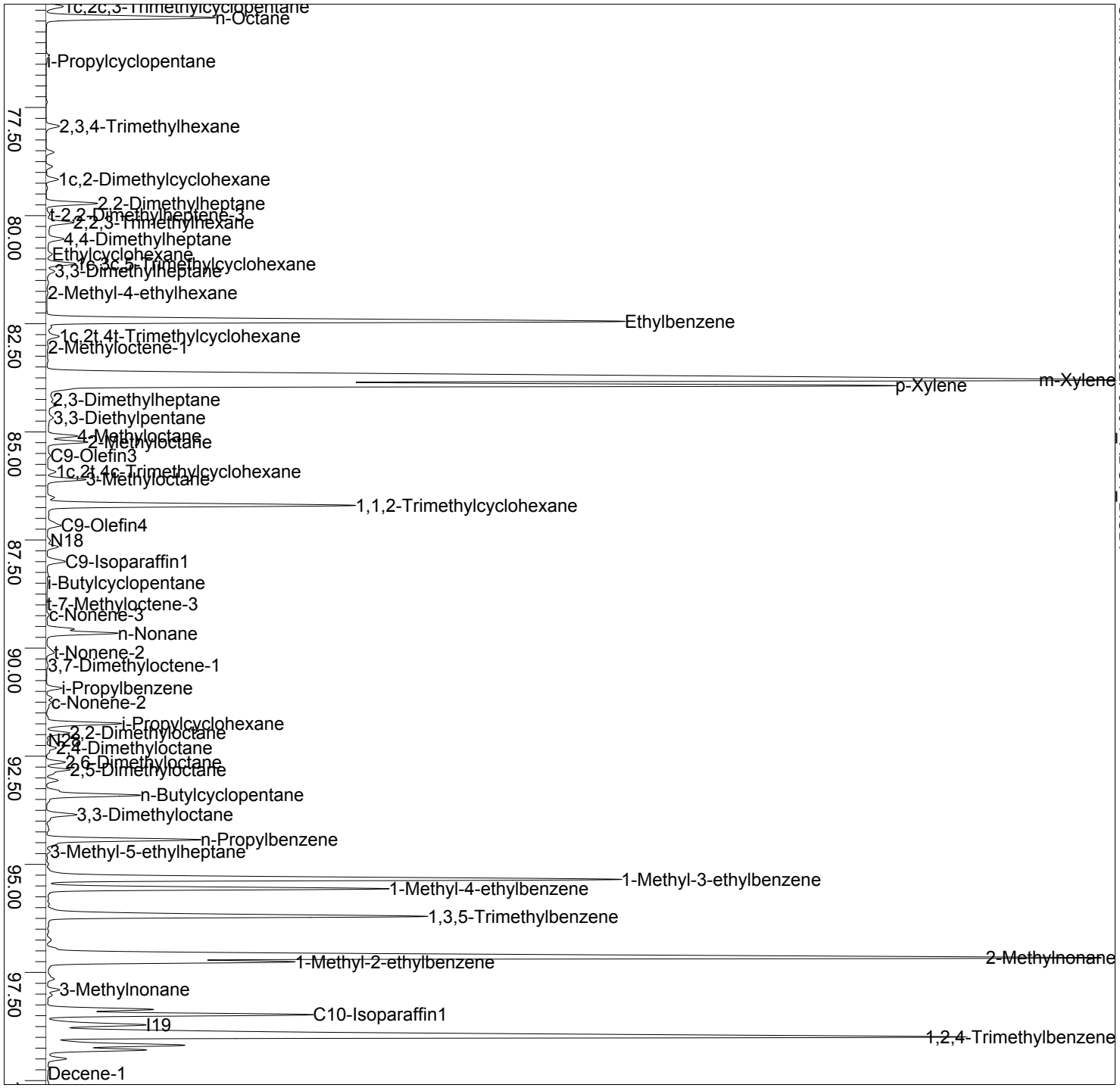
Sample: ODDB-71719
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

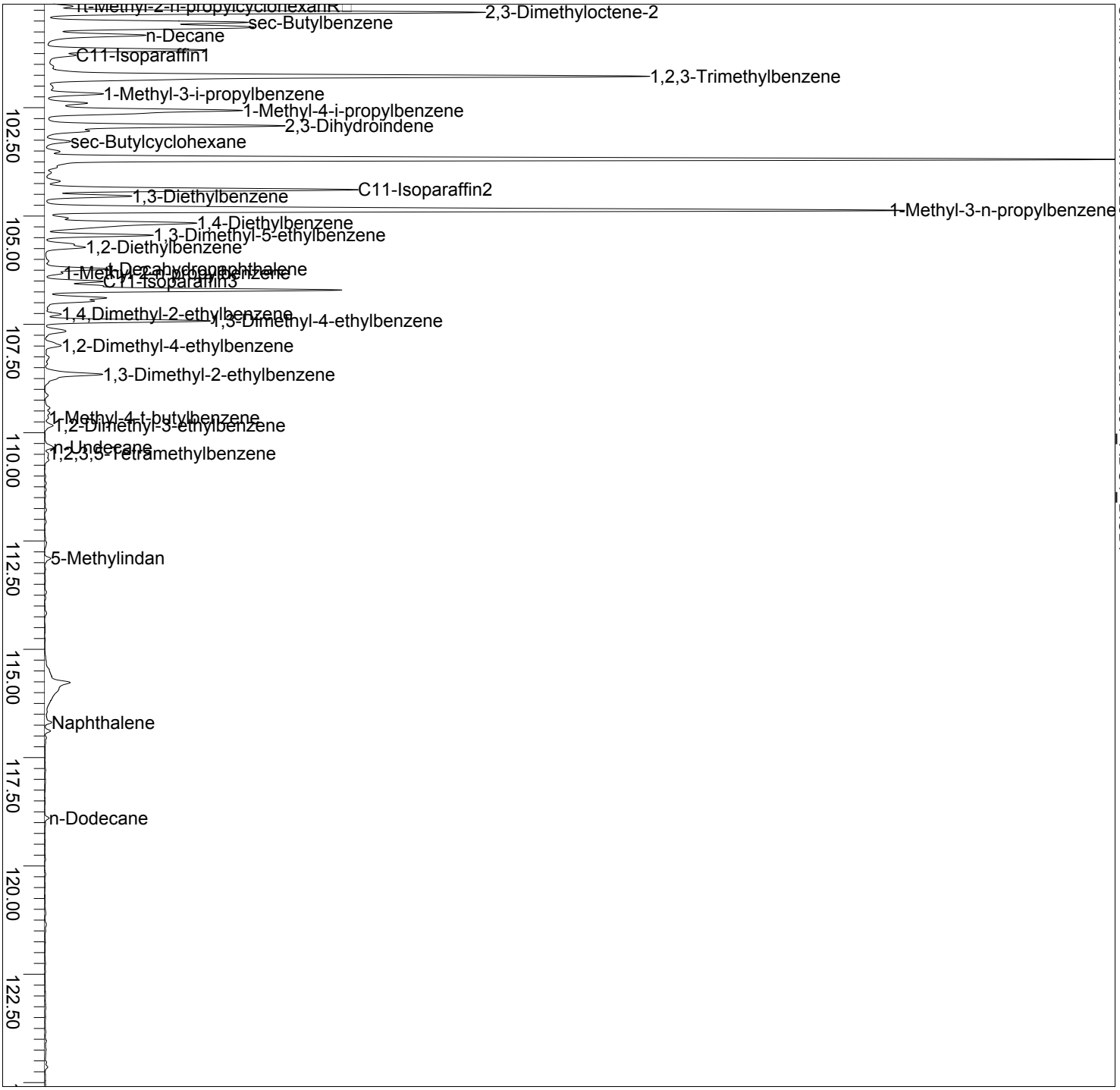
29-Jun-08, 15:09:16
Operator: RAS

Sample Chromatogram



File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF 29-Jun-08, 15:09:16
Sample: ODDB-71719 Operator: RAS
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

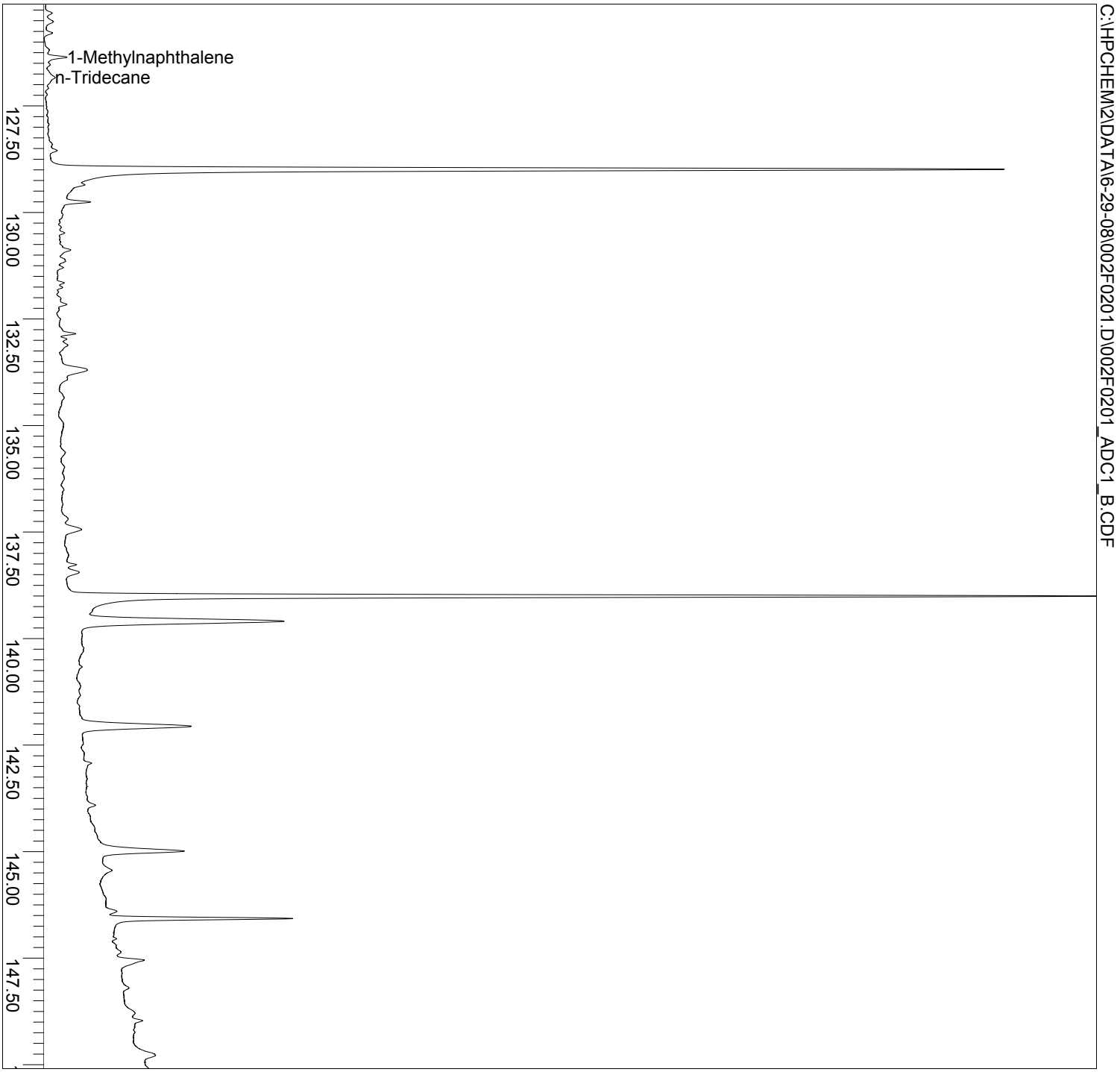
Sample Chromatogram



File: C:\HPCHEM\2\DATA\6-29-08\002F0201.D\002F0201_ADC1_B.CDF
Sample: ODDB-71719
Parameter: C:\HPCHEM\HCE40\ODDB-71719
ODDB-71719 R.

29-Jun-08, 15:09:16
Operator: RAS

Sample Chromatogram



File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	10.977	12.565	11.015
I-Paraffins	26.015	28.917	23.032
Aromatics	31.773	27.542	26.225
Mono-Aromatics	31.210	27.099	25.816
Naphthalenes	0.064	0.049	0.042
Naphtheno/Olefino-Benz	0.043	0.036	0.029
Indenes	0.445	0.348	0.332
Naphthenes	8.725	8.554	7.671
Mono-Naphthenes	8.396	8.239	7.456
Di/Bicyclo-Naphthenes	0.067	0.063	0.038
Olefins	4.083	4.450	3.905
n-Olefins	3.101	3.420	3.145
Iso-Olefins	0.459	0.494	0.332
Naphtheno-Olefins	0.007	0.007	0.009
Di-Olefins	0.214	0.215	0.182
Oxygenates	12.087	11.560	23.113
Unidentified	6.341	6.413	5.040
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	12.079	11.551	23.104
C4	2.693	3.513	4.082
C5	7.949	9.638	9.715
C6	8.971	9.665	9.360
C7	16.083	15.338	14.872
C8	20.364	19.816	16.301
C9	17.077	15.882	12.245
C10	7.022	6.779	4.479
C11	1.293	1.283	0.734
C12	0.120	0.112	0.063
C13	0.010	0.010	0.005

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	2.633	3.433	3.992
	C5	0.981	1.182	1.199
	C6	1.306	1.495	1.336
	C7	1.606	1.772	1.412
	C8	1.672	1.796	1.290
	C9	1.267	1.332	0.870
	C10	1.202	1.243	0.745
	C11	0.260	0.263	0.146
	C12	0.042	0.042	0.022
	C13	0.007	0.007	0.003
I-Paraffins	C4	0.057	0.077	0.086
	C5	6.771	8.247	8.270
	C6	2.167	2.486	2.216
	C7	2.375	2.634	2.089
	C8	7.343	7.898	5.664
	C9	3.493	3.674	2.400
	C10	2.887	2.977	1.788
	C11	0.892	0.897	0.504
	C12	0.026	0.026	0.013
	C13	0.003	0.003	0.001
Aromatics	C12	0.011	0.009	0.006
Mono-Aromatics	C6	0.656	0.563	0.740
	C7	8.665	7.541	8.287
	C8	9.279	8.082	7.702
	C9	10.671	9.233	7.824
	C10	1.821	1.580	1.196
	C11	0.079	0.068	0.047
	C12	0.037	0.032	0.020
Naphthalenes	C10	0.051	0.039	0.035
	C11	0.013	0.009	0.008
Naphtheno/Olefino-Benzs	C10	0.043	0.036	0.029
Indenes	C10	0.445	0.348	0.332
Naphthenes	C8	0.005	0.004	0.004
	C9	0.202	0.195	0.141
	C10	0.006	0.006	0.004
	C11	0.049	0.046	0.028
Mono-Naphthenes	C5	0.122	0.123	0.153

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C6	2.081	2.050	2.179
	C7	3.390	3.342	3.042
	C8	1.677	1.641	1.317
	C9	0.825	0.800	0.576
	C10	0.298	0.279	0.187
	C12	0.003	0.003	0.002
Di/Bicyclo-Naphthenes	C10	0.067	0.063	0.038
Olefins	C6	0.001	0.001	0.001
	C7	0.011	0.012	0.010
	C8	0.131	0.135	0.113
	C9	0.159	0.166	0.114
n-Olefins	C4	0.001	0.001	0.002
	C5	0.035	0.040	0.044
	C6	2.732	3.041	2.861
	C7	0.009	0.010	0.008
	C8	0.055	0.057	0.043
	C9	0.260	0.260	0.181
	C10	0.010	0.010	0.006
Iso-Olefins	C5	0.022	0.025	0.027
	C6	0.022	0.024	0.023
	C7	0.025	0.027	0.023
	C9	0.200	0.221	0.140
	C10	0.190	0.197	0.120
Naphtheno-Olefins	C5	0.004	0.004	0.005
	C6	0.003	0.003	0.003
Di-Olefins	C5	0.009	0.010	0.012
	C6	0.001	0.001	0.001
	C7	0.001	0.001	0.001
	C8	0.203	0.203	0.169
Oxygenates	C2	12.079	11.551	23.104
	C4	0.002	0.002	0.002
	C5	0.005	0.005	0.005
	C6	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
1	7.612		?	Unidentified	0.002	0.003	0.004
2	8.696	75-28-5	I4	i-Butane	0.057	0.077	0.086
3	9.740	106-97-8	P4	n-Butane	2.633	3.433	3.992
4	10.159	624-64-6	K4	t-Butene-2	0.001	0.001	0.001
5	10.276	463-82-1	I5	2,2-Dimethylpropane	0.015	0.020	0.019
6	10.798	590-18-1	K4	c-Butene-2	0.001	0.001	0.001
7	12.708	64-17-5	X2	Ethanol	12.079	11.551	23.104
8	14.140	78-78-4	I5	i-Pentane	6.756	8.227	8.251
9	14.734		?	Unidentified	0.004	0.005	0.007
10	14.814		?	Unidentified	0.002	0.002	0.003
11	14.853		?	Unidentified	0.003	0.004	0.004
12	14.910		?	Unidentified	0.016	0.019	0.020
13	15.238		?	Unidentified	0.001	0.001	0.001
14	15.258		?	Unidentified	0.001	0.002	0.002
15	15.286		?	Unidentified	0.007	0.009	0.009
16	15.546	109-67-1	K5	Pentene-1	0.019	0.022	0.024
17	15.818		?	Unidentified	0.002	0.002	0.003
18	15.878		?	Unidentified	0.004	0.004	0.006
19	15.989		?	Unidentified	0.001	0.001	0.001
20	16.008		?	Unidentified	0.004	0.003	0.005
21	16.115		?	Unidentified	0.001	0.001	0.002
22	16.144		?	Unidentified	0.001	0.001	0.002
23	16.185		?	Unidentified	0.001	0.001	0.001
24	16.301	563-46-2	C5	2-Methylbutene-1	0.012	0.014	0.015
25	16.482		?	Unidentified	0.001	0.002	0.002
26	16.524		?	Unidentified	0.004	0.004	0.005
27	16.754	109-66-0	P5	n-Pentane	0.981	1.182	1.199
28	17.219	78-79-5	E5	2-Methyl-1,3-Butadiene	0.004	0.005	0.005
29	17.318		?	Unidentified	0.001	0.001	0.001
30	17.351		?	Unidentified	0.002	0.002	0.003
31	17.452		?	Unidentified	0.002	0.002	0.002
32	17.503		?	Unidentified	0.001	0.001	0.001
33	17.537		?	Unidentified	0.000	0.001	0.001
34	17.562		?	Unidentified	0.001	0.001	0.001
35	17.589		?	Unidentified	0.001	0.002	0.002
36	17.635		?	Unidentified	0.001	0.001	0.001
37	17.768	646-04-8	K5	t-Pentene-2	0.009	0.010	0.011
38	17.907		?	Unidentified	0.001	0.002	0.002
39	17.968		?	Unidentified	0.002	0.002	0.002
40	18.037		?	Unidentified	0.001	0.001	0.001
41	18.064		?	Unidentified	0.002	0.002	0.003
42	18.190		?	Unidentified	0.002	0.002	0.002
43	18.235		?	Unidentified	0.001	0.001	0.001
44	18.257		?	Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
45	18.313		?	Unidentified	0.001	0.001	0.001
46	18.333		?	Unidentified	0.001	0.001	0.001
47	18.397	598-25-4	E5	3-Methylbutadiene-1,2	0.002	0.002	0.002
48	18.463		?	Unidentified	0.001	0.001	0.002
49	18.494		?	Unidentified	0.001	0.001	0.001
50	18.538		?	Unidentified	0.001	0.001	0.001
51	18.578		?	Unidentified	0.001	0.001	0.001
52	18.703	627-20-3	K5	c-Pentene-2	0.007	0.008	0.009
53	18.850		?	Unidentified	0.001	0.001	0.001
54	18.950		?	Unidentified	0.004	0.003	0.004
55	19.063		?	Unidentified	0.001	0.001	0.001
56	19.102		?	Unidentified	0.001	0.001	0.001
57	19.147	75-65-0	X4	t-Butanol	0.001	0.001	0.001
58	19.186		?	Unidentified	0.001	0.001	0.001
59	19.312	513-35-9	C5	2-Methylbutene-2	0.010	0.011	0.012
60	19.480		?	Unidentified	0.001	0.002	0.002
61	19.561		?	Unidentified	0.001	0.001	0.001
62	19.630	2004-70-8	E5	1t,3-Pentadiene	0.002	0.003	0.003
63	19.685		?	Unidentified	0.001	0.001	0.001
64	19.743		?	Unidentified	0.002	0.002	0.002
65	19.795		?	Unidentified	0.001	0.001	0.001
66	19.830		?	Unidentified	0.000	0.000	0.001
67	19.893		?	Unidentified	0.001	0.001	0.002
68	19.939		?	Unidentified	0.001	0.001	0.001
69	19.975		?	Unidentified	0.001	0.001	0.001
70	20.078		?	Unidentified	0.003	0.003	0.003
71	20.161		?	Unidentified	0.001	0.001	0.001
72	20.230		?	Unidentified	0.001	0.001	0.001
73	20.283		?	Unidentified	0.001	0.001	0.001
74	20.307		?	Unidentified	0.000	0.001	0.001
75	20.341		?	Unidentified	0.001	0.001	0.001
76	20.398		?	Unidentified	0.001	0.001	0.001
77	20.564		?	Unidentified	0.003	0.004	0.004
78	20.647		?	Unidentified	0.001	0.001	0.001
79	20.756		?	Unidentified	0.003	0.003	0.004
80	20.855	1574-41-0	E5	1c,3-Pentadiene	0.001	0.001	0.001
81	20.922		?	Unidentified	0.001	0.001	0.001
82	20.947		?	Unidentified	0.000	0.001	0.001
83	21.020		?	Unidentified	0.001	0.001	0.001
84	21.062		?	Unidentified	0.001	0.001	0.001
85	21.092		?	Unidentified	0.001	0.001	0.001
86	21.256	75-83-2	I6	2,2-Dimethylbutane	0.130	0.152	0.133
87	21.447		?	Unidentified	0.002	0.002	0.002
88	21.559		?	Unidentified	0.002	0.002	0.002

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
89	21.694		?	Unidentified	0.001	0.001	0.001
90	21.722		?	Unidentified	0.000	0.001	0.000
91	21.750		?	Unidentified	0.001	0.001	0.001
92	21.837		?	Unidentified	0.001	0.001	0.001
93	21.867		?	Unidentified	0.001	0.001	0.001
94	21.981		?	Unidentified	0.001	0.002	0.002
95	22.004		?	Unidentified	0.001	0.001	0.001
96	22.082		?	Unidentified	0.001	0.001	0.001
97	22.122		?	Unidentified	0.000	0.000	0.000
98	22.186		?	Unidentified	0.002	0.002	0.002
99	22.281		?	Unidentified	0.001	0.001	0.001
100	22.330		?	Unidentified	0.001	0.001	0.001
101	22.440		?	Unidentified	0.001	0.001	0.001
102	22.541		?	Unidentified	0.001	0.001	0.002
103	22.592		?	Unidentified	0.001	0.001	0.001
104	22.664		?	Unidentified	0.001	0.001	0.002
105	22.698		?	Unidentified	0.000	0.000	0.001
106	22.784		?	Unidentified	0.001	0.001	0.002
107	22.825		?	Unidentified	0.000	0.000	0.001
108	22.866		?	Unidentified	0.000	0.000	0.001
109	22.931		?	Unidentified	0.001	0.001	0.002
110	23.035		?	Unidentified	0.001	0.001	0.001
111	23.107		?	Unidentified	0.000	0.000	0.001
112	23.160		?	Unidentified	0.001	0.001	0.001
113	23.203		?	Unidentified	0.001	0.001	0.001
114	23.304		?	Unidentified	0.002	0.002	0.002
115	23.412		?	Unidentified	0.000	0.000	0.001
116	23.468		?	Unidentified	0.002	0.002	0.002
117	23.566		?	Unidentified	0.001	0.001	0.001
118	23.704	142-29-0	B5	Cyclopentene	0.004	0.004	0.005
119	23.871		?	Unidentified	0.002	0.002	0.002
120	24.010		?	Unidentified	0.001	0.001	0.001
121	24.040		?	Unidentified	0.001	0.001	0.001
122	24.118		?	Unidentified	0.001	0.001	0.001
123	24.165		?	Unidentified	0.001	0.001	0.001
124	24.205		?	Unidentified	0.001	0.001	0.001
125	24.299		?	Unidentified	0.001	0.001	0.001
126	24.327		?	Unidentified	0.001	0.001	0.001
127	24.428		?	Unidentified	0.001	0.001	0.001
128	24.509		?	Unidentified	0.000	0.001	0.001
129	24.577		?	Unidentified	0.001	0.001	0.001
130	24.608		?	Unidentified	0.001	0.001	0.001
131	24.794		?	Unidentified	0.001	0.002	0.002
132	24.896	691-37-2	C6	4-Methylpentene-1	0.004	0.005	0.004

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
133	25.015		?	Unidentified	0.001	0.001	0.001
134	25.133		?	Unidentified	0.001	0.001	0.002
135	25.161		?	Unidentified	0.001	0.001	0.001
136	25.193		?	Unidentified	0.000	0.000	0.001
137	25.244		?	Unidentified	0.001	0.001	0.001
138	25.419	287-92-3	M5	Cyclopentane	0.122	0.123	0.153
139	25.626		?	Unidentified	0.001	0.001	0.001
140	25.696		?	Unidentified	0.001	0.001	0.001
141	25.728		?	Unidentified	0.001	0.001	0.001
142	25.782		?	Unidentified	0.001	0.001	0.001
143	25.853		?	Unidentified	0.000	0.001	0.000
144	26.106	79-29-8	I6	2,3-Dimethylbutane	0.483	0.550	0.494
145	26.351		?	Unidentified	0.002	0.002	0.002
146	26.524	1634-04-4	X5	Methyl-t-butylether	0.005	0.005	0.005
147	26.653		?	Unidentified	0.001	0.001	0.001
148	26.735		?	Unidentified	0.001	0.001	0.001
149	26.798		?	Unidentified	0.001	0.001	0.001
150	26.819		?	Unidentified	0.001	0.001	0.001
151	26.870	691-38-3	C6	4-Methyl-c-pentene-2	0.001	0.001	0.001
152	27.126	107-83-5	I6	2-Methylpentane	0.960	1.110	0.982
153	27.558	674-76-0	C6	4-Methyl-t-pentene-2	0.004	0.004	0.004
154	27.702		?	Unidentified	0.000	0.000	0.000
155	27.727		?	Unidentified	0.000	0.000	0.000
156	27.753		?	Unidentified	0.000	0.000	0.000
157	27.839		?	Unidentified	0.001	0.001	0.001
158	27.908		?	Unidentified	0.001	0.001	0.001
159	28.007		?	Unidentified	0.000	0.000	0.000
160	28.062		?	Unidentified	0.001	0.001	0.001
161	28.141		?	Unidentified	0.000	0.001	0.000
162	28.229		?	Unidentified	0.000	0.001	0.000
163	28.332		?	Unidentified	0.000	0.000	0.000
164	28.358		?	Unidentified	0.001	0.001	0.001
165	28.502		?	Unidentified	0.001	0.002	0.001
166	28.558		?	Unidentified	0.000	0.001	0.000
167	28.619		?	Unidentified	0.000	0.000	0.000
168	28.652		?	Unidentified	0.001	0.001	0.001
169	28.729		?	Unidentified	0.000	0.001	0.000
170	28.784		?	Unidentified	0.000	0.001	0.000
171	28.812		?	Unidentified	0.000	0.000	0.000
172	28.896		?	Unidentified	0.001	0.002	0.001
173	29.124		?	Unidentified	0.001	0.001	0.001
174	29.155		?	Unidentified	0.000	0.001	0.000
175	29.252		?	Unidentified	0.000	0.000	0.000
176	29.307		?	Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
177	29.371		?	Unidentified	0.001	0.001	0.001
178	29.626	96-14-0	I6	3-Methylpentane	0.594	0.675	0.607
179	29.945		?	Unidentified	0.000	0.001	0.000
180	30.037		?	Unidentified	0.000	0.000	0.000
181	30.064		?	Unidentified	0.000	0.000	0.000
182	30.127		?	Unidentified	0.001	0.001	0.001
183	30.207		?	Unidentified	0.001	0.001	0.001
184	30.389		?	Unidentified	0.001	0.001	0.001
185	30.594		?	Unidentified	0.000	0.000	0.000
186	31.005	592-41-6	K6	Hexene-1	2.717	3.024	2.845
187	31.678		?	Unidentified	0.001	0.001	0.001
188	31.721		?	Unidentified	0.001	0.001	0.001
189	31.795		?	Unidentified	0.002	0.002	0.002
190	31.939		?	Unidentified	0.001	0.001	0.001
191	32.053		?	Unidentified	0.001	0.001	0.001
192	32.072		?	Unidentified	0.000	0.000	0.001
193	32.174		?	Unidentified	0.001	0.001	0.001
194	32.211		?	Unidentified	0.001	0.001	0.001
195	32.321		?	Unidentified	0.000	0.000	0.001
196	32.349		?	Unidentified	0.001	0.001	0.001
197	32.463		?	Unidentified	0.000	0.000	0.001
198	32.544		?	Unidentified	0.000	0.000	0.001
199	32.601		?	Unidentified	0.001	0.000	0.001
200	32.693		?	Unidentified	0.000	0.000	0.000
201	32.747		?	Unidentified	0.001	0.001	0.001
202	32.832		?	Unidentified	0.001	0.001	0.001
203	32.880		?	Unidentified	0.000	0.001	0.000
204	32.921		?	Unidentified	0.000	0.000	0.000
205	33.228	110-54-3	P6	n-Hexane	1.306	1.495	1.336
206	33.634		?	Unidentified	0.001	0.002	0.001
207	33.856	13269-52-8	K6	t-Hexene-3	0.005	0.006	0.005
208	34.045		?	Unidentified	0.000	0.000	0.000
209	34.072		?	Unidentified	0.000	0.001	0.000
210	34.121		?	Unidentified	0.000	0.000	0.000
211	34.319	4050-45-7	K6	t-Hexene-2	0.007	0.007	0.007
212	34.523		?	Unidentified	0.001	0.001	0.001
213	34.792	625-27-4	C6	2-Methylpentene-2	0.004	0.004	0.004
214	34.935		?	Unidentified	0.001	0.001	0.001
215	35.183	922-62-3	C6	3-Methyl-c-pentene-2	0.010	0.011	0.010
216	35.395		?	Unidentified	0.000	0.000	0.000
217	35.441		?	Unidentified	0.001	0.001	0.001
218	35.554		?	Unidentified	0.001	0.001	0.001
219	35.605		?	Unidentified	0.000	0.001	0.001
220	35.759		O6	O14	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
221	35.881		?	Unidentified	0.000	0.000	0.000
222	36.080	7688-21-3	K6	c-Hexene-2	0.004	0.004	0.004
223	36.248		?	Unidentified	0.001	0.001	0.001
224	36.512		?	Unidentified	0.000	0.000	0.000
225	36.589		?	Unidentified	0.001	0.001	0.001
226	36.677		?	Unidentified	0.001	0.001	0.001
227	36.811		?	Unidentified	0.000	0.000	0.000
228	37.098		?	Unidentified	0.001	0.001	0.001
229	37.130		?	Unidentified	0.000	0.001	0.000
230	37.188		?	Unidentified	0.000	0.000	0.000
231	37.372	3404-73-7	C7	3,3-Dimethylpentene-1	0.007	0.007	0.006
232	37.861	96-37-7	M6	Methylcyclopentane	0.869	0.875	0.909
233	38.223		?	Unidentified	0.000	0.000	0.001
234	38.383		?	Unidentified	0.001	0.001	0.001
235	38.580		?	Unidentified	0.001	0.001	0.001
236	38.633		?	Unidentified	0.000	0.001	0.001
237	38.685	563-79-1	E7	2,3-Dimethyl-2-Butene	0.001	0.001	0.001
238	38.812		?	Unidentified	0.000	0.000	0.000
239	38.871		?	Unidentified	0.000	0.000	0.000
240	39.033		?	Unidentified	0.001	0.001	0.001
241	39.091		?	Unidentified	0.001	0.001	0.001
242	39.171		?	Unidentified	0.001	0.001	0.001
243	39.411	108-08-7	I7	2,4-Dimethylpentane	0.399	0.448	0.351
244	39.680	594-56-9	C7	2,3,3-Trimethylbutene-1	0.001	0.001	0.001
245	39.932	464-06-2	I7	2,2,3-Trimethylbutane	0.052	0.057	0.046
246	40.226		?	Unidentified	0.001	0.001	0.001
247	40.416		?	Unidentified	0.000	0.000	0.000
248	40.569		?	Unidentified	0.001	0.001	0.001
249	40.640	7385-78-6	C7	3,4-Dimethylpentene-1	0.001	0.001	0.000
250	40.708		?	Unidentified	0.000	0.000	0.000
251	40.824		?	Unidentified	0.000	0.001	0.000
252	40.860		?	Unidentified	0.000	0.000	0.000
253	41.012		?	Unidentified	0.001	0.001	0.001
254	41.068		?	Unidentified	0.001	0.002	0.001
255	41.384		?	Unidentified	0.001	0.001	0.001
256	41.476		?	Unidentified	0.001	0.001	0.000
257	41.586	762-63-0	C7	4,4-Dimethyl-c-pentene-2	0.001	0.001	0.001
258	41.710		?	Unidentified	0.001	0.001	0.001
259	41.895		?	Unidentified	0.001	0.001	0.000
260	41.985		?	Unidentified	0.001	0.001	0.001
261	42.090		?	Unidentified	0.001	0.001	0.000
262	42.251		?	Unidentified	0.001	0.001	0.001
263	42.502		E6	Diolefin	0.001	0.001	0.001
264	42.702	71-42-3	Q6	Benzene	0.656	0.563	0.740

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
265	43.291		?	Unidentified	0.001	0.001	0.001
266	43.380		?	Unidentified	0.001	0.001	0.000
267	43.481		?	Unidentified	0.001	0.001	0.001
268	43.693		?	Unidentified	0.000	0.000	0.000
269	43.765		C7	2-Methyl-c-hexene-3	0.001	0.001	0.001
270	43.848		?	Unidentified	0.001	0.001	0.000
271	44.271	562-49-2	I7	3,3-Dimethylpentane	0.064	0.069	0.056
272	44.537	110-82-7	M6	Cyclohexane	1.212	1.175	1.269
273	45.121	692-24-0	C7	2-Methyl-t-hexene-3	0.003	0.003	0.002
274	45.278		?	Unidentified	0.001	0.001	0.001
275	45.410		?	Unidentified	0.000	0.000	0.000
276	45.599	71-36-3	X4	n-Butanol	0.001	0.001	0.001
277	45.814		?	Unidentified	0.001	0.001	0.001
278	45.950		?	Unidentified	0.000	0.000	0.001
279	46.054		?	Unidentified	0.001	0.001	0.001
280	46.305	7357-93-9	C7	2-Ethyl-3-methylbutene-1	0.001	0.001	0.001
281	46.670	3769-23-1	C7	4-Methylhexene-1	0.001	0.001	0.001
282	46.824		?	Unidentified	0.001	0.001	0.001
283	47.295	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.002	0.002	0.001
284	47.659	591-76-4	I7	2-Methylhexane	1.191	1.325	1.048
285	48.071	110-83-8	B6	Cyclohexene	0.003	0.003	0.003
286	48.278		?	Unidentified	0.000	0.000	0.001
287	48.344		?	Unidentified	0.001	0.001	0.001
288	48.517	994-05-8	X6	TAME	0.001	0.001	0.001
289	48.799		?	Unidentified	0.001	0.001	0.001
290	48.889		?	Unidentified	0.000	0.000	0.000
291	49.024		?	Unidentified	0.001	0.001	0.001
292	49.135		?	Unidentified	0.001	0.001	0.000
293	49.450	589-34-4	I7	3-Methylhexane	0.669	0.734	0.588
294	49.925		?	Unidentified	0.001	0.001	0.001
295	50.241	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.180	0.183	0.162
296	50.596		?	Unidentified	0.001	0.001	0.001
297	50.810	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.168	0.170	0.151
298	51.100		C7	2-Ethylpentene-1	0.001	0.001	0.001
299	51.163		?	Unidentified	0.001	0.001	0.001
300	51.414	822-50-4	M7	1t,2-Dimethylcyclopentane	0.270	0.271	0.242
301	51.611		?	Unidentified	0.041	0.041	0.037
302	52.072	540-84-1	I8	2,2,4-Trimethylpentane	2.604	2.840	2.009
303	53.029		?	Unidentified	0.001	0.001	0.001
304	53.088		?	Unidentified	0.001	0.001	0.001
305	53.164		?	Unidentified	0.001	0.001	0.000
306	53.234		?	Unidentified	0.001	0.001	0.001
307	53.348		?	Unidentified	0.000	0.001	0.000
308	53.394		?	Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
309	53.596		?	Unidentified	0.000	0.000	0.000
310	53.725	4914-89-0	C7	3-Methyl-c-hexene-3	0.002	0.002	0.002
311	53.959		?	Unidentified	0.001	0.001	0.001
312	54.189		?	Unidentified	0.002	0.002	0.002
313	54.224	14686-14-7	K7	t-Heptene-3	0.001	0.001	0.001
314	54.359		?	Unidentified	0.001	0.001	0.001
315	54.527		?	Unidentified	0.002	0.002	0.002
316	54.627		O7	C7-Olefin2	0.002	0.003	0.002
317	54.975	142-82-5	P7	n-Heptane	1.606	1.772	1.412
318	55.412		?	Unidentified	0.001	0.001	0.001
319	55.475	2738-19-4	C7	2-Methyl-2-hexene	0.004	0.005	0.004
320	55.618		?	Unidentified	0.005	0.005	0.004
321	55.974		?	Unidentified	0.001	0.001	0.001
322	56.031		?	Unidentified	0.001	0.001	0.000
323	56.098	14686-13-6	K7	t-Heptene-2	0.003	0.003	0.002
324	56.242	816-79-5	C7	3-Ethylpentene-2	0.002	0.002	0.001
325	56.743		?	Unidentified	2.386	2.504	2.141
326	57.363		?	Unidentified	0.007	0.007	0.006
327	57.595		?	Unidentified	0.001	0.001	0.000
328	57.729	6443-92-1	K7	c-Heptene-2	0.006	0.006	0.005
329	58.291	108-87-2	M7	Methylcyclohexane	2.757	2.704	2.474
330	58.636	1192-18-3	M7	1c,2-Dimethylcyclopentane	0.015	0.015	0.013
331	59.192	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.093	0.094	0.073
332	59.647	590-73-8	I8	2,2-Dimethylhexane	0.082	0.089	0.063
333	59.889		?	Unidentified	0.001	0.001	0.001
334	60.031		?	Unidentified	0.005	0.004	0.003
335	60.174		?	Unidentified	0.001	0.001	0.001
336	60.239		?	Unidentified	0.001	0.002	0.001
337	60.317		?	Unidentified	0.001	0.002	0.001
338	60.387		O7	O35	0.002	0.002	0.002
339	60.521		?	Unidentified	0.003	0.003	0.002
340	60.867		?	Unidentified	0.747	0.769	0.670
341	61.657	564-02-3	I8	2,2,3-Trimethylpentane	0.164	0.173	0.126
342	61.953	592-13-2	I8	2,5-Dimethylhexane	0.445	0.484	0.343
343	62.274	589-43-5	I8	2,4-Dimethylhexane	0.437	0.471	0.337
344	62.520		?	Unidentified	0.010	0.010	0.009
345	63.059	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.099	0.098	0.078
346	63.492	563-16-6	I8	3,3-Dimethylhexane	0.070	0.074	0.054
347	63.811		O7	O38	0.007	0.007	0.006
348	63.980		?	Unidentified	0.002	0.002	0.002
349	64.208		?	Unidentified	0.004	0.004	0.003
350	64.362		?	Unidentified	0.004	0.004	0.003
351	64.635		O8	C8-Olefin2	0.090	0.093	0.081
352	65.327	565-75-3	I8	2,3,4-Trimethylpentane	1.019	1.070	0.786

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
353	66.046	108-88-3	Q7	Toluene	8.665	7.541	8.287
354	67.115		?	Unidentified	0.019	0.019	0.017
355	67.435		E8	C8-Diolefin4	0.067	0.069	0.060
356	67.812	584-94-1	I8	2,3-Dimethylhexane	0.419	0.443	0.323
357	68.350		O8	C8-Olefin3	0.041	0.042	0.032
358	69.195	592-27-8	I8	2-Methylheptane	0.749	0.810	0.578
359	69.436	589-53-7	I8	4-Methylheptane	0.347	0.371	0.268
360	69.769	583-48-2	I8	3,4-Dimethylhexane	0.027	0.028	0.021
361	70.289	638-04-0	M8	1c,3-Dimethylcyclohexane	0.610	0.604	0.479
362	70.549	589-81-1	I8	3-Methylheptane	0.635	0.679	0.490
363	70.655	619-99-8	I8	3-Ethylhexane	0.346	0.366	0.267
364	71.233		M8	1c,2t,3-Trimethylcyclopentane	0.005	0.005	0.004
365	71.547	1002-33-1	E8	1,3-Octadiene	0.136	0.134	0.108
366	71.724		?	Unidentified	0.016	0.016	0.013
367	71.988		?	Unidentified	0.007	0.007	0.005
368	72.504	3522-94-9	I9	2,2,5-Trimethylhexane	0.437	0.467	0.301
369	72.795		M8	3c-Ethylmethylcyclopentane	0.047	0.046	0.037
370	73.020		M8	3t-Ethylmethylcyclopentane	0.061	0.060	0.048
371	73.285	111-66-0	M8	2t-Ethylmethylcyclopentane	0.022	0.022	0.017
372	73.476	14850-23-8	K8	t-Octene-4	0.012	0.013	0.010
373	73.709	16747-50-5	M8	1,1-Methylethylcyclopentane	0.311	0.300	0.244
374	74.360	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.005	0.005	0.004
375	74.706	14919-01-8	K8	t-Octene-3	0.015	0.016	0.012
376	75.004		M8	1c,2c,3-Trimethylcyclopentane	0.196	0.190	0.154
377	75.307	111-65-9	P8	n-Octane	1.672	1.796	1.290
378	75.912	13389-42-9	K8	t-Octene-2	0.005	0.005	0.004
379	76.160		O9	C9-Olefin1	0.032	0.033	0.025
380	76.279		?	Unidentified	0.014	0.015	0.010
381	76.552		O9	C9-Olefin2	0.012	0.012	0.008
382	76.884		?	Unidentified	0.009	0.010	0.006
383	77.222	7642-04-8	K8	c-Octene-2	0.023	0.024	0.018
384	77.482		?	Unidentified	0.003	0.003	0.002
385	77.581		?	Unidentified	0.003	0.003	0.002
386	77.787		C9	2,3,3-Trimethylhexene-1	0.092	0.102	0.065
387	78.115		N8	N3	0.005	0.004	0.004
388	78.392		?	Unidentified	0.070	0.073	0.048
389	78.713		?	Unidentified	0.060	0.062	0.041
390	79.022	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.132	0.125	0.103
391	79.221		?	Unidentified	0.018	0.018	0.015
392	79.575	1071-26-7	I9	2,2-Dimethylheptane	0.532	0.565	0.365
393	79.835	19550-75-6	C9	t-2,2-Dimethylheptene-3	0.062	0.069	0.044
394	80.023	16747-25-4	I9	2,2,3-Trimethylhexane	0.354	0.374	0.243
395	80.393	1068-19-5	I9	4,4-Dimethylheptane	0.289	0.304	0.198
396	80.745	1678-91-7	M8	Ethylcyclohexane	0.096	0.092	0.075

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
397	80.975	1795-27-3	M9	1c,3c,5-Trimethylcyclohexane	0.317	0.311	0.222
398	81.148	4032-86-4	I9	3,3-Dimethylheptane	0.132	0.137	0.091
399	81.408		?	Unidentified	0.046	0.051	0.032
400	81.647	3074-75-7	I9	2-Methyl-4-ethylhexane	0.062	0.065	0.043
401	81.990		?	Unidentified	0.014	0.013	0.010
402	82.282	100-41-4	Q8	Ethylbenzene	1.440	1.253	1.195
403	82.435		?	Unidentified	0.038	0.036	0.026
404	82.644	7667-60-9	M9	1c,2t,4t-Trimethylcyclohexane	0.188	0.182	0.131
405	82.897	4588-18-5	C9	2-Methyloctene-1	0.032	0.036	0.022
406	83.210		?	Unidentified	0.054	0.060	0.038
407	83.617	108-38-3	Q8	m-Xylene	4.534	3.958	3.763
408	83.749	106-42-3	Q8	p-Xylene	1.903	1.668	1.580
409	83.862		?	Unidentified	0.173	0.151	0.143
410	84.110	3074-71-3	I9	2,3-Dimethylheptane	0.059	0.062	0.041
411	84.230		?	Unidentified	0.099	0.103	0.068
412	84.538	1067-20-5	I9	3,3-Diethylpentane	0.132	0.132	0.091
413	84.971	2216-34-4	I9	4-Methyloctane	0.354	0.371	0.243
414	85.115	3221-61-2	I9	2-Methyloctane	0.467	0.494	0.321
415	85.395		N9	N15	0.075	0.073	0.053
416	85.791		M9	1c,2t,4c-Trimethylcyclohexane	0.124	0.121	0.087
417	85.981	2216-33-3	I9	3-Methyloctane	0.485	0.508	0.333
418	86.194		?	Unidentified	0.011	0.012	0.008
419	86.388		?	Unidentified	0.072	0.074	0.049
420	86.573	95-47-6	Q8	o-Xylene	1.403	1.202	1.164
421	86.779		?	Unidentified	0.040	0.038	0.028
422	87.033		O9	C9-Olefin4	0.115	0.121	0.081
423	87.385		N9	N18	0.054	0.052	0.038
424	87.527		?	Unidentified	0.161	0.156	0.112
425	87.831		I9	C9-Isoparaffin1	0.189	0.196	0.130
426	88.174	124-11-8	K9	Nonene-1	0.022	0.024	0.015
427	88.361		?	Unidentified	0.024	0.024	0.017
428	88.536		?	Unidentified	0.018	0.018	0.013
429	88.858	20063-92-8	C9	t-7-Methyloctene-3	0.013	0.015	0.009
430	89.092	20237-46-0	K9	c-Nonene-3	0.041	0.046	0.029
431	89.269		?	Unidentified	0.007	0.007	0.005
432	89.557	111-84-2	P9	n-Nonane	1.267	1.332	0.870
433	89.923	6434-78-2	K9	t-Nonene-2	0.120	0.116	0.084
434	90.280	4984-01-4	C10	3,7-Dimethyloctene-1	0.059	0.064	0.037
435	90.479		?	Unidentified	0.013	0.012	0.009
436	90.797	98-82-8	Q9	i-Propylbenzene	0.176	0.154	0.129
437	91.015		?	Unidentified	0.014	0.013	0.009
438	91.213	6434-77-1	K9	c-Nonene-2	0.077	0.074	0.054
439	91.481		N9	N26	0.047	0.044	0.032
440	91.610	696-29-7	M9	i-Propylcyclohexane	0.085	0.080	0.059

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
441	91.842	15869-87-1	I10	2,2-Dimethyloctane	0.137	0.143	0.085
442	92.008		N9	N28	0.026	0.025	0.018
443	92.117	4032-94-4	I10	2,4-Dimethyloctane	0.037	0.039	0.023
444	92.276		?	Unidentified	0.009	0.009	0.006
445	92.522	2051-30-1	I10	2,6-Dimethyloctane	0.076	0.078	0.047
446	92.691	15869-89-3	I10	2,5-Dimethyloctane	0.108	0.112	0.067
447	92.758		?	Unidentified	0.139	0.144	0.086
448	92.925		?	Unidentified	0.024	0.025	0.015
449	93.173		I10	I12	0.088	0.091	0.054
450	93.275	2040-95-1	M9	n-Butylcyclopentane	0.110	0.106	0.077
451	93.528		N10	N30	0.006	0.006	0.004
452	93.728	4110-44-5	I10	3,3-Dimethyloctane	0.233	0.238	0.144
453	93.854		I10	I14	0.055	0.057	0.034
454	94.069		?	Unidentified	0.051	0.052	0.031
455	94.303	103-65-1	Q9	n-Propylbenzene	0.681	0.596	0.499
456	94.576	52896-90-9	I10	3-Methyl-5-ethylheptane	0.065	0.068	0.040
457	94.744		?	Unidentified	0.009	0.009	0.005
458	94.874		?	Unidentified	0.013	0.012	0.008
459	94.995		?	Unidentified	0.017	0.016	0.011
460	95.216	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.163	1.888	1.586
461	95.437	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.256	1.101	0.921
462	95.653		?	Unidentified	0.013	0.012	0.010
463	95.782		?	Unidentified	0.005	0.005	0.003
464	96.066	108-67-8	Q9	1,3,5-Trimethylbenzene	1.277	1.113	0.936
465	96.285		?	Unidentified	0.022	0.023	0.014
466	96.422		?	Unidentified	0.031	0.032	0.019
467	96.591	15869-85-9	I10	5-Methylnonane	0.166	0.171	0.103
468	96.787	17301-94-8	I10	4-Methylnonane	0.297	0.306	0.184
469	96.948	871-83-0	I10	2-Methylnonane	0.751	0.780	0.465
470	97.111	611-14-3	Q9	1-Methyl-2-ethylbenzene	1.137	0.974	0.834
471	97.431	5881-17-4	I10	3-Ethyloctane	0.084	0.086	0.052
472	97.764	5911-04-6	I10	3-Methylnonane	0.394	0.405	0.244
473	97.981		?	Unidentified	0.023	0.022	0.014
474	98.206		?	Unidentified	0.080	0.087	0.051
475	98.314		I10	C10-Isoparaffin1	0.163	0.167	0.101
476	98.569		I10	I19	0.116	0.118	0.072
477	98.815	95-63-6	Q9	1,2,4-Trimethylbenzene	2.674	2.304	1.961
478	98.921		?	Unidentified	0.079	0.081	0.049
479	99.036	1678-98-4	M10	i-Butylcyclohexane	0.127	0.120	0.080
480	99.143		?	Unidentified	0.058	0.059	0.036
481	99.232		I10	I21	0.090	0.092	0.056
482	99.363		?	Unidentified	0.016	0.016	0.010
483	99.464		I10	C10-Isoparaffin2	0.026	0.026	0.016
484	99.560		?	Unidentified	0.017	0.017	0.010

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
485	99.692		?	Unidentified	0.020	0.020	0.012
486	99.828	872-05-9	K10	Decene-1	0.010	0.010	0.006
487	99.904		?	Unidentified	0.007	0.007	0.004
488	100.014		M10	1t-Methyl-2-n-propylcyclohexanR	0.011	0.010	0.007
489	100.148	19781-18-0	C10	2,3-Dimethyloctene-2	0.131	0.134	0.082
490	100.386		?	Unidentified	0.098	0.100	0.060
491	100.502	135-98-8	Q10	sec-Butylbenzene	0.064	0.056	0.042
492	100.726	124-18-5	P10	n-Decane	1.202	1.243	0.745
493	101.039		I11	I26	0.278	0.283	0.157
494	101.415		N11	N39	0.049	0.046	0.028
495	101.647	526-73-8	Q9	1,2,3-Trimethylbenzene	1.307	1.102	0.958
496	101.867		?	Unidentified	0.032	0.033	0.018
497	102.054	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.069	0.060	0.045
498	102.262		?	Unidentified	0.049	0.050	0.027
499	102.338		?	Unidentified	0.041	0.036	0.027
500	102.427		?	Unidentified	0.044	0.038	0.029
501	102.500	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.057	0.050	0.038
502	102.779	496-11-7	J10	2,3-Dihydroindene	0.445	0.348	0.332
503	103.149	7058-01-7	M10	sec-Butylcyclohexane	0.161	0.149	0.101
504	103.377		?	Unidentified	0.019	0.017	0.013
505	103.525		?	Unidentified	0.222	0.191	0.145
506	103.645	17362-11-3	I11	3-Ethylnonane	0.072	0.073	0.041
507	103.731		?	Unidentified	0.021	0.020	0.012
508	103.854		?	Unidentified	0.058	0.054	0.033
509	104.061		?	Unidentified	0.012	0.011	0.007
510	104.246		I11	C11-Isoparaffin2	0.169	0.159	0.096
511	104.404	141-93-5	Q10	1,3-Diethylbenzene	0.135	0.118	0.089
512	104.691	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.473	0.414	0.310
513	104.888		?	Unidentified	0.011	0.011	0.006
514	105.045	105-05-5	Q10	1,4-Diethylbenzene	0.193	0.169	0.127
515	105.308	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.221	0.189	0.145
516	105.495		?	Unidentified	0.016	0.015	0.009
517	105.601	135-01-3	Q10	1,2-Diethylbenzene	0.043	0.037	0.028
518	105.906		?	Unidentified	0.039	0.037	0.022
519	106.097	493-02-7	D10	t-Decahydronaphthalene	0.067	0.063	0.038
520	106.180	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.046	0.040	0.030
521	106.397		I11	C11-Isoparaffin3	0.119	0.122	0.067
522	106.566		?	Unidentified	0.088	0.090	0.050
523	106.694		I11	C11-Isoparaffin4	0.104	0.106	0.059
524	106.830		I11	I38	0.021	0.022	0.012
525	107.027		I11	C11-Isoparaffin5	0.101	0.103	0.057
526	107.132	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.100	0.086	0.066
527	107.298	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.150	0.129	0.098
528	107.629		?	Unidentified	0.084	0.086	0.048

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
529	107.872	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.129	0.111	0.085
530	108.121		I11	I41	0.014	0.014	0.008
531	108.264		I11	I42	0.015	0.015	0.008
532	108.522	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.095	0.080	0.062
533	108.964		?	Unidentified	0.020	0.017	0.013
534	109.160		Q11	4M-1tC4Benz	0.004	0.003	0.002
535	109.320		?	Unidentified	0.021	0.018	0.014
536	109.519		Q11	1-Methyl-4-t-butylbenzene	0.014	0.013	0.008
537	109.715	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.027	0.023	0.018
538	109.899		?	Unidentified	0.007	0.006	0.004
539	110.227	1120-21-4	P11	n-Undecane	0.260	0.263	0.146
540	110.402	95-93-2	Q10	1,2,4,5-Tetramethylbenzene	0.019	0.016	0.013
541	110.572		?	Unidentified	0.017	0.014	0.011
542	110.745		?	Unidentified	0.002	0.002	0.001
543	110.884		Q11	1-Methyl-1-n-butylbenzene	0.015	0.012	0.009
544	111.038		?	Unidentified	0.006	0.005	0.003
545	111.184	1074-92-6	Q11	1-t-Butyl-2-methylbenzene	0.014	0.012	0.008
546	111.350		?	Unidentified	0.006	0.005	0.004
547	111.524		?	Unidentified	0.014	0.012	0.008
548	111.688		?	Unidentified	0.008	0.007	0.005
549	111.859		?	Unidentified	0.011	0.010	0.007
550	111.951		?	Unidentified	0.013	0.011	0.007
551	112.082		?	Unidentified	0.005	0.004	0.003
552	112.247		?	Unidentified	0.006	0.005	0.003
553	112.453		?	Unidentified	0.015	0.013	0.008
554	112.794	874-35-1	H10	5-Methylindan	0.026	0.022	0.017
555	113.018		Q11	C11-Aromatic2	0.011	0.010	0.007
556	113.272		?	Unidentified	0.007	0.006	0.004
557	113.377		Q11	C11-Aromatic3	0.006	0.005	0.003
558	113.458		?	Unidentified	0.014	0.012	0.007
559	113.682	824-22-6	H10	4-Methylindan	0.009	0.008	0.006
560	113.828		?	Unidentified	0.001	0.001	0.001
561	113.948		?	Unidentified	0.005	0.004	0.003
562	114.041	824-63-5	H10	2-Methylindan	0.008	0.007	0.005
563	114.239		?	Unidentified	0.010	0.008	0.005
564	114.442		?	Unidentified	0.007	0.006	0.004
565	114.684		?	Unidentified	0.008	0.008	0.004
566	114.783		M12	1t-M-2-(4-MP)cyclopentane	0.003	0.003	0.002
567	114.887		?	Unidentified	0.006	0.006	0.003
568	115.052		I12	I46	0.011	0.011	0.006
569	115.158		Q11	1-Methyl-2-n-butylbenzene	0.014	0.012	0.008
570	115.347	100-18-5	Q12	1,4-Di-i-propylbenzene	0.006	0.005	0.003
571	115.489		I12	I48	0.015	0.015	0.008
572	115.644		?	Unidentified	0.067	0.068	0.035

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
573	115.845	119-64-2	G10	1,2,3,4-Tetrahydronaphthalene	0.035	0.027	0.023
574	116.035		?	Unidentified	0.011	0.008	0.007
575	116.300		A12	A6	0.011	0.009	0.006
576	116.421	91-20-3	G10	Naphthalene	0.017	0.012	0.011
577	116.558		?	Unidentified	0.012	0.009	0.008
578	116.758		?	Unidentified	0.010	0.007	0.007
579	116.919		?	Unidentified	0.005	0.005	0.003
580	117.019		?	Unidentified	0.003	0.003	0.002
581	117.129		Q12	1t-Butyl-4-ethylbenzene	0.002	0.001	0.001
582	117.205		?	Unidentified	0.002	0.002	0.001
583	117.366		?	Unidentified	0.005	0.004	0.003
584	117.487		?	Unidentified	0.002	0.002	0.001
585	117.655		?	Unidentified	0.006	0.005	0.003
586	117.913		Q12	1,3-Di-n-propylbenzene	0.012	0.010	0.007
587	118.343		?	Unidentified	0.006	0.005	0.003
588	118.529		?	Unidentified	0.003	0.003	0.001
589	118.769	112-40-3	P12	n-Dodecane	0.042	0.042	0.022
590	118.897		?	Unidentified	0.003	0.003	0.001
591	119.046		?	Unidentified	0.003	0.003	0.001
592	119.292		?	Unidentified	0.002	0.002	0.001
593	119.400		?	Unidentified	0.001	0.001	0.001
594	119.480		?	Unidentified	0.001	0.001	0.000
595	119.628		?	Unidentified	0.002	0.002	0.001
596	119.723		?	Unidentified	0.003	0.002	0.002
597	119.831		?	Unidentified	0.003	0.003	0.002
598	120.066	102-25-0	Q12	1,3,5-Triethylbenzene	0.010	0.008	0.005
599	120.357		?	Unidentified	0.006	0.005	0.003
600	120.564		?	Unidentified	0.002	0.001	0.001
601	120.702		?	Unidentified	0.004	0.003	0.002
602	120.846	877-44-1	Q12	1,2,4-Triethylbenzene	0.003	0.003	0.002
603	120.973		?	Unidentified	0.002	0.002	0.001
604	121.243		?	Unidentified	0.004	0.003	0.002
605	121.372		?	Unidentified	0.001	0.001	0.001
606	121.479		?	Unidentified	0.001	0.001	0.000
607	121.632		?	Unidentified	0.001	0.001	0.001
608	121.827		?	Unidentified	0.001	0.001	0.001
609	121.988		?	Unidentified	0.001	0.000	0.000
610	122.119		Q12	1-Methyl-4-n-pentylbenzene	0.003	0.003	0.002
611	122.317		?	Unidentified	0.001	0.001	0.001
612	122.649		?	Unidentified	0.001	0.001	0.000
613	122.911		?	Unidentified	0.002	0.002	0.001
614	123.060	1077-16-3	Q12	n-Hexylbenzene	0.002	0.002	0.001
615	123.157		?	Unidentified	0.001	0.001	0.001
616	123.399		I13	I49	0.003	0.003	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol
617	123.724		?	Unidentified	0.002	0.002	0.001
618	123.928		?	Unidentified	0.001	0.001	0.001
619	124.126		?	Unidentified	0.001	0.001	0.001
620	124.213		?	Unidentified	0.001	0.001	0.001
621	124.420	700-12-9	Q11	Pentamethylbenzene	0.001	0.001	0.001
622	124.525		?	Unidentified	0.003	0.002	0.002
623	125.179	91-57-6	G11	2-Methylnaphthalene	0.009	0.006	0.005
624	125.363		?	Unidentified	0.003	0.002	0.002
625	125.614		?	Unidentified	0.001	0.001	0.001
626	125.970	90-12-0	G11	1-Methylnaphthalene	0.004	0.003	0.002
627	126.135	629-50-5	P13	n-Tridecane	0.007	0.007	0.003
628	126.291		?	Unidentified	0.002	0.002	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Paraffin	9.740	106-97-8	n-Butane	2.633	3.433	3.992
	16.754	109-66-0	n-Pentane	0.981	1.182	1.199
	33.228	110-54-3	n-Hexane	1.306	1.495	1.336
	54.975	142-82-5	n-Heptane	1.606	1.772	1.412
	75.307	111-65-9	n-Octane	1.672	1.796	1.290
	89.557	111-84-2	n-Nonane	1.267	1.332	0.870
	100.726	124-18-5	n-Decane	1.202	1.243	0.745
	110.227	1120-21-4	n-Undecane	0.260	0.263	0.146
	118.769	112-40-3	n-Dodecane	0.042	0.042	0.022
	126.135	629-50-5	n-Tridecane	0.007	0.007	0.003
I-Paraffins	8.696	75-28-5	i-Butane	0.057	0.077	0.086
	10.276	463-82-1	2,2-Dimethylpropane	0.015	0.020	0.019
	14.140	78-78-4	i-Pentane	6.756	8.227	8.251
	21.256	75-83-2	2,2-Dimethylbutane	0.130	0.152	0.133
	26.106	79-29-8	2,3-Dimethylbutane	0.483	0.550	0.494
	27.126	107-83-5	2-Methylpentane	0.960	1.110	0.982
	29.626	96-14-0	3-Methylpentane	0.594	0.675	0.607
	39.411	108-08-7	2,4-Dimethylpentane	0.399	0.448	0.351
	39.932	464-06-2	2,2,3-Trimethylbutane	0.052	0.057	0.046
	44.271	562-49-2	3,3-Dimethylpentane	0.064	0.069	0.056
	47.659	591-76-4	2-Methylhexane	1.191	1.325	1.048
	49.450	589-34-4	3-Methylhexane	0.669	0.734	0.588
	52.072	540-84-1	2,2,4-Trimethylpentane	2.604	2.840	2.009
	59.647	590-73-8	2,2-Dimethylhexane	0.082	0.089	0.063
	61.657	564-02-3	2,2,3-Trimethylpentane	0.164	0.173	0.126
	61.953	592-13-2	2,5-Dimethylhexane	0.445	0.484	0.343
	62.274	589-43-5	2,4-Dimethylhexane	0.437	0.471	0.337
	63.492	563-16-6	3,3-Dimethylhexane	0.070	0.074	0.054
	65.327	565-75-3	2,3,4-Trimethylpentane	1.019	1.070	0.786
	67.812	584-94-1	2,3-Dimethylhexane	0.419	0.443	0.323
	69.195	592-27-8	2-Methylheptane	0.749	0.810	0.578
	69.436	589-53-7	4-Methylheptane	0.347	0.371	0.268
	69.769	583-48-2	3,4-Dimethylhexane	0.027	0.028	0.021
	70.549	589-81-1	3-Methylheptane	0.635	0.679	0.490
	70.655	619-99-8	3-Ethylhexane	0.346	0.366	0.267
	72.504	3522-94-9	2,2,5-Trimethylhexane	0.437	0.467	0.301
	79.575	1071-26-7	2,2-Dimethylheptane	0.532	0.565	0.365
	80.023	16747-25-4	2,2,3-Trimethylhexane	0.354	0.374	0.243
	80.393	1068-19-5	4,4-Dimethylheptane	0.289	0.304	0.198
	81.148	4032-86-4	3,3-Dimethylheptane	0.132	0.137	0.091
	81.647	3074-75-7	2-Methyl-4-ethylhexane	0.062	0.065	0.043
	84.110	3074-71-3	2,3-Dimethylheptane	0.059	0.062	0.041
	84.538	1067-20-5	3,3-Diethylpentane	0.132	0.132	0.091
	84.971	2216-34-4	4-Methyloctane	0.354	0.371	0.243
	85.115	3221-61-2	2-Methyloctane	0.467	0.494	0.321
	85.981	2216-33-3	3-Methyloctane	0.485	0.508	0.333
	87.831		C9-Isoparaffin1	0.189	0.196	0.130

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
I-Paraffins	91.842	15869-87-1	2,2-Dimethyloctane	0.137	0.143	0.085
	92.117	4032-94-4	2,4-Dimethyloctane	0.037	0.039	0.023
	92.522	2051-30-1	2,6-Dimethyloctane	0.076	0.078	0.047
	92.691	15869-89-3	2,5-Dimethyloctane	0.108	0.112	0.067
	93.173		I12	0.088	0.091	0.054
	93.728	4110-44-5	3,3-Dimethyloctane	0.233	0.238	0.144
	93.854		I14	0.055	0.057	0.034
	94.576	52896-90-9	3-Methyl-5-ethylheptane	0.065	0.068	0.040
	96.591	15869-85-9	5-Methylnonane	0.166	0.171	0.103
	96.787	17301-94-8	4-Methylnonane	0.297	0.306	0.184
	96.948	871-83-0	2-Methylnonane	0.751	0.780	0.465
	97.431	5881-17-4	3-Ethyloctane	0.084	0.086	0.052
	97.764	5911-04-6	3-Methylnonane	0.394	0.405	0.244
	98.314		C10-Isoparaffin1	0.163	0.167	0.101
	98.569		I19	0.116	0.118	0.072
	99.232		I21	0.090	0.092	0.056
	99.464		C10-Isoparaffin2	0.026	0.026	0.016
	101.039		I26	0.278	0.283	0.157
	103.645	17362-11-3	3-Ethylnonane	0.072	0.073	0.041
	104.246		C11-Isoparaffin2	0.169	0.159	0.096
	106.397		C11-Isoparaffin3	0.119	0.122	0.067
	106.694		C11-Isoparaffin4	0.104	0.106	0.059
	106.830		I38	0.021	0.022	0.012
	107.027		C11-Isoparaffin5	0.101	0.103	0.057
	108.121		I41	0.014	0.014	0.008
	108.264		I42	0.015	0.015	0.008
	115.052		I46	0.011	0.011	0.006
	115.489		I48	0.015	0.015	0.008
	123.399		I49	0.003	0.003	0.001
Aromatics	116.300		A6	0.011	0.009	0.006
Mono-Aromatics	42.702	71-42-3	Benzene	0.656	0.563	0.740
	66.046	108-88-3	Toluene	8.665	7.541	8.287
	82.282	100-41-4	Ethylbenzene	1.440	1.253	1.195
	83.617	108-38-3	m-Xylene	4.534	3.958	3.763
	83.749	106-42-3	p-Xylene	1.903	1.668	1.580
	86.573	95-47-6	o-Xylene	1.403	1.202	1.164
	90.797	98-82-8	i-Propylbenzene	0.176	0.154	0.129
	94.303	103-65-1	n-Propylbenzene	0.681	0.596	0.499
	95.216	620-14-4	1-Methyl-3-ethylbenzene	2.163	1.888	1.586
	95.437	622-96-8	1-Methyl-4-ethylbenzene	1.256	1.101	0.921
	96.066	108-67-8	1,3,5-Trimethylbenzene	1.277	1.113	0.936
	97.111	611-14-3	1-Methyl-2-ethylbenzene	1.137	0.974	0.834
	98.815	95-63-6	1,2,4-Trimethylbenzene	2.674	2.304	1.961
	100.502	135-98-8	sec-Butylbenzene	0.064	0.056	0.042
	101.647	526-73-8	1,2,3-Trimethylbenzene	1.307	1.102	0.958
	102.054	535-77-3	1-Methyl-3-i-propylbenzene	0.069	0.060	0.045

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Mono-Aromatics	102.500	99-87-6	1-Methyl-4-i-propylbenzene	0.057	0.050	0.038
	104.404	141-93-5	1,3-Diethylbenzene	0.135	0.118	0.089
	104.691	1074-43-7	1-Methyl-3-n-propylbenzene	0.473	0.414	0.310
	105.045	105-05-5	1,4-Diethylbenzene	0.193	0.169	0.127
	105.308	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.221	0.189	0.145
	105.601	135-01-3	1,2-Diethylbenzene	0.043	0.037	0.028
	106.180	1074-17-5	1-Methyl-2-n-propylbenzene	0.046	0.040	0.030
	107.132	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.100	0.086	0.066
	107.298	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.150	0.129	0.098
	107.872	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.129	0.111	0.085
	108.522	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.095	0.080	0.062
	109.160		4M-1tC4Benz	0.004	0.003	0.002
	109.519		1-Methyl-4-t-butylbenzene	0.014	0.013	0.008
	109.715	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.027	0.023	0.018
	110.402	95-93-2	1,2,4,5-Tetramethylbenzene	0.019	0.016	0.013
	110.884		1-Methyl-1-n-butylbenzene	0.015	0.012	0.009
	111.184	1074-92-6	1-t-Butyl-2-methylbenzene	0.014	0.012	0.008
	113.018		C11-Aromatic2	0.011	0.010	0.007
	113.377		C11-Aromatic3	0.006	0.005	0.003
	115.158		1-Methyl-2-n-butylbenzene	0.014	0.012	0.008
	115.347	100-18-5	1,4-Di-i-propylbenzene	0.006	0.005	0.003
	117.129		1t-Butyl-4-ethylbenzene	0.002	0.001	0.001
	117.913		1,3-Di-n-propylbenzene	0.012	0.010	0.007
	120.066	102-25-0	1,3,5-Triethylbenzene	0.010	0.008	0.005
	120.846	877-44-1	1,2,4-Triethylbenzene	0.003	0.003	0.002
	122.119		1-Methyl-4-n-pentylbenzene	0.003	0.003	0.002
	123.060	1077-16-3	n-Hexylbenzene	0.002	0.002	0.001
	124.420	700-12-9	Pentamethylbenzene	0.001	0.001	0.001
Naphthalenes	115.845	119-64-2	1,2,3,4-Tetrahydronaphthalene	0.035	0.027	0.023
	116.421	91-20-3	Naphthalene	0.017	0.012	0.011
	125.179	91-57-6	2-Methylnaphthalene	0.009	0.006	0.005
	125.970	90-12-0	1-Methylnaphthalene	0.004	0.003	0.002
Naphtheno/Olefir	112.794	874-35-1	5-Methylindan	0.026	0.022	0.017
	113.682	824-22-6	4-Methylindan	0.009	0.008	0.006
	114.041	824-63-5	2-Methylindan	0.008	0.007	0.005
Indenes	102.779	496-11-7	2,3-Dihydroindene	0.445	0.348	0.332
Naphthenes	78.115		N3	0.005	0.004	0.004
	85.395		N15	0.075	0.073	0.053
	87.385		N18	0.054	0.052	0.038
	91.481		N26	0.047	0.044	0.032
	92.008		N28	0.026	0.025	0.018
	93.528		N30	0.006	0.006	0.004
	101.415		N39	0.049	0.046	0.028
Mono-Naphthene	25.419	287-92-3	Cyclopentane	0.122	0.123	0.153

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Mono-Naphthene	37.861	96-37-7	Methylcyclopentane	0.869	0.875	0.909
	44.537	110-82-7	Cyclohexane	1.212	1.175	1.269
	50.241	2532-58-3	1c,3-Dimethylcyclopentane	0.180	0.183	0.162
	50.810	1759-58-6	1t,3-Dimethylcyclopentane	0.168	0.170	0.151
	51.414	822-50-4	1t,2-Dimethylcyclopentane	0.270	0.271	0.242
	58.291	108-87-2	Methylcyclohexane	2.757	2.704	2.474
	58.636	1192-18-3	1c,2-Dimethylcyclopentane	0.015	0.015	0.013
	59.192	4516-69-2	1,1,3-Trimethylcyclopentane	0.093	0.094	0.073
	63.059	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.099	0.098	0.078
	70.289	638-04-0	1c,3-Dimethylcyclohexane	0.610	0.604	0.479
	71.233		1c,2t,3-Trimethylcyclopentane	0.005	0.005	0.004
	72.795		3c-Ethylmethylcyclopentane	0.047	0.046	0.037
	73.020		3t-Ethylmethylcyclopentane	0.061	0.060	0.048
	73.285	111-66-0	2t-Ethylmethylcyclopentane	0.022	0.022	0.017
	73.709	16747-50-5	1,1-Methylethylcyclopentane	0.311	0.300	0.244
	74.360	2207-03-6	1t,3-Dimethylcyclohexane	0.005	0.005	0.004
	75.004		1c,2c,3-Trimethylcyclopentane	0.196	0.190	0.154
	79.022	2207-01-4	1c,2-Dimethylcyclohexane	0.132	0.125	0.103
	80.745	1678-91-7	Ethylcyclohexane	0.096	0.092	0.075
	80.975	1795-27-3	1c,3c,5-Trimethylcyclohexane	0.317	0.311	0.222
	82.644	7667-60-9	1c,2t,4t-Trimethylcyclohexane	0.188	0.182	0.131
	85.791		1c,2t,4c-Trimethylcyclohexane	0.124	0.121	0.087
	91.610	696-29-7	i-Propylcyclohexane	0.085	0.080	0.059
	93.275	2040-95-1	n-Butylcyclopentane	0.110	0.106	0.077
	99.036	1678-98-4	i-Butylcyclohexane	0.127	0.120	0.080
	100.014		1t-Methyl-2-n-propylcyclohexanR□	0.011	0.010	0.007
	103.149	7058-01-7	sec-Butylcyclohexane	0.161	0.149	0.101
	114.783		1t-M-2-(4-MP)cyclopentane	0.003	0.003	0.002
Di/Bicyclo-Naphth	106.097	493-02-7	t-Decahydronaphthalene	0.067	0.063	0.038
Olefins	35.759		O14	0.001	0.001	0.001
	54.627		C7-Olefin2	0.002	0.003	0.002
	60.387		O35	0.002	0.002	0.002
	63.811		O38	0.007	0.007	0.006
	64.635		C8-Olefin2	0.090	0.093	0.081
	68.350		C8-Olefin3	0.041	0.042	0.032
	76.160		C9-Olefin1	0.032	0.033	0.025
	76.552		C9-Olefin2	0.012	0.012	0.008
	87.033		C9-Olefin4	0.115	0.121	0.081
n-Olefins	10.159	624-64-6	t-Butene-2	0.001	0.001	0.001
	10.798	590-18-1	c-Butene-2	0.001	0.001	0.001
	15.546	109-67-1	Pentene-1	0.019	0.022	0.024
	17.768	646-04-8	t-Pentene-2	0.009	0.010	0.011
	18.703	627-20-3	c-Pentene-2	0.007	0.008	0.009
	31.005	592-41-6	Hexene-1	2.717	3.024	2.845
	33.856	13269-52-8	t-Hexene-3	0.005	0.006	0.005

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
n-Olefins	34.319	4050-45-7	t-Hexene-2	0.007	0.007	0.007
	36.080	7688-21-3	c-Hexene-2	0.004	0.004	0.004
	54.224	14686-14-7	t-Heptene-3	0.001	0.001	0.001
	56.098	14686-13-6	t-Heptene-2	0.003	0.003	0.002
	57.729	6443-92-1	c-Heptene-2	0.006	0.006	0.005
	73.476	14850-23-8	t-Octene-4	0.012	0.013	0.010
	74.706	14919-01-8	t-Octene-3	0.015	0.016	0.012
	75.912	13389-42-9	t-Octene-2	0.005	0.005	0.004
	77.222	7642-04-8	c-Octene-2	0.023	0.024	0.018
	88.174	124-11-8	Nonene-1	0.022	0.024	0.015
	89.092	20237-46-0	c-Nonene-3	0.041	0.046	0.029
	89.923	6434-78-2	t-Nonene-2	0.120	0.116	0.084
	91.213	6434-77-1	c-Nonene-2	0.077	0.074	0.054
	99.828	872-05-9	Decene-1	0.010	0.010	0.006
Iso-Olefins	16.301	563-46-2	2-Methylbutene-1	0.012	0.014	0.015
	19.312	513-35-9	2-Methylbutene-2	0.010	0.011	0.012
	24.896	691-37-2	4-Methylpentene-1	0.004	0.005	0.004
	26.870	691-38-3	4-Methyl-c-pentene-2	0.001	0.001	0.001
	27.558	674-76-0	4-Methyl-t-pentene-2	0.004	0.004	0.004
	34.792	625-27-4	2-Methylpentene-2	0.004	0.004	0.004
	35.183	922-62-3	3-Methyl-c-pentene-2	0.010	0.011	0.010
	37.372	3404-73-7	3,3-Dimethylpentene-1	0.007	0.007	0.006
	39.680	594-56-9	2,3,3-Trimethylbutene-1	0.001	0.001	0.001
	40.640	7385-78-6	3,4-Dimethylpentene-1	0.001	0.001	0.000
	41.586	762-63-0	4,4-Dimethyl-c-pentene-2	0.001	0.001	0.001
	43.765		2-Methyl-c-hexene-3	0.001	0.001	0.001
	45.121	692-24-0	2-Methyl-t-hexene-3	0.003	0.003	0.002
	46.305	7357-93-9	2-Ethyl-3-methylbutene-1	0.001	0.001	0.001
	46.670	3769-23-1	4-Methylhexene-1	0.001	0.001	0.001
	47.295	3404-55-5	4-Methyl-t/c-hexene-2	0.002	0.002	0.001
	51.100		2-Ethylpentene-1	0.001	0.001	0.001
	53.725	4914-89-0	3-Methyl-c-hexene-3	0.002	0.002	0.002
	55.475	2738-19-4	2-Methyl-2-hexene	0.004	0.005	0.004
	56.242	816-79-5	3-Ethylpentene-2	0.002	0.002	0.001
	77.787		2,3,3-Trimethylhexene-1	0.092	0.102	0.065
	79.835	19550-75-6	t-2,2-Dimethylheptene-3	0.062	0.069	0.044
	82.897	4588-18-5	2-Methyloctene-1	0.032	0.036	0.022
	88.858	20063-92-8	t-7-Methyloctene-3	0.013	0.015	0.009
	90.280	4984-01-4	3,7-Dimethyloctene-1	0.059	0.064	0.037
	100.148	19781-18-0	2,3-Dimethyloctene-2	0.131	0.134	0.082
Naphtheno-Olefi	23.704	142-29-0	Cyclopentene	0.004	0.004	0.005
	48.071	110-83-8	Cyclohexene	0.003	0.003	0.003
Di-Olefins	17.219	78-79-5	2-Methyl-1,3-Butadiene	0.004	0.005	0.005
	18.397	598-25-4	3-Methylbutadiene-1,2	0.002	0.002	0.002
	19.630	2004-70-8	1t,3-Pentadiene	0.002	0.003	0.003

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Di-Olefins	20.855	1574-41-0	1c,3-Pentadiene	0.001	0.001	0.001
	38.685	563-79-1	2,3-Dimethyl-2-Butene	0.001	0.001	0.001
	42.502		Diolefin	0.001	0.001	0.001
	67.435		C8-Diolefin4	0.067	0.069	0.060
	71.547	1002-33-1	1,3-Octadiene	0.136	0.134	0.108
Oxygenates	12.708	64-17-5	Ethanol	12.079	11.551	23.104
	19.147	75-65-0	t-Butanol	0.001	0.001	0.001
	26.524	1634-04-4	Methyl-t-butylether	0.005	0.005	0.005
	45.599	71-36-3	n-Butanol	0.001	0.001	0.001
	48.517	994-05-8	TAME	0.001	0.001	0.001
Unidentified	7.612		Unidentified	0.002	0.003	0.004
	14.734		Unidentified	0.004	0.005	0.007
	14.814		Unidentified	0.002	0.002	0.003
	14.853		Unidentified	0.003	0.004	0.004
	14.910		Unidentified	0.016	0.019	0.020
	15.238		Unidentified	0.001	0.001	0.001
	15.258		Unidentified	0.001	0.002	0.002
	15.286		Unidentified	0.007	0.009	0.009
	15.818		Unidentified	0.002	0.002	0.003
	15.878		Unidentified	0.004	0.004	0.006
	15.989		Unidentified	0.001	0.001	0.001
	16.008		Unidentified	0.004	0.003	0.005
	16.115		Unidentified	0.001	0.001	0.002
	16.144		Unidentified	0.001	0.001	0.002
	16.185		Unidentified	0.001	0.001	0.001
	16.482		Unidentified	0.001	0.002	0.002
	16.524		Unidentified	0.004	0.004	0.005
	17.318		Unidentified	0.001	0.001	0.001
	17.351		Unidentified	0.002	0.002	0.003
	17.452		Unidentified	0.002	0.002	0.002
	17.503		Unidentified	0.001	0.001	0.001
	17.537		Unidentified	0.000	0.001	0.001
	17.562		Unidentified	0.001	0.001	0.001
	17.589		Unidentified	0.001	0.002	0.002
	17.635		Unidentified	0.001	0.001	0.001
	17.907		Unidentified	0.001	0.002	0.002
	17.968		Unidentified	0.002	0.002	0.002
	18.037		Unidentified	0.001	0.001	0.001
	18.064		Unidentified	0.002	0.002	0.003
	18.190		Unidentified	0.002	0.002	0.002
	18.235		Unidentified	0.001	0.001	0.001
	18.257		Unidentified	0.001	0.001	0.001
	18.313		Unidentified	0.001	0.001	0.001
	18.333		Unidentified	0.001	0.001	0.001
	18.463		Unidentified	0.001	0.001	0.002
	18.494		Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	18.538		Unidentified	0.001	0.001	0.001
	18.578		Unidentified	0.001	0.001	0.001
	18.850		Unidentified	0.001	0.001	0.001
	18.950		Unidentified	0.004	0.003	0.004
	19.063		Unidentified	0.001	0.001	0.001
	19.102		Unidentified	0.001	0.001	0.001
	19.186		Unidentified	0.001	0.001	0.001
	19.480		Unidentified	0.001	0.002	0.002
	19.561		Unidentified	0.001	0.001	0.001
	19.685		Unidentified	0.001	0.001	0.001
	19.743		Unidentified	0.002	0.002	0.002
	19.795		Unidentified	0.001	0.001	0.001
	19.830		Unidentified	0.000	0.000	0.001
	19.893		Unidentified	0.001	0.001	0.002
	19.939		Unidentified	0.001	0.001	0.001
	19.975		Unidentified	0.001	0.001	0.001
	20.078		Unidentified	0.003	0.003	0.003
	20.161		Unidentified	0.001	0.001	0.001
	20.230		Unidentified	0.001	0.001	0.001
	20.283		Unidentified	0.001	0.001	0.001
	20.307		Unidentified	0.000	0.001	0.001
	20.341		Unidentified	0.001	0.001	0.001
	20.398		Unidentified	0.001	0.001	0.001
	20.564		Unidentified	0.003	0.004	0.004
	20.647		Unidentified	0.001	0.001	0.001
	20.756		Unidentified	0.003	0.003	0.004
	20.922		Unidentified	0.001	0.001	0.001
	20.947		Unidentified	0.000	0.001	0.001
	21.020		Unidentified	0.001	0.001	0.001
	21.062		Unidentified	0.001	0.001	0.001
	21.092		Unidentified	0.001	0.001	0.001
	21.447		Unidentified	0.002	0.002	0.002
	21.559		Unidentified	0.002	0.002	0.002
	21.694		Unidentified	0.001	0.001	0.001
	21.722		Unidentified	0.000	0.001	0.000
	21.750		Unidentified	0.001	0.001	0.001
	21.837		Unidentified	0.001	0.001	0.001
	21.867		Unidentified	0.001	0.001	0.001
	21.981		Unidentified	0.001	0.002	0.002
	22.004		Unidentified	0.001	0.001	0.001
	22.082		Unidentified	0.001	0.001	0.001
	22.122		Unidentified	0.000	0.000	0.000
	22.186		Unidentified	0.002	0.002	0.002
	22.281		Unidentified	0.001	0.001	0.001
	22.330		Unidentified	0.001	0.001	0.001
	22.440		Unidentified	0.001	0.001	0.001
	22.541		Unidentified	0.001	0.001	0.002
	22.592		Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	22.664		Unidentified	0.001	0.001	0.002
	22.698		Unidentified	0.000	0.000	0.001
	22.784		Unidentified	0.001	0.001	0.002
	22.825		Unidentified	0.000	0.000	0.001
	22.866		Unidentified	0.000	0.000	0.001
	22.931		Unidentified	0.001	0.001	0.002
	23.035		Unidentified	0.001	0.001	0.001
	23.107		Unidentified	0.000	0.000	0.001
	23.160		Unidentified	0.001	0.001	0.001
	23.203		Unidentified	0.001	0.001	0.001
	23.304		Unidentified	0.002	0.002	0.002
	23.412		Unidentified	0.000	0.000	0.001
	23.468		Unidentified	0.002	0.002	0.002
	23.566		Unidentified	0.001	0.001	0.001
	23.871		Unidentified	0.002	0.002	0.002
	24.010		Unidentified	0.001	0.001	0.001
	24.040		Unidentified	0.001	0.001	0.001
	24.118		Unidentified	0.001	0.001	0.001
	24.165		Unidentified	0.001	0.001	0.001
	24.205		Unidentified	0.001	0.001	0.001
	24.299		Unidentified	0.001	0.001	0.001
	24.327		Unidentified	0.001	0.001	0.001
	24.428		Unidentified	0.001	0.001	0.001
	24.509		Unidentified	0.000	0.001	0.001
	24.577		Unidentified	0.001	0.001	0.001
	24.608		Unidentified	0.001	0.001	0.001
	24.794		Unidentified	0.001	0.002	0.002
	25.015		Unidentified	0.001	0.001	0.001
	25.133		Unidentified	0.001	0.001	0.002
	25.161		Unidentified	0.001	0.001	0.001
	25.193		Unidentified	0.000	0.000	0.001
	25.244		Unidentified	0.001	0.001	0.001
	25.626		Unidentified	0.001	0.001	0.001
	25.696		Unidentified	0.001	0.001	0.001
	25.728		Unidentified	0.001	0.001	0.001
	25.782		Unidentified	0.001	0.001	0.001
	25.853		Unidentified	0.000	0.001	0.000
	26.351		Unidentified	0.002	0.002	0.002
	26.653		Unidentified	0.001	0.001	0.001
	26.735		Unidentified	0.001	0.001	0.001
	26.798		Unidentified	0.001	0.001	0.001
	26.819		Unidentified	0.001	0.001	0.001
	27.702		Unidentified	0.000	0.000	0.000
	27.727		Unidentified	0.000	0.000	0.000
	27.753		Unidentified	0.000	0.000	0.000
	27.839		Unidentified	0.001	0.001	0.001
	27.908		Unidentified	0.001	0.001	0.001
	28.007		Unidentified	0.000	0.000	0.000

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	28.062		Unidentified	0.001	0.001	0.001
	28.141		Unidentified	0.000	0.001	0.000
	28.229		Unidentified	0.000	0.001	0.000
	28.332		Unidentified	0.000	0.000	0.000
	28.358		Unidentified	0.001	0.001	0.001
	28.502		Unidentified	0.001	0.002	0.001
	28.558		Unidentified	0.000	0.001	0.000
	28.619		Unidentified	0.000	0.000	0.000
	28.652		Unidentified	0.001	0.001	0.001
	28.729		Unidentified	0.000	0.001	0.000
	28.784		Unidentified	0.000	0.001	0.000
	28.812		Unidentified	0.000	0.000	0.000
	28.896		Unidentified	0.001	0.002	0.001
	29.124		Unidentified	0.001	0.001	0.001
	29.155		Unidentified	0.000	0.001	0.000
	29.252		Unidentified	0.000	0.000	0.000
	29.307		Unidentified	0.001	0.001	0.001
	29.371		Unidentified	0.001	0.001	0.001
	29.945		Unidentified	0.000	0.001	0.000
	30.037		Unidentified	0.000	0.000	0.000
	30.064		Unidentified	0.000	0.000	0.000
	30.127		Unidentified	0.001	0.001	0.001
	30.207		Unidentified	0.001	0.001	0.001
	30.389		Unidentified	0.001	0.001	0.001
	30.594		Unidentified	0.000	0.000	0.000
	31.678		Unidentified	0.001	0.001	0.001
	31.721		Unidentified	0.001	0.001	0.001
	31.795		Unidentified	0.002	0.002	0.002
	31.939		Unidentified	0.001	0.001	0.001
	32.053		Unidentified	0.001	0.001	0.001
	32.072		Unidentified	0.000	0.000	0.001
	32.174		Unidentified	0.001	0.001	0.001
	32.211		Unidentified	0.001	0.001	0.001
	32.321		Unidentified	0.000	0.000	0.001
	32.349		Unidentified	0.001	0.001	0.001
	32.463		Unidentified	0.000	0.000	0.001
	32.544		Unidentified	0.000	0.000	0.001
	32.601		Unidentified	0.001	0.000	0.001
	32.693		Unidentified	0.000	0.000	0.000
	32.747		Unidentified	0.001	0.001	0.001
	32.832		Unidentified	0.001	0.001	0.001
	32.880		Unidentified	0.000	0.001	0.000
	32.921		Unidentified	0.000	0.000	0.000
	33.634		Unidentified	0.001	0.002	0.001
	34.045		Unidentified	0.000	0.000	0.000
	34.072		Unidentified	0.000	0.001	0.000
	34.121		Unidentified	0.000	0.000	0.000
	34.523		Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	34.935		Unidentified	0.001	0.001	0.001
	35.395		Unidentified	0.000	0.000	0.000
	35.441		Unidentified	0.001	0.001	0.001
	35.554		Unidentified	0.001	0.001	0.001
	35.605		Unidentified	0.000	0.001	0.001
	35.881		Unidentified	0.000	0.000	0.000
	36.248		Unidentified	0.001	0.001	0.001
	36.512		Unidentified	0.000	0.000	0.000
	36.589		Unidentified	0.001	0.001	0.001
	36.677		Unidentified	0.001	0.001	0.001
	36.811		Unidentified	0.000	0.000	0.000
	37.098		Unidentified	0.001	0.001	0.001
	37.130		Unidentified	0.000	0.001	0.000
	37.188		Unidentified	0.000	0.000	0.000
	38.223		Unidentified	0.000	0.000	0.001
	38.383		Unidentified	0.001	0.001	0.001
	38.580		Unidentified	0.001	0.001	0.001
	38.633		Unidentified	0.000	0.001	0.001
	38.812		Unidentified	0.000	0.000	0.000
	38.871		Unidentified	0.000	0.000	0.000
	39.033		Unidentified	0.001	0.001	0.001
	39.091		Unidentified	0.001	0.001	0.001
	39.171		Unidentified	0.001	0.001	0.001
	40.226		Unidentified	0.001	0.001	0.001
	40.416		Unidentified	0.000	0.000	0.000
	40.569		Unidentified	0.001	0.001	0.001
	40.708		Unidentified	0.000	0.000	0.000
	40.824		Unidentified	0.000	0.001	0.000
	40.860		Unidentified	0.000	0.000	0.000
	41.012		Unidentified	0.001	0.001	0.001
	41.068		Unidentified	0.001	0.002	0.001
	41.384		Unidentified	0.001	0.001	0.001
	41.476		Unidentified	0.001	0.001	0.000
	41.710		Unidentified	0.001	0.001	0.001
	41.895		Unidentified	0.001	0.001	0.000
	41.985		Unidentified	0.001	0.001	0.001
	42.090		Unidentified	0.001	0.001	0.000
	42.251		Unidentified	0.001	0.001	0.001
	43.291		Unidentified	0.001	0.001	0.001
	43.380		Unidentified	0.001	0.001	0.000
	43.481		Unidentified	0.001	0.001	0.001
	43.693		Unidentified	0.000	0.000	0.000
	43.848		Unidentified	0.001	0.001	0.000
	45.278		Unidentified	0.001	0.001	0.001
	45.410		Unidentified	0.000	0.000	0.000
	45.814		Unidentified	0.001	0.001	0.001
	45.950		Unidentified	0.000	0.000	0.001
	46.054		Unidentified	0.001	0.001	0.001

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	46.824		Unidentified	0.001	0.001	0.001
	48.278		Unidentified	0.000	0.000	0.001
	48.344		Unidentified	0.001	0.001	0.001
	48.799		Unidentified	0.001	0.001	0.001
	48.889		Unidentified	0.000	0.000	0.000
	49.024		Unidentified	0.001	0.001	0.001
	49.135		Unidentified	0.001	0.001	0.000
	49.925		Unidentified	0.001	0.001	0.001
	50.596		Unidentified	0.001	0.001	0.001
	51.163		Unidentified	0.001	0.001	0.001
	51.611		Unidentified	0.041	0.041	0.037
	53.029		Unidentified	0.001	0.001	0.001
	53.088		Unidentified	0.001	0.001	0.001
	53.164		Unidentified	0.001	0.001	0.000
	53.234		Unidentified	0.001	0.001	0.001
	53.348		Unidentified	0.000	0.001	0.000
	53.394		Unidentified	0.001	0.001	0.001
	53.596		Unidentified	0.000	0.000	0.000
	53.959		Unidentified	0.001	0.001	0.001
	54.189		Unidentified	0.002	0.002	0.002
	54.359		Unidentified	0.001	0.001	0.001
	54.527		Unidentified	0.002	0.002	0.002
	55.412		Unidentified	0.001	0.001	0.001
	55.618		Unidentified	0.005	0.005	0.004
	55.974		Unidentified	0.001	0.001	0.001
	56.031		Unidentified	0.001	0.001	0.000
	56.743		Unidentified	2.386	2.504	2.141
	57.363		Unidentified	0.007	0.007	0.006
	57.595		Unidentified	0.001	0.001	0.000
	59.889		Unidentified	0.001	0.001	0.001
	60.031		Unidentified	0.005	0.004	0.003
	60.174		Unidentified	0.001	0.001	0.001
	60.239		Unidentified	0.001	0.002	0.001
	60.317		Unidentified	0.001	0.002	0.001
	60.521		Unidentified	0.003	0.003	0.002
	60.867		Unidentified	0.747	0.769	0.670
	62.520		Unidentified	0.010	0.010	0.009
	63.980		Unidentified	0.002	0.002	0.002
	64.208		Unidentified	0.004	0.004	0.003
	64.362		Unidentified	0.004	0.004	0.003
	67.115		Unidentified	0.019	0.019	0.017
	71.724		Unidentified	0.016	0.016	0.013
	71.988		Unidentified	0.007	0.007	0.005
	76.279		Unidentified	0.014	0.015	0.010
	76.884		Unidentified	0.009	0.010	0.006
	77.482		Unidentified	0.003	0.003	0.002
	77.581		Unidentified	0.003	0.003	0.002
	78.392		Unidentified	0.070	0.073	0.048

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	78.713		Unidentified	0.060	0.062	0.041
	79.221		Unidentified	0.018	0.018	0.015
	81.408		Unidentified	0.046	0.051	0.032
	81.990		Unidentified	0.014	0.013	0.010
	82.435		Unidentified	0.038	0.036	0.026
	83.210		Unidentified	0.054	0.060	0.038
	83.862		Unidentified	0.173	0.151	0.143
	84.230		Unidentified	0.099	0.103	0.068
	86.194		Unidentified	0.011	0.012	0.008
	86.388		Unidentified	0.072	0.074	0.049
	86.779		Unidentified	0.040	0.038	0.028
	87.527		Unidentified	0.161	0.156	0.112
	88.361		Unidentified	0.024	0.024	0.017
	88.536		Unidentified	0.018	0.018	0.013
	89.269		Unidentified	0.007	0.007	0.005
	90.479		Unidentified	0.013	0.012	0.009
	91.015		Unidentified	0.014	0.013	0.009
	92.276		Unidentified	0.009	0.009	0.006
	92.758		Unidentified	0.139	0.144	0.086
	92.925		Unidentified	0.024	0.025	0.015
	94.069		Unidentified	0.051	0.052	0.031
	94.744		Unidentified	0.009	0.009	0.005
	94.874		Unidentified	0.013	0.012	0.008
	94.995		Unidentified	0.017	0.016	0.011
	95.653		Unidentified	0.013	0.012	0.010
	95.782		Unidentified	0.005	0.005	0.003
	96.285		Unidentified	0.022	0.023	0.014
	96.422		Unidentified	0.031	0.032	0.019
	97.981		Unidentified	0.023	0.022	0.014
	98.206		Unidentified	0.080	0.087	0.051
	98.921		Unidentified	0.079	0.081	0.049
	99.143		Unidentified	0.058	0.059	0.036
	99.363		Unidentified	0.016	0.016	0.010
	99.560		Unidentified	0.017	0.017	0.010
	99.692		Unidentified	0.020	0.020	0.012
	99.904		Unidentified	0.007	0.007	0.004
	100.386		Unidentified	0.098	0.100	0.060
	101.867		Unidentified	0.032	0.033	0.018
	102.262		Unidentified	0.049	0.050	0.027
	102.338		Unidentified	0.041	0.036	0.027
	102.427		Unidentified	0.044	0.038	0.029
	103.377		Unidentified	0.019	0.017	0.013
	103.525		Unidentified	0.222	0.191	0.145
	103.731		Unidentified	0.021	0.020	0.012
	103.854		Unidentified	0.058	0.054	0.033
	104.061		Unidentified	0.012	0.011	0.007
	104.888		Unidentified	0.011	0.011	0.006
	105.495		Unidentified	0.016	0.015	0.009

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	105.906		Unidentified	0.039	0.037	0.022
	106.566		Unidentified	0.088	0.090	0.050
	107.629		Unidentified	0.084	0.086	0.048
	108.964		Unidentified	0.020	0.017	0.013
	109.320		Unidentified	0.021	0.018	0.014
	109.899		Unidentified	0.007	0.006	0.004
	110.572		Unidentified	0.017	0.014	0.011
	110.745		Unidentified	0.002	0.002	0.001
	111.038		Unidentified	0.006	0.005	0.003
	111.350		Unidentified	0.006	0.005	0.004
	111.524		Unidentified	0.014	0.012	0.008
	111.688		Unidentified	0.008	0.007	0.005
	111.859		Unidentified	0.011	0.010	0.007
	111.951		Unidentified	0.013	0.011	0.007
	112.082		Unidentified	0.005	0.004	0.003
	112.247		Unidentified	0.006	0.005	0.003
	112.453		Unidentified	0.015	0.013	0.008
	113.272		Unidentified	0.007	0.006	0.004
	113.458		Unidentified	0.014	0.012	0.007
	113.828		Unidentified	0.001	0.001	0.001
	113.948		Unidentified	0.005	0.004	0.003
	114.239		Unidentified	0.010	0.008	0.005
	114.442		Unidentified	0.007	0.006	0.004
	114.684		Unidentified	0.008	0.008	0.004
	114.887		Unidentified	0.006	0.006	0.003
	115.644		Unidentified	0.067	0.068	0.035
	116.035		Unidentified	0.011	0.008	0.007
	116.558		Unidentified	0.012	0.009	0.008
	116.758		Unidentified	0.010	0.007	0.007
	116.919		Unidentified	0.005	0.005	0.003
	117.019		Unidentified	0.003	0.003	0.002
	117.205		Unidentified	0.002	0.002	0.001
	117.366		Unidentified	0.005	0.004	0.003
	117.487		Unidentified	0.002	0.002	0.001
	117.655		Unidentified	0.006	0.005	0.003
	118.343		Unidentified	0.006	0.005	0.003
	118.529		Unidentified	0.003	0.003	0.001
	118.897		Unidentified	0.003	0.003	0.001
	119.046		Unidentified	0.003	0.003	0.001
	119.292		Unidentified	0.002	0.002	0.001
	119.400		Unidentified	0.001	0.001	0.001
	119.480		Unidentified	0.001	0.001	0.000
	119.628		Unidentified	0.002	0.002	0.001
	119.723		Unidentified	0.003	0.002	0.002
	119.831		Unidentified	0.003	0.003	0.002
	120.357		Unidentified	0.006	0.005	0.003
	120.564		Unidentified	0.002	0.001	0.001
	120.702		Unidentified	0.004	0.003	0.002

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF 21-Jul-08, 23:56:15
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol
Unidentified	120.973		Unidentified	0.002	0.002	0.001
	121.243		Unidentified	0.004	0.003	0.002
	121.372		Unidentified	0.001	0.001	0.001
	121.479		Unidentified	0.001	0.001	0.000
	121.632		Unidentified	0.001	0.001	0.001
	121.827		Unidentified	0.001	0.001	0.001
	121.988		Unidentified	0.001	0.000	0.000
	122.317		Unidentified	0.001	0.001	0.001
	122.649		Unidentified	0.001	0.001	0.000
	122.911		Unidentified	0.002	0.002	0.001
	123.157		Unidentified	0.001	0.001	0.001
	123.724		Unidentified	0.002	0.002	0.001
	123.928		Unidentified	0.001	0.001	0.001
	124.126		Unidentified	0.001	0.001	0.001
	124.213		Unidentified	0.001	0.001	0.001
	124.525		Unidentified	0.003	0.002	0.002
	125.363		Unidentified	0.003	0.002	0.002
	125.614		Unidentified	0.001	0.001	0.001
	126.291		Unidentified	0.002	0.002	0.001

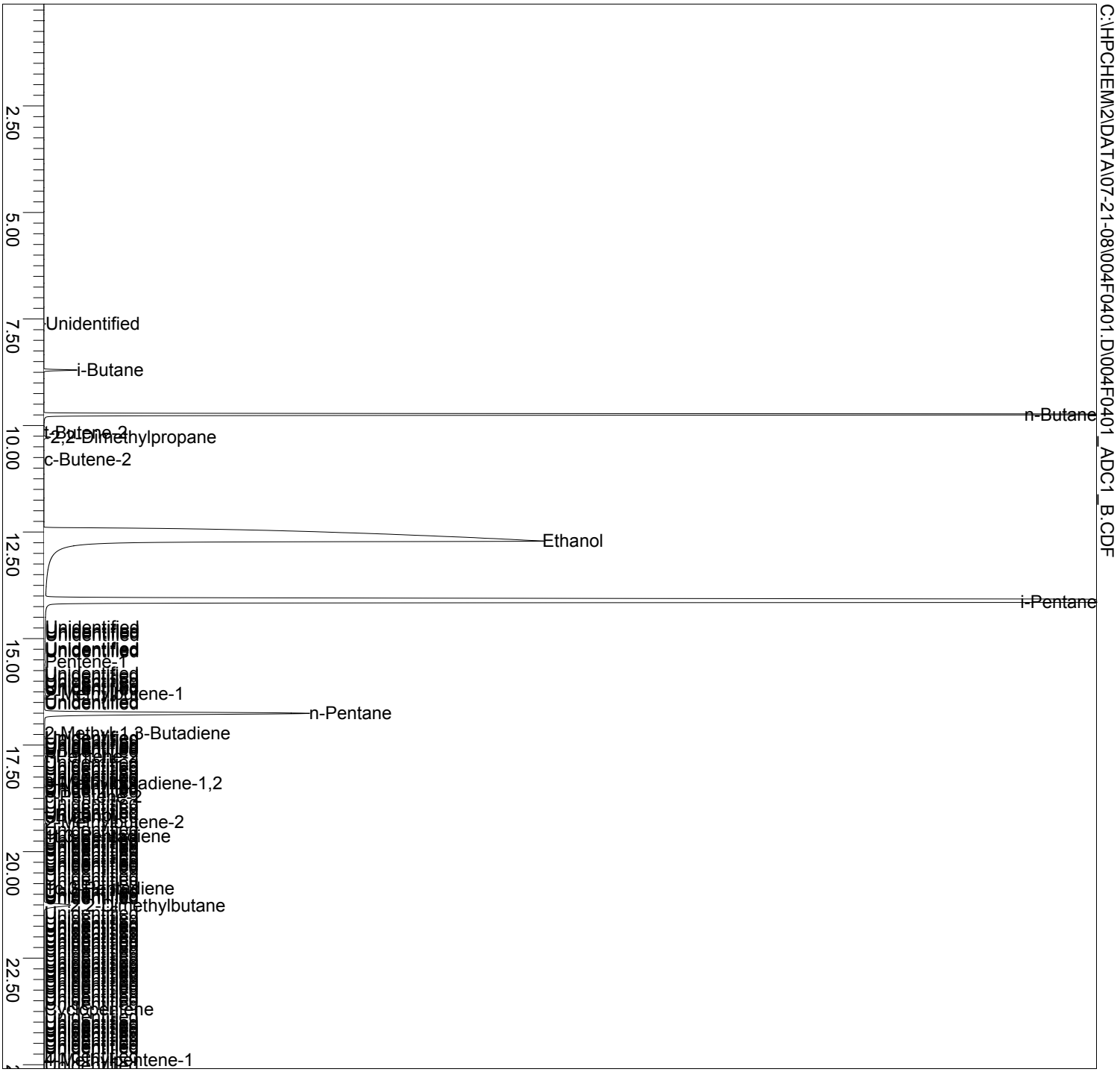
Plus

Recovery = 100.00

File: C:\HPCHEM\2\DATA\07-21-08\004F0401.D\004F0401_ADC1_B.CDF
Sample: ODDB-72366
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

21-Jul-08, 23:56:15
Operator: AAD

Sample Chromatogram



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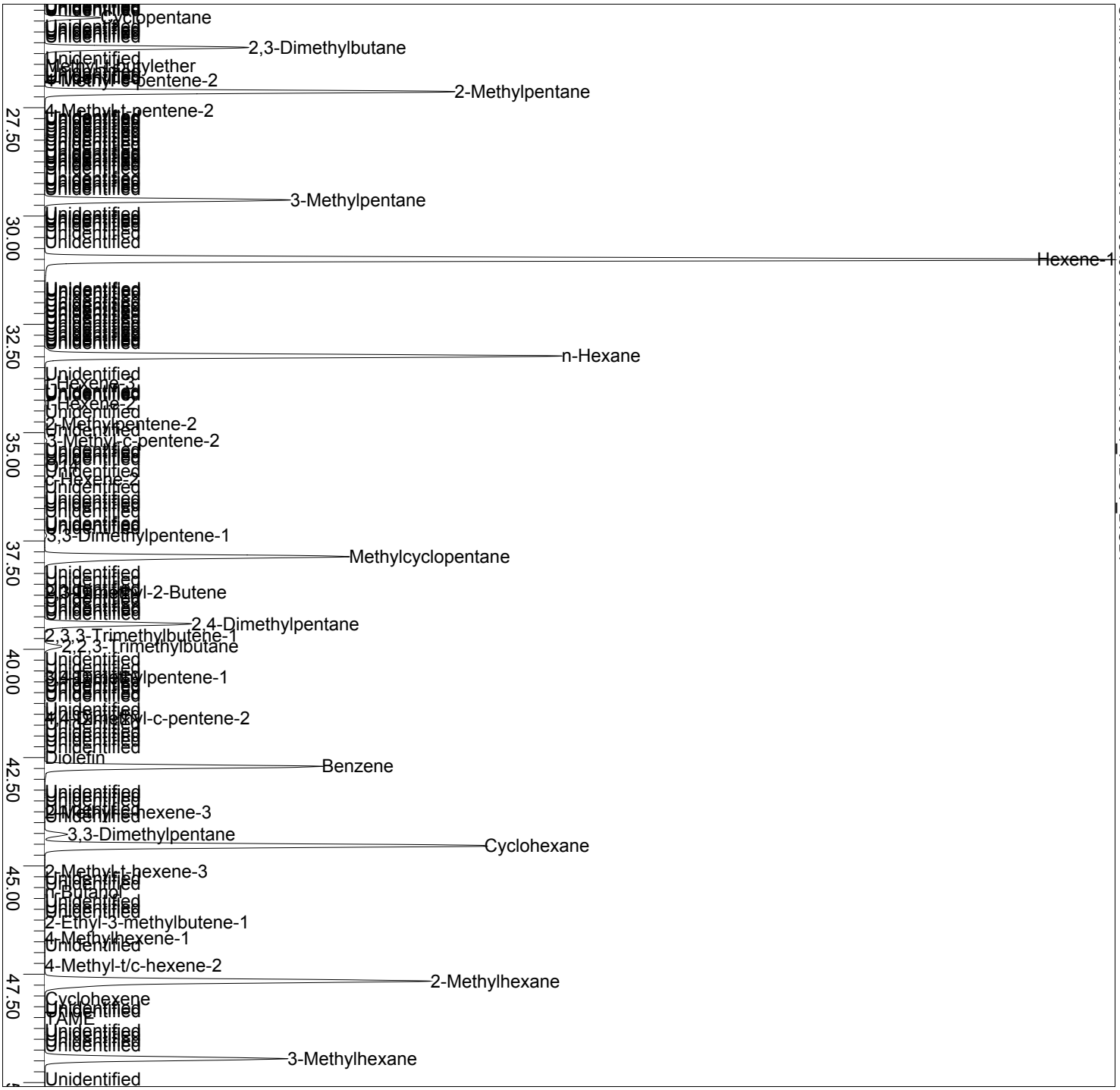
Sample: ODDB-72366
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

21-Jul-08, 23:56:15
Operator: AAD

Sample Chromatogram



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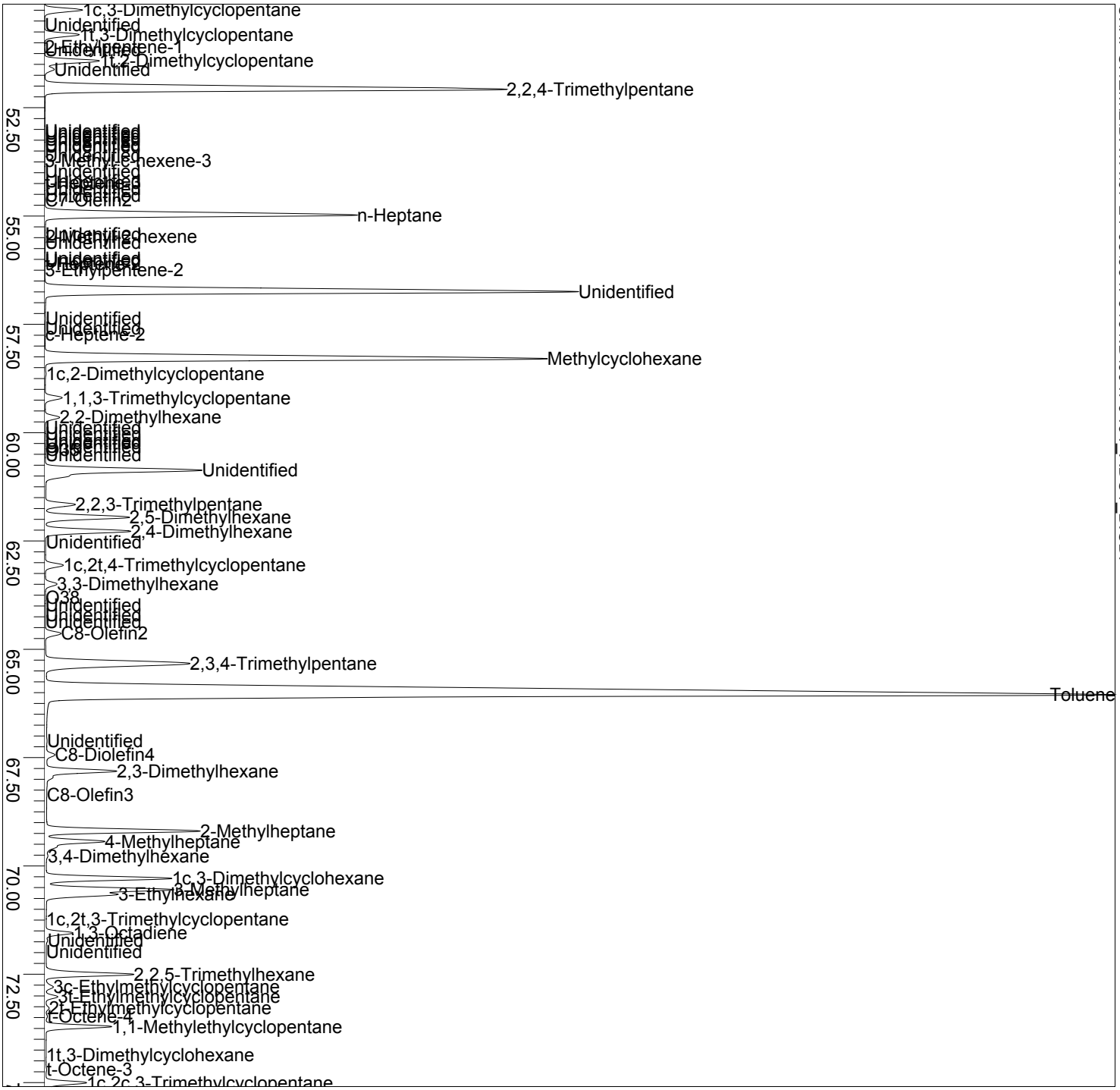
Sample: ODDB-72366
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

21-Jul-08, 23:56:15
Operator: AAD

Sample Chromatogram



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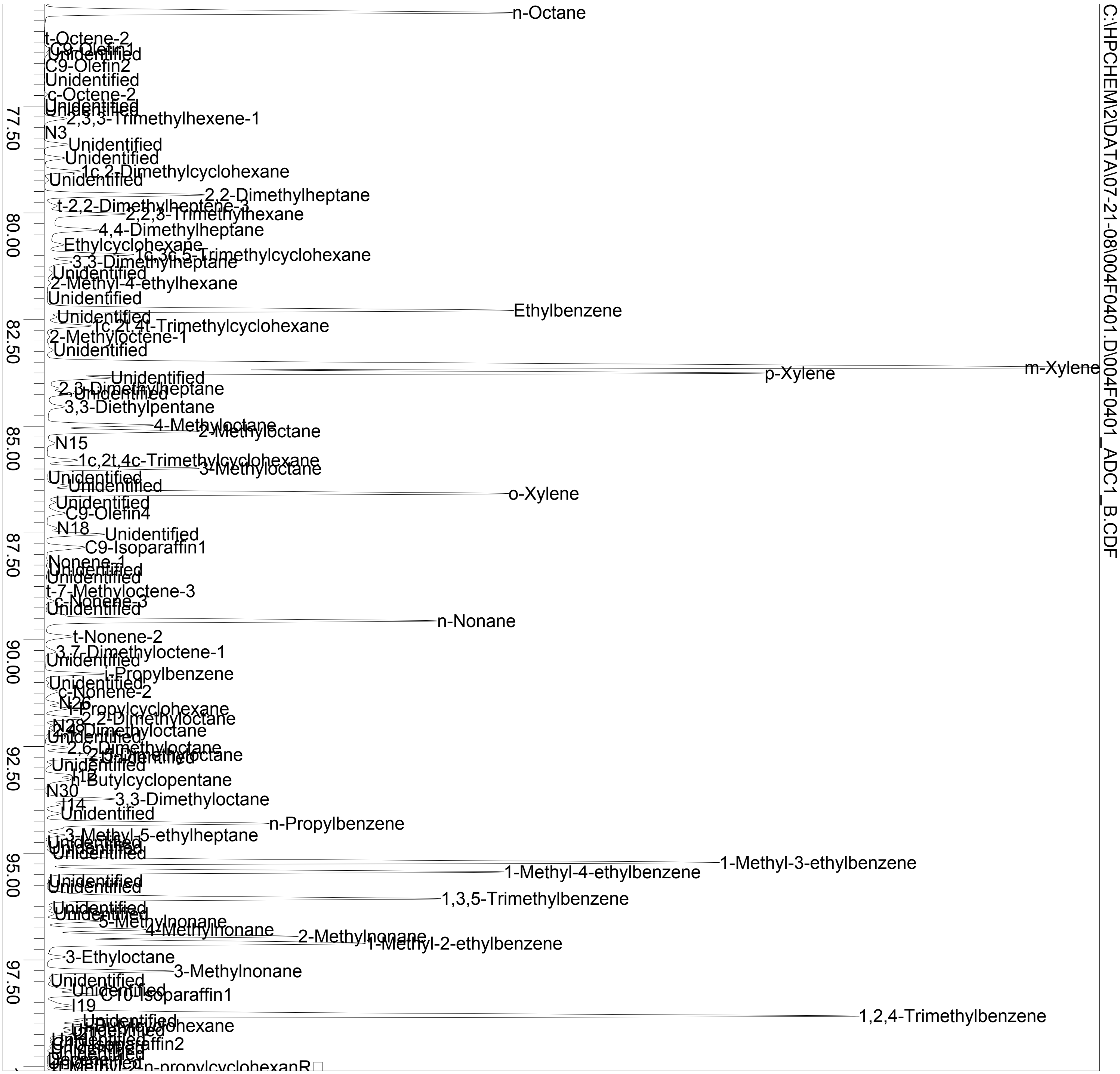
Sample: ODDB-72366 Operator: AAD
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

Sample Chromatogram



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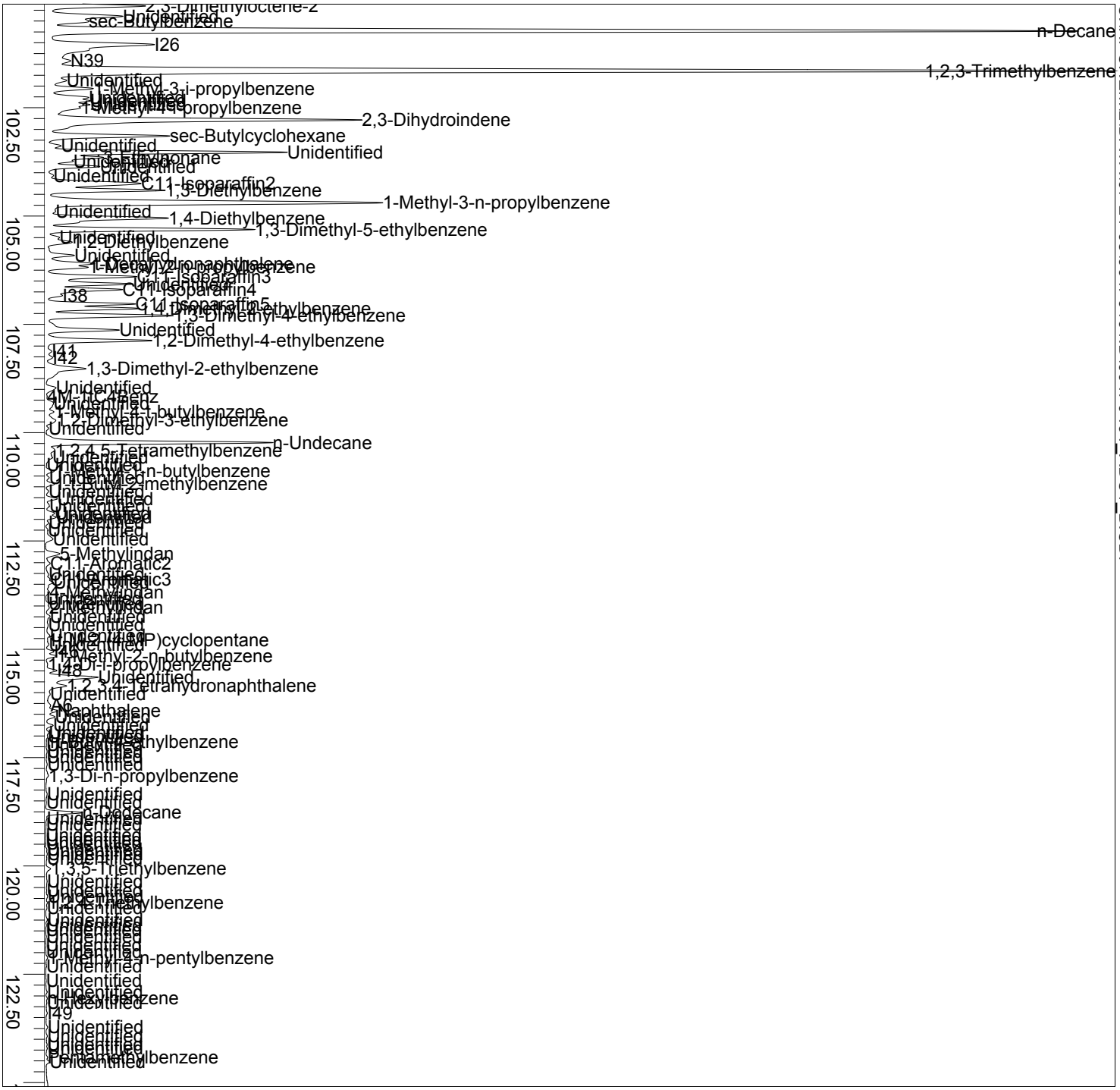
Sample: ODDB-72366
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

21-Jul-08, 23:56:15
Operator: AAD

Sample Chromatogram



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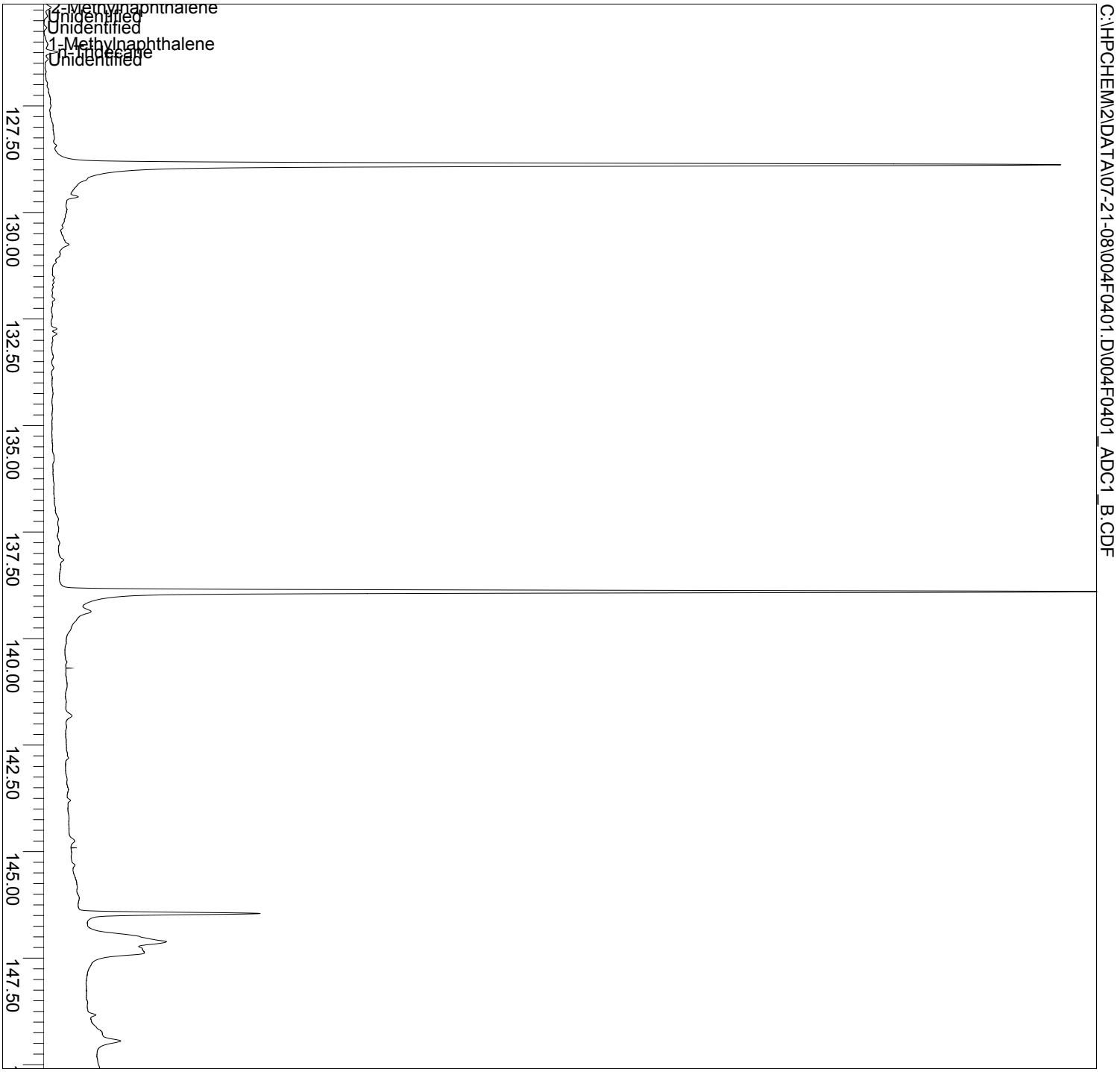
Sample: ODDB-72366
Parameter: C:\HPCHEM\SeparationSystems\HCE4\ODDB-72366
ODDB-72366

21-Jul-08, 23:56:15
Operator: AAD

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	3.891	4.430	3.716
I-Paraffins	42.144	45.328	31.970
Aromatics	18.679	15.841	13.777
Mono-Aromatics	17.762	15.124	13.196
Naphthalenes	0.129	0.093	0.078
Naphtheno/Olefino-Benz	0.178	0.148	0.106
Indenes	0.611	0.477	0.396
Naphthenes	3.473	3.377	3.000
Mono-Naphthenes	3.473	3.377	3.000
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.304	7.991	7.554
n-Olefins	2.999	3.367	3.205
Iso-Olefins	3.554	3.903	3.580
Naphtheno-Olefins	0.710	0.678	0.725
Di-Olefins	0.041	0.043	0.045
Oxygenates	22.675	21.279	38.864
Unidentified	1.833	1.754	1.119
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	22.540	21.154	38.700
C3	0.087	0.084	0.117
C4	0.783	0.972	1.059
C5	9.218	10.718	10.234
C6	11.237	12.025	10.486
C7	10.695	10.274	8.824
C8	30.880	31.392	21.656
C9	7.573	7.045	4.851
C10	4.092	3.602	2.407
C11	0.933	0.871	0.484
C12	0.129	0.109	0.063

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.006	0.009	0.011
	C4	0.479	0.613	0.652
	C5	1.183	1.399	1.297
	C6	0.839	0.942	0.770
	C7	0.584	0.632	0.461
	C8	0.472	0.497	0.327
	C9	0.278	0.286	0.171
	C10	0.020	0.020	0.011
	C11	0.030	0.030	0.015
I-Paraffins	C4	0.052	0.069	0.071
	C5	4.195	5.014	4.599
	C6	5.533	6.226	5.079
	C7	2.943	3.210	2.323
	C8	24.875	26.123	17.224
	C9	2.918	3.041	1.800
	C10	1.093	1.111	0.604
	C11	0.522	0.520	0.264
	C12	0.013	0.013	0.006
Mono-Aromatics	C6	0.743	0.626	0.752
	C7	5.029	4.295	4.317
	C8	5.117	4.373	3.812
	C9	4.277	3.638	2.815
	C10	2.146	1.816	1.265
	C11	0.338	0.284	0.180
	C12	0.112	0.094	0.055
Naphthalenes	C10	0.112	0.081	0.069
	C11	0.017	0.012	0.009
Naphtheno/Olefino-Benzs	C10	0.178	0.148	0.106
Indenes	C9	0.070	0.054	0.047
	C10	0.537	0.420	0.347
	C12	0.004	0.003	0.002
Mono-Naphthenes	C5	0.150	0.149	0.169
	C6	1.501	1.467	1.411
	C7	1.409	1.368	1.132
	C8	0.376	0.360	0.265
	C9	0.030	0.026	0.019

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.007	0.006	0.004
n-Olefins	C4	0.197	0.239	0.278
	C5	1.666	1.902	1.879
	C6	1.040	1.127	0.978
	C7	0.069	0.073	0.056
	C11	0.026	0.026	0.015
Iso-Olefins	C5	1.791	2.027	2.020
	C6	1.077	1.158	1.012
	C7	0.646	0.680	0.520
	C8	0.040	0.038	0.027
Naphtheno-Olefins	C5	0.206	0.198	0.239
	C6	0.504	0.479	0.485
Di-Olefins	C5	0.026	0.029	0.030
	C7	0.015	0.015	0.014
Oxygenates	C2	22.540	21.154	38.700
	C3	0.081	0.075	0.106
	C4	0.055	0.051	0.058

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	29.52	27.10
5%	81.81	81.17
10%	114.58	98.81
15%	144.41	139.00
20%	164.42	153.99
25%	172.44	172.31
30%	172.67	172.57
35%	172.91	172.82
40%	173.15	173.08
45%	177.19	176.24
50%	209.29	208.97
55%	209.94	209.71
60%	211.55	210.32
65%	230.81	228.71
70%	234.39	231.05
75%	237.47	236.74
80%	245.89	239.09
85%	279.99	268.46
90%	319.83	291.80
95%	348.60	336.10
FBP	400.46	388.16

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.554	74-98-6	P3	Propane	0.006	0.009	0.011	1.666
2	8.810	75-28-5	I4	i-Butane	0.052	0.069	0.071	13.823
3	9.624	115-11-7	K4	Isobutene	0.017	0.021	0.023	4.570
4	9.665	106-98-9	K4	Butene-1	0.018	0.023	0.026	5.010
5	10.023	106-97-8	P4	n-Butane	0.479	0.613	0.652	127.567
6	10.510	624-64-6	K4	t-Butene-2	0.074	0.091	0.105	20.522
7	10.638	463-82-1	I5	2,2-Dimethylpropane	0.012	0.015	0.013	3.130
8	11.252	590-18-1	K4	c-Butene-2	0.088	0.105	0.124	24.230
9	13.126	64-17-5	X2	Ethanol	22.540	21.154	38.700	2558.100
10	13.453	563-45-1	C5	3-Methylbutene-1	0.225	0.265	0.254	61.956
11	15.078	78-78-4	I5	i-Pentane	4.183	5.000	4.586	1121.004
12	16.732	109-67-1	K5	Pentene-1	0.338	0.391	0.381	93.178
13	17.583	563-46-2	C5	2-Methylbutene-1	0.514	0.585	0.579	141.572
14	18.116	109-66-0	P5	n-Pentane	1.183	1.399	1.297	317.000
15	18.625	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	3.013
16	19.234	646-04-8	K5	t-Pentene-2	0.858	0.980	0.968	236.495
17	19.877		?	Unidentified	0.006	0.007	0.007	1.976
18	20.269	627-20-3	K5	c-Pentene-2	0.470	0.531	0.530	129.585
19	20.945	513-35-9	C5	2-Methylbutene-2	1.053	1.177	1.187	290.107
20	21.270	2004-70-8	E5	1t,3-Pentadiene	0.016	0.017	0.018	4.430
21	22.537	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.007	0.008	1.979
22	23.096	75-83-2	I6	2,2-Dimethylbutane	0.094	0.107	0.086	25.259
23	25.742	142-29-0	B5	Cyclopentene	0.199	0.191	0.231	56.449
24	26.896	71-23-8	X3	n-Propanol	0.081	0.075	0.106	15.535
25	27.000		?	Unidentified	0.057	0.063	0.054	19.256
26	27.605	287-92-3	M5	Cyclopentane	0.150	0.149	0.169	41.421
27	28.340	79-29-8	I6	2,3-Dimethylbutane	1.146	1.283	1.052	308.342
28	28.736		?	Unidentified	0.053	0.053	0.048	17.997
29	29.203	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.051	0.044	12.794
30	29.421	107-83-5	I6	2-Methylpentane	2.676	3.034	2.456	719.907
31	29.842	674-76-0	C6	4-Methyl-t-pentene-2	0.132	0.145	0.124	36.274
32	32.069	96-14-0	I6	3-Methylpentane	1.617	1.803	1.484	435.084
33	33.225	763-29-1	C6	2-Methylpentene-1	0.224	0.243	0.211	61.862
34	33.446	592-41-6	K6	Hexene-1	0.160	0.175	0.151	44.141
35	35.641	760-21-4	C6	2-Ethylbutene-1	0.069	0.074	0.065	19.089
36	35.800	110-54-3	P6	n-Hexane	0.839	0.942	0.770	225.643
37	36.437	13269-52-8	K6	t-Hexene-3	0.263	0.285	0.247	72.471
38	36.915	4050-45-7	K6	t-Hexene-2	0.403	0.438	0.379	111.187
39	37.041	1120-62-3	B6	3-Methylcyclopentene	0.101	0.098	0.097	27.771
40	37.410	625-27-4	C6	2-Methylpentene-2	0.341	0.366	0.321	94.058
41	37.823	922-62-3	C6	3-Methyl-c-pentene-2	0.264	0.280	0.248	72.747
42	38.740	7688-21-3	K6	c-Hexene-2	0.214	0.229	0.201	58.924
43	40.084	3404-73-7	C7	3,3-Dimethylpentene-1	0.308	0.325	0.248	85.004

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.669	96-37-7	M6	Methylcyclopentane	1.028	1.017	0.966	283.247
45	42.237	108-08-7	I7	2,4-Dimethylpentane	0.820	0.903	0.647	221.463
46	42.535	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.014	0.011	3.669
47	42.781	464-06-2	I7	2,2,3-Trimethylbutane	0.052	0.056	0.041	14.023
48	45.427	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	4.112
49	45.635	71-42-3	Q6	Benzene	0.743	0.626	0.752	220.396
50	45.833	693-89-0	B6	1-Methylcyclopentene	0.359	0.341	0.346	101.275
51	46.640	3404-61-3	C7	3-Methylhexene-1	0.015	0.016	0.012	4.234
52	47.228	3524-73-0	C7	5-Methylhexene-1	0.042	0.044	0.034	11.469
53	47.552	110-82-7	M6	Cyclohexane	0.474	0.450	0.445	130.535
54	48.058	71-36-3	X4	n-Butanol	0.055	0.051	0.058	11.385
55	49.271	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.043	0.032	11.089
56	49.619	3769-23-1	C7	4-Methylhexene-1	0.011	0.011	0.009	3.003
57	50.265	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.053	0.041	13.947
58	50.672	591-76-4	I7	2-Methylhexane	1.518	1.657	1.198	410.084
59	51.153	110-83-8	B6	Cyclohexene	0.044	0.040	0.043	12.219
60	52.492	589-34-4	I7	3-Methylhexane	0.552	0.595	0.436	149.226
61	53.353	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.152	0.150	0.122	41.855
62	53.940	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.117	0.116	0.094	32.205
63	54.566	822-50-4	M7	1t,2-Dimethylcyclopentane	0.160	0.158	0.129	44.160
64	54.899		C7	C7 - Iso-Olefin - 2	0.021	0.022	0.017	5.859
65	55.232	540-84-1	I8	2,2,4-Trimethylpentane	11.022	11.796	7.632	2983.199
66	55.611		M7	C7 - MonoNaph - 1	0.028	0.027	0.020	7.645
67	56.802	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.772
68	57.331	14686-14-7	K7	t-Heptene-3	0.032	0.033	0.025	8.702
69	57.684	6094-02-6	C7	2-Methylhexene-1	0.057	0.060	0.046	15.641
70	58.056	142-82-5	P7	n-Heptane	0.584	0.632	0.461	157.722
71	58.273	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.020	6.752
72	58.547	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.027	0.021	7.167
73	58.791	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.021	0.016	5.445
74	59.172	14686-13-6	K7	t-Heptene-2	0.013	0.014	0.011	3.658
75	59.648	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	4.962
76	60.075	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.015	0.012	4.089
77	60.858	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	3.669
78	61.518	108-87-2	M7	Methylcyclohexane	0.886	0.852	0.714	244.129
79	62.457	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.027	0.026	0.019	7.338
80	62.847	590-73-8	I8	2,2-Dimethylhexane	0.027	0.028	0.018	7.211
81	63.360		?	Unidentified	0.052	0.054	0.038	17.660
82	64.294	1640-89-7	M7	Ethylcyclopentane	0.049	0.047	0.039	13.470
83	64.950	564-02-3	I8	2,2,3-Trimethylpentane	0.546	0.565	0.378	147.830
84	65.182	592-13-2	I8	2,5-Dimethylhexane	1.242	1.326	0.860	336.147
85	65.519	589-43-5	I8	2,4-Dimethylhexane	1.139	1.204	0.789	308.287
86	66.349	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.027	0.026	0.019	7.392

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.741	563-16-6	I8	3,3-Dimethylhexane	0.019	0.020	0.013	5.067
88	67.86215	890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.024	0.023	0.017	6.647
89	68.509	565-75-3	I8	2,3,4-Trimethylpentane	4.276	4.403	2.961	1157.167
90	69.028	108-88-3	Q7	Toluene	5.029	4.295	4.317	1476.457
91	69.188	560-21-4	I8	2,3,3-Trimethylpentane	4.740	4.833	3.282	1282.747
92	70.514		C8	C8 - Diolefin - 1	0.010	0.010	0.007	2.769
93	70.799	584-94-1	I8	2,3-Dimethylhexane	1.127	1.172	0.780	304.957
94	72.048	592-27-8	I8	2-Methylheptane	0.243	0.258	0.168	65.714
95	72.310	589-53-7	I8	4-Methylheptane	0.185	0.194	0.128	50.063
96	72.448		?	Unidentified	0.089	0.092	0.062	30.210
97	73.224		M8	1,3-dimethyl-t-cyclohexane	0.155	0.149	0.109	42.805
98	73.360	589-81-1	I8	3-Methylheptane	0.210	0.220	0.145	56.789
99	73.561	619-99-8	I8	3-Ethylhexane	0.100	0.104	0.069	27.147
100	74.457		?	Unidentified	0.025	0.024	0.018	8.607
101	75.260	3522-94-9	I9	2,2,5-Trimethylhexane	1.994	2.088	1.230	540.830
102	75.609		M8	3c-Ethylmethylcyclopentane	0.009	0.009	0.006	2.528
103	75.826		M8	3t-Ethylmethylcyclopentane	0.013	0.012	0.009	3.495
104	76.233		?	Unidentified	0.015	0.014	0.010	4.926
105	76.532		?	Unidentified	0.059	0.056	0.041	19.802
106	77.869	111-65-9	P8	n-Octane	0.472	0.497	0.327	127.728
107	78.820		?	Unidentified	0.050	0.048	0.035	16.755
108	80.353	1069-53-0	I9	2,3,5-Trimethylhexane	0.330	0.338	0.203	89.373
109	80.905		C8	C9 - IsoOlefin - 1	0.016	0.015	0.011	4.377
110	81.367	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.013	0.012	0.009	3.629
111	81.518	1071-26-7	I9	2,4-Dimethylheptane	0.069	0.072	0.043	18.763
112	82.173	1678-91-7	M8	Ethylcyclohexane	0.108	0.102	0.076	29.739
113	82.473	1072-05-5	I9	2,6-Dimethylheptane	0.105	0.109	0.065	28.373
114	82.974		?	Unidentified	0.024	0.023	0.017	8.014
115	83.404		I9	2,5-Dimethylheptane	0.201	0.208	0.124	54.408
116	83.580	926-82-9	I9	3,5-Dimethylheptane	0.024	0.025	0.015	6.558
117	84.728	100-41-4	Q8	Ethylbenzene	0.894	0.764	0.666	260.567
118	84.901		?	Unidentified	0.028	0.028	0.018	9.343
119	85.145		?	Unidentified	0.031	0.030	0.020	10.555
120	85.952	108-38-3	Q8	m-Xylene	2.374	2.034	1.769	691.839
121	86.098	106-42-3	Q8	p-Xylene	1.058	0.910	0.789	308.408
122	86.230		?	Unidentified	0.067	0.068	0.041	22.611
123	86.487		C8	C9-IsoOlefin-3	0.014	0.014	0.009	3.924
124	86.594		?	Unidentified	0.013	0.013	0.008	4.223
125	86.751		I9	3,5-Dimethylheptane	0.009	0.009	0.005	2.310
126	86.879	1067-20-5	I9	3,3-Diethylpentane	0.008	0.007	0.005	2.038
127	87.272	2216-34-4	I9	4-Methyloctane	0.047	0.048	0.029	12.776
128	87.404	3221-61-2	I9	2-Methyloctane	0.063	0.065	0.039	17.010
129	88.10615	869-80-4	I9	Heptane, 3-ethyl-	0.008	0.009	0.005	2.293

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	88.267	2216-33-3	I9	3-Methyloctane	0.062	0.063	0.038	16.679
131	88.743		?	Unidentified	0.107	0.116	0.067	36.142
132	88.926	95-47-6	Q8	o-Xylene	0.790	0.665	0.589	230.183
133	89.321		I10	C10 - IsoParaffin - 1	0.344	0.350	0.191	93.372
134	89.909		M9	trans-1,3-Diethylcyclopentane	0.017	0.015	0.011	5.039
135	90.164	14720-74-2	I10	2,2,4-trimethylheptane	0.247	0.251	0.137	67.095
136	91.729	111-84-2	P9	n-Nonane	0.278	0.286	0.171	75.261
137	92.301	4926-90-3	M9	1,1-Methylethylcyclohexane	0.012	0.011	0.008	3.438
138	93.093	98-82-8	Q9	i-Propylbenzene	0.030	0.025	0.019	8.543
139	93.271		?	Unidentified	0.007	0.007	0.005	2.442
140	93.271		?	Unidentified	0.007	0.008	0.004	2.442
141	93.271		?	Unidentified	0.007	0.005	0.004	2.442
142	93.839		?	Unidentified	0.050	0.051	0.028	16.961
143	94.061	15869-87-1	I10	2,2-Dimethyloctane	0.019	0.019	0.010	5.100
144	94.863	15869-89-3	I10	2,5-Dimethyloctane	0.012	0.013	0.007	3.388
145	95.066		I10	C10 - IsoParaffin - 2	0.007	0.007	0.004	1.960
146	95.504	2051-30-1	I10	2,4-Dimethyloctane	0.022	0.022	0.012	6.003
147	95.891		I10	2,6-Dimethyloctane	0.010	0.010	0.006	2.798
148	96.552	103-65-1	Q9	n-Propylbenzene	0.253	0.217	0.166	73.177
149	97.398	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.954	0.817	0.628	276.302
150	97.631	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.442	0.380	0.291	127.883
151	98.257	108-67-8	Q9	1,3,5-Trimethylbenzene	0.557	0.477	0.366	161.221
152	98.905	17301-94-8	I10	4-Methylnonane	0.011	0.011	0.006	3.045
153	99.112		I10	2,2,6-Trimethyloctane	0.344	0.351	0.191	93.565
154	99.342	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.325	0.273	0.214	94.131
155	99.884	5911-04-6	I10	3-Methylnonane	0.015	0.015	0.008	3.948
156	100.349		?	Unidentified	0.023	0.017	0.011	7.617
157	100.480		?	Unidentified	0.060	0.060	0.030	20.252
158	100.696		I11	C11-Isoparaffin-2	0.033	0.033	0.017	9.019
159	100.972	95-63-6	Q9	1,2,4-Trimethylbenzene	1.526	1.290	1.004	441.812
160	101.162		?	Unidentified	0.042	0.045	0.024	14.311
161	101.283		?	Unidentified	0.025	0.026	0.014	8.583
162	101.548	1678-98-4	M10	i-Butylcyclohexane	0.007	0.006	0.004	1.869
163	102.333	17302-01-1	I10	3-Ethyl-3-methylheptane	0.061	0.061	0.031	16.694
164	102.647	538-93-2	Q10	i-Butylbenzene	0.073	0.063	0.043	21.031
165	102.799	124-18-5	P10	n-Decane	0.020	0.020	0.011	5.489
166	102.896		?	Unidentified	0.014	0.012	0.008	4.698
167	103.196		?	Unidentified	0.017	0.017	0.009	5.905
168	103.847	526-73-8	Q9	1,2,3-Trimethylbenzene	0.190	0.158	0.125	55.090
169	104.212	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.008	0.007	0.005	2.444
170	104.406		I11	C11 Isoparaffin-4	0.009	0.009	0.005	2.434
171	104.614	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.062	0.053	0.036	17.809
172	105.043		J9	Indan	0.070	0.054	0.047	20.739

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	105.637		J10	Indene	0.365	0.281	0.245	107.521
174	106.352		I11	C11-Isoparaffin-7	0.152	0.152	0.077	41.437
175	106.545	141-93-5	Q10	1,3-Diethylbenzene	0.023	0.020	0.014	6.684
176	106.830	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.479	0.412	0.282	137.958
177	107.157	105-05-5	Q10	1,4-Diethylbenzene	0.180	0.155	0.106	51.889
178	107.380	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.108	0.091	0.064	31.187
179	107.620	135-01-3	Q10	1,2-Diethylbenzene	0.039	0.033	0.023	11.236
180	108.079		?	Unidentified	0.038	0.038	0.019	12.775
181	108.232	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.043	0.036	0.025	12.367
182	108.353		?	Unidentified	0.045	0.045	0.023	15.040
183	108.435		?	Unidentified	0.041	0.041	0.021	13.925
184	108.561		I11	C11- Isoparaffin-11	0.328	0.326	0.166	89.233
185	108.743		?	Unidentified	0.106	0.106	0.054	35.927
186	109.166		?	Unidentified	0.448	0.378	0.264	151.280
187	109.393		J10	2-Methylindan	0.056	0.043	0.034	16.550
188	109.739	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.268	0.227	0.158	77.278
189	110.285	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.318	0.265	0.187	91.604
190	110.709		?	Unidentified	0.011	0.010	0.006	3.688
191	110.903	693-61-8	K11	2-Undecene, (E)-	0.026	0.026	0.015	7.039
192	111.037		?	Unidentified	0.062	0.062	0.035	20.808
193	111.309		?	Unidentified	0.054	0.047	0.029	18.125
194	111.411	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.060	0.050	0.035	17.256
195	111.709	1120-21-4	P11	n-Undecane	0.030	0.030	0.015	8.135
196	111.861	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.041	0.034	0.022	11.745
197	111.972		?	Unidentified	0.024	0.020	0.013	8.189
198	112.346		Q10	1,2,4,5-Tetramethylbenzene	0.204	0.170	0.120	58.779
199	112.613	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.280	0.233	0.165	80.518
200	112.955		?	Unidentified	0.005	0.004	0.003	1.804
201	113.130		I12	C12 - IsoParaffin - 1	0.008	0.008	0.004	2.293
202	113.484		?	Unidentified	0.019	0.019	0.009	6.391
203	113.609		?	Unidentified	0.006	0.006	0.003	2.050
204	113.760		Q11	C11 - Aromatic - 3	0.050	0.041	0.027	14.268
205	113.944	874-35-1	H10	5-Methylindan	0.090	0.075	0.054	25.798
206	114.069		Q12	1,2-Di-i-propylbenzene	0.033	0.028	0.016	9.526
207	114.284	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.045	0.037	0.024	12.876
208	114.448		Q11	C11 - Aromatic - 4	0.031	0.026	0.016	8.790
209	114.693	824-22-6	J10	4-Methylindan	0.115	0.096	0.069	33.114
210	114.847	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.028	0.023	0.015	7.980
211	114.941	824-63-5	H10	2-Methylindan	0.088	0.073	0.053	25.317
212	115.143		?	Unidentified	0.010	0.010	0.005	3.289
213	115.257	538-68-1	Q11	n-Pentylbenzene	0.011	0.009	0.006	3.227
214	115.484		Q11	tert-Pentylbenzene	0.046	0.039	0.025	13.291
215	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.020	0.017	0.011	5.802

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	115.908		Q11	C11 - Aromatic - 6	0.032	0.028	0.017	9.217
217	116.248		I12	C12 - IsoParaffin - 4	0.004	0.004	0.002	1.205
218	116.367	100-18-5	Q12	1,4-Di-i-propylbenzene	0.038	0.032	0.019	10.926
219	116.809	91-20-3	G10	Naphthalene	0.112	0.081	0.069	33.752
220	116.942		?	Unidentified	0.013	0.013	0.006	4.352
221	117.125		?	Unidentified	0.004	0.003	0.002	1.303
222	117.246		?	Unidentified	0.009	0.008	0.004	3.053
223	117.409		J12	Dimethyl Indane - 1	0.004	0.003	0.002	1.189
224	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.006	0.005	0.003	1.719
225	117.893		Q12	1,3-Di-n-propylbenzene	0.035	0.029	0.017	9.966
226	118.004		Q11	C11 - Aromatic - 11	0.019	0.016	0.010	5.362
227	118.557		Q11	C11 - Aromatic - 12	0.015	0.013	0.008	4.314
228	123.440	91-57-6	G11	2-Methylnaphthalene	0.011	0.008	0.006	3.391
229	124.305	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.596
230	126.296		?	Unidentified	0.007	0.006	0.003	2.243
231	130.001		?	Unidentified	0.003	0.002	0.002	0.999

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.006	0.009	0.011	1.666
	10.023	106-97-8	n-Butane	0.479	0.613	0.652	127.567
	18.116	109-66-0	n-Pentane	1.183	1.399	1.297	317.000
	35.800	110-54-3	n-Hexane	0.839	0.942	0.770	225.643
	58.056	142-82-5	n-Heptane	0.584	0.632	0.461	157.722
	77.869	111-65-9	n-Octane	0.472	0.497	0.327	127.728
	91.729	111-84-2	n-Nonane	0.278	0.286	0.171	75.261
	102.799	124-18-5	n-Decane	0.020	0.020	0.011	5.489
	111.709	1120-21-4	n-Undecane	0.030	0.030	0.015	8.135
I-Paraffins	8.810	75-28-5	i-Butane	0.052	0.069	0.071	13.823
	10.638	463-82-1	2,2-Dimethylpropane	0.012	0.015	0.013	3.130
	15.078	78-78-4	i-Pentane	4.183	5.000	4.586	1121.004
	23.096	75-83-2	2,2-Dimethylbutane	0.094	0.107	0.086	25.259
	28.340	79-29-8	2,3-Dimethylbutane	1.146	1.283	1.052	308.342
	29.421	107-83-5	2-Methylpentane	2.676	3.034	2.456	719.907
	32.069	96-14-0	3-Methylpentane	1.617	1.803	1.484	435.084
	42.237	108-08-7	2,4-Dimethylpentane	0.820	0.903	0.647	221.463
	42.781	464-06-2	2,2,3-Trimethylbutane	0.052	0.056	0.041	14.023
	50.672	591-76-4	2-Methylhexane	1.518	1.657	1.198	410.084
	52.492	589-34-4	3-Methylhexane	0.552	0.595	0.436	149.226
	55.232	540-84-1	2,2,4-Trimethylpentane	11.022	11.796	7.632	2983.199
	62.847	590-73-8	2,2-Dimethylhexane	0.027	0.028	0.018	7.211
	64.950	564-02-3	2,2,3-Trimethylpentane	0.546	0.565	0.378	147.830
	65.182	592-13-2	2,5-Dimethylhexane	1.242	1.326	0.860	336.147
	65.519	589-43-5	2,4-Dimethylhexane	1.139	1.204	0.789	308.287
	66.741	563-16-6	3,3-Dimethylhexane	0.019	0.020	0.013	5.067
	68.509	565-75-3	2,3,4-Trimethylpentane	4.276	4.403	2.961	1157.167
	69.188	560-21-4	2,3,3-Trimethylpentane	4.740	4.833	3.282	1282.747
	70.799	584-94-1	2,3-Dimethylhexane	1.127	1.172	0.780	304.957
	72.048	592-27-8	2-Methylheptane	0.243	0.258	0.168	65.714
	72.310	589-53-7	4-Methylheptane	0.185	0.194	0.128	50.063
	73.360	589-81-1	3-Methylheptane	0.210	0.220	0.145	56.789
	73.561	619-99-8	3-Ethylhexane	0.100	0.104	0.069	27.147
	75.260	3522-94-9	2,2,5-Trimethylhexane	1.994	2.088	1.230	540.830
	80.353	1069-53-0	2,3,5-Trimethylhexane	0.330	0.338	0.203	89.373
	81.518	1071-26-7	2,4-Dimethylheptane	0.069	0.072	0.043	18.763
	82.473	1072-05-5	2,6-Dimethylheptane	0.105	0.109	0.065	28.373
	83.404		2,5-Dimethylheptane	0.201	0.208	0.124	54.408
	83.580	926-82-9	3,5-Dimethylheptane	0.024	0.025	0.015	6.558
	86.751		3,5-Dimethylheptane	0.009	0.009	0.005	2.310
	86.879	1067-20-5	3,3-Diethylpentane	0.008	0.007	0.005	2.038
	87.272	2216-34-4	4-Methyloctane	0.047	0.048	0.029	12.776
	87.404	3221-61-2	2-Methyloctane	0.063	0.065	0.039	17.010
	88.106	15869-80-4	Heptane, 3-ethyl-	0.008	0.009	0.005	2.293
	88.267	2216-33-3	3-Methyloctane	0.062	0.063	0.038	16.679
	89.321		C10 - IsoParaffin - 1	0.344	0.350	0.191	93.372

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	90.164	14720-74-2	2,2,4-trimethylheptane	0.247	0.251	0.137	67.095
	94.061	15869-87-1	2,2-Dimethyloctane	0.019	0.019	0.010	5.100
	94.863	15869-89-3	2,5-Dimethyloctane	0.012	0.013	0.007	3.388
	95.066		C10 - IsoParaffin - 2	0.007	0.007	0.004	1.960
	95.504	2051-30-1	2,4-Dimethyloctane	0.022	0.022	0.012	6.003
	95.891		2,6-Dimethyloctane	0.010	0.010	0.006	2.798
	98.905	17301-94-8	4-Methylnonane	0.011	0.011	0.006	3.045
	99.112		2,2,6-Trimethyloctane	0.344	0.351	0.191	93.565
	99.884	5911-04-6	3-Methylnonane	0.015	0.015	0.008	3.948
	100.696		C11-Isoparaffin-2	0.033	0.033	0.017	9.019
	102.333	17302-01-1	3-Ethyl-3-methylheptane	0.061	0.061	0.031	16.694
	104.406		C11 Isoparaffin-4	0.009	0.009	0.005	2.434
	106.352		C11-Isoparaffin-7	0.152	0.152	0.077	41.437
	108.561		C11- Isoparaffin-11	0.328	0.326	0.166	89.233
	113.130		C12 - IsoParaffin - 1	0.008	0.008	0.004	2.293
	116.248		C12 - IsoParaffin - 4	0.004	0.004	0.002	1.205
Aromatics							
Mono-Aromatics	45.635	71-42-3	Benzene	0.743	0.626	0.752	220.396
	69.028	108-88-3	Toluene	5.029	4.295	4.317	1476.457
	84.728	100-41-4	Ethylbenzene	0.894	0.764	0.666	260.567
	85.952	108-38-3	m-Xylene	2.374	2.034	1.769	691.839
	86.098	106-42-3	p-Xylene	1.058	0.910	0.789	308.408
	88.926	95-47-6	o-Xylene	0.790	0.665	0.589	230.183
	93.093	98-82-8	i-Propylbenzene	0.030	0.025	0.019	8.543
	96.552	103-65-1	n-Propylbenzene	0.253	0.217	0.166	73.177
	97.398	620-14-4	1-Methyl-3-ethylbenzene	0.954	0.817	0.628	276.302
	97.631	622-96-8	1-Methyl-4-ethylbenzene	0.442	0.380	0.291	127.883
	98.257	108-67-8	1,3,5-Trimethylbenzene	0.557	0.477	0.366	161.221
	99.342	611-14-3	1-Methyl-2-ethylbenzene	0.325	0.273	0.214	94.131
	100.972	95-63-6	1,2,4-Trimethylbenzene	1.526	1.290	1.004	441.812
	102.647	538-93-2	i-Butylbenzene	0.073	0.063	0.043	21.031
	103.847	526-73-8	1,2,3-Trimethylbenzene	0.190	0.158	0.125	55.090
	104.212	535-77-3	1-Methyl-3-i-propylbenzene	0.008	0.007	0.005	2.444
	104.614	99-87-6	1-Methyl-4-i-propylbenzene	0.062	0.053	0.036	17.809
	106.545	141-93-5	1,3-Diethylbenzene	0.023	0.020	0.014	6.684
	106.830	1074-43-7	1-Methyl-3-n-propylbenzene	0.479	0.412	0.282	137.958
	107.157	105-05-5	1,4-Diethylbenzene	0.180	0.155	0.106	51.889
	107.380	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.108	0.091	0.064	31.187
	107.620	135-01-3	1,2-Diethylbenzene	0.039	0.033	0.023	11.236
	108.232	1074-17-5	1-Methyl-2-n-propylbenzene	0.043	0.036	0.025	12.367
	109.739	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.268	0.227	0.158	77.278
	110.285	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.318	0.265	0.187	91.604
	111.411	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.060	0.050	0.035	17.256
	111.861	4218-48-8	1-Ethyl-4-i-propylbenzene	0.041	0.034	0.022	11.745
	112.346		1,2,4,5-Tetramethylbenzene	0.204	0.170	0.120	58.779
	112.613	527-53-7	1,2,3,5-Tetramethylbenzene	0.280	0.233	0.165	80.518

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	113.760		C11 - Aromatic - 3	0.050	0.041	0.027	14.268
	114.069		1,2-Di-i-propylbenzene	0.033	0.028	0.016	9.526
	114.284	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.045	0.037	0.024	12.876
	114.448		C11 - Aromatic - 4	0.031	0.026	0.016	8.790
	114.847	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.028	0.023	0.015	7.980
	115.257	538-68-1	n-Pentylbenzene	0.011	0.009	0.006	3.227
	115.484		tert-Pentylbenzene	0.046	0.039	0.025	13.291
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.020	0.017	0.011	5.802
	115.908		C11 - Aromatic - 6	0.032	0.028	0.017	9.217
	116.367	100-18-5	1,4-Di-i-propylbenzene	0.038	0.032	0.019	10.926
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.006	0.005	0.003	1.719
	117.893		1,3-Di-n-propylbenzene	0.035	0.029	0.017	9.966
	118.004		C11 - Aromatic - 11	0.019	0.016	0.010	5.362
	118.557		C11 - Aromatic - 12	0.015	0.013	0.008	4.314
Naphthalenes	116.809	91-20-3	Naphthalene	0.112	0.081	0.069	33.752
	123.440	91-57-6	2-Methylnaphthalene	0.011	0.008	0.006	3.391
	124.305	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.596
Naphtheno/Olefir	113.944	874-35-1	5-Methylindan	0.090	0.075	0.054	25.798
	114.941	824-63-5	2-Methylindan	0.088	0.073	0.053	25.317
Indenes	105.043		Indan	0.070	0.054	0.047	20.739
	105.637		Indene	0.365	0.281	0.245	107.521
	109.393		2-Methylindan	0.056	0.043	0.034	16.550
	114.693	824-22-6	4-Methylindan	0.115	0.096	0.069	33.114
	117.409		Dimethyl Indane - 1	0.004	0.003	0.002	1.189
Naphthenes							
Mono-Naphthene	27.605	287-92-3	Cyclopentane	0.150	0.149	0.169	41.421
	40.669	96-37-7	Methylcyclopentane	1.028	1.017	0.966	283.247
	47.552	110-82-7	Cyclohexane	0.474	0.450	0.445	130.535
	53.353	1759-58-6	1t,3-Dimethylcyclopentane	0.152	0.150	0.122	41.855
	53.940	2532-58-3	1c,3-Dimethylcyclopentane	0.117	0.116	0.094	32.205
	54.566	822-50-4	1t,2-Dimethylcyclopentane	0.160	0.158	0.129	44.160
	55.611		C7 - MonoNaph - 1	0.028	0.027	0.020	7.645
	59.648	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	4.962
	61.518	108-87-2	Methylcyclohexane	0.886	0.852	0.714	244.129
	62.457	4516-69-2	1,1,3-Trimethylcyclopentane	0.027	0.026	0.019	7.338
	64.294	1640-89-7	Ethylcyclopentane	0.049	0.047	0.039	13.470
	66.349	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.027	0.026	0.019	7.392
	67.862	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.024	0.023	0.017	6.647
	73.224		1,3-dimethyl-t-cyclohexane	0.155	0.149	0.109	42.805
	75.609		3c-Ethylmethylcyclopentane	0.009	0.009	0.006	2.528
	75.826		3t-Ethylmethylcyclopentane	0.013	0.012	0.009	3.495
	81.367	2207-01-4	1c,2-Dimethylcyclohexane	0.013	0.012	0.009	3.629
	82.173	1678-91-7	Ethylcyclohexane	0.108	0.102	0.076	29.739

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	89.909		trans-1,3-Diethylcyclopentane	0.017	0.015	0.011	5.039
	92.301	4926-90-3	1,1-Methylethylcyclohexane	0.012	0.011	0.008	3.438
	101.548	1678-98-4	i-Butylcyclohexane	0.007	0.006	0.004	1.869
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.624	115-11-7	Isobutene	0.017	0.021	0.023	4.570
	9.665	106-98-9	Butene-1	0.018	0.023	0.026	5.010
	10.510	624-64-6	t-Butene-2	0.074	0.091	0.105	20.522
	11.252	590-18-1	c-Butene-2	0.088	0.105	0.124	24.230
	16.732	109-67-1	Pentene-1	0.338	0.391	0.381	93.178
	19.234	646-04-8	t-Pentene-2	0.858	0.980	0.968	236.495
	20.269	627-20-3	c-Pentene-2	0.470	0.531	0.530	129.585
	33.446	592-41-6	Hexene-1	0.160	0.175	0.151	44.141
	36.437	13269-52-8	t-Hexene-3	0.263	0.285	0.247	72.471
	36.915	4050-45-7	t-Hexene-2	0.403	0.438	0.379	111.187
	38.740	7688-21-3	c-Hexene-2	0.214	0.229	0.201	58.924
	57.331	14686-14-7	t-Heptene-3	0.032	0.033	0.025	8.702
	58.273	7642-10-6	c-Heptene-3	0.024	0.026	0.020	6.752
	59.172	14686-13-6	t-Heptene-2	0.013	0.014	0.011	3.658
	110.903	693-61-8	2-Undecene, (E)-	0.026	0.026	0.015	7.039
Iso-Olefins	13.453	563-45-1	3-Methylbutene-1	0.225	0.265	0.254	61.956
	17.583	563-46-2	2-Methylbutene-1	0.514	0.585	0.579	141.572
	20.945	513-35-9	2-Methylbutene-2	1.053	1.177	1.187	290.107
	29.203	691-38-3	4-Methyl-c-pentene-2	0.046	0.051	0.044	12.794
	29.842	674-76-0	4-Methyl-t-pentene-2	0.132	0.145	0.124	36.274
	33.225	763-29-1	2-Methylpentene-1	0.224	0.243	0.211	61.862
	35.641	760-21-4	2-Ethylbutene-1	0.069	0.074	0.065	19.089
	37.410	625-27-4	2-Methylpentene-2	0.341	0.366	0.321	94.058
	37.823	922-62-3	3-Methyl-c-pentene-2	0.264	0.280	0.248	72.747
	40.084	3404-73-7	3,3-Dimethylpentene-1	0.308	0.325	0.248	85.004
	42.535	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.014	0.011	3.669
	46.640	3404-61-3	3-Methylhexene-1	0.015	0.016	0.012	4.234
	47.228	3524-73-0	5-Methylhexene-1	0.042	0.044	0.034	11.469
	49.271	15840-60-5	2-Methyl-c-hexene-3	0.040	0.043	0.032	11.089
	49.619	3769-23-1	4-Methylhexene-1	0.011	0.011	0.009	3.003
	50.265	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.053	0.041	13.947
	54.899		C7 - Iso-Olefin - 2	0.021	0.022	0.017	5.859
	56.802	4914-89-0	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.772
	57.684	6094-02-6	2-Methylhexene-1	0.057	0.060	0.046	15.641
	58.547	2738-19-4	2-Methyl-2-hexene	0.026	0.027	0.021	7.167
	58.791	10574-36-4	3-Methyl-c-hexene-2	0.020	0.021	0.016	5.445
	60.075	20710-38-8	3-Methyl-t-hexene-2	0.015	0.015	0.012	4.089
	60.858	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	3.669
	70.514		C8 - Diolefin - 1	0.010	0.010	0.007	2.769
	80.905		C9 - IsoOlefin - 1	0.016	0.015	0.011	4.377

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	86.487		C9-IsoOlefin-3	0.014	0.014	0.009	3.924
Naphtheno-Olefir	22.537	1574-41-0	1,3-Cyclopentadiene	0.007	0.007	0.008	1.979
	25.742	142-29-0	Cyclopentene	0.199	0.191	0.231	56.449
	37.041	1120-62-3	3-Methylcyclopentene	0.101	0.098	0.097	27.771
	45.833	693-89-0	1-Methylcyclopentene	0.359	0.341	0.346	101.275
	51.153	110-83-8	Cyclohexene	0.044	0.040	0.043	12.219
Di-Olefins	18.625	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	3.013
	21.270	2004-70-8	1t,3-Pentadiene	0.016	0.017	0.018	4.430
	45.427	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	4.112
Oxygenates	13.126	64-17-5	Ethanol	22.540	21.154	38.700	2558.100
	26.896	71-23-8	n-Propanol	0.081	0.075	0.106	15.535
	48.058	71-36-3	n-Butanol	0.055	0.051	0.058	11.385
Unidentified	19.877		Unidentified	0.006	0.007	0.007	1.976
	27.000		Unidentified	0.057	0.063	0.054	19.256
	28.736		Unidentified	0.053	0.053	0.048	17.997
	63.360		Unidentified	0.052	0.054	0.038	17.660
	72.448		Unidentified	0.089	0.092	0.062	30.210
	74.457		Unidentified	0.025	0.024	0.018	8.607
	76.233		Unidentified	0.015	0.014	0.010	4.926
	76.532		Unidentified	0.059	0.056	0.041	19.802
	78.820		Unidentified	0.050	0.048	0.035	16.755
	82.974		Unidentified	0.024	0.023	0.017	8.014
	84.901		Unidentified	0.028	0.028	0.018	9.343
	85.145		Unidentified	0.031	0.030	0.020	10.555
	86.230		Unidentified	0.067	0.068	0.041	22.611
	86.594		Unidentified	0.013	0.013	0.008	4.223
	88.743		Unidentified	0.107	0.116	0.067	36.142
	93.271		Unidentified	0.007	0.007	0.005	2.442
	93.271		Unidentified	0.007	0.008	0.004	2.442
	93.271		Unidentified	0.007	0.005	0.004	2.442
	93.839		Unidentified	0.050	0.051	0.028	16.961
	100.349		Unidentified	0.023	0.017	0.011	7.617
	100.480		Unidentified	0.060	0.060	0.030	20.252
	101.162		Unidentified	0.042	0.045	0.024	14.311
	101.283		Unidentified	0.025	0.026	0.014	8.583
	102.896		Unidentified	0.014	0.012	0.008	4.698
	103.196		Unidentified	0.017	0.017	0.009	5.905
	108.079		Unidentified	0.038	0.038	0.019	12.775
	108.353		Unidentified	0.045	0.045	0.023	15.040
	108.435		Unidentified	0.041	0.041	0.021	13.925
	108.743		Unidentified	0.106	0.106	0.054	35.927
	109.166		Unidentified	0.448	0.378	0.264	151.280
	110.709		Unidentified	0.011	0.010	0.006	3.688

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Components by Group

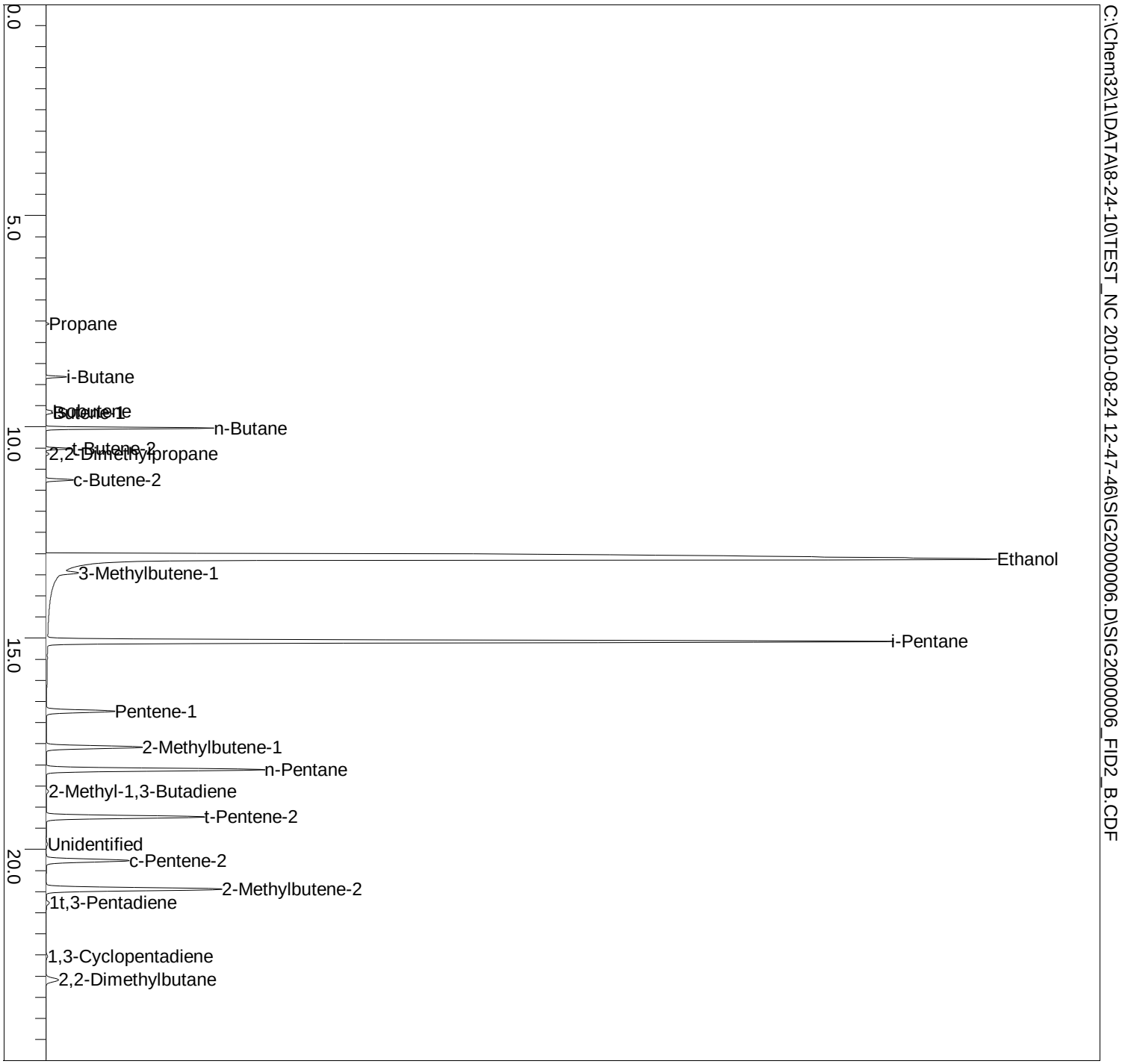
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	111.037		Unidentified	0.062	0.062	0.035	20.808
	111.309		Unidentified	0.054	0.047	0.029	18.125
	111.972		Unidentified	0.024	0.020	0.013	8.189
	112.955		Unidentified	0.005	0.004	0.003	1.804
	113.484		Unidentified	0.019	0.019	0.009	6.391
	113.609		Unidentified	0.006	0.006	0.003	2.050
	115.143		Unidentified	0.010	0.010	0.005	3.289
	116.942		Unidentified	0.013	0.013	0.006	4.352
	117.125		Unidentified	0.004	0.003	0.002	1.303
	117.246		Unidentified	0.009	0.008	0.004	3.053
	126.296		Unidentified	0.007	0.006	0.003	2.243
	130.001		Unidentified	0.003	0.002	0.002	0.999

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Sample Chromatogram

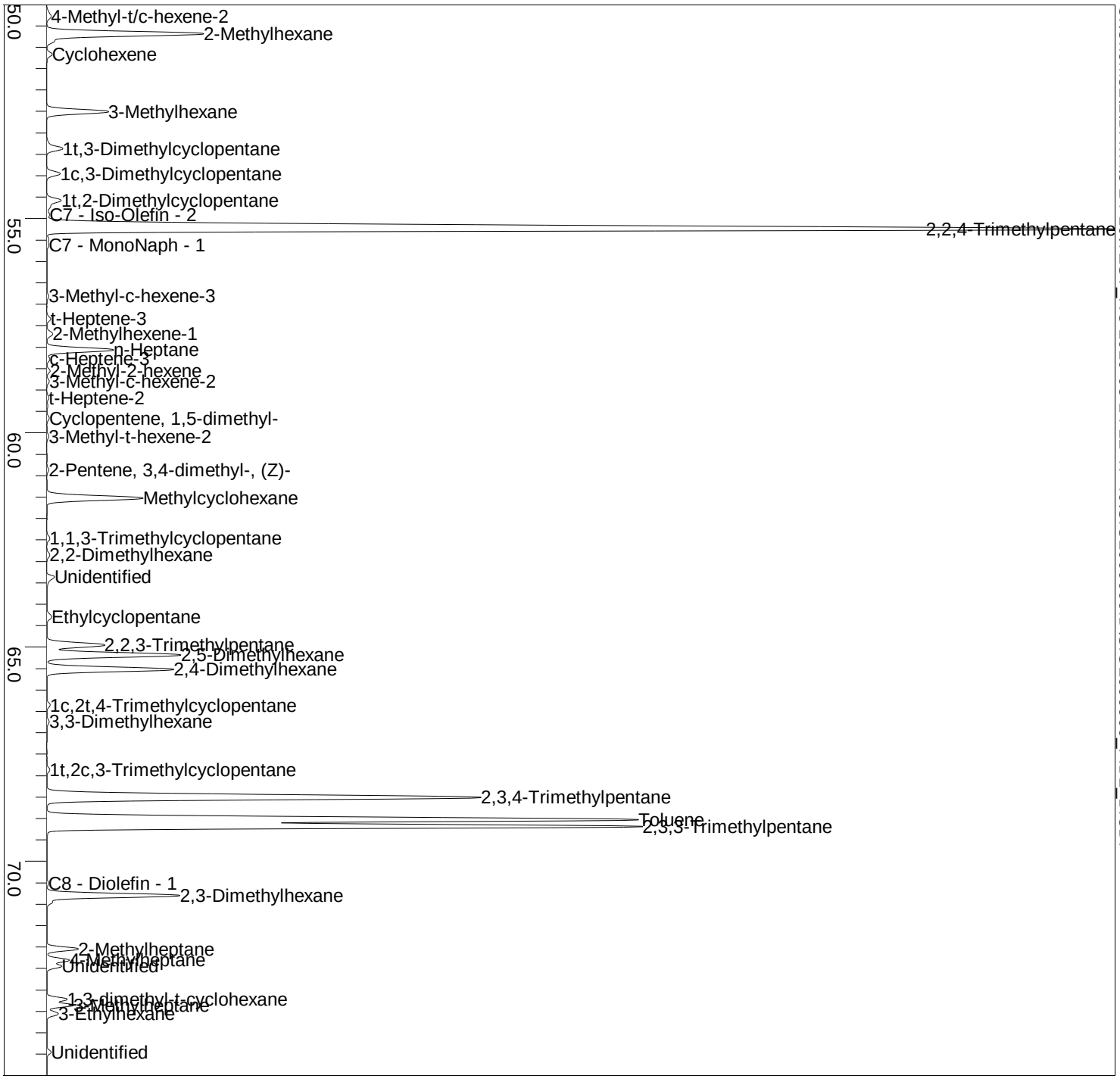


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

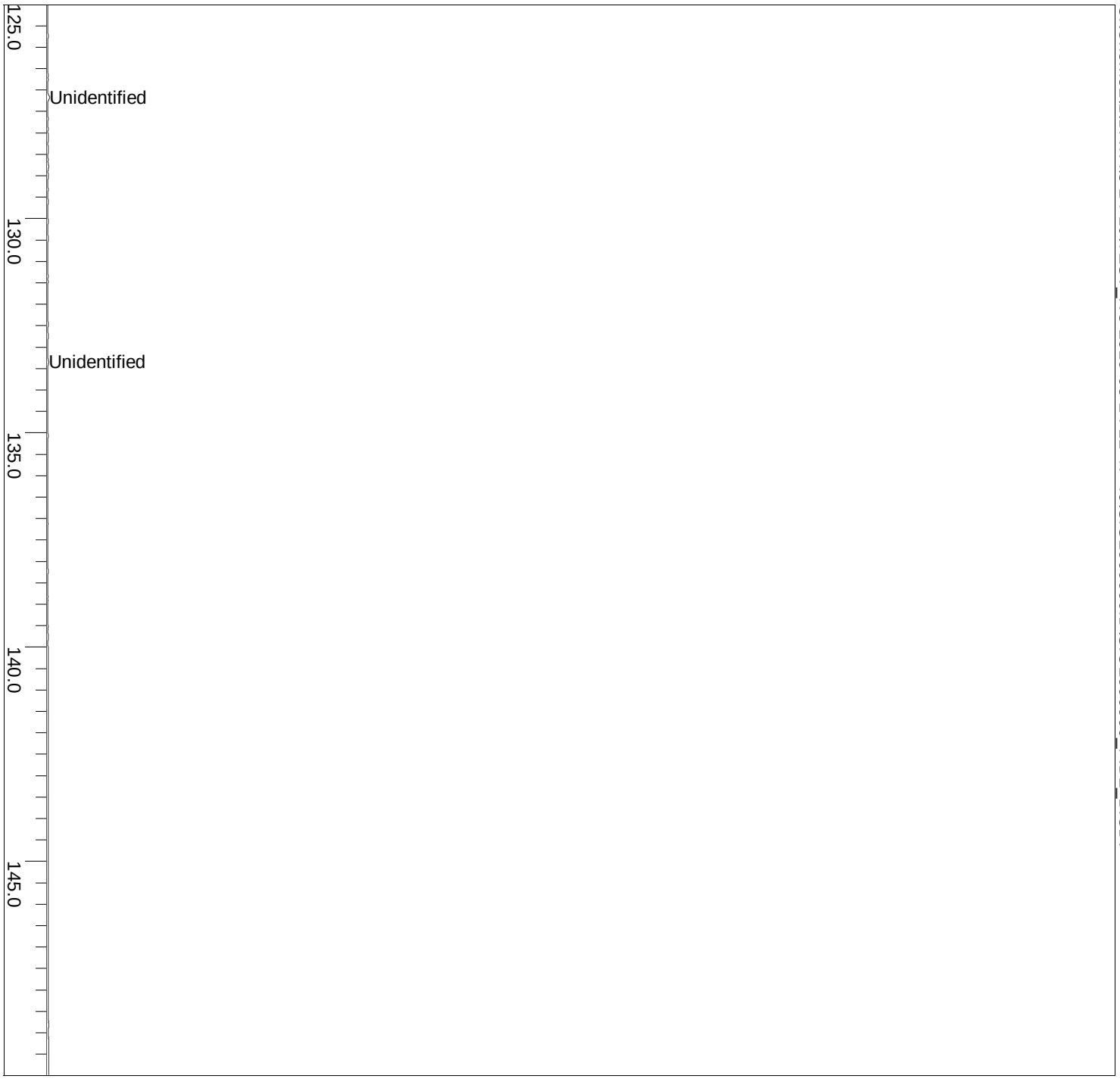
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000006.D\SIG2000006_FID2_B.CDF 25-Aug-10, 01:11:34
Sample: ODDB-91324 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91324
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	7.251	8.696	6.920
I-Paraffins	15.239	17.679	12.652
Aromatics	41.806	37.213	31.116
Mono-Aromatics	40.748	36.345	30.468
Naphthalenes	0.132	0.100	0.078
Naphtheno/Olefino-Benz	0.220	0.191	0.128
Indenes	0.706	0.577	0.442
Naphthenes	5.215	5.296	4.455
Mono-Naphthenes	5.215	5.296	4.455
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.049	8.064	7.070
n-Olefins	2.900	3.403	3.005
Iso-Olefins	3.426	3.935	3.346
Naphtheno-Olefins	0.683	0.681	0.676
Di-Olefins	0.040	0.044	0.042
Oxygenates	22.006	21.592	36.603
Unidentified	1.433	1.459	1.183
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	21.878	21.468	36.452
C3	0.082	0.083	0.108
C4	1.214	1.593	1.596
C5	9.521	11.575	10.251
C6	13.490	15.037	12.201
C7	21.417	20.135	17.540
C8	18.508	17.133	13.227
C9	6.610	6.102	4.173
C10	5.022	4.653	2.854
C11	0.671	0.628	0.342
C12	0.153	0.133	0.073

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.007	0.010	0.011
	C4	0.926	1.238	1.223
	C5	1.956	2.418	2.081
	C6	2.865	3.364	2.552
	C7	0.733	0.830	0.561
	C8	0.518	0.571	0.348
	C9	0.199	0.215	0.119
	C10	0.029	0.030	0.015
	C11	0.018	0.019	0.009
I-Paraffins	C4	0.047	0.066	0.062
	C5	3.824	4.778	4.068
	C6	4.638	5.457	4.131
	C7	1.899	2.159	1.455
	C8	2.166	2.365	1.455
	C9	1.003	1.090	0.600
	C10	1.441	1.531	0.771
	C11	0.222	0.231	0.109
Mono-Aromatics	C6	0.663	0.584	0.652
	C7	16.289	14.546	13.570
	C8	15.366	13.738	11.110
	C9	5.257	4.672	3.357
	C10	2.642	2.339	1.511
	C11	0.384	0.339	0.199
	C12	0.147	0.128	0.069
Naphthalenes	C10	0.118	0.089	0.071
	C11	0.014	0.011	0.007
Naphtheno/Olefino-Benzs	C10	0.220	0.191	0.128
Indenes	C9	0.119	0.095	0.077
	C10	0.560	0.460	0.351
	C11	0.021	0.017	0.011
	C12	0.007	0.005	0.004
Mono-Naphthenes	C5	0.203	0.210	0.222
	C6	2.805	2.854	2.558
	C7	1.734	1.760	1.355
	C8	0.429	0.430	0.294
	C9	0.032	0.029	0.020

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.013	0.012	0.007
n-Olefins	C4	0.187	0.238	0.256
	C5	1.599	1.908	1.750
	C6	1.006	1.140	0.918
	C7	0.096	0.106	0.075
	C11	0.012	0.012	0.006
Iso-Olefins	C5	1.716	2.031	1.879
	C6	1.028	1.156	0.938
	C7	0.653	0.719	0.510
	C8	0.029	0.029	0.020
Naphtheno-Olefins	C5	0.198	0.199	0.223
	C6	0.485	0.482	0.453
Di-Olefins	C5	0.025	0.029	0.029
	C7	0.014	0.015	0.014
Oxygenates	C2	21.878	21.468	36.452
	C3	0.076	0.073	0.096
	C4	0.053	0.051	0.055

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	25.32	23.88
5%	81.75	80.87
10%	100.89	96.79
15%	144.75	138.31
20%	155.48	152.87
25%	172.32	158.64
30%	172.57	172.37
35%	172.82	172.62
40%	173.06	172.87
45%	174.18	173.12
50%	208.82	177.08
55%	230.78	212.13
60%	230.89	230.81
65%	231.01	230.94
70%	243.86	231.06
75%	278.85	276.87
80%	281.46	281.08
85%	282.32	282.07
90%	323.02	321.27
95%	350.79	340.83
FBP	403.88	399.78

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.554	74-98-6	P3	Propane	0.007	0.010	0.011	1.866
2	8.810	75-28-5	I4	i-Butane	0.047	0.066	0.062	13.628
3	9.624	115-11-7	K4	Isobutene	0.015	0.020	0.021	4.617
4	9.665	106-98-9	K4	Butene-1	0.017	0.023	0.024	5.177
5	10.024	106-97-8	P4	n-Butane	0.926	1.238	1.223	266.821
6	10.510	624-64-6	K4	t-Butene-2	0.071	0.091	0.097	21.138
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.011	0.015	0.012	3.299
8	11.250	590-18-1	K4	c-Butene-2	0.084	0.104	0.115	24.994
9	13.136	64-17-5	X2	Ethanol	21.878	21.468	36.452	2688.961
10	13.454	563-45-1	C5	3-Methylbutene-1	0.214	0.264	0.234	63.815
11	15.076	78-78-4	I5	i-Pentane	3.812	4.764	4.056	1106.312
12	16.728	109-67-1	K5	Pentene-1	0.324	0.392	0.355	96.787
13	17.579	563-46-2	C5	2-Methylbutene-1	0.492	0.586	0.539	146.973
14	18.114	109-66-0	P5	n-Pentane	1.956	2.418	2.081	567.543
15	18.629	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.012	0.011	3.130
16	19.235	646-04-8	K5	t-Pentene-2	0.823	0.983	0.901	245.725
17	19.876		?	Unidentified	0.006	0.007	0.006	2.085
18	20.264	627-20-3	K5	c-Pentene-2	0.451	0.533	0.494	134.738
19	20.946	513-35-9	C5	2-Methylbutene-2	1.010	1.181	1.106	301.538
20	21.271	2004-70-8	E5	1t,3-Pentadiene	0.015	0.018	0.017	4.700
21	22.541	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.008	2.088
22	23.095	75-83-2	I6	2,2-Dimethylbutane	0.126	0.150	0.112	36.741
23	25.745	142-29-0	B5	Cyclopentene	0.191	0.192	0.215	58.746
24	26.897	71-23-8	X3	n-Propanol	0.076	0.073	0.096	15.782
25	26.999		?	Unidentified	0.056	0.065	0.051	20.474
26	27.606	287-92-3	M5	Cyclopentane	0.203	0.210	0.222	60.480
27	28.335	79-29-8	I6	2,3-Dimethylbutane	0.449	0.525	0.400	130.697
28	28.734		?	Unidentified	0.054	0.056	0.047	19.662
29	29.190	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.051	0.041	13.314
30	29.422	107-83-5	I6	2-Methylpentane	2.318	2.748	2.065	675.380
31	29.836	674-76-0	C6	4-Methyl-t-pentene-2	0.127	0.146	0.116	37.802
32	32.063	96-14-0	I6	3-Methylpentane	1.745	2.034	1.554	508.409
33	33.224	763-29-1	C6	2-Methylpentene-1	0.216	0.245	0.197	64.584
34	33.448	592-41-6	K6	Hexene-1	0.155	0.177	0.141	46.181
35	35.649	760-21-4	C6	2-Ethylbutene-1	0.057	0.063	0.052	16.939
36	35.812	110-54-3	P6	n-Hexane	2.865	3.364	2.552	834.756
37	36.444	13269-52-8	K6	t-Hexene-3	0.254	0.288	0.232	75.829
38	36.913	4050-45-7	K6	t-Hexene-2	0.391	0.443	0.356	116.663
39	37.040	1120-62-3	B6	3-Methylcyclopentene	0.096	0.097	0.089	28.535
40	37.405	625-27-4	C6	2-Methylpentene-2	0.329	0.369	0.300	98.243
41	37.819	922-62-3	C6	3-Methyl-c-pentene-2	0.255	0.282	0.232	75.981
42	38.740	7688-21-3	K6	c-Hexene-2	0.207	0.231	0.189	61.700
43	40.086	3404-73-7	C7	3,3-Dimethylpentene-1	0.297	0.328	0.232	88.758

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.671	96-37-7	M6	Methylcyclopentane	1.630	1.686	1.487	486.537
45	42.230	108-08-7	I7	2,4-Dimethylpentane	0.278	0.320	0.213	81.360
46	42.529	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.014	0.010	3.926
47	42.776	464-06-2	I7	2,2,3-Trimethylbutane	0.037	0.042	0.029	10.886
48	45.422	1528-30-9	E7	C6-Diolefin-1	0.014	0.015	0.014	4.320
49	45.633	71-42-3	Q6	Benzene	0.663	0.584	0.652	213.261
50	45.832	693-89-0	B6	1-Methylcyclopentene	0.346	0.344	0.324	105.906
51	46.635	3404-61-3	C7	3-Methylhexene-1	0.015	0.017	0.012	4.448
52	47.233	3524-73-0	C7	5-Methylhexene-1	0.068	0.075	0.053	20.179
53	47.555	110-82-7	M6	Cyclohexane	1.175	1.168	1.071	350.637
54	48.053	71-36-3	X4	n-Butanol	0.053	0.051	0.055	11.979
55	49.270	15840-60-5	C7	2-Methyl-c-hexene-3	0.039	0.043	0.030	11.625
56	49.617	3769-23-1	C7	4-Methylhexene-1	0.010	0.011	0.008	3.058
57	50.265	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.049	0.054	0.038	14.576
58	50.659	591-76-4	I7	2-Methylhexane	0.946	1.080	0.725	276.837
59	50.838		?	Unidentified	0.063	0.071	0.051	23.206
60	51.151	110-83-8	B6	Cyclohexene	0.043	0.041	0.040	12.780
61	52.491	589-34-4	I7	3-Methylhexane	0.637	0.718	0.488	186.352
62	53.351	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.179	0.185	0.140	53.382
63	53.936	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.141	0.146	0.110	42.044
64	54.559	822-50-4	M7	1t,2-Dimethylcyclopentane	0.206	0.213	0.161	61.581
65	54.839		C7	C7 - Iso-Olefin - 2	0.021	0.023	0.017	6.409
66	55.142	540-84-1	I8	2,2,4-Trimethylpentane	0.058	0.065	0.039	16.961
67	55.466	592-76-7	K7	Heptene-1	0.028	0.031	0.022	8.311
68	56.799	4914-89-0	C7	3-Methyl-c-hexene-3	0.013	0.014	0.011	4.010
69	57.329	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.024	9.204
70	57.681	6094-02-6	C7	2-Methylhexene-1	0.055	0.061	0.043	16.479
71	58.055	142-82-5	P7	n-Heptane	0.733	0.830	0.561	214.390
72	58.272	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.019	7.071
73	58.546	2738-19-4	C7	2-Methyl-2-hexene	0.025	0.027	0.020	7.518
74	58.790	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.684
75	59.171	14686-13-6	K7	t-Heptene-2	0.013	0.015	0.010	3.986
76	59.647	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.014	5.299
77	60.075	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.012	4.412
78	60.858	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.010	3.732
79	61.519	108-87-2	M7	Methylcyclohexane	1.134	1.141	0.887	338.516
80	62.457	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.032	0.033	0.022	9.620
81	62.846	590-73-8	I8	2,2-Dimethylhexane	0.027	0.030	0.018	8.017
82	63.357		?	Unidentified	0.051	0.055	0.035	18.600
83	64.294	1640-89-7	M7	Ethylcyclopentane	0.056	0.056	0.044	16.693
84	64.943	564-02-3	I8	2,2,3-Trimethylpentane	0.074	0.080	0.050	21.734
85	65.167	592-13-2	I8	2,5-Dimethylhexane	0.169	0.189	0.113	49.503
86	65.504	589-43-5	I8	2,4-Dimethylhexane	0.163	0.180	0.110	47.824

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.343	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.032	0.032	0.022	9.483
88	66.738	563-16-6	I8	3,3-Dimethylhexane	0.021	0.023	0.014	6.121
89	67.859	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.028	0.028	0.019	8.316
90	68.482	565-75-3	I8	2,3,4-Trimethylpentane	0.757	0.815	0.509	221.852
91	69.109	108-88-3	Q7	Toluene	16.289	14.546	13.570	5179.291
92	70.516		C8	C8 - Diolefin - 1	0.012	0.012	0.008	3.613
93	70.793	584-94-1	I8	2,3-Dimethylhexane	0.241	0.261	0.162	70.493
94	72.046	592-27-8	I8	2-Methylheptane	0.237	0.263	0.159	69.534
95	72.301	589-53-7	I8	4-Methylheptane	0.106	0.117	0.071	31.095
96	72.449		?	Unidentified	0.022	0.023	0.015	7.948
97	73.223		M8	1,3-dimethyl-t-cyclohexane	0.178	0.179	0.122	53.236
98	73.360	589-81-1	I8	3-Methylheptane	0.202	0.221	0.135	59.078
99	73.561	619-99-8	I8	3-Ethylhexane	0.111	0.121	0.075	32.604
100	74.456		?	Unidentified	0.029	0.028	0.020	10.431
101	75.247	3522-94-9	I9	2,2,5-Trimethylhexane	0.495	0.542	0.296	145.426
102	75.607		M8	3c-Ethylmethylcyclopentane	0.010	0.010	0.007	3.089
103	75.823		M8	3t-Ethylmethylcyclopentane	0.015	0.015	0.010	4.405
104	76.528		?	Unidentified	0.065	0.065	0.044	23.653
105	77.869	111-65-9	P8	n-Octane	0.518	0.571	0.348	151.827
106	78.822		?	Unidentified	0.015	0.015	0.010	5.428
107	80.350	1069-53-0	I9	2,3,5-Trimethylhexane	0.089	0.095	0.053	26.029
108	80.905		C8	C9 - IsoOlefin - 1	0.017	0.017	0.012	5.132
109	81.364	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.015	0.014	0.010	4.332
110	81.519	1071-26-7	I9	2,4-Dimethylheptane	0.036	0.039	0.022	10.576
111	82.172	1678-91-7	M8	Ethylcyclohexane	0.119	0.118	0.082	35.624
112	82.474	1072-05-5	I9	2,6-Dimethylheptane	0.063	0.069	0.038	18.495
113	82.973		?	Unidentified	0.023	0.023	0.016	8.474
114	83.408		I9	2,5-Dimethylheptane	0.099	0.107	0.059	28.974
115	83.599	926-82-9	I9	3,5-Dimethylheptane	0.018	0.019	0.011	5.227
116	84.747	100-41-4	Q8	Ethylbenzene	2.730	2.437	1.973	861.317
117	85.154		?	Unidentified	0.017	0.017	0.010	6.281
118	86.002	108-38-3	Q8	m-Xylene	7.325	6.562	5.296	2311.502
119	86.140	106-42-3	Q8	p-Xylene	3.381	3.040	2.444	1066.798
120	86.596		?	Unidentified	0.012	0.012	0.007	4.383
121	86.762		I9	3,5-Dimethylheptane	0.010	0.010	0.006	2.838
122	86.881	1067-20-5	I9	3,3-Diethylpentane	0.008	0.008	0.005	2.329
123	87.276	2216-34-4	I9	4-Methyloctane	0.049	0.052	0.029	14.291
124	87.407	3221-61-2	I9	2-Methyloctane	0.064	0.070	0.039	18.913
125	88.107	15869-80-4	I9	Heptane, 3-ethyl-	0.009	0.010	0.006	2.721
126	88.269	2216-33-3	I9	3-Methyloctane	0.064	0.069	0.038	18.740
127	88.745		?	Unidentified	0.033	0.037	0.020	11.959
128	88.941	95-47-6	Q8	o-Xylene	1.930	1.698	1.396	609.177
129	89.320		I10	C10 - IsoParaffin - 1	0.106	0.113	0.057	31.178

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	89.910		M9	trans-1,3-Diethylcyclopentane	0.019	0.017	0.012	6.149
131	90.165	14720-74-2	I10	2,2,4-trimethylheptane	0.088	0.093	0.047	25.752
132	91.741	111-84-2	P9	n-Nonane	0.199	0.215	0.119	58.575
133	92.299	4926-90-3	M9	1,1-Methylethylcyclohexane	0.013	0.012	0.008	3.841
134	93.093	98-82-8	Q9	i-Propylbenzene	0.032	0.028	0.020	9.888
135	93.838		?	Unidentified	0.048	0.052	0.026	17.710
136	94.061	15869-87-1	I10	2,2-Dimethyloctane	0.020	0.021	0.011	5.885
137	94.524		?	Unidentified	0.004	0.003	0.337	1.604
138	94.524		?	Unidentified	0.004	0.005	0.002	1.604
139	94.861	15869-89-3	I10	2,5-Dimethyloctane	0.031	0.033	0.017	9.035
140	95.066		I10	C10 - IsoParaffin - 2	0.011	0.011	0.006	3.153
141	95.326	2040-95-1	I10	2,7-Dimethyloctane	0.015	0.016	0.008	4.522
142	95.504	2051-30-1	I10	2,4-Dimethyloctane	0.061	0.065	0.033	17.847
143	95.892		I10	2,6-Dimethyloctane	0.021	0.022	0.011	6.175
144	96.552	103-65-1	Q9	n-Propylbenzene	0.287	0.258	0.183	90.070
145	97.400	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.108	0.992	0.708	347.428
146	97.634	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.514	0.462	0.328	161.116
147	98.259	108-67-8	Q9	1,3,5-Trimethylbenzene	0.684	0.612	0.437	214.426
148	98.717	15869-85-9	I10	5-Methylnonane	0.006	0.007	0.003	1.877
149	98.906	17301-94-8	I10	4-Methylnonane	0.015	0.016	0.008	4.450
150	99.117		I10	2,2,6-Trimethyloctane	0.922	0.983	0.498	271.438
151	99.343	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.383	0.337	0.245	120.200
152	99.885	5911-04-6	I10	3-Methylnonane	0.018	0.019	0.010	5.214
153	100.350		?	Unidentified	0.052	0.040	0.026	19.071
154	100.482		?	Unidentified	0.143	0.149	0.070	52.277
155	100.697		I11	C11-Isoparaffin-2	0.076	0.079	0.037	22.299
156	100.979	95-63-6	Q9	1,2,4-Trimethylbenzene	1.943	1.718	1.241	609.157
157	101.163		?	Unidentified	0.086	0.095	0.047	31.626
158	101.284		?	Unidentified	0.051	0.054	0.028	18.710
159	101.548	1678-98-4	M10	i-Butylcyclohexane	0.013	0.012	0.007	3.746
160	102.334	17302-01-1	I10	3-Ethyl-3-methylheptane	0.128	0.133	0.063	37.565
161	102.669	538-93-2	Q10	i-Butylbenzene	0.160	0.145	0.092	49.942
162	102.896	124-18-5	P10	n-Decane	0.029	0.030	0.015	8.448
163	103.196		?	Unidentified	0.029	0.030	0.016	10.658
164	103.849	526-73-8	Q9	1,2,3-Trimethylbenzene	0.306	0.265	0.195	95.835
165	104.209		?	Unidentified	0.010	0.009	0.006	3.688
166	104.408		I11	C11 Isoparaffin-4	0.013	0.014	0.007	3.972
167	104.614	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.083	0.075	0.047	25.874
168	105.042		J9	Indan	0.119	0.095	0.077	37.792
169	105.638		J10	Indene	0.374	0.300	0.243	119.045
170	106.352		I11	C11-Isoparaffin-7	0.133	0.138	0.065	39.196
171	106.546	141-93-5	Q10	1,3-Diethylbenzene	0.040	0.036	0.023	12.407
172	106.827	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.491	0.442	0.281	153.197

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	107.162	105-05-5	Q10	1,4-Diethylbenzene	0.188	0.168	0.107	58.495
174	107.380	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.147	0.130	0.084	45.929
175	107.624	135-01-3	Q10	1,2-Diethylbenzene	0.030	0.027	0.017	9.484
176	108.078		?	Unidentified	0.028	0.029	0.014	10.060
177	108.231	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.053	0.047	0.031	16.653
178	108.353		?	Unidentified	0.029	0.025	0.019	10.719
179	108.434		?	Unidentified	0.027	0.028	0.013	9.784
180	108.560		?	Unidentified	0.180	0.187	0.088	65.669
181	108.742		?	Unidentified	0.069	0.072	0.034	25.298
182	109.076	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.119	0.105	0.068	37.101
183	109.165		?	Unidentified	0.170	0.150	0.097	62.321
184	109.235	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.127	0.112	0.073	39.538
185	109.393		J10	2-Methylindan	0.040	0.032	0.023	12.672
186	109.740	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.318	0.281	0.182	99.069
187	110.284	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.172	0.149	0.098	53.519
188	110.708		?	Unidentified	0.004	0.004	0.002	1.621
189	110.903	693-61-8	K11	2-Undecene, (E)-	0.012	0.012	0.006	3.442
190	111.037		?	Unidentified	0.016	0.017	0.009	5.995
191	111.193		Q11	1-Methyl-4-t-butylbenzene	0.026	0.023	0.013	7.982
192	111.413	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.107	0.093	0.061	33.341
193	111.708	1120-21-4	P11	n-Undecane	0.018	0.019	0.009	5.443
194	111.863	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.022	0.019	0.011	6.819
195	111.971		?	Unidentified	0.010	0.009	0.005	3.782
196	112.347		Q10	1,2,4,5-Tetramethylbenzene	0.254	0.222	0.145	79.201
197	112.613	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.353	0.307	0.202	110.152
198	113.481		?	Unidentified	0.013	0.013	0.006	4.607
199	113.753		Q11	C11 - Aromatic - 3	0.040	0.035	0.021	12.375
200	113.944	874-35-1	H10	5-Methylindan	0.109	0.095	0.063	34.083
201	114.069		Q12	1,2-Di-i-propylbenzene	0.039	0.034	0.019	12.169
202	114.284	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.057	0.049	0.029	17.602
203	114.440		Q11	C11 - Aromatic - 4	0.031	0.027	0.016	9.692
204	114.693	824-22-6	J10	4-Methylindan	0.147	0.128	0.085	45.715
205	114.845	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.034	0.030	0.018	10.541
206	114.941	824-63-5	H10	2-Methylindan	0.111	0.096	0.064	34.543
207	115.144		?	Unidentified	0.010	0.010	0.005	3.652
208	115.257	538-68-1	Q11	n-Pentylbenzene	0.013	0.012	0.007	4.185
209	115.484		Q11	tert-Pentylbenzene	0.060	0.052	0.031	18.533
210	115.797	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.027	0.023	0.014	8.262
211	115.906		Q11	C11 - Aromatic - 6	0.033	0.030	0.017	10.235
212	116.367	100-18-5	Q12	1,4-Di-i-propylbenzene	0.050	0.043	0.023	15.327
213	116.810	91-20-3	G10	Naphthalene	0.118	0.089	0.071	38.577
214	117.006		J11	4,7-Dimethyl Indane	0.005	0.004	0.003	1.713
215	117.250		J11	1,1-Dimethyl Indane	0.015	0.012	0.008	4.934

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	117.412		J12	Dimethyl Indane - 1	0.007	0.005	0.004	2.140
217	117.591	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.009	0.008	0.004	2.898
218	117.893		Q12	1,3-Di-n-propylbenzene	0.044	0.038	0.021	13.687
219	118.004		Q11	C11 - Aromatic - 11	0.025	0.023	0.013	7.830
220	118.557		Q11	C11 - Aromatic - 12	0.017	0.016	0.009	5.315
221	119.485	102-25-0	Q12	1,3,5-Triethylbenzene	0.004	0.004	0.002	1.355
222	123.438	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.005	2.903
223	124.304	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.589
224	130.001		?	Unidentified	0.003	0.002	0.001	1.023

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.007	0.010	0.011	1.866
	10.024	106-97-8	n-Butane	0.926	1.238	1.223	266.821
	18.114	109-66-0	n-Pentane	1.956	2.418	2.081	567.543
	35.812	110-54-3	n-Hexane	2.865	3.364	2.552	834.756
	58.055	142-82-5	n-Heptane	0.733	0.830	0.561	214.390
	77.869	111-65-9	n-Octane	0.518	0.571	0.348	151.827
	91.741	111-84-2	n-Nonane	0.199	0.215	0.119	58.575
	102.896	124-18-5	n-Decane	0.029	0.030	0.015	8.448
	111.708	1120-21-4	n-Undecane	0.018	0.019	0.009	5.443
I-Paraffins	8.810	75-28-5	i-Butane	0.047	0.066	0.062	13.628
	10.637	463-82-1	2,2-Dimethylpropane	0.011	0.015	0.012	3.299
	15.076	78-78-4	i-Pentane	3.812	4.764	4.056	1106.312
	23.095	75-83-2	2,2-Dimethylbutane	0.126	0.150	0.112	36.741
	28.335	79-29-8	2,3-Dimethylbutane	0.449	0.525	0.400	130.697
	29.422	107-83-5	2-Methylpentane	2.318	2.748	2.065	675.380
	32.063	96-14-0	3-Methylpentane	1.745	2.034	1.554	508.409
	42.230	108-08-7	2,4-Dimethylpentane	0.278	0.320	0.213	81.360
	42.776	464-06-2	2,2,3-Trimethylbutane	0.037	0.042	0.029	10.886
	50.659	591-76-4	2-Methylhexane	0.946	1.080	0.725	276.837
	52.491	589-34-4	3-Methylhexane	0.637	0.718	0.488	186.352
	55.142	540-84-1	2,2,4-Trimethylpentane	0.058	0.065	0.039	16.961
	62.846	590-73-8	2,2-Dimethylhexane	0.027	0.030	0.018	8.017
	64.943	564-02-3	2,2,3-Trimethylpentane	0.074	0.080	0.050	21.734
	65.167	592-13-2	2,5-Dimethylhexane	0.169	0.189	0.113	49.503
	65.504	589-43-5	2,4-Dimethylhexane	0.163	0.180	0.110	47.824
	66.738	563-16-6	3,3-Dimethylhexane	0.021	0.023	0.014	6.121
	68.482	565-75-3	2,3,4-Trimethylpentane	0.757	0.815	0.509	221.852
	70.793	584-94-1	2,3-Dimethylhexane	0.241	0.261	0.162	70.493
	72.046	592-27-8	2-Methylheptane	0.237	0.263	0.159	69.534
	72.301	589-53-7	4-Methylheptane	0.106	0.117	0.071	31.095
	73.360	589-81-1	3-Methylheptane	0.202	0.221	0.135	59.078
	73.561	619-99-8	3-Ethylhexane	0.111	0.121	0.075	32.604
	75.247	3522-94-9	2,2,5-Trimethylhexane	0.495	0.542	0.296	145.426
	80.350	1069-53-0	2,3,5-Trimethylhexane	0.089	0.095	0.053	26.029
	81.519	1071-26-7	2,4-Dimethylheptane	0.036	0.039	0.022	10.576
	82.474	1072-05-5	2,6-Dimethylheptane	0.063	0.069	0.038	18.495
	83.408		2,5-Dimethylheptane	0.099	0.107	0.059	28.974
	83.599	926-82-9	3,5-Dimethylheptane	0.018	0.019	0.011	5.227
	86.762		3,5-Dimethylheptane	0.010	0.010	0.006	2.838
	86.881	1067-20-5	3,3-Diethylpentane	0.008	0.008	0.005	2.329
	87.276	2216-34-4	4-Methyloctane	0.049	0.052	0.029	14.291
	87.407	3221-61-2	2-Methyloctane	0.064	0.070	0.039	18.913
	88.107	15869-80-4	Heptane, 3-ethyl-	0.009	0.010	0.006	2.721
	88.269	2216-33-3	3-Methyloctane	0.064	0.069	0.038	18.740
	89.320		C10 - IsoParaffin - 1	0.106	0.113	0.057	31.178
	90.165	14720-74-2	2,2,4-trimethylheptane	0.088	0.093	0.047	25.752

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	94.061	15869-87-1	2,2-Dimethyloctane	0.020	0.021	0.011	5.885
	94.861	15869-89-3	2,5-Dimethyloctane	0.031	0.033	0.017	9.035
	95.066		C10 - IsoParaffin - 2	0.011	0.011	0.006	3.153
	95.326	2040-95-1	2,7-Dimethyloctane	0.015	0.016	0.008	4.522
	95.504	2051-30-1	2,4-Dimethyloctane	0.061	0.065	0.033	17.847
	95.892		2,6-Dimethyloctane	0.021	0.022	0.011	6.175
	98.717	15869-85-9	5-Methylnonane	0.006	0.007	0.003	1.877
	98.906	17301-94-8	4-Methylnonane	0.015	0.016	0.008	4.450
	99.117		2,2,6-Trimethyloctane	0.922	0.983	0.498	271.438
	99.885	5911-04-6	3-Methylnonane	0.018	0.019	0.010	5.214
	100.697		C11-Isoparaffin-2	0.076	0.079	0.037	22.299
	102.334	17302-01-1	3-Ethyl-3-methylheptane	0.128	0.133	0.063	37.565
	104.408		C11 Isoparaffin-4	0.013	0.014	0.007	3.972
	106.352		C11-Isoparaffin-7	0.133	0.138	0.065	39.196
Aromatics							
Mono-Aromatics	45.633	71-42-3	Benzene	0.663	0.584	0.652	213.261
	69.109	108-88-3	Toluene	16.289	14.546	13.570	5179.291
	84.747	100-41-4	Ethylbenzene	2.730	2.437	1.973	861.317
	86.002	108-38-3	m-Xylene	7.325	6.562	5.296	2311.502
	86.140	106-42-3	p-Xylene	3.381	3.040	2.444	1066.798
	88.941	95-47-6	o-Xylene	1.930	1.698	1.396	609.177
	93.093	98-82-8	i-Propylbenzene	0.032	0.028	0.020	9.888
	96.552	103-65-1	n-Propylbenzene	0.287	0.258	0.183	90.070
	97.400	620-14-4	1-Methyl-3-ethylbenzene	1.108	0.992	0.708	347.428
	97.634	622-96-8	1-Methyl-4-ethylbenzene	0.514	0.462	0.328	161.116
	98.259	108-67-8	1,3,5-Trimethylbenzene	0.684	0.612	0.437	214.426
	99.343	611-14-3	1-Methyl-2-ethylbenzene	0.383	0.337	0.245	120.200
	100.979	95-63-6	1,2,4-Trimethylbenzene	1.943	1.718	1.241	609.157
	102.669	538-93-2	i-Butylbenzene	0.160	0.145	0.092	49.942
	103.849	526-73-8	1,2,3-Trimethylbenzene	0.306	0.265	0.195	95.835
	104.614	99-87-6	1-Methyl-4-i-propylbenzene	0.083	0.075	0.047	25.874
	106.546	141-93-5	1,3-Diethylbenzene	0.040	0.036	0.023	12.407
	106.827	1074-43-7	1-Methyl-3-n-propylbenzene	0.491	0.442	0.281	153.197
	107.162	105-05-5	1,4-Diethylbenzene	0.188	0.168	0.107	58.495
	107.380	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.147	0.130	0.084	45.929
	107.624	135-01-3	1,2-Diethylbenzene	0.030	0.027	0.017	9.484
	108.231	1074-17-5	1-Methyl-2-n-propylbenzene	0.053	0.047	0.031	16.653
	109.076	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.119	0.105	0.068	37.101
	109.235	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.127	0.112	0.073	39.538
	109.740	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.318	0.281	0.182	99.069
	110.284	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.172	0.149	0.098	53.519
	111.193		1-Methyl-4-t-butylbenzene	0.026	0.023	0.013	7.982
	111.413	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.107	0.093	0.061	33.341
	111.863	4218-48-8	1-Ethyl-4-i-propylbenzene	0.022	0.019	0.011	6.819
	112.347		1,2,4,5-Tetramethylbenzene	0.254	0.222	0.145	79.201
	112.613	527-53-7	1,2,3,5-Tetramethylbenzene	0.353	0.307	0.202	110.152

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	113.753		C11 - Aromatic - 3	0.040	0.035	0.021	12.375
	114.069		1,2-Di-i-propylbenzene	0.039	0.034	0.019	12.169
	114.284	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.057	0.049	0.029	17.602
	114.440		C11 - Aromatic - 4	0.031	0.027	0.016	9.692
	114.845	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.034	0.030	0.018	10.541
	115.257	538-68-1	n-Pentylbenzene	0.013	0.012	0.007	4.185
	115.484		tert-Pentylbenzene	0.060	0.052	0.031	18.533
	115.797	577-55-9	1-Methyl-2-n-butylbenzene	0.027	0.023	0.014	8.262
	115.906		C11 - Aromatic - 6	0.033	0.030	0.017	10.235
	116.367	100-18-5	1,4-Di-i-propylbenzene	0.050	0.043	0.023	15.327
	117.591	7364-19-4	1t-Butyl-4-ethylbenzene	0.009	0.008	0.004	2.898
	117.893		1,3-Di-n-propylbenzene	0.044	0.038	0.021	13.687
	118.004		C11 - Aromatic - 11	0.025	0.023	0.013	7.830
	118.557		C11 - Aromatic - 12	0.017	0.016	0.009	5.315
	119.485	102-25-0	1,3,5-Triethylbenzene	0.004	0.004	0.002	1.355
Naphthalenes	116.810	91-20-3	Naphthalene	0.118	0.089	0.071	38.577
	123.438	91-57-6	2-Methylnaphthalene	0.009	0.007	0.005	2.903
	124.304	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.589
Naphtheno/Olefir	113.944	874-35-1	5-Methylindan	0.109	0.095	0.063	34.083
	114.941	824-63-5	2-Methylindan	0.111	0.096	0.064	34.543
Indenes	105.042		Indan	0.119	0.095	0.077	37.792
	105.638		Indene	0.374	0.300	0.243	119.045
	109.393		2-Methylindan	0.040	0.032	0.023	12.672
	114.693	824-22-6	4-Methylindan	0.147	0.128	0.085	45.715
	117.006		4,7-Dimethyl Indane	0.005	0.004	0.003	1.713
	117.250		1,1-Dimethyl Indane	0.015	0.012	0.008	4.934
	117.412		Dimethyl Indane - 1	0.007	0.005	0.004	2.140
Naphthenes							
Mono-Naphthene	27.606	287-92-3	Cyclopentane	0.203	0.210	0.222	60.480
	40.671	96-37-7	Methylcyclopentane	1.630	1.686	1.487	486.537
	47.555	110-82-7	Cyclohexane	1.175	1.168	1.071	350.637
	53.351	1759-58-6	1t,3-Dimethylcyclopentane	0.179	0.185	0.140	53.382
	53.936	2532-58-3	1c,3-Dimethylcyclopentane	0.141	0.146	0.110	42.044
	54.559	822-50-4	1t,2-Dimethylcyclopentane	0.206	0.213	0.161	61.581
	59.647	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.014	5.299
	61.519	108-87-2	Methylcyclohexane	1.134	1.141	0.887	338.516
	62.457	4516-69-2	1,1,3-Trimethylcyclopentane	0.032	0.033	0.022	9.620
	64.294	1640-89-7	Ethylcyclopentane	0.056	0.056	0.044	16.693
	66.343	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.032	0.032	0.022	9.483
	67.859	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.028	0.028	0.019	8.316
	73.223		1,3-dimethyl-t-cyclohexane	0.178	0.179	0.122	53.236
	75.607		3c-Ethylmethylcyclopentane	0.010	0.010	0.007	3.089
	75.823		3t-Ethylmethylcyclopentane	0.015	0.015	0.010	4.405

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	81.364	2207-01-4	1c,2-Dimethylcyclohexane	0.015	0.014	0.010	4.332
	82.172	1678-91-7	Ethylcyclohexane	0.119	0.118	0.082	35.624
	89.910		trans-1,3-Diethylcyclopentane	0.019	0.017	0.012	6.149
	92.299	4926-90-3	1,1-Methylethylcyclohexane	0.013	0.012	0.008	3.841
	101.548	1678-98-4	i-Butylcyclohexane	0.013	0.012	0.007	3.746
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.624	115-11-7	Isobutene	0.015	0.020	0.021	4.617
	9.665	106-98-9	Butene-1	0.017	0.023	0.024	5.177
	10.510	624-64-6	t-Butene-2	0.071	0.091	0.097	21.138
	11.250	590-18-1	c-Butene-2	0.084	0.104	0.115	24.994
	16.728	109-67-1	Pentene-1	0.324	0.392	0.355	96.787
	19.235	646-04-8	t-Pentene-2	0.823	0.983	0.901	245.725
	20.264	627-20-3	c-Pentene-2	0.451	0.533	0.494	134.738
	33.448	592-41-6	Hexene-1	0.155	0.177	0.141	46.181
	36.444	13269-52-8	t-Hexene-3	0.254	0.288	0.232	75.829
	36.913	4050-45-7	t-Hexene-2	0.391	0.443	0.356	116.663
	38.740	7688-21-3	c-Hexene-2	0.207	0.231	0.189	61.700
	55.466	592-76-7	Heptene-1	0.028	0.031	0.022	8.311
	57.329	14686-14-7	t-Heptene-3	0.031	0.034	0.024	9.204
	58.272	7642-10-6	c-Heptene-3	0.024	0.026	0.019	7.071
	59.171	14686-13-6	t-Heptene-2	0.013	0.015	0.010	3.986
	110.903	693-61-8	2-Undecene, (E)-	0.012	0.012	0.006	3.442
Iso-Olefins	13.454	563-45-1	3-Methylbutene-1	0.214	0.264	0.234	63.815
	17.579	563-46-2	2-Methylbutene-1	0.492	0.586	0.539	146.973
	20.946	513-35-9	2-Methylbutene-2	1.010	1.181	1.106	301.538
	29.190	691-38-3	4-Methyl-c-pentene-2	0.045	0.051	0.041	13.314
	29.836	674-76-0	4-Methyl-t-pentene-2	0.127	0.146	0.116	37.802
	33.224	763-29-1	2-Methylpentene-1	0.216	0.245	0.197	64.584
	35.649	760-21-4	2-Ethylbutene-1	0.057	0.063	0.052	16.939
	37.405	625-27-4	2-Methylpentene-2	0.329	0.369	0.300	98.243
	37.819	922-62-3	3-Methyl-c-pentene-2	0.255	0.282	0.232	75.981
	40.086	3404-73-7	3,3-Dimethylpentene-1	0.297	0.328	0.232	88.758
	42.529	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.014	0.010	3.926
	46.635	3404-61-3	3-Methylhexene-1	0.015	0.017	0.012	4.448
	47.233	3524-73-0	5-Methylhexene-1	0.068	0.075	0.053	20.179
	49.270	15840-60-5	2-Methyl-c-hexene-3	0.039	0.043	0.030	11.625
	49.617	3769-23-1	4-Methylhexene-1	0.010	0.011	0.008	3.058
	50.265	3404-55-5	4-Methyl-t/c-hexene-2	0.049	0.054	0.038	14.576
	54.839		C7 - Iso-Olefin - 2	0.021	0.023	0.017	6.409
	56.799	4914-89-0	3-Methyl-c-hexene-3	0.013	0.014	0.011	4.010
	57.681	6094-02-6	2-Methylhexene-1	0.055	0.061	0.043	16.479
	58.546	2738-19-4	2-Methyl-2-hexene	0.025	0.027	0.020	7.518
	58.790	10574-36-4	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.684
	60.075	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.012	4.412

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	60.858	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.010	3.732
	70.516		C8 - Diolefin - 1	0.012	0.012	0.008	3.613
	80.905		C9 - IsoOlefin - 1	0.017	0.017	0.012	5.132
Naphtheno-Olefir	22.541	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.008	2.088
	25.745	142-29-0	Cyclopentene	0.191	0.192	0.215	58.746
	37.040	1120-62-3	3-Methylcyclopentene	0.096	0.097	0.089	28.535
	45.832	693-89-0	1-Methylcyclopentene	0.346	0.344	0.324	105.906
	51.151	110-83-8	Cyclohexene	0.043	0.041	0.040	12.780
Di-Olefins	18.629	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.012	0.011	3.130
	21.271	2004-70-8	1t,3-Pentadiene	0.015	0.018	0.017	4.700
	45.422	1528-30-9	C6-Diolefin-1	0.014	0.015	0.014	4.320
Oxygenates	13.136	64-17-5	Ethanol	21.878	21.468	36.452	2688.961
	26.897	71-23-8	n-Propanol	0.076	0.073	0.096	15.782
	48.053	71-36-3	n-Butanol	0.053	0.051	0.055	11.979
Unidentified	19.876		Unidentified	0.006	0.007	0.006	2.085
	26.999		Unidentified	0.056	0.065	0.051	20.474
	28.734		Unidentified	0.054	0.056	0.047	19.662
	50.838		Unidentified	0.063	0.071	0.051	23.206
	63.357		Unidentified	0.051	0.055	0.035	18.600
	72.449		Unidentified	0.022	0.023	0.015	7.948
	74.456		Unidentified	0.029	0.028	0.020	10.431
	76.528		Unidentified	0.065	0.065	0.044	23.653
	78.822		Unidentified	0.015	0.015	0.010	5.428
	82.973		Unidentified	0.023	0.023	0.016	8.474
	85.154		Unidentified	0.017	0.017	0.010	6.281
	86.596		Unidentified	0.012	0.012	0.007	4.383
	88.745		Unidentified	0.033	0.037	0.020	11.959
	93.838		Unidentified	0.048	0.052	0.026	17.710
	94.524		Unidentified	0.004	0.003	0.337	1.604
	94.524		Unidentified	0.004	0.005	0.002	1.604
	100.350		Unidentified	0.052	0.040	0.026	19.071
	100.482		Unidentified	0.143	0.149	0.070	52.277
	101.163		Unidentified	0.086	0.095	0.047	31.626
	101.284		Unidentified	0.051	0.054	0.028	18.710
	103.196		Unidentified	0.029	0.030	0.016	10.658
	104.209		Unidentified	0.010	0.009	0.006	3.688
	108.078		Unidentified	0.028	0.029	0.014	10.060
	108.353		Unidentified	0.029	0.025	0.019	10.719
	108.434		Unidentified	0.027	0.028	0.013	9.784
	108.560		Unidentified	0.180	0.187	0.088	65.669
	108.742		Unidentified	0.069	0.072	0.034	25.298
	109.165		Unidentified	0.170	0.150	0.097	62.321
	110.708		Unidentified	0.004	0.004	0.002	1.621

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Components by Group

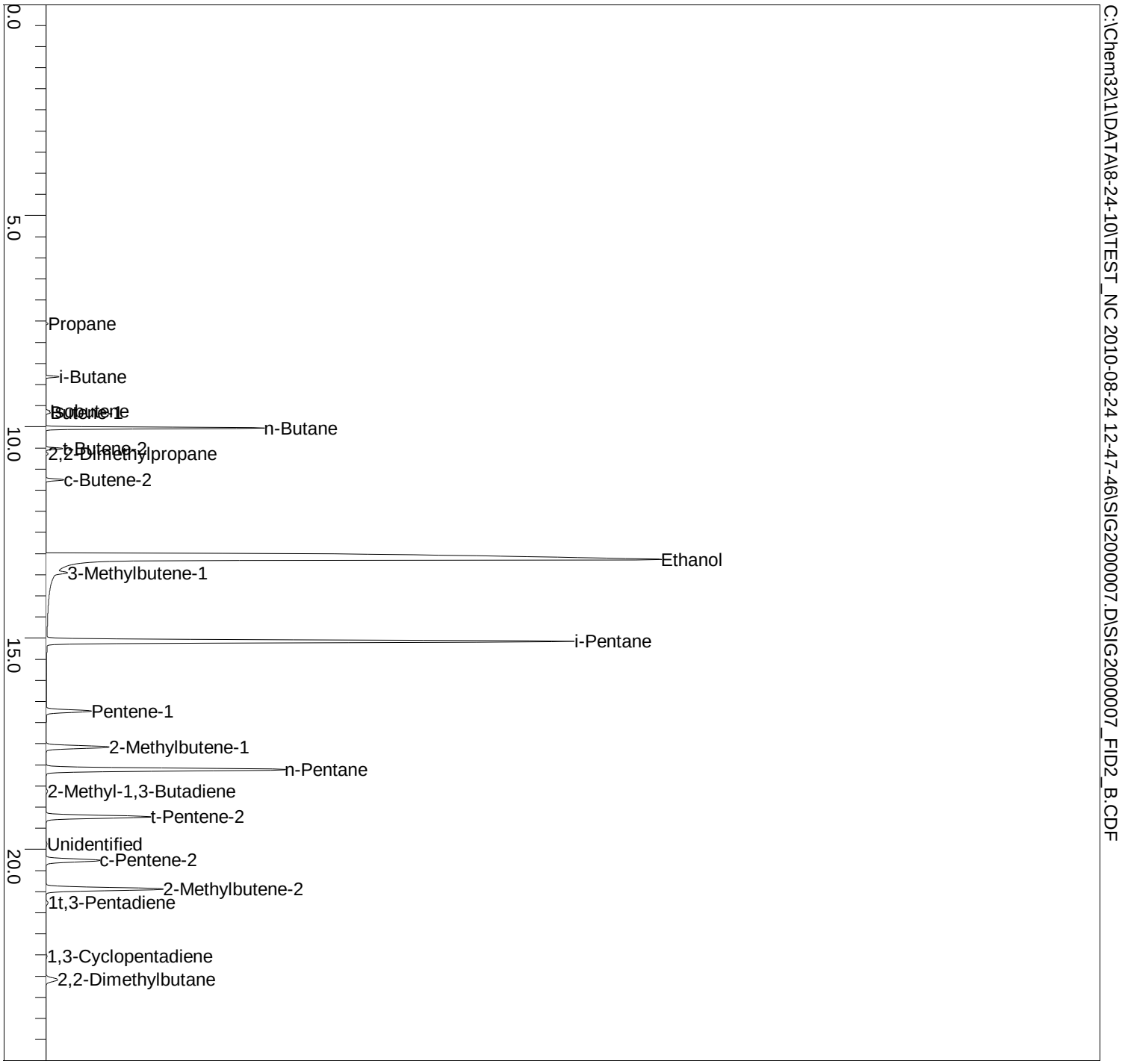
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	111.037		Unidentified	0.016	0.017	0.009	5.995
	111.971		Unidentified	0.010	0.009	0.005	3.782
	113.481		Unidentified	0.013	0.013	0.006	4.607
	115.144		Unidentified	0.010	0.010	0.005	3.652
	130.001		Unidentified	0.003	0.002	0.001	1.023

Plus

Recovery = 100.00

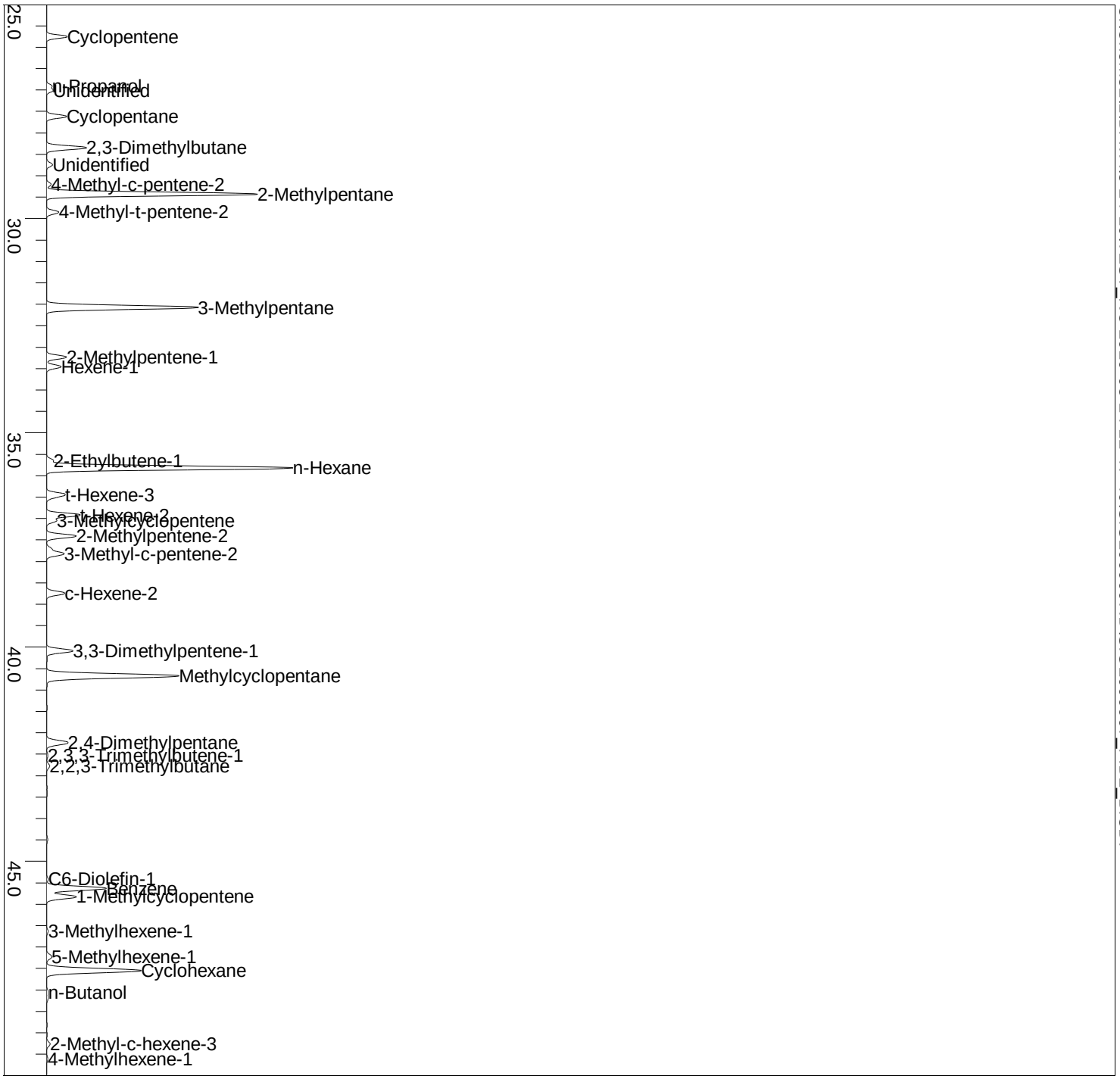
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

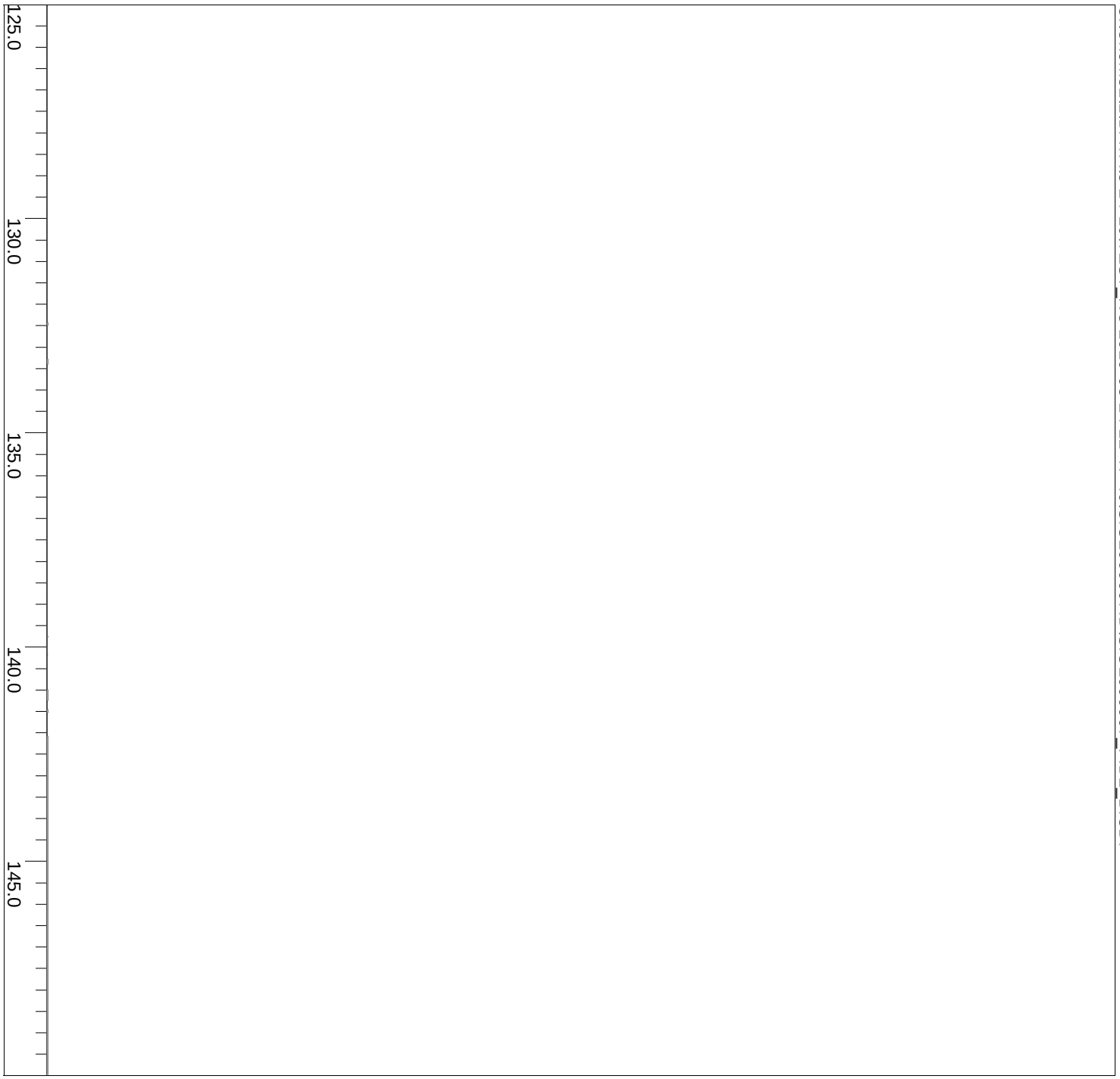
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000007.D\SIG2000007_FID2_B.CDF 25-Aug-10, 03:40:31
Sample: ODDB-91325 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91325
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	8.270	9.957	9.435
I-Paraffins	37.267	39.763	27.546
Aromatics	19.014	16.000	13.683
Mono-Aromatics	18.147	15.327	13.148
Naphthalenes	0.092	0.066	0.054
Naphtheno/Olefino-Benz	0.163	0.135	0.095
Indenes	0.612	0.473	0.386
Naphthenes	3.337	3.217	2.799
Mono-Naphthenes	3.337	3.217	2.799
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.296	7.918	7.342
n-Olefins	3.008	3.348	3.123
Iso-Olefins	3.545	3.863	3.479
Naphtheno-Olefins	0.702	0.664	0.698
Di-Olefins	0.041	0.043	0.043
Oxygenates	22.772	21.196	38.004
Unidentified	2.044	1.949	1.190
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	22.639	21.074	37.846
C3	0.084	0.081	0.111
C4	5.248	6.630	6.947
C5	9.128	10.531	9.868
C6	9.545	10.051	8.695
C7	10.587	10.042	8.522
C8	28.318	28.416	19.368
C9	7.751	7.149	4.835
C10	3.920	3.426	2.245
C11	0.621	0.553	0.318
C12	0.115	0.097	0.054

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.006	0.009	0.010
	C4	4.928	6.253	6.530
	C5	1.146	1.344	1.223
	C6	0.789	0.879	0.705
	C7	0.541	0.582	0.416
	C8	0.522	0.546	0.352
	C9	0.284	0.291	0.170
	C10	0.024	0.024	0.013
	C11	0.030	0.029	0.015
I-Paraffins	C4	0.067	0.088	0.089
	C5	4.174	4.948	4.455
	C6	3.986	4.448	3.563
	C7	2.762	2.989	2.123
	C8	22.044	22.948	14.862
	C9	2.973	3.073	1.785
	C10	1.054	1.062	0.567
	C11	0.195	0.192	0.096
	C12	0.013	0.013	0.006
Mono-Aromatics	C6	0.734	0.613	0.723
	C7	5.209	4.413	4.354
	C8	5.295	4.488	3.841
	C9	4.388	3.701	2.812
	C10	2.074	1.740	1.190
	C11	0.344	0.287	0.179
	C12	0.102	0.084	0.048
Naphthalenes	C10	0.076	0.054	0.045
	C11	0.017	0.012	0.009
Naphtheno/Olefino-Benzs	C10	0.163	0.135	0.095
Indenes	C9	0.072	0.055	0.047
	C10	0.530	0.411	0.334
	C11	0.009	0.007	0.005
Mono-Naphthenes	C5	0.131	0.129	0.144
	C6	1.434	1.390	1.312
	C7	1.323	1.275	1.038
	C8	0.415	0.394	0.285
	C9	0.034	0.029	0.021

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes				
n-Olefins	C4	0.198	0.238	0.271
	C5	1.652	1.871	1.814
	C6	1.034	1.111	0.946
	C7	0.097	0.102	0.076
	C11	0.026	0.026	0.015
Iso-Olefins	C5	1.795	2.016	1.971
	C6	1.069	1.140	0.978
	C7	0.639	0.667	0.501
	C8	0.043	0.040	0.028
Naphtheno-Olefins	C5	0.204	0.195	0.231
	C6	0.498	0.470	0.467
Di-Olefins	C5	0.026	0.028	0.029
	C7	0.015	0.015	0.014
Oxygenates	C2	22.639	21.074	37.846
	C3	0.079	0.072	0.101
	C4	0.055	0.050	0.057

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.49	21.26
5%	31.02	28.77
10%	85.03	80.76
15%	134.41	97.26
20%	153.45	139.34
25%	172.30	155.96
30%	172.54	172.39
35%	172.78	172.65
40%	173.02	172.90
45%	173.26	173.16
50%	197.24	188.33
55%	209.70	209.37
60%	210.48	210.10
65%	230.77	227.37
70%	233.94	230.97
75%	237.17	236.05
80%	254.13	239.03
85%	280.02	268.42
90%	318.96	291.69
95%	343.56	335.66
FBP	392.15	387.69

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.553	74-98-6	P3	Propane	0.006	0.009	0.010	1.525
2	8.810	75-28-5	I4	i-Butane	0.067	0.088	0.089	17.580
3	9.624	115-11-7	K4	Isobutene	0.017	0.021	0.023	4.519
4	9.666	106-98-9	K4	Butene-1	0.018	0.023	0.025	4.989
5	10.025	106-97-8	P4	n-Butane	4.928	6.253	6.530	1292.516
6	10.512	624-64-6	K4	t-Butene-2	0.075	0.091	0.103	20.288
7	10.639	463-82-1	I5	2,2-Dimethylpropane	0.016	0.020	0.017	4.193
8	11.253	590-18-1	K4	c-Butene-2	0.088	0.104	0.121	23.903
9	13.135	64-17-5	X2	Ethanol	22.639	21.074	37.846	2532.266
10	13.454	563-45-1	C5	3-Methylbutene-1	0.241	0.282	0.264	65.368
11	15.084	78-78-4	I5	i-Pentane	4.158	4.929	4.438	1098.132
12	16.734	109-67-1	K5	Pentene-1	0.335	0.385	0.368	91.131
13	17.588	563-46-2	C5	2-Methylbutene-1	0.510	0.576	0.560	138.520
14	18.118	109-66-0	P5	n-Pentane	1.146	1.344	1.223	302.686
15	18.632	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.011	0.012	2.954
16	19.237	646-04-8	K5	t-Pentene-2	0.850	0.964	0.934	231.033
17	19.887		?	Unidentified	0.006	0.007	0.006	1.937
18	20.274	627-20-3	K5	c-Pentene-2	0.466	0.522	0.512	126.617
19	20.949	513-35-9	C5	2-Methylbutene-2	1.044	1.158	1.147	283.651
20	21.274	2004-70-8	E5	1t,3-Pentadiene	0.015	0.017	0.017	4.324
21	22.541	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.007	0.008	1.930
22	23.099	75-83-2	I6	2,2-Dimethylbutane	0.063	0.071	0.056	16.633
23	25.750	142-29-0	B5	Cyclopentene	0.197	0.187	0.223	55.099
24	26.907	71-23-8	X3	n-Propanol	0.079	0.072	0.101	14.942
25	26.998		?	Unidentified	0.057	0.063	0.052	19.089
26	27.615	287-92-3	M5	Cyclopentane	0.131	0.129	0.144	35.572
27	28.348	79-29-8	I6	2,3-Dimethylbutane	1.022	1.134	0.913	270.906
28	28.741		?	Unidentified	0.053	0.053	0.046	17.621
29	29.202	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.050	0.042	12.506
30	29.420	107-83-5	I6	2-Methylpentane	1.809	2.034	1.617	479.677
31	29.844	674-76-0	C6	4-Methyl-t-pentene-2	0.131	0.142	0.120	35.482
32	32.072	96-14-0	I6	3-Methylpentane	1.093	1.208	0.977	289.778
33	33.233	763-29-1	C6	2-Methylpentene-1	0.223	0.239	0.204	60.633
34	33.457	592-41-6	K6	Hexene-1	0.159	0.172	0.146	43.215
35	35.650	760-21-4	C6	2-Ethylbutene-1	0.069	0.073	0.063	18.777
36	35.809	110-54-3	P6	n-Hexane	0.789	0.879	0.705	209.313
37	36.442	13269-52-8	K6	t-Hexene-3	0.261	0.281	0.238	70.789
38	36.923	4050-45-7	K6	t-Hexene-2	0.402	0.433	0.368	109.278
39	37.044	1120-62-3	B6	3-Methylcyclopentene	0.098	0.094	0.092	26.518
40	37.413	625-27-4	C6	2-Methylpentene-2	0.339	0.360	0.310	91.959
41	37.830	922-62-3	C6	3-Methyl-c-pentene-2	0.262	0.275	0.240	71.097
42	38.750	7688-21-3	K6	c-Hexene-2	0.212	0.225	0.194	57.641
43	40.091	3404-73-7	C7	3,3-Dimethylpentene-1	0.307	0.321	0.240	83.280

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.676	96-37-7	M6	Methylcyclopentane	0.998	0.979	0.913	271.044
45	42.237	108-08-7	I7	2,4-Dimethylpentane	0.817	0.892	0.628	217.607
46	42.539	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.013	0.010	3.496
47	42.787	464-06-2	I7	2,2,3-Trimethylbutane	0.051	0.054	0.039	13.581
48	45.436	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	4.023
49	45.644	71-42-3	Q6	Benzene	0.734	0.613	0.723	214.653
50	45.841	693-89-0	B6	1-Methylcyclopentene	0.356	0.336	0.334	99.106
51	46.648	3404-61-3	C7	3-Methylhexene-1	0.015	0.016	0.012	4.180
52	47.236	3524-73-0	C7	5-Methylhexene-1	0.039	0.041	0.031	10.613
53	47.558	110-82-7	M6	Cyclohexane	0.436	0.412	0.399	118.491
54	48.064	71-36-3	X4	n-Butanol	0.055	0.050	0.057	11.294
55	49.279	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.042	0.031	10.864
56	49.627	3769-23-1	C7	4-Methylhexene-1	0.011	0.011	0.008	2.860
57	50.272	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.052	0.039	13.624
58	50.679	591-76-4	I7	2-Methylhexane	1.378	1.492	1.059	366.883
59	51.161	110-83-8	B6	Cyclohexene	0.044	0.040	0.041	11.959
60	52.501	589-34-4	I7	3-Methylhexane	0.515	0.551	0.396	137.192
61	53.361	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.147	0.144	0.115	39.807
62	53.948	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.112	0.111	0.088	30.441
63	54.573	822-50-4	M7	1t,2-Dimethylcyclopentane	0.152	0.148	0.119	41.231
64	54.896		C7	C7 - Iso-Olefin - 2	0.022	0.022	0.017	5.948
65	55.225	540-84-1	I8	2,2,4-Trimethylpentane	9.280	9.851	6.257	2475.508
66	55.484	592-76-7	K7	Heptene-1	0.029	0.030	0.022	7.773
67	56.811	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.707
68	57.339	14686-14-7	K7	t-Heptene-3	0.031	0.033	0.025	8.540
69	57.691	6094-02-6	C7	2-Methylhexene-1	0.056	0.059	0.044	15.264
70	58.063	142-82-5	P7	n-Heptane	0.541	0.582	0.416	144.113
71	58.281	7642-10-6	K7	c-Heptene-3	0.024	0.025	0.019	6.613
72	58.555	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.027	0.020	6.985
73	58.799	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.020	0.015	5.312
74	59.181	14686-13-6	K7	t-Heptene-2	0.013	0.013	0.010	3.520
75	59.658	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.017	0.014	4.834
76	60.084	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.015	0.011	3.975
77	60.867	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.010	3.430
78	61.525	108-87-2	M7	Methylcyclohexane	0.848	0.809	0.665	230.275
79	62.466	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.026	0.025	0.018	7.022
80	62.856	590-73-8	I8	2,2-Dimethylhexane	0.025	0.026	0.017	6.634
81	63.369		?	Unidentified	0.053	0.054	0.037	17.607
82	64.302	1640-89-7	M7	Ethylcyclopentane	0.048	0.046	0.037	12.905
83	64.956	564-02-3	I8	2,2,3-Trimethylpentane	0.502	0.515	0.339	134.040
84	65.188	592-13-2	I8	2,5-Dimethylhexane	1.155	1.223	0.779	308.054
85	65.525	589-43-5	I8	2,4-Dimethylhexane	1.073	1.126	0.724	286.292
86	66.355	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.027	0.026	0.018	7.268

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.749	563-16-6	I8	3,3-Dimethylhexane	0.019	0.019	0.013	4.955
88	67.86715	890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.024	0.023	0.016	6.434
89	68.512	565-75-3	I8	2,3,4-Trimethylpentane	3.896	3.980	2.627	1039.360
90	69.036	108-88-3	Q7	Toluene	5.209	4.413	4.354	1507.415
91	69.189	560-21-4	I8	2,3,3-Trimethylpentane	4.281	4.330	2.887	1142.059
92	70.520		C8	C8 - Diolefin - 1	0.010	0.010	0.007	2.847
93	70.805	584-94-1	I8	2,3-Dimethylhexane	1.062	1.095	0.716	283.229
94	72.053	592-27-8	I8	2-Methylheptane	0.248	0.261	0.167	66.153
95	72.316	589-53-7	I8	4-Methylheptane	0.181	0.189	0.122	48.361
96	72.456		?	Unidentified	0.085	0.087	0.057	28.284
97	73.230		M8	1,3-dimethyl-t-cyclohexane	0.168	0.160	0.115	45.514
98	73.366	589-81-1	I8	3-Methylheptane	0.215	0.223	0.145	57.248
99	73.567	619-99-8	I8	3-Ethylhexane	0.106	0.109	0.071	28.276
100	74.464		?	Unidentified	0.028	0.026	0.019	9.163
101	75.266	3522-94-9	I9	2,2,5-Trimethylhexane	1.986	2.063	1.193	530.957
102	75.615		M8	3c-Ethylmethylcyclopentane	0.010	0.009	0.007	2.631
103	75.832		M8	3t-Ethylmethylcyclopentane	0.014	0.013	0.010	3.783
104	76.239		?	Unidentified	0.014	0.014	0.010	4.791
105	76.538		?	Unidentified	0.066	0.062	0.045	21.873
106	77.875	111-65-9	P8	n-Octane	0.522	0.546	0.352	139.347
107	78.826		?	Unidentified	0.047	0.044	0.032	15.474
108	80.357	1069-53-0	I9	2,3,5-Trimethylhexane	0.311	0.316	0.187	83.136
109	80.911		C8	C9 - IsoOlefin - 1	0.018	0.017	0.013	5.020
110	81.372	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.016	0.015	0.011	4.288
111	81.523	1071-26-7	I9	2,4-Dimethylheptane	0.071	0.073	0.042	18.897
112	82.177	1678-91-7	M8	Ethylcyclohexane	0.131	0.123	0.090	35.676
113	82.479	1072-05-5	I9	2,6-Dimethylheptane	0.114	0.118	0.068	30.466
114	82.978		?	Unidentified	0.030	0.029	0.021	10.067
115	83.409		I9	2,5-Dimethylheptane	0.205	0.211	0.123	54.806
116	83.588	926-82-9	I9	3,5-Dimethylheptane	0.026	0.027	0.016	7.053
117	84.733	100-41-4	Q8	Ethylbenzene	0.950	0.805	0.689	272.831
118	84.906		?	Unidentified	0.026	0.026	0.016	8.780
119	85.151		?	Unidentified	0.035	0.033	0.021	11.599
120	85.956	108-38-3	Q8	m-Xylene	2.418	2.055	1.754	694.470
121	86.103	106-42-3	Q8	p-Xylene	1.080	0.921	0.783	310.114
122	86.234		?	Unidentified	0.066	0.067	0.040	21.958
123	86.492		C8	C9-IsoOlefin-3	0.014	0.013	0.008	3.694
124	86.598		?	Unidentified	0.012	0.013	0.007	4.134
125	86.755		I9	3,5-Dimethylheptane	0.011	0.011	0.007	3.010
126	86.883	1067-20-5	I9	3,3-Diethylpentane	0.010	0.010	0.006	2.643
127	87.277	2216-34-4	I9	4-Methyloctane	0.063	0.064	0.038	16.803
128	87.408	3221-61-2	I9	2-Methyloctane	0.084	0.086	0.050	22.364
129	88.11015	869-80-4	I9	Heptane, 3-ethyl-	0.011	0.012	0.007	3.041

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	88.271	2216-33-3	I9	3-Methyloctane	0.081	0.082	0.048	21.547
131	88.747		?	Unidentified	0.090	0.097	0.055	30.081
132	88.930	95-47-6	Q8	o-Xylene	0.847	0.707	0.615	243.280
133	89.325		I10	C10 - IsoParaffin - 1	0.310	0.313	0.168	83.102
134	89.913		M9	trans-1,3-Diethylcyclopentane	0.020	0.017	0.012	5.851
135	90.167	14720-74-2	I10	2,2,4-trimethylheptane	0.226	0.229	0.123	60.660
136	91.735	111-84-2	P9	n-Nonane	0.284	0.291	0.170	75.892
137	92.299	4926-90-3	M9	1,1-Methylethylcyclohexane	0.013	0.012	0.008	3.652
138	93.096	98-82-8	Q9	i-Propylbenzene	0.031	0.027	0.020	8.883
139	93.842		?	Unidentified	0.046	0.047	0.025	15.448
140	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.018	0.018	0.010	4.886
141	94.867	15869-89-3	I10	2,5-Dimethyloctane	0.013	0.013	0.007	3.380
142	95.071		I10	C10 - IsoParaffin - 2	0.008	0.008	0.004	2.043
143	95.507	2051-30-1	I10	2,4-Dimethyloctane	0.022	0.023	0.012	5.990
144	95.894		I10	2,6-Dimethyloctane	0.011	0.011	0.006	3.036
145	96.555	103-65-1	Q9	n-Propylbenzene	0.255	0.217	0.163	72.805
146	97.402	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.969	0.824	0.621	276.614
147	97.635	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.449	0.383	0.288	128.209
148	98.260	108-67-8	Q9	1,3,5-Trimethylbenzene	0.572	0.485	0.366	163.135
149	98.718	15869-85-9	I10	5-Methylnonane	0.006	0.006	0.003	1.505
150	98.908	17301-94-8	I10	4-Methylnonane	0.013	0.013	0.007	3.516
151	99.115		I10	2,2,6-Trimethyloctane	0.349	0.353	0.189	93.544
152	99.345	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.333	0.278	0.214	95.141
153	99.887	5911-04-6	I10	3-Methylnonane	0.015	0.016	0.008	4.151
154	100.351		?	Unidentified	0.023	0.017	0.011	7.560
155	100.483		?	Unidentified	0.060	0.059	0.030	20.050
156	100.699		I11	C11-Isoparaffin-2	0.033	0.032	0.016	8.782
157	100.976	95-63-6	Q9	1,2,4-Trimethylbenzene	1.574	1.320	1.009	449.228
158	101.164		?	Unidentified	0.042	0.044	0.023	13.901
159	101.286		?	Unidentified	0.024	0.024	0.013	7.974
160	102.336	17302-01-1	I10	3-Ethyl-3-methylheptane	0.061	0.060	0.030	16.361
161	102.645	538-93-2	Q10	i-Butylbenzene	0.072	0.062	0.042	20.563
162	102.803	124-18-5	P10	n-Decane	0.024	0.024	0.013	6.388
163	102.899		?	Unidentified	0.014	0.012	0.008	4.764
164	103.199		?	Unidentified	0.017	0.017	0.009	5.778
165	103.851	526-73-8	Q9	1,2,3-Trimethylbenzene	0.203	0.167	0.130	57.981
166	104.222	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.009	0.008	0.005	2.564
167	104.410		I11	C11 Isoparaffin-4	0.009	0.009	0.004	2.435
168	104.617	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.062	0.053	0.036	17.648
169	105.046		J9	Indan	0.072	0.055	0.047	20.951
170	105.639		J10	Indene	0.367	0.280	0.239	106.527
171	106.355		I11	C11-Isoparaffin-7	0.153	0.151	0.075	41.018
172	106.548	141-93-5	Q10	1,3-Diethylbenzene	0.023	0.019	0.013	6.486

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	106.833	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.474	0.405	0.272	134.660
174	107.111	105-05-5	Q10	1,4-Diethylbenzene	0.173	0.147	0.099	49.056
175	107.383	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.095	0.079	0.054	26.889
176	107.622	135-01-3	Q10	1,2-Diethylbenzene	0.039	0.033	0.023	11.139
177	108.081		?	Unidentified	0.038	0.038	0.019	12.711
178	108.234	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.040	0.034	0.023	11.478
179	108.356		?	Unidentified	0.044	0.044	0.022	14.778
180	108.436		?	Unidentified	0.042	0.041	0.021	13.975
181	108.563		?	Unidentified	0.266	0.262	0.131	88.381
182	108.745		?	Unidentified	0.107	0.106	0.053	35.632
183	109.168		?	Unidentified	0.437	0.366	0.251	145.523
184	109.395		J10	2-Methylindan	0.055	0.042	0.032	16.018
185	109.741	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.247	0.208	0.142	70.137
186	110.286	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.321	0.265	0.184	91.206
187	110.711		?	Unidentified	0.010	0.009	0.005	3.492
188	110.905	693-61-8	K11	2-Undecene, (E)-	0.026	0.026	0.015	7.119
189	111.039		?	Unidentified	0.056	0.055	0.031	18.523
190	111.311		?	Unidentified	0.060	0.052	0.031	19.842
191	111.413	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.061	0.050	0.035	17.312
192	111.711	1120-21-4	P11	n-Undecane	0.030	0.029	0.015	7.946
193	111.864	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.041	0.034	0.022	11.719
194	111.973		?	Unidentified	0.024	0.020	0.012	7.916
195	112.349		Q10	1,2,4,5-Tetramethylbenzene	0.192	0.159	0.110	54.543
196	112.614	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.264	0.218	0.152	74.976
197	112.957		?	Unidentified	0.006	0.005	0.003	1.854
198	113.131		I12	C12 - IsoParaffin - 1	0.008	0.008	0.004	2.278
199	113.487		?	Unidentified	0.017	0.017	0.008	5.717
200	113.611		?	Unidentified	0.006	0.006	0.003	2.016
201	113.760		Q11	C11 - Aromatic - 3	0.052	0.043	0.027	14.775
202	113.946	874-35-1	H10	5-Methylindan	0.080	0.066	0.047	22.742
203	114.071		Q12	1,2-Di-i-propylbenzene	0.035	0.029	0.017	9.818
204	114.286	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.046	0.038	0.024	13.003
205	114.452		Q11	C11 - Aromatic - 4	0.030	0.024	0.015	8.373
206	114.695	824-22-6	J10	4-Methylindan	0.108	0.089	0.063	30.525
207	114.849	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.031	0.026	0.016	8.813
208	114.942	824-63-5	H10	2-Methylindan	0.083	0.068	0.048	23.516
209	115.146		?	Unidentified	0.010	0.010	0.005	3.399
210	115.259	538-68-1	Q11	n-Pentylbenzene	0.012	0.010	0.006	3.515
211	115.487		Q11	tert-Pentylbenzene	0.049	0.040	0.025	13.728
212	115.799	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.021	0.017	0.011	5.909
213	115.910		Q11	C11 - Aromatic - 7	0.035	0.030	0.018	9.767
214	116.251		I12	C12 - IsoParaffin - 4	0.004	0.004	0.002	1.221
215	116.370	100-18-5	Q12	1,4-Di-i-propylbenzene	0.037	0.031	0.018	10.549

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	116.810	91-20-3	G10	Naphthalene	0.076	0.054	0.045	22.459
217	116.944		?	Unidentified	0.012	0.012	0.006	4.091
218	117.127		?	Unidentified	0.004	0.003	0.002	1.225
219	117.241		J11	1,1-Dimethyl Indane	0.009	0.007	0.005	2.658
220	117.895		Q12	1,3-Di-n-propylbenzene	0.030	0.025	0.014	8.392
221	118.007		Q11	C11 - Aromatic - 11	0.016	0.013	0.008	4.407
222	118.559		Q11	C11 - Aromatic - 12	0.012	0.010	0.006	3.292
223	123.442	91-57-6	G11	2-Methylnaphthalene	0.011	0.008	0.006	3.353
224	124.309	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.587
225	126.298		?	Unidentified	0.007	0.006	0.003	2.235
226	130.004		?	Unidentified	0.003	0.002	0.002	1.013

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.553	74-98-6	Propane	0.006	0.009	0.010	1.525
	10.025	106-97-8	n-Butane	4.928	6.253	6.530	1292.516
	18.118	109-66-0	n-Pentane	1.146	1.344	1.223	302.686
	35.809	110-54-3	n-Hexane	0.789	0.879	0.705	209.313
	58.063	142-82-5	n-Heptane	0.541	0.582	0.416	144.113
	77.875	111-65-9	n-Octane	0.522	0.546	0.352	139.347
	91.735	111-84-2	n-Nonane	0.284	0.291	0.170	75.892
	102.803	124-18-5	n-Decane	0.024	0.024	0.013	6.388
	111.711	1120-21-4	n-Undecane	0.030	0.029	0.015	7.946
I-Paraffins	8.810	75-28-5	i-Butane	0.067	0.088	0.089	17.580
	10.639	463-82-1	2,2-Dimethylpropane	0.016	0.020	0.017	4.193
	15.084	78-78-4	i-Pentane	4.158	4.929	4.438	1098.132
	23.099	75-83-2	2,2-Dimethylbutane	0.063	0.071	0.056	16.633
	28.348	79-29-8	2,3-Dimethylbutane	1.022	1.134	0.913	270.906
	29.420	107-83-5	2-Methylpentane	1.809	2.034	1.617	479.677
	32.072	96-14-0	3-Methylpentane	1.093	1.208	0.977	289.778
	42.237	108-08-7	2,4-Dimethylpentane	0.817	0.892	0.628	217.607
	42.787	464-06-2	2,2,3-Trimethylbutane	0.051	0.054	0.039	13.581
	50.679	591-76-4	2-Methylhexane	1.378	1.492	1.059	366.883
	52.501	589-34-4	3-Methylhexane	0.515	0.551	0.396	137.192
	55.225	540-84-1	2,2,4-Trimethylpentane	9.280	9.851	6.257	2475.508
	62.856	590-73-8	2,2-Dimethylhexane	0.025	0.026	0.017	6.634
	64.956	564-02-3	2,2,3-Trimethylpentane	0.502	0.515	0.339	134.040
	65.188	592-13-2	2,5-Dimethylhexane	1.155	1.223	0.779	308.054
	65.525	589-43-5	2,4-Dimethylhexane	1.073	1.126	0.724	286.292
	66.749	563-16-6	3,3-Dimethylhexane	0.019	0.019	0.013	4.955
	68.512	565-75-3	2,3,4-Trimethylpentane	3.896	3.980	2.627	1039.360
	69.189	560-21-4	2,3,3-Trimethylpentane	4.281	4.330	2.887	1142.059
	70.805	584-94-1	2,3-Dimethylhexane	1.062	1.095	0.716	283.229
	72.053	592-27-8	2-Methylheptane	0.248	0.261	0.167	66.153
	72.316	589-53-7	4-Methylheptane	0.181	0.189	0.122	48.361
	73.366	589-81-1	3-Methylheptane	0.215	0.223	0.145	57.248
	73.567	619-99-8	3-Ethylhexane	0.106	0.109	0.071	28.276
	75.266	3522-94-9	2,2,5-Trimethylhexane	1.986	2.063	1.193	530.957
	80.357	1069-53-0	2,3,5-Trimethylhexane	0.311	0.316	0.187	83.136
	81.523	1071-26-7	2,4-Dimethylheptane	0.071	0.073	0.042	18.897
	82.479	1072-05-5	2,6-Dimethylheptane	0.114	0.118	0.068	30.466
	83.409		2,5-Dimethylheptane	0.205	0.211	0.123	54.806
	83.588	926-82-9	3,5-Dimethylheptane	0.026	0.027	0.016	7.053
	86.755		3,5-Dimethylheptane	0.011	0.011	0.007	3.010
	86.883	1067-20-5	3,3-Diethylpentane	0.010	0.010	0.006	2.643
	87.277	2216-34-4	4-Methyloctane	0.063	0.064	0.038	16.803
	87.408	3221-61-2	2-Methyloctane	0.084	0.086	0.050	22.364
	88.110	15869-80-4	Heptane, 3-ethyl-	0.011	0.012	0.007	3.041
	88.271	2216-33-3	3-Methyloctane	0.081	0.082	0.048	21.547
	89.325		C10 - IsoParaffin - 1	0.310	0.313	0.168	83.102

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	90.167	14720-74-2	2,2,4-trimethylheptane	0.226	0.229	0.123	60.660
	94.064	15869-87-1	2,2-Dimethyloctane	0.018	0.018	0.010	4.886
	94.867	15869-89-3	2,5-Dimethyloctane	0.013	0.013	0.007	3.380
	95.071		C10 - IsoParaffin - 2	0.008	0.008	0.004	2.043
	95.507	2051-30-1	2,4-Dimethyloctane	0.022	0.023	0.012	5.990
	95.894		2,6-Dimethyloctane	0.011	0.011	0.006	3.036
	98.718	15869-85-9	5-Methylnonane	0.006	0.006	0.003	1.505
	98.908	17301-94-8	4-Methylnonane	0.013	0.013	0.007	3.516
	99.115		2,2,6-Trimethyloctane	0.349	0.353	0.189	93.544
	99.887	5911-04-6	3-Methylnonane	0.015	0.016	0.008	4.151
	100.699		C11-Isoparaffin-2	0.033	0.032	0.016	8.782
	102.336	17302-01-1	3-Ethyl-3-methylheptane	0.061	0.060	0.030	16.361
	104.410		C11 Isoparaffin-4	0.009	0.009	0.004	2.435
	106.355		C11-Isoparaffin-7	0.153	0.151	0.075	41.018
	113.131		C12 - IsoParaffin - 1	0.008	0.008	0.004	2.278
	116.251		C12 - IsoParaffin - 4	0.004	0.004	0.002	1.221
Aromatics							
Mono-Aromatics	45.644	71-42-3	Benzene	0.734	0.613	0.723	214.653
	69.036	108-88-3	Toluene	5.209	4.413	4.354	1507.415
	84.733	100-41-4	Ethylbenzene	0.950	0.805	0.689	272.831
	85.956	108-38-3	m-Xylene	2.418	2.055	1.754	694.470
	86.103	106-42-3	p-Xylene	1.080	0.921	0.783	310.114
	88.930	95-47-6	o-Xylene	0.847	0.707	0.615	243.280
	93.096	98-82-8	i-Propylbenzene	0.031	0.027	0.020	8.883
	96.555	103-65-1	n-Propylbenzene	0.255	0.217	0.163	72.805
	97.402	620-14-4	1-Methyl-3-ethylbenzene	0.969	0.824	0.621	276.614
	97.635	622-96-8	1-Methyl-4-ethylbenzene	0.449	0.383	0.288	128.209
	98.260	108-67-8	1,3,5-Trimethylbenzene	0.572	0.485	0.366	163.135
	99.345	611-14-3	1-Methyl-2-ethylbenzene	0.333	0.278	0.214	95.141
	100.976	95-63-6	1,2,4-Trimethylbenzene	1.574	1.320	1.009	449.228
	102.645	538-93-2	i-Butylbenzene	0.072	0.062	0.042	20.563
	103.851	526-73-8	1,2,3-Trimethylbenzene	0.203	0.167	0.130	57.981
	104.222	535-77-3	1-Methyl-3-i-propylbenzene	0.009	0.008	0.005	2.564
	104.617	99-87-6	1-Methyl-4-i-propylbenzene	0.062	0.053	0.036	17.648
	106.548	141-93-5	1,3-Diethylbenzene	0.023	0.019	0.013	6.486
	106.833	1074-43-7	1-Methyl-3-n-propylbenzene	0.474	0.405	0.272	134.660
	107.111	105-05-5	1,4-Diethylbenzene	0.173	0.147	0.099	49.056
	107.383	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.095	0.079	0.054	26.889
	107.622	135-01-3	1,2-Diethylbenzene	0.039	0.033	0.023	11.139
	108.234	1074-17-5	1-Methyl-2-n-propylbenzene	0.040	0.034	0.023	11.478
	109.741	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.247	0.208	0.142	70.137
	110.286	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.321	0.265	0.184	91.206
	111.413	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.061	0.050	0.035	17.312
	111.864	4218-48-8	1-Ethyl-4-i-propylbenzene	0.041	0.034	0.022	11.719
	112.349		1,2,4,5-Tetramethylbenzene	0.192	0.159	0.110	54.543
	112.614	527-53-7	1,2,3,5-Tetramethylbenzene	0.264	0.218	0.152	74.976

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	113.760		C11 - Aromatic - 3	0.052	0.043	0.027	14.775
	114.071		1,2-Di-i-propylbenzene	0.035	0.029	0.017	9.818
	114.286	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.046	0.038	0.024	13.003
	114.452		C11 - Aromatic - 4	0.030	0.024	0.015	8.373
	114.849	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.031	0.026	0.016	8.813
	115.259	538-68-1	n-Pentylbenzene	0.012	0.010	0.006	3.515
	115.487		tert-Pentylbenzene	0.049	0.040	0.025	13.728
	115.799	577-55-9	1-Methyl-2-n-butylbenzene	0.021	0.017	0.011	5.909
	115.910		C11 - Aromatic - 7	0.035	0.030	0.018	9.767
	116.370	100-18-5	1,4-Di-i-propylbenzene	0.037	0.031	0.018	10.549
	117.895		1,3-Di-n-propylbenzene	0.030	0.025	0.014	8.392
	118.007		C11 - Aromatic - 11	0.016	0.013	0.008	4.407
	118.559		C11 - Aromatic - 12	0.012	0.010	0.006	3.292
Naphthalenes	116.810	91-20-3	Naphthalene	0.076	0.054	0.045	22.459
	123.442	91-57-6	2-Methylnaphthalene	0.011	0.008	0.006	3.353
	124.309	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.587
Naphtheno/Olefir	113.946	874-35-1	5-Methylindan	0.080	0.066	0.047	22.742
	114.942	824-63-5	2-Methylindan	0.083	0.068	0.048	23.516
Indenes	105.046		Indan	0.072	0.055	0.047	20.951
	105.639		Indene	0.367	0.280	0.239	106.527
	109.395		2-Methylindan	0.055	0.042	0.032	16.018
	114.695	824-22-6	4-Methylindan	0.108	0.089	0.063	30.525
	117.241		1,1-Dimethyl Indane	0.009	0.007	0.005	2.658
Naphthenes							
Mono-Naphthene	27.615	287-92-3	Cyclopentane	0.131	0.129	0.144	35.572
	40.676	96-37-7	Methylcyclopentane	0.998	0.979	0.913	271.044
	47.558	110-82-7	Cyclohexane	0.436	0.412	0.399	118.491
	53.361	1759-58-6	1t,3-Dimethylcyclopentane	0.147	0.144	0.115	39.807
	53.948	2532-58-3	1c,3-Dimethylcyclopentane	0.112	0.111	0.088	30.441
	54.573	822-50-4	1t,2-Dimethylcyclopentane	0.152	0.148	0.119	41.231
	59.658	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.017	0.014	4.834
	61.525	108-87-2	Methylcyclohexane	0.848	0.809	0.665	230.275
	62.466	4516-69-2	1,1,3-Trimethylcyclopentane	0.026	0.025	0.018	7.022
	64.302	1640-89-7	Ethylcyclopentane	0.048	0.046	0.037	12.905
	66.355	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.027	0.026	0.018	7.268
	67.867	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.024	0.023	0.016	6.434
	73.230		1,3-dimethyl-t-cyclohexane	0.168	0.160	0.115	45.514
	75.615		3c-Ethylmethylcyclopentane	0.010	0.009	0.007	2.631
	75.832		3t-Ethylmethylcyclopentane	0.014	0.013	0.010	3.783
	81.372	2207-01-4	1c,2-Dimethylcyclohexane	0.016	0.015	0.011	4.288
	82.177	1678-91-7	Ethylcyclohexane	0.131	0.123	0.090	35.676
	89.913		trans-1,3-Diethylcyclopentane	0.020	0.017	0.012	5.851
	92.299	4926-90-3	1,1-Methylethylcyclohexane	0.013	0.012	0.008	3.652

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.D 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene							
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.624	115-11-7	Isobutene	0.017	0.021	0.023	4.519
	9.666	106-98-9	Butene-1	0.018	0.023	0.025	4.989
	10.512	624-64-6	t-Butene-2	0.075	0.091	0.103	20.288
	11.253	590-18-1	c-Butene-2	0.088	0.104	0.121	23.903
	16.734	109-67-1	Pentene-1	0.335	0.385	0.368	91.131
	19.237	646-04-8	t-Pentene-2	0.850	0.964	0.934	231.033
	20.274	627-20-3	c-Pentene-2	0.466	0.522	0.512	126.617
	33.457	592-41-6	Hexene-1	0.159	0.172	0.146	43.215
	36.442	13269-52-8	t-Hexene-3	0.261	0.281	0.238	70.789
	36.923	4050-45-7	t-Hexene-2	0.402	0.433	0.368	109.278
	38.750	7688-21-3	c-Hexene-2	0.212	0.225	0.194	57.641
	55.484	592-76-7	Heptene-1	0.029	0.030	0.022	7.773
	57.339	14686-14-7	t-Heptene-3	0.031	0.033	0.025	8.540
	58.281	7642-10-6	c-Heptene-3	0.024	0.025	0.019	6.613
	59.181	14686-13-6	t-Heptene-2	0.013	0.013	0.010	3.520
	110.905	693-61-8	2-Undecene, (E)-	0.026	0.026	0.015	7.119
Iso-Olefins	13.454	563-45-1	3-Methylbutene-1	0.241	0.282	0.264	65.368
	17.588	563-46-2	2-Methylbutene-1	0.510	0.576	0.560	138.520
	20.949	513-35-9	2-Methylbutene-2	1.044	1.158	1.147	283.651
	29.202	691-38-3	4-Methyl-c-pentene-2	0.046	0.050	0.042	12.506
	29.844	674-76-0	4-Methyl-t-pentene-2	0.131	0.142	0.120	35.482
	33.233	763-29-1	2-Methylpentene-1	0.223	0.239	0.204	60.633
	35.650	760-21-4	2-Ethylbutene-1	0.069	0.073	0.063	18.777
	37.413	625-27-4	2-Methylpentene-2	0.339	0.360	0.310	91.959
	37.830	922-62-3	3-Methyl-c-pentene-2	0.262	0.275	0.240	71.097
	40.091	3404-73-7	3,3-Dimethylpentene-1	0.307	0.321	0.240	83.280
	42.539	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.013	0.010	3.496
	46.648	3404-61-3	3-Methylhexene-1	0.015	0.016	0.012	4.180
	47.236	3524-73-0	5-Methylhexene-1	0.039	0.041	0.031	10.613
	49.279	15840-60-5	2-Methyl-c-hexene-3	0.040	0.042	0.031	10.864
	49.627	3769-23-1	4-Methylhexene-1	0.011	0.011	0.008	2.860
	50.272	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.052	0.039	13.624
	54.896		C7 - Iso-Olefin - 2	0.022	0.022	0.017	5.948
	56.811	4914-89-0	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.707
	57.691	6094-02-6	2-Methylhexene-1	0.056	0.059	0.044	15.264
	58.555	2738-19-4	2-Methyl-2-hexene	0.026	0.027	0.020	6.985
	58.799	10574-36-4	3-Methyl-c-hexene-2	0.020	0.020	0.015	5.312
	60.084	20710-38-8	3-Methyl-t-hexene-2	0.015	0.015	0.011	3.975
	60.867	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.010	3.430
	70.520		C8 - Diolefin - 1	0.010	0.010	0.007	2.847
	80.911		C9 - IsoOlefin - 1	0.018	0.017	0.013	5.020
	86.492		C9-IsoOlefin-3	0.014	0.013	0.008	3.694
Naphtheno-Olefir	22.541	1574-41-0	1,3-Cyclopentadiene	0.007	0.007	0.008	1.930

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.D 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphtheno-Olefir	25.750	142-29-0	Cyclopentene	0.197	0.187	0.223	55.099
	37.044	1120-62-3	3-Methylcyclopentene	0.098	0.094	0.092	26.518
	45.841	693-89-0	1-Methylcyclopentene	0.356	0.336	0.334	99.106
	51.161	110-83-8	Cyclohexene	0.044	0.040	0.041	11.959
Di-Olefins	18.632	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.011	0.012	2.954
	21.274	2004-70-8	1t,3-Pentadiene	0.015	0.017	0.017	4.324
	45.436	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	4.023
Oxygenates	13.135	64-17-5	Ethanol	22.639	21.074	37.846	2532.266
	26.907	71-23-8	n-Propanol	0.079	0.072	0.101	14.942
	48.064	71-36-3	n-Butanol	0.055	0.050	0.057	11.294
Unidentified	19.887		Unidentified	0.006	0.007	0.006	1.937
	26.998		Unidentified	0.057	0.063	0.052	19.089
	28.741		Unidentified	0.053	0.053	0.046	17.621
	63.369		Unidentified	0.053	0.054	0.037	17.607
	72.456		Unidentified	0.085	0.087	0.057	28.284
	74.464		Unidentified	0.028	0.026	0.019	9.163
	76.239		Unidentified	0.014	0.014	0.010	4.791
	76.538		Unidentified	0.066	0.062	0.045	21.873
	78.826		Unidentified	0.047	0.044	0.032	15.474
	82.978		Unidentified	0.030	0.029	0.021	10.067
	84.906		Unidentified	0.026	0.026	0.016	8.780
	85.151		Unidentified	0.035	0.033	0.021	11.599
	86.234		Unidentified	0.066	0.067	0.040	21.958
	86.598		Unidentified	0.012	0.013	0.007	4.134
	88.747		Unidentified	0.090	0.097	0.055	30.081
	93.842		Unidentified	0.046	0.047	0.025	15.448
	100.351		Unidentified	0.023	0.017	0.011	7.560
	100.483		Unidentified	0.060	0.059	0.030	20.050
	101.164		Unidentified	0.042	0.044	0.023	13.901
	101.286		Unidentified	0.024	0.024	0.013	7.974
	102.899		Unidentified	0.014	0.012	0.008	4.764
	103.199		Unidentified	0.017	0.017	0.009	5.778
	108.081		Unidentified	0.038	0.038	0.019	12.711
	108.356		Unidentified	0.044	0.044	0.022	14.778
	108.436		Unidentified	0.042	0.041	0.021	13.975
	108.563		Unidentified	0.266	0.262	0.131	88.381
	108.745		Unidentified	0.107	0.106	0.053	35.632
	109.168		Unidentified	0.437	0.366	0.251	145.523
	110.711		Unidentified	0.010	0.009	0.005	3.492
	111.039		Unidentified	0.056	0.055	0.031	18.523
	111.311		Unidentified	0.060	0.052	0.031	19.842
	111.973		Unidentified	0.024	0.020	0.012	7.916
	112.957		Unidentified	0.006	0.005	0.003	1.854
	113.487		Unidentified	0.017	0.017	0.008	5.717

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2A.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Components by Group

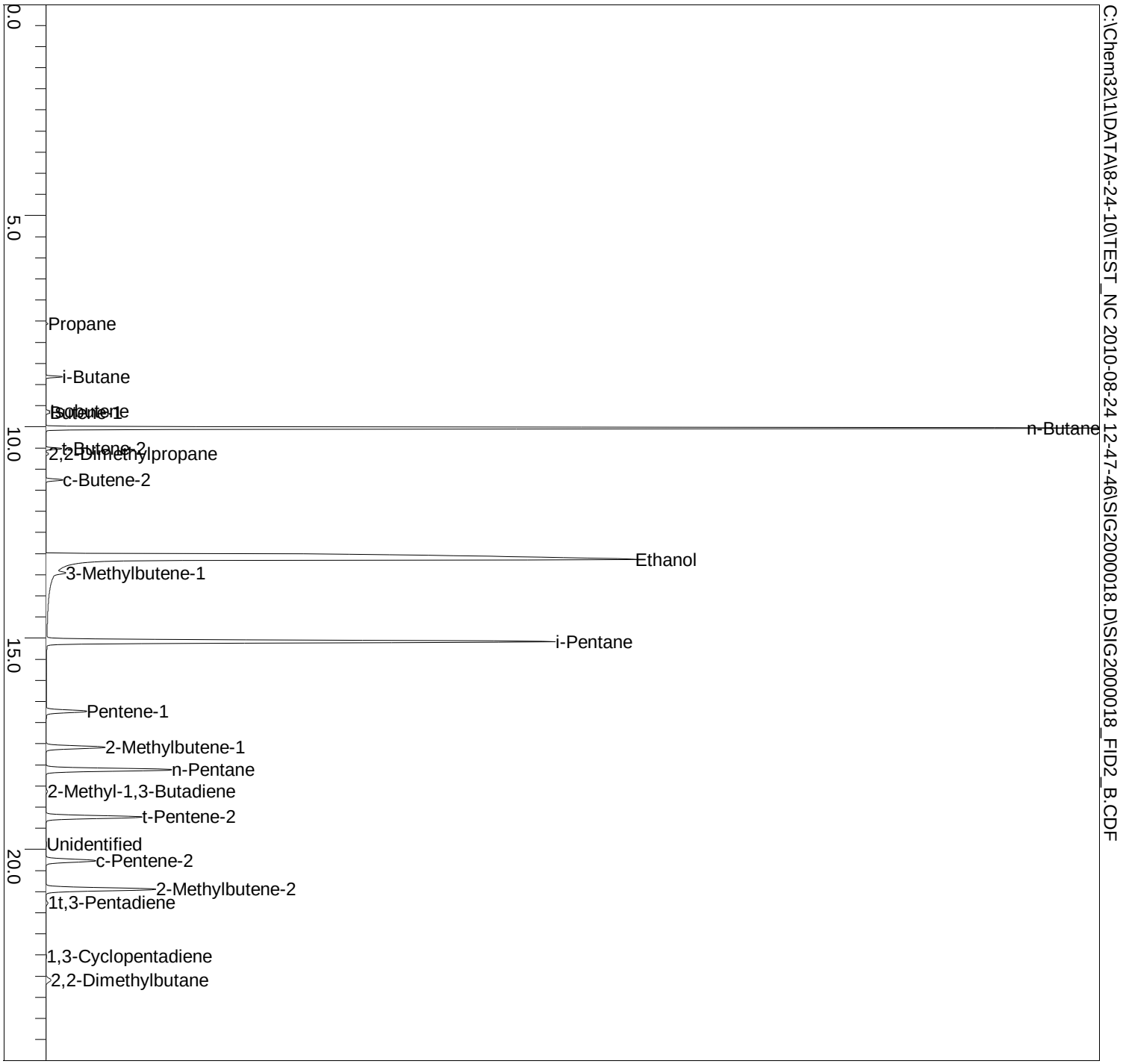
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	113.611		Unidentified	0.006	0.006	0.003	2.016
	115.146		Unidentified	0.010	0.010	0.005	3.399
	116.944		Unidentified	0.012	0.012	0.006	4.091
	117.127		Unidentified	0.004	0.003	0.002	1.225
	126.298		Unidentified	0.007	0.006	0.003	2.235
	130.004		Unidentified	0.003	0.002	0.002	1.013

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

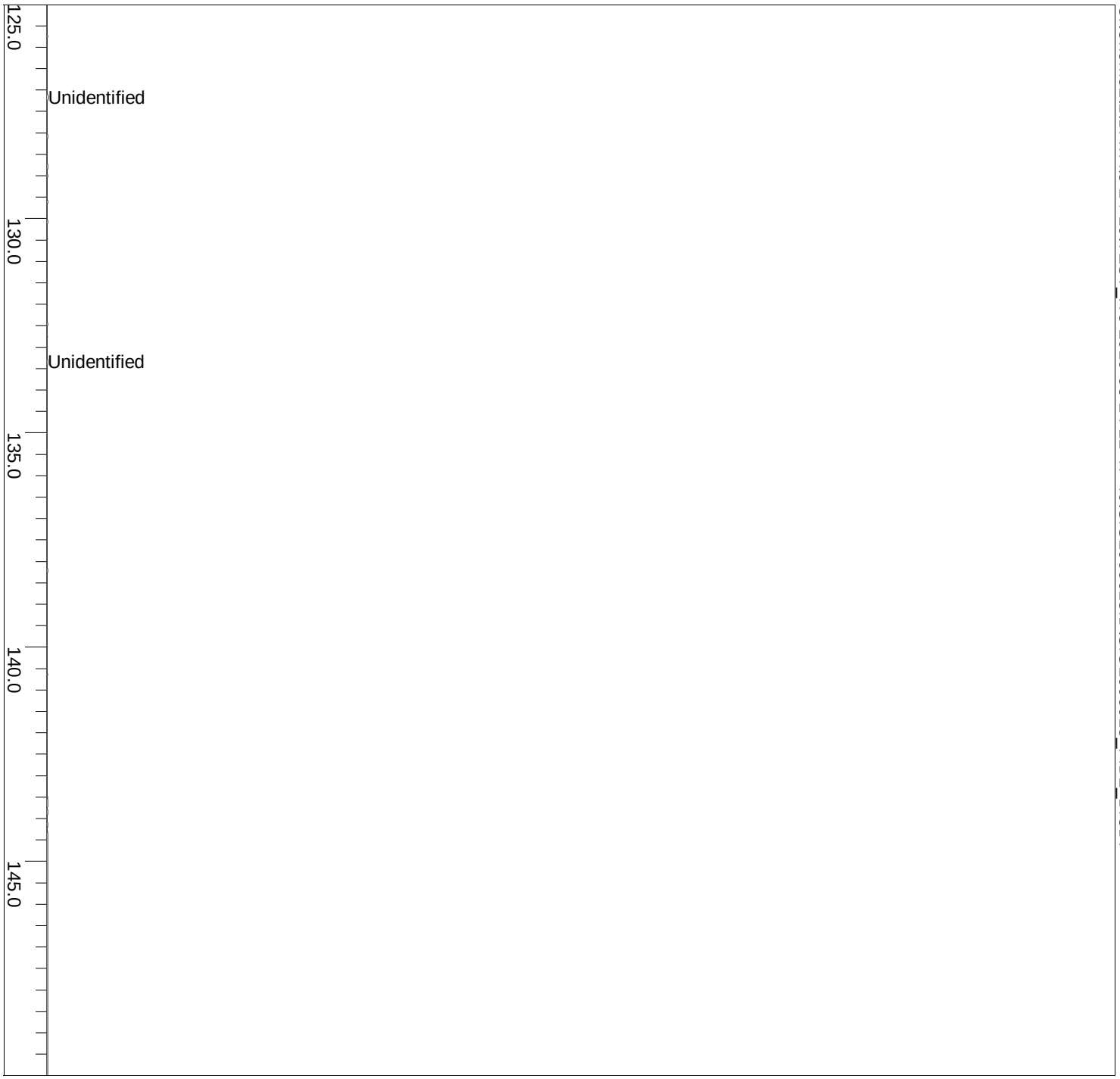
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000018.D\SIG2000018_FID2_B.CDF 26-Aug-10, 13:09:57
Sample: ODDB-91326 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91326
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	8.179	9.359	7.395
I-Paraffins	26.371	29.191	20.475
Aromatics	24.723	21.232	17.409
Mono-Aromatics	22.468	19.457	15.965
Naphthalenes	0.110	0.081	0.066
Naphtheno/Olefino-Benz	0.179	0.151	0.105
Indenes	1.966	1.542	1.273
Naphthenes	6.329	6.239	5.446
Mono-Naphthenes	6.329	6.239	5.446
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.197	7.993	7.271
n-Olefins	2.989	3.403	3.110
Iso-Olefins	3.457	3.856	3.408
Naphtheno-Olefins	0.709	0.688	0.708
Di-Olefins	0.043	0.046	0.046
Oxygenates	22.530	21.487	37.932
Unidentified	4.671	4.499	4.072
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	22.401	21.366	37.779
C3	0.082	0.081	0.109
C4	0.817	1.034	1.086
C5	8.195	9.640	8.951
C6	20.564	22.607	18.745
C7	11.762	11.416	9.542
C8	10.358	9.857	7.353
C9	6.421	5.759	4.103
C10	12.071	11.141	6.925
C11	2.520	2.479	1.268
C12	0.138	0.121	0.066

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.008	0.012	0.014
	C4	0.504	0.656	0.674
	C5	1.264	1.519	1.361
	C6	4.274	4.878	3.854
	C7	0.909	1.000	0.705
	C8	0.810	0.867	0.551
	C9	0.283	0.297	0.171
	C10	0.041	0.043	0.023
	C11	0.086	0.087	0.043
I-Paraffins	C4	0.068	0.092	0.092
	C5	3.123	3.794	3.364
	C6	9.714	11.116	8.758
	C7	2.492	2.756	1.932
	C8	3.057	3.280	2.079
	C9	0.863	0.908	0.523
	C10	5.079	5.247	2.748
	C11	1.949	1.971	0.969
	C12	0.026	0.026	0.012
Mono-Aromatics	C6	0.724	0.620	0.720
	C7	5.523	4.794	4.657
	C8	5.794	5.032	4.240
	C9	5.097	4.406	3.295
	C10	4.822	4.173	2.791
	C11	0.400	0.341	0.210
	C12	0.109	0.092	0.052
Naphthalenes	C10	0.095	0.070	0.058
	C11	0.015	0.011	0.008
Naphtheno/Olefino-Benzs	C10	0.179	0.151	0.105
Indenes	C9	0.106	0.083	0.070
	C10	1.847	1.450	1.197
	C11	0.009	0.007	0.005
	C12	0.004	0.003	0.002
Mono-Naphthenes	C5	0.235	0.237	0.260
	C6	3.330	3.292	3.074
	C7	2.043	2.015	1.617
	C8	0.652	0.634	0.452

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.065	0.058	0.040
	C10	0.003	0.003	0.002
n-Olefins	C4	0.190	0.234	0.262
	C5	1.615	1.873	1.789
	C6	1.027	1.131	0.948
	C7	0.096	0.103	0.076
	C11	0.062	0.063	0.034
Iso-Olefins	C5	1.730	1.990	1.917
	C6	0.993	1.085	0.916
	C7	0.685	0.733	0.542
	C8	0.045	0.044	0.031
	C10	0.004	0.004	0.002
Naphtheno-Olefins	C5	0.201	0.196	0.229
	C6	0.501	0.484	0.474
	C9	0.007	0.007	0.004
Di-Olefins	C5	0.027	0.030	0.031
	C7	0.015	0.015	0.014
Oxygenates	C2	22.401	21.366	37.779
	C3	0.074	0.069	0.095
	C4	0.055	0.052	0.058

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	28.74	26.29
5%	87.79	81.88
10%	134.95	101.07
15%	140.05	138.76
20%	152.92	144.52
25%	155.61	154.48
30%	172.32	159.22
35%	172.56	172.38
40%	172.80	172.63
45%	173.04	172.88
50%	173.28	173.14
55%	197.13	177.07
60%	228.60	209.01
65%	231.03	230.84
70%	277.05	245.71
75%	291.70	281.73
80%	329.25	321.71
85%	334.61	332.42
90%	358.04	352.22
95%	363.20	363.20
FBP	397.97	388.02

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.553	74-98-6	P3	Propane	0.008	0.012	0.014	2.117
2	8.810	75-28-5	I4	i-Butane	0.068	0.092	0.092	18.575
3	9.624	115-11-7	K4	Isobutene	0.016	0.020	0.022	4.438
4	9.665	106-98-9	K4	Butene-1	0.018	0.022	0.024	4.971
5	10.024	106-97-8	P4	n-Butane	0.504	0.656	0.674	136.813
6	10.510	624-64-6	K4	t-Butene-2	0.072	0.089	0.099	20.107
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.007	0.008	0.007	1.806
8	11.252	590-18-1	K4	c-Butene-2	0.085	0.102	0.117	23.755
9	13.136	64-17-5	X2	Ethanol	22.401	21.366	37.779	2592.448
10	13.454	563-45-1	C5	3-Methylbutene-1	0.212	0.255	0.235	59.661
11	15.077	78-78-4	I5	i-Pentane	3.117	3.786	3.356	851.694
12	16.730	109-67-1	K5	Pentene-1	0.327	0.384	0.362	91.959
13	17.580	563-46-2	C5	2-Methylbutene-1	0.496	0.574	0.550	139.529
14	18.117	109-66-0	P5	n-Pentane	1.264	1.519	1.361	345.443
15	18.627	78-79-5	E5	2-Methyl-1,3-Butadiene	0.012	0.013	0.014	3.463
16	19.236	646-04-8	K5	t-Pentene-2	0.831	0.965	0.921	233.676
17	19.879		?	Unidentified	0.006	0.007	0.006	1.988
18	20.267	627-20-3	K5	c-Pentene-2	0.456	0.523	0.505	128.173
19	20.944	513-35-9	C5	2-Methylbutene-2	1.021	1.161	1.132	287.088
20	21.271	2004-70-8	E5	1t,3-Pentadiene	0.015	0.017	0.017	4.436
21	22.538	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.007	0.008	1.971
22	23.092	75-83-2	I6	2,2-Dimethylbutane	0.216	0.251	0.195	59.275
23	25.740	142-29-0	B5	Cyclopentene	0.194	0.189	0.221	56.071
24	26.902	71-23-8	X3	n-Propanol	0.074	0.069	0.095	14.507
25	26.998		?	Unidentified	0.059	0.066	0.054	20.289
26	27.606	287-92-3	M5	Cyclopentane	0.235	0.237	0.260	66.074
27	28.338	79-29-8	I6	2,3-Dimethylbutane	1.008	1.147	0.909	276.570
28	28.734		?	Unidentified	0.052	0.053	0.046	17.890
29	29.197	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.050	0.041	12.606
30	29.436	107-83-5	I6	2-Methylpentane	5.203	5.995	4.691	1427.392
31	29.846	674-76-0	C6	4-Methyl-t-pentene-2	0.129	0.144	0.119	36.274
32	32.075	96-14-0	I6	3-Methylpentane	3.287	3.724	2.964	901.752
33	33.228	763-29-1	C6	2-Methylpentene-1	0.221	0.243	0.204	62.196
34	33.455	592-41-6	K6	Hexene-1	0.158	0.175	0.146	44.390
35	35.827	110-54-3	P6	n-Hexane	4.274	4.878	3.854	1172.592
36	36.441	13269-52-8	K6	t-Hexene-3	0.260	0.287	0.240	73.101
37	36.917	4050-45-7	K6	t-Hexene-2	0.398	0.438	0.367	111.781
38	37.043	1120-62-3	B6	3-Methylcyclopentene	0.100	0.099	0.095	28.141
39	37.408	625-27-4	C6	2-Methylpentene-2	0.336	0.366	0.311	94.559
40	37.820	922-62-3	C6	3-Methyl-c-pentene-2	0.261	0.281	0.241	73.337
41	38.745	7688-21-3	K6	c-Hexene-2	0.212	0.230	0.195	59.449
42	40.089	3404-73-7	C7	3,3-Dimethylpentene-1	0.307	0.330	0.243	86.391
43	40.678	96-37-7	M6	Methylcyclopentane	1.892	1.902	1.746	531.671

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.233	108-08-7	I7	2,4-Dimethylpentane	0.431	0.483	0.334	118.818
45	42.533	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.011	3.887
46	42.781	464-06-2	I7	2,2,3-Trimethylbutane	0.053	0.058	0.041	14.724
47	45.426	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	4.281
48	45.639	71-42-3	Q6	Benzene	0.724	0.620	0.720	219.241
49	45.833	693-89-0	B6	1-Methylcyclopentene	0.357	0.345	0.338	102.729
50	46.640	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.013	4.507
51	47.236	3524-73-0	C7	5-Methylhexene-1	0.082	0.088	0.065	22.959
52	47.559	110-82-7	M6	Cyclohexane	1.438	1.391	1.328	404.294
53	48.059	71-36-3	X4	n-Butanol	0.055	0.052	0.058	11.742
54	49.272	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.043	0.032	11.193
55	49.622	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.009	3.228
56	50.267	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.054	0.040	14.212
57	50.666	591-76-4	I7	2-Methylhexane	1.231	1.365	0.954	339.006
58	50.841		?	Unidentified	0.068	0.074	0.055	23.503
59	51.153	110-83-8	B6	Cyclohexene	0.044	0.041	0.042	12.426
60	52.493	589-34-4	I7	3-Methylhexane	0.776	0.850	0.602	213.780
61	53.353	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.194	0.195	0.154	54.572
62	53.939	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.154	0.156	0.122	43.326
63	54.561	822-50-4	M7	1t,2-Dimethylcyclopentane	0.234	0.234	0.185	65.793
64	54.847		C7	C7 - Iso-Olefin - 2	0.022	0.023	0.017	6.127
65	55.148	540-84-1	I8	2,2,4-Trimethylpentane	1.102	1.198	0.749	304.018
66	55.468	592-76-7	K7	Heptene-1	0.029	0.031	0.023	8.040
67	56.801	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.872
68	57.331	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.025	8.804
69	57.684	6094-02-6	C7	2-Methylhexene-1	0.056	0.061	0.044	15.758
70	58.060	142-82-5	P7	n-Heptane	0.909	1.000	0.705	250.301
71	58.276	7642-10-6	K7	c-Heptene-3	0.023	0.025	0.019	6.599
72	58.547	2738-19-4	C7	2-Methyl-2-hexene	0.025	0.027	0.020	7.076
73	58.792	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.472
74	59.173	14686-13-6	K7	t-Heptene-2	0.012	0.013	0.010	3.419
75	59.650	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	5.183
76	60.078	20710-38-8	C7	3-Methyl-t-hexene-2	0.016	0.016	0.012	4.415
77	60.860	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.012	0.013	0.010	3.388
78	61.523	108-87-2	M7	Methylcyclohexane	1.377	1.347	1.089	386.953
79	62.459	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.041	0.041	0.028	11.386
80	62.848	590-73-8	I8	2,2-Dimethylhexane	0.034	0.037	0.023	9.453
81	63.359		?	Unidentified	0.054	0.057	0.038	18.669
82	64.297	1640-89-7	M7	Ethylcyclopentane	0.066	0.065	0.052	18.498
83	64.945	564-02-3	I8	2,2,3-Trimethylpentane	0.057	0.060	0.039	15.846
84	65.169	592-13-2	I8	2,5-Dimethylhexane	0.181	0.197	0.123	50.088
85	65.506	589-43-5	I8	2,4-Dimethylhexane	0.191	0.205	0.130	52.699
86	66.345	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.042	0.041	0.029	11.757

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.739	563-16-6	I8	3,3-Dimethylhexane	0.028	0.030	0.019	7.782
88	67.858	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.038	0.037	0.026	10.575
89	68.470	565-75-3	I8	2,3,4-Trimethylpentane	0.409	0.428	0.278	112.781
90	69.019	108-88-3	Q7	Toluene	5.523	4.794	4.657	1653.405
91	70.512		C8	C8 - Diolefin - 1	0.017	0.016	0.012	4.679
92	70.791	584-94-1	I8	2,3-Dimethylhexane	0.160	0.169	0.109	44.175
93	72.049	592-27-8	I8	2-Methylheptane	0.330	0.355	0.224	90.953
94	72.301	589-53-7	I8	4-Methylheptane	0.126	0.135	0.086	34.844
95	72.450		?	Unidentified	0.013	0.014	0.009	4.570
96	73.225		M8	1,3-dimethyl-t-cyclohexane	0.263	0.257	0.182	73.975
97	73.362	589-81-1	I8	3-Methylheptane	0.278	0.297	0.189	76.791
98	73.563	619-99-8	I8	3-Ethylhexane	0.160	0.169	0.109	44.185
99	74.459		?	Unidentified	0.042	0.041	0.029	14.575
100	75.247	3522-94-9	I9	2,2,5-Trimethylhexane	0.178	0.190	0.108	49.329
101	75.609		M8	3c-Ethylmethylcyclopentane	0.015	0.015	0.011	4.346
102	75.825		M8	3t-Ethylmethylcyclopentane	0.022	0.022	0.015	6.221
103	76.530		?	Unidentified	0.100	0.097	0.069	34.502
104	77.875	111-65-9	P8	n-Octane	0.810	0.867	0.551	223.484
105	80.353	1069-53-0	I9	2,3,5-Trimethylhexane	0.030	0.031	0.018	8.275
106	80.908		C8	C9 - IsoOlefin - 1	0.029	0.028	0.020	8.016
107	81.366	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.024	0.022	0.016	6.646
108	81.521	1071-26-7	I9	2,4-Dimethylheptane	0.046	0.048	0.028	12.595
109	82.175	1678-91-7	M8	Ethylcyclohexane	0.199	0.191	0.138	55.853
110	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.088	0.093	0.053	24.338
111	82.976		?	Unidentified	0.041	0.040	0.029	14.247
112	83.406		I9	2,5-Dimethylheptane	0.116	0.122	0.070	32.038
113	83.605	926-82-9	I9	3,5-Dimethylheptane	0.028	0.029	0.017	7.803
114	84.731	100-41-4	Q8	Ethylbenzene	0.992	0.861	0.726	294.651
115	84.922		?	Unidentified	0.013	0.013	0.008	4.399
116	85.153		?	Unidentified	0.030	0.029	0.019	10.450
117	85.958	108-38-3	Q8	m-Xylene	2.730	2.378	1.998	811.298
118	86.104	106-42-3	Q8	p-Xylene	1.181	1.032	0.864	350.901
119	86.231		?	Unidentified	0.038	0.040	0.023	13.185
120	86.596		?	Unidentified	0.014	0.013	0.009	4.787
121	86.755		I9	3,5-Dimethylheptane	0.017	0.018	0.010	4.754
122	86.883	1067-20-5	I9	3,3-Diethylpentane	0.015	0.015	0.009	4.028
123	87.275	2216-34-4	I9	4-Methyloctane	0.091	0.095	0.055	25.046
124	87.407	3221-61-2	I9	2-Methyloctane	0.120	0.127	0.073	33.265
125	87.884		B9	C9 - NaphOlefin - 2	0.007	0.007	0.004	2.014
126	88.108	15869-80-4	I9	Heptane, 3-ethyl-	0.017	0.018	0.010	4.694
127	88.270	2216-33-3	I9	3-Methyloctane	0.117	0.123	0.071	32.451
128	88.930	95-47-6	Q8	o-Xylene	0.891	0.762	0.652	264.656
129	89.322		I10	C10 - IsoParaffin - 1	0.025	0.026	0.014	6.861

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	89.756	3728-57-2	M8	Cyclopentane, 1-methyl-2-propyl-	0.009	0.008	0.007	2.677
131	89.912		M9	trans-1,3-Diethylcyclopentane	0.033	0.029	0.021	9.922
132	90.182	14720-74-2	I10	2,2,4-trimethylheptane	0.046	0.047	0.025	12.611
133	91.748	111-84-2	P9	n-Nonane	0.283	0.297	0.171	78.269
134	92.324	4926-90-3	M9	1,1-Methylethylcyclohexane	0.028	0.026	0.017	7.878
135	93.095	98-82-8	Q9	i-Propylbenzene	0.035	0.031	0.023	10.407
136	93.273		?	Unidentified	0.008	0.008	0.005	2.876
137	93.273		?	Unidentified	0.008	0.009	0.005	2.876
138	93.273		?	Unidentified	0.008	0.006	0.005	2.876
139	93.387	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.004	0.004	0.002	1.119
140	93.387		C10	C10-IsoOlefin-4	0.004	0.004	0.002	1.119
141	93.387		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.119
142	93.843		?	Unidentified	0.150	0.156	0.082	51.658
143	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.054	0.056	0.029	14.888
144	94.526		?	Unidentified	0.019	0.014	1.470	6.512
145	94.526		?	Unidentified	0.019	0.020	0.010	6.512
146	94.722		?	Unidentified	0.022	0.021	0.014	7.613
147	94.862	15869-89-3	I10	2,5-Dimethyloctane	0.093	0.096	0.051	25.784
148	95.068		I10	C10 - IsoParaffin - 2	0.014	0.015	0.008	3.942
149	95.326	2040-95-1	I10	2,7-Dimethyloctane	0.056	0.058	0.030	15.463
150	95.509	2051-30-1	I10	2,4-Dimethyloctane	0.242	0.251	0.132	67.191
151	95.896		I10	2,6-Dimethyloctane	0.075	0.077	0.041	20.711
152	96.060		I10	C10 Isoparaffin -1	0.005	0.005	0.003	1.419
153	96.555	103-65-1	Q9	n-Propylbenzene	0.315	0.275	0.204	93.069
154	96.754		I10	3-Methyl-5-ethylheptane	0.009	0.010	0.005	2.612
155	97.402	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.105	0.962	0.714	326.178
156	97.635	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.497	0.435	0.322	146.856
157	98.260	108-67-8	Q9	1,3,5-Trimethylbenzene	0.711	0.618	0.459	209.794
158	98.725	15869-85-9	I10	5-Methylnonane	0.011	0.011	0.006	2.928
159	98.915	17301-94-8	I10	4-Methylnonane	0.023	0.024	0.013	6.459
160	99.140		I10	2,2,6-Trimethyloctane	3.878	4.017	2.118	1074.551
161	99.346	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.363	0.310	0.235	107.124
162	99.710		?	Unidentified	0.012	0.012	0.007	4.150
163	99.890	5911-04-6	I10	3-Methylnonane	0.023	0.024	0.013	6.427
164	100.074		?	Unidentified	0.013	0.014	0.007	4.393
165	100.356		?	Unidentified	0.224	0.168	0.111	77.047
166	100.489		?	Unidentified	0.619	0.626	0.308	213.181
167	100.705		I11	C11-Isoparaffin-2	0.326	0.330	0.162	90.374
168	100.982	95-63-6	Q9	1,2,4-Trimethylbenzene	1.845	1.585	1.193	544.634
169	101.170		?	Unidentified	0.370	0.397	0.205	127.269
170	101.292		?	Unidentified	0.219	0.225	0.120	75.383
171	101.554		?	Unidentified	0.050	0.051	0.027	17.139
172	102.197		?	Unidentified	0.025	0.024	0.014	8.604

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	102.341	17302-01-1	I10	3-Ethyl-3-methylheptane	0.525	0.531	0.261	145.746
174	102.546		?	Unidentified	0.130	0.131	0.064	44.638
175	102.690	538-93-2	Q10	i-Butylbenzene	0.408	0.360	0.236	119.797
176	102.890	124-18-5	P10	n-Decane	0.041	0.043	0.023	11.485
177	103.200		?	Unidentified	0.129	0.131	0.072	44.497
178	103.689		?	Unidentified	0.019	0.016	0.012	6.517
179	103.855	526-73-8	Q9	1,2,3-Trimethylbenzene	0.225	0.190	0.146	66.529
180	104.195	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.045	0.040	0.026	13.286
181	104.412		I11	C11 Isoparaffin-4	0.064	0.065	0.032	17.757
182	104.619	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.378	0.332	0.219	110.990
183	104.955		?	Unidentified	0.065	0.051	0.043	22.402
184	105.052		J9	Indan	0.106	0.083	0.070	31.900
185	105.265		I11	C11-Isoparaffin-5	0.026	0.026	0.013	7.143
186	105.652		J10	Indene	1.591	1.242	1.046	477.486
187	106.079		M10	n-ButylCyclohexane	0.003	0.003	0.002	0.819
188	106.205		?	Unidentified	0.011	0.011	0.006	3.946
189	106.363		I11	C11-Isoparaffin-7	0.572	0.578	0.284	158.540
190	106.552	141-93-5	Q10	1,3-Diethylbenzene	0.024	0.021	0.014	6.962
191	106.847	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.674	1.463	0.969	491.568
192	107.105	105-05-5	Q10	1,4-Diethylbenzene	0.415	0.362	0.240	121.806
193	107.385	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.104	0.089	0.060	30.440
194	107.621	135-01-3	Q10	1,2-Diethylbenzene	0.116	0.099	0.067	34.073
195	108.084		?	Unidentified	0.127	0.128	0.063	43.588
196	108.237	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.043	0.037	0.025	12.536
197	108.359		?	Unidentified	0.129	0.131	0.065	44.289
198	108.438		?	Unidentified	0.119	0.121	0.059	41.124
199	108.569		I11	C11- Isoparaffin-11	0.961	0.972	0.478	266.662
200	108.747		?	Unidentified	0.306	0.310	0.152	105.438
201	109.171		?	Unidentified	0.861	0.739	0.499	296.547
202	109.397		J10	2-Methylindan	0.142	0.111	0.084	42.717
203	109.743	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.309	0.265	0.179	90.595
204	109.875		?	Unidentified	0.041	0.035	0.024	14.031
205	110.288	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.734	0.620	0.425	215.546
206	110.712		?	Unidentified	0.025	0.023	0.013	8.746
207	110.906	693-61-8	K11	2-Undecene, (E)-	0.062	0.063	0.034	17.283
208	111.039		?	Unidentified	0.139	0.141	0.077	47.762
209	111.311		?	Unidentified	0.120	0.102	0.063	41.477
210	111.411	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.060	0.051	0.035	17.660
211	111.711	1120-21-4	P11	n-Undecane	0.086	0.087	0.043	23.760
212	111.862	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.100	0.084	0.052	29.208
213	111.974		?	Unidentified	0.066	0.056	0.034	22.649
214	112.349		Q10	1,2,4,5-Tetramethylbenzene	0.222	0.188	0.128	65.160
215	112.615	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.291	0.246	0.169	85.580

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	112.827		?	Unidentified	0.013	0.011	0.007	4.609
217	112.956		?	Unidentified	0.017	0.014	0.010	5.759
218	113.131		I12	C12 - IsoParaffin - 1	0.026	0.026	0.012	7.234
219	113.476		?	Unidentified	0.032	0.032	0.014	10.874
220	113.613		?	Unidentified	0.010	0.011	0.005	3.612
221	113.811		Q11	C11 - Aromatic - 3	0.060	0.051	0.032	17.574
222	113.946	874-35-1	H10	5-Methylindan	0.092	0.078	0.054	27.092
223	114.070		Q12	1,2-Di-i-propylbenzene	0.034	0.029	0.016	9.887
224	114.285	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.047	0.040	0.025	13.688
225	114.449		Q11	C11 - Aromatic - 4	0.031	0.026	0.016	9.126
226	114.695	824-22-6	J10	4-Methylindan	0.114	0.096	0.067	33.388
227	114.849	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.027	0.023	0.014	7.966
228	114.942	824-63-5	H10	2-Methylindan	0.087	0.073	0.051	25.506
229	115.145		?	Unidentified	0.010	0.008	0.005	3.392
230	115.258	538-68-1	Q11	n-Pentylbenzene	0.011	0.009	0.006	3.165
231	115.486		Q11	tert-Pentylbenzene	0.045	0.038	0.024	13.191
232	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.019	0.016	0.010	5.615
233	115.909		Q11	C11 - Aromatic - 7	0.027	0.024	0.014	7.936
234	116.369	100-18-5	Q12	1,4-Di-i-propylbenzene	0.036	0.030	0.017	10.472
235	116.811	91-20-3	G10	Naphthalene	0.095	0.070	0.058	29.213
236	117.248		J11	1,1-Dimethyl Indane	0.009	0.007	0.005	2.593
237	117.413		J12	Dimethyl Indane - 1	0.004	0.003	0.002	1.157
238	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.005	0.004	0.003	1.535
239	117.895		Q12	1,3-Di-n-propylbenzene	0.033	0.028	0.016	9.732
240	118.005		Q11	C11 - Aromatic - 11	0.019	0.017	0.010	5.529
241	118.559		Q11	C11 - Aromatic - 12	0.014	0.012	0.007	3.968
242	123.440	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.005	2.931
243	124.306	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.546
244	130.003		?	Unidentified	0.003	0.002	0.002	1.064

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.553	74-98-6	Propane	0.008	0.012	0.014	2.117
	10.024	106-97-8	n-Butane	0.504	0.656	0.674	136.813
	18.117	109-66-0	n-Pentane	1.264	1.519	1.361	345.443
	35.827	110-54-3	n-Hexane	4.274	4.878	3.854	1172.592
	58.060	142-82-5	n-Heptane	0.909	1.000	0.705	250.301
	77.875	111-65-9	n-Octane	0.810	0.867	0.551	223.484
	91.748	111-84-2	n-Nonane	0.283	0.297	0.171	78.269
	102.890	124-18-5	n-Decane	0.041	0.043	0.023	11.485
	111.711	1120-21-4	n-Undecane	0.086	0.087	0.043	23.760
I-Paraffins	8.810	75-28-5	i-Butane	0.068	0.092	0.092	18.575
	10.637	463-82-1	2,2-Dimethylpropane	0.007	0.008	0.007	1.806
	15.077	78-78-4	i-Pentane	3.117	3.786	3.356	851.694
	23.092	75-83-2	2,2-Dimethylbutane	0.216	0.251	0.195	59.275
	28.338	79-29-8	2,3-Dimethylbutane	1.008	1.147	0.909	276.570
	29.436	107-83-5	2-Methylpentane	5.203	5.995	4.691	1427.392
	32.075	96-14-0	3-Methylpentane	3.287	3.724	2.964	901.752
	42.233	108-08-7	2,4-Dimethylpentane	0.431	0.483	0.334	118.818
	42.781	464-06-2	2,2,3-Trimethylbutane	0.053	0.058	0.041	14.724
	50.666	591-76-4	2-Methylhexane	1.231	1.365	0.954	339.006
	52.493	589-34-4	3-Methylhexane	0.776	0.850	0.602	213.780
	55.148	540-84-1	2,2,4-Trimethylpentane	1.102	1.198	0.749	304.018
	62.848	590-73-8	2,2-Dimethylhexane	0.034	0.037	0.023	9.453
	64.945	564-02-3	2,2,3-Trimethylpentane	0.057	0.060	0.039	15.846
	65.169	592-13-2	2,5-Dimethylhexane	0.181	0.197	0.123	50.088
	65.506	589-43-5	2,4-Dimethylhexane	0.191	0.205	0.130	52.699
	66.739	563-16-6	3,3-Dimethylhexane	0.028	0.030	0.019	7.782
	68.470	565-75-3	2,3,4-Trimethylpentane	0.409	0.428	0.278	112.781
	70.791	584-94-1	2,3-Dimethylhexane	0.160	0.169	0.109	44.175
	72.049	592-27-8	2-Methylheptane	0.330	0.355	0.224	90.953
	72.301	589-53-7	4-Methylheptane	0.126	0.135	0.086	34.844
	73.362	589-81-1	3-Methylheptane	0.278	0.297	0.189	76.791
	73.563	619-99-8	3-Ethylhexane	0.160	0.169	0.109	44.185
	75.247	3522-94-9	2,2,5-Trimethylhexane	0.178	0.190	0.108	49.329
	80.353	1069-53-0	2,3,5-Trimethylhexane	0.030	0.031	0.018	8.275
	81.521	1071-26-7	2,4-Dimethylheptane	0.046	0.048	0.028	12.595
	82.476	1072-05-5	2,6-Dimethylheptane	0.088	0.093	0.053	24.338
	83.406		2,5-Dimethylheptane	0.116	0.122	0.070	32.038
	83.605	926-82-9	3,5-Dimethylheptane	0.028	0.029	0.017	7.803
	86.755		3,5-Dimethylheptane	0.017	0.018	0.010	4.754
	86.883	1067-20-5	3,3-Diethylpentane	0.015	0.015	0.009	4.028
	87.275	2216-34-4	4-Methyloctane	0.091	0.095	0.055	25.046
	87.407	3221-61-2	2-Methyloctane	0.120	0.127	0.073	33.265
	88.108	15869-80-4	Heptane, 3-ethyl-	0.017	0.018	0.010	4.694
	88.270	2216-33-3	3-Methyloctane	0.117	0.123	0.071	32.451
	89.322		C10 - IsoParaffin - 1	0.025	0.026	0.014	6.861
	90.182	14720-74-2	2,2,4-trimethylheptane	0.046	0.047	0.025	12.611

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	93.387		C10-isoparaffin-x	0.000	0.000	0.000	1.119
	94.064	15869-87-1	2,2-Dimethyloctane	0.054	0.056	0.029	14.888
	94.862	15869-89-3	2,5-Dimethyloctane	0.093	0.096	0.051	25.784
	95.068		C10 - IsoParaffin - 2	0.014	0.015	0.008	3.942
	95.326	2040-95-1	2,7-Dimethyloctane	0.056	0.058	0.030	15.463
	95.509	2051-30-1	2,4-Dimethyloctane	0.242	0.251	0.132	67.191
	95.896		2,6-Dimethyloctane	0.075	0.077	0.041	20.711
	96.060		C10 Isoparaffin -1	0.005	0.005	0.003	1.419
	96.754		3-Methyl-5-ethylheptane	0.009	0.010	0.005	2.612
	98.725	15869-85-9	5-Methylnonane	0.011	0.011	0.006	2.928
	98.915	17301-94-8	4-Methylnonane	0.023	0.024	0.013	6.459
	99.140		2,2,6-Trimethyloctane	3.878	4.017	2.118	1074.551
	99.890	5911-04-6	3-Methylnonane	0.023	0.024	0.013	6.427
	100.705		C11-Isoparaffin-2	0.326	0.330	0.162	90.374
	102.341	17302-01-1	3-Ethyl-3-methylheptane	0.525	0.531	0.261	145.746
	104.412		C11 Isoparaffin-4	0.064	0.065	0.032	17.757
	105.265		C11-Isoparaffin-5	0.026	0.026	0.013	7.143
	106.363		C11-Isoparaffin-7	0.572	0.578	0.284	158.540
	108.569		C11- Isoparaffin-11	0.961	0.972	0.478	266.662
	113.131		C12 - IsoParaffin - 1	0.026	0.026	0.012	7.234
Aromatics							
Mono-Aromatics	45.639	71-42-3	Benzene	0.724	0.620	0.720	219.241
	69.019	108-88-3	Toluene	5.523	4.794	4.657	1653.405
	84.731	100-41-4	Ethylbenzene	0.992	0.861	0.726	294.651
	85.958	108-38-3	m-Xylene	2.730	2.378	1.998	811.298
	86.104	106-42-3	p-Xylene	1.181	1.032	0.864	350.901
	88.930	95-47-6	o-Xylene	0.891	0.762	0.652	264.656
	93.095	98-82-8	i-Propylbenzene	0.035	0.031	0.023	10.407
	96.555	103-65-1	n-Propylbenzene	0.315	0.275	0.204	93.069
	97.402	620-14-4	1-Methyl-3-ethylbenzene	1.105	0.962	0.714	326.178
	97.635	622-96-8	1-Methyl-4-ethylbenzene	0.497	0.435	0.322	146.856
	98.260	108-67-8	1,3,5-Trimethylbenzene	0.711	0.618	0.459	209.794
	99.346	611-14-3	1-Methyl-2-ethylbenzene	0.363	0.310	0.235	107.124
	100.982	95-63-6	1,2,4-Trimethylbenzene	1.845	1.585	1.193	544.634
	102.690	538-93-2	i-Butylbenzene	0.408	0.360	0.236	119.797
	103.855	526-73-8	1,2,3-Trimethylbenzene	0.225	0.190	0.146	66.529
	104.195	535-77-3	1-Methyl-3-i-propylbenzene	0.045	0.040	0.026	13.286
	104.619	99-87-6	1-Methyl-4-i-propylbenzene	0.378	0.332	0.219	110.990
	106.552	141-93-5	1,3-Diethylbenzene	0.024	0.021	0.014	6.962
	106.847	1074-43-7	1-Methyl-3-n-propylbenzene	1.674	1.463	0.969	491.568
	107.105	105-05-5	1,4-Diethylbenzene	0.415	0.362	0.240	121.806
	107.385	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.104	0.089	0.060	30.440
	107.621	135-01-3	1,2-Diethylbenzene	0.116	0.099	0.067	34.073
	108.237	1074-17-5	1-Methyl-2-n-propylbenzene	0.043	0.037	0.025	12.536
	109.743	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.309	0.265	0.179	90.595
	110.288	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.734	0.620	0.425	215.546

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	111.411	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.060	0.051	0.035	17.660
	111.862	4218-48-8	1-Ethyl-4-i-propylbenzene	0.100	0.084	0.052	29.208
	112.349		1,2,4,5-Tetramethylbenzene	0.222	0.188	0.128	65.160
	112.615	527-53-7	1,2,3,5-Tetramethylbenzene	0.291	0.246	0.169	85.580
	113.811		C11 - Aromatic - 3	0.060	0.051	0.032	17.574
	114.070		1,2-Di-i-propylbenzene	0.034	0.029	0.016	9.887
	114.285	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.047	0.040	0.025	13.688
	114.449		C11 - Aromatic - 4	0.031	0.026	0.016	9.126
	114.849	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.027	0.023	0.014	7.966
	115.258	538-68-1	n-Pentylbenzene	0.011	0.009	0.006	3.165
	115.486		tert-Pentylbenzene	0.045	0.038	0.024	13.191
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.019	0.016	0.010	5.615
	115.909		C11 - Aromatic - 7	0.027	0.024	0.014	7.936
	116.369	100-18-5	1,4-Di-i-propylbenzene	0.036	0.030	0.017	10.472
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.005	0.004	0.003	1.535
	117.895		1,3-Di-n-propylbenzene	0.033	0.028	0.016	9.732
	118.005		C11 - Aromatic - 11	0.019	0.017	0.010	5.529
	118.559		C11 - Aromatic - 12	0.014	0.012	0.007	3.968
Naphthalenes	116.811	91-20-3	Naphthalene	0.095	0.070	0.058	29.213
	123.440	91-57-6	2-Methylnaphthalene	0.010	0.007	0.005	2.931
	124.306	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.546
Naphtheno/Olefir	113.946	874-35-1	5-Methylindan	0.092	0.078	0.054	27.092
	114.942	824-63-5	2-Methylindan	0.087	0.073	0.051	25.506
Indenes	105.052		Indan	0.106	0.083	0.070	31.900
	105.652		Indene	1.591	1.242	1.046	477.486
	109.397		2-Methylindan	0.142	0.111	0.084	42.717
	114.695	824-22-6	4-Methylindan	0.114	0.096	0.067	33.388
	117.248		1,1-Dimethyl Indane	0.009	0.007	0.005	2.593
	117.413		Dimethyl Indane - 1	0.004	0.003	0.002	1.157
Naphthenes							
Mono-Naphthene	27.606	287-92-3	Cyclopentane	0.235	0.237	0.260	66.074
	40.678	96-37-7	Methylcyclopentane	1.892	1.902	1.746	531.671
	47.559	110-82-7	Cyclohexane	1.438	1.391	1.328	404.294
	53.353	1759-58-6	1t,3-Dimethylcyclopentane	0.194	0.195	0.154	54.572
	53.939	2532-58-3	1c,3-Dimethylcyclopentane	0.154	0.156	0.122	43.326
	54.561	822-50-4	1t,2-Dimethylcyclopentane	0.234	0.234	0.185	65.793
	59.650	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	5.183
	61.523	108-87-2	Methylcyclohexane	1.377	1.347	1.089	386.953
	62.459	4516-69-2	1,1,3-Trimethylcyclopentane	0.041	0.041	0.028	11.386
	64.297	1640-89-7	Ethylcyclopentane	0.066	0.065	0.052	18.498
	66.345	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.042	0.041	0.029	11.757
	67.858	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.038	0.037	0.026	10.575
	73.225		1,3-dimethyl-t-cyclohexane	0.263	0.257	0.182	73.975

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	75.609		3c-Ethylmethylcyclopentane	0.015	0.015	0.011	4.346
	75.825		3t-Ethylmethylcyclopentane	0.022	0.022	0.015	6.221
	81.366	2207-01-4	1c,2-Dimethylcyclohexane	0.024	0.022	0.016	6.646
	82.175	1678-91-7	Ethylcyclohexane	0.199	0.191	0.138	55.853
	89.756	3728-57-2	Cyclopentane, 1-methyl-2-propyl-	0.009	0.008	0.007	2.677
	89.912		trans-1,3-Diethylcyclopentane	0.033	0.029	0.021	9.922
	92.324	4926-90-3	1,1-Methylethylcyclohexane	0.028	0.026	0.017	7.878
	93.387	696-29-7	1-Methyl-2-propyl-cyclopentan	0.004	0.004	0.002	1.119
	106.079		n-ButylCyclohexane	0.003	0.003	0.002	0.819
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.624	115-11-7	Isobutene	0.016	0.020	0.022	4.438
	9.665	106-98-9	Butene-1	0.018	0.022	0.024	4.971
	10.510	624-64-6	t-Butene-2	0.072	0.089	0.099	20.107
	11.252	590-18-1	c-Butene-2	0.085	0.102	0.117	23.755
	16.730	109-67-1	Pentene-1	0.327	0.384	0.362	91.959
	19.236	646-04-8	t-Pentene-2	0.831	0.965	0.921	233.676
	20.267	627-20-3	c-Pentene-2	0.456	0.523	0.505	128.173
	33.455	592-41-6	Hexene-1	0.158	0.175	0.146	44.390
	36.441	13269-52-8	t-Hexene-3	0.260	0.287	0.240	73.101
	36.917	4050-45-7	t-Hexene-2	0.398	0.438	0.367	111.781
	38.745	7688-21-3	c-Hexene-2	0.212	0.230	0.195	59.449
	55.468	592-76-7	Heptene-1	0.029	0.031	0.023	8.040
	57.331	14686-14-7	t-Heptene-3	0.031	0.034	0.025	8.804
	58.276	7642-10-6	c-Heptene-3	0.023	0.025	0.019	6.599
	59.173	14686-13-6	t-Heptene-2	0.012	0.013	0.010	3.419
	110.906	693-61-8	2-Undecene, (E)-	0.062	0.063	0.034	17.283
Iso-Olefins	13.454	563-45-1	3-Methylbutene-1	0.212	0.255	0.235	59.661
	17.580	563-46-2	2-Methylbutene-1	0.496	0.574	0.550	139.529
	20.944	513-35-9	2-Methylbutene-2	1.021	1.161	1.132	287.088
	29.197	691-38-3	4-Methyl-c-pentene-2	0.045	0.050	0.041	12.606
	29.846	674-76-0	4-Methyl-t-pentene-2	0.129	0.144	0.119	36.274
	33.228	763-29-1	2-Methylpentene-1	0.221	0.243	0.204	62.196
	37.408	625-27-4	2-Methylpentene-2	0.336	0.366	0.311	94.559
	37.820	922-62-3	3-Methyl-c-pentene-2	0.261	0.281	0.241	73.337
	40.089	3404-73-7	3,3-Dimethylpentene-1	0.307	0.330	0.243	86.391
	42.533	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.011	3.887
	46.640	3404-61-3	3-Methylhexene-1	0.016	0.017	0.013	4.507
	47.236	3524-73-0	5-Methylhexene-1	0.082	0.088	0.065	22.959
	49.272	15840-60-5	2-Methyl-c-hexene-3	0.040	0.043	0.032	11.193
	49.622	3769-23-1	4-Methylhexene-1	0.011	0.012	0.009	3.228
	50.267	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.054	0.040	14.212
	54.847		C7 - Iso-Olefin - 2	0.022	0.023	0.017	6.127
	56.801	4914-89-0	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.872
	57.684	6094-02-6	2-Methylhexene-1	0.056	0.061	0.044	15.758

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	58.547	2738-19-4	2-Methyl-2-hexene	0.025	0.027	0.020	7.076
	58.792	10574-36-4	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.472
	60.078	20710-38-8	3-Methyl-t-hexene-2	0.016	0.016	0.012	4.415
	60.860	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.012	0.013	0.010	3.388
	70.512		C8 - Diolefin - 1	0.017	0.016	0.012	4.679
	80.908		C9 - IsoOlefin - 1	0.029	0.028	0.020	8.016
	93.387		C10-IsoOlefin-4	0.004	0.004	0.002	1.119
Naphtheno-Olefir	22.538	1574-41-0	1,3-Cyclopentadiene	0.007	0.007	0.008	1.971
	25.740	142-29-0	Cyclopentene	0.194	0.189	0.221	56.071
	37.043	1120-62-3	3-Methylcyclopentene	0.100	0.099	0.095	28.141
	45.833	693-89-0	1-Methylcyclopentene	0.357	0.345	0.338	102.729
	51.153	110-83-8	Cyclohexene	0.044	0.041	0.042	12.426
	87.884		C9 - NaphOlefin - 2	0.007	0.007	0.004	2.014
Di-Olefins	18.627	78-79-5	2-Methyl-1,3-Butadiene	0.012	0.013	0.014	3.463
	21.271	2004-70-8	1t,3-Pentadiene	0.015	0.017	0.017	4.436
	45.426	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	4.281
Oxygenates	13.136	64-17-5	Ethanol	22.401	21.366	37.779	2592.448
	26.902	71-23-8	n-Propanol	0.074	0.069	0.095	14.507
	48.059	71-36-3	n-Butanol	0.055	0.052	0.058	11.742
Unidentified	19.879		Unidentified	0.006	0.007	0.006	1.988
	26.998		Unidentified	0.059	0.066	0.054	20.289
	28.734		Unidentified	0.052	0.053	0.046	17.890
	50.841		Unidentified	0.068	0.074	0.055	23.503
	63.359		Unidentified	0.054	0.057	0.038	18.669
	72.450		Unidentified	0.013	0.014	0.009	4.570
	74.459		Unidentified	0.042	0.041	0.029	14.575
	76.530		Unidentified	0.100	0.097	0.069	34.502
	82.976		Unidentified	0.041	0.040	0.029	14.247
	84.922		Unidentified	0.013	0.013	0.008	4.399
	85.153		Unidentified	0.030	0.029	0.019	10.450
	86.231		Unidentified	0.038	0.040	0.023	13.185
	86.596		Unidentified	0.014	0.013	0.009	4.787
	93.273		Unidentified	0.008	0.008	0.005	2.876
	93.273		Unidentified	0.008	0.009	0.005	2.876
	93.273		Unidentified	0.008	0.006	0.005	2.876
	93.843		Unidentified	0.150	0.156	0.082	51.658
	94.526		Unidentified	0.019	0.014	1.470	6.512
	94.526		Unidentified	0.019	0.020	0.010	6.512
	94.722		Unidentified	0.022	0.021	0.014	7.613
	99.710		Unidentified	0.012	0.012	0.007	4.150
	100.074		Unidentified	0.013	0.014	0.007	4.393
	100.356		Unidentified	0.224	0.168	0.111	77.047
	100.489		Unidentified	0.619	0.626	0.308	213.181

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	101.170		Unidentified	0.370	0.397	0.205	127.269
	101.292		Unidentified	0.219	0.225	0.120	75.383
	101.554		Unidentified	0.050	0.051	0.027	17.139
	102.197		Unidentified	0.025	0.024	0.014	8.604
	102.546		Unidentified	0.130	0.131	0.064	44.638
	103.200		Unidentified	0.129	0.131	0.072	44.497
	103.689		Unidentified	0.019	0.016	0.012	6.517
	104.955		Unidentified	0.065	0.051	0.043	22.402
	106.205		Unidentified	0.011	0.011	0.006	3.946
	108.084		Unidentified	0.127	0.128	0.063	43.588
	108.359		Unidentified	0.129	0.131	0.065	44.289
	108.438		Unidentified	0.119	0.121	0.059	41.124
	108.747		Unidentified	0.306	0.310	0.152	105.438
	109.171		Unidentified	0.861	0.739	0.499	296.547
	109.875		Unidentified	0.041	0.035	0.024	14.031
	110.712		Unidentified	0.025	0.023	0.013	8.746
	111.039		Unidentified	0.139	0.141	0.077	47.762
	111.311		Unidentified	0.120	0.102	0.063	41.477
	111.974		Unidentified	0.066	0.056	0.034	22.649
	112.827		Unidentified	0.013	0.011	0.007	4.609
	112.956		Unidentified	0.017	0.014	0.010	5.759
	113.476		Unidentified	0.032	0.032	0.014	10.874
	113.613		Unidentified	0.010	0.011	0.005	3.612
	115.145		Unidentified	0.010	0.008	0.005	3.392
	130.003		Unidentified	0.003	0.002	0.002	1.064

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2_B.CDF 25-Aug-10, 08:35:09
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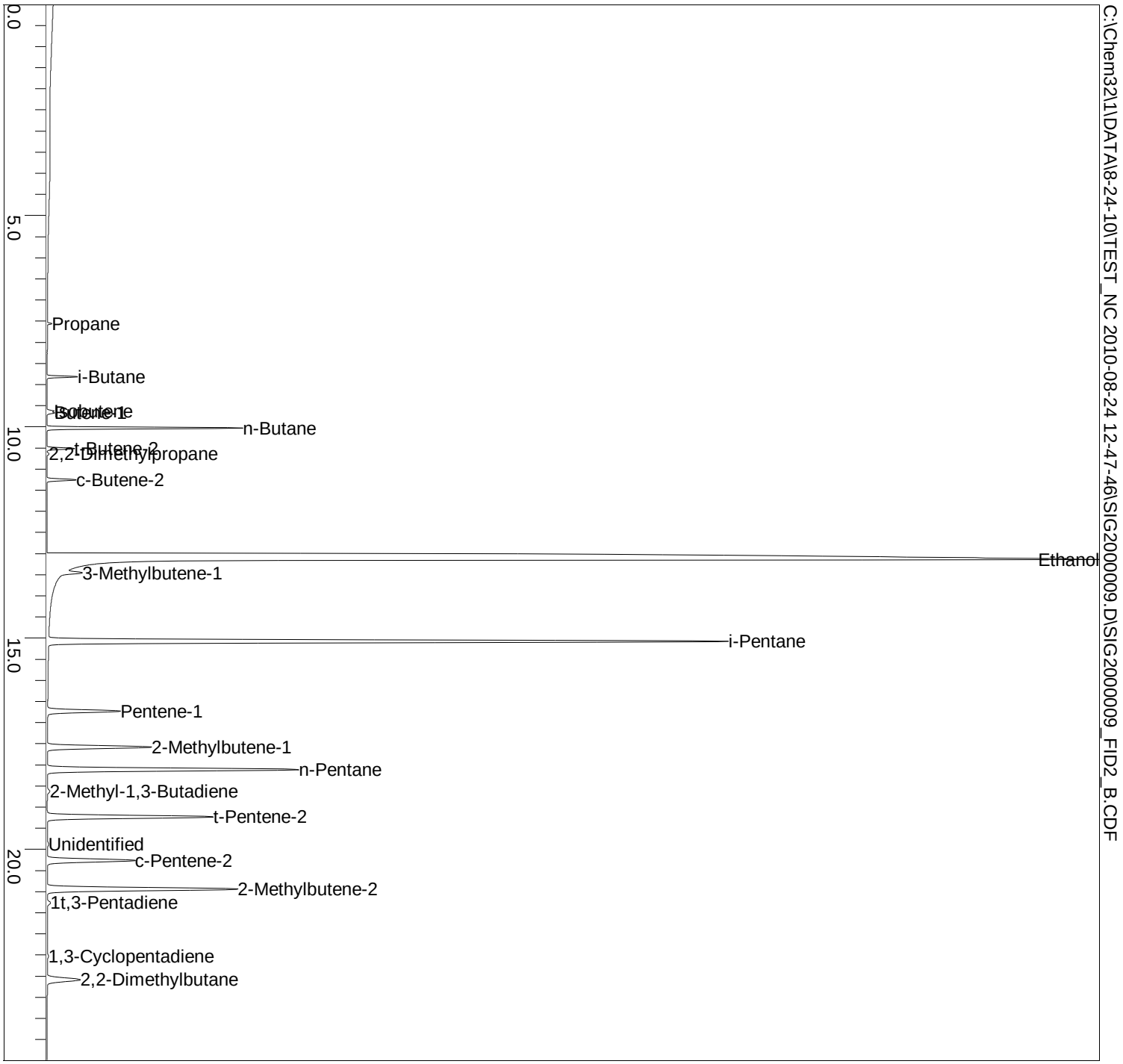
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram

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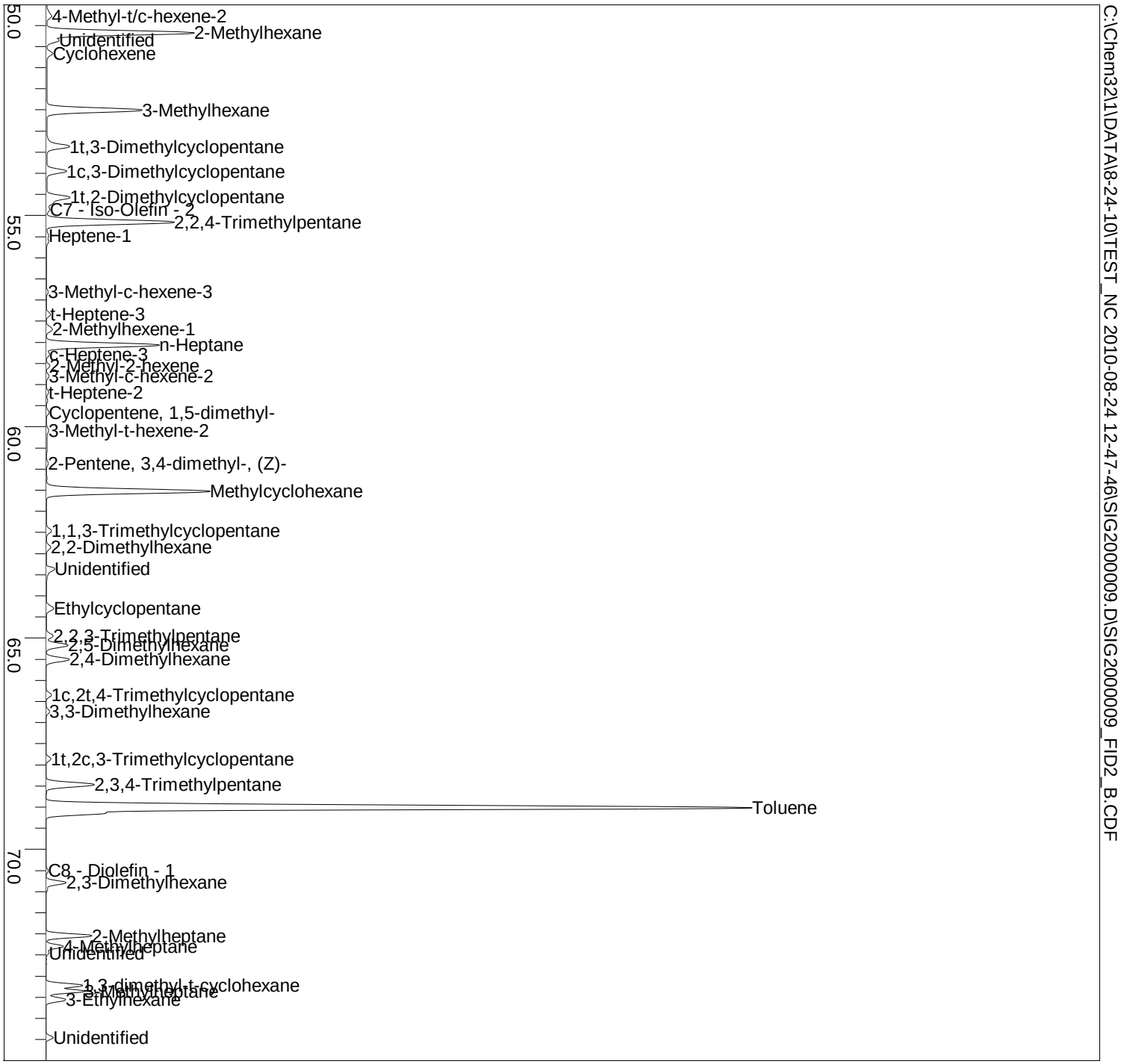
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram



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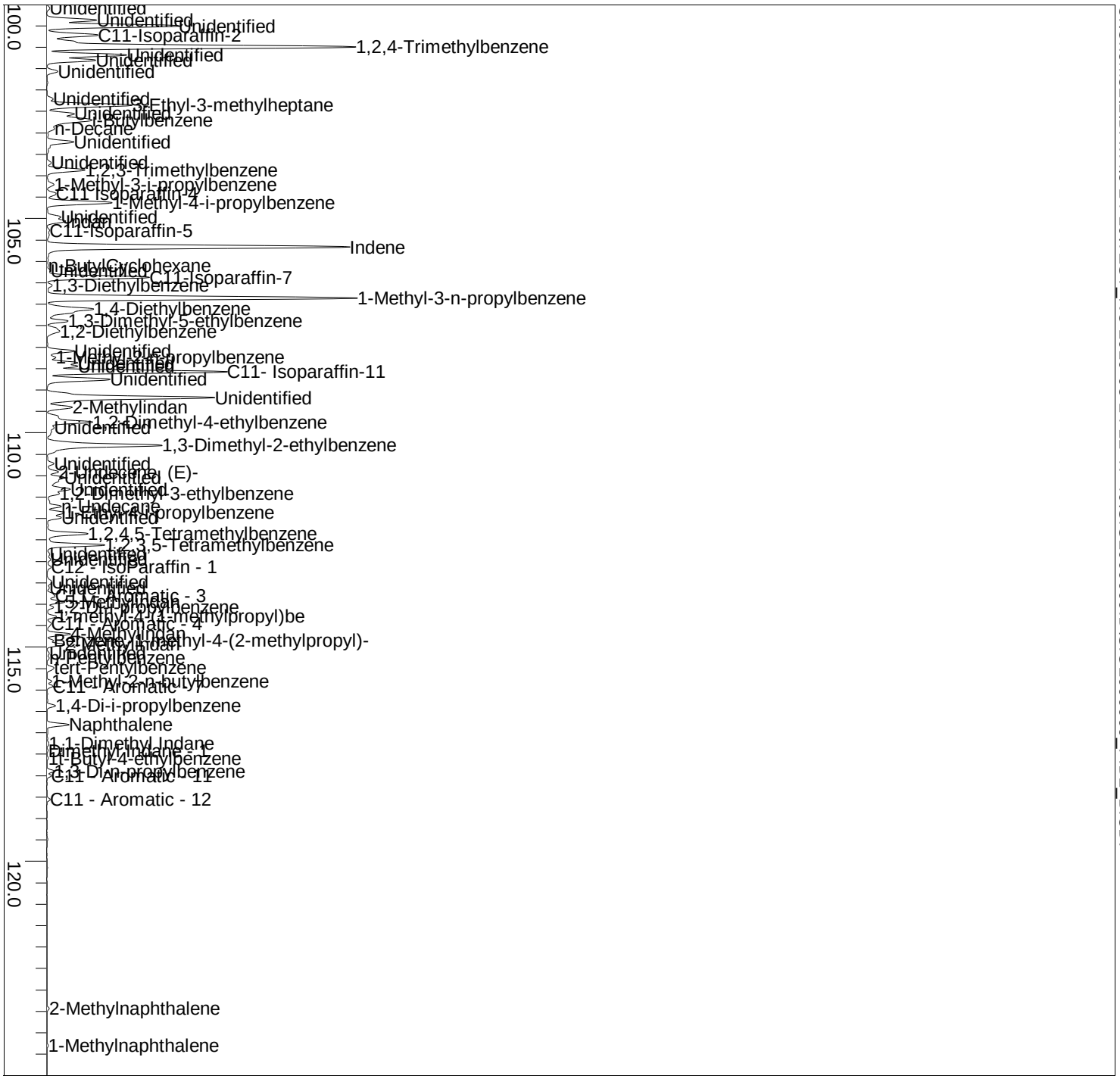
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000009.D\SIG2000009_FID2_B.CDF 25-Aug-10, 08:35:09
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram



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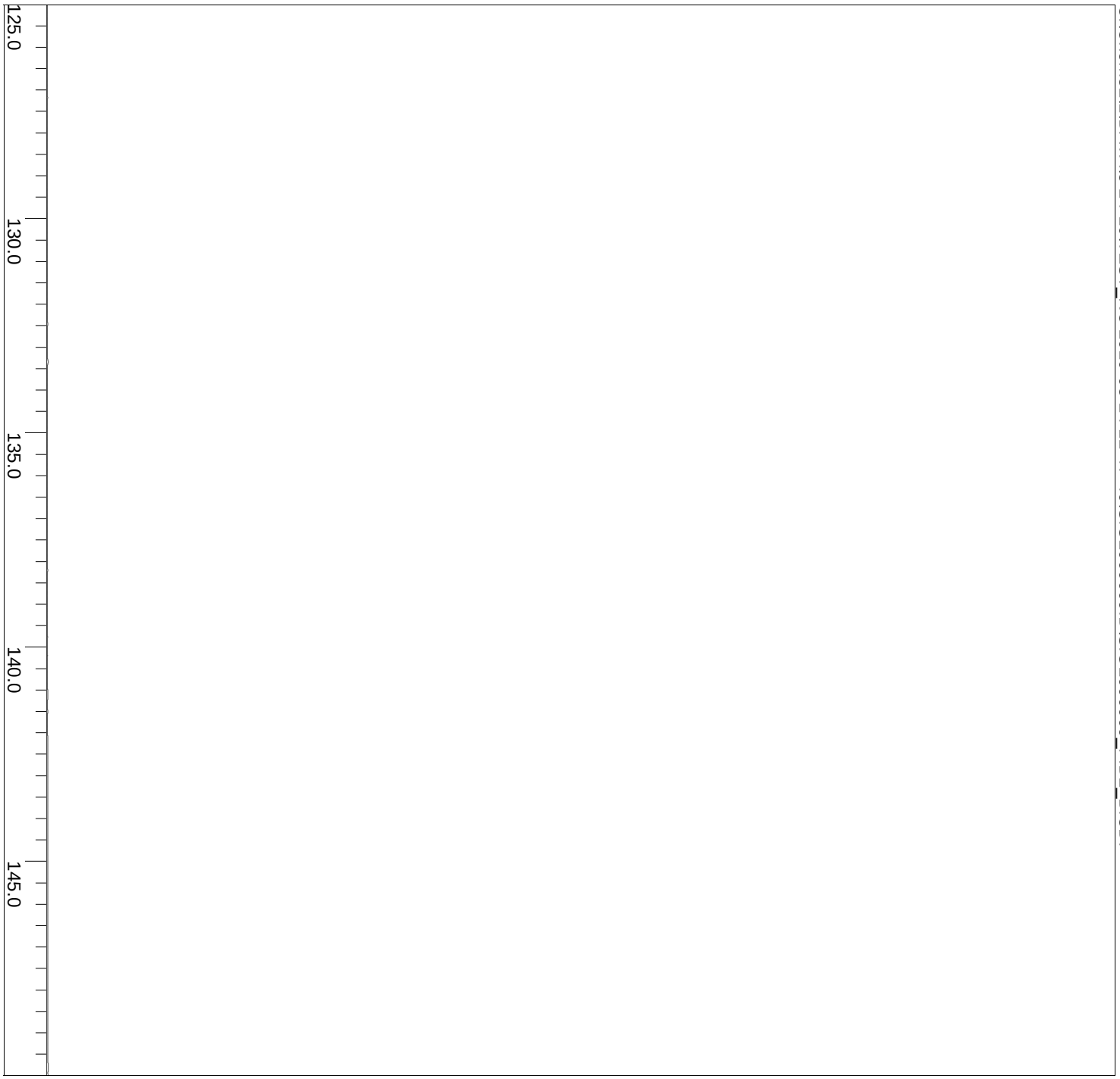
Sample: ODDB-91327 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91327
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	8.442	10.248	9.404
I-Paraffins	28.876	31.453	21.590
Aromatics	23.029	19.560	16.025
Mono-Aromatics	20.934	17.927	14.709
Naphthalenes	0.092	0.067	0.054
Naphtheno/Olefino-Benz	0.183	0.153	0.106
Indenes	1.820	1.413	1.156
Naphthenes	3.829	3.738	3.170
Mono-Naphthenes	3.829	3.738	3.170
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.571	8.311	7.472
n-Olefins	3.228	3.620	3.236
Iso-Olefins	3.585	3.960	3.487
Naphtheno-Olefins	0.716	0.687	0.705
Di-Olefins	0.042	0.044	0.044
Oxygenates	23.072	21.767	38.167
Unidentified	5.181	4.922	4.172
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	22.944	21.648	38.018
C3	0.078	0.077	0.102
C4	4.935	6.318	6.476
C5	9.429	11.020	10.102
C6	12.051	12.985	10.847
C7	10.196	9.729	8.152
C8	16.487	16.257	11.313
C9	6.308	5.658	3.949
C10	10.732	9.825	6.046
C11	1.504	1.427	0.751
C12	0.154	0.133	0.072

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.007	0.010	0.011
	C4	4.614	5.935	6.060
	C5	1.445	1.718	1.529
	C6	0.910	1.027	0.806
	C7	0.583	0.635	0.444
	C8	0.536	0.568	0.358
	C9	0.228	0.237	0.136
	C10	0.039	0.040	0.021
	C11	0.080	0.080	0.039
I-Paraffins	C4	0.066	0.088	0.086
	C5	4.094	4.919	4.331
	C6	6.112	6.917	5.414
	C7	2.180	2.390	1.661
	C8	9.730	10.289	6.502
	C9	1.206	1.261	0.718
	C10	4.570	4.670	2.429
	C11	0.890	0.891	0.435
	C12	0.029	0.029	0.013
Mono-Aromatics	C6	0.772	0.654	0.755
	C7	5.223	4.484	4.327
	C8	5.679	4.879	4.084
	C9	4.729	4.044	3.004
	C10	3.964	3.389	2.254
	C11	0.442	0.372	0.228
	C12	0.125	0.104	0.059
Naphthalenes	C10	0.076	0.055	0.045
	C11	0.016	0.012	0.009
Naphtheno/Olefino-Benzs	C10	0.183	0.153	0.106
Indenes	C9	0.099	0.076	0.064
	C10	1.702	1.322	1.083
	C11	0.019	0.015	0.010
Mono-Naphthenes	C5	0.175	0.175	0.190
	C6	1.607	1.578	1.457
	C7	1.439	1.405	1.119
	C8	0.512	0.493	0.348
	C9	0.045	0.040	0.027

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C10	0.051	0.048	0.028
n-Olefins	C4	0.200	0.244	0.271
	C5	1.675	1.922	1.823
	C6	1.053	1.147	0.955
	C7	0.099	0.105	0.077
	C10	0.144	0.145	0.078
	C11	0.057	0.057	0.031
Iso-Olefins	C5	1.807	2.056	1.967
	C6	1.087	1.175	0.986
	C7	0.657	0.696	0.511
	C8	0.030	0.029	0.020
	C10	0.004	0.004	0.002
Naphtheno-Olefins	C5	0.207	0.201	0.232
	C6	0.509	0.487	0.473
Di-Olefins	C5	0.026	0.029	0.030
	C7	0.015	0.015	0.014
Oxygenates	C2	22.944	21.648	38.018
	C3	0.072	0.067	0.091
	C4	0.056	0.052	0.058

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.55	21.29
5%	55.00	29.21
10%	87.23	80.98
15%	134.26	97.23
20%	144.68	138.35
25%	161.44	146.09
30%	172.42	172.23
35%	172.66	172.48
40%	172.89	172.73
45%	173.13	172.98
50%	176.90	173.23
55%	209.58	197.14
60%	228.87	210.20
65%	231.05	230.83
70%	251.09	236.75
75%	281.64	277.01
80%	321.45	296.60
85%	332.47	332.04
90%	352.22	349.06
95%	363.20	363.20
FBP	399.20	388.21

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.554	74-98-6	P3	Propane	0.007	0.010	0.011	1.701
2	8.810	75-28-5	I4	i-Butane	0.066	0.088	0.086	17.158
3	9.623	115-11-7	K4	Isobutene	0.017	0.021	0.023	4.515
4	9.665	106-98-9	K4	Butene-1	0.019	0.023	0.025	5.019
5	10.024	106-97-8	P4	n-Butane	4.614	5.935	6.060	1204.963
6	10.510	624-64-6	K4	t-Butene-2	0.075	0.093	0.103	20.396
7	10.638	463-82-1	I5	2,2-Dimethylpropane	0.015	0.019	0.016	4.020
8	11.251	590-18-1	K4	c-Butene-2	0.089	0.107	0.121	24.042
9	13.131	64-17-5	X2	Ethanol	22.944	21.648	38.018	2555.264
10	13.452	563-45-1	C5	3-Methylbutene-1	0.232	0.275	0.252	62.689
11	15.076	78-78-4	I5	i-Pentane	4.078	4.900	4.315	1072.411
12	16.727	109-67-1	K5	Pentene-1	0.340	0.395	0.370	91.909
13	17.580	563-46-2	C5	2-Methylbutene-1	0.516	0.591	0.562	139.634
14	18.113	109-66-0	P5	n-Pentane	1.445	1.718	1.529	379.903
15	18.625	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	2.953
16	19.230	646-04-8	K5	t-Pentene-2	0.862	0.991	0.939	233.275
17	19.879		?	Unidentified	0.006	0.007	0.006	1.958
18	20.266	627-20-3	K5	c-Pentene-2	0.473	0.537	0.515	127.890
19	20.943	513-35-9	C5	2-Methylbutene-2	1.059	1.190	1.153	286.406
20	21.271	2004-70-8	E5	1t,3-Pentadiene	0.016	0.017	0.018	4.394
21	22.536	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.008	1.968
22	23.092	75-83-2	I6	2,2-Dimethylbutane	0.113	0.130	0.100	29.814
23	25.743	142-29-0	B5	Cyclopentene	0.200	0.193	0.224	55.693
24	26.906	71-23-8	X3	n-Propanol	0.072	0.067	0.091	13.578
25	26.995		?	Unidentified	0.063	0.070	0.057	20.863
26	27.608	287-92-3	M5	Cyclopentane	0.175	0.175	0.190	47.269
27	28.339	79-29-8	I6	2,3-Dimethylbutane	0.972	1.094	0.861	256.713
28	28.734		?	Unidentified	0.054	0.054	0.047	17.816
29	29.192	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.051	0.042	12.573
30	29.421	107-83-5	I6	2-Methylpentane	3.123	3.560	2.766	824.449
31	29.842	674-76-0	C6	4-Methyl-t-pentene-2	0.133	0.147	0.120	35.928
32	32.069	96-14-0	I6	3-Methylpentane	1.904	2.134	1.687	502.653
33	33.228	763-29-1	C6	2-Methylpentene-1	0.227	0.247	0.206	61.460
34	33.451	592-41-6	K6	Hexene-1	0.162	0.178	0.147	43.792
35	35.640	760-21-4	C6	2-Ethylbutene-1	0.069	0.074	0.063	18.732
36	35.803	110-54-3	P6	n-Hexane	0.910	1.027	0.806	240.197
37	36.440	13269-52-8	K6	t-Hexene-3	0.266	0.291	0.242	72.033
38	36.917	4050-45-7	K6	t-Hexene-2	0.409	0.446	0.371	110.534
39	37.040	1120-62-3	B6	3-Methylcyclopentene	0.101	0.099	0.094	27.386
40	37.407	625-27-4	C6	2-Methylpentene-2	0.345	0.371	0.313	93.283
41	37.820	922-62-3	C6	3-Methyl-c-pentene-2	0.267	0.284	0.242	72.114
42	38.745	7688-21-3	K6	c-Hexene-2	0.216	0.233	0.196	58.516
43	40.088	3404-73-7	C7	3,3-Dimethylpentene-1	0.313	0.332	0.244	84.790

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.670	96-37-7	M6	Methylcyclopentane	1.090	1.084	0.988	294.735
45	42.232	108-08-7	I7	2,4-Dimethylpentane	0.601	0.665	0.457	159.170
46	42.534	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.014	0.011	3.697
47	42.781	464-06-2	I7	2,2,3-Trimethylbutane	0.040	0.043	0.030	10.557
48	45.426	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	4.127
49	45.640	71-42-3	Q6	Benzene	0.772	0.654	0.755	224.957
50	45.831	693-89-0	B6	1-Methylcyclopentene	0.363	0.347	0.338	100.596
51	46.640	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.012	4.332
52	47.229	3524-73-0	C7	5-Methylhexene-1	0.042	0.045	0.033	11.398
53	47.552	110-82-7	M6	Cyclohexane	0.517	0.494	0.469	139.804
54	48.062	71-36-3	X4	n-Butanol	0.056	0.052	0.058	11.447
55	49.273	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.032	11.021
56	49.621	3769-23-1	C7	4-Methylhexene-1	0.012	0.012	0.009	3.163
57	50.266	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.054	0.040	13.783
58	50.668	591-76-4	I7	2-Methylhexane	1.029	1.129	0.784	272.854
59	50.839		?	Unidentified	0.043	0.046	0.034	14.280
60	51.153	110-83-8	B6	Cyclohexene	0.045	0.041	0.042	12.089
61	52.493	589-34-4	I7	3-Methylhexane	0.510	0.553	0.389	135.220
62	53.353	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.157	0.156	0.122	42.341
63	53.940	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.120	0.120	0.094	32.543
64	54.564	822-50-4	M7	1t,2-Dimethylcyclopentane	0.165	0.163	0.128	44.508
65	54.862		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.018	6.144
66	55.178	540-84-1	I8	2,2,4-Trimethylpentane	4.298	4.625	2.872	1141.598
67	55.472	592-76-7	K7	Heptene-1	0.030	0.032	0.023	7.979
68	56.802	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.774
69	57.333	14686-14-7	K7	t-Heptene-3	0.032	0.034	0.025	8.645
70	57.684	6094-02-6	C7	2-Methylhexene-1	0.058	0.061	0.045	15.564
71	58.058	142-82-5	P7	n-Heptane	0.583	0.635	0.444	154.512
72	58.275	7642-10-6	K7	c-Heptene-3	0.025	0.026	0.019	6.714
73	58.548	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.020	7.127
74	58.793	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.021	0.016	5.430
75	59.174	14686-13-6	K7	t-Heptene-2	0.012	0.013	0.010	3.370
76	59.651	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.014	4.977
77	60.077	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.015	0.012	4.029
78	60.861	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.566
79	61.519	108-87-2	M7	Methylcyclohexane	0.929	0.899	0.722	251.207
80	62.460	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.028	0.027	0.019	7.456
81	62.848	590-73-8	I8	2,2-Dimethylhexane	0.026	0.027	0.017	6.784
82	63.362		?	Unidentified	0.054	0.055	0.037	17.764
83	64.297	1640-89-7	M7	Ethylcyclopentane	0.051	0.049	0.039	13.665
84	64.948	564-02-3	I8	2,2,3-Trimethylpentane	0.210	0.218	0.140	55.721
85	65.174	592-13-2	I8	2,5-Dimethylhexane	0.521	0.559	0.348	138.296
86	65.511	589-43-5	I8	2,4-Dimethylhexane	0.515	0.548	0.344	136.793

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.347	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.028	0.028	0.019	7.682
88	66.741	563-16-6	I8	3,3-Dimethylhexane	0.019	0.020	0.013	5.176
89	67.861	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.025	0.024	0.017	6.762
90	68.482	565-75-3	I8	2,3,4-Trimethylpentane	1.575	1.631	1.052	418.284
91	69.022	108-88-3	Q7	Toluene	5.223	4.484	4.327	1504.641
92	69.155	560-21-4	I8	2,3,3-Trimethylpentane	1.461	1.497	0.976	387.960
93	70.515		C8	C8 - Diolefin - 1	0.011	0.011	0.008	3.012
94	70.794	584-94-1	I8	2,3-Dimethylhexane	0.448	0.468	0.299	119.005
95	72.048	592-27-8	I8	2-Methylheptane	0.231	0.247	0.155	61.459
96	72.305	589-53-7	I8	4-Methylheptane	0.118	0.125	0.079	31.458
97	72.450		?	Unidentified	0.034	0.035	0.023	11.233
98	73.225		M8	1,3-dimethyl-t-cyclohexane	0.174	0.168	0.118	47.086
99	73.361	589-81-1	I8	3-Methylheptane	0.199	0.210	0.133	52.857
100	73.563	619-99-8	I8	3-Ethylhexane	0.108	0.113	0.072	28.780
101	74.459		?	Unidentified	0.028	0.027	0.019	9.378
102	75.250	3522-94-9	I9	2,2,5-Trimethylhexane	0.614	0.647	0.366	163.444
103	75.610		M8	3c-Ethylmethylcyclopentane	0.010	0.010	0.007	2.811
104	75.826		M8	3t-Ethylmethylcyclopentane	0.015	0.014	0.010	4.004
105	76.531	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.081	0.077	0.055	21.835
106	77.871	111-65-9	P8	n-Octane	0.536	0.568	0.358	142.302
107	78.825		?	Unidentified	0.015	0.014	0.010	4.921
108	80.353	1069-53-0	I9	2,3,5-Trimethylhexane	0.091	0.094	0.054	24.323
109	80.907		C8	C9 - IsoOlefin - 1	0.019	0.018	0.013	5.122
110	81.367	2207-01-4	M8	1c,2-Dimethylcyclohexane	0.016	0.015	0.011	4.345
111	81.521	1071-26-7	I9	2,4-Dimethylheptane	0.042	0.044	0.025	11.173
112	82.175	1678-91-7	M8	Ethylcyclohexane	0.135	0.128	0.092	36.557
113	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.071	0.074	0.042	18.848
114	82.976		?	Unidentified	0.029	0.028	0.020	9.515
115	83.405		I9	2,5-Dimethylheptane	0.109	0.113	0.065	28.886
116	83.599	926-82-9	I9	3,5-Dimethylheptane	0.021	0.022	0.013	5.632
117	84.731	100-41-4	Q8	Ethylbenzene	1.023	0.879	0.736	292.627
118	85.151		?	Unidentified	0.035	0.033	0.021	11.579
119	85.955	108-38-3	Q8	m-Xylene	2.607	2.245	1.874	745.305
120	86.102	106-42-3	Q8	p-Xylene	1.167	1.009	0.839	333.671
121	86.231		?	Unidentified	0.035	0.036	0.021	11.662
122	86.597		?	Unidentified	0.013	0.012	0.008	4.302
123	86.754		I9	3,5-Dimethylheptane	0.012	0.012	0.007	3.080
124	86.881	1067-20-5	I9	3,3-Diethylpentane	0.010	0.010	0.006	2.658
125	87.274	2216-34-4	I9	4-Methyloctane	0.062	0.064	0.037	16.590
126	87.406	3221-61-2	I9	2-Methyloctane	0.083	0.086	0.049	21.964
127	88.107	15869-80-4	I9	Heptane, 3-ethyl-	0.011	0.012	0.007	3.059
128	88.269	2216-33-3	I9	3-Methyloctane	0.080	0.083	0.048	21.320
129	88.745		?	Unidentified	0.020	0.022	0.012	6.576

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	88.929	95-47-6	Q8	o-Xylene	0.882	0.746	0.634	252.297
131	89.321		I10	C10 - IsoParaffin - 1	0.079	0.081	0.043	21.135
132	89.910		M9	trans-1,3-Diethylcyclopentane	0.020	0.017	0.012	5.700
133	90.168	14720-74-2	I10	2,2,4-trimethylheptane	0.076	0.077	0.041	20.149
134	91.741	111-84-2	P9	n-Nonane	0.228	0.237	0.136	60.760
135	92.337	4926-90-3	M9	1,1-Methylethylcyclohexane	0.022	0.020	0.013	5.903
136	93.094	98-82-8	Q9	i-Propylbenzene	0.032	0.028	0.020	9.119
137	93.272		?	Unidentified	0.009	0.008	0.005	2.922
138	93.272		?	Unidentified	0.009	0.009	0.005	2.922
139	93.272		?	Unidentified	0.009	0.007	0.005	2.922
140	93.383	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.004	0.003	0.002	0.964
141	93.383		C10	C10-IsoOlefin-4	0.004	0.004	0.002	0.964
142	93.383		I10	C10-isoparaffin-x	0.000	0.000	0.000	0.964
143	93.842		?	Unidentified	0.145	0.149	0.078	47.973
144	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.054	0.055	0.029	14.377
145	94.526		?	Unidentified	0.018	0.013	1.379	5.984
146	94.526		?	Unidentified	0.018	0.019	0.010	5.984
147	94.723		?	Unidentified	0.012	0.011	0.007	3.928
148	94.861	15869-89-3	I10	2,5-Dimethyloctane	0.074	0.075	0.040	19.743
149	95.325	2040-95-1	I10	2,7-Dimethyloctane	0.047	0.048	0.025	12.470
150	95.508	2051-30-1	I10	2,4-Dimethyloctane	0.220	0.225	0.118	58.706
151	95.894		I10	2,6-Dimethyloctane	0.068	0.070	0.037	18.212
152	96.058		I10	C10 Isoparaffin -1	0.006	0.006	0.003	1.626
153	96.555	103-65-1	Q9	n-Propylbenzene	0.291	0.251	0.185	82.590
154	96.753		I10	3-Methyl-5-ethylheptane	0.007	0.007	0.004	1.939
155	97.400	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.011	0.871	0.642	287.357
156	97.634	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.459	0.397	0.292	130.475
157	98.259	108-67-8	Q9	1,3,5-Trimethylbenzene	0.654	0.562	0.415	185.717
158	98.721	15869-85-9	I10	5-Methylnonane	0.009	0.009	0.005	2.455
159	98.913	17301-94-8	I10	4-Methylnonane	0.020	0.020	0.011	5.312
160	99.135		I10	2,2,6-Trimethyloctane	3.428	3.513	1.839	914.097
161	99.345	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.339	0.287	0.215	96.348
162	99.707		?	Unidentified	0.011	0.011	0.006	3.555
163	99.888	5911-04-6	I10	3-Methylnonane	0.020	0.021	0.011	5.423
164	100.073		?	Unidentified	0.011	0.012	0.006	3.778
165	100.354		?	Unidentified	0.201	0.150	0.098	66.600
166	100.487		?	Unidentified	0.542	0.542	0.265	179.602
167	100.702		I11	C11-Isoparaffin-2	0.287	0.287	0.140	76.574
168	100.978	95-63-6	Q9	1,2,4-Trimethylbenzene	1.723	1.465	1.094	489.529
169	101.168		?	Unidentified	0.328	0.348	0.179	108.674
170	101.290		?	Unidentified	0.194	0.197	0.104	64.374
171	101.552	1678-98-4	M10	i-Butylcyclohexane	0.051	0.048	0.028	13.834
172	102.194		?	Unidentified	0.020	0.019	0.011	6.790

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	102.339	17302-01-1	I10	3-Ethyl-3-methylheptane	0.461	0.461	0.225	123.016
174	102.545		?	Unidentified	0.118	0.118	0.058	39.022
175	102.689	538-93-2	Q10	i-Butylbenzene	0.347	0.302	0.197	97.929
176	102.890	124-18-5	P10	n-Decane	0.039	0.040	0.021	10.415
177	103.199		K10	3-Decene	0.144	0.145	0.078	38.585
178	103.688		?	Unidentified	0.016	0.013	0.010	5.353
179	103.853	526-73-8	Q9	1,2,3-Trimethylbenzene	0.220	0.183	0.140	62.413
180	104.194	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.034	0.029	0.019	9.531
181	104.410		I11	C11 Isoparaffin-4	0.053	0.053	0.026	14.271
182	104.618	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.319	0.277	0.182	90.254
183	104.955		?	Unidentified	0.053	0.041	0.034	17.430
184	105.051		J9	Indan	0.099	0.076	0.064	28.493
185	105.264		I11	C11-Isoparaffin-5	0.023	0.023	0.011	6.189
186	105.649		J10	Indene	1.454	1.123	0.939	419.908
187	106.203		?	Unidentified	0.010	0.009	0.005	3.239
188	106.361		I11	C11-Isoparaffin-7	0.527	0.527	0.257	140.559
189	106.551	141-93-5	Q10	1,3-Diethylbenzene	0.026	0.022	0.015	7.353
190	106.845	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.510	1.306	0.859	426.818
191	107.104		?	Unidentified	0.330	0.285	0.188	109.282
192	107.385	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.097	0.082	0.055	27.534
193	107.619		?	Unidentified	0.086	0.073	0.049	28.581
194	108.083		?	Unidentified	0.112	0.112	0.055	37.220
195	108.236	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.042	0.035	0.024	11.738
196	108.358		?	Unidentified	0.119	0.119	0.059	39.323
197	108.437		?	Unidentified	0.109	0.109	0.053	36.190
198	108.567		?	Unidentified	0.712	0.712	0.348	235.829
199	108.746		?	Unidentified	0.277	0.277	0.135	91.656
200	109.170		?	Unidentified	0.809	0.686	0.460	267.972
201	109.396		J10	2-Methylindan	0.129	0.099	0.074	37.142
202	109.742	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.308	0.262	0.175	86.893
203	109.875		?	Unidentified	0.038	0.032	0.021	12.507
204	110.287	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.677	0.566	0.385	191.360
205	110.711		?	Unidentified	0.024	0.021	0.012	7.789
206	110.906	693-61-8	K11	2-Undecene, (E)-	0.057	0.057	0.031	15.290
207	111.039		?	Unidentified	0.130	0.130	0.071	42.983
208	111.310		?	Unidentified	0.115	0.096	0.059	38.040
209	111.410	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.068	0.057	0.039	19.159
210	111.711	1120-21-4	P11	n-Undecane	0.080	0.080	0.039	21.346
211	111.862	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.093	0.078	0.048	26.102
212	111.974		?	Unidentified	0.062	0.052	0.032	20.511
213	112.350		Q10	1,2,4,5-Tetramethylbenzene	0.230	0.193	0.131	64.991
214	112.614	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.306	0.256	0.174	86.457
215	112.824		?	Unidentified	0.013	0.011	0.007	4.221

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	112.956		?	Unidentified	0.016	0.014	0.009	5.448
217	113.131		I12	C12 - IsoParaffin - 1	0.024	0.024	0.011	6.451
218	113.478		?	Unidentified	0.030	0.030	0.013	9.950
219	113.612		?	Unidentified	0.011	0.011	0.005	3.506
220	113.807		Q11	C11 - Aromatic - 3	0.068	0.057	0.035	19.167
221	113.945	874-35-1	H10	5-Methylindan	0.092	0.077	0.053	25.988
222	114.070		Q12	1,2-Di-i-propylbenzene	0.040	0.033	0.019	11.173
223	114.285	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.055	0.046	0.028	15.382
224	114.453		Q11	C11 - Aromatic - 4	0.035	0.029	0.018	9.711
225	114.695	824-22-6	J10	4-Methylindan	0.119	0.100	0.069	33.675
226	114.848	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.034	0.029	0.018	9.688
227	114.942	824-63-5	H10	2-Methylindan	0.091	0.076	0.053	25.695
228	115.145		?	Unidentified	0.012	0.010	0.006	3.878
229	115.259	538-68-1	Q11	n-Pentylbenzene	0.014	0.011	0.007	3.821
230	115.487		Q11	tert-Pentylbenzene	0.054	0.045	0.028	15.200
231	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.023	0.019	0.012	6.497
232	115.909		Q11	C11 - Aromatic - 7	0.037	0.033	0.019	10.467
233	116.250		I12	C12 - IsoParaffin - 4	0.005	0.005	0.002	1.358
234	116.368	100-18-5	Q12	1,4-Di-i-propylbenzene	0.044	0.037	0.021	12.304
235	116.810	91-20-3	G10	Naphthalene	0.076	0.055	0.045	22.500
236	116.944		?	Unidentified	0.010	0.010	0.005	3.372
237	117.241		J11	1,1-Dimethyl Indane	0.019	0.015	0.010	5.459
238	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.009	0.007	0.004	2.392
239	117.893		Q12	1,3-Di-n-propylbenzene	0.033	0.027	0.015	9.141
240	118.005		Q11	C11 - Aromatic - 11	0.018	0.016	0.009	5.002
241	118.558		Q11	C11 - Aromatic - 12	0.012	0.010	0.006	3.343
242	123.441	91-57-6	G11	2-Methylnaphthalene	0.011	0.008	0.006	3.218
243	124.306	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.499
244	126.297		?	Unidentified	0.004	0.004	0.002	1.445
245	126.297		?	Unidentified	0.004	0.004	0.002	1.445
246	126.297		?	Unidentified	0.004	0.004	0.002	1.445
247	130.003		?	Unidentified	0.003	0.002	0.002	1.030

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.007	0.010	0.011	1.701
	10.024	106-97-8	n-Butane	4.614	5.935	6.060	1204.963
	18.113	109-66-0	n-Pentane	1.445	1.718	1.529	379.903
	35.803	110-54-3	n-Hexane	0.910	1.027	0.806	240.197
	58.058	142-82-5	n-Heptane	0.583	0.635	0.444	154.512
	77.871	111-65-9	n-Octane	0.536	0.568	0.358	142.302
	91.741	111-84-2	n-Nonane	0.228	0.237	0.136	60.760
	102.890	124-18-5	n-Decane	0.039	0.040	0.021	10.415
	111.711	1120-21-4	n-Undecane	0.080	0.080	0.039	21.346
I-Paraffins	8.810	75-28-5	i-Butane	0.066	0.088	0.086	17.158
	10.638	463-82-1	2,2-Dimethylpropane	0.015	0.019	0.016	4.020
	15.076	78-78-4	i-Pentane	4.078	4.900	4.315	1072.411
	23.092	75-83-2	2,2-Dimethylbutane	0.113	0.130	0.100	29.814
	28.339	79-29-8	2,3-Dimethylbutane	0.972	1.094	0.861	256.713
	29.421	107-83-5	2-Methylpentane	3.123	3.560	2.766	824.449
	32.069	96-14-0	3-Methylpentane	1.904	2.134	1.687	502.653
	42.232	108-08-7	2,4-Dimethylpentane	0.601	0.665	0.457	159.170
	42.781	464-06-2	2,2,3-Trimethylbutane	0.040	0.043	0.030	10.557
	50.668	591-76-4	2-Methylhexane	1.029	1.129	0.784	272.854
	52.493	589-34-4	3-Methylhexane	0.510	0.553	0.389	135.220
	55.178	540-84-1	2,2,4-Trimethylpentane	4.298	4.625	2.872	1141.598
	62.848	590-73-8	2,2-Dimethylhexane	0.026	0.027	0.017	6.784
	64.948	564-02-3	2,2,3-Trimethylpentane	0.210	0.218	0.140	55.721
	65.174	592-13-2	2,5-Dimethylhexane	0.521	0.559	0.348	138.296
	65.511	589-43-5	2,4-Dimethylhexane	0.515	0.548	0.344	136.793
	66.741	563-16-6	3,3-Dimethylhexane	0.019	0.020	0.013	5.176
	68.482	565-75-3	2,3,4-Trimethylpentane	1.575	1.631	1.052	418.284
	69.155	560-21-4	2,3,3-Trimethylpentane	1.461	1.497	0.976	387.960
	70.794	584-94-1	2,3-Dimethylhexane	0.448	0.468	0.299	119.005
	72.048	592-27-8	2-Methylheptane	0.231	0.247	0.155	61.459
	72.305	589-53-7	4-Methylheptane	0.118	0.125	0.079	31.458
	73.361	589-81-1	3-Methylheptane	0.199	0.210	0.133	52.857
	73.563	619-99-8	3-Ethylhexane	0.108	0.113	0.072	28.780
	75.250	3522-94-9	2,2,5-Trimethylhexane	0.614	0.647	0.366	163.444
	80.353	1069-53-0	2,3,5-Trimethylhexane	0.091	0.094	0.054	24.323
	81.521	1071-26-7	2,4-Dimethylheptane	0.042	0.044	0.025	11.173
	82.476	1072-05-5	2,6-Dimethylheptane	0.071	0.074	0.042	18.848
	83.405		2,5-Dimethylheptane	0.109	0.113	0.065	28.886
	83.599	926-82-9	3,5-Dimethylheptane	0.021	0.022	0.013	5.632
	86.754		3,5-Dimethylheptane	0.012	0.012	0.007	3.080
	86.881	1067-20-5	3,3-Diethylpentane	0.010	0.010	0.006	2.658
	87.274	2216-34-4	4-Methyloctane	0.062	0.064	0.037	16.590
	87.406	3221-61-2	2-Methyloctane	0.083	0.086	0.049	21.964
	88.107	15869-80-4	Heptane, 3-ethyl-	0.011	0.012	0.007	3.059
	88.269	2216-33-3	3-Methyloctane	0.080	0.083	0.048	21.320
	89.321		C10 - IsoParaffin - 1	0.079	0.081	0.043	21.135

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	90.168	14720-74-2	2,2,4-trimethylheptane	0.076	0.077	0.041	20.149
	93.383		C10-isoparaffin-x	0.000	0.000	0.000	0.964
	94.064	15869-87-1	2,2-Dimethyloctane	0.054	0.055	0.029	14.377
	94.861	15869-89-3	2,5-Dimethyloctane	0.074	0.075	0.040	19.743
	95.325	2040-95-1	2,7-Dimethyloctane	0.047	0.048	0.025	12.470
	95.508	2051-30-1	2,4-Dimethyloctane	0.220	0.225	0.118	58.706
	95.894		2,6-Dimethyloctane	0.068	0.070	0.037	18.212
	96.058		C10 Isoparaffin -1	0.006	0.006	0.003	1.626
	96.753		3-Methyl-5-ethylheptane	0.007	0.007	0.004	1.939
	98.721	15869-85-9	5-Methylnonane	0.009	0.009	0.005	2.455
	98.913	17301-94-8	4-Methylnonane	0.020	0.020	0.011	5.312
	99.135		2,2,6-Trimethyloctane	3.428	3.513	1.839	914.097
	99.888	5911-04-6	3-Methylnonane	0.020	0.021	0.011	5.423
	100.702		C11-Isoparaffin-2	0.287	0.287	0.140	76.574
	102.339	17302-01-1	3-Ethyl-3-methylheptane	0.461	0.461	0.225	123.016
	104.410		C11 Isoparaffin-4	0.053	0.053	0.026	14.271
	105.264		C11-Isoparaffin-5	0.023	0.023	0.011	6.189
	106.361		C11-Isoparaffin-7	0.527	0.527	0.257	140.559
	113.131		C12 - IsoParaffin - 1	0.024	0.024	0.011	6.451
	116.250		C12 - IsoParaffin - 4	0.005	0.005	0.002	1.358
Aromatics							
Mono-Aromatics	45.640	71-42-3	Benzene	0.772	0.654	0.755	224.957
	69.022	108-88-3	Toluene	5.223	4.484	4.327	1504.641
	84.731	100-41-4	Ethylbenzene	1.023	0.879	0.736	292.627
	85.955	108-38-3	m-Xylene	2.607	2.245	1.874	745.305
	86.102	106-42-3	p-Xylene	1.167	1.009	0.839	333.671
	88.929	95-47-6	o-Xylene	0.882	0.746	0.634	252.297
	93.094	98-82-8	i-Propylbenzene	0.032	0.028	0.020	9.119
	96.555	103-65-1	n-Propylbenzene	0.291	0.251	0.185	82.590
	97.400	620-14-4	1-Methyl-3-ethylbenzene	1.011	0.871	0.642	287.357
	97.634	622-96-8	1-Methyl-4-ethylbenzene	0.459	0.397	0.292	130.475
	98.259	108-67-8	1,3,5-Trimethylbenzene	0.654	0.562	0.415	185.717
	99.345	611-14-3	1-Methyl-2-ethylbenzene	0.339	0.287	0.215	96.348
	100.978	95-63-6	1,2,4-Trimethylbenzene	1.723	1.465	1.094	489.529
	102.689	538-93-2	i-Butylbenzene	0.347	0.302	0.197	97.929
	103.853	526-73-8	1,2,3-Trimethylbenzene	0.220	0.183	0.140	62.413
	104.194	535-77-3	1-Methyl-3-i-propylbenzene	0.034	0.029	0.019	9.531
	104.618	99-87-6	1-Methyl-4-i-propylbenzene	0.319	0.277	0.182	90.254
	106.551	141-93-5	1,3-Diethylbenzene	0.026	0.022	0.015	7.353
	106.845	1074-43-7	1-Methyl-3-n-propylbenzene	1.510	1.306	0.859	426.818
	107.385	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.097	0.082	0.055	27.534
	108.236	1074-17-5	1-Methyl-2-n-propylbenzene	0.042	0.035	0.024	11.738
	109.742	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.308	0.262	0.175	86.893
	110.287	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.677	0.566	0.385	191.360
	111.410	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.068	0.057	0.039	19.159
	111.862	4218-48-8	1-Ethyl-4-i-propylbenzene	0.093	0.078	0.048	26.102

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	112.350		1,2,4,5-Tetramethylbenzene	0.230	0.193	0.131	64.991
	112.614	527-53-7	1,2,3,5-Tetramethylbenzene	0.306	0.256	0.174	86.457
	113.807		C11 - Aromatic - 3	0.068	0.057	0.035	19.167
	114.070		1,2-Di-i-propylbenzene	0.040	0.033	0.019	11.173
	114.285	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.055	0.046	0.028	15.382
	114.453		C11 - Aromatic - 4	0.035	0.029	0.018	9.711
	114.848	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.034	0.029	0.018	9.688
	115.259	538-68-1	n-Pentylbenzene	0.014	0.011	0.007	3.821
	115.487		tert-Pentylbenzene	0.054	0.045	0.028	15.200
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.023	0.019	0.012	6.497
	115.909		C11 - Aromatic - 7	0.037	0.033	0.019	10.467
	116.368	100-18-5	1,4-Di-i-propylbenzene	0.044	0.037	0.021	12.304
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.009	0.007	0.004	2.392
	117.893		1,3-Di-n-propylbenzene	0.033	0.027	0.015	9.141
	118.005		C11 - Aromatic - 11	0.018	0.016	0.009	5.002
	118.558		C11 - Aromatic - 12	0.012	0.010	0.006	3.343
Naphthalenes	116.810	91-20-3	Naphthalene	0.076	0.055	0.045	22.500
	123.441	91-57-6	2-Methylnaphthalene	0.011	0.008	0.006	3.218
	124.306	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.499
Naphtheno/Olefir	113.945	874-35-1	5-Methylindan	0.092	0.077	0.053	25.988
	114.942	824-63-5	2-Methylindan	0.091	0.076	0.053	25.695
Indenes	105.051		Indan	0.099	0.076	0.064	28.493
	105.649		Indene	1.454	1.123	0.939	419.908
	109.396		2-Methylindan	0.129	0.099	0.074	37.142
	114.695	824-22-6	4-Methylindan	0.119	0.100	0.069	33.675
	117.241		1,1-Dimethyl Indane	0.019	0.015	0.010	5.459
Naphthenes							
Mono-Naphthene	27.608	287-92-3	Cyclopentane	0.175	0.175	0.190	47.269
	40.670	96-37-7	Methylcyclopentane	1.090	1.084	0.988	294.735
	47.552	110-82-7	Cyclohexane	0.517	0.494	0.469	139.804
	53.353	1759-58-6	1t,3-Dimethylcyclopentane	0.157	0.156	0.122	42.341
	53.940	2532-58-3	1c,3-Dimethylcyclopentane	0.120	0.120	0.094	32.543
	54.564	822-50-4	1t,2-Dimethylcyclopentane	0.165	0.163	0.128	44.508
	59.651	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.014	4.977
	61.519	108-87-2	Methylcyclohexane	0.929	0.899	0.722	251.207
	62.460	4516-69-2	1,1,3-Trimethylcyclopentane	0.028	0.027	0.019	7.456
	64.297	1640-89-7	Ethylcyclopentane	0.051	0.049	0.039	13.665
	66.347	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.028	0.028	0.019	7.682
	67.861	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.025	0.024	0.017	6.762
	73.225		1,3-dimethyl-t-cyclohexane	0.174	0.168	0.118	47.086
	75.610		3c-Ethylmethylcyclopentane	0.010	0.010	0.007	2.811
	75.826		3t-Ethylmethylcyclopentane	0.015	0.014	0.010	4.004
	76.531	2207-03-6	1t,3-Dimethylcyclohexane	0.081	0.077	0.055	21.835

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	81.367	2207-01-4	1c,2-Dimethylcyclohexane	0.016	0.015	0.011	4.345
	82.175	1678-91-7	Ethylcyclohexane	0.135	0.128	0.092	36.557
	89.910		trans-1,3-Diethylcyclopentane	0.020	0.017	0.012	5.700
	92.337	4926-90-3	1,1-Methylethylcyclohexane	0.022	0.020	0.013	5.903
	93.383	696-29-7	1-Methyl-2-propyl-cyclopentan	0.004	0.003	0.002	0.964
	101.552	1678-98-4	i-Butylcyclohexane	0.051	0.048	0.028	13.834
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.623	115-11-7	Isobutene	0.017	0.021	0.023	4.515
	9.665	106-98-9	Butene-1	0.019	0.023	0.025	5.019
	10.510	624-64-6	t-Butene-2	0.075	0.093	0.103	20.396
	11.251	590-18-1	c-Butene-2	0.089	0.107	0.121	24.042
	16.727	109-67-1	Pentene-1	0.340	0.395	0.370	91.909
	19.230	646-04-8	t-Pentene-2	0.862	0.991	0.939	233.275
	20.266	627-20-3	c-Pentene-2	0.473	0.537	0.515	127.890
	33.451	592-41-6	Hexene-1	0.162	0.178	0.147	43.792
	36.440	13269-52-8	t-Hexene-3	0.266	0.291	0.242	72.033
	36.917	4050-45-7	t-Hexene-2	0.409	0.446	0.371	110.534
	38.745	7688-21-3	c-Hexene-2	0.216	0.233	0.196	58.516
	55.472	592-76-7	Heptene-1	0.030	0.032	0.023	7.979
	57.333	14686-14-7	t-Heptene-3	0.032	0.034	0.025	8.645
	58.275	7642-10-6	c-Heptene-3	0.025	0.026	0.019	6.714
	59.174	14686-13-6	t-Heptene-2	0.012	0.013	0.010	3.370
	103.199		3-Decene	0.144	0.145	0.078	38.585
	110.906	693-61-8	2-Undecene, (E)-	0.057	0.057	0.031	15.290
Iso-Olefins	13.452	563-45-1	3-Methylbutene-1	0.232	0.275	0.252	62.689
	17.580	563-46-2	2-Methylbutene-1	0.516	0.591	0.562	139.634
	20.943	513-35-9	2-Methylbutene-2	1.059	1.190	1.153	286.406
	29.192	691-38-3	4-Methyl-c-pentene-2	0.046	0.051	0.042	12.573
	29.842	674-76-0	4-Methyl-t-pentene-2	0.133	0.147	0.120	35.928
	33.228	763-29-1	2-Methylpentene-1	0.227	0.247	0.206	61.460
	35.640	760-21-4	2-Ethylbutene-1	0.069	0.074	0.063	18.732
	37.407	625-27-4	2-Methylpentene-2	0.345	0.371	0.313	93.283
	37.820	922-62-3	3-Methyl-c-pentene-2	0.267	0.284	0.242	72.114
	40.088	3404-73-7	3,3-Dimethylpentene-1	0.313	0.332	0.244	84.790
	42.534	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.014	0.011	3.697
	46.640	3404-61-3	3-Methylhexene-1	0.016	0.017	0.012	4.332
	47.229	3524-73-0	5-Methylhexene-1	0.042	0.045	0.033	11.398
	49.273	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.032	11.021
	49.621	3769-23-1	4-Methylhexene-1	0.012	0.012	0.009	3.163
	50.266	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.054	0.040	13.783
	54.862		C7 - Iso-Olefin - 2	0.023	0.024	0.018	6.144
	56.802	4914-89-0	3-Methyl-c-hexene-3	0.014	0.014	0.011	3.774
	57.684	6094-02-6	2-Methylhexene-1	0.058	0.061	0.045	15.564
	58.548	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.020	7.127

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	58.793	10574-36-4	3-Methyl-c-hexene-2	0.020	0.021	0.016	5.430
	60.077	20710-38-8	3-Methyl-t-hexene-2	0.015	0.015	0.012	4.029
	60.861	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.566
	70.515		C8 - Diolefin - 1	0.011	0.011	0.008	3.012
	80.907		C9 - IsoOlefin - 1	0.019	0.018	0.013	5.122
	93.383		C10-IsoOlefin-4	0.004	0.004	0.002	0.964
Naphtheno-Olefir	22.536	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.008	1.968
	25.743	142-29-0	Cyclopentene	0.200	0.193	0.224	55.693
	37.040	1120-62-3	3-Methylcyclopentene	0.101	0.099	0.094	27.386
	45.831	693-89-0	1-Methylcyclopentene	0.363	0.347	0.338	100.596
	51.153	110-83-8	Cyclohexene	0.045	0.041	0.042	12.089
Di-Olefins	18.625	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	2.953
	21.271	2004-70-8	1t,3-Pentadiene	0.016	0.017	0.018	4.394
	45.426	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	4.127
Oxygenates	13.131	64-17-5	Ethanol	22.944	21.648	38.018	2555.264
	26.906	71-23-8	n-Propanol	0.072	0.067	0.091	13.578
	48.062	71-36-3	n-Butanol	0.056	0.052	0.058	11.447
Unidentified	19.879		Unidentified	0.006	0.007	0.006	1.958
	26.995		Unidentified	0.063	0.070	0.057	20.863
	28.734		Unidentified	0.054	0.054	0.047	17.816
	50.839		Unidentified	0.043	0.046	0.034	14.280
	63.362		Unidentified	0.054	0.055	0.037	17.764
	72.450		Unidentified	0.034	0.035	0.023	11.233
	74.459		Unidentified	0.028	0.027	0.019	9.378
	78.825		Unidentified	0.015	0.014	0.010	4.921
	82.976		Unidentified	0.029	0.028	0.020	9.515
	85.151		Unidentified	0.035	0.033	0.021	11.579
	86.231		Unidentified	0.035	0.036	0.021	11.662
	86.597		Unidentified	0.013	0.012	0.008	4.302
	88.745		Unidentified	0.020	0.022	0.012	6.576
	93.272		Unidentified	0.009	0.008	0.005	2.922
	93.272		Unidentified	0.009	0.009	0.005	2.922
	93.272		Unidentified	0.009	0.007	0.005	2.922
	93.842		Unidentified	0.145	0.149	0.078	47.973
	94.526		Unidentified	0.018	0.013	1.379	5.984
	94.526		Unidentified	0.018	0.019	0.010	5.984
	94.723		Unidentified	0.012	0.011	0.007	3.928
	99.707		Unidentified	0.011	0.011	0.006	3.555
	100.073		Unidentified	0.011	0.012	0.006	3.778
	100.354		Unidentified	0.201	0.150	0.098	66.600
	100.487		Unidentified	0.542	0.542	0.265	179.602
	101.168		Unidentified	0.328	0.348	0.179	108.674
	101.290		Unidentified	0.194	0.197	0.104	64.374

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Components by Group

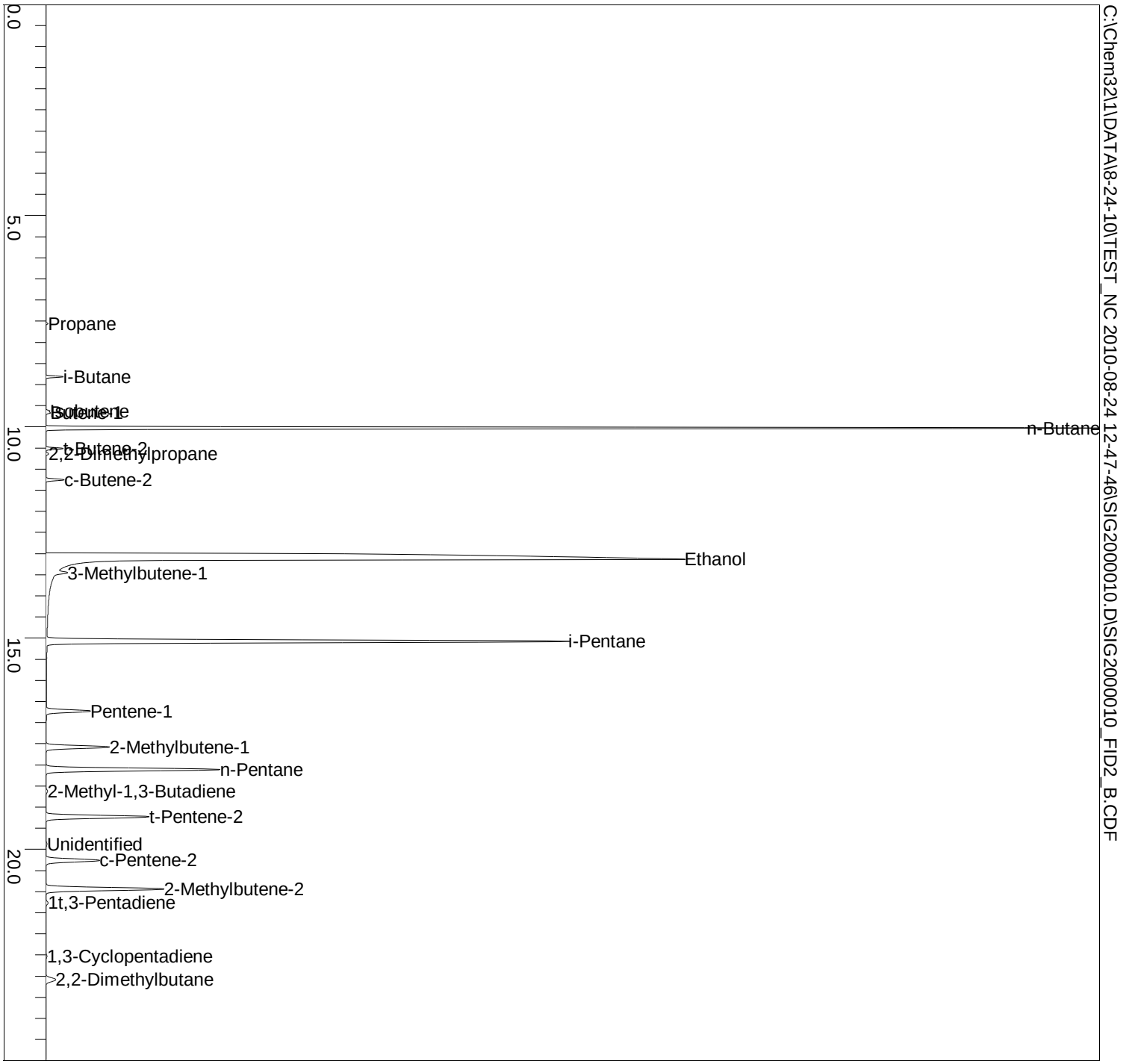
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	102.194		Unidentified	0.020	0.019	0.011	6.790
	102.545		Unidentified	0.118	0.118	0.058	39.022
	103.688		Unidentified	0.016	0.013	0.010	5.353
	104.955		Unidentified	0.053	0.041	0.034	17.430
	106.203		Unidentified	0.010	0.009	0.005	3.239
	107.104		Unidentified	0.330	0.285	0.188	109.282
	107.619		Unidentified	0.086	0.073	0.049	28.581
	108.083		Unidentified	0.112	0.112	0.055	37.220
	108.358		Unidentified	0.119	0.119	0.059	39.323
	108.437		Unidentified	0.109	0.109	0.053	36.190
	108.567		Unidentified	0.712	0.712	0.348	235.829
	108.746		Unidentified	0.277	0.277	0.135	91.656
	109.170		Unidentified	0.809	0.686	0.460	267.972
	109.875		Unidentified	0.038	0.032	0.021	12.507
	110.711		Unidentified	0.024	0.021	0.012	7.789
	111.039		Unidentified	0.130	0.130	0.071	42.983
	111.310		Unidentified	0.115	0.096	0.059	38.040
	111.974		Unidentified	0.062	0.052	0.032	20.511
	112.824		Unidentified	0.013	0.011	0.007	4.221
	112.956		Unidentified	0.016	0.014	0.009	5.448
	113.478		Unidentified	0.030	0.030	0.013	9.950
	113.612		Unidentified	0.011	0.011	0.005	3.506
	115.145		Unidentified	0.012	0.010	0.006	3.878
	116.944		Unidentified	0.010	0.010	0.005	3.372
	126.297		Unidentified	0.004	0.004	0.002	1.445
	126.297		Unidentified	0.004	0.004	0.002	1.445
	126.297		Unidentified	0.004	0.004	0.002	1.445
	130.003		Unidentified	0.003	0.002	0.002	1.030

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2_B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Sample Chromatogram



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Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2_B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2_B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

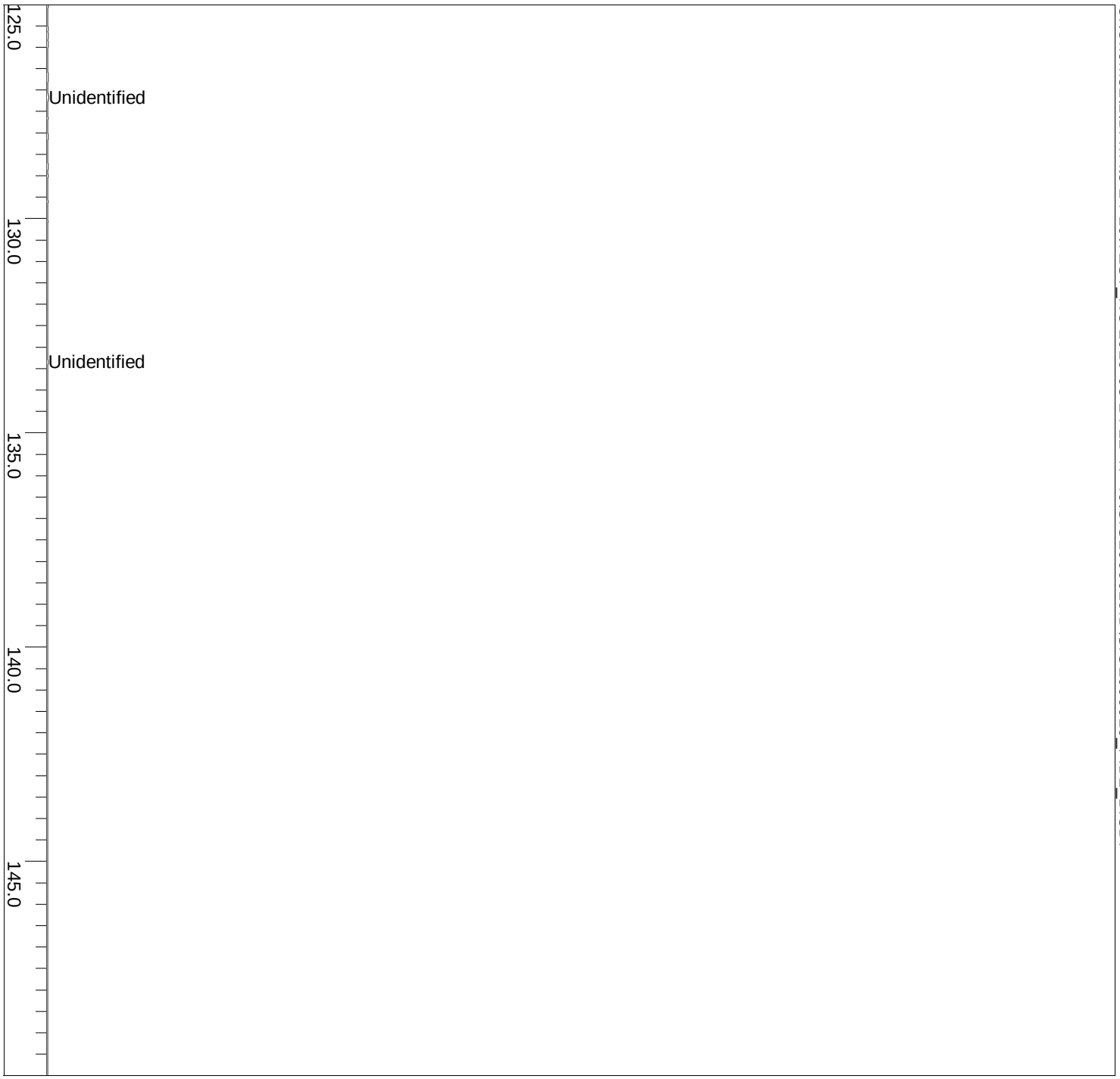
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2_B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000010.D\SIG2000010_FID2_B.CDF 25-Aug-10, 11:02:54
Sample: ODDB-91328 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91328
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	7.734	9.847	9.087
I-Paraffins	15.447	18.031	13.525
Aromatics	42.903	37.798	30.294
Mono-Aromatics	40.715	36.014	28.953
Naphthalenes	0.247	0.186	0.147
Naphtheno/Olefino-Benz	0.452	0.391	0.263
Indenes	1.488	1.207	0.930
Naphthenes	2.071	2.109	1.891
Mono-Naphthenes	2.071	2.109	1.891
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.117	8.087	7.143
n-Olefins	2.978	3.467	3.071
Iso-Olefins	3.403	3.886	3.339
Naphtheno-Olefins	0.696	0.690	0.690
Di-Olefins	0.040	0.044	0.043
Oxygenates	21.900	21.350	36.487
Unidentified	2.828	2.779	1.573
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	21.767	21.222	36.330
C3	0.079	0.077	0.102
C4	5.147	6.809	6.803
C5	7.109	8.510	7.701
C6	16.997	19.240	15.334
C7	13.609	12.576	11.220
C8	11.480	10.212	8.311
C9	10.903	9.604	6.977
C10	7.580	6.595	4.398
C11	2.142	2.065	1.082
C12	0.358	0.312	0.170

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.001	0.001	0.001
	C4	4.881	6.487	6.457
	C5	0.812	0.997	0.865
	C6	1.796	2.095	1.603
	C7	0.126	0.142	0.097
	C8	0.023	0.025	0.015
	C9	0.013	0.014	0.008
	C11	0.083	0.085	0.041
I-Paraffins	C4	0.021	0.030	0.028
	C5	2.497	3.100	2.661
	C6	10.368	12.139	9.251
	C7	1.132	1.280	0.869
	C8	0.047	0.052	0.032
	C10	0.258	0.269	0.133
	C11	1.099	1.136	0.541
	C12	0.025	0.026	0.011
Mono-Aromatics	C6	0.762	0.667	0.750
	C7	11.289	10.016	9.421
	C8	11.410	10.136	8.264
	C9	10.632	9.384	6.802
	C10	5.464	4.802	3.130
	C11	0.846	0.739	0.439
	C12	0.312	0.270	0.148
Naphthalenes	C10	0.233	0.175	0.140
	C11	0.014	0.011	0.008
Naphtheno/Olefino-Benzenes	C10	0.452	0.391	0.263
Indenes	C9	0.258	0.206	0.168
	C10	1.162	0.947	0.726
	C11	0.048	0.038	0.025
	C12	0.020	0.016	0.011
Mono-Naphthenes	C5	0.244	0.251	0.267
	C6	1.503	1.527	1.373
	C7	0.313	0.320	0.245
	C10	0.011	0.011	0.006
n-Olefins	C4	0.190	0.240	0.261

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.615	1.916	1.771
	C6	1.023	1.151	0.935
	C7	0.096	0.105	0.075
	C11	0.053	0.055	0.029
Iso-Olefins	C5	1.716	2.017	1.881
	C6	1.049	1.171	0.958
	C7	0.638	0.698	0.500
Naphtheno-Olefins	C5	0.200	0.200	0.226
	C6	0.496	0.490	0.464
Di-Olefins	C5	0.026	0.029	0.029
	C7	0.015	0.015	0.014
Oxygenates	C2	21.767	21.222	36.330
	C3	0.078	0.075	0.100
	C4	0.055	0.052	0.057

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.61	21.35
5%	33.33	28.59
10%	97.17	81.80
15%	138.01	111.42
20%	140.53	138.65
25%	154.40	143.99
30%	172.29	154.33
35%	172.54	172.27
40%	172.79	172.53
45%	173.04	172.78
50%	173.28	173.03
55%	221.36	173.29
60%	226.27	221.51
65%	253.49	227.05
70%	281.21	270.68
75%	282.37	281.68
80%	323.14	321.06
85%	335.32	334.04
90%	358.22	352.22
95%	370.41	368.42
FBP	404.60	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.554	74-98-6	P3	Propane	0.001	0.001	0.001	0.187
2	8.810	75-28-5	I4	i-Butane	0.021	0.030	0.028	5.549
3	9.623	115-11-7	K4	Isobutene	0.016	0.020	0.022	4.228
4	9.664	106-98-9	K4	Butene-1	0.018	0.023	0.024	4.729
5	10.024	106-97-8	P4	n-Butane	4.881	6.487	6.457	1264.928
6	10.510	624-64-6	K4	t-Butene-2	0.072	0.092	0.099	19.355
7	10.637	463-82-1	I5	2,2-Dimethylpropane	0.006	0.008	0.007	1.616
8	11.250	590-18-1	K4	c-Butene-2	0.085	0.105	0.116	22.797
9	13.124	64-17-5	X2	Ethanol	21.767	21.222	36.330	2405.814
10	13.454	563-45-1	C5	3-Methylbutene-1	0.197	0.242	0.216	52.954
11	15.073	78-78-4	I5	i-Pentane	2.491	3.092	2.654	649.939
12	16.730	109-67-1	K5	Pentene-1	0.328	0.393	0.359	87.931
13	17.577	563-46-2	C5	2-Methylbutene-1	0.497	0.588	0.545	133.516
14	18.111	109-66-0	P5	n-Pentane	0.812	0.997	0.865	211.846
15	18.628	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.012	0.012	2.816
16	19.232	646-04-8	K5	t-Pentene-2	0.832	0.987	0.912	223.252
17	19.882		?	Unidentified	0.006	0.007	0.006	1.907
18	20.263	627-20-3	K5	c-Pentene-2	0.456	0.535	0.500	122.419
19	20.940	513-35-9	C5	2-Methylbutene-2	1.021	1.186	1.120	274.156
20	21.269	2004-70-8	E5	1t,3-Pentadiene	0.015	0.018	0.017	4.261
21	22.534	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.008	1.879
22	23.089	75-83-2	I6	2,2-Dimethylbutane	0.264	0.313	0.235	69.147
23	25.739	142-29-0	B5	Cyclopentene	0.194	0.193	0.219	53.497
24	26.906	71-23-8	X3	n-Propanol	0.078	0.075	0.100	14.745
25	26.991		?	Unidentified	0.056	0.064	0.051	18.364
26	27.604	287-92-3	M5	Cyclopentane	0.244	0.251	0.267	65.362
27	28.334	79-29-8	I6	2,3-Dimethylbutane	1.068	1.242	0.953	279.771
28	28.733		?	Unidentified	0.052	0.054	0.045	17.036
29	29.194	691-38-3	C6	4-Methyl-c-pentene-2	0.044	0.051	0.041	11.916
30	29.438	107-83-5	I6	2-Methylpentane	6.069	7.148	5.415	1589.994
31	29.843	674-76-0	C6	4-Methyl-t-pentene-2	0.128	0.147	0.117	34.450
32	32.074	96-14-0	I6	3-Methylpentane	2.968	3.437	2.648	777.561
33	33.233	763-29-1	C6	2-Methylpentene-1	0.220	0.247	0.201	59.096
34	33.450	592-41-6	K6	Hexene-1	0.157	0.178	0.144	42.227
35	35.642	760-21-4	C6	2-Ethylbutene-1	0.062	0.069	0.057	16.747
36	35.806	110-54-3	P6	n-Hexane	1.796	2.095	1.603	470.606
37	36.439	13269-52-8	K6	t-Hexene-3	0.258	0.291	0.236	69.365
38	36.916	4050-45-7	K6	t-Hexene-2	0.397	0.447	0.363	106.583
39	37.042	1120-62-3	B6	3-Methylcyclopentene	0.098	0.099	0.092	26.242
40	37.406	625-27-4	C6	2-Methylpentene-2	0.335	0.373	0.306	89.849
41	37.820	922-62-3	C6	3-Methyl-c-pentene-2	0.259	0.285	0.236	69.441
42	38.742	7688-21-3	K6	c-Hexene-2	0.210	0.234	0.192	56.392
43	40.086	3404-73-7	C7	3,3-Dimethylpentene-1	0.306	0.336	0.240	82.196

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.671	96-37-7	M6	Methylcyclopentane	1.055	1.085	0.964	283.306
45	42.239	108-08-7	I7	2,4-Dimethylpentane	0.209	0.239	0.160	54.905
46	42.532	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.014	0.010	3.544
47	42.778	464-06-2	I7	2,2,3-Trimethylbutane	0.019	0.021	0.015	4.979
48	45.429	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	3.975
49	45.637	71-42-3	Q6	Benzene	0.762	0.667	0.750	220.346
50	45.833	693-89-0	B6	1-Methylcyclopentene	0.354	0.349	0.331	97.257
51	46.637	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.012	4.167
52	47.230	3524-73-0	C7	5-Methylhexene-1	0.038	0.042	0.030	10.241
53	47.552	110-82-7	M6	Cyclohexane	0.448	0.442	0.409	120.162
54	48.062	71-36-3	X4	n-Butanol	0.055	0.052	0.057	11.090
55	49.272	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.044	0.031	10.677
56	49.619	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.008	2.867
57	50.266	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.055	0.039	13.442
58	50.661	591-76-4	I7	2-Methylhexane	0.552	0.626	0.423	145.154
59	50.840		?	Unidentified	0.024	0.027	0.019	7.980
60	51.152	110-83-8	B6	Cyclohexene	0.044	0.042	0.041	11.800
61	52.491	589-34-4	I7	3-Methylhexane	0.352	0.395	0.270	92.708
62	53.352	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.100	0.103	0.078	26.826
63	53.938	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.068	0.070	0.053	18.197
64	54.563	822-50-4	M7	1t,2-Dimethylcyclopentane	0.069	0.070	0.054	18.403
65	54.842		C7	C7 - Iso-Olefin - 2	0.022	0.023	0.017	5.868
66	55.468	592-76-7	K7	Heptene-1	0.027	0.030	0.021	7.291
67	56.801	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.011	3.660
68	57.332	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.025	8.413
69	57.683	6094-02-6	C7	2-Methylhexene-1	0.056	0.062	0.044	15.137
70	58.053	142-82-5	P7	n-Heptane	0.126	0.142	0.097	33.207
71	58.274	7642-10-6	K7	c-Heptene-3	0.025	0.027	0.019	6.665
72	58.548	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.020	6.845
73	58.793	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.209
74	59.174	14686-13-6	K7	t-Heptene-2	0.013	0.014	0.010	3.395
75	59.650	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.019	0.014	4.888
76	60.077	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.012	3.985
77	60.859	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.431
78	61.507	108-87-2	M7	Methylcyclohexane	0.058	0.058	0.046	15.648
79	63.361		?	Unidentified	0.057	0.061	0.040	18.873
80	69.069	108-88-3	Q7	Toluene	11.289	10.016	9.421	3227.774
81	72.046	592-27-8	I8	2-Methylheptane	0.019	0.020	0.012	4.877
82	72.299	589-53-7	I8	4-Methylheptane	0.010	0.011	0.007	2.552
83	73.361	589-81-1	I8	3-Methylheptane	0.019	0.021	0.013	5.011
84	77.869	111-65-9	P8	n-Octane	0.023	0.025	0.015	6.005
85	84.742	100-41-4	Q8	Ethylbenzene	2.126	1.886	1.540	603.262
86	85.983	108-38-3	Q8	m-Xylene	5.424	4.828	3.928	1539.029

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	86.124	106-42-3	Q8	p-Xylene	2.466	2.203	1.786	699.626
88	88.935	95-47-6	Q8	o-Xylene	1.395	1.219	1.010	395.859
89	91.739	111-84-2	P9	n-Nonane	0.013	0.014	0.008	3.421
90	93.095	98-82-8	Q9	i-Propylbenzene	0.035	0.031	0.023	9.924
91	93.842		?	Unidentified	0.015	0.015	0.008	4.781
92	94.860	15869-89-3	I10	2,5-Dimethyloctane	0.009	0.010	0.005	2.416
93	95.508	2051-30-1	I10	2,4-Dimethyloctane	0.032	0.034	0.017	8.411
94	95.898		I10	2,6-Dimethyloctane	0.010	0.010	0.005	2.548
95	96.557	103-65-1	Q9	n-Propylbenzene	0.546	0.487	0.349	153.898
96	97.412	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.190	1.948	1.401	617.332
97	97.643	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.026	0.916	0.656	289.162
98	98.268	108-67-8	Q9	1,3,5-Trimethylbenzene	1.319	1.173	0.844	371.949
99	98.724	15869-85-9	I10	5-Methylnonane	0.009	0.010	0.005	2.453
100	98.913	17301-94-8	I10	4-Methylnonane	0.022	0.023	0.012	5.861
101	99.119		?	Unidentified	0.568	0.601	0.307	186.648
102	99.349	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.795	0.694	0.509	224.157
103	99.568	5881-17-4	I10	3-Ethyloctane	0.004	0.005	0.002	1.185
104	99.889	5911-04-6	I10	3-Methylnonane	0.031	0.033	0.017	8.312
105	100.353		?	Unidentified	0.045	0.034	0.022	14.684
106	100.487		?	Unidentified	0.128	0.132	0.063	42.031
107	100.701		I11	C11-Isoparaffin-2	0.068	0.070	0.033	18.003
108	100.998	95-63-6	Q9	1,2,4-Trimethylbenzene	4.010	3.522	2.565	1130.624
109	101.165		?	Unidentified	0.085	0.094	0.047	28.053
110	101.287		?	Unidentified	0.050	0.052	0.027	16.373
111	101.551	1678-98-4	M10	i-Butylcyclohexane	0.011	0.011	0.006	3.000
112	102.338	17302-01-1	I10	3-Ethyl-3-methylheptane	0.140	0.145	0.069	37.096
113	102.636	538-93-2	Q10	i-Butylbenzene	0.210	0.189	0.120	58.832
114	102.901		?	Unidentified	0.048	0.043	0.028	15.814
115	103.200		?	Unidentified	0.035	0.036	0.017	11.499
116	103.855	526-73-8	Q9	1,2,3-Trimethylbenzene	0.711	0.612	0.455	200.480
117	104.234	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.024	0.022	0.014	6.805
118	104.411		I11	C11 Isoparaffin-4	0.019	0.020	0.010	5.146
119	104.617	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.134	0.121	0.077	37.701
120	105.046		J9	Indan	0.258	0.206	0.168	74.055
121	105.643		J10	Indene	0.733	0.585	0.477	210.012
122	106.358		I11	C11-Isoparaffin-7	0.318	0.329	0.156	84.204
123	106.549	141-93-5	Q10	1,3-Diethylbenzene	0.097	0.086	0.055	27.102
124	106.834	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.138	1.017	0.652	319.151
125	107.167	105-05-5	Q10	1,4-Diethylbenzene	0.420	0.375	0.240	117.726
126	107.385	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.301	0.264	0.173	84.543
127	107.626	135-01-3	Q10	1,2-Diethylbenzene	0.079	0.069	0.045	22.122
128	108.083		?	Unidentified	0.080	0.082	0.039	26.142
129	108.235	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.103	0.091	0.059	28.968

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	108.358		?	Unidentified	0.091	0.094	0.045	29.838
131	108.437		?	Unidentified	0.083	0.086	0.041	27.434
132	108.566		I11	C11- Isoparaffin-11	0.694	0.717	0.341	183.768
133	108.746		?	Unidentified	0.224	0.232	0.110	73.628
134	109.084	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.209	0.183	0.120	58.511
135	109.170		?	Unidentified	0.812	0.712	0.465	266.890
136	109.397		J10	2-Methylindan	0.127	0.102	0.074	36.451
137	109.745	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.691	0.608	0.396	193.699
138	110.287	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.627	0.541	0.359	175.760
139	110.711		?	Unidentified	0.022	0.020	0.011	7.130
140	110.906	693-61-8	K11	2-Undecene, (E)-	0.053	0.055	0.029	14.139
141	111.040		?	Unidentified	0.101	0.105	0.055	33.160
142	111.192		Q11	1-Methyl-4-t-butylbenzene	0.041	0.037	0.021	11.322
143	111.314		?	Unidentified	0.100	0.087	0.052	32.932
144	111.415	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.163	0.140	0.093	45.632
145	111.712	1120-21-4	P11	n-Undecane	0.083	0.085	0.041	21.905
146	111.864	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.090	0.078	0.047	25.236
147	111.975		?	Unidentified	0.057	0.050	0.030	18.882
148	112.352		Q10	1,2,4,5-Tetramethylbenzene	0.538	0.467	0.308	150.976
149	112.618	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.730	0.631	0.418	204.853
150	112.821		?	Unidentified	0.012	0.010	0.006	3.858
151	112.958		?	Unidentified	0.015	0.013	0.009	4.849
152	113.132		I12	C12 - IsoParaffin - 1	0.020	0.020	0.009	5.230
153	113.482		?	Unidentified	0.035	0.037	0.017	11.625
154	113.613		?	Unidentified	0.007	0.007	0.003	2.309
155	113.757		Q11	C11 - Aromatic - 3	0.096	0.083	0.050	26.882
156	113.947	874-35-1	H10	5-Methylindan	0.229	0.198	0.133	64.313
157	114.072		Q12	1,2-Di-i-propylbenzene	0.083	0.072	0.039	23.143
158	114.286	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.119	0.103	0.062	33.241
159	114.443		Q11	C11 - Aromatic - 4	0.068	0.059	0.035	18.949
160	114.696	824-22-6	J10	4-Methylindan	0.302	0.261	0.175	84.586
161	114.847	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.071	0.061	0.037	19.699
162	114.944	824-63-5	H10	2-Methylindan	0.223	0.192	0.130	62.446
163	115.146		?	Unidentified	0.022	0.023	0.010	7.192
164	115.259	538-68-1	Q11	n-Pentylbenzene	0.028	0.024	0.015	7.833
165	115.486		Q11	tert-Pentylbenzene	0.123	0.107	0.064	34.466
166	115.799	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.055	0.048	0.029	15.369
167	115.908		Q11	C11 - Aromatic - 7	0.070	0.064	0.037	19.675
168	116.238		I12	C12 - IsoParaffin - 4	0.005	0.006	0.002	1.513
169	116.369	100-18-5	Q12	1,4-Di-i-propylbenzene	0.109	0.094	0.052	30.323
170	116.813	91-20-3	G10	Naphthalene	0.233	0.175	0.140	68.466
171	117.007		J11	4,7-Dimethyl Indane	0.011	0.009	0.006	3.158
172	117.252		J11	1,1-Dimethyl Indane	0.037	0.029	0.019	10.480

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	117.414		J12	Dimethyl Indane - 1	0.015	0.012	0.008	4.273
174	117.593	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.017	0.015	0.008	4.694
175	117.733		J12	Dimethyl Indane - 2	0.005	0.004	0.003	1.536
176	117.895		Q12	1,3-Di-n-propylbenzene	0.090	0.078	0.043	25.039
177	118.005		Q11	C11 - Aromatic - 11	0.051	0.046	0.026	14.158
178	118.559		Q11	C11 - Aromatic - 12	0.034	0.030	0.017	9.389
179	119.487	102-25-0	Q12	1,3,5-Triethylbenzene	0.009	0.008	0.004	2.415
180	120.147		Q12	C12 - Aromatic - 1	0.005	0.004	0.002	1.299
181	123.439	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.005	2.635
182	124.306	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.476

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.001	0.001	0.001	0.187
	10.024	106-97-8	n-Butane	4.881	6.487	6.457	1264.928
	18.111	109-66-0	n-Pentane	0.812	0.997	0.865	211.846
	35.806	110-54-3	n-Hexane	1.796	2.095	1.603	470.606
	58.053	142-82-5	n-Heptane	0.126	0.142	0.097	33.207
	77.869	111-65-9	n-Octane	0.023	0.025	0.015	6.005
	91.739	111-84-2	n-Nonane	0.013	0.014	0.008	3.421
	111.712	1120-21-4	n-Undecane	0.083	0.085	0.041	21.905
I-Paraffins	8.810	75-28-5	i-Butane	0.021	0.030	0.028	5.549
	10.637	463-82-1	2,2-Dimethylpropane	0.006	0.008	0.007	1.616
	15.073	78-78-4	i-Pentane	2.491	3.092	2.654	649.939
	23.089	75-83-2	2,2-Dimethylbutane	0.264	0.313	0.235	69.147
	28.334	79-29-8	2,3-Dimethylbutane	1.068	1.242	0.953	279.771
	29.438	107-83-5	2-Methylpentane	6.069	7.148	5.415	1589.994
	32.074	96-14-0	3-Methylpentane	2.968	3.437	2.648	777.561
	42.239	108-08-7	2,4-Dimethylpentane	0.209	0.239	0.160	54.905
	42.778	464-06-2	2,2,3-Trimethylbutane	0.019	0.021	0.015	4.979
	50.661	591-76-4	2-Methylhexane	0.552	0.626	0.423	145.154
	52.491	589-34-4	3-Methylhexane	0.352	0.395	0.270	92.708
	72.046	592-27-8	2-Methylheptane	0.019	0.020	0.012	4.877
	72.299	589-53-7	4-Methylheptane	0.010	0.011	0.007	2.552
	73.361	589-81-1	3-Methylheptane	0.019	0.021	0.013	5.011
	94.860	15869-89-3	2,5-Dimethyloctane	0.009	0.010	0.005	2.416
	95.508	2051-30-1	2,4-Dimethyloctane	0.032	0.034	0.017	8.411
	95.898		2,6-Dimethyloctane	0.010	0.010	0.005	2.548
	98.724	15869-85-9	5-Methylnonane	0.009	0.010	0.005	2.453
	98.913	17301-94-8	4-Methylnonane	0.022	0.023	0.012	5.861
	99.568	5881-17-4	3-Ethyloctane	0.004	0.005	0.002	1.185
	99.889	5911-04-6	3-Methylnonane	0.031	0.033	0.017	8.312
	100.701		C11-Isoparaffin-2	0.068	0.070	0.033	18.003
	102.338	17302-01-1	3-Ethyl-3-methylheptane	0.140	0.145	0.069	37.096
	104.411		C11 Isoparaffin-4	0.019	0.020	0.010	5.146
	106.358		C11-Isoparaffin-7	0.318	0.329	0.156	84.204
	108.566		C11- Isoparaffin-11	0.694	0.717	0.341	183.768
	113.132		C12 - IsoParaffin - 1	0.020	0.020	0.009	5.230
	116.238		C12 - IsoParaffin - 4	0.005	0.006	0.002	1.513
Aromatics							
Mono-Aromatics	45.637	71-42-3	Benzene	0.762	0.667	0.750	220.346
	69.069	108-88-3	Toluene	11.289	10.016	9.421	3227.774
	84.742	100-41-4	Ethylbenzene	2.126	1.886	1.540	603.262
	85.983	108-38-3	m-Xylene	5.424	4.828	3.928	1539.029
	86.124	106-42-3	p-Xylene	2.466	2.203	1.786	699.626
	88.935	95-47-6	o-Xylene	1.395	1.219	1.010	395.859
	93.095	98-82-8	i-Propylbenzene	0.035	0.031	0.023	9.924
	96.557	103-65-1	n-Propylbenzene	0.546	0.487	0.349	153.898

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	97.412	620-14-4	1-Methyl-3-ethylbenzene	2.190	1.948	1.401	617.332
	97.643	622-96-8	1-Methyl-4-ethylbenzene	1.026	0.916	0.656	289.162
	98.268	108-67-8	1,3,5-Trimethylbenzene	1.319	1.173	0.844	371.949
	99.349	611-14-3	1-Methyl-2-ethylbenzene	0.795	0.694	0.509	224.157
	100.998	95-63-6	1,2,4-Trimethylbenzene	4.010	3.522	2.565	1130.624
	102.636	538-93-2	i-Butylbenzene	0.210	0.189	0.120	58.832
	103.855	526-73-8	1,2,3-Trimethylbenzene	0.711	0.612	0.455	200.480
	104.234	535-77-3	1-Methyl-3-i-propylbenzene	0.024	0.022	0.014	6.805
	104.617	99-87-6	1-Methyl-4-i-propylbenzene	0.134	0.121	0.077	37.701
	106.549	141-93-5	1,3-Diethylbenzene	0.097	0.086	0.055	27.102
	106.834	1074-43-7	1-Methyl-3-n-propylbenzene	1.138	1.017	0.652	319.151
	107.167	105-05-5	1,4-Diethylbenzene	0.420	0.375	0.240	117.726
	107.385	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.301	0.264	0.173	84.543
	107.626	135-01-3	1,2-Diethylbenzene	0.079	0.069	0.045	22.122
	108.235	1074-17-5	1-Methyl-2-n-propylbenzene	0.103	0.091	0.059	28.968
	109.084	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.209	0.183	0.120	58.511
	109.745	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.691	0.608	0.396	193.699
	110.287	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.627	0.541	0.359	175.760
	111.192		1-Methyl-4-t-butylbenzene	0.041	0.037	0.021	11.322
	111.415	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.163	0.140	0.093	45.632
	111.864	4218-48-8	1-Ethyl-4-i-propylbenzene	0.090	0.078	0.047	25.236
	112.352		1,2,4,5-Tetramethylbenzene	0.538	0.467	0.308	150.976
	112.618	527-53-7	1,2,3,5-Tetramethylbenzene	0.730	0.631	0.418	204.853
	113.757		C11 - Aromatic - 3	0.096	0.083	0.050	26.882
	114.072		1,2-Di-i-propylbenzene	0.083	0.072	0.039	23.143
	114.286	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.119	0.103	0.062	33.241
	114.443		C11 - Aromatic - 4	0.068	0.059	0.035	18.949
	114.847	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.071	0.061	0.037	19.699
	115.259	538-68-1	n-Pentylbenzene	0.028	0.024	0.015	7.833
	115.486		tert-Pentylbenzene	0.123	0.107	0.064	34.466
	115.799	577-55-9	1-Methyl-2-n-butylbenzene	0.055	0.048	0.029	15.369
	115.908		C11 - Aromatic - 7	0.070	0.064	0.037	19.675
	116.369	100-18-5	1,4-Di-i-propylbenzene	0.109	0.094	0.052	30.323
	117.593	7364-19-4	1t-Butyl-4-ethylbenzene	0.017	0.015	0.008	4.694
	117.895		1,3-Di-n-propylbenzene	0.090	0.078	0.043	25.039
	118.005		C11 - Aromatic - 11	0.051	0.046	0.026	14.158
	118.559		C11 - Aromatic - 12	0.034	0.030	0.017	9.389
	119.487	102-25-0	1,3,5-Triethylbenzene	0.009	0.008	0.004	2.415
	120.147		C12 - Aromatic - 1	0.005	0.004	0.002	1.299
Naphthalenes	116.813	91-20-3	Naphthalene	0.233	0.175	0.140	68.466
	123.439	91-57-6	2-Methylnaphthalene	0.009	0.007	0.005	2.635
	124.306	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.476
Naphtheno/Olefir	113.947	874-35-1	5-Methylindan	0.229	0.198	0.133	64.313
	114.944	824-63-5	2-Methylindan	0.223	0.192	0.130	62.446
Indenes	105.046		Indan	0.258	0.206	0.168	74.055

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Indenes	105.643		Indene	0.733	0.585	0.477	210.012
	109.397		2-Methylindan	0.127	0.102	0.074	36.451
	114.696	824-22-6	4-Methylindan	0.302	0.261	0.175	84.586
	117.007		4,7-Dimethyl Indane	0.011	0.009	0.006	3.158
	117.252		1,1-Dimethyl Indane	0.037	0.029	0.019	10.480
	117.414		Dimethyl Indane - 1	0.015	0.012	0.008	4.273
	117.733		Dimethyl Indane - 2	0.005	0.004	0.003	1.536
Naphthenes							
Mono-Naphthene	27.604	287-92-3	Cyclopentane	0.244	0.251	0.267	65.362
	40.671	96-37-7	Methylcyclopentane	1.055	1.085	0.964	283.306
	47.552	110-82-7	Cyclohexane	0.448	0.442	0.409	120.162
	53.352	1759-58-6	1t,3-Dimethylcyclopentane	0.100	0.103	0.078	26.826
	53.938	2532-58-3	1c,3-Dimethylcyclopentane	0.068	0.070	0.053	18.197
	54.563	822-50-4	1t,2-Dimethylcyclopentane	0.069	0.070	0.054	18.403
	59.650	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.019	0.014	4.888
	61.507	108-87-2	Methylcyclohexane	0.058	0.058	0.046	15.648
	101.551	1678-98-4	i-Butylcyclohexane	0.011	0.011	0.006	3.000
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.623	115-11-7	Isobutene	0.016	0.020	0.022	4.228
	9.664	106-98-9	Butene-1	0.018	0.023	0.024	4.729
	10.510	624-64-6	t-Butene-2	0.072	0.092	0.099	19.355
	11.250	590-18-1	c-Butene-2	0.085	0.105	0.116	22.797
	16.730	109-67-1	Pentene-1	0.328	0.393	0.359	87.931
	19.232	646-04-8	t-Pentene-2	0.832	0.987	0.912	223.252
	20.263	627-20-3	c-Pentene-2	0.456	0.535	0.500	122.419
	33.450	592-41-6	Hexene-1	0.157	0.178	0.144	42.227
	36.439	13269-52-8	t-Hexene-3	0.258	0.291	0.236	69.365
	36.916	4050-45-7	t-Hexene-2	0.397	0.447	0.363	106.583
	38.742	7688-21-3	c-Hexene-2	0.210	0.234	0.192	56.392
	55.468	592-76-7	Heptene-1	0.027	0.030	0.021	7.291
	57.332	14686-14-7	t-Heptene-3	0.031	0.034	0.025	8.413
	58.274	7642-10-6	c-Heptene-3	0.025	0.027	0.019	6.665
	59.174	14686-13-6	t-Heptene-2	0.013	0.014	0.010	3.395
	110.906	693-61-8	2-Undecene, (E)-	0.053	0.055	0.029	14.139
Iso-Olefins	13.454	563-45-1	3-Methylbutene-1	0.197	0.242	0.216	52.954
	17.577	563-46-2	2-Methylbutene-1	0.497	0.588	0.545	133.516
	20.940	513-35-9	2-Methylbutene-2	1.021	1.186	1.120	274.156
	29.194	691-38-3	4-Methyl-c-pentene-2	0.044	0.051	0.041	11.916
	29.843	674-76-0	4-Methyl-t-pentene-2	0.128	0.147	0.117	34.450
	33.233	763-29-1	2-Methylpentene-1	0.220	0.247	0.201	59.096
	35.642	760-21-4	2-Ethylbutene-1	0.062	0.069	0.057	16.747
	37.406	625-27-4	2-Methylpentene-2	0.335	0.373	0.306	89.849
	37.820	922-62-3	3-Methyl-c-pentene-2	0.259	0.285	0.236	69.441

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	40.086	3404-73-7	3,3-Dimethylpentene-1	0.306	0.336	0.240	82.196
	42.532	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.014	0.010	3.544
	46.637	3404-61-3	3-Methylhexene-1	0.016	0.017	0.012	4.167
	47.230	3524-73-0	5-Methylhexene-1	0.038	0.042	0.030	10.241
	49.272	15840-60-5	2-Methyl-c-hexene-3	0.040	0.044	0.031	10.677
	49.619	3769-23-1	4-Methylhexene-1	0.011	0.012	0.008	2.867
	50.266	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.055	0.039	13.442
	54.842		C7 - Iso-Olefin - 2	0.022	0.023	0.017	5.868
	56.801	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.011	3.660
	57.683	6094-02-6	2-Methylhexene-1	0.056	0.062	0.044	15.137
	58.548	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.020	6.845
	58.793	10574-36-4	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.209
	60.077	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.012	3.985
	60.859	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.431
Naphtheno-Olefir	22.534	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.008	1.879
	25.739	142-29-0	Cyclopentene	0.194	0.193	0.219	53.497
	37.042	1120-62-3	3-Methylcyclopentene	0.098	0.099	0.092	26.242
	45.833	693-89-0	1-Methylcyclopentene	0.354	0.349	0.331	97.257
	51.152	110-83-8	Cyclohexene	0.044	0.042	0.041	11.800
Di-Olefins	18.628	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.012	0.012	2.816
	21.269	2004-70-8	1t,3-Pentadiene	0.015	0.018	0.017	4.261
	45.429	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	3.975
Oxygenates	13.124	64-17-5	Ethanol	21.767	21.222	36.330	2405.814
	26.906	71-23-8	n-Propanol	0.078	0.075	0.100	14.745
	48.062	71-36-3	n-Butanol	0.055	0.052	0.057	11.090
Unidentified	19.882		Unidentified	0.006	0.007	0.006	1.907
	26.991		Unidentified	0.056	0.064	0.051	18.364
	28.733		Unidentified	0.052	0.054	0.045	17.036
	50.840		Unidentified	0.024	0.027	0.019	7.980
	63.361		Unidentified	0.057	0.061	0.040	18.873
	93.842		Unidentified	0.015	0.015	0.008	4.781
	99.119		Unidentified	0.568	0.601	0.307	186.648
	100.353		Unidentified	0.045	0.034	0.022	14.684
	100.487		Unidentified	0.128	0.132	0.063	42.031
	101.165		Unidentified	0.085	0.094	0.047	28.053
	101.287		Unidentified	0.050	0.052	0.027	16.373
	102.901		Unidentified	0.048	0.043	0.028	15.814
	103.200		Unidentified	0.035	0.036	0.017	11.499
	108.083		Unidentified	0.080	0.082	0.039	26.142
	108.358		Unidentified	0.091	0.094	0.045	29.838
	108.437		Unidentified	0.083	0.086	0.041	27.434
	108.746		Unidentified	0.224	0.232	0.110	73.628
	109.170		Unidentified	0.812	0.712	0.465	266.890

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Components by Group

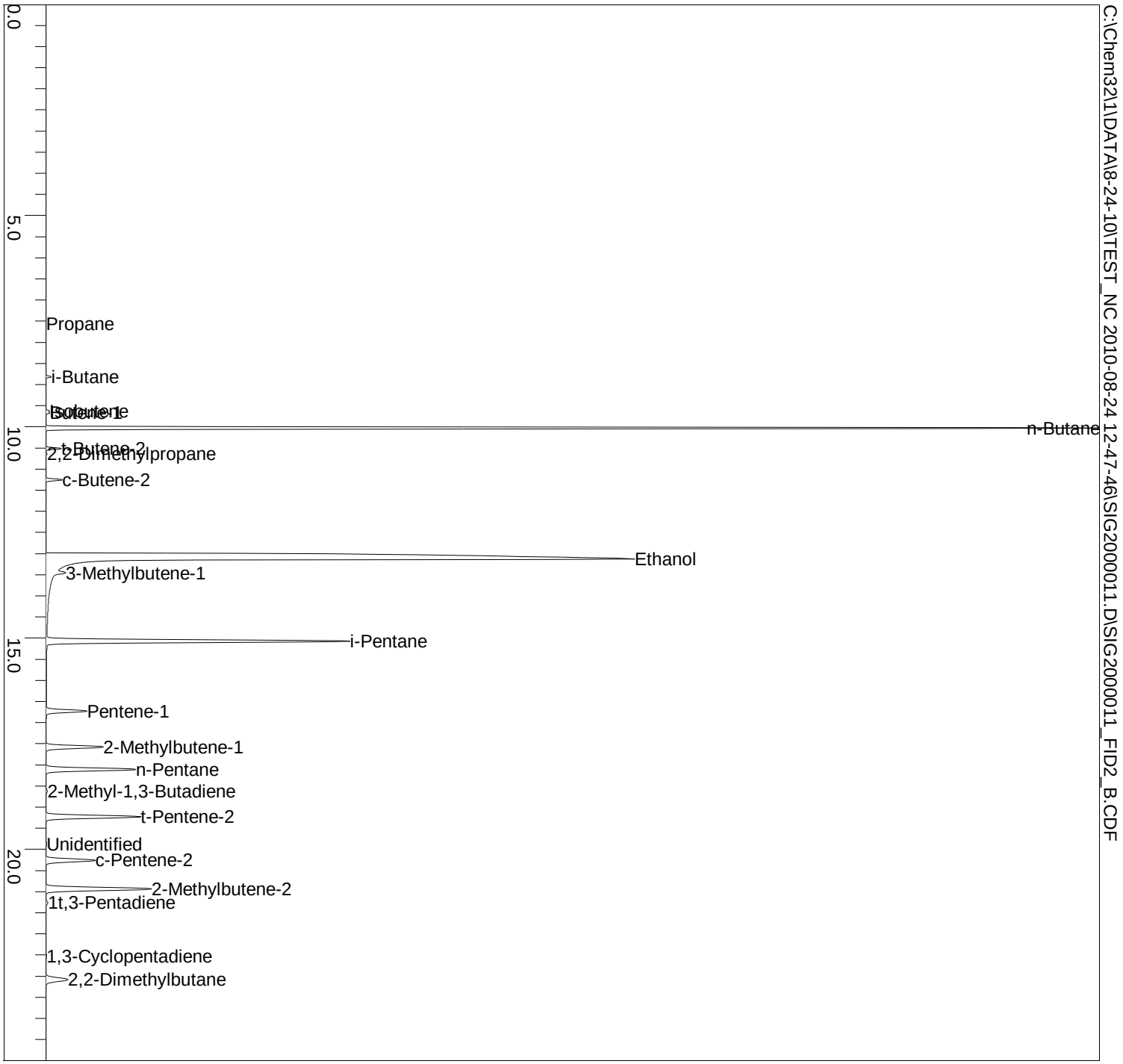
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	110.711		Unidentified	0.022	0.020	0.011	7.130
	111.040		Unidentified	0.101	0.105	0.055	33.160
	111.314		Unidentified	0.100	0.087	0.052	32.932
	111.975		Unidentified	0.057	0.050	0.030	18.882
	112.821		Unidentified	0.012	0.010	0.006	3.858
	112.958		Unidentified	0.015	0.013	0.009	4.849
	113.482		Unidentified	0.035	0.037	0.017	11.625
	113.613		Unidentified	0.007	0.007	0.003	2.309
	115.146		Unidentified	0.022	0.023	0.010	7.192

Plus

Recovery = 100.00

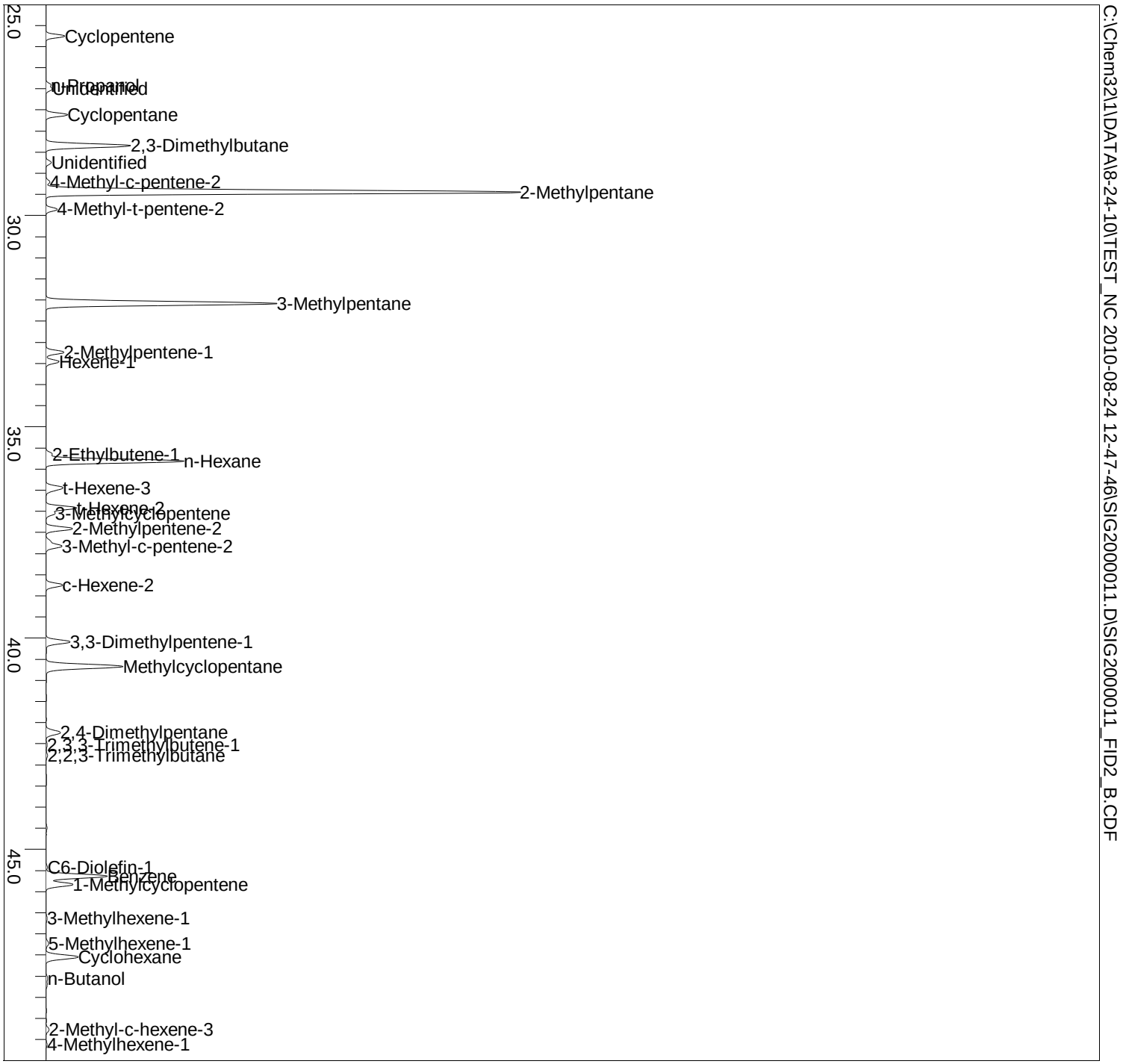
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram



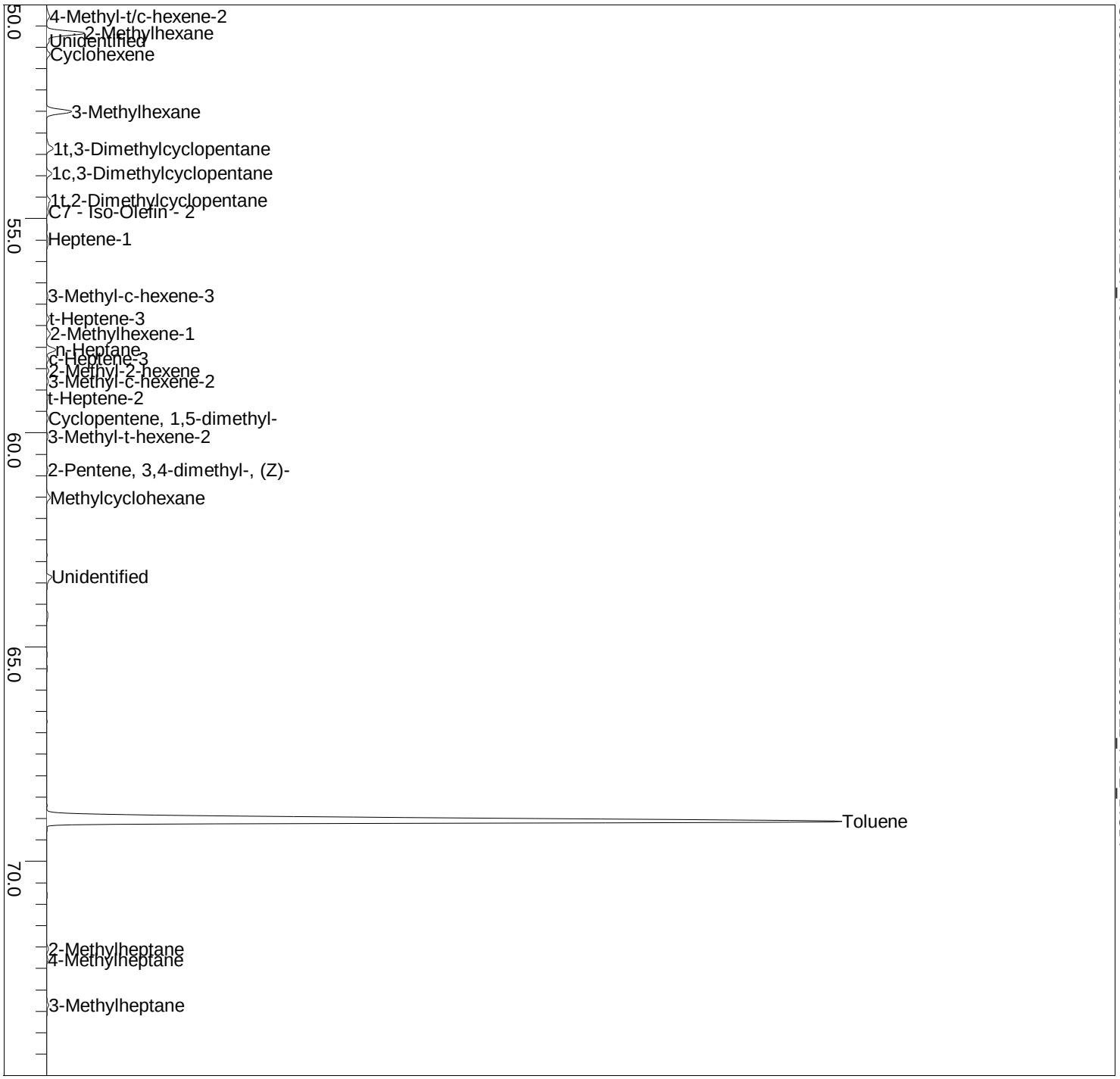
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram



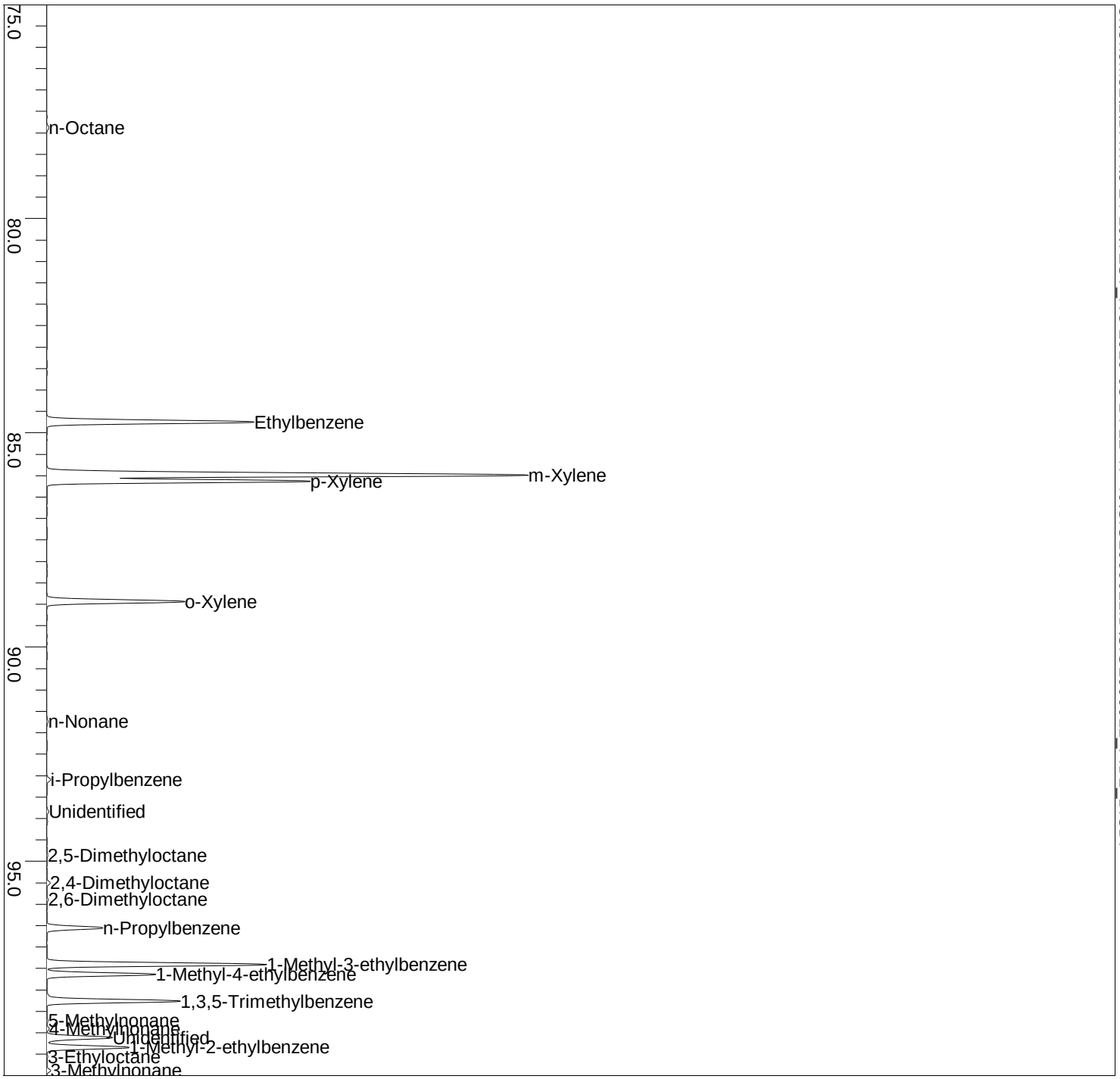
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram

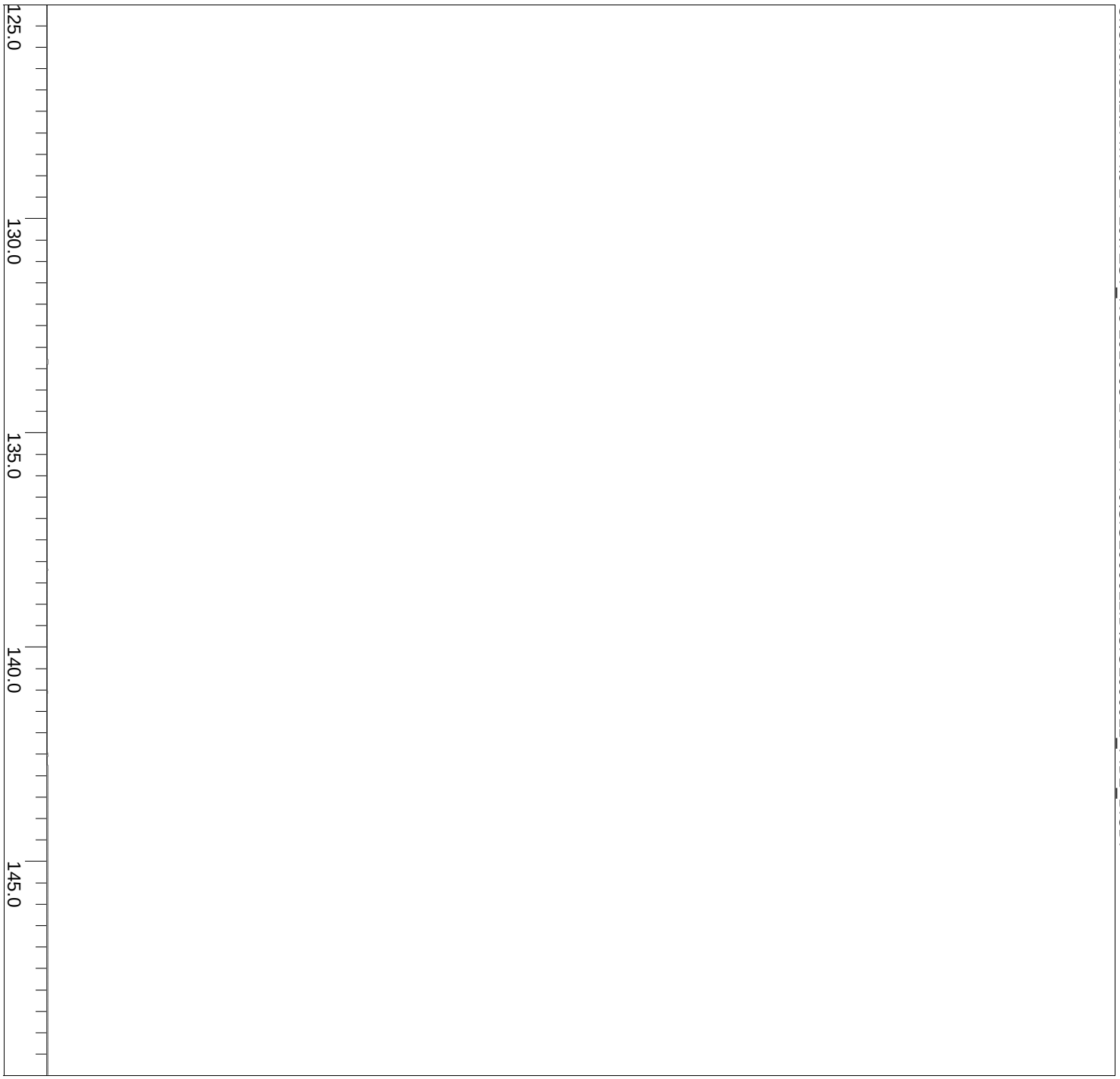


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000011.D\SIG2000011_FID2_B.CDF 25-Aug-10, 13:30:15
Sample: ODDB-91329 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91329
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	3.580	4.480	4.343
I-Paraffins	26.765	31.493	26.304
Aromatics	43.296	37.521	31.368
Mono-Aromatics	41.011	35.674	29.940
Naphthalenes	0.336	0.248	0.208
Naphtheno/Olefino-Benz	0.627	0.533	0.378
Indenes	1.323	1.066	0.842
Naphthenes	1.425	1.438	1.364
Mono-Naphthenes	1.425	1.438	1.364
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.192	8.040	7.486
n-Olefins	2.990	3.428	3.204
Iso-Olefins	3.439	3.863	3.497
Naphtheno-Olefins	0.722	0.705	0.740
Di-Olefins	0.041	0.044	0.045
Oxygenates	16.442	15.774	28.362
Unidentified	1.299	1.253	0.773
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	16.311	15.650	28.202
C3	0.075	0.071	0.100
C4	2.371	3.069	3.242
C5	16.690	20.062	18.558
C6	17.331	19.450	16.176
C7	12.679	11.479	10.842
C8	11.410	9.988	8.557
C9	10.612	9.198	7.035
C10	8.720	7.509	5.212
C11	2.026	1.866	1.069
C12	0.476	0.406	0.235

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	2.109	2.758	2.890
	C5	0.838	1.014	0.926
	C6	0.413	0.474	0.382
	C7	0.096	0.107	0.077
	C8	0.020	0.022	0.014
	C9	0.006	0.007	0.004
	C10	0.033	0.034	0.018
	C11	0.063	0.064	0.032
I-Paraffins	C4	0.017	0.023	0.023
	C5	11.941	14.589	13.183
	C6	12.756	14.704	11.791
	C7	0.827	0.920	0.657
	C8	0.046	0.050	0.032
	C10	0.440	0.456	0.243
	C11	0.719	0.732	0.367
	C12	0.018	0.019	0.009
Mono-Aromatics	C6	0.726	0.626	0.741
	C7	10.715	9.355	9.262
	C8	11.343	9.915	8.510
	C9	10.358	8.996	6.864
	C10	6.308	5.442	3.744
	C11	1.130	0.973	0.607
	C12	0.430	0.366	0.211
Naphthalenes	C10	0.320	0.237	0.199
	C11	0.015	0.011	0.008
Naphtheno/Olefino-Benzenes	C10	0.627	0.533	0.378
Indenes	C9	0.248	0.195	0.167
	C10	0.984	0.801	0.626
	C11	0.063	0.049	0.034
	C12	0.027	0.021	0.015
Mono-Naphthenes	C5	0.313	0.318	0.355
	C6	0.809	0.815	0.765
	C7	0.297	0.299	0.240
	C10	0.007	0.006	0.004
n-Olefins	C4	0.189	0.235	0.269

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.637	1.911	1.859
	C6	1.044	1.156	0.988
	C7	0.084	0.091	0.068
	C11	0.035	0.036	0.020
Iso-Olefins	C5	1.731	2.001	1.965
	C6	1.077	1.183	1.019
	C7	0.631	0.679	0.512
Naphtheno-Olefins	C5	0.204	0.201	0.239
	C6	0.506	0.491	0.490
	C7	0.013	0.012	0.011
Di-Olefins	C5	0.026	0.029	0.031
	C7	0.015	0.015	0.015
Oxygenates	C2	16.311	15.650	28.202
	C3	0.075	0.071	0.100
	C4	0.056	0.053	0.060

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	22.89	22.31
5%	79.44	79.16
10%	80.80	80.27
15%	86.39	81.38
20%	134.21	96.99
25%	138.99	135.70
30%	144.35	139.00
35%	159.47	143.92
40%	172.48	154.03
45%	172.81	172.40
50%	173.14	172.74
55%	220.09	173.09
60%	225.26	197.38
65%	230.43	225.20
70%	280.63	243.86
75%	282.22	281.36
80%	322.54	291.87
85%	335.29	329.33
90%	359.24	352.03
95%	374.16	372.02
FBP	410.01	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.809	75-28-5	I4	i-Butane	0.017	0.023	0.023	5.177
2	9.621	115-11-7	K4	Isobutene	0.016	0.020	0.022	5.023
3	9.663	106-98-9	K4	Butene-1	0.017	0.022	0.025	5.591
4	10.023	106-97-8	P4	n-Butane	2.109	2.758	2.890	655.608
5	10.509	624-64-6	K4	t-Butene-2	0.072	0.090	0.102	23.066
6	10.637	463-82-1	I5	2,2-Dimethylpropane	0.008	0.010	0.009	2.511
7	11.251	590-18-1	K4	c-Butene-2	0.085	0.103	0.120	27.303
8	13.111	64-17-5	X2	Ethanol	16.311	15.650	28.202	2162.315
9	13.451	563-45-1	C5	3-Methylbutene-1	0.190	0.230	0.216	61.273
10	15.097	78-78-4	I5	i-Pentane	11.933	14.579	13.174	3735.075
11	16.728	109-67-1	K5	Pentene-1	0.331	0.392	0.376	106.701
12	17.580	563-46-2	C5	2-Methylbutene-1	0.504	0.586	0.572	162.173
13	18.112	109-66-0	P5	n-Pentane	0.838	1.014	0.926	262.437
14	18.625	78-79-5	E5	2-Methyl-1,3-Butadiene	0.010	0.012	0.012	3.456
15	19.232	646-04-8	K5	t-Pentene-2	0.843	0.985	0.958	271.448
16	19.879		?	Unidentified	0.006	0.007	0.007	2.292
17	20.266	627-20-3	K5	c-Pentene-2	0.463	0.534	0.525	148.936
18	20.944	513-35-9	C5	2-Methylbutene-2	1.037	1.185	1.177	333.713
19	21.270	2004-70-8	E5	1t,3-Pentadiene	0.016	0.018	0.018	5.211
20	22.535	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.008	2.314
21	23.092	75-83-2	I6	2,2-Dimethylbutane	0.369	0.430	0.341	115.862
22	25.740	142-29-0	B5	Cyclopentene	0.197	0.193	0.230	65.328
23	26.904	71-23-8	X3	n-Propanol	0.075	0.071	0.100	16.972
24	26.995		?	Unidentified	0.059	0.067	0.056	23.426
25	27.606	287-92-3	M5	Cyclopentane	0.313	0.318	0.355	100.758
26	28.342	79-29-8	I6	2,3-Dimethylbutane	1.375	1.573	1.270	431.949
27	28.734		?	Unidentified	0.053	0.054	0.048	20.912
28	29.204	691-38-3	C6	4-Methyl-c-pentene-2	0.045	0.050	0.042	14.401
29	29.461	107-83-5	I6	2-Methylpentane	7.744	8.976	7.158	2433.703
30	29.850	674-76-0	C6	4-Methyl-t-pentene-2	0.131	0.147	0.124	42.030
31	32.083	96-14-0	I6	3-Methylpentane	3.269	3.725	3.021	1027.171
32	33.230	763-29-1	C6	2-Methylpentene-1	0.224	0.248	0.212	72.191
33	33.454	592-41-6	K6	Hexene-1	0.160	0.179	0.152	51.582
34	35.641	760-21-4	C6	2-Ethylbutene-1	0.072	0.079	0.068	23.300
35	35.802	110-54-3	P6	n-Hexane	0.413	0.474	0.382	129.877
36	36.439	13269-52-8	K6	t-Hexene-3	0.263	0.292	0.249	84.733
37	36.918	4050-45-7	K6	t-Hexene-2	0.406	0.450	0.384	130.707
38	37.040	1120-62-3	B6	3-Methylcyclopentene	0.099	0.098	0.096	31.759
39	37.408	625-27-4	C6	2-Methylpentene-2	0.341	0.374	0.323	109.806
40	37.823	922-62-3	C6	3-Methyl-c-pentene-2	0.264	0.286	0.250	84.946
41	38.745	7688-21-3	K6	c-Hexene-2	0.214	0.235	0.203	69.017
42	40.091	3404-73-7	C7	3,3-Dimethylpentene-1	0.311	0.335	0.252	100.051
43	40.670	96-37-7	M6	Methylcyclopentane	0.740	0.748	0.700	238.146

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.243	108-08-7	I7	2,4-Dimethylpentane	0.146	0.164	0.116	46.060
45	42.534	594-56-9	C7	2,3,3-Trimethylbutene-1	0.009	0.010	0.007	2.897
46	44.495	7459-71-4	B7	3,5-Dimethylcyclopentene	0.013	0.012	0.011	4.125
47	45.429	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.015	4.875
48	45.640	71-42-3	Q6	Benzene	0.726	0.626	0.741	251.866
49	45.836	693-89-0	B6	1-Methylcyclopentene	0.362	0.351	0.351	119.252
50	46.643	3404-61-3	C7	3-Methylhexene-1	0.016	0.018	0.013	5.217
51	47.229	3524-73-0	C7	5-Methylhexene-1	0.023	0.025	0.018	7.340
52	47.553	110-82-7	M6	Cyclohexane	0.069	0.067	0.065	22.211
53	48.058	71-36-3	X4	n-Butanol	0.056	0.053	0.060	13.663
54	49.274	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.033	13.058
55	49.621	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.009	3.672
56	50.268	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.051	0.055	0.042	16.512
57	50.661	591-76-4	I7	2-Methylhexane	0.405	0.452	0.322	127.777
58	50.841		?	Unidentified	0.020	0.022	0.017	7.883
59	51.153	110-83-8	B6	Cyclohexene	0.045	0.042	0.044	14.542
60	52.493	589-34-4	I7	3-Methylhexane	0.276	0.304	0.220	87.130
61	53.354	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.097	0.098	0.078	31.087
62	53.940	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.064	0.065	0.052	20.739
63	54.566	822-50-4	M7	1t,2-Dimethylcyclopentane	0.059	0.059	0.048	18.891
64	54.843		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.018	7.276
65	55.470	592-76-7	K7	Heptene-1	0.014	0.015	0.011	4.427
66	55.604		M7	C7 - MonoNaph - 1	0.014	0.013	0.010	4.429
67	56.803	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.011	4.505
68	57.333	14686-14-7	K7	t-Heptene-3	0.032	0.035	0.026	10.417
69	57.685	6094-02-6	C7	2-Methylhexene-1	0.058	0.063	0.047	18.603
70	58.055	142-82-5	P7	n-Heptane	0.096	0.107	0.077	30.404
71	58.276	7642-10-6	K7	c-Heptene-3	0.026	0.028	0.021	8.302
72	58.550	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.021	8.482
73	58.794	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.021	0.016	6.457
74	59.176	14686-13-6	K7	t-Heptene-2	0.012	0.013	0.010	3.954
75	59.653	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.015	6.028
76	60.078	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.012	4.946
77	60.862	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	4.178
78	61.503	108-87-2	M7	Methylcyclohexane	0.045	0.044	0.037	14.529
79	63.365		?	Unidentified	0.045	0.047	0.032	17.677
80	69.082	108-88-3	Q7	Toluene	10.715	9.355	9.262	3674.563
81	72.047	592-27-8	I8	2-Methylheptane	0.018	0.019	0.012	5.541
82	72.301	589-53-7	I8	4-Methylheptane	0.010	0.010	0.007	3.071
83	73.362	589-81-1	I8	3-Methylheptane	0.019	0.021	0.013	6.059
84	77.870	111-65-9	P8	n-Octane	0.020	0.022	0.014	6.465
85	84.746	100-41-4	Q8	Ethylbenzene	2.111	1.843	1.584	718.518
86	85.993	108-38-3	Q8	m-Xylene	5.389	4.721	4.043	1834.259

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	86.132	106-42-3	Q8	p-Xylene	2.444	2.149	1.834	831.977
88	88.939	95-47-6	Q8	o-Xylene	1.398	1.202	1.049	475.836
89	91.751	111-84-2	P9	n-Nonane	0.006	0.007	0.004	1.995
90	93.096	98-82-8	Q9	i-Propylbenzene	0.037	0.032	0.024	12.472
91	95.508	2051-30-1	I10	2,4-Dimethyloctane	0.009	0.009	0.005	2.705
92	96.558	103-65-1	Q9	n-Propylbenzene	0.530	0.466	0.351	179.330
93	97.417	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.130	1.865	1.411	720.185
94	97.646	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.998	0.877	0.661	337.491
95	98.271	108-67-8	Q9	1,3,5-Trimethylbenzene	1.274	1.114	0.844	430.727
96	98.725	15869-85-9	I10	5-Methylnonane	0.009	0.009	0.005	2.729
97	98.914	17301-94-8	I10	4-Methylnonane	0.021	0.021	0.011	6.508
98	99.118		I10	2,2,6-Trimethyloctane	0.297	0.310	0.167	94.413
99	99.351	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.778	0.669	0.516	263.055
100	99.570	5881-17-4	I10	3-Ethyloctane	0.006	0.006	0.003	1.815
101	99.890	5911-04-6	I10	3-Methylnonane	0.031	0.032	0.017	9.723
102	100.354		?	Unidentified	0.020	0.015	0.010	7.865
103	100.488		?	Unidentified	0.059	0.060	0.030	23.427
104	100.701		I11	C11-Isoparaffin-2	0.033	0.033	0.017	10.410
105	101.004	95-63-6	Q9	1,2,4-Trimethylbenzene	3.904	3.375	2.587	1320.248
106	101.166		?	Unidentified	0.042	0.046	0.024	16.645
107	101.288		?	Unidentified	0.025	0.026	0.014	9.938
108	101.551	1678-98-4	M10	i-Butylcyclohexane	0.007	0.006	0.004	2.107
109	102.338	17302-01-1	I10	3-Ethyl-3-methylheptane	0.069	0.070	0.035	21.809
110	102.627	538-93-2	Q10	i-Butylbenzene	0.110	0.098	0.065	37.102
111	102.806	124-18-5	P10	n-Decane	0.033	0.034	0.018	10.422
112	102.902		?	Unidentified	0.044	0.039	0.026	17.297
113	103.200		?	Unidentified	0.019	0.019	0.010	7.375
114	103.856	526-73-8	Q9	1,2,3-Trimethylbenzene	0.707	0.599	0.469	239.171
115	104.244	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.021	0.018	0.012	6.930
116	104.412		I11	C11 Isoparaffin-4	0.012	0.012	0.006	3.736
117	104.617	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.081	0.071	0.048	27.192
118	105.047		J9	Indan	0.248	0.195	0.167	85.272
119	105.643		J10	Indene	0.460	0.362	0.310	158.236
120	106.358		I11	C11-Isoparaffin-7	0.206	0.209	0.105	65.361
121	106.549	141-93-5	Q10	1,3-Diethylbenzene	0.110	0.097	0.066	37.149
122	106.827	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.889	0.782	0.528	299.094
123	107.170	105-05-5	Q10	1,4-Diethylbenzene	0.353	0.310	0.209	118.667
124	107.267	104-51-8	Q10	n-Butylbenzene	0.067	0.059	0.040	22.570
125	107.387	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.396	0.341	0.235	133.245
126	107.644	135-01-3	Q10	1,2-Diethylbenzene	0.061	0.053	0.036	20.540
127	108.084		?	Unidentified	0.052	0.053	0.027	20.644
128	108.236	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.137	0.119	0.081	46.093
129	108.358		?	Unidentified	0.061	0.062	0.031	23.957

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	108.439		?	Unidentified	0.056	0.056	0.028	21.899
131	108.566		I11	C11- Isoparaffin-11	0.469	0.477	0.239	149.073
132	108.747		?	Unidentified	0.152	0.154	0.077	59.856
133	109.084	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.325	0.280	0.193	109.194
134	109.172		?	Unidentified	0.403	0.347	0.239	158.793
135	109.244	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.361	0.312	0.214	121.545
136	109.397		J10	2-Methylindan	0.100	0.079	0.060	34.463
137	109.748	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.890	0.770	0.528	299.351
138	110.288	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.451	0.384	0.268	151.731
139	110.712		?	Unidentified	0.013	0.012	0.007	4.976
140	110.907	693-61-8	K11	2-Undecene, (E)-	0.035	0.036	0.020	11.152
141	111.042		?	Unidentified	0.046	0.047	0.026	17.953
142	111.197		Q11	1-Methyl-4-t-butylbenzene	0.077	0.068	0.041	25.643
143	111.418	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.306	0.259	0.181	102.803
144	111.714	1120-21-4	P11	n-Undecane	0.063	0.064	0.032	20.072
145	111.868	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.068	0.058	0.037	22.807
146	111.976		?	Unidentified	0.034	0.029	0.018	13.307
147	112.083		Q11	C11 - Aromatic - 1	0.007	0.006	0.004	2.456
148	112.356		Q10	1,2,4,5-Tetramethylbenzene	0.739	0.630	0.439	248.541
149	112.623	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	1.011	0.860	0.600	340.155
150	112.813		?	Unidentified	0.009	0.007	0.005	3.466
151	112.962		?	Unidentified	0.011	0.010	0.007	4.451
152	113.134		I12	C12 - IsoParaffin - 1	0.013	0.013	0.006	4.048
153	113.486		?	Unidentified	0.040	0.041	0.019	15.583
154	113.757		Q11	C11 - Aromatic - 3	0.116	0.098	0.062	38.766
155	113.949	874-35-1	H10	5-Methylindan	0.317	0.269	0.191	106.484
156	114.073		Q12	1,2-Di-i-propylbenzene	0.115	0.097	0.056	38.230
157	114.288	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.165	0.140	0.088	55.136
158	114.443		Q11	C11 - Aromatic - 4	0.091	0.077	0.049	30.433
159	114.698	824-22-6	J10	4-Methylindan	0.424	0.360	0.255	142.501
160	114.848	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.098	0.084	0.053	32.973
161	114.946	824-63-5	H10	2-Methylindan	0.310	0.264	0.187	104.407
162	115.146		?	Unidentified	0.030	0.030	0.014	11.648
163	115.260	538-68-1	Q11	n-Pentylbenzene	0.039	0.033	0.021	13.066
164	115.487		Q11	tert-Pentylbenzene	0.172	0.146	0.092	57.548
165	115.800	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.077	0.066	0.041	25.841
166	115.909		Q11	C11 - Aromatic - 7	0.095	0.084	0.051	31.740
167	116.239		I12	C12 - IsoParaffin - 4	0.006	0.006	0.003	1.924
168	116.370	100-18-5	Q12	1,4-Di-i-propylbenzene	0.149	0.127	0.073	49.736
169	116.815	91-20-3	G10	Naphthalene	0.320	0.237	0.199	112.847
170	117.008		J11	4,7-Dimethyl Indane	0.014	0.011	0.007	4.651
171	117.253		J11	1,1-Dimethyl Indane	0.049	0.039	0.027	16.938
172	117.415		J12	Dimethyl Indane - 1	0.020	0.016	0.011	6.967

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	117.593	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.023	0.020	0.011	7.679
174	117.733		J12	Dimethyl Indane - 2	0.007	0.006	0.004	2.412
175	117.895		Q12	1,3-Di-n-propylbenzene	0.125	0.107	0.062	41.855
176	118.006		Q11	C11 - Aromatic - 11	0.071	0.063	0.038	23.710
177	118.559		Q11	C11 - Aromatic - 12	0.047	0.042	0.025	15.884
178	119.189		Q11	C11 - Aromatic - 13	0.007	0.007	0.004	2.459
179	119.487	102-25-0	Q12	1,3,5-Triethylbenzene	0.012	0.010	0.006	4.107
180	120.146		Q12	C12 - Aromatic - 1	0.006	0.005	0.003	2.105
181	123.440	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.006	3.469
182	124.306	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.842
183	130.001		?	Unidentified	0.003	0.002	0.001	1.142

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	10.023	106-97-8	n-Butane	2.109	2.758	2.890	655.608
	18.112	109-66-0	n-Pentane	0.838	1.014	0.926	262.437
	35.802	110-54-3	n-Hexane	0.413	0.474	0.382	129.877
	58.055	142-82-5	n-Heptane	0.096	0.107	0.077	30.404
	77.870	111-65-9	n-Octane	0.020	0.022	0.014	6.465
	91.751	111-84-2	n-Nonane	0.006	0.007	0.004	1.995
	102.806	124-18-5	n-Decane	0.033	0.034	0.018	10.422
	111.714	1120-21-4	n-Undecane	0.063	0.064	0.032	20.072
I-Paraffins	8.809	75-28-5	i-Butane	0.017	0.023	0.023	5.177
	10.637	463-82-1	2,2-Dimethylpropane	0.008	0.010	0.009	2.511
	15.097	78-78-4	i-Pentane	11.933	14.579	13.174	3735.075
	23.092	75-83-2	2,2-Dimethylbutane	0.369	0.430	0.341	115.862
	28.342	79-29-8	2,3-Dimethylbutane	1.375	1.573	1.270	431.949
	29.461	107-83-5	2-Methylpentane	7.744	8.976	7.158	2433.703
	32.083	96-14-0	3-Methylpentane	3.269	3.725	3.021	1027.171
	42.243	108-08-7	2,4-Dimethylpentane	0.146	0.164	0.116	46.060
	50.661	591-76-4	2-Methylhexane	0.405	0.452	0.322	127.777
	52.493	589-34-4	3-Methylhexane	0.276	0.304	0.220	87.130
	72.047	592-27-8	2-Methylheptane	0.018	0.019	0.012	5.541
	72.301	589-53-7	4-Methylheptane	0.010	0.010	0.007	3.071
	73.362	589-81-1	3-Methylheptane	0.019	0.021	0.013	6.059
	95.508	2051-30-1	2,4-Dimethyloctane	0.009	0.009	0.005	2.705
	98.725	15869-85-9	5-Methylnonane	0.009	0.009	0.005	2.729
	98.914	17301-94-8	4-Methylnonane	0.021	0.021	0.011	6.508
	99.118		2,2,6-Trimethyloctane	0.297	0.310	0.167	94.413
	99.570	5881-17-4	3-Ethyloctane	0.006	0.006	0.003	1.815
	99.890	5911-04-6	3-Methylnonane	0.031	0.032	0.017	9.723
	100.701		C11-Isoparaffin-2	0.033	0.033	0.017	10.410
	102.338	17302-01-1	3-Ethyl-3-methylheptane	0.069	0.070	0.035	21.809
	104.412		C11 Isoparaffin-4	0.012	0.012	0.006	3.736
	106.358		C11-Isoparaffin-7	0.206	0.209	0.105	65.361
	108.566		C11- Isoparaffin-11	0.469	0.477	0.239	149.073
	113.134		C12 - IsoParaffin - 1	0.013	0.013	0.006	4.048
	116.239		C12 - IsoParaffin - 4	0.006	0.006	0.003	1.924
Aromatics							
Mono-Aromatics	45.640	71-42-3	Benzene	0.726	0.626	0.741	251.866
	69.082	108-88-3	Toluene	10.715	9.355	9.262	3674.563
	84.746	100-41-4	Ethylbenzene	2.111	1.843	1.584	718.518
	85.993	108-38-3	m-Xylene	5.389	4.721	4.043	1834.259
	86.132	106-42-3	p-Xylene	2.444	2.149	1.834	831.977
	88.939	95-47-6	o-Xylene	1.398	1.202	1.049	475.836
	93.096	98-82-8	i-Propylbenzene	0.037	0.032	0.024	12.472
	96.558	103-65-1	n-Propylbenzene	0.530	0.466	0.351	179.330
	97.417	620-14-4	1-Methyl-3-ethylbenzene	2.130	1.865	1.411	720.185
	97.646	622-96-8	1-Methyl-4-ethylbenzene	0.998	0.877	0.661	337.491

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	98.271	108-67-8	1,3,5-Trimethylbenzene	1.274	1.114	0.844	430.727
	99.351	611-14-3	1-Methyl-2-ethylbenzene	0.778	0.669	0.516	263.055
	101.004	95-63-6	1,2,4-Trimethylbenzene	3.904	3.375	2.587	1320.248
	102.627	538-93-2	i-Butylbenzene	0.110	0.098	0.065	37.102
	103.856	526-73-8	1,2,3-Trimethylbenzene	0.707	0.599	0.469	239.171
	104.244	535-77-3	1-Methyl-3-i-propylbenzene	0.021	0.018	0.012	6.930
	104.617	99-87-6	1-Methyl-4-i-propylbenzene	0.081	0.071	0.048	27.192
	106.549	141-93-5	1,3-Diethylbenzene	0.110	0.097	0.066	37.149
	106.827	1074-43-7	1-Methyl-3-n-propylbenzene	0.889	0.782	0.528	299.094
	107.170	105-05-5	1,4-Diethylbenzene	0.353	0.310	0.209	118.667
	107.267	104-51-8	n-Butylbenzene	0.067	0.059	0.040	22.570
	107.387	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.396	0.341	0.235	133.245
	107.644	135-01-3	1,2-Diethylbenzene	0.061	0.053	0.036	20.540
	108.236	1074-17-5	1-Methyl-2-n-propylbenzene	0.137	0.119	0.081	46.093
	109.084	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.325	0.280	0.193	109.194
	109.244	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.361	0.312	0.214	121.545
	109.748	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.890	0.770	0.528	299.351
	110.288	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.451	0.384	0.268	151.731
	111.197		1-Methyl-4-t-butylbenzene	0.077	0.068	0.041	25.643
	111.418	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.306	0.259	0.181	102.803
	111.868	4218-48-8	1-Ethyl-4-i-propylbenzene	0.068	0.058	0.037	22.807
	112.083		C11 - Aromatic - 1	0.007	0.006	0.004	2.456
	112.356		1,2,4,5-Tetramethylbenzene	0.739	0.630	0.439	248.541
	112.623	527-53-7	1,2,3,5-Tetramethylbenzene	1.011	0.860	0.600	340.155
	113.757		C11 - Aromatic - 3	0.116	0.098	0.062	38.766
	114.073		1,2-Di-i-propylbenzene	0.115	0.097	0.056	38.230
	114.288	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.165	0.140	0.088	55.136
	114.443		C11 - Aromatic - 4	0.091	0.077	0.049	30.433
	114.848	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.098	0.084	0.053	32.973
	115.260	538-68-1	n-Pentylbenzene	0.039	0.033	0.021	13.066
	115.487		tert-Pentylbenzene	0.172	0.146	0.092	57.548
	115.800	577-55-9	1-Methyl-2-n-butylbenzene	0.077	0.066	0.041	25.841
	115.909		C11 - Aromatic - 7	0.095	0.084	0.051	31.740
	116.370	100-18-5	1,4-Di-i-propylbenzene	0.149	0.127	0.073	49.736
	117.593	7364-19-4	1t-Butyl-4-ethylbenzene	0.023	0.020	0.011	7.679
	117.895		1,3-Di-n-propylbenzene	0.125	0.107	0.062	41.855
	118.006		C11 - Aromatic - 11	0.071	0.063	0.038	23.710
	118.559		C11 - Aromatic - 12	0.047	0.042	0.025	15.884
	119.189		C11 - Aromatic - 13	0.007	0.007	0.004	2.459
	119.487	102-25-0	1,3,5-Triethylbenzene	0.012	0.010	0.006	4.107
	120.146		C12 - Aromatic - 1	0.006	0.005	0.003	2.105
Naphthalenes	116.815	91-20-3	Naphthalene	0.320	0.237	0.199	112.847
	123.440	91-57-6	2-Methylnaphthalene	0.010	0.007	0.006	3.469
	124.306	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.842
Naphtheno/Olefir	113.949	874-35-1	5-Methylindan	0.317	0.269	0.191	106.484

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphtheno/Olefir	114.946	824-63-5	2-Methylindan	0.310	0.264	0.187	104.407
Indenes	105.047		Indan	0.248	0.195	0.167	85.272
	105.643		Indene	0.460	0.362	0.310	158.236
	109.397		2-Methylindan	0.100	0.079	0.060	34.463
	114.698	824-22-6	4-Methylindan	0.424	0.360	0.255	142.501
	117.008		4,7-Dimethyl Indane	0.014	0.011	0.007	4.651
	117.253		1,1-Dimethyl Indane	0.049	0.039	0.027	16.938
	117.415		Dimethyl Indane - 1	0.020	0.016	0.011	6.967
	117.733		Dimethyl Indane - 2	0.007	0.006	0.004	2.412
Naphthenes							
Mono-Naphthene	27.606	287-92-3	Cyclopentane	0.313	0.318	0.355	100.758
	40.670	96-37-7	Methylcyclopentane	0.740	0.748	0.700	238.146
	47.553	110-82-7	Cyclohexane	0.069	0.067	0.065	22.211
	53.354	1759-58-6	1t,3-Dimethylcyclopentane	0.097	0.098	0.078	31.087
	53.940	2532-58-3	1c,3-Dimethylcyclopentane	0.064	0.065	0.052	20.739
	54.566	822-50-4	1t,2-Dimethylcyclopentane	0.059	0.059	0.048	18.891
	55.604		C7 - MonoNaph - 1	0.014	0.013	0.010	4.429
	59.653	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.019	0.019	0.015	6.028
	61.503	108-87-2	Methylcyclohexane	0.045	0.044	0.037	14.529
	101.551	1678-98-4	i-Butylcyclohexane	0.007	0.006	0.004	2.107
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.621	115-11-7	Isobutene	0.016	0.020	0.022	5.023
	9.663	106-98-9	Butene-1	0.017	0.022	0.025	5.591
	10.509	624-64-6	t-Butene-2	0.072	0.090	0.102	23.066
	11.251	590-18-1	c-Butene-2	0.085	0.103	0.120	27.303
	16.728	109-67-1	Pentene-1	0.331	0.392	0.376	106.701
	19.232	646-04-8	t-Pentene-2	0.843	0.985	0.958	271.448
	20.266	627-20-3	c-Pentene-2	0.463	0.534	0.525	148.936
	33.454	592-41-6	Hexene-1	0.160	0.179	0.152	51.582
	36.439	13269-52-8	t-Hexene-3	0.263	0.292	0.249	84.733
	36.918	4050-45-7	t-Hexene-2	0.406	0.450	0.384	130.707
	38.745	7688-21-3	c-Hexene-2	0.214	0.235	0.203	69.017
	55.470	592-76-7	Heptene-1	0.014	0.015	0.011	4.427
	57.333	14686-14-7	t-Heptene-3	0.032	0.035	0.026	10.417
	58.276	7642-10-6	c-Heptene-3	0.026	0.028	0.021	8.302
	59.176	14686-13-6	t-Heptene-2	0.012	0.013	0.010	3.954
	110.907	693-61-8	2-Undecene, (E)-	0.035	0.036	0.020	11.152
Iso-Olefins	13.451	563-45-1	3-Methylbutene-1	0.190	0.230	0.216	61.273
	17.580	563-46-2	2-Methylbutene-1	0.504	0.586	0.572	162.173
	20.944	513-35-9	2-Methylbutene-2	1.037	1.185	1.177	333.713
	29.204	691-38-3	4-Methyl-c-pentene-2	0.045	0.050	0.042	14.401
	29.850	674-76-0	4-Methyl-t-pentene-2	0.131	0.147	0.124	42.030

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	33.230	763-29-1	2-Methylpentene-1	0.224	0.248	0.212	72.191
	35.641	760-21-4	2-Ethylbutene-1	0.072	0.079	0.068	23.300
	37.408	625-27-4	2-Methylpentene-2	0.341	0.374	0.323	109.806
	37.823	922-62-3	3-Methyl-c-pentene-2	0.264	0.286	0.250	84.946
	40.091	3404-73-7	3,3-Dimethylpentene-1	0.311	0.335	0.252	100.051
	42.534	594-56-9	2,3,3-Trimethylbutene-1	0.009	0.010	0.007	2.897
	46.643	3404-61-3	3-Methylhexene-1	0.016	0.018	0.013	5.217
	47.229	3524-73-0	5-Methylhexene-1	0.023	0.025	0.018	7.340
	49.274	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.033	13.058
	49.621	3769-23-1	4-Methylhexene-1	0.011	0.012	0.009	3.672
	50.268	3404-55-5	4-Methyl-t/c-hexene-2	0.051	0.055	0.042	16.512
	54.843		C7 - Iso-Olefin - 2	0.023	0.024	0.018	7.276
	56.803	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.011	4.505
	57.685	6094-02-6	2-Methylhexene-1	0.058	0.063	0.047	18.603
	58.550	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.021	8.482
	58.794	10574-36-4	3-Methyl-c-hexene-2	0.020	0.021	0.016	6.457
	60.078	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.012	4.946
	60.862	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	4.178
Naphtheno-Olefir	22.535	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.008	2.314
	25.740	142-29-0	Cyclopentene	0.197	0.193	0.230	65.328
	37.040	1120-62-3	3-Methylcyclopentene	0.099	0.098	0.096	31.759
	44.495	7459-71-4	3,5-Dimethylcyclopentene	0.013	0.012	0.011	4.125
	45.836	693-89-0	1-Methylcyclopentene	0.362	0.351	0.351	119.252
	51.153	110-83-8	Cyclohexene	0.045	0.042	0.044	14.542
Di-Olefins	18.625	78-79-5	2-Methyl-1,3-Butadiene	0.010	0.012	0.012	3.456
	21.270	2004-70-8	1t,3-Pentadiene	0.016	0.018	0.018	5.211
	45.429	1528-30-9	C6-Diolefin-1	0.015	0.015	0.015	4.875
Oxygenates	13.111	64-17-5	Ethanol	16.311	15.650	28.202	2162.315
	26.904	71-23-8	n-Propanol	0.075	0.071	0.100	16.972
	48.058	71-36-3	n-Butanol	0.056	0.053	0.060	13.663
Unidentified	19.879		Unidentified	0.006	0.007	0.007	2.292
	26.995		Unidentified	0.059	0.067	0.056	23.426
	28.734		Unidentified	0.053	0.054	0.048	20.912
	50.841		Unidentified	0.020	0.022	0.017	7.883
	63.365		Unidentified	0.045	0.047	0.032	17.677
	100.354		Unidentified	0.020	0.015	0.010	7.865
	100.488		Unidentified	0.059	0.060	0.030	23.427
	101.166		Unidentified	0.042	0.046	0.024	16.645
	101.288		Unidentified	0.025	0.026	0.014	9.938
	102.902		Unidentified	0.044	0.039	0.026	17.297
	103.200		Unidentified	0.019	0.019	0.010	7.375
	108.084		Unidentified	0.052	0.053	0.027	20.644
	108.358		Unidentified	0.061	0.062	0.031	23.957

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Components by Group

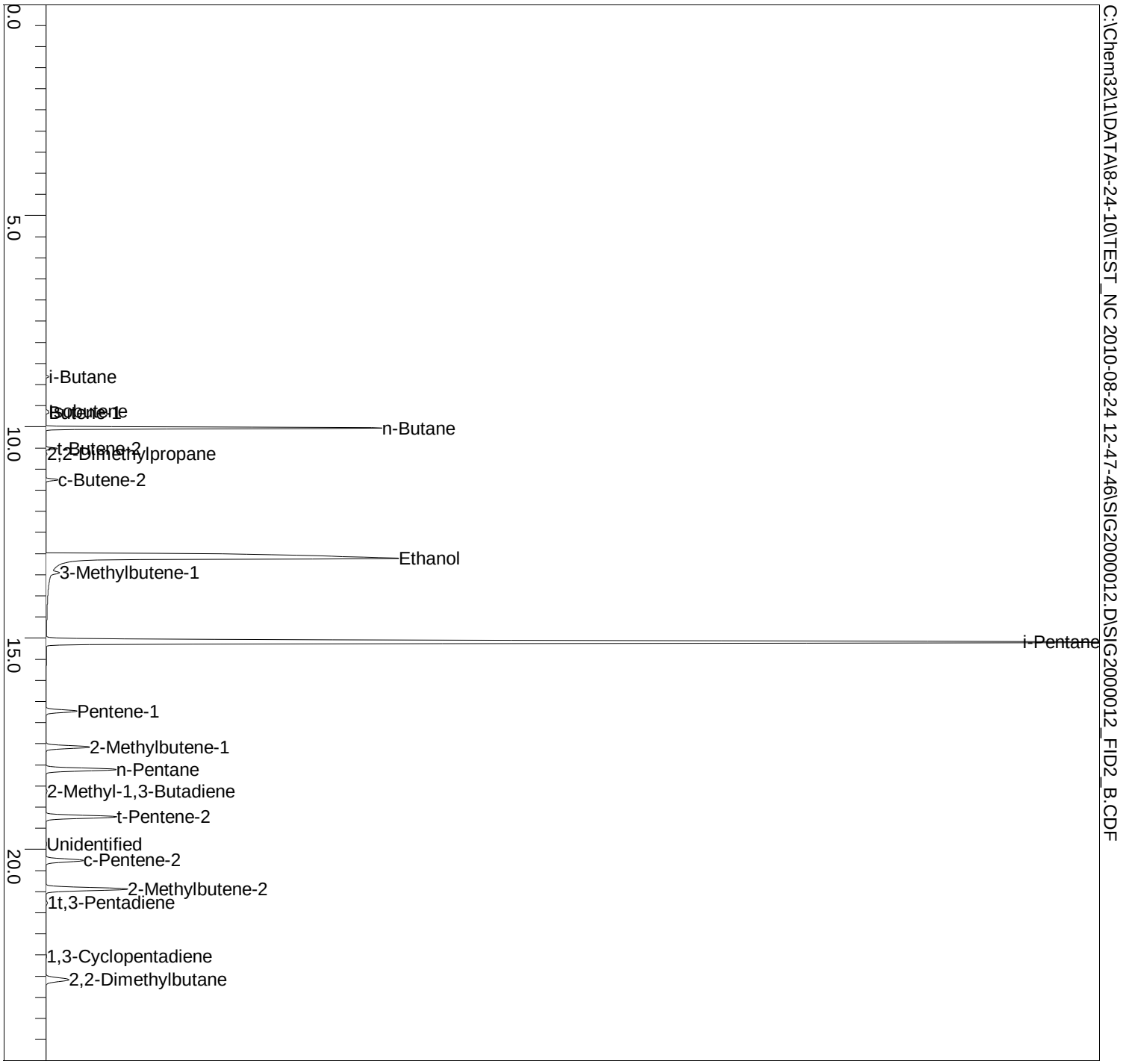
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	108.439		Unidentified	0.056	0.056	0.028	21.899
	108.747		Unidentified	0.152	0.154	0.077	59.856
	109.172		Unidentified	0.403	0.347	0.239	158.793
	110.712		Unidentified	0.013	0.012	0.007	4.976
	111.042		Unidentified	0.046	0.047	0.026	17.953
	111.976		Unidentified	0.034	0.029	0.018	13.307
	112.813		Unidentified	0.009	0.007	0.005	3.466
	112.962		Unidentified	0.011	0.010	0.007	4.451
	113.486		Unidentified	0.040	0.041	0.019	15.583
	115.146		Unidentified	0.030	0.030	0.014	11.648
	130.001		Unidentified	0.003	0.002	0.001	1.142

Plus

Recovery = 100.00

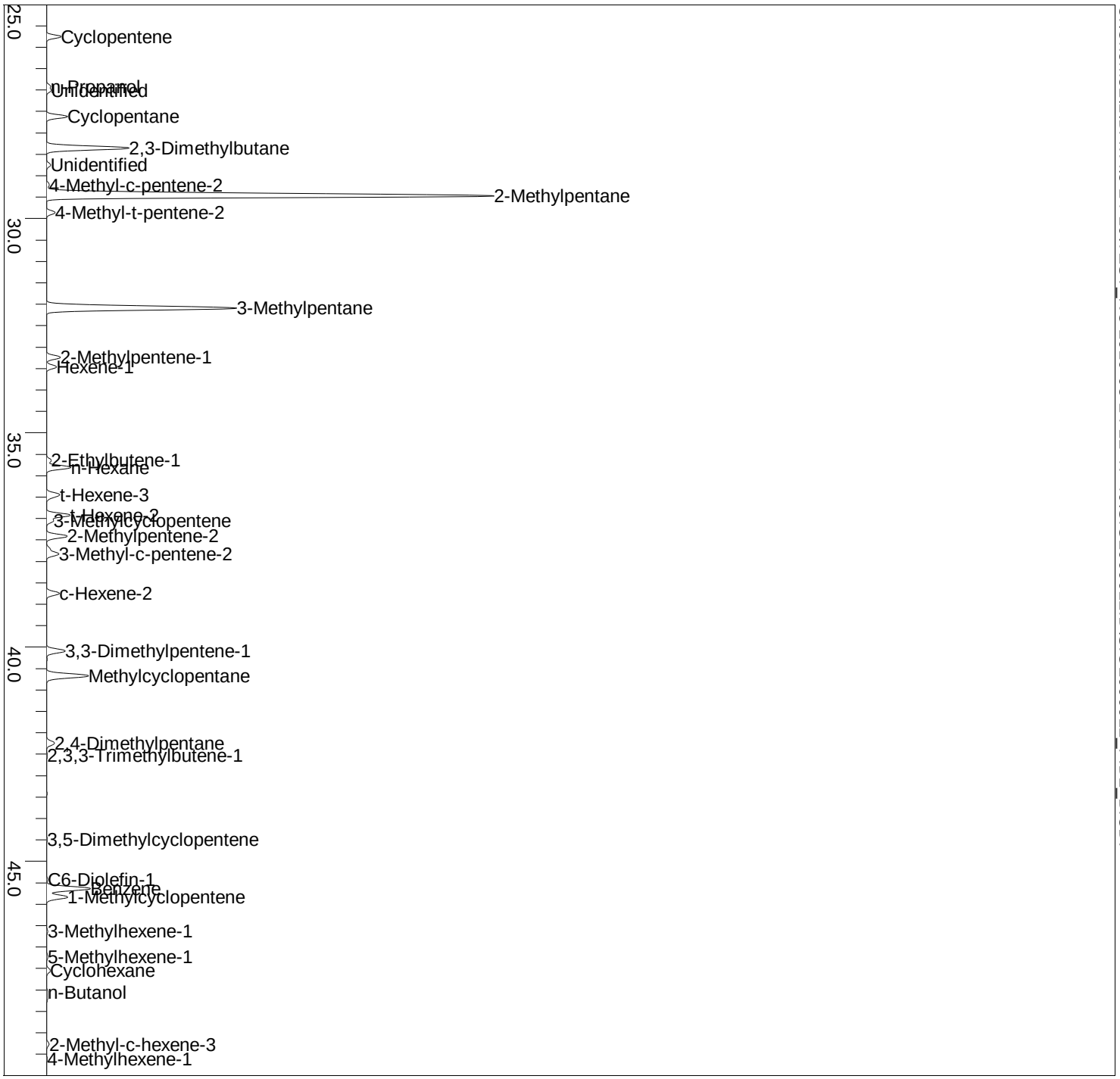
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2_B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2_B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram



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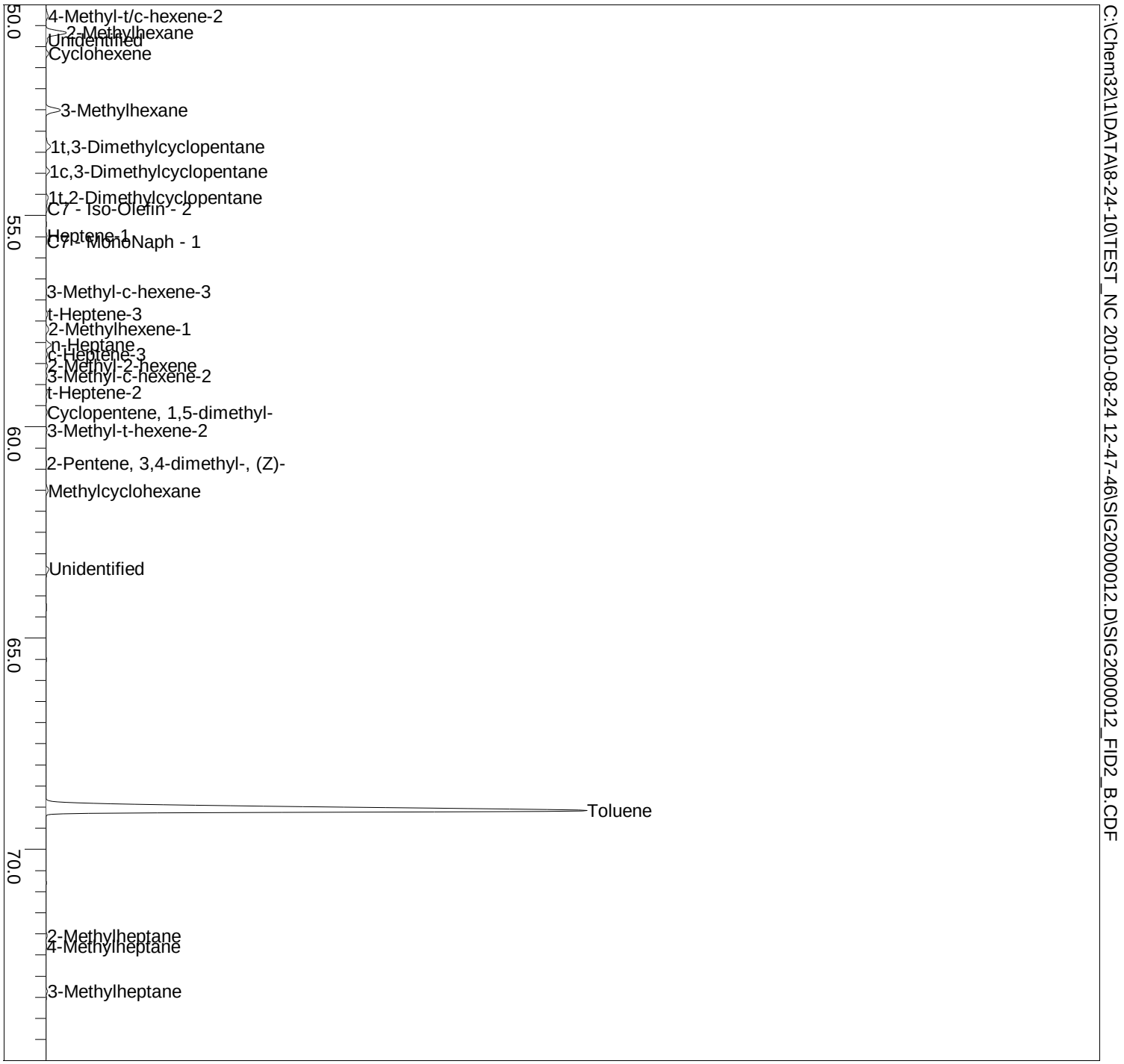
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram



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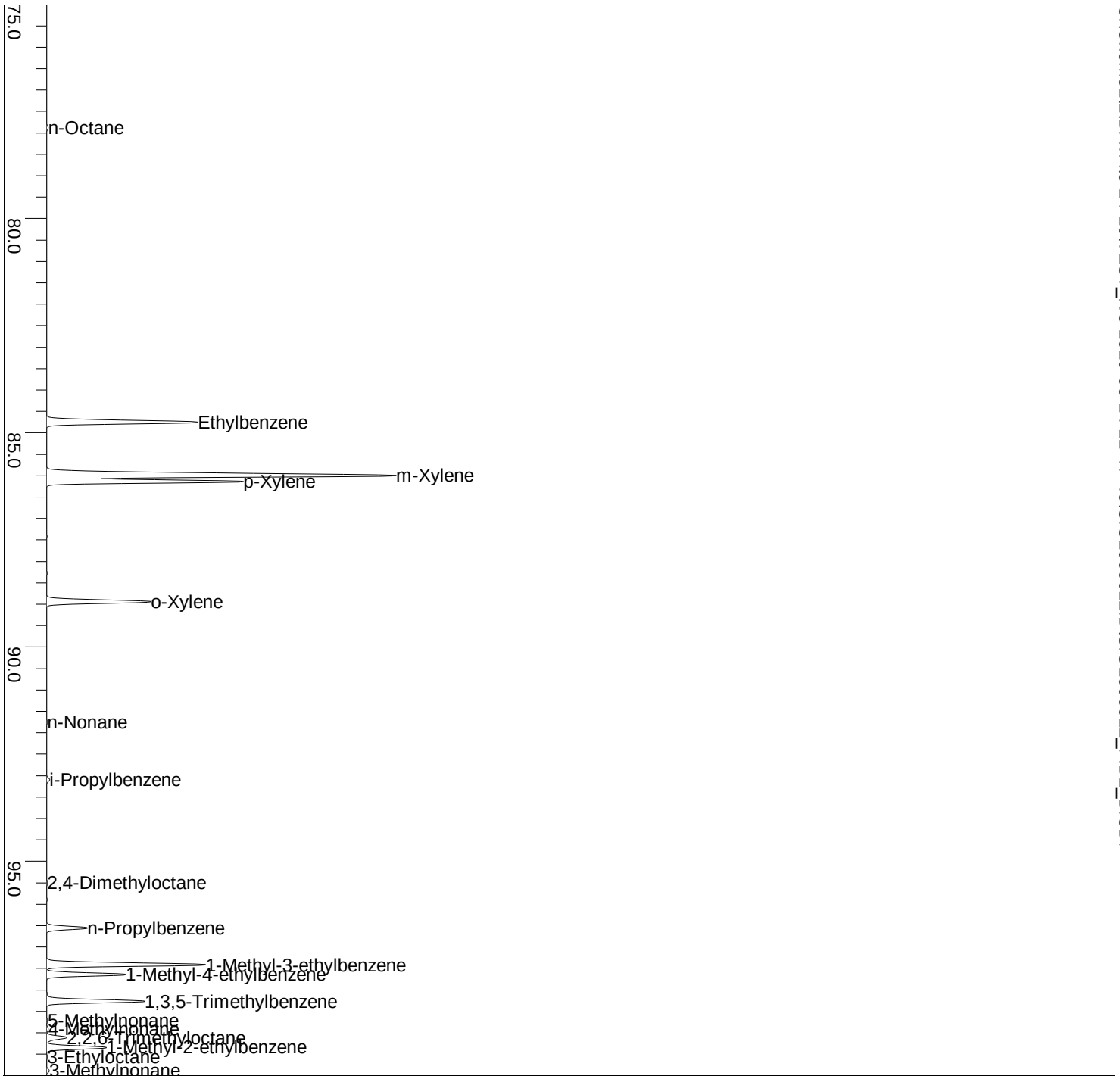
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram

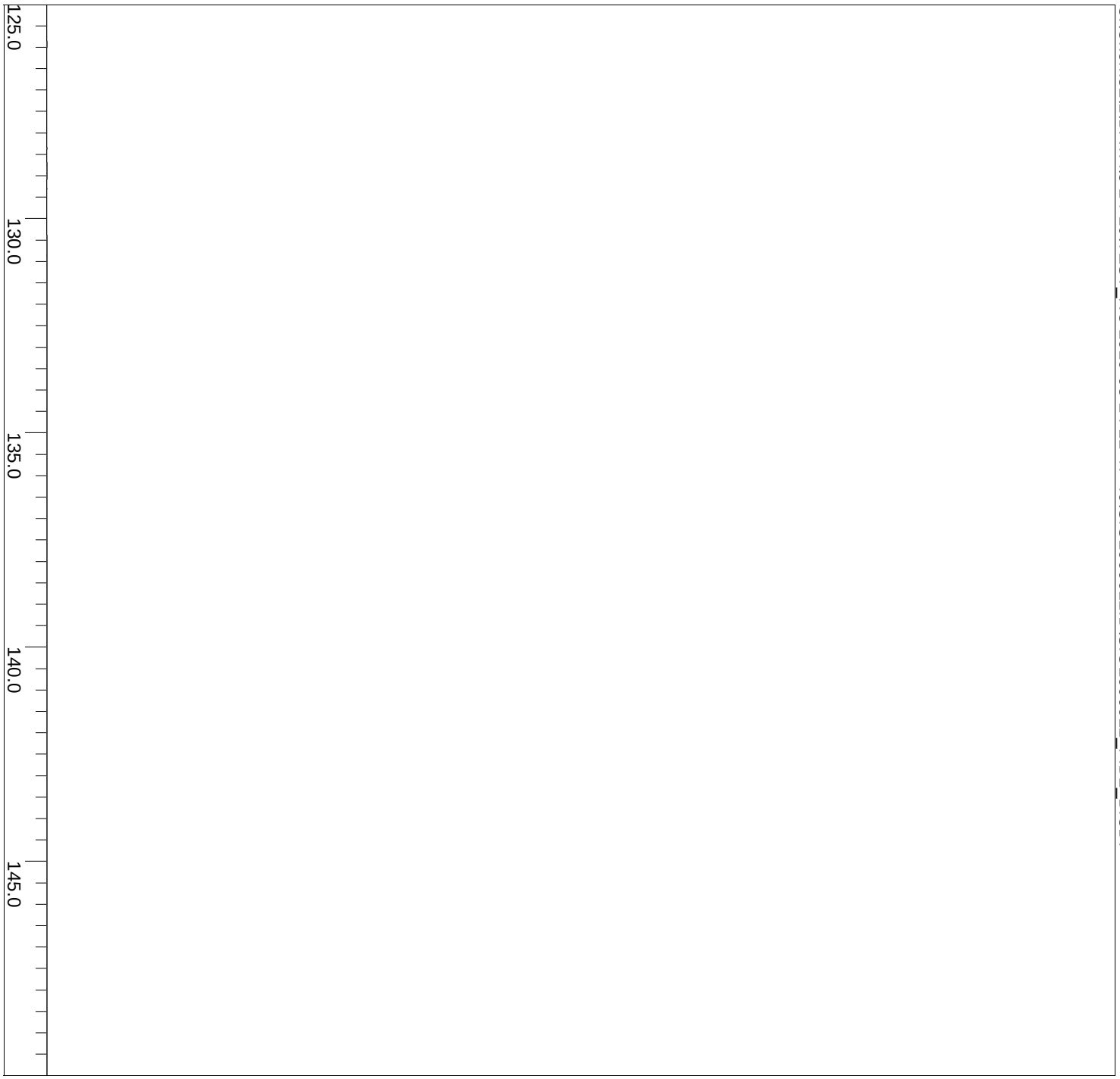


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2_B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000012.D\SIG2000012_FID2_B.CDF 25-Aug-10, 15:57:03
Sample: ODDB-91330 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91330
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	4.083	4.804	4.540
I-Paraffins	42.647	45.728	33.265
Aromatics	22.281	18.909	17.099
Mono-Aromatics	20.011	17.143	15.521
Naphthalenes	0.136	0.099	0.088
Naphtheno/Olefino-Benz	0.173	0.145	0.110
Indenes	1.961	1.522	1.380
Naphthenes	1.643	1.617	1.575
Mono-Naphthenes	1.643	1.617	1.575
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.614	8.382	8.395
n-Olefins	3.191	3.600	3.619
Iso-Olefins	3.641	4.026	3.921
Naphtheno-Olefins	0.739	0.710	0.805
Di-Olefins	0.043	0.046	0.050
Oxygenates	16.687	15.756	30.495
Unidentified	5.045	4.805	4.631
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	16.550	15.628	30.318
C3	0.079	0.074	0.111
C4	1.683	2.133	2.436
C5	9.089	10.633	10.772
C6	9.900	10.643	9.871
C7	8.867	8.457	7.866
C8	26.247	26.680	19.665
C9	8.277	7.632	5.683
C10	11.654	10.790	7.227
C11	2.439	2.378	1.332
C12	0.171	0.149	0.088

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	1.395	1.796	2.025
	C5	0.876	1.042	1.025
	C6	0.963	1.088	0.943
	C7	0.112	0.122	0.094
	C8	0.026	0.028	0.020
	C9	0.279	0.290	0.184
	C10	0.303	0.309	0.180
	C11	0.124	0.124	0.067
	C12	0.005	0.005	0.003
I-Paraffins	C4	0.021	0.028	0.031
	C5	4.282	5.150	5.008
	C6	4.383	4.957	4.292
	C7	2.569	2.824	2.163
	C8	21.317	22.433	15.749
	C9	2.671	2.804	1.758
	C10	5.502	5.627	3.238
	C11	1.868	1.870	1.008
	C12	0.034	0.034	0.017
Mono-Aromatics	C6	0.720	0.610	0.778
	C7	5.106	4.388	4.676
	C8	4.880	4.197	3.879
	C9	5.060	4.326	3.553
	C10	3.757	3.210	2.362
	C11	0.363	0.307	0.207
	C12	0.125	0.105	0.065
Naphthalenes	C10	0.117	0.085	0.077
	C11	0.019	0.014	0.011
Naphtheno/Olefino-Benzs	C10	0.173	0.145	0.110
Indenes	C9	0.223	0.172	0.159
	C10	1.721	1.337	1.211
	C11	0.011	0.009	0.007
	C12	0.006	0.005	0.004
Mono-Naphthenes	C5	0.099	0.098	0.119
	C6	1.107	1.094	1.110
	C7	0.304	0.301	0.262
	C8	0.014	0.013	0.010

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.043	0.039	0.029
	C10	0.076	0.071	0.046
n-Olefins	C4	0.209	0.255	0.314
	C5	1.745	2.004	2.100
	C6	1.083	1.180	1.086
	C7	0.101	0.107	0.087
	C11	0.054	0.054	0.032
Iso-Olefins	C5	1.845	2.099	2.220
	C6	1.120	1.212	1.123
	C7	0.661	0.700	0.568
	C8	0.010	0.010	0.007
	C10	0.005	0.006	0.003
Naphtheno-Olefins	C5	0.215	0.209	0.267
	C6	0.524	0.501	0.538
Di-Olefins	C5	0.028	0.030	0.034
	C7	0.016	0.016	0.016
Oxygenates	C2	16.550	15.628	30.318
	C3	0.079	0.074	0.111
	C4	0.058	0.054	0.066

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	23.97	23.13
5%	81.07	80.38
10%	100.74	97.08
15%	144.48	137.87
20%	168.76	154.06
25%	172.53	172.35
30%	172.86	172.69
35%	173.18	173.04
40%	193.37	176.58
45%	209.85	209.42
50%	228.40	210.31
55%	230.67	229.99
60%	235.00	232.43
65%	238.04	236.99
70%	261.54	243.44
75%	291.66	281.24
80%	326.97	320.72
85%	334.28	332.34
90%	352.22	352.22
95%	363.20	363.20
FBP	402.05	388.39

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.806	75-28-5	I4	i-Butane	0.021	0.028	0.031	5.320
2	9.619	115-11-7	K4	Isobutene	0.017	0.022	0.026	4.527
3	9.661	106-98-9	K4	Butene-1	0.019	0.024	0.029	5.030
4	10.020	106-97-8	P4	n-Butane	1.395	1.796	2.025	348.622
5	10.506	624-64-6	K4	t-Butene-2	0.079	0.097	0.119	20.405
6	10.634	463-82-1	I5	2,2-Dimethylpropane	0.016	0.020	0.018	3.956
7	11.247	590-18-1	K4	c-Butene-2	0.093	0.112	0.140	24.087
8	13.087	64-17-5	X2	Ethanol	16.550	15.628	30.318	1763.987
9	13.448	563-45-1	C5	3-Methylbutene-1	0.205	0.244	0.247	53.090
10	15.074	78-78-4	I5	i-Pentane	4.266	5.130	4.990	1073.609
11	16.726	109-67-1	K5	Pentene-1	0.355	0.413	0.427	91.857
12	17.578	563-46-2	C5	2-Methylbutene-1	0.538	0.617	0.648	139.330
13	18.110	109-66-0	P5	n-Pentane	0.876	1.042	1.025	220.468
14	18.624	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.014	2.981
15	19.230	646-04-8	K5	t-Pentene-2	0.898	1.032	1.081	232.434
16	19.876		?	Unidentified	0.006	0.007	0.007	1.963
17	20.264	627-20-3	K5	c-Pentene-2	0.492	0.559	0.592	127.403
18	20.942	513-35-9	C5	2-Methylbutene-2	1.101	1.239	1.325	285.046
19	21.266	2004-70-8	E5	1t,3-Pentadiene	0.016	0.018	0.020	4.394
20	22.532	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.009	1.969
21	23.105	75-83-2	I6	2,2-Dimethylbutane	0.029	0.033	0.028	7.201
22	25.738	142-29-0	B5	Cyclopentene	0.208	0.201	0.258	55.399
23	26.901	71-23-8	X3	n-Propanol	0.079	0.074	0.111	14.373
24	26.992		?	Unidentified	0.062	0.069	0.062	19.690
25	27.606	287-92-3	M5	Cyclopentane	0.099	0.098	0.119	25.503
26	28.339	79-29-8	I6	2,3-Dimethylbutane	1.335	1.504	1.308	337.344
27	28.734		?	Unidentified	0.056	0.056	0.053	17.614
28	29.192	691-38-3	C6	4-Methyl-c-pentene-2	0.048	0.053	0.048	12.495
29	29.415	107-83-5	I6	2-Methylpentane	1.825	2.082	1.787	461.124
30	29.842	674-76-0	C6	4-Methyl-t-pentene-2	0.137	0.152	0.138	35.495
31	32.065	96-14-0	I6	3-Methylpentane	1.194	1.339	1.169	301.639
32	33.229	763-29-1	C6	2-Methylpentene-1	0.234	0.254	0.234	60.522
33	33.453	592-41-6	K6	Hexene-1	0.167	0.183	0.167	43.147
34	35.642	760-21-4	C6	2-Ethylbutene-1	0.071	0.076	0.071	18.449
35	35.804	110-54-3	P6	n-Hexane	0.963	1.088	0.943	243.400
36	36.441	13269-52-8	K6	t-Hexene-3	0.274	0.299	0.274	70.847
37	36.916	4050-45-7	K6	t-Hexene-2	0.421	0.459	0.422	108.872
38	37.041	1120-62-3	B6	3-Methylcyclopentene	0.104	0.101	0.107	26.877
39	37.409	625-27-4	C6	2-Methylpentene-2	0.355	0.383	0.356	91.931
40	37.823	922-62-3	C6	3-Methyl-c-pentene-2	0.274	0.293	0.275	71.033
41	38.745	7688-21-3	K6	c-Hexene-2	0.222	0.239	0.223	57.500
42	40.088	3404-73-7	C7	3,3-Dimethylpentene-1	0.322	0.342	0.277	83.413
43	40.669	96-37-7	M6	Methylcyclopentane	0.891	0.887	0.893	230.581

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.235	108-08-7	I7	2,4-Dimethylpentane	1.014	1.123	0.854	257.280
45	42.536	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.753
46	42.782	464-06-2	I7	2,2,3-Trimethylbutane	0.067	0.073	0.057	17.116
47	45.429	1528-30-9	E7	C6-Diolefin-1	0.016	0.016	0.016	4.066
48	45.638	71-42-3	Q6	Benzene	0.720	0.610	0.778	200.638
49	45.835	693-89-0	B6	1-Methylcyclopentene	0.374	0.357	0.384	99.075
50	46.641	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.014	4.230
51	47.232	3524-73-0	C7	5-Methylhexene-1	0.030	0.032	0.025	7.664
52	47.554	110-82-7	M6	Cyclohexane	0.216	0.207	0.217	56.017
53	48.061	71-36-3	X4	n-Butanol	0.058	0.054	0.066	11.331
54	49.275	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.036	10.725
55	49.625	3769-23-1	C7	4-Methylhexene-1	0.012	0.013	0.010	3.119
56	50.270	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.052	0.055	0.045	13.559
57	50.674	591-76-4	I7	2-Methylhexane	1.123	1.233	0.946	284.818
58	51.155	110-83-8	B6	Cyclohexene	0.046	0.042	0.047	11.959
59	52.494	589-34-4	I7	3-Methylhexane	0.364	0.395	0.307	92.357
60	53.356	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.101	0.100	0.086	26.025
61	53.942	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.068	0.068	0.058	17.525
62	54.568	822-50-4	M7	1t,2-Dimethylcyclopentane	0.066	0.065	0.057	17.051
63	54.881		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.020	6.017
64	55.204	540-84-1	I8	2,2,4-Trimethylpentane	7.529	8.108	5.563	1913.792
65	55.476	592-76-7	K7	Heptene-1	0.030	0.032	0.025	7.655
66	56.806	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.690
67	57.335	14686-14-7	K7	t-Heptene-3	0.033	0.035	0.028	8.520
68	57.686	6094-02-6	C7	2-Methylhexene-1	0.059	0.063	0.051	15.271
69	58.056	142-82-5	P7	n-Heptane	0.112	0.122	0.094	28.296
70	58.277	7642-10-6	K7	c-Heptene-3	0.026	0.028	0.022	6.743
71	58.550	2738-19-4	C7	2-Methyl-2-hexene	0.027	0.028	0.023	6.901
72	58.795	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.021	0.017	5.247
73	59.178	14686-13-6	K7	t-Heptene-2	0.012	0.013	0.010	3.158
74	59.653	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.019	0.018	0.016	4.821
75	60.078	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.013	3.970
76	60.862	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	3.439
77	61.506	108-87-2	M7	Methylcyclohexane	0.052	0.050	0.044	13.334
78	63.373		?	Unidentified	0.044	0.046	0.034	14.036
79	64.954	564-02-3	I8	2,2,3-Trimethylpentane	0.564	0.587	0.417	143.318
80	65.183	592-13-2	I8	2,5-Dimethylhexane	1.172	1.260	0.866	298.008
81	65.522	589-43-5	I8	2,4-Dimethylhexane	1.022	1.087	0.755	259.674
82	68.511	565-75-3	I8	2,3,4-Trimethylpentane	4.452	4.613	3.289	1131.566
83	69.030	108-88-3	Q7	Toluene	5.106	4.388	4.676	1407.813
84	69.192	560-21-4	I8	2,3,3-Trimethylpentane	5.238	5.374	3.870	1331.407
85	70.802	584-94-1	I8	2,3-Dimethylhexane	1.110	1.161	0.820	282.159
86	72.047	592-27-8	I8	2-Methylheptane	0.057	0.061	0.042	14.536

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	72.320	589-53-7	I8	4-Methylheptane	0.122	0.129	0.090	31.045
88	72.451		?	Unidentified	0.090	0.093	0.066	28.487
89	73.362	589-81-1	I8	3-Methylheptane	0.051	0.053	0.037	12.876
90	75.263	3522-94-9	I9	2,2,5-Trimethylhexane	2.047	2.156	1.347	521.317
91	76.237		?	Unidentified	0.015	0.015	0.012	4.900
92	77.870	111-65-9	P8	n-Octane	0.026	0.028	0.020	6.728
93	78.822		?	Unidentified	0.045	0.044	0.034	14.354
94	80.354	1069-53-0	I9	2,3,5-Trimethylhexane	0.319	0.329	0.210	81.284
95	81.520	1071-26-7	I9	2,4-Dimethylheptane	0.043	0.045	0.028	11.027
96	82.166	1678-91-7	M8	Ethylcyclohexane	0.014	0.013	0.010	3.605
97	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.057	0.060	0.037	14.420
98	83.407		I9	2,5-Dimethylheptane	0.138	0.143	0.091	35.048
99	84.730	100-41-4	Q8	Ethylbenzene	0.898	0.771	0.714	245.642
100	84.900		?	Unidentified	0.021	0.021	0.014	6.649
101	85.146		?	Unidentified	0.022	0.021	0.015	6.955
102	85.951	108-38-3	Q8	m-Xylene	2.242	1.932	1.782	613.395
103	86.099	106-42-3	Q8	p-Xylene	1.019	0.881	0.810	278.756
104	86.231		?	Unidentified	0.044	0.045	0.029	13.865
105	86.489		C8	C9-IsoOlefin-3	0.010	0.010	0.007	2.627
106	86.597		?	Unidentified	0.009	0.009	0.006	2.721
107	87.274	2216-34-4	I9	4-Methyloctane	0.017	0.017	0.011	4.248
108	87.406	3221-61-2	I9	2-Methyloctane	0.024	0.025	0.016	6.186
109	88.269	2216-33-3	I9	3-Methyloctane	0.027	0.028	0.018	6.814
110	88.745		?	Unidentified	0.102	0.111	0.068	32.383
111	88.927	95-47-6	Q8	o-Xylene	0.722	0.611	0.574	197.643
112	89.323		I10	C10 - IsoParaffin - 1	0.333	0.341	0.197	84.964
113	89.911		M9	trans-1,3-Diethylcyclopentane	0.013	0.011	0.009	3.649
114	90.166	14720-74-2	I10	2,2,4-trimethylheptane	0.238	0.244	0.141	60.744
115	91.726	111-84-2	P9	n-Nonane	0.279	0.290	0.184	71.166
116	92.334	4926-90-3	M9	1,1-Methylethylcyclohexane	0.025	0.023	0.016	6.368
117	93.094	98-82-8	Q9	i-Propylbenzene	0.029	0.025	0.020	7.776
118	93.273		?	Unidentified	0.012	0.012	0.008	3.868
119	93.273		?	Unidentified	0.012	0.013	0.007	3.868
120	93.273		?	Unidentified	0.012	0.009	0.007	3.868
121	93.385	696-29-7	M9	1-Methyl-2-propyl-cyclopentan	0.005	0.005	0.003	1.355
122	93.385		C10	C10-IsoOlefin-4	0.005	0.006	0.003	1.355
123	93.385		I10	C10-isoparaffin-x	0.000	0.000	0.000	1.355
124	93.842		?	Unidentified	0.173	0.178	0.103	54.945
125	94.063	15869-87-1	I10	2,2-Dimethyloctane	0.074	0.076	0.044	18.961
126	94.525		?	Unidentified	0.019	0.014	1.612	6.055
127	94.525		?	Unidentified	0.019	0.020	0.011	6.055
128	94.724		?	Unidentified	0.023	0.021	0.015	7.282
129	94.863	15869-89-3	I10	2,5-Dimethyloctane	0.108	0.110	0.064	27.484

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	95.068		I10	C10 - IsoParaffin - 2	0.019	0.019	0.011	4.821
131	95.331	2040-95-1	I10	2,7-Dimethyloctane	0.061	0.062	0.036	15.533
132	95.508	2051-30-1	I10	2,4-Dimethyloctane	0.232	0.238	0.138	59.220
133	95.894		I10	2,6-Dimethyloctane	0.092	0.094	0.055	23.570
134	96.061		I10	C10 Isoparaffin -1	0.010	0.010	0.006	2.525
135	96.351		?	Unidentified	0.008	0.008	0.005	2.424
136	96.555	103-65-1	Q9	n-Propylbenzene	0.295	0.255	0.207	80.142
137	96.752		I10	3-Methyl-5-ethylheptane	0.009	0.009	0.005	2.338
138	97.400	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.996	0.858	0.699	270.675
139	97.634	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.456	0.395	0.321	124.111
140	98.259	108-67-8	Q9	1,3,5-Trimethylbenzene	0.672	0.579	0.472	182.761
141	98.724	15869-85-9	I10	5-Methylnonane	0.031	0.032	0.018	7.957
142	98.914	17301-94-8	I10	4-Methylnonane	0.066	0.067	0.039	16.814
143	99.135		I10	2,2,6-Trimethyloctane	3.660	3.754	2.171	934.022
144	99.345	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.361	0.305	0.253	98.153
145	99.564	5881-17-4	I10	3-Ethyloctane	0.009	0.009	0.005	2.360
146	99.707		?	Unidentified	0.012	0.012	0.007	3.720
147	99.888	5911-04-6	I10	3-Methylnonane	0.071	0.072	0.042	18.184
148	100.068		?	Unidentified	0.017	0.018	0.010	5.267
149	100.354		?	Unidentified	0.215	0.160	0.116	68.306
150	100.488		?	Unidentified	0.577	0.578	0.312	183.068
151	100.702		I11	C11-Isoparaffin-2	0.311	0.311	0.168	79.444
152	100.979	95-63-6	Q9	1,2,4-Trimethylbenzene	1.910	1.625	1.341	519.303
153	101.168		?	Unidentified	0.358	0.380	0.215	113.423
154	101.290		?	Unidentified	0.209	0.213	0.124	66.388
155	101.550	1678-98-4	M10	i-Butylcyclohexane	0.065	0.061	0.039	16.878
156	102.195		?	Unidentified	0.023	0.021	0.014	7.253
157	102.339	17302-01-1	I10	3-Ethyl-3-methylheptane	0.489	0.489	0.264	124.873
158	102.546		?	Unidentified	0.123	0.108	0.077	39.065
159	102.688		?	Unidentified	0.281	0.281	0.152	89.115
160	102.805	124-18-5	P10	n-Decane	0.303	0.309	0.180	77.288
161	103.199		?	Unidentified	0.122	0.122	0.066	38.704
162	103.687		?	Unidentified	0.018	0.015	0.013	5.691
163	103.853	526-73-8	Q9	1,2,3-Trimethylbenzene	0.342	0.285	0.240	92.961
164	104.195	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.045	0.039	0.028	12.146
165	104.412		I11	C11 Isoparaffin-4	0.070	0.070	0.038	17.967
166	104.618	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.347	0.302	0.218	93.954
167	105.048		J9	Indan	0.223	0.172	0.159	61.520
168	105.262		I11	C11-Isoparaffin-5	0.048	0.048	0.026	12.185
169	105.649		J10	Indene	1.481	1.145	1.058	409.309
170	106.064		M10	n-ButylCyclohexane	0.011	0.010	0.007	2.821
171	106.204		?	Unidentified	0.010	0.009	0.006	3.057
172	106.361		I11	C11-Isoparaffin-7	0.537	0.538	0.290	137.170

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	106.549	141-93-5	Q10	1,3-Diethylbenzene	0.043	0.037	0.027	11.639
174	106.843	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	1.575	1.363	0.991	426.067
175	107.104		?	Unidentified	0.345	0.298	0.217	109.291
176	107.384	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.120	0.101	0.075	32.393
177	107.619	135-01-3	Q10	1,2-Diethylbenzene	0.115	0.098	0.072	31.144
178	107.898		I11	C11-Isoparaffin-8	0.010	0.010	0.005	2.564
179	108.082		?	Unidentified	0.120	0.120	0.065	37.905
180	108.237	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.051	0.044	0.032	13.838
181	108.354		?	Unidentified	0.135	0.135	0.073	42.788
182	108.436		?	Unidentified	0.106	0.107	0.057	33.726
183	108.566		I11	C11- Isoparaffin-11	0.867	0.869	0.468	221.590
184	108.745		?	Unidentified	0.268	0.268	0.145	84.927
185	108.896		I11	C11- IsoParaffin - 13	0.024	0.025	0.013	6.250
186	109.169		?	Unidentified	0.773	0.657	0.486	245.109
187	109.398		J10	2-Methylindan	0.134	0.104	0.086	37.045
188	109.741	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.288	0.245	0.181	77.768
189	109.868		?	Unidentified	0.036	0.030	0.022	11.326
190	110.286	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.633	0.529	0.398	171.135
191	110.710		?	Unidentified	0.025	0.023	0.013	7.816
192	110.904	693-61-8	K11	2-Undecene, (E)-	0.054	0.054	0.032	13.734
193	111.039		?	Unidentified	0.120	0.121	0.072	38.197
194	111.309		?	Unidentified	0.110	0.096	0.063	34.817
195	111.410	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.062	0.052	0.039	16.741
196	111.698	1120-21-4	P11	n-Undecane	0.124	0.124	0.067	31.591
197	111.861	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.087	0.073	0.050	23.484
198	111.972		?	Unidentified	0.059	0.049	0.033	18.652
199	112.347		Q10	1,2,4,5-Tetramethylbenzene	0.210	0.176	0.132	56.718
200	112.613	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.268	0.224	0.169	72.491
201	112.956		?	Unidentified	0.031	0.026	0.020	9.948
202	113.130		I12	C12 - IsoParaffin - 1	0.026	0.026	0.013	6.726
203	113.483		?	Unidentified	0.034	0.034	0.017	10.663
204	113.609		?	Unidentified	0.012	0.012	0.006	3.772
205	113.811		?	Unidentified	0.056	0.047	0.032	17.887
206	113.944	874-35-1	H10	5-Methylindan	0.089	0.075	0.057	24.087
207	114.069		Q12	1,2-Di-i-propylbenzene	0.033	0.028	0.017	8.818
208	114.284	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.048	0.040	0.028	13.018
209	114.462		Q11	C11 - Aromatic - 4	0.038	0.032	0.021	10.160
210	114.694	824-22-6	J10	4-Methylindan	0.105	0.088	0.067	28.525
211	114.848	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.033	0.028	0.019	8.868
212	114.941	824-63-5	H10	2-Methylindan	0.084	0.070	0.053	22.604
213	115.144		?	Unidentified	0.011	0.009	0.006	3.591
214	115.256	538-68-1	Q11	n-Pentylbenzene	0.015	0.012	0.008	3.959
215	115.485		Q11	tert-Pentylbenzene	0.049	0.041	0.028	13.280

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.020	0.017	0.011	5.358
217	115.911		Q11	C11 - Aromatic - 7	0.033	0.029	0.019	8.977
218	116.090		?	Unidentified	0.005	0.005	0.003	1.663
219	116.245		I12	C12 - IsoParaffin - 4	0.008	0.008	0.004	2.181
220	116.368	100-18-5	Q12	1,4-Di-i-propylbenzene	0.038	0.032	0.020	10.112
221	116.809	91-20-3	G10	Naphthalene	0.117	0.085	0.077	33.249
222	116.942		?	Unidentified	0.018	0.018	0.009	5.791
223	117.124		?	Unidentified	0.006	0.004	0.003	1.756
224	117.247		J11	1,1-Dimethyl Indane	0.011	0.009	0.007	3.176
225	117.410		J12	Dimethyl Indane - 1	0.006	0.005	0.004	1.731
226	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.010	0.008	0.005	2.586
227	117.893		Q12	1,3-Di-n-propylbenzene	0.038	0.032	0.020	10.157
228	118.004		Q11	C11 - Aromatic - 11	0.021	0.018	0.012	5.675
229	118.409	112-40-3	P12	n-Dodecane	0.005	0.005	0.003	1.356
230	118.558		Q11	C11 - Aromatic - 12	0.019	0.016	0.011	5.033
231	122.671	877-44-1	Q12	1,2,4-Triethylbenzene	0.007	0.006	0.004	1.884
232	123.441	91-57-6	G11	2-Methylnaphthalene	0.013	0.009	0.008	3.636
233	124.307	90-12-0	G11	1-Methylnaphthalene	0.006	0.004	0.003	1.644
234	126.296		?	Unidentified	0.009	0.009	0.004	2.982
235	127.262		?	Unidentified	0.003	0.002	0.002	0.932
236	130.003		?	Unidentified	0.003	0.003	0.002	1.043

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	10.020	106-97-8	n-Butane	1.395	1.796	2.025	348.622
	18.110	109-66-0	n-Pentane	0.876	1.042	1.025	220.468
	35.804	110-54-3	n-Hexane	0.963	1.088	0.943	243.400
	58.056	142-82-5	n-Heptane	0.112	0.122	0.094	28.296
	77.870	111-65-9	n-Octane	0.026	0.028	0.020	6.728
	91.726	111-84-2	n-Nonane	0.279	0.290	0.184	71.166
	102.805	124-18-5	n-Decane	0.303	0.309	0.180	77.288
	111.698	1120-21-4	n-Undecane	0.124	0.124	0.067	31.591
	118.409	112-40-3	n-Dodecane	0.005	0.005	0.003	1.356
I-Paraffins	8.806	75-28-5	i-Butane	0.021	0.028	0.031	5.320
	10.634	463-82-1	2,2-Dimethylpropane	0.016	0.020	0.018	3.956
	15.074	78-78-4	i-Pentane	4.266	5.130	4.990	1073.609
	23.105	75-83-2	2,2-Dimethylbutane	0.029	0.033	0.028	7.201
	28.339	79-29-8	2,3-Dimethylbutane	1.335	1.504	1.308	337.344
	29.415	107-83-5	2-Methylpentane	1.825	2.082	1.787	461.124
	32.065	96-14-0	3-Methylpentane	1.194	1.339	1.169	301.639
	42.235	108-08-7	2,4-Dimethylpentane	1.014	1.123	0.854	257.280
	42.782	464-06-2	2,2,3-Trimethylbutane	0.067	0.073	0.057	17.116
	50.674	591-76-4	2-Methylhexane	1.123	1.233	0.946	284.818
	52.494	589-34-4	3-Methylhexane	0.364	0.395	0.307	92.357
	55.204	540-84-1	2,2,4-Trimethylpentane	7.529	8.108	5.563	1913.792
	64.954	564-02-3	2,2,3-Trimethylpentane	0.564	0.587	0.417	143.318
	65.183	592-13-2	2,5-Dimethylhexane	1.172	1.260	0.866	298.008
	65.522	589-43-5	2,4-Dimethylhexane	1.022	1.087	0.755	259.674
	68.511	565-75-3	2,3,4-Trimethylpentane	4.452	4.613	3.289	1131.566
	69.192	560-21-4	2,3,3-Trimethylpentane	5.238	5.374	3.870	1331.407
	70.802	584-94-1	2,3-Dimethylhexane	1.110	1.161	0.820	282.159
	72.047	592-27-8	2-Methylheptane	0.057	0.061	0.042	14.536
	72.320	589-53-7	4-Methylheptane	0.122	0.129	0.090	31.045
	73.362	589-81-1	3-Methylheptane	0.051	0.053	0.037	12.876
	75.263	3522-94-9	2,2,5-Trimethylhexane	2.047	2.156	1.347	521.317
	80.354	1069-53-0	2,3,5-Trimethylhexane	0.319	0.329	0.210	81.284
	81.520	1071-26-7	2,4-Dimethylheptane	0.043	0.045	0.028	11.027
	82.476	1072-05-5	2,6-Dimethylheptane	0.057	0.060	0.037	14.420
	83.407		2,5-Dimethylheptane	0.138	0.143	0.091	35.048
	87.274	2216-34-4	4-Methyloctane	0.017	0.017	0.011	4.248
	87.406	3221-61-2	2-Methyloctane	0.024	0.025	0.016	6.186
	88.269	2216-33-3	3-Methyloctane	0.027	0.028	0.018	6.814
	89.323		C10 - IsoParaffin - 1	0.333	0.341	0.197	84.964
	90.166	14720-74-2	2,2,4-trimethylheptane	0.238	0.244	0.141	60.744
	93.385		C10-isoparaffin-x	0.000	0.000	0.000	1.355
	94.063	15869-87-1	2,2-Dimethyloctane	0.074	0.076	0.044	18.961
	94.863	15869-89-3	2,5-Dimethyloctane	0.108	0.110	0.064	27.484
	95.068		C10 - IsoParaffin - 2	0.019	0.019	0.011	4.821
	95.331	2040-95-1	2,7-Dimethyloctane	0.061	0.062	0.036	15.533
	95.508	2051-30-1	2,4-Dimethyloctane	0.232	0.238	0.138	59.220

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	95.894		2,6-Dimethyloctane	0.092	0.094	0.055	23.570
	96.061		C10 Isoparaffin -1	0.010	0.010	0.006	2.525
	96.752		3-Methyl-5-ethylheptane	0.009	0.009	0.005	2.338
	98.724	15869-85-9	5-Methylnonane	0.031	0.032	0.018	7.957
	98.914	17301-94-8	4-Methylnonane	0.066	0.067	0.039	16.814
	99.135		2,2,6-Trimethyloctane	3.660	3.754	2.171	934.022
	99.564	5881-17-4	3-Ethyloctane	0.009	0.009	0.005	2.360
	99.888	5911-04-6	3-Methylnonane	0.071	0.072	0.042	18.184
	100.702		C11-Isoparaffin-2	0.311	0.311	0.168	79.444
	102.339	17302-01-1	3-Ethyl-3-methylheptane	0.489	0.489	0.264	124.873
	104.412		C11 Isoparaffin-4	0.070	0.070	0.038	17.967
	105.262		C11-Isoparaffin-5	0.048	0.048	0.026	12.185
	106.361		C11-Isoparaffin-7	0.537	0.538	0.290	137.170
	107.898		C11-Isoparaffin-8	0.010	0.010	0.005	2.564
	108.566		C11- Isoparaffin-11	0.867	0.869	0.468	221.590
	108.896		C11- IsoParaffin - 13	0.024	0.025	0.013	6.250
	113.130		C12 - IsoParaffin - 1	0.026	0.026	0.013	6.726
	116.245		C12 - IsoParaffin - 4	0.008	0.008	0.004	2.181
Aromatics							
Mono-Aromatics	45.638	71-42-3	Benzene	0.720	0.610	0.778	200.638
	69.030	108-88-3	Toluene	5.106	4.388	4.676	1407.813
	84.730	100-41-4	Ethylbenzene	0.898	0.771	0.714	245.642
	85.951	108-38-3	m-Xylene	2.242	1.932	1.782	613.395
	86.099	106-42-3	p-Xylene	1.019	0.881	0.810	278.756
	88.927	95-47-6	o-Xylene	0.722	0.611	0.574	197.643
	93.094	98-82-8	i-Propylbenzene	0.029	0.025	0.020	7.776
	96.555	103-65-1	n-Propylbenzene	0.295	0.255	0.207	80.142
	97.400	620-14-4	1-Methyl-3-ethylbenzene	0.996	0.858	0.699	270.675
	97.634	622-96-8	1-Methyl-4-ethylbenzene	0.456	0.395	0.321	124.111
	98.259	108-67-8	1,3,5-Trimethylbenzene	0.672	0.579	0.472	182.761
	99.345	611-14-3	1-Methyl-2-ethylbenzene	0.361	0.305	0.253	98.153
	100.979	95-63-6	1,2,4-Trimethylbenzene	1.910	1.625	1.341	519.303
	103.853	526-73-8	1,2,3-Trimethylbenzene	0.342	0.285	0.240	92.961
	104.195	535-77-3	1-Methyl-3-i-propylbenzene	0.045	0.039	0.028	12.146
	104.618	99-87-6	1-Methyl-4-i-propylbenzene	0.347	0.302	0.218	93.954
	106.549	141-93-5	1,3-Diethylbenzene	0.043	0.037	0.027	11.639
	106.843	1074-43-7	1-Methyl-3-n-propylbenzene	1.575	1.363	0.991	426.067
	107.384	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.120	0.101	0.075	32.393
	107.619	135-01-3	1,2-Diethylbenzene	0.115	0.098	0.072	31.144
	108.237	1074-17-5	1-Methyl-2-n-propylbenzene	0.051	0.044	0.032	13.838
	109.741	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.288	0.245	0.181	77.768
	110.286	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.633	0.529	0.398	171.135
	111.410	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.062	0.052	0.039	16.741
	111.861	4218-48-8	1-Ethyl-4-i-propylbenzene	0.087	0.073	0.050	23.484
	112.347		1,2,4,5-Tetramethylbenzene	0.210	0.176	0.132	56.718
	112.613	527-53-7	1,2,3,5-Tetramethylbenzene	0.268	0.224	0.169	72.491

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	114.069		1,2-Di-i-propylbenzene	0.033	0.028	0.017	8.818
	114.284	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.048	0.040	0.028	13.018
	114.462		C11 - Aromatic - 4	0.038	0.032	0.021	10.160
	114.848	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.033	0.028	0.019	8.868
	115.256	538-68-1	n-Pentylbenzene	0.015	0.012	0.008	3.959
	115.485		tert-Pentylbenzene	0.049	0.041	0.028	13.280
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.020	0.017	0.011	5.358
	115.911		C11 - Aromatic - 7	0.033	0.029	0.019	8.977
	116.368	100-18-5	1,4-Di-i-propylbenzene	0.038	0.032	0.020	10.112
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.010	0.008	0.005	2.586
	117.893		1,3-Di-n-propylbenzene	0.038	0.032	0.020	10.157
	118.004		C11 - Aromatic - 11	0.021	0.018	0.012	5.675
	118.558		C11 - Aromatic - 12	0.019	0.016	0.011	5.033
	122.671	877-44-1	1,2,4-Triethylbenzene	0.007	0.006	0.004	1.884
Naphthalenes	116.809	91-20-3	Naphthalene	0.117	0.085	0.077	33.249
	123.441	91-57-6	2-Methylnaphthalene	0.013	0.009	0.008	3.636
	124.307	90-12-0	1-Methylnaphthalene	0.006	0.004	0.003	1.644
Naphtheno/Olefir	113.944	874-35-1	5-Methylindan	0.089	0.075	0.057	24.087
	114.941	824-63-5	2-Methylindan	0.084	0.070	0.053	22.604
Indenes	105.048		Indan	0.223	0.172	0.159	61.520
	105.649		Indene	1.481	1.145	1.058	409.309
	109.398		2-Methylindan	0.134	0.104	0.086	37.045
	114.694	824-22-6	4-Methylindan	0.105	0.088	0.067	28.525
	117.247		1,1-Dimethyl Indane	0.011	0.009	0.007	3.176
	117.410		Dimethyl Indane - 1	0.006	0.005	0.004	1.731
Naphthenes							
Mono-Naphthene	27.606	287-92-3	Cyclopentane	0.099	0.098	0.119	25.503
	40.669	96-37-7	Methylcyclopentane	0.891	0.887	0.893	230.581
	47.554	110-82-7	Cyclohexane	0.216	0.207	0.217	56.017
	53.356	1759-58-6	1t,3-Dimethylcyclopentane	0.101	0.100	0.086	26.025
	53.942	2532-58-3	1c,3-Dimethylcyclopentane	0.068	0.068	0.058	17.525
	54.568	822-50-4	1t,2-Dimethylcyclopentane	0.066	0.065	0.057	17.051
	59.653	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.019	0.018	0.016	4.821
	61.506	108-87-2	Methylcyclohexane	0.052	0.050	0.044	13.334
	82.166	1678-91-7	Ethylcyclohexane	0.014	0.013	0.010	3.605
	89.911		trans-1,3-Diethylcyclopentane	0.013	0.011	0.009	3.649
	92.334	4926-90-3	1,1-Methylethylcyclohexane	0.025	0.023	0.016	6.368
	93.385	696-29-7	1-Methyl-2-propyl-cyclopentan	0.005	0.005	0.003	1.355
	101.550	1678-98-4	i-Butylcyclohexane	0.065	0.061	0.039	16.878
	106.064		n-ButylCyclohexane	0.011	0.010	0.007	2.821
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.619	115-11-7	Isobutene	0.017	0.022	0.026	4.527

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	9.661	106-98-9	Butene-1	0.019	0.024	0.029	5.030
	10.506	624-64-6	t-Butene-2	0.079	0.097	0.119	20.405
	11.247	590-18-1	c-Butene-2	0.093	0.112	0.140	24.087
	16.726	109-67-1	Pentene-1	0.355	0.413	0.427	91.857
	19.230	646-04-8	t-Pentene-2	0.898	1.032	1.081	232.434
	20.264	627-20-3	c-Pentene-2	0.492	0.559	0.592	127.403
	33.453	592-41-6	Hexene-1	0.167	0.183	0.167	43.147
	36.441	13269-52-8	t-Hexene-3	0.274	0.299	0.274	70.847
	36.916	4050-45-7	t-Hexene-2	0.421	0.459	0.422	108.872
	38.745	7688-21-3	c-Hexene-2	0.222	0.239	0.223	57.500
	55.476	592-76-7	Heptene-1	0.030	0.032	0.025	7.655
	57.335	14686-14-7	t-Heptene-3	0.033	0.035	0.028	8.520
	58.277	7642-10-6	c-Heptene-3	0.026	0.028	0.022	6.743
	59.178	14686-13-6	t-Heptene-2	0.012	0.013	0.010	3.158
	110.904	693-61-8	2-Undecene, (E)-	0.054	0.054	0.032	13.734
Iso-Olefins	13.448	563-45-1	3-Methylbutene-1	0.205	0.244	0.247	53.090
	17.578	563-46-2	2-Methylbutene-1	0.538	0.617	0.648	139.330
	20.942	513-35-9	2-Methylbutene-2	1.101	1.239	1.325	285.046
	29.192	691-38-3	4-Methyl-c-pentene-2	0.048	0.053	0.048	12.495
	29.842	674-76-0	4-Methyl-t-pentene-2	0.137	0.152	0.138	35.495
	33.229	763-29-1	2-Methylpentene-1	0.234	0.254	0.234	60.522
	35.642	760-21-4	2-Ethylbutene-1	0.071	0.076	0.071	18.449
	37.409	625-27-4	2-Methylpentene-2	0.355	0.383	0.356	91.931
	37.823	922-62-3	3-Methyl-c-pentene-2	0.274	0.293	0.275	71.033
	40.088	3404-73-7	3,3-Dimethylpentene-1	0.322	0.342	0.277	83.413
	42.536	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	3.753
	46.641	3404-61-3	3-Methylhexene-1	0.016	0.017	0.014	4.230
	47.232	3524-73-0	5-Methylhexene-1	0.030	0.032	0.025	7.664
	49.275	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.036	10.725
	49.625	3769-23-1	4-Methylhexene-1	0.012	0.013	0.010	3.119
	50.270	3404-55-5	4-Methyl-t/c-hexene-2	0.052	0.055	0.045	13.559
	54.881		C7 - Iso-Olefin - 2	0.023	0.024	0.020	6.017
	56.806	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.690
	57.686	6094-02-6	2-Methylhexene-1	0.059	0.063	0.051	15.271
	58.550	2738-19-4	2-Methyl-2-hexene	0.027	0.028	0.023	6.901
	58.795	10574-36-4	3-Methyl-c-hexene-2	0.020	0.021	0.017	5.247
	60.078	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.013	3.970
	60.862	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.011	3.439
	86.489		C9-IsoOlefin-3	0.010	0.010	0.007	2.627
	93.385		C10-IsoOlefin-4	0.005	0.006	0.003	1.355
Naphtheno-Olefir	22.532	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.009	1.969
	25.738	142-29-0	Cyclopentene	0.208	0.201	0.258	55.399
	37.041	1120-62-3	3-Methylcyclopentene	0.104	0.101	0.107	26.877
	45.835	693-89-0	1-Methylcyclopentene	0.374	0.357	0.384	99.075
	51.155	110-83-8	Cyclohexene	0.046	0.042	0.047	11.959

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphtheno-Olefir							
Di-Olefins	18.624	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.014	2.981
	21.266	2004-70-8	1t,3-Pentadiene	0.016	0.018	0.020	4.394
	45.429	1528-30-9	C6-Diolefin-1	0.016	0.016	0.016	4.066
Oxygenates	13.087	64-17-5	Ethanol	16.550	15.628	30.318	1763.987
	26.901	71-23-8	n-Propanol	0.079	0.074	0.111	14.373
	48.061	71-36-3	n-Butanol	0.058	0.054	0.066	11.331
Unidentified	19.876		Unidentified	0.006	0.007	0.007	1.963
	26.992		Unidentified	0.062	0.069	0.062	19.690
	28.734		Unidentified	0.056	0.056	0.053	17.614
	63.373		Unidentified	0.044	0.046	0.034	14.036
	72.451		Unidentified	0.090	0.093	0.066	28.487
	76.237		Unidentified	0.015	0.015	0.012	4.900
	78.822		Unidentified	0.045	0.044	0.034	14.354
	84.900		Unidentified	0.021	0.021	0.014	6.649
	85.146		Unidentified	0.022	0.021	0.015	6.955
	86.231		Unidentified	0.044	0.045	0.029	13.865
	86.597		Unidentified	0.009	0.009	0.006	2.721
	88.745		Unidentified	0.102	0.111	0.068	32.383
	93.273		Unidentified	0.012	0.012	0.008	3.868
	93.273		Unidentified	0.012	0.013	0.007	3.868
	93.273		Unidentified	0.012	0.009	0.007	3.868
	93.842		Unidentified	0.173	0.178	0.103	54.945
	94.525		Unidentified	0.019	0.014	1.612	6.055
	94.525		Unidentified	0.019	0.020	0.011	6.055
	94.724		Unidentified	0.023	0.021	0.015	7.282
	96.351		Unidentified	0.008	0.008	0.005	2.424
	99.707		Unidentified	0.012	0.012	0.007	3.720
	100.068		Unidentified	0.017	0.018	0.010	5.267
	100.354		Unidentified	0.215	0.160	0.116	68.306
	100.488		Unidentified	0.577	0.578	0.312	183.068
	101.168		Unidentified	0.358	0.380	0.215	113.423
	101.290		Unidentified	0.209	0.213	0.124	66.388
	102.195		Unidentified	0.023	0.021	0.014	7.253
	102.546		Unidentified	0.123	0.108	0.077	39.065
	102.688		Unidentified	0.281	0.281	0.152	89.115
	103.199		Unidentified	0.122	0.122	0.066	38.704
	103.687		Unidentified	0.018	0.015	0.013	5.691
	106.204		Unidentified	0.010	0.009	0.006	3.057
	107.104		Unidentified	0.345	0.298	0.217	109.291
	108.082		Unidentified	0.120	0.120	0.065	37.905
	108.354		Unidentified	0.135	0.135	0.073	42.788
	108.436		Unidentified	0.106	0.107	0.057	33.726
	108.745		Unidentified	0.268	0.268	0.145	84.927
	109.169		Unidentified	0.773	0.657	0.486	245.109

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Components by Group

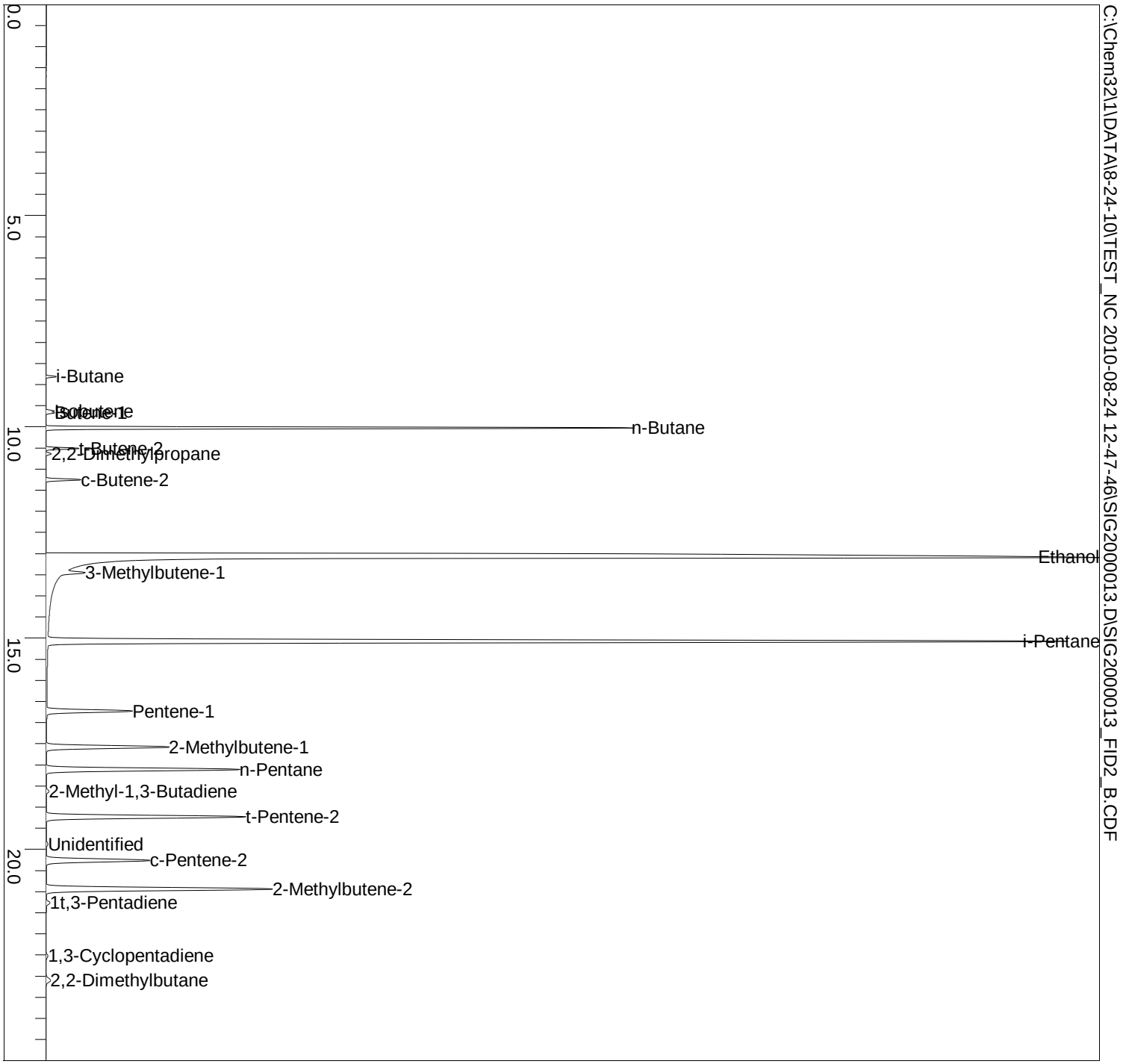
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	109.868		Unidentified	0.036	0.030	0.022	11.326
	110.710		Unidentified	0.025	0.023	0.013	7.816
	111.039		Unidentified	0.120	0.121	0.072	38.197
	111.309		Unidentified	0.110	0.096	0.063	34.817
	111.972		Unidentified	0.059	0.049	0.033	18.652
	112.956		Unidentified	0.031	0.026	0.020	9.948
	113.483		Unidentified	0.034	0.034	0.017	10.663
	113.609		Unidentified	0.012	0.012	0.006	3.772
	113.811		Unidentified	0.056	0.047	0.032	17.887
	115.144		Unidentified	0.011	0.009	0.006	3.591
	116.090		Unidentified	0.005	0.005	0.003	1.663
	116.942		Unidentified	0.018	0.018	0.009	5.791
	117.124		Unidentified	0.006	0.004	0.003	1.756
	126.296		Unidentified	0.009	0.009	0.004	2.982
	127.262		Unidentified	0.003	0.002	0.002	0.932
	130.003		Unidentified	0.003	0.003	0.002	1.043

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

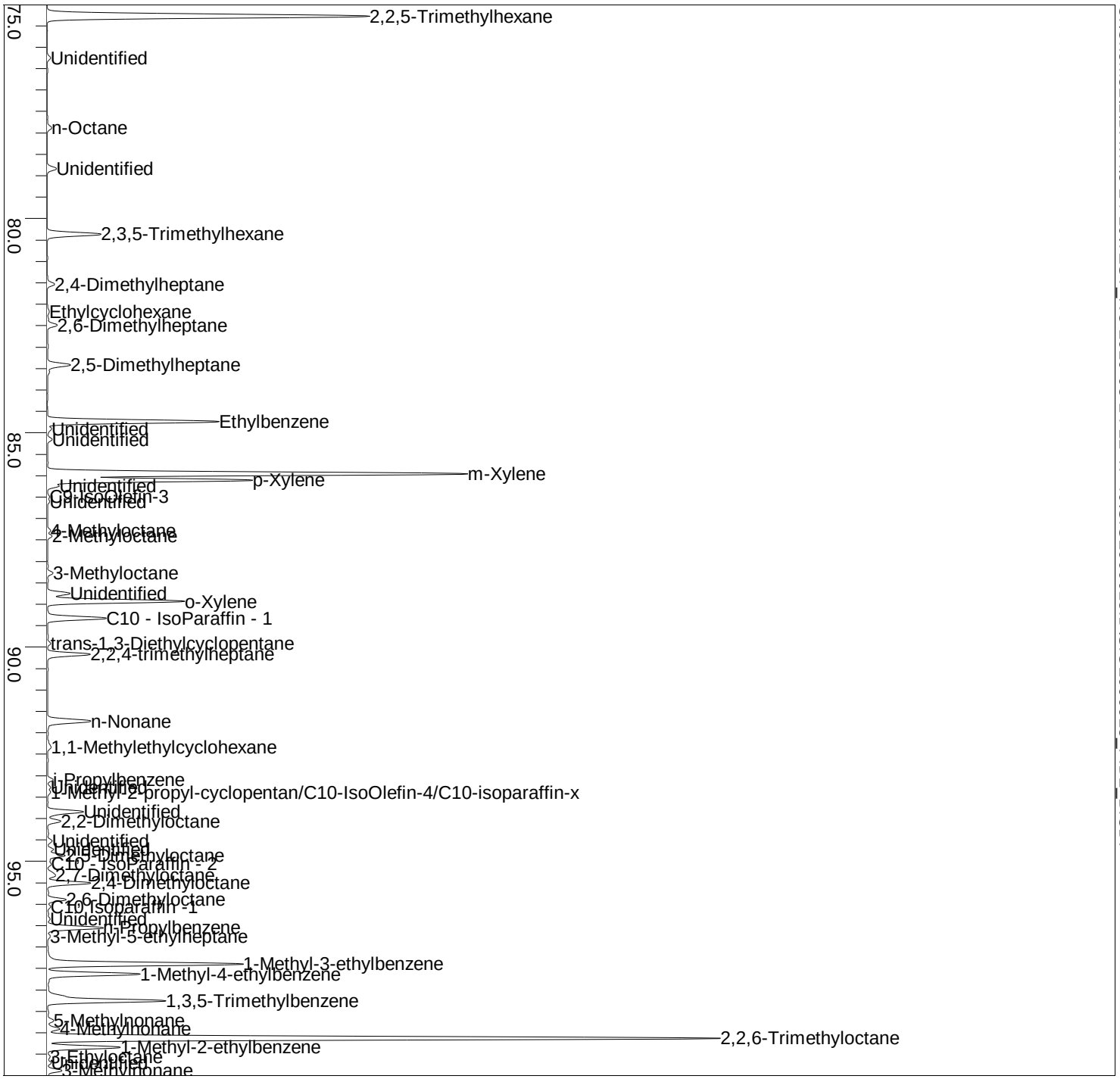
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Sample Chromatogram

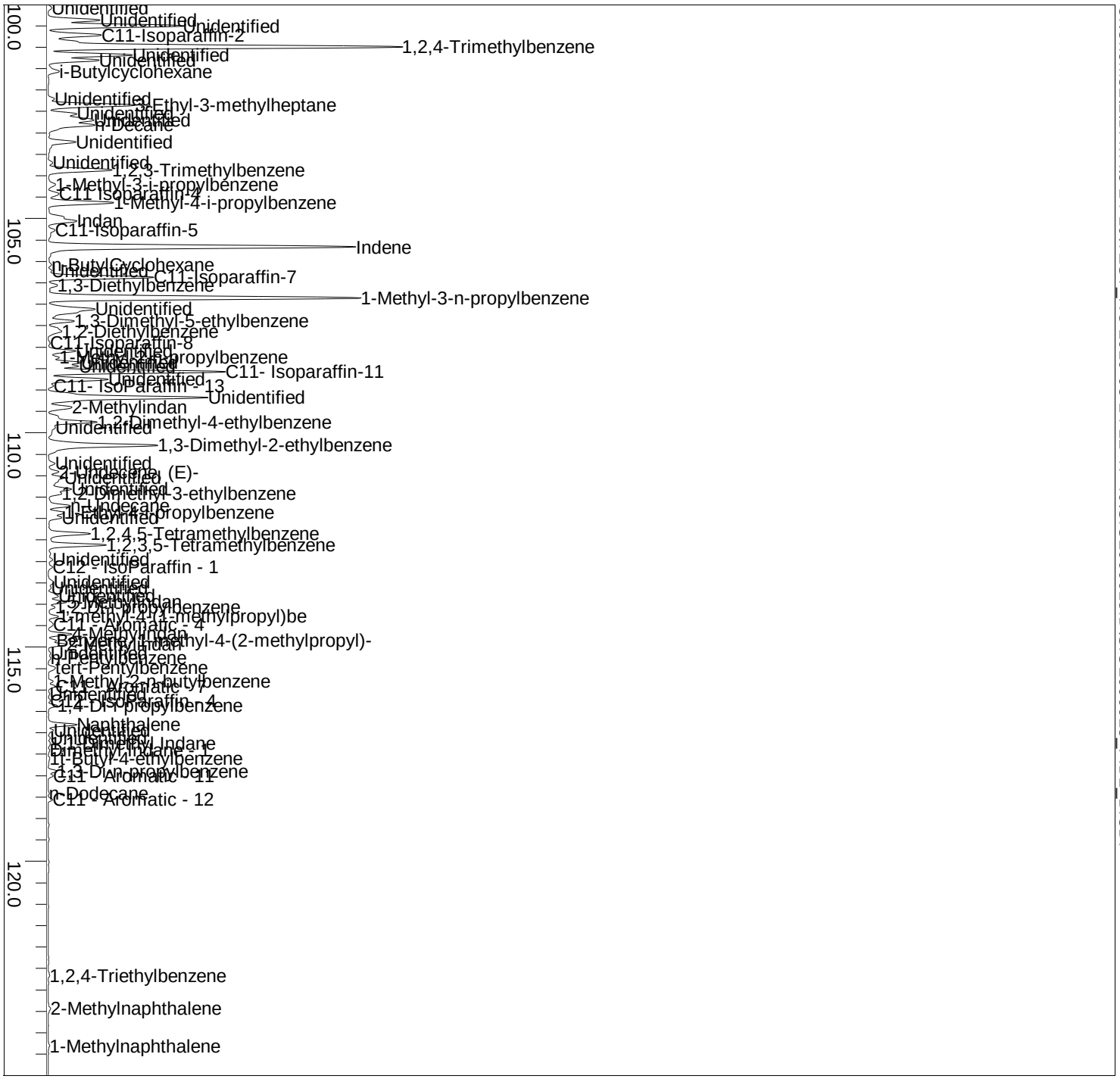
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Sample Chromatogram



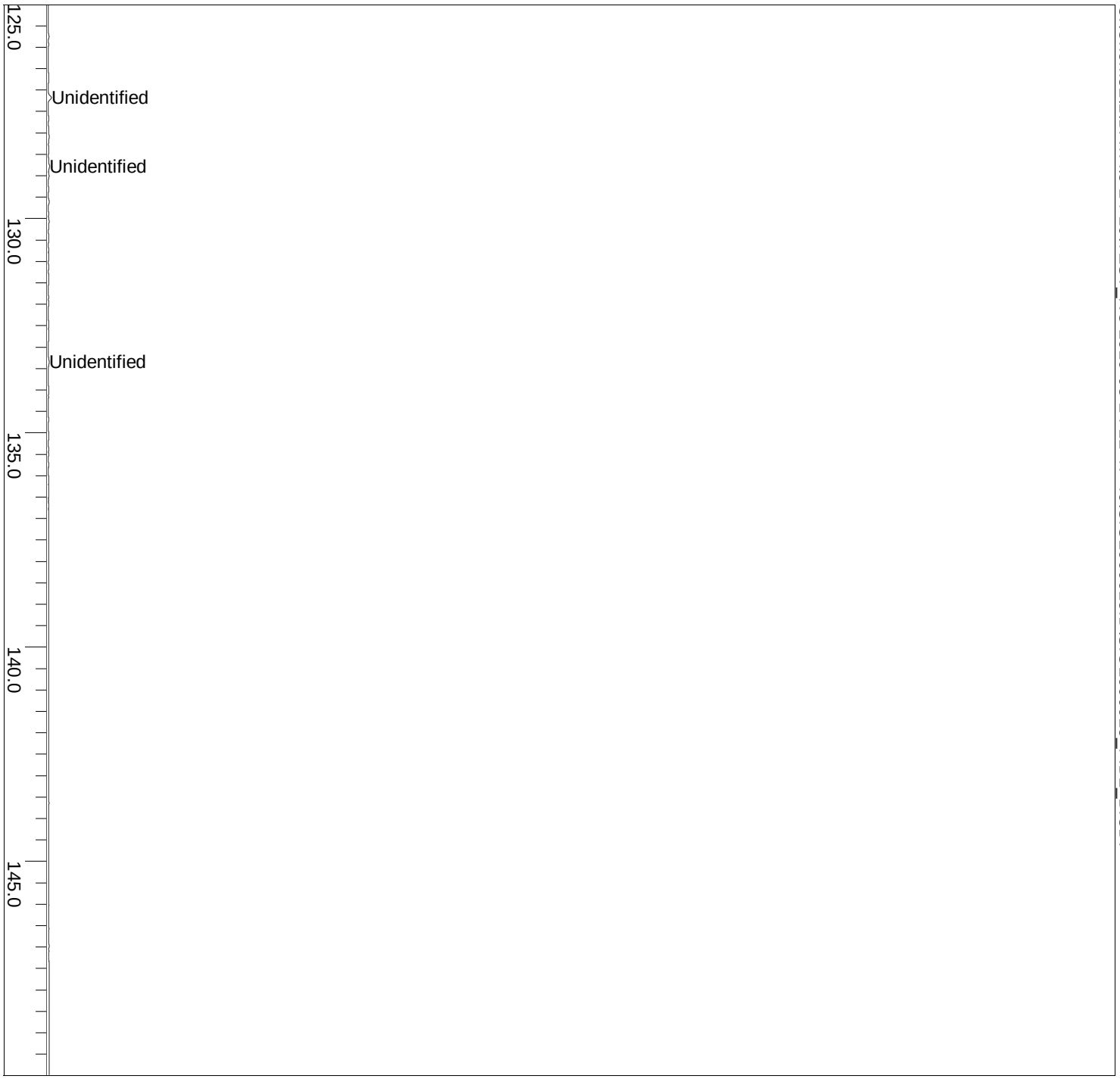
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000013.D\SIG2000013_FID2_B.CDF 25-Aug-10, 18:24:02
Sample: ODDB-91331 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91331
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	4.593	5.646	5.278
I-Paraffins	28.265	31.378	22.549
Aromatics	40.492	35.745	32.614
Mono-Aromatics	39.596	35.016	32.025
Naphthalenes	0.141	0.105	0.090
Naphtheno/Olefino-Benz	0.207	0.178	0.130
Indenes	0.549	0.446	0.369
Naphthenes	1.856	1.885	1.807
Mono-Naphthenes	1.856	1.885	1.807
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.240	8.217	7.872
n-Olefins	3.005	3.497	3.371
Iso-Olefins	3.491	3.979	3.701
Naphtheno-Olefins	0.703	0.695	0.753
Di-Olefins	0.041	0.045	0.047
Oxygenates	16.089	15.652	28.934
Unidentified	1.465	1.477	0.946
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	15.958	15.526	28.767
C3	0.076	0.073	0.106
C4	1.974	2.586	2.814
C5	7.736	9.294	9.038
C6	10.273	11.364	10.073
C7	18.347	16.895	16.346
C8	30.682	30.120	23.155
C9	8.701	8.307	5.872
C10	3.813	3.452	2.354
C11	0.809	0.761	0.444
C12	0.165	0.143	0.084

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	1.703	2.259	2.433
	C5	0.821	1.007	0.945
	C6	1.709	1.990	1.647
	C7	0.120	0.135	0.100
	C8	0.021	0.023	0.015
	C9	0.177	0.189	0.115
	C10	0.016	0.017	0.009
	C11	0.025	0.026	0.013
I-Paraffins	C4	0.018	0.025	0.026
	C5	3.155	3.909	3.631
	C6	3.831	4.467	3.692
	C7	1.733	1.960	1.436
	C8	15.266	16.448	11.099
	C9	3.087	3.339	1.999
	C10	0.843	0.888	0.490
	C11	0.322	0.332	0.171
	C12	0.010	0.010	0.005
Mono-Aromatics	C6	0.685	0.598	0.728
	C7	15.435	13.667	13.912
	C8	15.380	13.636	12.031
	C9	5.317	4.683	3.674
	C10	2.219	1.944	1.373
	C11	0.413	0.360	0.231
	C12	0.148	0.127	0.076
Naphthalenes	C10	0.124	0.093	0.081
	C11	0.016	0.012	0.009
Naphtheno/Olefino-Benzs	C10	0.207	0.178	0.130
Indenes	C9	0.120	0.096	0.084
	C10	0.404	0.331	0.271
	C11	0.018	0.014	0.010
	C12	0.007	0.006	0.004
Mono-Naphthenes	C5	0.093	0.096	0.111
	C6	1.456	1.477	1.437
	C7	0.306	0.313	0.259
n-Olefins	C4	0.199	0.250	0.294

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C5	1.659	1.964	1.965
	C6	1.033	1.160	1.020
	C7	0.098	0.107	0.083
	C11	0.015	0.016	0.009
Iso-Olefins	C5	1.777	2.085	2.104
	C6	1.060	1.182	1.046
	C7	0.640	0.698	0.541
	C8	0.014	0.014	0.009
Naphtheno-Olefins	C5	0.205	0.204	0.250
	C6	0.498	0.491	0.504
Di-Olefins	C5	0.026	0.030	0.032
	C7	0.015	0.015	0.015
Oxygenates	C2	15.958	15.526	28.767
	C3	0.076	0.073	0.106
	C4	0.055	0.053	0.061

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	23.40	22.65
5%	81.59	80.51
10%	133.56	97.90
15%	153.07	140.21
20%	172.26	155.11
25%	172.60	172.38
30%	172.94	172.72
35%	173.28	173.07
40%	209.60	183.48
45%	229.89	210.36
50%	230.30	230.02
55%	230.71	230.48
60%	231.64	230.95
65%	236.93	235.22
70%	246.00	238.21
75%	276.56	254.85
80%	281.23	279.18
85%	282.10	281.80
90%	320.72	301.96
95%	341.62	336.07
FBP	403.54	399.00

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.809	75-28-5	I4	i-Butane	0.018	0.025	0.026	5.016
2	9.622	115-11-7	K4	Isobutene	0.017	0.021	0.025	4.824
3	9.663	106-98-9	K4	Butene-1	0.018	0.024	0.027	5.339
4	10.022	106-97-8	P4	n-Butane	1.703	2.259	2.433	476.606
5	10.507	624-64-6	K4	t-Butene-2	0.075	0.096	0.111	21.798
6	10.635	463-82-1	I5	2,2-Dimethylpropane	0.008	0.010	0.009	2.207
7	11.249	590-18-1	K4	c-Butene-2	0.088	0.109	0.131	25.652
8	13.095	64-17-5	X2	Ethanol	15.958	15.526	28.767	1904.669
9	13.450	563-45-1	C5	3-Methylbutene-1	0.219	0.268	0.259	63.429
10	15.072	78-78-4	I5	i-Pentane	3.147	3.899	3.622	886.785
11	16.725	109-67-1	K5	Pentene-1	0.337	0.404	0.400	97.817
12	17.577	563-46-2	C5	2-Methylbutene-1	0.512	0.604	0.606	148.347
13	18.109	109-66-0	P5	n-Pentane	0.821	1.007	0.945	231.436
14	18.624	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	3.169
15	19.230	646-04-8	K5	t-Pentene-2	0.854	1.011	1.011	247.513
16	19.875		?	Unidentified	0.006	0.007	0.007	2.072
17	20.263	627-20-3	K5	c-Pentene-2	0.468	0.548	0.554	135.641
18	20.940	513-35-9	C5	2-Methylbutene-2	1.046	1.213	1.239	303.329
19	21.266	2004-70-8	E5	1t,3-Pentadiene	0.016	0.018	0.019	4.692
20	22.531	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.009	2.115
21	23.100	75-83-2	I6	2,2-Dimethylbutane	0.028	0.033	0.027	7.928
22	25.738	142-29-0	B5	Cyclopentene	0.198	0.196	0.241	58.959
23	26.899	71-23-8	X3	n-Propanol	0.076	0.073	0.106	15.497
24	26.990		?	Unidentified	0.059	0.067	0.058	20.797
25	27.603	287-92-3	M5	Cyclopentane	0.093	0.096	0.111	27.060
26	28.334	79-29-8	I6	2,3-Dimethylbutane	0.704	0.817	0.678	199.158
27	28.732		?	Unidentified	0.053	0.055	0.050	18.695
28	29.190	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.052	0.045	13.302
29	29.413	107-83-5	I6	2-Methylpentane	1.771	2.082	1.707	501.176
30	29.840	674-76-0	C6	4-Methyl-t-pentene-2	0.130	0.148	0.129	37.750
31	32.064	96-14-0	I6	3-Methylpentane	1.328	1.535	1.280	375.725
32	33.226	763-29-1	C6	2-Methylpentene-1	0.222	0.249	0.219	64.428
33	33.449	592-41-6	K6	Hexene-1	0.162	0.184	0.160	47.021
34	35.642	760-21-4	C6	2-Ethylbutene-1	0.063	0.070	0.062	18.264
35	35.807	110-54-3	P6	n-Hexane	1.709	1.990	1.647	483.546
36	36.437	13269-52-8	K6	t-Hexene-3	0.260	0.293	0.257	75.488
37	36.913	4050-45-7	K6	t-Hexene-2	0.399	0.449	0.394	115.739
38	37.039	1120-62-3	B6	3-Methylcyclopentene	0.099	0.100	0.101	28.830
39	37.407	625-27-4	C6	2-Methylpentene-2	0.338	0.375	0.333	97.894
40	37.820	922-62-3	C6	3-Methyl-c-pentene-2	0.261	0.287	0.257	75.630
41	38.741	7688-21-3	K6	c-Hexene-2	0.211	0.234	0.209	61.253
42	40.086	3404-73-7	C7	3,3-Dimethylpentene-1	0.307	0.335	0.259	88.880
43	40.668	96-37-7	M6	Methylcyclopentane	1.035	1.061	1.021	299.897

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.230	108-08-7	I7	2,4-Dimethylpentane	0.524	0.598	0.434	148.880
45	42.531	594-56-9	C7	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	4.048
46	42.780	464-06-2	I7	2,2,3-Trimethylbutane	0.040	0.045	0.033	11.375
47	45.424	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.015	4.336
48	45.635	71-42-3	Q6	Benzene	0.685	0.598	0.728	213.697
49	45.832	693-89-0	B6	1-Methylcyclopentene	0.355	0.349	0.359	105.295
50	46.637	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.013	4.523
51	47.227	3524-73-0	C7	5-Methylhexene-1	0.037	0.041	0.031	10.776
52	47.550	110-82-7	M6	Cyclohexane	0.422	0.416	0.416	122.239
53	48.057	71-36-3	X4	n-Butanol	0.055	0.053	0.061	12.019
54	49.271	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.044	0.034	11.593
55	49.616	3769-23-1	C7	4-Methylhexene-1	0.012	0.013	0.010	3.344
56	50.264	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.054	0.042	14.460
57	50.663	591-76-4	I7	2-Methylhexane	0.805	0.911	0.667	228.761
58	51.151	110-83-8	B6	Cyclohexene	0.044	0.042	0.044	12.745
59	52.490	589-34-4	I7	3-Methylhexane	0.364	0.406	0.301	103.273
60	53.349	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.100	0.102	0.084	28.855
61	53.936	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.067	0.069	0.057	19.418
62	54.563	822-50-4	M7	1t,2-Dimethylcyclopentane	0.068	0.069	0.057	19.620
63	54.855		C7	C7 - Iso-Olefin - 2	0.022	0.024	0.019	6.500
64	55.165	540-84-1	I8	2,2,4-Trimethylpentane	2.988	3.315	2.172	850.410
65	55.470	592-76-7	K7	Heptene-1	0.028	0.031	0.024	8.182
66	56.801	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.947
67	57.330	14686-14-7	K7	t-Heptene-3	0.032	0.035	0.027	9.157
68	57.683	6094-02-6	C7	2-Methylhexene-1	0.056	0.062	0.048	16.309
69	58.052	142-82-5	P7	n-Heptane	0.120	0.135	0.100	34.163
70	58.272	7642-10-6	K7	c-Heptene-3	0.025	0.027	0.021	7.277
71	58.546	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.022	7.459
72	58.790	10574-36-4	C7	3-Methyl-c-hexene-2	0.020	0.021	0.017	5.684
73	59.173	14686-13-6	K7	t-Heptene-2	0.013	0.014	0.011	3.821
74	59.649	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	5.243
75	60.075	20710-38-8	C7	3-Methyl-t-hexene-2	0.015	0.016	0.013	4.288
76	60.857	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.646
77	61.504	108-87-2	M7	Methylcyclohexane	0.054	0.054	0.046	15.625
78	63.367		?	Unidentified	0.043	0.045	0.032	15.132
79	64.950	564-02-3	I8	2,2,3-Trimethylpentane	0.448	0.481	0.326	127.584
80	65.178	592-13-2	I8	2,5-Dimethylhexane	0.836	0.925	0.608	237.908
81	65.515	589-43-5	I8	2,4-Dimethylhexane	0.739	0.810	0.537	210.382
82	68.522	565-75-3	I8	2,3,4-Trimethylpentane	4.183	4.466	3.041	1190.681
83	69.115	108-88-3	Q7	Toluene	15.435	13.667	13.912	4765.873
84	69.232	560-21-4	I8	2,3,3-Trimethylpentane	4.730	5.001	3.439	1346.437
85	70.803	584-94-1	I8	2,3-Dimethylhexane	1.102	1.188	0.802	313.800
86	72.047	592-27-8	I8	2-Methylheptane	0.059	0.064	0.043	16.668

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	72.319	589-53-7	I8	4-Methylheptane	0.129	0.140	0.094	36.671
88	72.450		?	Unidentified	0.096	0.102	0.070	34.095
89	73.361	589-81-1	I8	3-Methylheptane	0.052	0.057	0.038	14.812
90	75.266	3522-94-9	I9	2,2,5-Trimethylhexane	2.367	2.569	1.533	675.055
91	76.236		?	Unidentified	0.018	0.018	0.014	6.488
92	77.868	111-65-9	P8	n-Octane	0.021	0.023	0.015	6.018
93	78.821		?	Unidentified	0.058	0.058	0.043	20.616
94	80.354	1069-53-0	I9	2,3,5-Trimethylhexane	0.394	0.419	0.255	112.325
95	81.519	1071-26-7	I9	2,4-Dimethylheptane	0.053	0.058	0.035	15.215
96	82.476	1072-05-5	I9	2,6-Dimethylheptane	0.064	0.070	0.042	18.307
97	83.411		I9	2,5-Dimethylheptane	0.187	0.201	0.121	53.362
98	84.749	100-41-4	Q8	Ethylbenzene	2.851	2.524	2.230	873.669
99	84.901		?	Unidentified	0.025	0.026	0.017	8.888
100	85.148		?	Unidentified	0.022	0.022	0.014	7.758
101	86.001	108-38-3	Q8	m-Xylene	7.294	6.479	5.706	2235.133
102	86.140	106-42-3	Q8	p-Xylene	3.389	3.022	2.651	1038.534
103	86.490		C8	C9-IsoOlefin-3	0.014	0.014	0.009	4.152
104	86.597		?	Unidentified	0.012	0.012	0.008	4.181
105	87.408	3221-61-2	I9	2-Methyloctane	0.013	0.014	0.009	3.763
106	88.271	2216-33-3	I9	3-Methyloctane	0.008	0.009	0.005	2.421
107	88.747		?	Unidentified	0.142	0.160	0.093	50.369
108	88.940	95-47-6	Q8	o-Xylene	1.846	1.610	1.444	565.783
109	89.323		I10	C10 - IsoParaffin - 1	0.446	0.471	0.260	127.480
110	90.166	14720-74-2	I10	2,2,4-trimethylheptane	0.301	0.317	0.176	85.947
111	91.710	111-84-2	P9	n-Nonane	0.177	0.189	0.115	50.450
112	93.094	98-82-8	Q9	i-Propylbenzene	0.033	0.029	0.023	9.953
113	93.272		?	Unidentified	0.012	0.012	0.008	4.271
114	93.272		?	Unidentified	0.012	0.013	0.007	4.271
115	93.272		?	Unidentified	0.012	0.009	0.007	4.271
116	93.840		?	Unidentified	0.052	0.055	0.030	18.549
117	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.017	0.018	0.010	4.769
118	94.865	15869-89-3	I10	2,5-Dimethyloctane	0.007	0.008	0.004	2.051
119	95.505	2051-30-1	I10	2,4-Dimethyloctane	0.012	0.013	0.007	3.396
120	96.553	103-65-1	Q9	n-Propylbenzene	0.279	0.248	0.193	84.939
121	97.401	620-14-4	Q9	1-Methyl-3-ethylbenzene	1.081	0.960	0.747	329.098
122	97.633	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.508	0.453	0.351	154.647
123	98.259	108-67-8	Q9	1,3,5-Trimethylbenzene	0.640	0.568	0.442	194.829
124	98.907	17301-94-8	I10	4-Methylnonane	0.009	0.009	0.005	2.482
125	99.112		?	Unidentified	0.167	0.176	0.097	59.137
126	99.344	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.406	0.354	0.280	123.552
127	99.885	5911-04-6	I10	3-Methylnonane	0.014	0.015	0.008	4.114
128	100.350		?	Unidentified	0.012	0.010	0.007	4.414
129	100.481		?	Unidentified	0.036	0.037	0.019	12.795

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	100.696		I11	C11-Isoparaffin-2	0.020	0.021	0.011	5.777
131	100.978	95-63-6	Q9	1,2,4-Trimethylbenzene	2.005	1.757	1.385	610.371
132	101.162		?	Unidentified	0.025	0.027	0.015	8.880
133	101.283		?	Unidentified	0.014	0.015	0.008	5.113
134	102.334	17302-01-1	I10	3-Ethyl-3-methylheptane	0.037	0.039	0.020	10.675
135	102.623	538-93-2	Q10	i-Butylbenzene	0.059	0.053	0.036	17.756
136	102.803	124-18-5	P10	n-Decane	0.016	0.017	0.009	4.591
137	102.899		?	Unidentified	0.024	0.022	0.015	8.680
138	103.197		?	Unidentified	0.010	0.010	0.005	3.529
139	103.849	526-73-8	Q9	1,2,3-Trimethylbenzene	0.366	0.314	0.253	111.433
140	104.241	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.008	0.007	0.005	2.498
141	104.614	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.037	0.033	0.023	11.304
142	105.043		J9	Indan	0.120	0.096	0.084	37.159
143	105.636		J10	Indene	0.227	0.181	0.159	70.184
144	106.352		I11	C11-Isoparaffin-7	0.094	0.097	0.050	26.762
145	106.546	141-93-5	Q10	1,3-Diethylbenzene	0.048	0.043	0.030	14.676
146	106.822	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.394	0.351	0.244	119.298
147	107.163	105-05-5	Q10	1,4-Diethylbenzene	0.147	0.131	0.091	44.524
148	107.260	104-51-8	Q10	n-Butylbenzene	0.030	0.027	0.019	9.170
149	107.381	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.146	0.128	0.091	44.342
150	107.633	135-01-3	Q10	1,2-Diethylbenzene	0.027	0.024	0.017	8.215
151	108.079		?	Unidentified	0.023	0.024	0.012	8.213
152	108.232	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.057	0.050	0.035	17.204
153	108.353		?	Unidentified	0.028	0.029	0.015	9.989
154	108.434		?	Unidentified	0.025	0.026	0.014	9.025
155	108.560		I11	C11- Isoparaffin-11	0.208	0.215	0.111	59.571
156	108.742		?	Unidentified	0.067	0.070	0.036	23.919
157	109.076	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.116	0.102	0.072	35.244
158	109.165		?	Unidentified	0.291	0.255	0.180	103.406
159	109.393		J10	2-Methylindan	0.042	0.033	0.026	12.981
160	109.739	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.309	0.271	0.191	93.639
161	110.284	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.206	0.178	0.128	62.501
162	110.708		?	Unidentified	0.006	0.005	0.003	2.063
163	110.902	693-61-8	K11	2-Undecene, (E)-	0.015	0.016	0.009	4.387
164	111.036		?	Unidentified	0.022	0.023	0.013	7.718
165	111.195		Q11	1-Methyl-4-t-butylbenzene	0.029	0.026	0.016	8.774
166	111.311		?	Unidentified	0.033	0.029	0.019	11.746
167	111.412	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.083	0.071	0.051	25.007
168	111.707	1120-21-4	P11	n-Undecane	0.025	0.026	0.013	7.254
169	111.863	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.027	0.024	0.015	8.251
170	111.972		?	Unidentified	0.014	0.012	0.008	5.004
171	112.346		Q10	1,2,4,5-Tetramethylbenzene	0.235	0.204	0.146	71.287
172	112.612	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.315	0.272	0.195	95.358

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	112.955		J10	C1-Indane - 1	0.005	0.004	0.003	1.440
174	113.131		I12	C12 - IsoParaffin - 1	0.006	0.007	0.003	1.846
175	113.483		?	Unidentified	0.019	0.019	0.009	6.582
176	113.754		Q11	C11 - Aromatic - 3	0.044	0.038	0.025	13.348
177	113.944	874-35-1	H10	5-Methylindan	0.103	0.089	0.065	31.260
178	114.069		Q12	1,2-Di-i-propylbenzene	0.038	0.032	0.019	11.303
179	114.284	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.053	0.046	0.030	15.967
180	114.441		Q11	C11 - Aromatic - 4	0.034	0.029	0.019	10.274
181	114.693	824-22-6	J10	4-Methylindan	0.131	0.113	0.082	39.591
182	114.845	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.039	0.034	0.022	11.910
183	114.940	824-63-5	H10	2-Methylindan	0.103	0.089	0.065	31.331
184	115.144		?	Unidentified	0.011	0.011	0.005	3.825
185	115.256	538-68-1	Q11	n-Pentylbenzene	0.017	0.015	0.010	5.183
186	115.485		Q11	tert-Pentylbenzene	0.058	0.050	0.033	17.591
187	115.797	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.026	0.022	0.014	7.743
188	115.908		Q11	C11 - Aromatic - 7	0.036	0.032	0.020	10.827
189	116.242		I12	C12 - IsoParaffin - 4	0.004	0.004	0.002	1.108
190	116.367	100-18-5	Q12	1,4-Di-i-propylbenzene	0.050	0.043	0.025	14.889
191	116.809	91-20-3	G10	Naphthalene	0.124	0.093	0.081	39.466
192	116.944		?	Unidentified	0.009	0.010	0.005	3.310
193	117.250		J11	1,1-Dimethyl Indane	0.018	0.014	0.010	5.443
194	117.412		J12	Dimethyl Indane - 1	0.007	0.006	0.004	2.186
195	117.592	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.007	0.006	0.004	2.097
196	117.892		Q12	1,3-Di-n-propylbenzene	0.048	0.041	0.025	14.409
197	118.003		Q11	C11 - Aromatic - 11	0.027	0.025	0.015	8.211
198	118.557		Q11	C11 - Aromatic - 12	0.021	0.019	0.012	6.334
199	119.486	102-25-0	Q12	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.670
200	123.439	91-57-6	G11	2-Methylnaphthalene	0.011	0.008	0.006	3.387
201	124.305	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.653
202	126.296		?	Unidentified	0.004	0.004	0.002	1.351
203	130.002		?	Unidentified	0.003	0.002	0.002	1.015

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	10.022	106-97-8	n-Butane	1.703	2.259	2.433	476.606
	18.109	109-66-0	n-Pentane	0.821	1.007	0.945	231.436
	35.807	110-54-3	n-Hexane	1.709	1.990	1.647	483.546
	58.052	142-82-5	n-Heptane	0.120	0.135	0.100	34.163
	77.868	111-65-9	n-Octane	0.021	0.023	0.015	6.018
	91.710	111-84-2	n-Nonane	0.177	0.189	0.115	50.450
	102.803	124-18-5	n-Decane	0.016	0.017	0.009	4.591
	111.707	1120-21-4	n-Undecane	0.025	0.026	0.013	7.254
I-Paraffins	8.809	75-28-5	i-Butane	0.018	0.025	0.026	5.016
	10.635	463-82-1	2,2-Dimethylpropane	0.008	0.010	0.009	2.207
	15.072	78-78-4	i-Pentane	3.147	3.899	3.622	886.785
	23.100	75-83-2	2,2-Dimethylbutane	0.028	0.033	0.027	7.928
	28.334	79-29-8	2,3-Dimethylbutane	0.704	0.817	0.678	199.158
	29.413	107-83-5	2-Methylpentane	1.771	2.082	1.707	501.176
	32.064	96-14-0	3-Methylpentane	1.328	1.535	1.280	375.725
	42.230	108-08-7	2,4-Dimethylpentane	0.524	0.598	0.434	148.880
	42.780	464-06-2	2,2,3-Trimethylbutane	0.040	0.045	0.033	11.375
	50.663	591-76-4	2-Methylhexane	0.805	0.911	0.667	228.761
	52.490	589-34-4	3-Methylhexane	0.364	0.406	0.301	103.273
	55.165	540-84-1	2,2,4-Trimethylpentane	2.988	3.315	2.172	850.410
	64.950	564-02-3	2,2,3-Trimethylpentane	0.448	0.481	0.326	127.584
	65.178	592-13-2	2,5-Dimethylhexane	0.836	0.925	0.608	237.908
	65.515	589-43-5	2,4-Dimethylhexane	0.739	0.810	0.537	210.382
	68.522	565-75-3	2,3,4-Trimethylpentane	4.183	4.466	3.041	1190.681
	69.232	560-21-4	2,3,3-Trimethylpentane	4.730	5.001	3.439	1346.437
	70.803	584-94-1	2,3-Dimethylhexane	1.102	1.188	0.802	313.800
	72.047	592-27-8	2-Methylheptane	0.059	0.064	0.043	16.668
	72.319	589-53-7	4-Methylheptane	0.129	0.140	0.094	36.671
	73.361	589-81-1	3-Methylheptane	0.052	0.057	0.038	14.812
	75.266	3522-94-9	2,2,5-Trimethylhexane	2.367	2.569	1.533	675.055
	80.354	1069-53-0	2,3,5-Trimethylhexane	0.394	0.419	0.255	112.325
	81.519	1071-26-7	2,4-Dimethylheptane	0.053	0.058	0.035	15.215
	82.476	1072-05-5	2,6-Dimethylheptane	0.064	0.070	0.042	18.307
	83.411		2,5-Dimethylheptane	0.187	0.201	0.121	53.362
	87.408	3221-61-2	2-Methyloctane	0.013	0.014	0.009	3.763
	88.271	2216-33-3	3-Methyloctane	0.008	0.009	0.005	2.421
	89.323		C10 - IsoParaffin - 1	0.446	0.471	0.260	127.480
	90.166	14720-74-2	2,2,4-trimethylheptane	0.301	0.317	0.176	85.947
	94.064	15869-87-1	2,2-Dimethyloctane	0.017	0.018	0.010	4.769
	94.865	15869-89-3	2,5-Dimethyloctane	0.007	0.008	0.004	2.051
	95.505	2051-30-1	2,4-Dimethyloctane	0.012	0.013	0.007	3.396
	98.907	17301-94-8	4-Methylnonane	0.009	0.009	0.005	2.482
	99.885	5911-04-6	3-Methylnonane	0.014	0.015	0.008	4.114
	100.696		C11-Isoparaffin-2	0.020	0.021	0.011	5.777
	102.334	17302-01-1	3-Ethyl-3-methylheptane	0.037	0.039	0.020	10.675
	106.352		C11-Isoparaffin-7	0.094	0.097	0.050	26.762

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	108.560		C11- Isoparaffin-11	0.208	0.215	0.111	59.571
	113.131		C12 - IsoParaffin - 1	0.006	0.007	0.003	1.846
	116.242		C12 - IsoParaffin - 4	0.004	0.004	0.002	1.108
Aromatics							
Mono-Aromatics	45.635	71-42-3	Benzene	0.685	0.598	0.728	213.697
	69.115	108-88-3	Toluene	15.435	13.667	13.912	4765.873
	84.749	100-41-4	Ethylbenzene	2.851	2.524	2.230	873.669
	86.001	108-38-3	m-Xylene	7.294	6.479	5.706	2235.133
	86.140	106-42-3	p-Xylene	3.389	3.022	2.651	1038.534
	88.940	95-47-6	o-Xylene	1.846	1.610	1.444	565.783
	93.094	98-82-8	i-Propylbenzene	0.033	0.029	0.023	9.953
	96.553	103-65-1	n-Propylbenzene	0.279	0.248	0.193	84.939
	97.401	620-14-4	1-Methyl-3-ethylbenzene	1.081	0.960	0.747	329.098
	97.633	622-96-8	1-Methyl-4-ethylbenzene	0.508	0.453	0.351	154.647
	98.259	108-67-8	1,3,5-Trimethylbenzene	0.640	0.568	0.442	194.829
	99.344	611-14-3	1-Methyl-2-ethylbenzene	0.406	0.354	0.280	123.552
	100.978	95-63-6	1,2,4-Trimethylbenzene	2.005	1.757	1.385	610.371
	102.623	538-93-2	i-Butylbenzene	0.059	0.053	0.036	17.756
	103.849	526-73-8	1,2,3-Trimethylbenzene	0.366	0.314	0.253	111.433
	104.241	535-77-3	1-Methyl-3-i-propylbenzene	0.008	0.007	0.005	2.498
	104.614	99-87-6	1-Methyl-4-i-propylbenzene	0.037	0.033	0.023	11.304
	106.546	141-93-5	1,3-Diethylbenzene	0.048	0.043	0.030	14.676
	106.822	1074-43-7	1-Methyl-3-n-propylbenzene	0.394	0.351	0.244	119.298
	107.163	105-05-5	1,4-Diethylbenzene	0.147	0.131	0.091	44.524
	107.260	104-51-8	n-Butylbenzene	0.030	0.027	0.019	9.170
	107.381	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.146	0.128	0.091	44.342
	107.633	135-01-3	1,2-Diethylbenzene	0.027	0.024	0.017	8.215
	108.232	1074-17-5	1-Methyl-2-n-propylbenzene	0.057	0.050	0.035	17.204
	109.076	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.116	0.102	0.072	35.244
	109.739	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.309	0.271	0.191	93.639
	110.284	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.206	0.178	0.128	62.501
	111.195		1-Methyl-4-t-butylbenzene	0.029	0.026	0.016	8.774
	111.412	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.083	0.071	0.051	25.007
	111.863	4218-48-8	1-Ethyl-4-i-propylbenzene	0.027	0.024	0.015	8.251
	112.346		1,2,4,5-Tetramethylbenzene	0.235	0.204	0.146	71.287
	112.612	527-53-7	1,2,3,5-Tetramethylbenzene	0.315	0.272	0.195	95.358
	113.754		C11 - Aromatic - 3	0.044	0.038	0.025	13.348
	114.069		1,2-Di-i-propylbenzene	0.038	0.032	0.019	11.303
	114.284	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.053	0.046	0.030	15.967
	114.441		C11 - Aromatic - 4	0.034	0.029	0.019	10.274
	114.845	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.039	0.034	0.022	11.910
	115.256	538-68-1	n-Pentylbenzene	0.017	0.015	0.010	5.183
	115.485		tert-Pentylbenzene	0.058	0.050	0.033	17.591
	115.797	577-55-9	1-Methyl-2-n-butylbenzene	0.026	0.022	0.014	7.743
	115.908		C11 - Aromatic - 7	0.036	0.032	0.020	10.827
	116.367	100-18-5	1,4-Di-i-propylbenzene	0.050	0.043	0.025	14.889

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	117.592	7364-19-4	1t-Butyl-4-ethylbenzene	0.007	0.006	0.004	2.097
	117.892		1,3-Di-n-propylbenzene	0.048	0.041	0.025	14.409
	118.003		C11 - Aromatic - 11	0.027	0.025	0.015	8.211
	118.557		C11 - Aromatic - 12	0.021	0.019	0.012	6.334
	119.486	102-25-0	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.670
Naphthalenes	116.809	91-20-3	Naphthalene	0.124	0.093	0.081	39.466
	123.439	91-57-6	2-Methylnaphthalene	0.011	0.008	0.006	3.387
	124.305	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.653
Naphtheno/Olefir	113.944	874-35-1	5-Methylindan	0.103	0.089	0.065	31.260
	114.940	824-63-5	2-Methylindan	0.103	0.089	0.065	31.331
Indenes	105.043		Indan	0.120	0.096	0.084	37.159
	105.636		Indene	0.227	0.181	0.159	70.184
	109.393		2-Methylindan	0.042	0.033	0.026	12.981
	112.955		C1-Indane - 1	0.005	0.004	0.003	1.440
	114.693	824-22-6	4-Methylindan	0.131	0.113	0.082	39.591
	117.250		1,1-Dimethyl Indane	0.018	0.014	0.010	5.443
	117.412		Dimethyl Indane - 1	0.007	0.006	0.004	2.186
Naphthenes							
Mono-Naphthene	27.603	287-92-3	Cyclopentane	0.093	0.096	0.111	27.060
	40.668	96-37-7	Methylcyclopentane	1.035	1.061	1.021	299.897
	47.550	110-82-7	Cyclohexane	0.422	0.416	0.416	122.239
	53.349	1759-58-6	1t,3-Dimethylcyclopentane	0.100	0.102	0.084	28.855
	53.936	2532-58-3	1c,3-Dimethylcyclopentane	0.067	0.069	0.057	19.418
	54.563	822-50-4	1t,2-Dimethylcyclopentane	0.068	0.069	0.057	19.620
	59.649	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	5.243
	61.504	108-87-2	Methylcyclohexane	0.054	0.054	0.046	15.625
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.622	115-11-7	Isobutene	0.017	0.021	0.025	4.824
	9.663	106-98-9	Butene-1	0.018	0.024	0.027	5.339
	10.507	624-64-6	t-Butene-2	0.075	0.096	0.111	21.798
	11.249	590-18-1	c-Butene-2	0.088	0.109	0.131	25.652
	16.725	109-67-1	Pentene-1	0.337	0.404	0.400	97.817
	19.230	646-04-8	t-Pentene-2	0.854	1.011	1.011	247.513
	20.263	627-20-3	c-Pentene-2	0.468	0.548	0.554	135.641
	33.449	592-41-6	Hexene-1	0.162	0.184	0.160	47.021
	36.437	13269-52-8	t-Hexene-3	0.260	0.293	0.257	75.488
	36.913	4050-45-7	t-Hexene-2	0.399	0.449	0.394	115.739
	38.741	7688-21-3	c-Hexene-2	0.211	0.234	0.209	61.253
	55.470	592-76-7	Heptene-1	0.028	0.031	0.024	8.182
	57.330	14686-14-7	t-Heptene-3	0.032	0.035	0.027	9.157
	58.272	7642-10-6	c-Heptene-3	0.025	0.027	0.021	7.277

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
n-Olefins	59.173	14686-13-6	t-Heptene-2	0.013	0.014	0.011	3.821
	110.902	693-61-8	2-Undecene, (E)-	0.015	0.016	0.009	4.387
Iso-Olefins	13.450	563-45-1	3-Methylbutene-1	0.219	0.268	0.259	63.429
	17.577	563-46-2	2-Methylbutene-1	0.512	0.604	0.606	148.347
	20.940	513-35-9	2-Methylbutene-2	1.046	1.213	1.239	303.329
	29.190	691-38-3	4-Methyl-c-pentene-2	0.046	0.052	0.045	13.302
	29.840	674-76-0	4-Methyl-t-pentene-2	0.130	0.148	0.129	37.750
	33.226	763-29-1	2-Methylpentene-1	0.222	0.249	0.219	64.428
	35.642	760-21-4	2-Ethylbutene-1	0.063	0.070	0.062	18.264
	37.407	625-27-4	2-Methylpentene-2	0.338	0.375	0.333	97.894
	37.820	922-62-3	3-Methyl-c-pentene-2	0.261	0.287	0.257	75.630
	40.086	3404-73-7	3,3-Dimethylpentene-1	0.307	0.335	0.259	88.880
	42.531	594-56-9	2,3,3-Trimethylbutene-1	0.014	0.015	0.012	4.048
	46.637	3404-61-3	3-Methylhexene-1	0.016	0.017	0.013	4.523
	47.227	3524-73-0	5-Methylhexene-1	0.037	0.041	0.031	10.776
	49.271	15840-60-5	2-Methyl-c-hexene-3	0.040	0.044	0.034	11.593
	49.616	3769-23-1	4-Methylhexene-1	0.012	0.013	0.010	3.344
	50.264	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.054	0.042	14.460
	54.855		C7 - Iso-Olefin - 2	0.022	0.024	0.019	6.500
	56.801	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.947
	57.683	6094-02-6	2-Methylhexene-1	0.056	0.062	0.048	16.309
	58.546	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.022	7.459
	58.790	10574-36-4	3-Methyl-c-hexene-2	0.020	0.021	0.017	5.684
	60.075	20710-38-8	3-Methyl-t-hexene-2	0.015	0.016	0.013	4.288
	60.857	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.646
	86.490		C9-IsoOlefin-3	0.014	0.014	0.009	4.152
Naphtheno-Olefir	22.531	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.009	2.115
	25.738	142-29-0	Cyclopentene	0.198	0.196	0.241	58.959
	37.039	1120-62-3	3-Methylcyclopentene	0.099	0.100	0.101	28.830
	45.832	693-89-0	1-Methylcyclopentene	0.355	0.349	0.359	105.295
	51.151	110-83-8	Cyclohexene	0.044	0.042	0.044	12.745
Di-Olefins	18.624	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	3.169
	21.266	2004-70-8	1t,3-Pentadiene	0.016	0.018	0.019	4.692
	45.424	1528-30-9	C6-Diolefin-1	0.015	0.015	0.015	4.336
Oxygenates	13.095	64-17-5	Ethanol	15.958	15.526	28.767	1904.669
	26.899	71-23-8	n-Propanol	0.076	0.073	0.106	15.497
	48.057	71-36-3	n-Butanol	0.055	0.053	0.061	12.019
Unidentified	19.875		Unidentified	0.006	0.007	0.007	2.072
	26.990		Unidentified	0.059	0.067	0.058	20.797
	28.732		Unidentified	0.053	0.055	0.050	18.695
	63.367		Unidentified	0.043	0.045	0.032	15.132
	72.450		Unidentified	0.096	0.102	0.070	34.095

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Components by Group

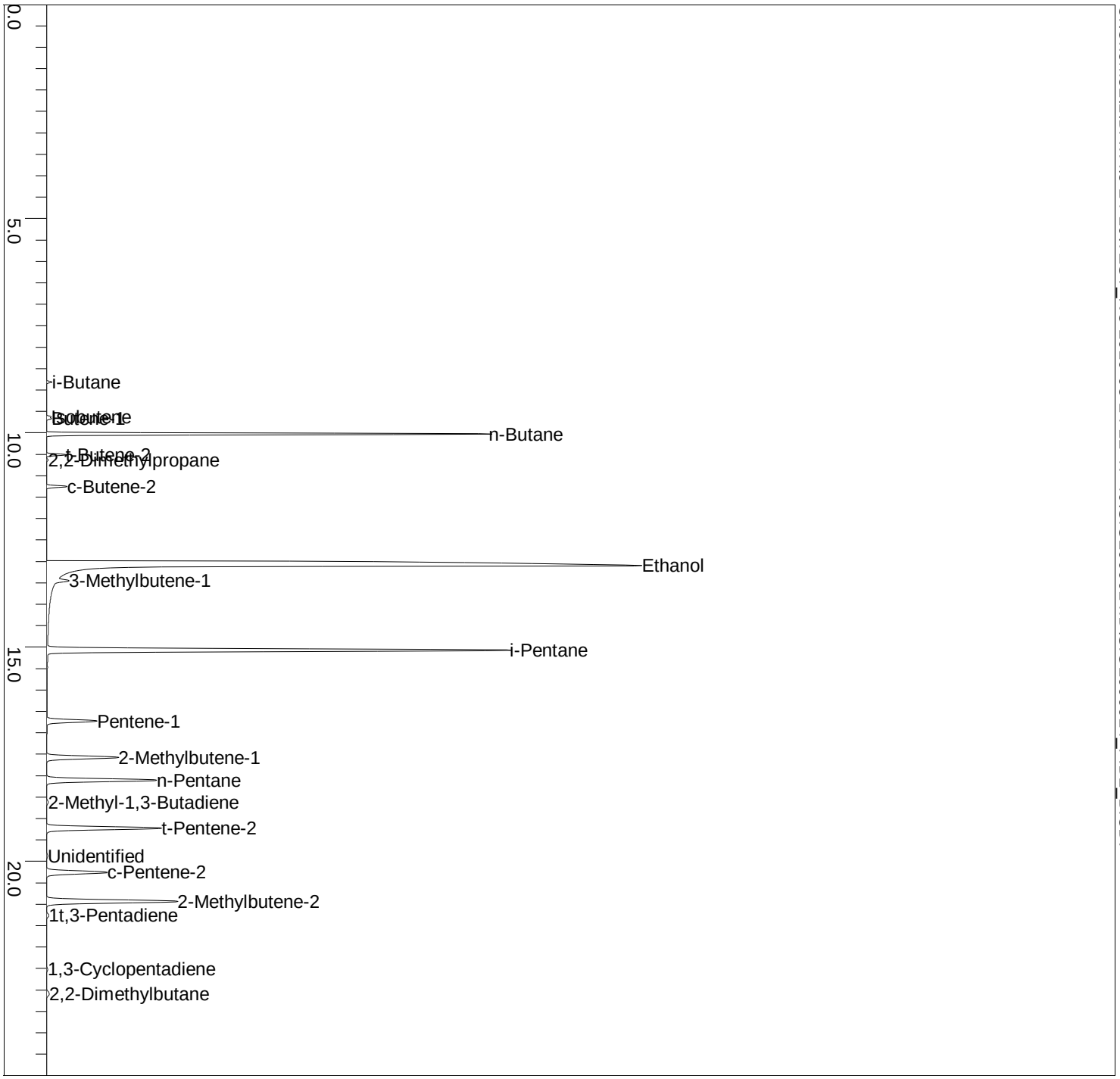
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Unidentified	76.236		Unidentified	0.018	0.018	0.014	6.488
	78.821		Unidentified	0.058	0.058	0.043	20.616
	84.901		Unidentified	0.025	0.026	0.017	8.888
	85.148		Unidentified	0.022	0.022	0.014	7.758
	86.597		Unidentified	0.012	0.012	0.008	4.181
	88.747		Unidentified	0.142	0.160	0.093	50.369
	93.272		Unidentified	0.012	0.012	0.008	4.271
	93.272		Unidentified	0.012	0.013	0.007	4.271
	93.272		Unidentified	0.012	0.009	0.007	4.271
	93.840		Unidentified	0.052	0.055	0.030	18.549
	99.112		Unidentified	0.167	0.176	0.097	59.137
	100.350		Unidentified	0.012	0.010	0.007	4.414
	100.481		Unidentified	0.036	0.037	0.019	12.795
	101.162		Unidentified	0.025	0.027	0.015	8.880
	101.283		Unidentified	0.014	0.015	0.008	5.113
	102.899		Unidentified	0.024	0.022	0.015	8.680
	103.197		Unidentified	0.010	0.010	0.005	3.529
	108.079		Unidentified	0.023	0.024	0.012	8.213
	108.353		Unidentified	0.028	0.029	0.015	9.989
	108.434		Unidentified	0.025	0.026	0.014	9.025
	108.742		Unidentified	0.067	0.070	0.036	23.919
	109.165		Unidentified	0.291	0.255	0.180	103.406
	110.708		Unidentified	0.006	0.005	0.003	2.063
	111.036		Unidentified	0.022	0.023	0.013	7.718
	111.311		Unidentified	0.033	0.029	0.019	11.746
	111.972		Unidentified	0.014	0.012	0.008	5.004
	113.483		Unidentified	0.019	0.019	0.009	6.582
	115.144		Unidentified	0.011	0.011	0.005	3.825
	116.944		Unidentified	0.009	0.010	0.005	3.310
	126.296		Unidentified	0.004	0.004	0.002	1.351
	130.002		Unidentified	0.003	0.002	0.002	1.015

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2_B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram



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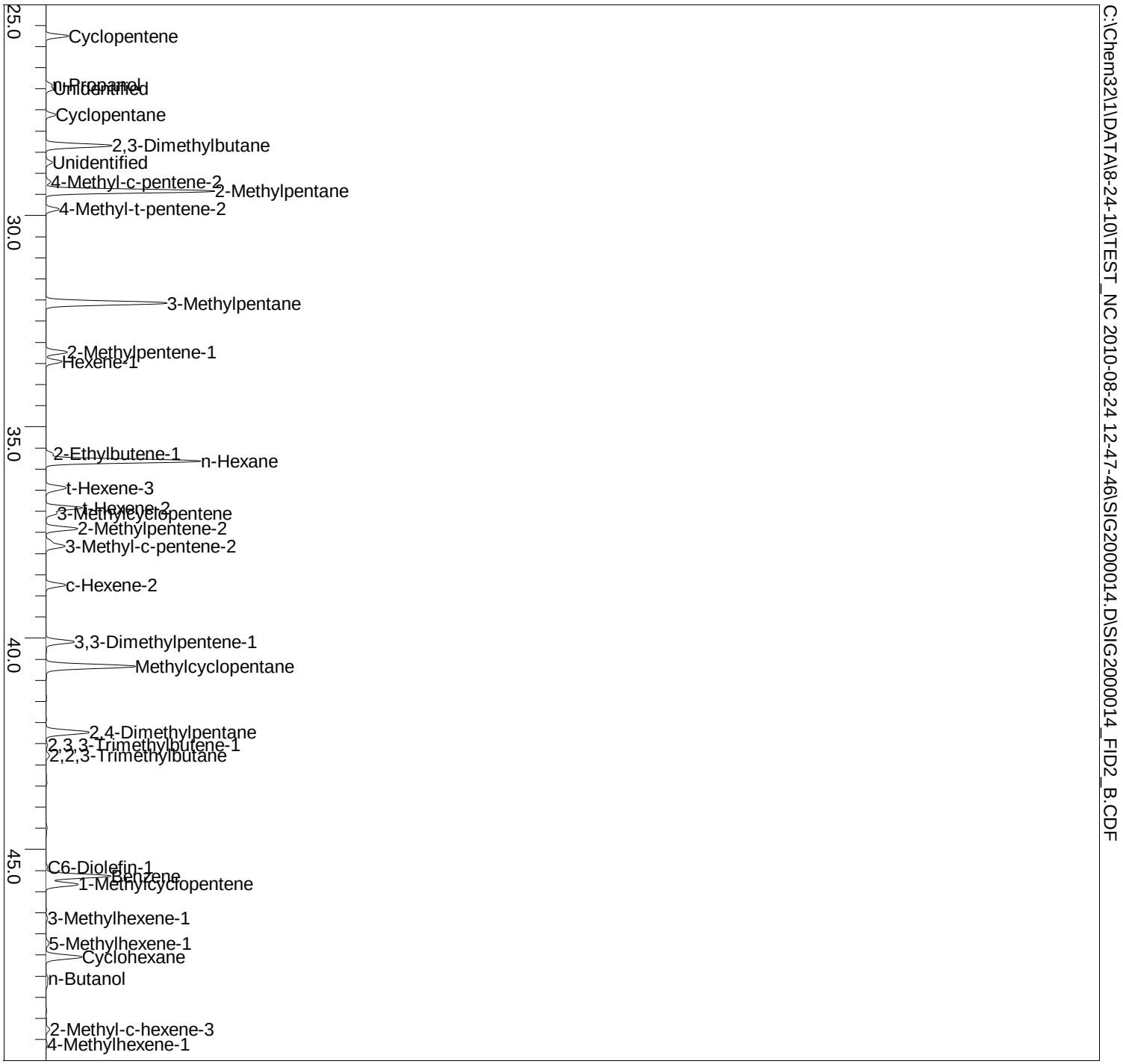
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram



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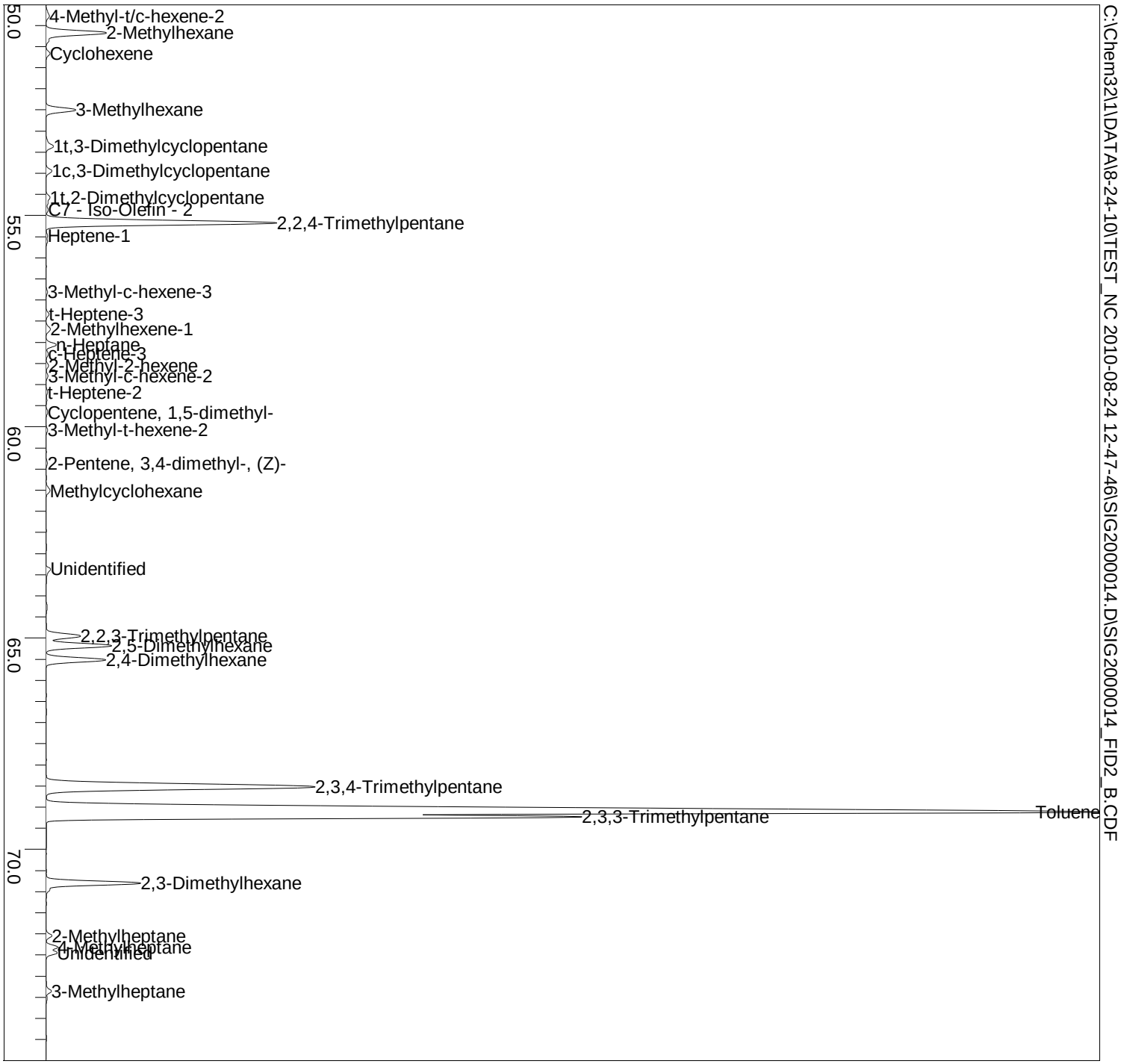
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram



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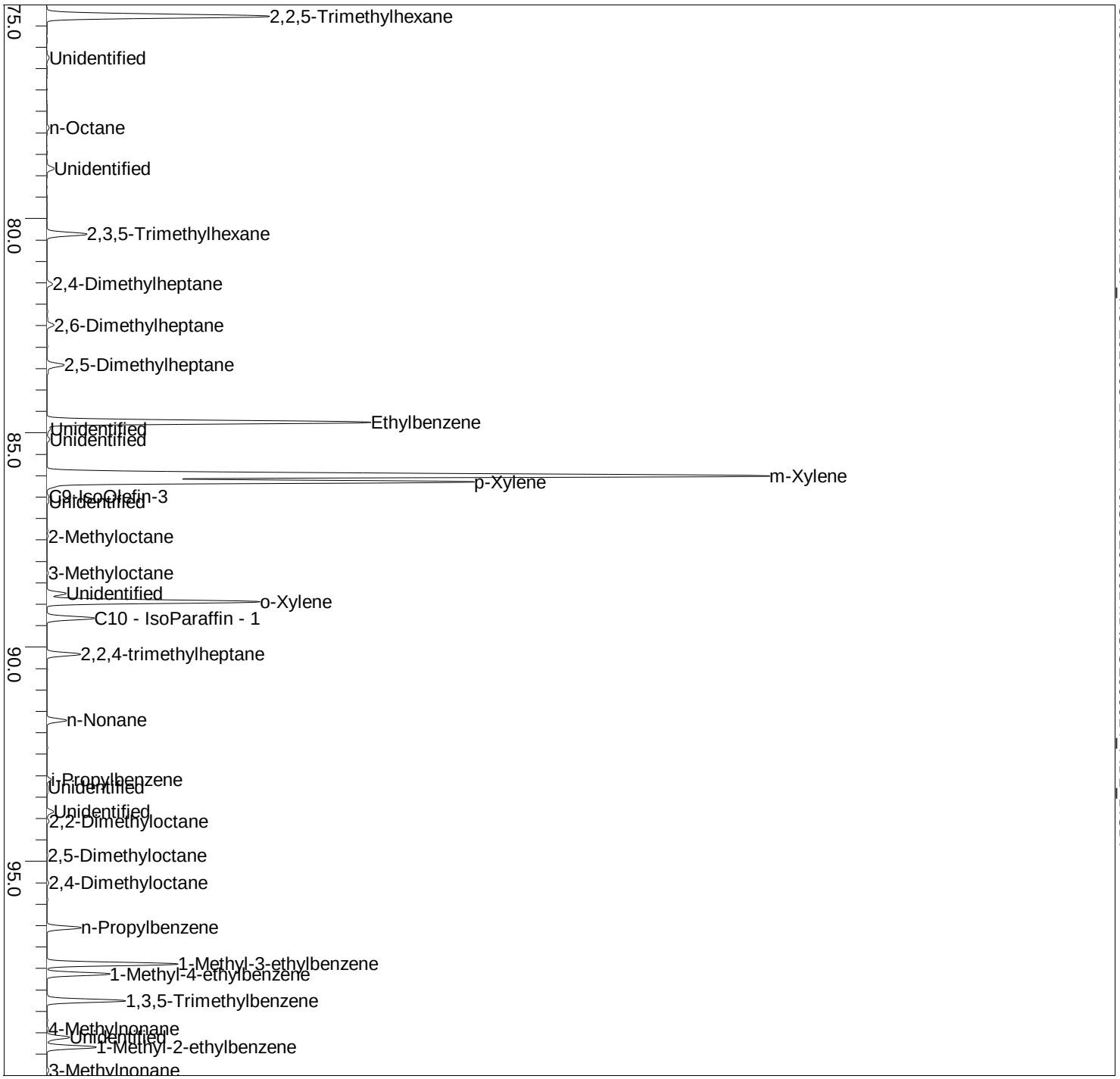
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram

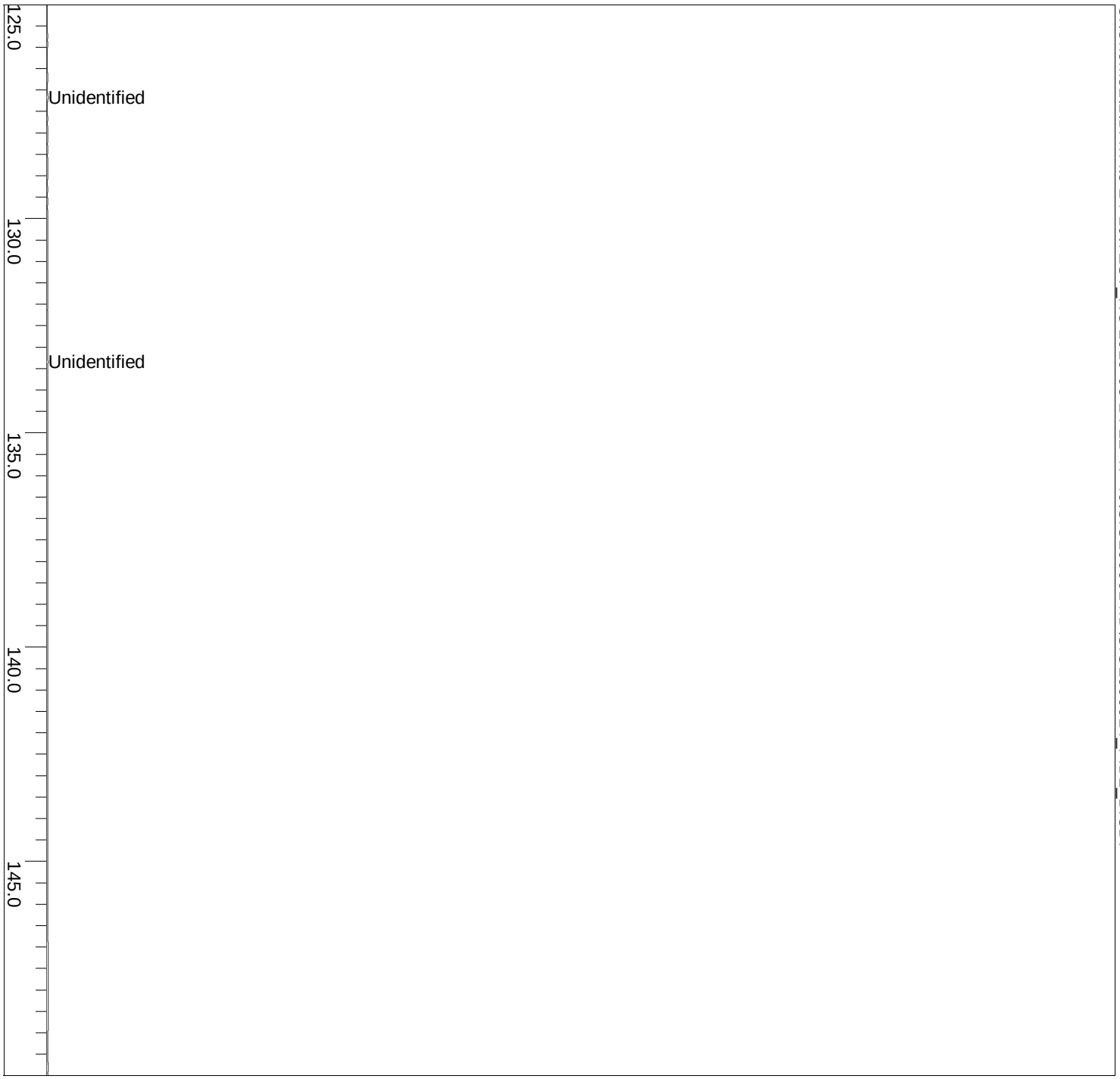


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2_B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000014.D\SIG2000014_FID2_B.CDF 25-Aug-10, 20:51:55
Sample: ODDB-91332 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91332
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	4.061	5.099	2.937
I-Paraffins	5.798	6.839	3.314
Aromatics	6.677	5.948	3.273
Mono-Aromatics	6.588	5.876	3.238
Naphthalenes	0.033	0.025	0.012
Naphtheno/Olefino-Benz	0.014	0.013	0.005
Indenes	0.042	0.035	0.018
Naphthenes	0.715	0.733	0.423
Mono-Naphthenes	0.715	0.733	0.423
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	0.443	0.549	0.359
n-Olefins	0.337	0.429	0.295
Iso-Olefins	0.106	0.120	0.063
Naphtheno-Olefins	0.000	0.000	0.000
Di-Olefins	0.000	0.000	0.000
Oxygenates	82.109	80.620	89.603
Unidentified	0.197	0.213	0.091
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	82.109	80.620	89.603
C3	0.007	0.010	0.007
C4	2.040	2.725	1.774
C5	3.749	4.624	2.617
C6	2.008	2.282	1.184
C7	3.810	3.679	2.027
C8	4.280	4.206	1.966
C9	1.459	1.336	0.605
C10	0.300	0.267	0.113
C11	0.042	0.039	0.014

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.007	0.010	0.007
	C4	1.528	2.045	1.321
	C5	1.652	2.044	1.151
	C6	0.399	0.469	0.233
	C7	0.289	0.327	0.145
	C8	0.138	0.153	0.061
	C9	0.036	0.039	0.014
	C10	0.008	0.008	0.003
	C11	0.004	0.004	0.001
I-Paraffins	C4	0.212	0.295	0.183
	C5	1.843	2.304	1.284
	C6	1.190	1.403	0.694
	C7	0.674	0.766	0.338
	C8	1.665	1.839	0.733
	C9	0.171	0.185	0.067
	C10	0.023	0.025	0.008
	C11	0.020	0.021	0.007
Mono-Aromatics	C6	0.142	0.125	0.091
	C7	2.551	2.280	1.392
	C8	2.446	2.184	1.158
	C9	1.230	1.093	0.514
	C10	0.219	0.194	0.082
Naphthalenes	C10	0.016	0.012	0.006
	C11	0.017	0.013	0.006
Naphtheno/Olefino-Benzs	C10	0.014	0.013	0.005
Indenes	C9	0.022	0.018	0.009
	C10	0.020	0.017	0.008
Mono-Naphthenes	C5	0.177	0.184	0.127
	C6	0.268	0.274	0.160
	C7	0.240	0.244	0.123
	C8	0.030	0.030	0.014
n-Olefins	C4	0.300	0.385	0.269
	C5	0.037	0.044	0.026
Iso-Olefins	C5	0.041	0.048	0.029

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Iso-Olefins	C6	0.009	0.010	0.005
	C7	0.056	0.062	0.029
Oxygenates	C2	82.109	80.620	89.603

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	21.70	20.80
5%	93.97	81.46
10%	171.55	171.51
15%	171.66	171.62
20%	171.77	171.74
25%	171.88	171.85
30%	171.99	171.96
35%	172.10	172.07
40%	172.21	172.18
45%	172.32	172.29
50%	172.43	172.41
55%	172.54	172.52
60%	172.65	172.63
65%	172.76	172.74
70%	172.87	172.85
75%	172.98	172.96
80%	173.09	173.07
85%	173.20	173.19
90%	178.77	173.30
95%	235.25	231.00
FBP	336.22	335.51

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.476		?	Unidentified	0.001	0.002	0.001	0.379
2	7.554	74-98-6	P3	Propane	0.007	0.010	0.007	1.953
3	8.808	75-28-5	I4	i-Butane	0.212	0.295	0.183	64.086
4	9.621	115-11-7	K4	Isobutene	0.073	0.095	0.065	22.829
5	9.662	106-98-9	K4	Butene-1	0.055	0.071	0.049	17.123
6	10.021	106-97-8	P4	n-Butane	1.528	2.045	1.321	461.498
7	10.506	624-64-6	K4	t-Butene-2	0.107	0.137	0.096	33.454
8	10.634	463-82-1	I5	2,2-Dimethylpropane	0.009	0.012	0.006	2.810
9	11.247	590-18-1	K4	c-Butene-2	0.066	0.082	0.059	20.543
10	13.405	64-17-5	X2	Ethanol	82.109	80.620	89.603	10578.776
11	15.067	78-78-4	I5	i-Pentane	1.833	2.292	1.277	557.689
12	16.723	109-67-1	K5	Pentene-1	0.008	0.010	0.006	2.513
13	17.574	563-46-2	C5	2-Methylbutene-1	0.014	0.017	0.010	4.365
14	18.105	109-66-0	P5	n-Pentane	1.652	2.044	1.151	502.540
15	19.225	646-04-8	K5	t-Pentene-2	0.019	0.022	0.013	5.850
16	20.258	627-20-3	K5	c-Pentene-2	0.010	0.012	0.007	3.111
17	20.935	513-35-9	C5	2-Methylbutene-2	0.027	0.032	0.019	8.449
18	23.079	75-83-2	I6	2,2-Dimethylbutane	0.069	0.082	0.040	20.959
19	27.595	287-92-3	M5	Cyclopentane	0.177	0.184	0.127	55.278
20	28.325	79-29-8	I6	2,3-Dimethylbutane	0.147	0.172	0.086	44.870
21	29.399	107-83-5	I6	2-Methylpentane	0.632	0.750	0.369	193.017
22	32.051	96-14-0	I6	3-Methylpentane	0.342	0.399	0.200	104.569
23	35.789	110-54-3	P6	n-Hexane	0.399	0.469	0.233	121.978
24	37.397	625-27-4	C6	2-Methylpentene-2	0.009	0.010	0.005	2.835
25	40.078	3404-73-7	C7	3,3-Dimethylpentene-1	0.009	0.010	0.004	2.745
26	40.654	96-37-7	M6	Methylcyclopentane	0.201	0.208	0.120	62.791
27	42.217	108-08-7	I7	2,4-Dimethylpentane	0.074	0.085	0.037	22.613
28	45.625	71-42-3	Q6	Benzene	0.142	0.125	0.091	47.875
29	47.219	3524-73-0	C7	5-Methylhexene-1	0.022	0.024	0.011	6.770
30	47.541	110-82-7	M6	Cyclohexane	0.067	0.067	0.040	20.976
31	50.650	591-76-4	I7	2-Methylhexane	0.323	0.369	0.162	99.136
32	52.480	589-34-4	I7	3-Methylhexane	0.277	0.312	0.139	84.930
33	53.343	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.025	0.026	0.013	7.722
34	53.929	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.022	0.023	0.011	6.930
35	54.555	822-50-4	M7	1t,2-Dimethylcyclopentane	0.029	0.030	0.015	9.026
36	54.670		C7	2-Ethylpentene-1	0.025	0.028	0.013	7.944
37	55.134	540-84-1	I8	2,2,4-Trimethylpentane	0.666	0.745	0.293	204.506
38	58.045	142-82-5	P7	n-Heptane	0.289	0.327	0.145	88.539
39	61.501	108-87-2	M7	Methylcyclohexane	0.094	0.095	0.048	29.471
40	62.839	590-73-8	I8	2,2-Dimethylhexane	0.013	0.015	0.006	4.028
41	63.330		?	Unidentified	0.196	0.211	0.090	75.213
42	64.168	1640-89-7	M7	Ethylcyclopentane	0.070	0.071	0.036	22.047
43	64.936	564-02-3	I8	2,2,3-Trimethylpentane	0.024	0.026	0.011	7.456

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	65.159	592-13-2	I8	2,5-Dimethylhexane	0.084	0.094	0.037	25.953
45	65.497	589-43-5	I8	2,4-Dimethylhexane	0.108	0.120	0.048	33.221
46	66.334	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.009	0.010	0.004	2.959
47	66.731	563-16-6	I8	3,3-Dimethylhexane	0.016	0.017	0.007	4.848
48	68.455	565-75-3	I8	2,3,4-Trimethylpentane	0.277	0.298	0.122	84.965
49	68.984	108-88-3	Q7	Toluene	2.551	2.280	1.392	850.318
50	70.783	584-94-1	I8	2,3-Dimethylhexane	0.091	0.099	0.040	28.040
51	72.038	592-27-8	I8	2-Methylheptane	0.120	0.133	0.053	36.872
52	72.293	589-53-7	I8	4-Methylheptane	0.078	0.086	0.034	23.923
53	73.354	589-81-1	I8	3-Methylheptane	0.153	0.168	0.067	47.044
54	73.519	619-99-8	I8	3-Ethylhexane	0.035	0.038	0.015	10.738
55	75.241	3522-94-9	I9	2,2,5-Trimethylhexane	0.046	0.050	0.018	14.140
56	75.602		M8	3c-Ethylmethylcyclopentane	0.005	0.005	0.002	1.493
57	77.864	111-65-9	P8	n-Octane	0.138	0.153	0.061	42.513
58	80.347	1069-53-0	I9	2,3,5-Trimethylhexane	0.008	0.008	0.003	2.314
59	81.516	1071-26-7	I9	2,4-Dimethylheptane	0.009	0.010	0.003	2.694
60	82.159	1678-91-7	M8	Ethylcyclohexane	0.016	0.016	0.007	5.021
61	82.471	1072-05-5	I9	2,6-Dimethylheptane	0.011	0.012	0.004	3.299
62	83.399		I9	2,5-Dimethylheptane	0.016	0.018	0.006	4.984
63	84.721	100-41-4	Q8	Ethylbenzene	0.402	0.359	0.190	132.895
64	85.937	108-38-3	Q8	m-Xylene	1.042	0.934	0.493	344.612
65	86.087	106-42-3	Q8	p-Xylene	0.441	0.397	0.209	145.825
66	87.270	2216-34-4	I9	4-Methyloctane	0.021	0.023	0.008	6.551
67	87.401	3221-61-2	I9	2-Methyloctane	0.024	0.026	0.010	7.490
68	88.101	15869-80-4	I9	Heptane, 3-ethyl-	0.006	0.006	0.002	1.820
69	88.265	2216-33-3	I9	3-Methyloctane	0.030	0.033	0.012	9.307
70	88.922	95-47-6	Q8	o-Xylene	0.562	0.494	0.266	185.747
71	89.316		I10	C10 - IsoParaffin - 1	0.006	0.006	0.002	1.702
72	91.744	111-84-2	P9	n-Nonane	0.036	0.039	0.014	11.157
73	93.091	98-82-8	Q9	i-Propylbenzene	0.022	0.020	0.009	7.355
74	96.548	103-65-1	Q9	n-Propylbenzene	0.077	0.069	0.032	25.188
75	97.389	620-14-4	Q9	1-Methyl-3-ethylbenzene	0.271	0.243	0.113	89.025
76	97.625	622-96-8	Q9	1-Methyl-4-ethylbenzene	0.119	0.107	0.050	38.990
77	98.250	108-67-8	Q9	1,3,5-Trimethylbenzene	0.127	0.114	0.053	41.883
78	99.111		I10	2,2,6-Trimethyloctane	0.018	0.019	0.006	5.417
79	99.338	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.098	0.086	0.041	32.243
80	100.960	95-63-6	Q9	1,2,4-Trimethylbenzene	0.425	0.376	0.178	139.747
81	102.802	124-18-5	P10	n-Decane	0.008	0.008	0.003	2.335
82	103.843	526-73-8	Q9	1,2,3-Trimethylbenzene	0.091	0.078	0.038	29.778
83	105.039		J9	Indan	0.022	0.018	0.009	7.373
84	105.632		J10	Indene	0.012	0.009	0.005	3.869
85	106.349		I11	C11-Isoparaffin-7	0.005	0.005	0.002	1.504
86	106.542	141-93-5	Q10	1,3-Diethylbenzene	0.009	0.008	0.003	2.822

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	106.803	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.036	0.033	0.014	11.915
88	107.159	105-05-5	Q10	1,4-Diethylbenzene	0.018	0.016	0.007	5.822
89	107.377	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.025	0.022	0.009	8.046
90	108.230	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.007	0.006	0.003	2.314
91	108.558		I11	C11- Isoparaffin-11	0.016	0.016	0.005	4.816
92	109.071	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.017	0.015	0.006	5.486
93	109.234	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.023	0.020	0.009	7.558
94	109.736	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.029	0.026	0.011	9.449
95	110.282	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.009	0.008	0.003	2.930
96	111.411	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.006	0.005	0.002	1.946
97	111.687	1120-21-4	P11	n-Undecane	0.004	0.004	0.001	1.281
98	112.343		Q10	1,2,4,5-Tetramethylbenzene	0.017	0.015	0.006	5.526
99	112.608	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.024	0.021	0.009	7.747
100	113.942	874-35-1	H10	5-Methylindan	0.006	0.005	0.002	1.846
101	114.691	824-22-6	J10	4-Methylindan	0.009	0.007	0.003	2.806
102	114.939	824-63-5	H10	2-Methylindan	0.009	0.008	0.003	2.852
103	116.809	91-20-3	G10	Naphthalene	0.016	0.012	0.006	5.344
104	123.439	91-57-6	G11	2-Methylnaphthalene	0.012	0.009	0.004	4.131
105	124.304	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.002	1.679

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.554	74-98-6	Propane	0.007	0.010	0.007	1.953
	10.021	106-97-8	n-Butane	1.528	2.045	1.321	461.498
	18.105	109-66-0	n-Pentane	1.652	2.044	1.151	502.540
	35.789	110-54-3	n-Hexane	0.399	0.469	0.233	121.978
	58.045	142-82-5	n-Heptane	0.289	0.327	0.145	88.539
	77.864	111-65-9	n-Octane	0.138	0.153	0.061	42.513
	91.744	111-84-2	n-Nonane	0.036	0.039	0.014	11.157
	102.802	124-18-5	n-Decane	0.008	0.008	0.003	2.335
	111.687	1120-21-4	n-Undecane	0.004	0.004	0.001	1.281
I-Paraffins	8.808	75-28-5	i-Butane	0.212	0.295	0.183	64.086
	10.634	463-82-1	2,2-Dimethylpropane	0.009	0.012	0.006	2.810
	15.067	78-78-4	i-Pentane	1.833	2.292	1.277	557.689
	23.079	75-83-2	2,2-Dimethylbutane	0.069	0.082	0.040	20.959
	28.325	79-29-8	2,3-Dimethylbutane	0.147	0.172	0.086	44.870
	29.399	107-83-5	2-Methylpentane	0.632	0.750	0.369	193.017
	32.051	96-14-0	3-Methylpentane	0.342	0.399	0.200	104.569
	42.217	108-08-7	2,4-Dimethylpentane	0.074	0.085	0.037	22.613
	50.650	591-76-4	2-Methylhexane	0.323	0.369	0.162	99.136
	52.480	589-34-4	3-Methylhexane	0.277	0.312	0.139	84.930
	55.134	540-84-1	2,2,4-Trimethylpentane	0.666	0.745	0.293	204.506
	62.839	590-73-8	2,2-Dimethylhexane	0.013	0.015	0.006	4.028
	64.936	564-02-3	2,2,3-Trimethylpentane	0.024	0.026	0.011	7.456
	65.159	592-13-2	2,5-Dimethylhexane	0.084	0.094	0.037	25.953
	65.497	589-43-5	2,4-Dimethylhexane	0.108	0.120	0.048	33.221
	66.731	563-16-6	3,3-Dimethylhexane	0.016	0.017	0.007	4.848
	68.455	565-75-3	2,3,4-Trimethylpentane	0.277	0.298	0.122	84.965
	70.783	584-94-1	2,3-Dimethylhexane	0.091	0.099	0.040	28.040
	72.038	592-27-8	2-Methylheptane	0.120	0.133	0.053	36.872
	72.293	589-53-7	4-Methylheptane	0.078	0.086	0.034	23.923
	73.354	589-81-1	3-Methylheptane	0.153	0.168	0.067	47.044
	73.519	619-99-8	3-Ethylhexane	0.035	0.038	0.015	10.738
	75.241	3522-94-9	2,2,5-Trimethylhexane	0.046	0.050	0.018	14.140
	80.347	1069-53-0	2,3,5-Trimethylhexane	0.008	0.008	0.003	2.314
	81.516	1071-26-7	2,4-Dimethylheptane	0.009	0.010	0.003	2.694
	82.471	1072-05-5	2,6-Dimethylheptane	0.011	0.012	0.004	3.299
	83.399		2,5-Dimethylheptane	0.016	0.018	0.006	4.984
	87.270	2216-34-4	4-Methyloctane	0.021	0.023	0.008	6.551
	87.401	3221-61-2	2-Methyloctane	0.024	0.026	0.010	7.490
	88.101	15869-80-4	Heptane, 3-ethyl-	0.006	0.006	0.002	1.820
	88.265	2216-33-3	3-Methyloctane	0.030	0.033	0.012	9.307
	89.316		C10 - IsoParaffin - 1	0.006	0.006	0.002	1.702
	99.111		2,2,6-Trimethyloctane	0.018	0.019	0.006	5.417
	106.349		C11-Isoparaffin-7	0.005	0.005	0.002	1.504
	108.558		C11- Isoparaffin-11	0.016	0.016	0.005	4.816
Aromatics							
Mono-Aromatics	45.625	71-42-3	Benzene	0.142	0.125	0.091	47.875

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	68.984	108-88-3	Toluene	2.551	2.280	1.392	850.318
	84.721	100-41-4	Ethylbenzene	0.402	0.359	0.190	132.895
	85.937	108-38-3	m-Xylene	1.042	0.934	0.493	344.612
	86.087	106-42-3	p-Xylene	0.441	0.397	0.209	145.825
	88.922	95-47-6	o-Xylene	0.562	0.494	0.266	185.747
	93.091	98-82-8	i-Propylbenzene	0.022	0.020	0.009	7.355
	96.548	103-65-1	n-Propylbenzene	0.077	0.069	0.032	25.188
	97.389	620-14-4	1-Methyl-3-ethylbenzene	0.271	0.243	0.113	89.025
	97.625	622-96-8	1-Methyl-4-ethylbenzene	0.119	0.107	0.050	38.990
	98.250	108-67-8	1,3,5-Trimethylbenzene	0.127	0.114	0.053	41.883
	99.338	611-14-3	1-Methyl-2-ethylbenzene	0.098	0.086	0.041	32.243
	100.960	95-63-6	1,2,4-Trimethylbenzene	0.425	0.376	0.178	139.747
	103.843	526-73-8	1,2,3-Trimethylbenzene	0.091	0.078	0.038	29.778
	106.542	141-93-5	1,3-Diethylbenzene	0.009	0.008	0.003	2.822
	106.803	1074-43-7	1-Methyl-3-n-propylbenzene	0.036	0.033	0.014	11.915
	107.159	105-05-5	1,4-Diethylbenzene	0.018	0.016	0.007	5.822
	107.377	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.025	0.022	0.009	8.046
	108.230	1074-17-5	1-Methyl-2-n-propylbenzene	0.007	0.006	0.003	2.314
	109.071	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.017	0.015	0.006	5.486
	109.234	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.023	0.020	0.009	7.558
	109.736	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.029	0.026	0.011	9.449
	110.282	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.009	0.008	0.003	2.930
	111.411	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.006	0.005	0.002	1.946
	112.343		1,2,4,5-Tetramethylbenzene	0.017	0.015	0.006	5.526
	112.608	527-53-7	1,2,3,5-Tetramethylbenzene	0.024	0.021	0.009	7.747
Naphthalenes	116.809	91-20-3	Naphthalene	0.016	0.012	0.006	5.344
	123.439	91-57-6	2-Methylnaphthalene	0.012	0.009	0.004	4.131
	124.304	90-12-0	1-Methylnaphthalene	0.005	0.004	0.002	1.679
Naphtheno/Olefir	113.942	874-35-1	5-Methylindan	0.006	0.005	0.002	1.846
	114.939	824-63-5	2-Methylindan	0.009	0.008	0.003	2.852
Indenes	105.039		Indan	0.022	0.018	0.009	7.373
	105.632		Indene	0.012	0.009	0.005	3.869
	114.691	824-22-6	4-Methylindan	0.009	0.007	0.003	2.806
Naphthenes							
Mono-Naphthene	27.595	287-92-3	Cyclopentane	0.177	0.184	0.127	55.278
	40.654	96-37-7	Methylcyclopentane	0.201	0.208	0.120	62.791
	47.541	110-82-7	Cyclohexane	0.067	0.067	0.040	20.976
	53.343	1759-58-6	1t,3-Dimethylcyclopentane	0.025	0.026	0.013	7.722
	53.929	2532-58-3	1c,3-Dimethylcyclopentane	0.022	0.023	0.011	6.930
	54.555	822-50-4	1t,2-Dimethylcyclopentane	0.029	0.030	0.015	9.026
	61.501	108-87-2	Methylcyclohexane	0.094	0.095	0.048	29.471
	64.168	1640-89-7	Ethylcyclopentane	0.070	0.071	0.036	22.047
	66.334	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.009	0.010	0.004	2.959

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

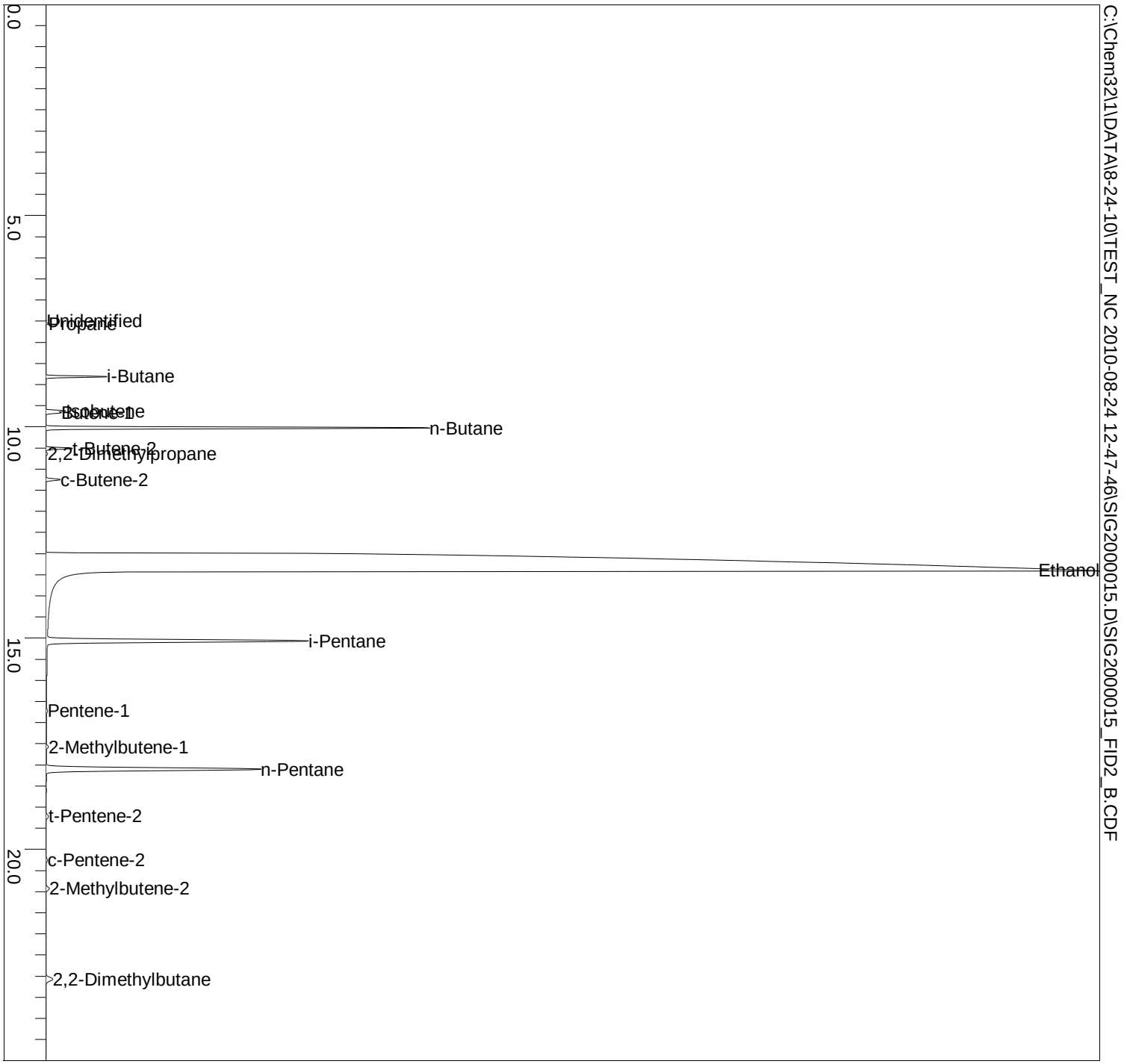
Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	75.602		3c-Ethylmethylcyclopentane	0.005	0.005	0.002	1.493
	82.159	1678-91-7	Ethylcyclohexane	0.016	0.016	0.007	5.021
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.621	115-11-7	Isobutene	0.073	0.095	0.065	22.829
	9.662	106-98-9	Butene-1	0.055	0.071	0.049	17.123
	10.506	624-64-6	t-Butene-2	0.107	0.137	0.096	33.454
	11.247	590-18-1	c-Butene-2	0.066	0.082	0.059	20.543
	16.723	109-67-1	Pentene-1	0.008	0.010	0.006	2.513
	19.225	646-04-8	t-Pentene-2	0.019	0.022	0.013	5.850
	20.258	627-20-3	c-Pentene-2	0.010	0.012	0.007	3.111
Iso-Olefins	17.574	563-46-2	2-Methylbutene-1	0.014	0.017	0.010	4.365
	20.935	513-35-9	2-Methylbutene-2	0.027	0.032	0.019	8.449
	37.397	625-27-4	2-Methylpentene-2	0.009	0.010	0.005	2.835
	40.078	3404-73-7	3,3-Dimethylpentene-1	0.009	0.010	0.004	2.745
	47.219	3524-73-0	5-Methylhexene-1	0.022	0.024	0.011	6.770
	54.670		2-Ethylpentene-1	0.025	0.028	0.013	7.944
Naphtheno-Olefir							
Di-Olefins							
Oxygenates	13.405	64-17-5	Ethanol	82.109	80.620	89.603	10578.776
Unidentified	7.476		Unidentified	0.001	0.002	0.001	0.379
	63.330		Unidentified	0.196	0.211	0.090	75.213
Plus							

Recovery = 100.00

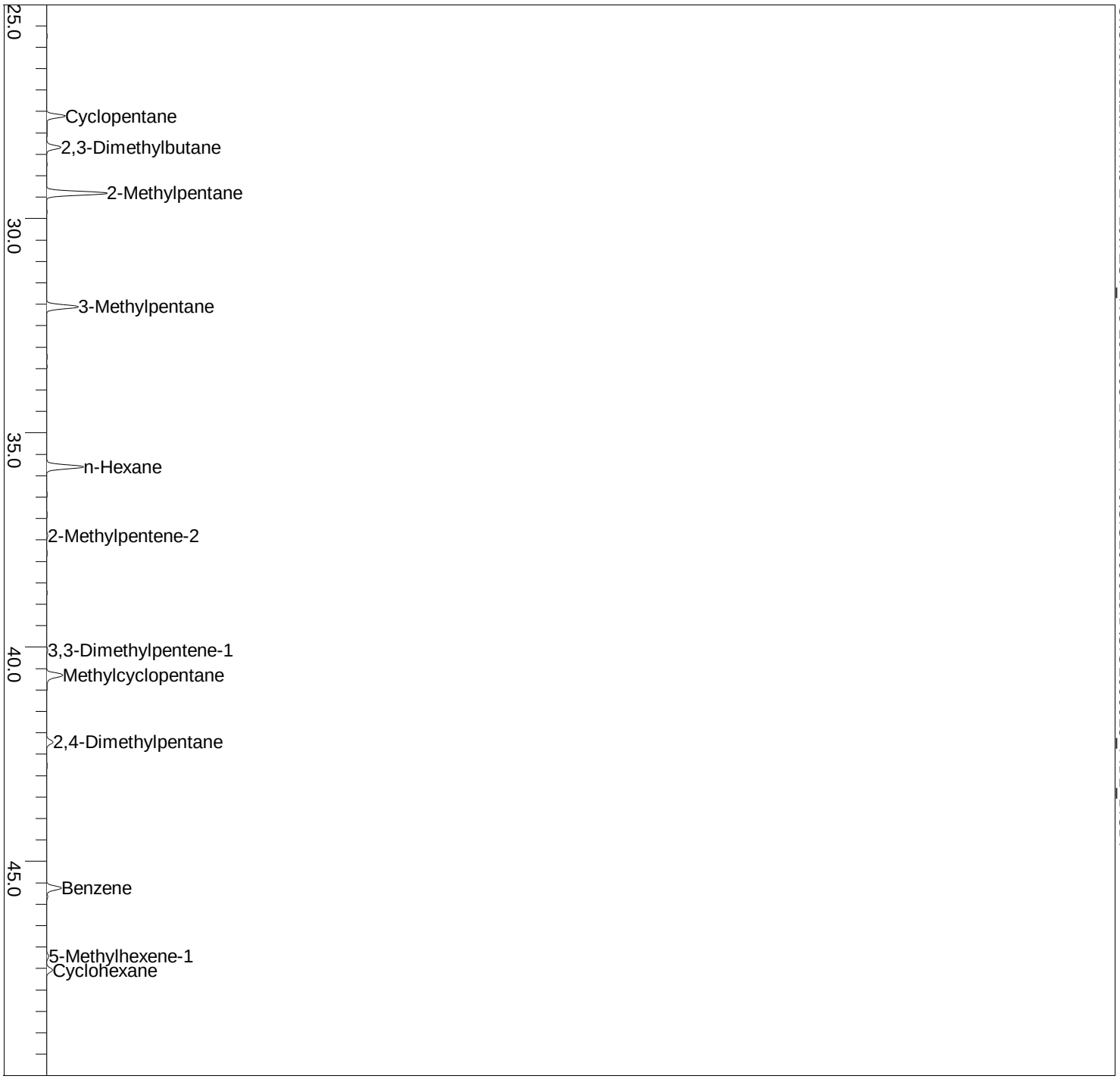
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

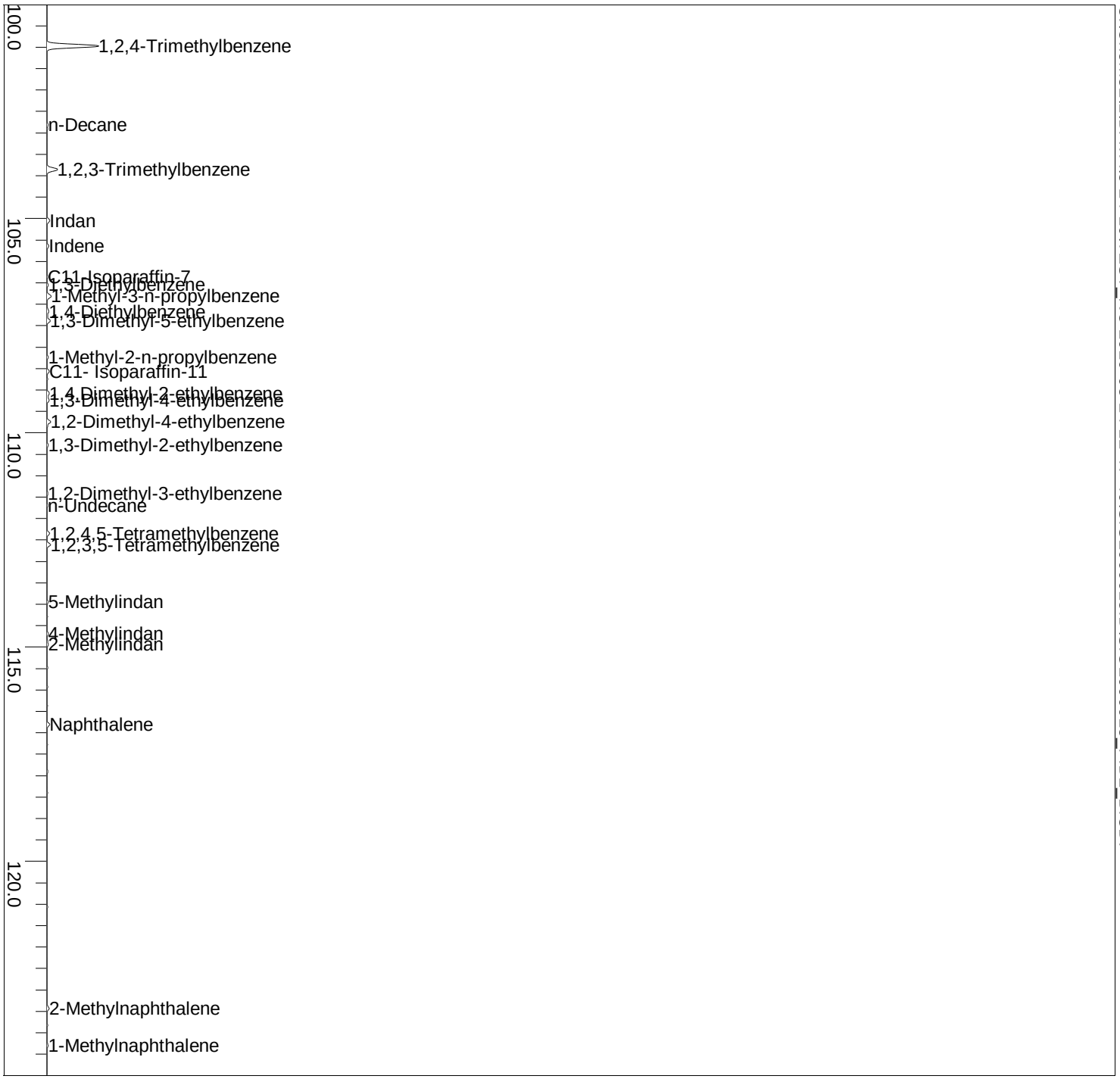
Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Sample Chromatogram

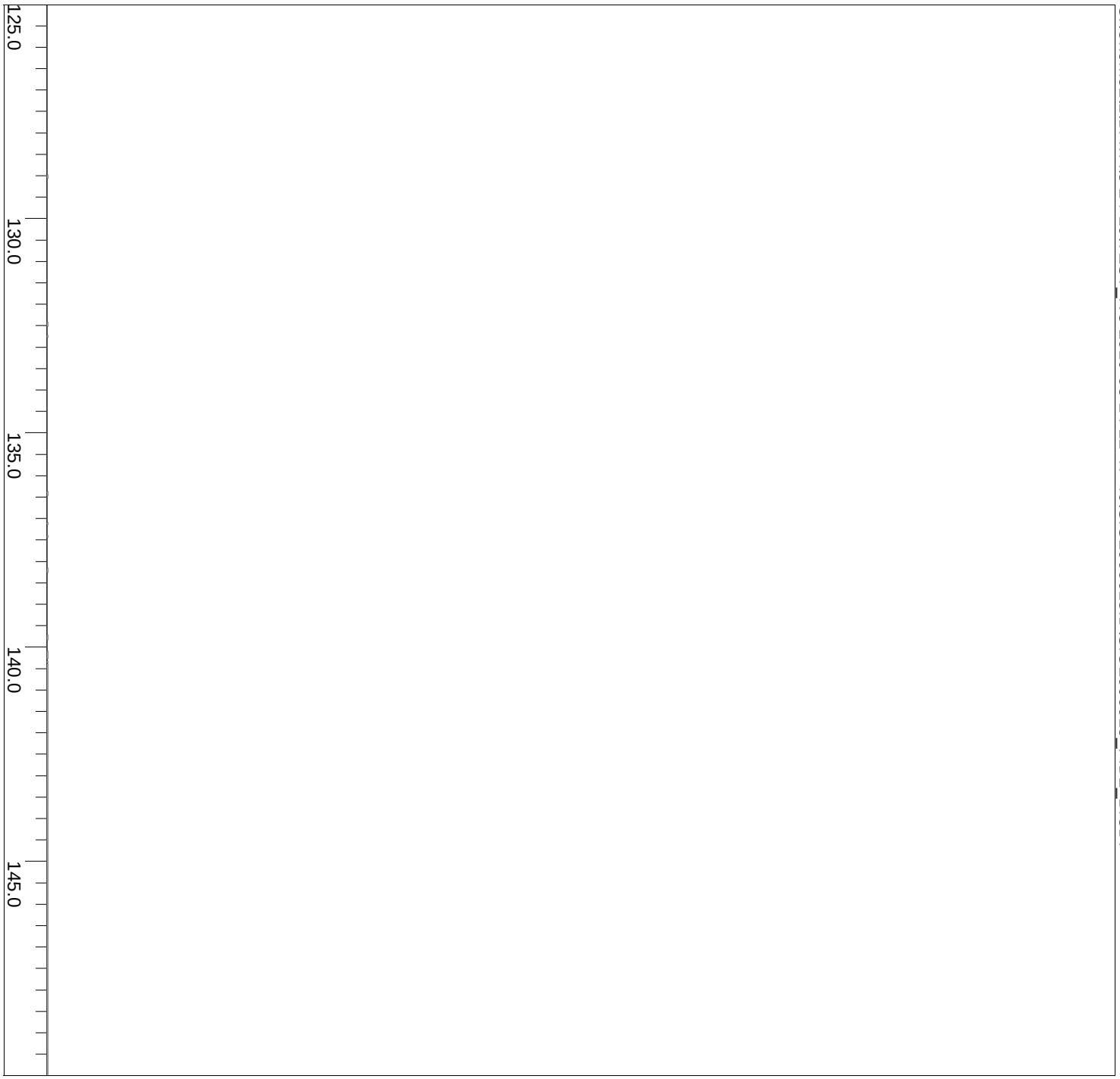
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000015.D\SIG2000015_FID2_B.CDF 25-Aug-10, 23:27:47
Sample: ODDB-91333 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91333
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	3.648	4.505	4.628
I-Paraffins	33.536	38.748	34.013
Aromatics	42.295	36.165	32.537
Mono-Aromatics	40.946	35.096	31.657
Naphthalenes	0.185	0.135	0.118
Naphtheno/Olefino-Benz	0.327	0.274	0.204
Indenes	0.837	0.661	0.557
Naphthenes	1.465	1.456	1.471
Mono-Naphthenes	1.465	1.456	1.471
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.367	8.109	7.962
n-Olefins	3.084	3.481	3.432
Iso-Olefins	3.516	3.888	3.710
Naphtheno-Olefins	0.725	0.696	0.772
Di-Olefins	0.042	0.045	0.048
Oxygenates	10.419	9.834	18.599
Unidentified	1.270	1.182	0.790
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	10.286	9.710	18.431
C3	0.077	0.072	0.106
C4	2.499	3.184	3.542
C5	17.835	21.096	20.549
C6	23.350	25.952	22.530
C7	14.022	12.449	12.442
C8	12.205	10.510	9.486
C9	12.010	10.266	8.250
C10	4.945	4.214	3.065
C11	1.263	1.163	0.687
C12	0.240	0.202	0.122

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C4	2.216	2.852	3.148
	C5	0.832	0.990	0.952
	C6	0.415	0.469	0.398
	C7	0.091	0.100	0.075
	C8	0.020	0.021	0.014
	C10	0.039	0.040	0.023
	C11	0.034	0.034	0.018
I-Paraffins	C4	0.027	0.037	0.039
	C5	12.911	15.523	14.772
	C6	18.731	21.232	17.943
	C7	0.833	0.913	0.687
	C8	0.045	0.047	0.032
	C10	0.402	0.410	0.231
	C11	0.574	0.575	0.303
	C12	0.011	0.011	0.005
Mono-Aromatics	C6	0.712	0.603	0.752
	C7	12.074	10.373	10.817
	C8	12.140	10.442	9.440
	C9	11.874	10.161	8.155
	C10	3.346	2.843	2.058
	C11	0.581	0.492	0.323
	C12	0.219	0.183	0.111
Naphthalenes	C10	0.171	0.124	0.110
	C11	0.015	0.011	0.008
Naphtheno/Olefino-Benzs	C10	0.327	0.274	0.204
Indenes	C9	0.135	0.105	0.095
	C10	0.660	0.524	0.439
	C11	0.031	0.024	0.018
	C12	0.010	0.008	0.006
Mono-Naphthenes	C5	0.375	0.374	0.441
	C6	0.811	0.805	0.796
	C7	0.279	0.277	0.235
n-Olefins	C4	0.199	0.243	0.293
	C5	1.698	1.950	1.999
	C6	1.063	1.158	1.042

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
n-Olefins	C7	0.096	0.102	0.081
	C11	0.028	0.028	0.016
Iso-Olefins	C5	1.782	2.026	2.097
	C6	1.102	1.192	1.081
	C7	0.632	0.670	0.532
Naphtheno-Olefins	C5	0.210	0.203	0.255
	C6	0.515	0.493	0.518
Di-Olefins	C5	0.027	0.029	0.033
	C7	0.015	0.015	0.015
Oxygenates	C2	10.286	9.710	18.431
	C3	0.077	0.072	0.106
	C4	0.056	0.052	0.063

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	22.72	22.20
5%	79.36	79.11
10%	80.61	80.16
15%	81.87	81.20
20%	111.52	88.92
25%	138.02	126.40
30%	139.43	138.13
35%	144.11	139.37
40%	148.77	143.79
45%	172.39	145.53
50%	172.91	170.61
55%	191.00	172.77
60%	223.52	174.24
65%	228.11	222.92
70%	272.95	228.26
75%	281.53	277.87
80%	289.20	281.91
85%	323.48	321.57
90%	335.37	334.25
95%	363.20	359.41
FBP	404.60	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	8.809	75-28-5	I4	i-Butane	0.027	0.037	0.039	6.805
2	9.623	115-11-7	K4	Isobutene	0.017	0.021	0.024	4.281
3	9.665	106-98-9	K4	Butene-1	0.018	0.023	0.027	4.773
4	10.023	106-97-8	P4	n-Butane	2.216	2.852	3.148	552.220
5	10.510	624-64-6	K4	t-Butene-2	0.075	0.093	0.111	19.435
6	10.638	463-82-1	I5	2,2-Dimethylpropane	0.028	0.035	0.031	6.902
7	11.251	590-18-1	K4	c-Butene-2	0.089	0.107	0.131	22.971
8	13.050	64-17-5	X2	Ethanol	10.286	9.710	18.431	1093.007
9	13.455	563-45-1	C5	3-Methylbutene-1	0.184	0.218	0.216	47.445
10	15.097	78-78-4	I5	i-Pentane	12.884	15.488	14.741	3232.534
11	16.734	109-67-1	K5	Pentene-1	0.345	0.401	0.406	88.991
12	17.587	563-46-2	C5	2-Methylbutene-1	0.524	0.600	0.617	135.298
13	18.116	109-66-0	P5	n-Pentane	0.832	0.990	0.952	208.786
14	18.633	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	2.853
15	19.239	646-04-8	K5	t-Pentene-2	0.874	1.005	1.029	225.599
16	19.882		?	Unidentified	0.006	0.007	0.007	1.934
17	20.268	627-20-3	K5	c-Pentene-2	0.479	0.544	0.564	123.646
18	20.950	513-35-9	C5	2-Methylbutene-2	1.074	1.207	1.264	277.069
19	21.279	2004-70-8	E5	1t,3-Pentadiene	0.016	0.018	0.020	4.276
20	22.540	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.009	1.931
21	23.093	75-83-2	I6	2,2-Dimethylbutane	0.520	0.597	0.498	130.983
22	25.745	142-29-0	B5	Cyclopentene	0.203	0.195	0.246	53.820
23	26.904	71-23-8	X3	n-Propanol	0.077	0.072	0.106	13.895
24	27.005		?	Unidentified	0.062	0.069	0.060	19.450
25	27.607	287-92-3	M5	Cyclopentane	0.375	0.374	0.441	96.657
26	28.353	79-29-8	I6	2,3-Dimethylbutane	1.877	2.113	1.798	472.714
27	28.748		?	Unidentified	0.054	0.054	0.051	17.060
28	29.207	691-38-3	C6	4-Methyl-c-pentene-2	0.046	0.051	0.045	11.836
29	29.474	107-83-5	I6	2-Methylpentane	10.806	12.324	10.351	2721.985
30	29.857	674-76-0	C6	4-Methyl-t-pentene-2	0.134	0.148	0.132	34.623
31	32.101	96-14-0	I6	3-Methylpentane	5.529	6.199	5.296	1392.728
32	33.239	763-29-1	C6	2-Methylpentene-1	0.230	0.250	0.226	59.348
33	33.460	592-41-6	K6	Hexene-1	0.164	0.180	0.161	42.260
34	35.645	760-21-4	C6	2-Ethylbutene-1	0.074	0.080	0.073	19.187
35	35.807	110-54-3	P6	n-Hexane	0.415	0.469	0.398	104.594
36	36.443	13269-52-8	K6	t-Hexene-3	0.269	0.293	0.264	69.349
37	36.921	4050-45-7	K6	t-Hexene-2	0.411	0.449	0.404	106.182
38	37.048	1120-62-3	B6	3-Methylcyclopentene	0.104	0.101	0.104	26.770
39	37.413	625-27-4	C6	2-Methylpentene-2	0.349	0.376	0.342	89.939
40	37.828	922-62-3	C6	3-Methyl-c-pentene-2	0.269	0.287	0.264	69.485
41	38.748	7688-21-3	K6	c-Hexene-2	0.219	0.236	0.215	56.473
42	40.094	3404-73-7	C7	3,3-Dimethylpentene-1	0.316	0.335	0.266	81.530
43	40.674	96-37-7	M6	Methylcyclopentane	0.746	0.743	0.732	192.624

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	42.246	108-08-7	I7	2,4-Dimethylpentane	0.149	0.165	0.123	37.719
45	42.544	594-56-9	C7	2,3,3-Trimethylbutene-1	0.010	0.010	0.008	2.467
46	45.435	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.015	3.958
47	45.645	71-42-3	Q6	Benzene	0.712	0.603	0.752	197.767
48	45.839	693-89-0	B6	1-Methylcyclopentene	0.366	0.350	0.368	96.741
49	46.649	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.013	4.014
50	47.234	3524-73-0	C7	5-Methylhexene-1	0.023	0.024	0.019	5.891
51	47.557	110-82-7	M6	Cyclohexane	0.065	0.062	0.064	16.744
52	48.061	71-36-3	X4	n-Butanol	0.056	0.052	0.063	10.967
53	49.278	15840-60-5	C7	2-Methyl-c-hexene-3	0.041	0.044	0.035	10.648
54	49.626	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.009	2.828
55	50.272	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.052	0.055	0.043	13.320
56	50.665	591-76-4	I7	2-Methylhexane	0.407	0.447	0.335	102.965
57	50.847		?	Unidentified	0.020	0.022	0.017	6.343
58	51.158	110-83-8	B6	Cyclohexene	0.045	0.042	0.046	11.738
59	52.498	589-34-4	I7	3-Methylhexane	0.277	0.300	0.228	70.106
60	53.360	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.096	0.096	0.081	24.869
61	53.946	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.064	0.064	0.054	16.633
62	54.569	822-50-4	M7	1t,2-Dimethylcyclopentane	0.058	0.058	0.049	15.086
63	54.849		C7	C7 - Iso-Olefin - 2	0.023	0.024	0.019	5.866
64	55.475	592-76-7	K7	Heptene-1	0.028	0.030	0.024	7.257
65	56.808	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.625
66	57.338	14686-14-7	K7	t-Heptene-3	0.032	0.034	0.027	8.202
67	57.690	6094-02-6	C7	2-Methylhexene-1	0.056	0.060	0.047	14.491
68	58.060	142-82-5	P7	n-Heptane	0.091	0.100	0.075	23.135
69	58.280	7642-10-6	K7	c-Heptene-3	0.024	0.026	0.020	6.264
70	58.555	2738-19-4	C7	2-Methyl-2-hexene	0.025	0.026	0.021	6.456
71	58.799	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.020	0.016	5.028
72	59.182	14686-13-6	K7	t-Heptene-2	0.012	0.013	0.010	3.067
73	59.657	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	4.736
74	60.080	20710-38-8	C7	3-Methyl-t-hexene-2	0.014	0.015	0.012	3.723
75	60.865	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.326
76	61.506	108-87-2	M7	Methylcyclohexane	0.042	0.040	0.035	10.727
77	63.401		?	Unidentified	0.024	0.025	0.018	7.719
78	69.076	108-88-3	Q7	Toluene	12.074	10.373	10.817	3319.113
79	72.051	592-27-8	I8	2-Methylheptane	0.017	0.018	0.012	4.247
80	72.304	589-53-7	I8	4-Methylheptane	0.009	0.010	0.007	2.396
81	73.365	589-81-1	I8	3-Methylheptane	0.018	0.019	0.013	4.670
82	77.873	111-65-9	P8	n-Octane	0.020	0.021	0.014	4.996
83	84.745	100-41-4	Q8	Ethylbenzene	2.190	1.881	1.703	597.451
84	85.987	108-38-3	Q8	m-Xylene	5.749	4.955	4.470	1568.548
85	86.128	106-42-3	Q8	p-Xylene	2.663	2.304	2.071	726.622
86	88.939	95-47-6	Q8	o-Xylene	1.538	1.301	1.196	419.492

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	93.098	98-82-8	Q9	i-Propylbenzene	0.033	0.028	0.023	8.880
88	95.511	2051-30-1	I10	2,4-Dimethyloctane	0.007	0.007	0.004	1.770
89	96.560	103-65-1	Q9	n-Propylbenzene	0.650	0.562	0.446	176.160
90	97.418	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.697	2.324	1.852	731.111
91	97.648	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.258	1.088	0.864	340.892
92	98.273	108-67-8	Q9	1,3,5-Trimethylbenzene	1.623	1.397	1.115	439.949
93	98.726	15869-85-9	I10	5-Methylnonane	0.011	0.011	0.006	2.827
94	98.915	17301-94-8	I10	4-Methylnonane	0.027	0.027	0.016	6.863
95	99.120		I10	2,2,6-Trimethyloctane	0.253	0.259	0.147	64.384
96	99.353	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.898	0.760	0.617	243.466
97	99.570	5881-17-4	I10	3-Ethyloctane	0.008	0.008	0.005	1.975
98	99.891	5911-04-6	I10	3-Methylnonane	0.042	0.042	0.024	10.561
99	100.356		?	Unidentified	0.016	0.012	0.008	5.086
100	100.489		?	Unidentified	0.048	0.048	0.025	15.084
101	100.702		I11	C11-Isoparaffin-2	0.026	0.026	0.014	6.682
102	101.001	95-63-6	Q9	1,2,4-Trimethylbenzene	4.291	3.649	2.947	1163.089
103	101.167		?	Unidentified	0.034	0.036	0.020	10.723
104	101.288		?	Unidentified	0.019	0.020	0.011	6.145
105	102.339	17302-01-1	I10	3-Ethyl-3-methylheptane	0.055	0.055	0.029	13.971
106	102.628	538-93-2	Q10	i-Butylbenzene	0.085	0.074	0.052	22.871
107	102.806	124-18-5	P10	n-Decane	0.039	0.040	0.023	9.913
108	102.904		?	Unidentified	0.032	0.027	0.019	10.000
109	103.201		?	Unidentified	0.015	0.015	0.008	4.695
110	103.853	526-73-8	Q9	1,2,3-Trimethylbenzene	0.425	0.354	0.292	115.180
111	104.234	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.010	0.009	0.006	2.715
112	104.413		I11	C11 Isoparaffin-4	0.009	0.009	0.005	2.283
113	104.618	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.065	0.057	0.040	17.541
114	105.047		J9	Indan	0.135	0.105	0.095	37.283
115	105.641		J10	Indene	0.368	0.285	0.257	101.478
116	106.356		I11	C11-Isoparaffin-7	0.161	0.162	0.085	41.103
117	106.550	141-93-5	Q10	1,3-Diethylbenzene	0.038	0.033	0.024	10.361
118	106.833	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.590	0.510	0.363	159.044
119	107.166	105-05-5	Q10	1,4-Diethylbenzene	0.245	0.212	0.151	66.072
120	107.385	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.190	0.161	0.117	51.327
121	107.628	135-01-3	Q10	1,2-Diethylbenzene	0.044	0.037	0.027	11.820
122	108.083		?	Unidentified	0.042	0.042	0.022	13.315
123	108.235	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.072	0.062	0.044	19.503
124	108.358		?	Unidentified	0.049	0.049	0.026	15.380
125	108.438		?	Unidentified	0.045	0.045	0.024	14.313
126	108.565		I11	C11- Isoparaffin-11	0.378	0.378	0.200	96.240
127	108.747		?	Unidentified	0.122	0.123	0.065	38.687
128	109.082	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.160	0.136	0.099	43.236
129	109.170		?	Unidentified	0.490	0.416	0.301	154.966

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	109.397		J10	2-Methylindan	0.073	0.057	0.046	20.219
131	109.744	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.471	0.401	0.289	126.903
132	110.288	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.354	0.296	0.218	95.396
133	110.712		?	Unidentified	0.010	0.010	0.006	3.315
134	110.907	693-61-8	K11	2-Undecene, (E)-	0.028	0.028	0.016	7.032
135	111.040		?	Unidentified	0.052	0.052	0.031	16.400
136	111.195		Q11	1-Methyl-4-t-butylbenzene	0.029	0.025	0.016	7.809
137	111.316		?	Unidentified	0.053	0.044	0.030	16.787
138	111.417	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.117	0.098	0.072	31.536
139	111.712	1120-21-4	P11	n-Undecane	0.034	0.034	0.018	8.659
140	111.865	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.045	0.038	0.025	12.199
141	111.975		?	Unidentified	0.024	0.020	0.014	7.681
142	112.351		Q10	1,2,4,5-Tetramethylbenzene	0.379	0.318	0.233	102.212
143	112.617	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.525	0.439	0.323	141.640
144	112.959		?	Unidentified	0.013	0.010	0.007	4.086
145	113.133		I12	C12 - IsoParaffin - 1	0.011	0.011	0.005	2.821
146	113.484		?	Unidentified	0.024	0.024	0.011	7.467
147	113.757		Q11	C11 - Aromatic - 3	0.064	0.054	0.036	17.194
148	113.947	874-35-1	H10	5-Methylindan	0.164	0.138	0.103	44.325
149	114.072		Q12	1,2-Di-i-propylbenzene	0.059	0.050	0.030	15.887
150	114.287	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.084	0.071	0.047	22.642
151	114.443		Q11	C11 - Aromatic - 4	0.048	0.040	0.026	12.772
152	114.697	824-22-6	J10	4-Methylindan	0.218	0.183	0.136	58.850
153	114.848	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.051	0.042	0.028	13.633
154	114.944	824-63-5	H10	2-Methylindan	0.163	0.136	0.101	43.821
155	115.147		?	Unidentified	0.015	0.013	0.009	4.850
156	115.260	538-68-1	Q11	n-Pentylbenzene	0.020	0.017	0.011	5.378
157	115.486		Q11	tert-Pentylbenzene	0.089	0.074	0.049	23.773
158	115.800	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.039	0.033	0.022	10.571
159	115.909		Q11	C11 - Aromatic - 7	0.049	0.043	0.028	13.270
160	116.370	100-18-5	Q12	1,4-Di-i-propylbenzene	0.074	0.062	0.037	19.711
161	116.814	91-20-3	G10	Naphthalene	0.171	0.124	0.110	48.212
162	117.008		J11	4,7-Dimethyl Indane	0.009	0.007	0.005	2.362
163	117.252		J11	1,1-Dimethyl Indane	0.023	0.018	0.013	6.308
164	117.414		J12	Dimethyl Indane - 1	0.010	0.008	0.006	2.783
165	117.594	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.014	0.012	0.007	3.784
166	117.896		Q12	1,3-Di-n-propylbenzene	0.065	0.055	0.033	17.435
167	118.006		Q11	C11 - Aromatic - 11	0.037	0.033	0.021	9.982
168	118.560		Q11	C11 - Aromatic - 12	0.025	0.022	0.014	6.718
169	119.488	102-25-0	Q12	1,3,5-Triethylbenzene	0.007	0.005	0.003	1.752
170	123.441	91-57-6	G11	2-Methylnaphthalene	0.010	0.007	0.005	2.665
171	124.308	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.418

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	10.023	106-97-8	n-Butane	2.216	2.852	3.148	552.220
	18.116	109-66-0	n-Pentane	0.832	0.990	0.952	208.786
	35.807	110-54-3	n-Hexane	0.415	0.469	0.398	104.594
	58.060	142-82-5	n-Heptane	0.091	0.100	0.075	23.135
	77.873	111-65-9	n-Octane	0.020	0.021	0.014	4.996
	102.806	124-18-5	n-Decane	0.039	0.040	0.023	9.913
	111.712	1120-21-4	n-Undecane	0.034	0.034	0.018	8.659
I-Paraffins	8.809	75-28-5	i-Butane	0.027	0.037	0.039	6.805
	10.638	463-82-1	2,2-Dimethylpropane	0.028	0.035	0.031	6.902
	15.097	78-78-4	i-Pentane	12.884	15.488	14.741	3232.534
	23.093	75-83-2	2,2-Dimethylbutane	0.520	0.597	0.498	130.983
	28.353	79-29-8	2,3-Dimethylbutane	1.877	2.113	1.798	472.714
	29.474	107-83-5	2-Methylpentane	10.806	12.324	10.351	2721.985
	32.101	96-14-0	3-Methylpentane	5.529	6.199	5.296	1392.728
	42.246	108-08-7	2,4-Dimethylpentane	0.149	0.165	0.123	37.719
	50.665	591-76-4	2-Methylhexane	0.407	0.447	0.335	102.965
	52.498	589-34-4	3-Methylhexane	0.277	0.300	0.228	70.106
	72.051	592-27-8	2-Methylheptane	0.017	0.018	0.012	4.247
	72.304	589-53-7	4-Methylheptane	0.009	0.010	0.007	2.396
	73.365	589-81-1	3-Methylheptane	0.018	0.019	0.013	4.670
	95.511	2051-30-1	2,4-Dimethyloctane	0.007	0.007	0.004	1.770
	98.726	15869-85-9	5-Methylnonane	0.011	0.011	0.006	2.827
	98.915	17301-94-8	4-Methylnonane	0.027	0.027	0.016	6.863
	99.120		2,2,6-Trimethyloctane	0.253	0.259	0.147	64.384
	99.570	5881-17-4	3-Ethyloctane	0.008	0.008	0.005	1.975
	99.891	5911-04-6	3-Methylnonane	0.042	0.042	0.024	10.561
	100.702		C11-Isoparaffin-2	0.026	0.026	0.014	6.682
	102.339	17302-01-1	3-Ethyl-3-methylheptane	0.055	0.055	0.029	13.971
	104.413		C11 Isoparaffin-4	0.009	0.009	0.005	2.283
	106.356		C11-Isoparaffin-7	0.161	0.162	0.085	41.103
	108.565		C11- Isoparaffin-11	0.378	0.378	0.200	96.240
	113.133		C12 - IsoParaffin - 1	0.011	0.011	0.005	2.821
Aromatics							
Mono-Aromatics	45.645	71-42-3	Benzene	0.712	0.603	0.752	197.767
	69.076	108-88-3	Toluene	12.074	10.373	10.817	3319.113
	84.745	100-41-4	Ethylbenzene	2.190	1.881	1.703	597.451
	85.987	108-38-3	m-Xylene	5.749	4.955	4.470	1568.548
	86.128	106-42-3	p-Xylene	2.663	2.304	2.071	726.622
	88.939	95-47-6	o-Xylene	1.538	1.301	1.196	419.492
	93.098	98-82-8	i-Propylbenzene	0.033	0.028	0.023	8.880
	96.560	103-65-1	n-Propylbenzene	0.650	0.562	0.446	176.160
	97.418	620-14-4	1-Methyl-3-ethylbenzene	2.697	2.324	1.852	731.111
	97.648	622-96-8	1-Methyl-4-ethylbenzene	1.258	1.088	0.864	340.892
	98.273	108-67-8	1,3,5-Trimethylbenzene	1.623	1.397	1.115	439.949
	99.353	611-14-3	1-Methyl-2-ethylbenzene	0.898	0.760	0.617	243.466

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	101.001	95-63-6	1,2,4-Trimethylbenzene	4.291	3.649	2.947	1163.089
	102.628	538-93-2	i-Butylbenzene	0.085	0.074	0.052	22.871
	103.853	526-73-8	1,2,3-Trimethylbenzene	0.425	0.354	0.292	115.180
	104.234	535-77-3	1-Methyl-3-i-propylbenzene	0.010	0.009	0.006	2.715
	104.618	99-87-6	1-Methyl-4-i-propylbenzene	0.065	0.057	0.040	17.541
	106.550	141-93-5	1,3-Diethylbenzene	0.038	0.033	0.024	10.361
	106.833	1074-43-7	1-Methyl-3-n-propylbenzene	0.590	0.510	0.363	159.044
	107.166	105-05-5	1,4-Diethylbenzene	0.245	0.212	0.151	66.072
	107.385	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.190	0.161	0.117	51.327
	107.628	135-01-3	1,2-Diethylbenzene	0.044	0.037	0.027	11.820
	108.235	1074-17-5	1-Methyl-2-n-propylbenzene	0.072	0.062	0.044	19.503
	109.082	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.160	0.136	0.099	43.236
	109.744	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.471	0.401	0.289	126.903
	110.288	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.354	0.296	0.218	95.396
	111.195		1-Methyl-4-t-butylbenzene	0.029	0.025	0.016	7.809
	111.417	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.117	0.098	0.072	31.536
	111.865	4218-48-8	1-Ethyl-4-i-propylbenzene	0.045	0.038	0.025	12.199
	112.351		1,2,4,5-Tetramethylbenzene	0.379	0.318	0.233	102.212
	112.617	527-53-7	1,2,3,5-Tetramethylbenzene	0.525	0.439	0.323	141.640
	113.757		C11 - Aromatic - 3	0.064	0.054	0.036	17.194
	114.072		1,2-Di-i-propylbenzene	0.059	0.050	0.030	15.887
	114.287	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.084	0.071	0.047	22.642
	114.443		C11 - Aromatic - 4	0.048	0.040	0.026	12.772
	114.848	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.051	0.042	0.028	13.633
	115.260	538-68-1	n-Pentylbenzene	0.020	0.017	0.011	5.378
	115.486		tert-Pentylbenzene	0.089	0.074	0.049	23.773
	115.800	577-55-9	1-Methyl-2-n-butylbenzene	0.039	0.033	0.022	10.571
	115.909		C11 - Aromatic - 7	0.049	0.043	0.028	13.270
	116.370	100-18-5	1,4-Di-i-propylbenzene	0.074	0.062	0.037	19.711
	117.594	7364-19-4	1t-Butyl-4-ethylbenzene	0.014	0.012	0.007	3.784
	117.896		1,3-Di-n-propylbenzene	0.065	0.055	0.033	17.435
	118.006		C11 - Aromatic - 11	0.037	0.033	0.021	9.982
	118.560		C11 - Aromatic - 12	0.025	0.022	0.014	6.718
	119.488	102-25-0	1,3,5-Triethylbenzene	0.007	0.005	0.003	1.752
Naphthalenes	116.814	91-20-3	Naphthalene	0.171	0.124	0.110	48.212
	123.441	91-57-6	2-Methylnaphthalene	0.010	0.007	0.005	2.665
	124.308	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.418
Naphtheno/Olefir	113.947	874-35-1	5-Methylindan	0.164	0.138	0.103	44.325
	114.944	824-63-5	2-Methylindan	0.163	0.136	0.101	43.821
Indenes	105.047		Indan	0.135	0.105	0.095	37.283
	105.641		Indene	0.368	0.285	0.257	101.478
	109.397		2-Methylindan	0.073	0.057	0.046	20.219
	114.697	824-22-6	4-Methylindan	0.218	0.183	0.136	58.850
	117.008		4,7-Dimethyl Indane	0.009	0.007	0.005	2.362

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Indenes	117.252		1,1-Dimethyl Indane	0.023	0.018	0.013	6.308
	117.414		Dimethyl Indane - 1	0.010	0.008	0.006	2.783
Naphthenes							
Mono-Naphthene	27.607	287-92-3	Cyclopentane	0.375	0.374	0.441	96.657
	40.674	96-37-7	Methylcyclopentane	0.746	0.743	0.732	192.624
	47.557	110-82-7	Cyclohexane	0.065	0.062	0.064	16.744
	53.360	1759-58-6	1t,3-Dimethylcyclopentane	0.096	0.096	0.081	24.869
	53.946	2532-58-3	1c,3-Dimethylcyclopentane	0.064	0.064	0.054	16.633
	54.569	822-50-4	1t,2-Dimethylcyclopentane	0.058	0.058	0.049	15.086
	59.657	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.018	0.018	0.015	4.736
	61.506	108-87-2	Methylcyclohexane	0.042	0.040	0.035	10.727
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.623	115-11-7	Isobutene	0.017	0.021	0.024	4.281
	9.665	106-98-9	Butene-1	0.018	0.023	0.027	4.773
	10.510	624-64-6	t-Butene-2	0.075	0.093	0.111	19.435
	11.251	590-18-1	c-Butene-2	0.089	0.107	0.131	22.971
	16.734	109-67-1	Pentene-1	0.345	0.401	0.406	88.991
	19.239	646-04-8	t-Pentene-2	0.874	1.005	1.029	225.599
	20.268	627-20-3	c-Pentene-2	0.479	0.544	0.564	123.646
	33.460	592-41-6	Hexene-1	0.164	0.180	0.161	42.260
	36.443	13269-52-8	t-Hexene-3	0.269	0.293	0.264	69.349
	36.921	4050-45-7	t-Hexene-2	0.411	0.449	0.404	106.182
	38.748	7688-21-3	c-Hexene-2	0.219	0.236	0.215	56.473
	55.475	592-76-7	Heptene-1	0.028	0.030	0.024	7.257
	57.338	14686-14-7	t-Heptene-3	0.032	0.034	0.027	8.202
	58.280	7642-10-6	c-Heptene-3	0.024	0.026	0.020	6.264
	59.182	14686-13-6	t-Heptene-2	0.012	0.013	0.010	3.067
	110.907	693-61-8	2-Undecene, (E)-	0.028	0.028	0.016	7.032
Iso-Olefins	13.455	563-45-1	3-Methylbutene-1	0.184	0.218	0.216	47.445
	17.587	563-46-2	2-Methylbutene-1	0.524	0.600	0.617	135.298
	20.950	513-35-9	2-Methylbutene-2	1.074	1.207	1.264	277.069
	29.207	691-38-3	4-Methyl-c-pentene-2	0.046	0.051	0.045	11.836
	29.857	674-76-0	4-Methyl-t-pentene-2	0.134	0.148	0.132	34.623
	33.239	763-29-1	2-Methylpentene-1	0.230	0.250	0.226	59.348
	35.645	760-21-4	2-Ethylbutene-1	0.074	0.080	0.073	19.187
	37.413	625-27-4	2-Methylpentene-2	0.349	0.376	0.342	89.939
	37.828	922-62-3	3-Methyl-c-pentene-2	0.269	0.287	0.264	69.485
	40.094	3404-73-7	3,3-Dimethylpentene-1	0.316	0.335	0.266	81.530
	42.544	594-56-9	2,3,3-Trimethylbutene-1	0.010	0.010	0.008	2.467
	46.649	3404-61-3	3-Methylhexene-1	0.016	0.017	0.013	4.014
	47.234	3524-73-0	5-Methylhexene-1	0.023	0.024	0.019	5.891
	49.278	15840-60-5	2-Methyl-c-hexene-3	0.041	0.044	0.035	10.648
	49.626	3769-23-1	4-Methylhexene-1	0.011	0.012	0.009	2.828

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2A.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Components by Group

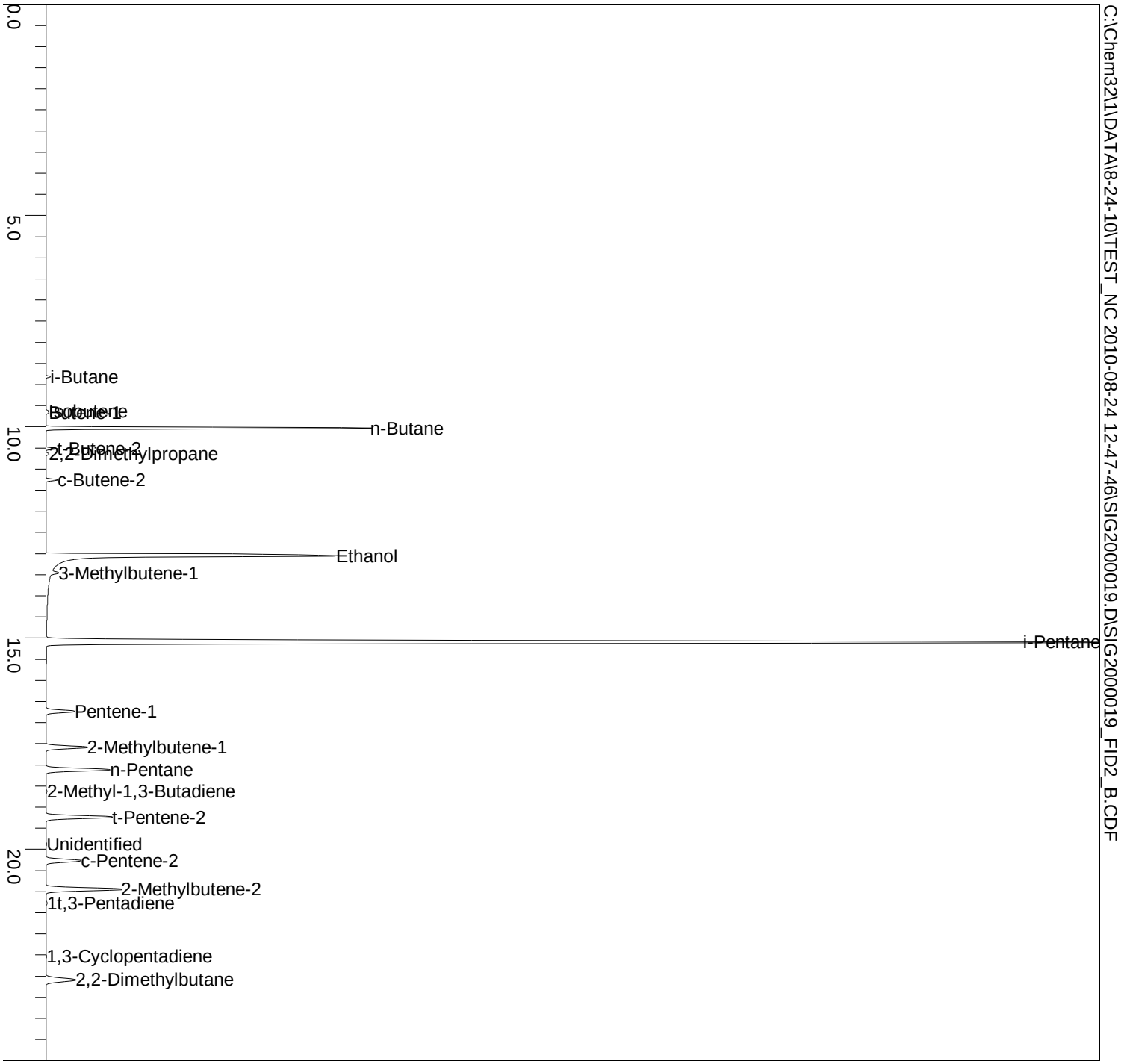
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Iso-Olefins	50.272	3404-55-5	4-Methyl-t/c-hexene-2	0.052	0.055	0.043	13.320
	54.849		C7 - Iso-Olefin - 2	0.023	0.024	0.019	5.866
	56.808	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.012	3.625
	57.690	6094-02-6	2-Methylhexene-1	0.056	0.060	0.047	14.491
	58.555	2738-19-4	2-Methyl-2-hexene	0.025	0.026	0.021	6.456
	58.799	10574-36-4	3-Methyl-c-hexene-2	0.019	0.020	0.016	5.028
	60.080	20710-38-8	3-Methyl-t-hexene-2	0.014	0.015	0.012	3.723
	60.865	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.013	0.011	3.326
Naphtheno-Olefir	22.540	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.009	1.931
	25.745	142-29-0	Cyclopentene	0.203	0.195	0.246	53.820
	37.048	1120-62-3	3-Methylcyclopentene	0.104	0.101	0.104	26.770
	45.839	693-89-0	1-Methylcyclopentene	0.366	0.350	0.368	96.741
	51.158	110-83-8	Cyclohexene	0.045	0.042	0.046	11.738
Di-Olefins	18.633	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.013	2.853
	21.279	2004-70-8	1t,3-Pentadiene	0.016	0.018	0.020	4.276
	45.435	1528-30-9	C6-Diolefin-1	0.015	0.015	0.015	3.958
Oxygenates	13.050	64-17-5	Ethanol	10.286	9.710	18.431	1093.007
	26.904	71-23-8	n-Propanol	0.077	0.072	0.106	13.895
	48.061	71-36-3	n-Butanol	0.056	0.052	0.063	10.967
Unidentified	19.882		Unidentified	0.006	0.007	0.007	1.934
	27.005		Unidentified	0.062	0.069	0.060	19.450
	28.748		Unidentified	0.054	0.054	0.051	17.060
	50.847		Unidentified	0.020	0.022	0.017	6.343
	63.401		Unidentified	0.024	0.025	0.018	7.719
	100.356		Unidentified	0.016	0.012	0.008	5.086
	100.489		Unidentified	0.048	0.048	0.025	15.084
	101.167		Unidentified	0.034	0.036	0.020	10.723
	101.288		Unidentified	0.019	0.020	0.011	6.145
	102.904		Unidentified	0.032	0.027	0.019	10.000
	103.201		Unidentified	0.015	0.015	0.008	4.695
	108.083		Unidentified	0.042	0.042	0.022	13.315
	108.358		Unidentified	0.049	0.049	0.026	15.380
	108.438		Unidentified	0.045	0.045	0.024	14.313
	108.747		Unidentified	0.122	0.123	0.065	38.687
	109.170		Unidentified	0.490	0.416	0.301	154.966
	110.712		Unidentified	0.010	0.010	0.006	3.315
	111.040		Unidentified	0.052	0.052	0.031	16.400
	111.316		Unidentified	0.053	0.044	0.030	16.787
	111.975		Unidentified	0.024	0.020	0.014	7.681
	112.959		Unidentified	0.013	0.010	0.007	4.086
	113.484		Unidentified	0.024	0.024	0.011	7.467
	115.147		Unidentified	0.015	0.013	0.009	4.850

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2_B.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram



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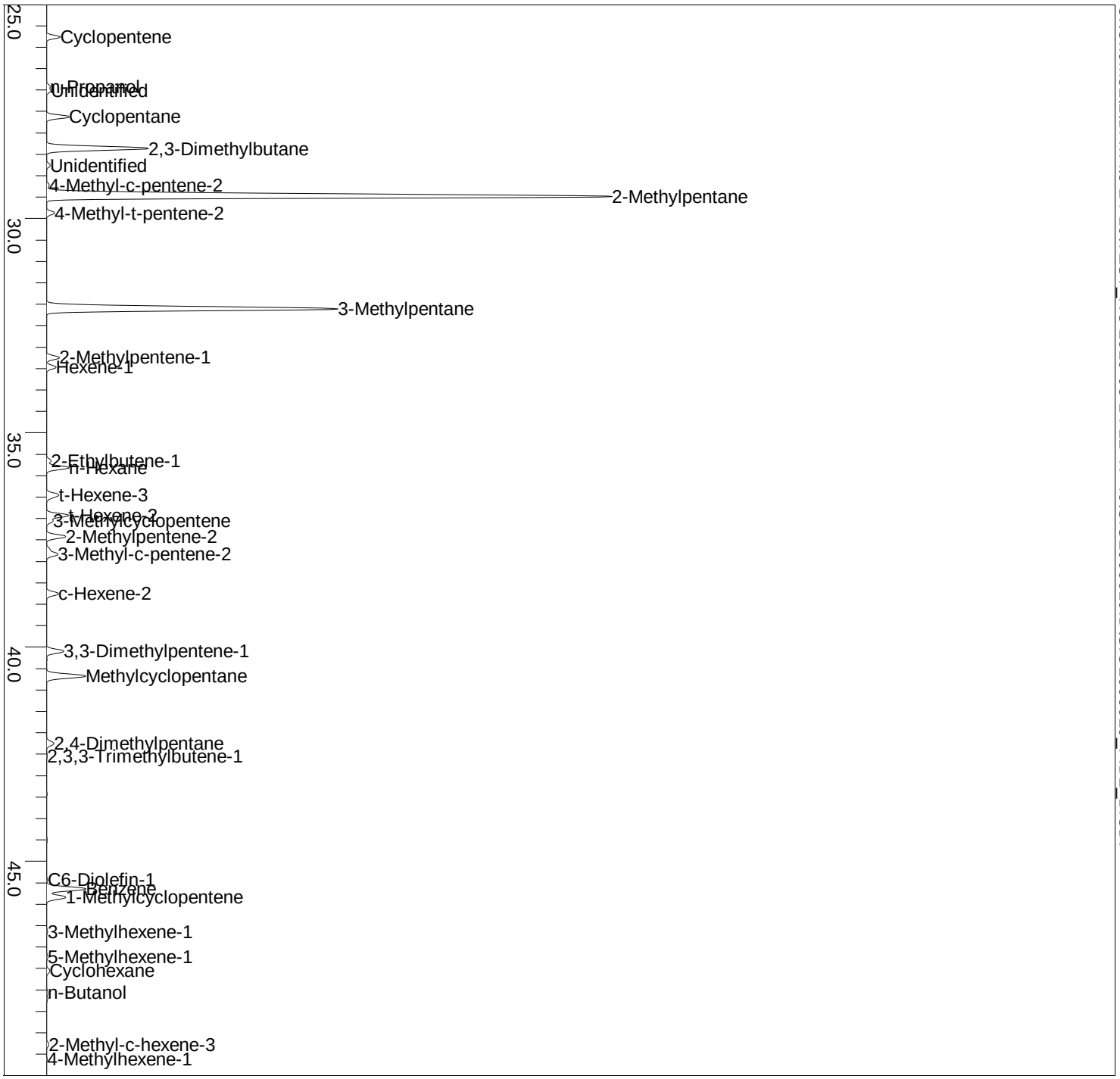
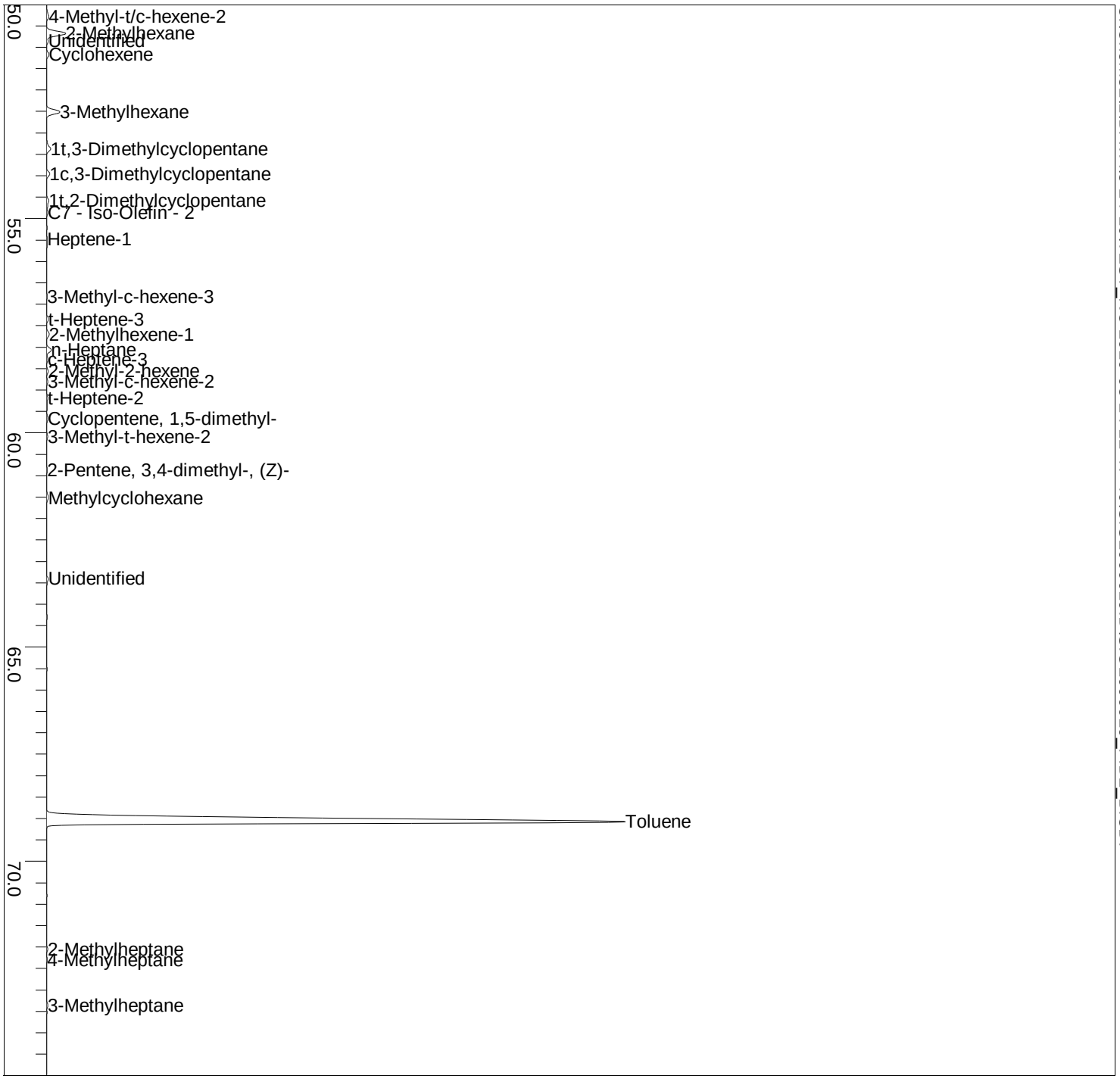
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram



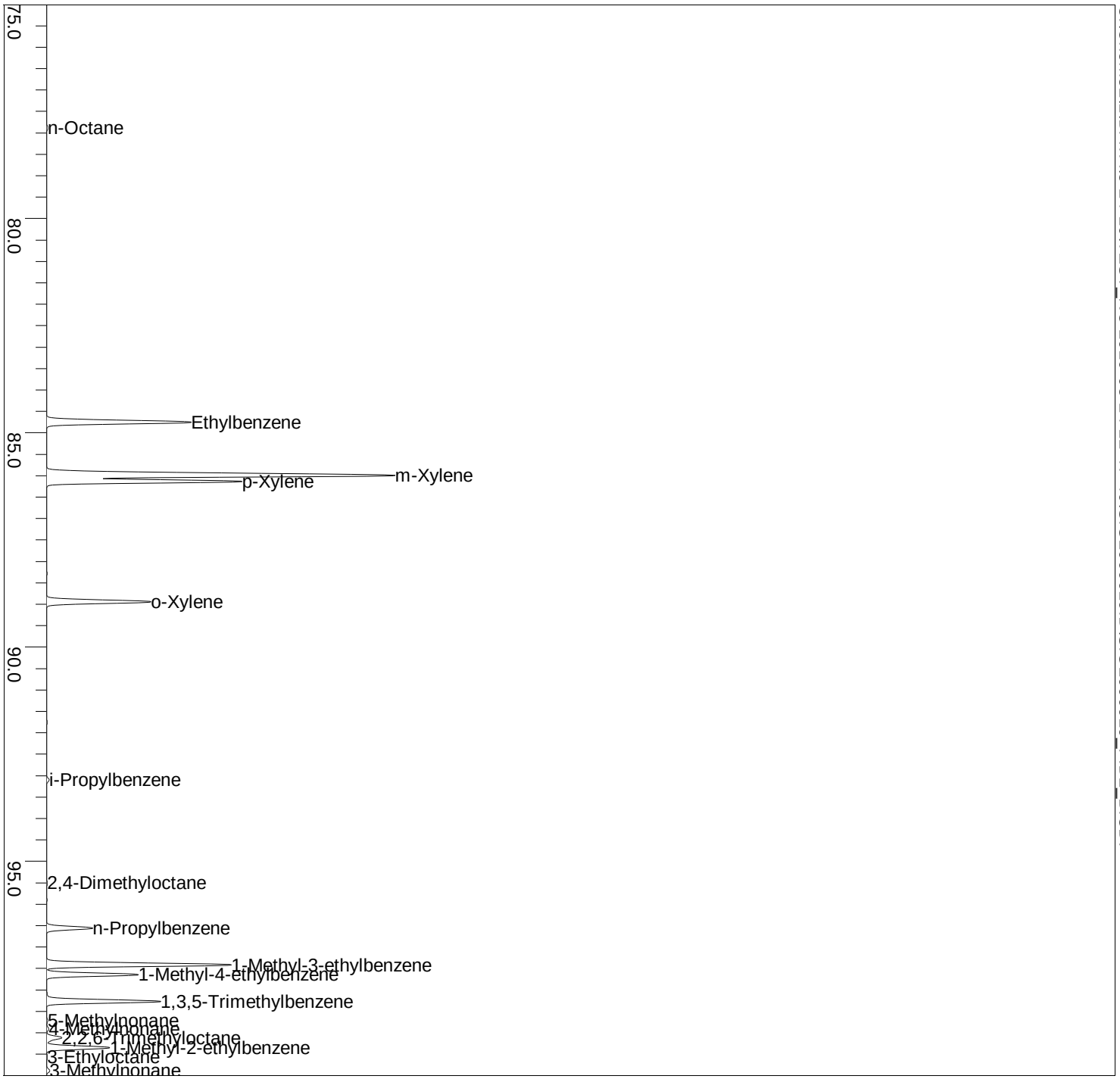
File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2_B.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2_B.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram

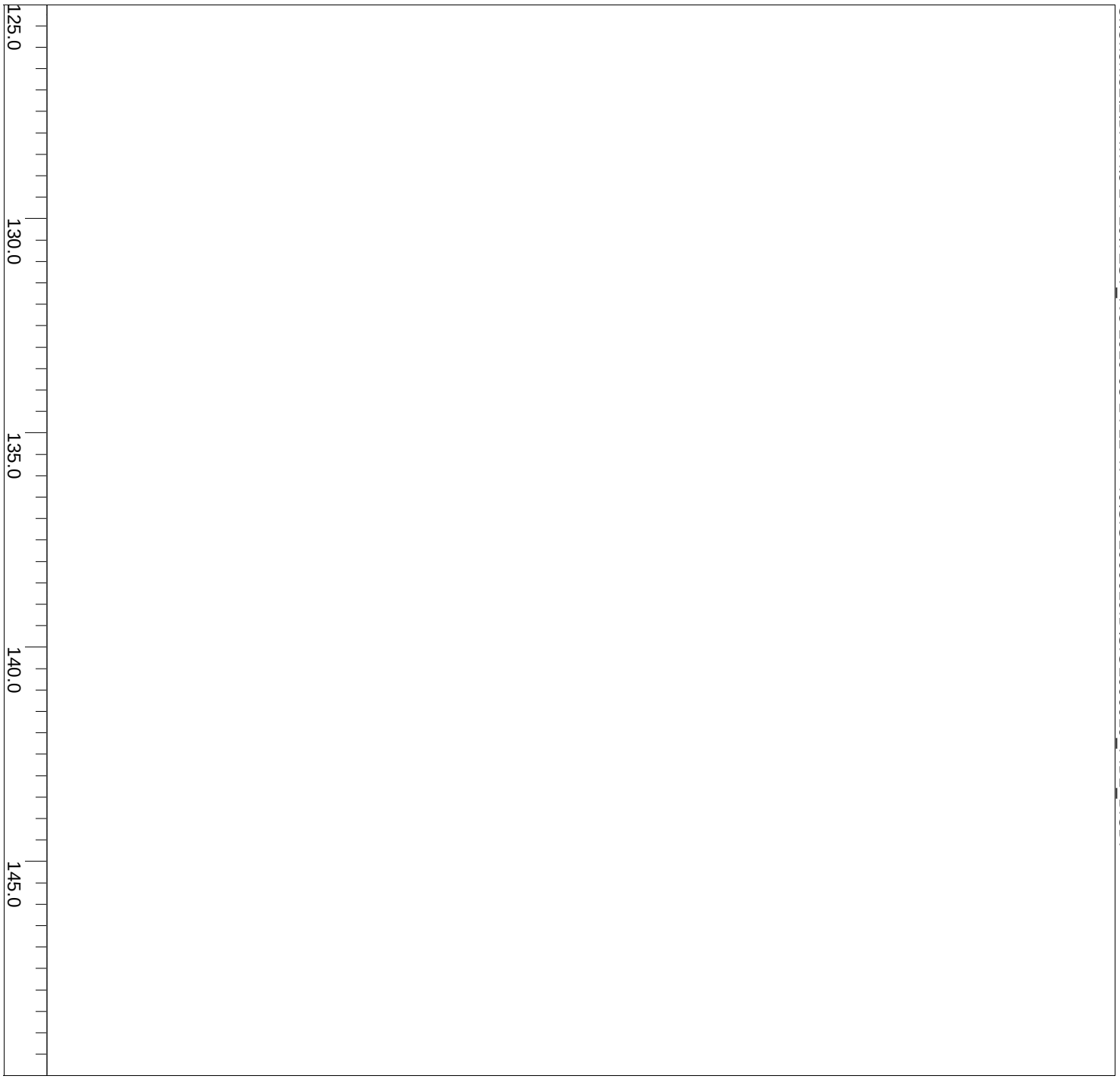


File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2_B.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000019.D\SIG2000019_FID2_B.CDF 26-Aug-10, 15:36:26
Sample: ODDB-91334 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91334
LIMS Id:

Sample Chromatogram



File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Summary by Group

Group	%Wgt	%Vol	%Mol
Paraffin	4.688	5.657	4.647
I-Paraffins	19.280	22.413	16.416
Aromatics	42.279	37.515	30.678
Mono-Aromatics	40.739	36.253	29.721
Naphthalenes	0.183	0.138	0.110
Naphtheno/Olefino-Benz	0.325	0.283	0.191
Indenes	1.031	0.842	0.656
Naphthenes	3.320	3.381	2.938
Mono-Naphthenes	3.320	3.381	2.938
Di/Bicyclo-Naphthenes	0.000	0.000	0.000
Olefins	7.121	8.142	7.242
n-Olefins	2.939	3.445	3.081
Iso-Olefins	3.447	3.961	3.423
Naphtheno-Olefins	0.693	0.691	0.694
Di-Olefins	0.041	0.045	0.044
Oxygenates	21.875	21.438	36.824
Unidentified	1.438	1.453	1.255
Plus	0.000	0.000	0.000

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Summary by Carbon

C#	%Wgt	%Vol	%Mol
C2	21.748	21.315	36.673
C3	0.075	0.073	0.098
C4	0.867	1.127	1.153
C5	9.339	11.313	10.185
C6	16.286	18.463	14.855
C7	16.039	14.994	13.321
C8	13.867	12.747	10.049
C9	11.815	10.625	7.607
C10	7.003	6.446	4.035
C11	1.266	1.219	0.647
C12	0.257	0.224	0.123

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Paraffin	C3	0.002	0.003	0.004
	C4	0.597	0.797	0.797
	C5	1.763	2.178	1.899
	C6	1.573	1.845	1.418
	C7	0.376	0.425	0.292
	C8	0.201	0.221	0.136
	C9	0.110	0.118	0.066
	C10	0.040	0.042	0.022
	C11	0.027	0.028	0.014
I-Paraffins	C4	0.025	0.035	0.034
	C5	3.668	4.578	3.949
	C6	9.602	11.302	8.656
	C7	1.318	1.498	1.022
	C8	1.536	1.672	1.044
	C9	0.671	0.730	0.406
	C10	1.824	1.936	0.988
	C11	0.631	0.655	0.313
	C12	0.005	0.005	0.002
Mono-Aromatics	C6	0.734	0.646	0.730
	C7	12.625	11.261	10.644
	C8	11.926	10.650	8.727
	C9	10.809	9.596	6.987
	C10	3.834	3.389	2.219
	C11	0.569	0.501	0.298
	C12	0.242	0.211	0.116
Naphthalenes	C10	0.169	0.128	0.103
	C11	0.014	0.011	0.008
Naphtheno/Olefino-Benzenes	C10	0.325	0.283	0.191
Indenes	C9	0.219	0.175	0.144
	C10	0.794	0.651	0.503
	C11	0.009	0.007	0.005
	C12	0.010	0.008	0.005
Mono-Naphthenes	C5	0.305	0.316	0.338
	C6	1.822	1.858	1.682
	C7	0.965	0.980	0.763
	C8	0.204	0.204	0.141

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Composite by Carbon

Group	C#	%Wgt	%Vol	%Mol
Mono-Naphthenes	C9	0.007	0.006	0.004
	C10	0.018	0.018	0.010
n-Olefins	C4	0.191	0.242	0.265
	C5	1.616	1.926	1.790
	C6	1.017	1.151	0.939
	C7	0.099	0.109	0.078
	C11	0.017	0.017	0.009
Iso-Olefins	C5	1.762	2.084	1.951
	C6	1.044	1.172	0.964
	C7	0.641	0.706	0.508
Naphtheno-Olefins	C5	0.200	0.201	0.228
	C6	0.493	0.490	0.466
Di-Olefins	C5	0.026	0.030	0.030
	C7	0.015	0.015	0.014
Oxygenates	C2	21.748	21.315	36.673
	C3	0.073	0.070	0.094
	C4	0.054	0.053	0.057

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Calculated Boiling Point

%Off	WBP(F)	VBP(F)
IBP	28.34	26.13
5%	83.73	81.27
10%	111.94	97.25
15%	139.18	137.76
20%	145.62	140.07
25%	161.49	152.27
30%	172.44	169.42
35%	172.68	172.46
40%	172.93	172.72
45%	173.18	172.97
50%	196.17	173.22
55%	230.80	201.59
60%	230.94	230.82
65%	231.16	230.98
70%	278.20	257.01
75%	281.80	281.22
80%	318.15	291.63
85%	327.67	323.18
90%	335.83	334.98
95%	363.20	362.49
FBP	404.60	404.60

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
1	7.553	74-98-6	P3	Propane	0.002	0.003	0.004	0.583
2	8.809	75-28-5	I4	i-Butane	0.025	0.035	0.034	6.870
3	9.621	115-11-7	K4	Isobutene	0.016	0.021	0.022	4.502
4	9.662	106-98-9	K4	Butene-1	0.018	0.023	0.024	4.962
5	10.021	106-97-8	P4	n-Butane	0.597	0.797	0.797	162.290
6	10.507	624-64-6	K4	t-Butene-2	0.072	0.092	0.100	20.328
7	10.635	463-82-1	I5	2,2-Dimethylpropane	0.009	0.012	0.010	2.601
8	11.247	590-18-1	K4	c-Butene-2	0.085	0.106	0.118	24.035
9	13.125	64-17-5	X2	Ethanol	21.748	21.315	36.673	2523.196
10	13.445	563-45-1	C5	3-Methylbutene-1	0.245	0.302	0.271	68.928
11	15.073	78-78-4	I5	i-Pentane	3.658	4.566	3.939	1002.166
12	16.725	109-67-1	K5	Pentene-1	0.328	0.396	0.363	92.420
13	17.577	563-46-2	C5	2-Methylbutene-1	0.498	0.592	0.551	140.212
14	18.107	109-66-0	P5	n-Pentane	1.763	2.178	1.899	483.060
15	18.621	78-79-5	E5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	3.164
16	19.228	646-04-8	K5	t-Pentene-2	0.832	0.992	0.921	234.391
17	19.873		?	Unidentified	0.005	0.006	0.006	1.873
18	20.261	627-20-3	K5	c-Pentene-2	0.456	0.538	0.505	128.401
19	20.941	513-35-9	C5	2-Methylbutene-2	1.019	1.190	1.129	287.222
20	21.266	2004-70-8	E5	1t,3-Pentadiene	0.015	0.018	0.018	4.495
21	22.527	1574-41-0	B5	1,3-Cyclopentadiene	0.007	0.008	0.008	1.979
22	23.085	75-83-2	I6	2,2-Dimethylbutane	0.296	0.353	0.267	81.465
23	25.736	142-29-0	B5	Cyclopentene	0.193	0.193	0.220	55.939
24	26.899	71-23-8	X3	n-Propanol	0.073	0.070	0.094	14.306
25	26.983		?	Unidentified	0.059	0.068	0.054	20.285
26	27.596	287-92-3	M5	Cyclopentane	0.305	0.316	0.338	85.857
27	28.336	79-29-8	I6	2,3-Dimethylbutane	1.015	1.187	0.915	279.232
28	28.726		?	Unidentified	0.055	0.057	0.048	18.827
29	29.196	691-38-3	C6	4-Methyl-c-pentene-2	0.044	0.050	0.040	12.346
30	29.429	107-83-5	I6	2-Methylpentane	5.593	6.623	5.042	1538.314
31	29.838	674-76-0	C6	4-Methyl-t-pentene-2	0.128	0.147	0.118	35.957
32	32.074	96-14-0	I6	3-Methylpentane	2.697	3.140	2.431	741.781
33	33.221	763-29-1	C6	2-Methylpentene-1	0.220	0.249	0.203	62.043
34	33.446	592-41-6	K6	Hexene-1	0.158	0.180	0.146	44.508
35	35.633	760-21-4	C6	2-Ethylbutene-1	0.064	0.071	0.059	17.898
36	35.799	110-54-3	P6	n-Hexane	1.573	1.845	1.418	432.616
37	36.435	13269-52-8	K6	t-Hexene-3	0.257	0.291	0.237	72.378
38	36.909	4050-45-7	K6	t-Hexene-2	0.394	0.446	0.363	110.939
39	37.033	1120-62-3	B6	3-Methylcyclopentene	0.098	0.099	0.093	27.611
40	37.401	625-27-4	C6	2-Methylpentene-2	0.333	0.372	0.307	93.747
41	37.815	922-62-3	C6	3-Methyl-c-pentene-2	0.256	0.284	0.237	72.243
42	38.737	7688-21-3	K6	c-Hexene-2	0.209	0.233	0.193	58.832
43	40.080	3404-73-7	C7	3,3-Dimethylpentene-1	0.305	0.336	0.242	86.052

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
44	40.665	96-37-7	M6	Methylcyclopentane	1.205	1.245	1.112	339.547
45	42.235	108-08-7	I7	2,4-Dimethylpentane	0.207	0.238	0.161	57.207
46	42.525	594-56-9	C7	2,3,3-Trimethylbutene-1	0.013	0.015	0.011	3.749
47	42.773	464-06-2	I7	2,2,3-Trimethylbutane	0.020	0.022	0.015	5.432
48	45.422	1528-30-9	E7	C6-Diolefin-1	0.015	0.015	0.014	4.177
49	45.631	71-42-3	Q6	Benzene	0.734	0.646	0.730	222.725
50	45.828	693-89-0	B6	1-Methylcyclopentene	0.351	0.349	0.332	101.379
51	46.634	3404-61-3	C7	3-Methylhexene-1	0.016	0.017	0.012	4.389
52	47.225	3524-73-0	C7	5-Methylhexene-1	0.043	0.048	0.034	12.223
53	47.550	110-82-7	M6	Cyclohexane	0.617	0.613	0.569	173.801
54	48.053	71-36-3	X4	n-Butanol	0.054	0.053	0.057	11.594
55	49.268	15840-60-5	C7	2-Methyl-c-hexene-3	0.040	0.044	0.031	11.166
56	49.614	3769-23-1	C7	4-Methylhexene-1	0.011	0.012	0.009	3.054
57	50.261	3404-55-5	C7	4-Methyl-t/c-hexene-2	0.050	0.055	0.039	14.019
58	50.654	591-76-4	I7	2-Methylhexane	0.651	0.742	0.505	179.828
59	50.835		?	Unidentified	0.041	0.046	0.034	14.321
60	51.147	110-83-8	B6	Cyclohexene	0.044	0.042	0.041	12.323
61	52.488	589-34-4	I7	3-Methylhexane	0.440	0.495	0.341	121.523
62	53.349	1759-58-6	M7	1t,3-Dimethylcyclopentane	0.137	0.141	0.108	38.547
63	53.934	2532-58-3	M7	1c,3-Dimethylcyclopentane	0.102	0.106	0.081	28.707
64	54.556	822-50-4	M7	1t,2-Dimethylcyclopentane	0.131	0.134	0.103	36.801
65	54.838		C7	C7 - Iso-Olefin - 2	0.022	0.024	0.018	6.235
66	55.140	540-84-1	I8	2,2,4-Trimethylpentane	0.054	0.060	0.037	14.924
67	55.464	592-76-7	K7	Heptene-1	0.028	0.031	0.022	7.935
68	56.799	4914-89-0	C7	3-Methyl-c-hexene-3	0.014	0.015	0.011	3.819
69	57.328	14686-14-7	K7	t-Heptene-3	0.031	0.034	0.025	8.787
70	57.679	6094-02-6	C7	2-Methylhexene-1	0.056	0.062	0.044	15.773
71	58.051	142-82-5	P7	n-Heptane	0.376	0.425	0.292	103.846
72	58.270	7642-10-6	K7	c-Heptene-3	0.024	0.027	0.019	6.871
73	58.545	2738-19-4	C7	2-Methyl-2-hexene	0.026	0.028	0.020	7.199
74	58.788	10574-36-4	C7	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.494
75	59.170	14686-13-6	K7	t-Heptene-2	0.015	0.017	0.012	4.257
76	59.646	16491-15-9	M7	Cyclopentene, 1,5-dimethyl-	0.017	0.018	0.014	4.867
77	60.073	20710-38-8	C7	3-Methyl-t-hexene-2	0.014	0.015	0.011	4.032
78	60.857	4914-91-4	C7	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.544
79	61.513	108-87-2	M7	Methylcyclohexane	0.542	0.544	0.428	152.583
80	62.456	4516-69-2	M8	1,1,3-Trimethylcyclopentane	0.015	0.015	0.010	4.114
81	62.845	590-73-8	I8	2,2-Dimethylhexane	0.012	0.014	0.008	3.451
82	63.356		?	Unidentified	0.057	0.062	0.041	19.817
83	64.289	1640-89-7	M7	Ethylcyclopentane	0.036	0.037	0.029	10.269
84	64.942	564-02-3	I8	2,2,3-Trimethylpentane	0.064	0.069	0.043	17.634
85	65.167	592-13-2	I8	2,5-Dimethylhexane	0.133	0.148	0.090	36.796
86	65.503	589-43-5	I8	2,4-Dimethylhexane	0.123	0.136	0.084	34.156

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
87	66.343	4850-28-6	M8	1c,2t,4-Trimethylcyclopentane	0.014	0.014	0.010	3.951
88	67.859	15890-40-1	M8	1t,2c,3-Trimethylcyclopentane	0.012	0.012	0.008	3.360
89	68.478	565-75-3	I8	2,3,4-Trimethylpentane	0.662	0.712	0.450	183.050
90	69.077	108-88-3	Q7	Toluene	12.625	11.261	10.644	3789.205
91	70.790	584-94-1	I8	2,3-Dimethylhexane	0.185	0.201	0.126	51.197
92	72.044	592-27-8	I8	2-Methylheptane	0.105	0.116	0.071	29.018
93	72.303	589-53-7	I8	4-Methylheptane	0.058	0.063	0.039	15.932
94	72.447		?	Unidentified	0.017	0.019	0.012	6.014
95	73.222		M8	1,3-dimethyl-t-cyclohexane	0.070	0.070	0.048	19.722
96	73.358	589-81-1	I8	3-Methylheptane	0.093	0.102	0.063	25.804
97	73.558	619-99-8	I8	3-Ethylhexane	0.047	0.051	0.032	12.962
98	74.457		?	Unidentified	0.011	0.011	0.008	3.870
99	75.247	3522-94-9	I9	2,2,5-Trimethylhexane	0.427	0.467	0.259	118.324
100	76.528	2207-03-6	M8	1t,3-Dimethylcyclohexane	0.031	0.030	0.021	8.620
101	77.868	111-65-9	P8	n-Octane	0.201	0.221	0.136	55.524
102	78.821		M8	C8 - MonoNaph - 3	0.015	0.015	0.010	4.185
103	80.350	1069-53-0	I9	2,3,5-Trimethylhexane	0.077	0.083	0.047	21.429
104	81.519	1071-26-7	I9	2,4-Dimethylheptane	0.018	0.020	0.011	5.059
105	82.172	1678-91-7	M8	Ethylcyclohexane	0.048	0.047	0.033	13.412
106	82.475	1072-05-5	I9	2,6-Dimethylheptane	0.032	0.034	0.019	8.764
107	82.974		?	Unidentified	0.009	0.009	0.006	3.065
108	83.407		I9	2,5-Dimethylheptane	0.049	0.053	0.030	13.705
109	84.740	100-41-4	Q8	Ethylbenzene	2.131	1.901	1.559	634.694
110	85.150		?	Unidentified	0.009	0.009	0.005	3.004
111	85.985	108-38-3	Q8	m-Xylene	5.649	5.055	4.134	1682.769
112	86.126	106-42-3	Q8	p-Xylene	2.623	2.356	1.920	781.401
113	87.275	2216-34-4	I9	4-Methyloctane	0.019	0.020	0.011	5.163
114	87.407	3221-61-2	I9	2-Methyloctane	0.025	0.027	0.015	6.835
115	88.269	2216-33-3	I9	3-Methyloctane	0.024	0.026	0.015	6.708
116	88.745		?	Unidentified	0.031	0.035	0.019	10.638
117	88.935	95-47-6	Q8	o-Xylene	1.523	1.338	1.115	453.684
118	89.320		I10	C10 - IsoParaffin - 1	0.099	0.105	0.054	27.411
119	89.911		M9	trans-1,3-Diethylcyclopentane	0.007	0.006	0.004	1.997
120	90.164	14720-74-2	I10	2,2,4-trimethylheptane	0.073	0.078	0.040	20.361
121	91.730	111-84-2	P9	n-Nonane	0.110	0.118	0.066	30.373
122	93.094	98-82-8	Q9	i-Propylbenzene	0.030	0.027	0.020	8.966
123	93.840		?	Unidentified	0.060	0.064	0.033	20.831
124	94.064	15869-87-1	I10	2,2-Dimethyloctane	0.022	0.023	0.012	6.080
125	94.524		?	Unidentified	0.005	0.004	0.419	1.862
126	94.524		?	Unidentified	0.005	0.006	0.003	1.862
127	94.861	15869-89-3	I10	2,5-Dimethyloctane	0.024	0.025	0.013	6.623
128	95.325	2040-95-1	I10	2,7-Dimethyloctane	0.018	0.019	0.010	5.110
129	95.507	2051-30-1	I10	2,4-Dimethyloctane	0.080	0.085	0.044	22.279

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
130	95.898		I10	2,6-Dimethyloctane	0.025	0.026	0.014	6.909
131	96.556	103-65-1	Q9	n-Propylbenzene	0.549	0.493	0.355	162.621
132	97.413	620-14-4	Q9	1-Methyl-3-ethylbenzene	2.289	2.048	1.480	677.453
133	97.643	622-96-8	Q9	1-Methyl-4-ethylbenzene	1.072	0.963	0.693	317.369
134	98.268	108-67-8	Q9	1,3,5-Trimethylbenzene	1.443	1.290	0.933	427.024
135	98.723	15869-85-9	I10	5-Methylnonane	0.011	0.012	0.006	3.091
136	98.913	17301-94-8	I10	4-Methylnonane	0.027	0.028	0.015	7.394
137	99.121		I10	2,2,6-Trimethyloctane	1.242	1.323	0.678	345.124
138	99.349	611-14-3	Q9	1-Methyl-2-ethylbenzene	0.786	0.690	0.508	232.631
139	99.567	5881-17-4	I10	3-Ethyloctane	0.005	0.005	0.003	1.365
140	99.889	5911-04-6	I10	3-Methylnonane	0.036	0.038	0.019	9.883
141	100.353		?	Unidentified	0.071	0.055	0.035	24.509
142	100.487		?	Unidentified	0.191	0.198	0.095	65.824
143	100.701		I11	C11-Isoparaffin-2	0.102	0.106	0.051	28.437
144	100.999	95-63-6	Q9	1,2,4-Trimethylbenzene	4.057	3.583	2.622	1200.810
145	101.165		?	Unidentified	0.116	0.128	0.064	39.963
146	101.287		?	Unidentified	0.069	0.073	0.038	23.913
147	101.550	1678-98-4	M10	i-Butylcyclohexane	0.018	0.018	0.010	5.091
148	102.193		?	Unidentified	0.007	0.006	0.004	2.278
149	102.337	17302-01-1	I10	3-Ethyl-3-methylheptane	0.162	0.169	0.081	45.156
150	102.643	538-93-2	Q10	i-Butylbenzene	0.194	0.176	0.112	57.190
151	102.798	124-18-5	P10	n-Decane	0.040	0.042	0.022	10.990
152	102.900		?	Unidentified	0.042	0.038	0.025	14.638
153	103.199		?	Unidentified	0.039	0.041	0.020	13.581
154	103.688		?	Unidentified	0.006	0.005	0.004	1.946
155	103.853	526-73-8	Q9	1,2,3-Trimethylbenzene	0.582	0.503	0.376	172.206
156	104.217	535-77-3	Q10	1-Methyl-3-i-propylbenzene	0.028	0.026	0.016	8.359
157	104.410		I11	C11 Isoparaffin-4	0.022	0.023	0.011	6.062
158	104.617	99-87-6	Q10	1-Methyl-4-i-propylbenzene	0.112	0.101	0.065	33.084
159	105.045		J9	Indan	0.219	0.175	0.144	65.778
160	105.640		J10	Indene	0.519	0.416	0.341	156.008
161	106.356		I11	C11-Isoparaffin-7	0.192	0.199	0.095	53.323
162	106.547	141-93-5	Q10	1,3-Diethylbenzene	0.068	0.061	0.040	20.121
163	106.829	1074-43-7	Q10	1-Methyl-3-n-propylbenzene	0.705	0.633	0.408	207.476
164	107.166	105-05-5	Q10	1,4-Diethylbenzene	0.237	0.212	0.137	69.632
165	107.262	104-51-8	Q10	n-Butylbenzene	0.037	0.033	0.022	10.962
166	107.383	934-74-7	Q10	1,3-Dimethyl-5-ethylbenzene	0.222	0.195	0.128	65.332
167	107.625	135-01-3	Q10	1,2-Diethylbenzene	0.045	0.039	0.026	13.226
168	108.081		?	Unidentified	0.039	0.041	0.019	13.531
169	108.234	1074-17-5	Q10	1-Methyl-2-n-propylbenzene	0.077	0.068	0.044	22.563
170	108.355		?	Unidentified	0.042	0.043	0.021	14.353
171	108.435		?	Unidentified	0.038	0.040	0.019	13.148
172	108.563		I11	C11- Isoparaffin-11	0.315	0.327	0.156	87.528

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
173	108.744		?	Unidentified	0.098	0.102	0.049	33.803
174	109.080	1758-88-9	Q10	1,4,Dimethyl-2-ethylbenzene	0.173	0.153	0.100	51.036
175	109.168		?	Unidentified	0.236	0.208	0.137	81.546
176	109.239	874-41-9	Q10	1,3-Dimethyl-4-ethylbenzene	0.187	0.164	0.108	54.928
177	109.395		J10	2-Methylindan	0.057	0.046	0.034	17.206
178	109.743	934-80-5	Q10	1,2-Dimethyl-4-ethylbenzene	0.459	0.406	0.266	135.093
179	110.285	2870-04-4	Q10	1,3-Dimethyl-2-ethylbenzene	0.239	0.208	0.138	70.408
180	110.710		?	Unidentified	0.006	0.006	0.003	2.147
181	110.905	693-61-8	K11	2-Undecene, (E)-	0.017	0.017	0.009	4.613
182	111.039		?	Unidentified	0.023	0.024	0.013	7.855
183	111.195		Q11	1-Methyl-4-t-butylbenzene	0.037	0.034	0.020	10.963
184	111.415	933-98-2	Q10	1,2-Dimethyl-3-ethylbenzene	0.154	0.134	0.089	45.420
185	111.710	1120-21-4	P11	n-Undecane	0.027	0.028	0.014	7.561
186	111.866	4218-48-8	Q11	1-Ethyl-4-i-propylbenzene	0.031	0.027	0.016	9.050
187	111.974		?	Unidentified	0.015	0.013	0.008	5.064
188	112.349		Q10	1,2,4,5-Tetramethylbenzene	0.375	0.327	0.217	110.320
189	112.616	527-53-7	Q10	1,2,3,5-Tetramethylbenzene	0.521	0.452	0.302	153.348
190	113.132		I12	C12 - IsoParaffin - 1	0.005	0.005	0.002	1.451
191	113.483		?	Unidentified	0.020	0.021	0.009	6.737
192	113.755		Q11	C11 - Aromatic - 3	0.059	0.052	0.031	17.430
193	113.946	874-35-1	H10	5-Methylindan	0.163	0.141	0.096	47.931
194	114.071		Q12	1,2-Di-i-propylbenzene	0.059	0.051	0.028	17.265
195	114.286	1595-16-0	Q11	1-methyl-4-(1-methylpropyl)be	0.085	0.074	0.045	24.946
196	114.442		Q11	C11 - Aromatic - 4	0.047	0.041	0.025	13.773
197	114.695	824-22-6	J10	4-Methylindan	0.218	0.189	0.128	64.103
198	114.846	5161-04-6	Q11	Benzene, 1-methyl-4-(2-methylpropyl)	0.051	0.044	0.027	14.827
199	114.943	824-63-5	H10	2-Methylindan	0.162	0.141	0.095	47.781
200	115.146		?	Unidentified	0.015	0.016	0.007	5.194
201	115.259	538-68-1	Q11	n-Pentylbenzene	0.020	0.017	0.010	5.869
202	115.486		Q11	tert-Pentylbenzene	0.088	0.077	0.046	25.921
203	115.798	577-55-9	Q11	1-Methyl-2-n-butylbenzene	0.039	0.034	0.021	11.513
204	115.908		Q11	C11 - Aromatic - 6	0.049	0.045	0.026	14.427
205	116.369	100-18-5	Q12	1,4-Di-i-propylbenzene	0.073	0.064	0.035	21.437
206	116.813	91-20-3	G10	Naphthalene	0.169	0.128	0.103	52.159
207	117.008		J11	4,7-Dimethyl Indane	0.009	0.007	0.005	2.624
208	117.251		Q12	C12-Aromatic-1	0.023	0.021	0.011	6.871
209	117.414		J12	Dimethyl Indane - 1	0.010	0.008	0.005	3.038
210	117.593	7364-19-4	Q12	1t-Butyl-4-ethylbenzene	0.014	0.013	0.007	4.212
211	117.895		Q12	1,3-Di-n-propylbenzene	0.065	0.057	0.031	19.021
212	118.005		Q11	C11 - Aromatic - 11	0.037	0.034	0.019	10.824
213	118.559		Q11	C11 - Aromatic - 12	0.025	0.023	0.013	7.278
214	119.487	102-25-0	Q12	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.823
215	123.440	91-57-6	G11	2-Methylnaphthalene	0.009	0.007	0.005	2.774

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Component List

Pk#	Time	CASNO	Group	Component	%Wgt	%Vol	%Mol	Area
216	124.306	90-12-0	G11	1-Methylnaphthalene	0.005	0.004	0.003	1.501

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Paraffin	7.553	74-98-6	Propane	0.002	0.003	0.004	0.583
	10.021	106-97-8	n-Butane	0.597	0.797	0.797	162.290
	18.107	109-66-0	n-Pentane	1.763	2.178	1.899	483.060
	35.799	110-54-3	n-Hexane	1.573	1.845	1.418	432.616
	58.051	142-82-5	n-Heptane	0.376	0.425	0.292	103.846
	77.868	111-65-9	n-Octane	0.201	0.221	0.136	55.524
	91.730	111-84-2	n-Nonane	0.110	0.118	0.066	30.373
	102.798	124-18-5	n-Decane	0.040	0.042	0.022	10.990
	111.710	1120-21-4	n-Undecane	0.027	0.028	0.014	7.561
I-Paraffins	8.809	75-28-5	i-Butane	0.025	0.035	0.034	6.870
	10.635	463-82-1	2,2-Dimethylpropane	0.009	0.012	0.010	2.601
	15.073	78-78-4	i-Pentane	3.658	4.566	3.939	1002.166
	23.085	75-83-2	2,2-Dimethylbutane	0.296	0.353	0.267	81.465
	28.336	79-29-8	2,3-Dimethylbutane	1.015	1.187	0.915	279.232
	29.429	107-83-5	2-Methylpentane	5.593	6.623	5.042	1538.314
	32.074	96-14-0	3-Methylpentane	2.697	3.140	2.431	741.781
	42.235	108-08-7	2,4-Dimethylpentane	0.207	0.238	0.161	57.207
	42.773	464-06-2	2,2,3-Trimethylbutane	0.020	0.022	0.015	5.432
	50.654	591-76-4	2-Methylhexane	0.651	0.742	0.505	179.828
	52.488	589-34-4	3-Methylhexane	0.440	0.495	0.341	121.523
	55.140	540-84-1	2,2,4-Trimethylpentane	0.054	0.060	0.037	14.924
	62.845	590-73-8	2,2-Dimethylhexane	0.012	0.014	0.008	3.451
	64.942	564-02-3	2,2,3-Trimethylpentane	0.064	0.069	0.043	17.634
	65.167	592-13-2	2,5-Dimethylhexane	0.133	0.148	0.090	36.796
	65.503	589-43-5	2,4-Dimethylhexane	0.123	0.136	0.084	34.156
	68.478	565-75-3	2,3,4-Trimethylpentane	0.662	0.712	0.450	183.050
	70.790	584-94-1	2,3-Dimethylhexane	0.185	0.201	0.126	51.197
	72.044	592-27-8	2-Methylheptane	0.105	0.116	0.071	29.018
	72.303	589-53-7	4-Methylheptane	0.058	0.063	0.039	15.932
	73.358	589-81-1	3-Methylheptane	0.093	0.102	0.063	25.804
	73.558	619-99-8	3-Ethylhexane	0.047	0.051	0.032	12.962
	75.247	3522-94-9	2,2,5-Trimethylhexane	0.427	0.467	0.259	118.324
	80.350	1069-53-0	2,3,5-Trimethylhexane	0.077	0.083	0.047	21.429
	81.519	1071-26-7	2,4-Dimethylheptane	0.018	0.020	0.011	5.059
	82.475	1072-05-5	2,6-Dimethylheptane	0.032	0.034	0.019	8.764
	83.407		2,5-Dimethylheptane	0.049	0.053	0.030	13.705
	87.275	2216-34-4	4-Methyloctane	0.019	0.020	0.011	5.163
	87.407	3221-61-2	2-Methyloctane	0.025	0.027	0.015	6.835
	88.269	2216-33-3	3-Methyloctane	0.024	0.026	0.015	6.708
	89.320		C10 - IsoParaffin - 1	0.099	0.105	0.054	27.411
	90.164	14720-74-2	2,2,4-trimethylheptane	0.073	0.078	0.040	20.361
	94.064	15869-87-1	2,2-Dimethyloctane	0.022	0.023	0.012	6.080
	94.861	15869-89-3	2,5-Dimethyloctane	0.024	0.025	0.013	6.623
	95.325	2040-95-1	2,7-Dimethyloctane	0.018	0.019	0.010	5.110
	95.507	2051-30-1	2,4-Dimethyloctane	0.080	0.085	0.044	22.279
	95.898		2,6-Dimethyloctane	0.025	0.026	0.014	6.909

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
I-Paraffins	98.723	15869-85-9	5-Methylnonane	0.011	0.012	0.006	3.091
	98.913	17301-94-8	4-Methylnonane	0.027	0.028	0.015	7.394
	99.121		2,2,6-Trimethyloctane	1.242	1.323	0.678	345.124
	99.567	5881-17-4	3-Ethyloctane	0.005	0.005	0.003	1.365
	99.889	5911-04-6	3-Methylnonane	0.036	0.038	0.019	9.883
	100.701		C11-Isoparaffin-2	0.102	0.106	0.051	28.437
	102.337	17302-01-1	3-Ethyl-3-methylheptane	0.162	0.169	0.081	45.156
	104.410		C11 Isoparaffin-4	0.022	0.023	0.011	6.062
	106.356		C11-Isoparaffin-7	0.192	0.199	0.095	53.323
	108.563		C11- Isoparaffin-11	0.315	0.327	0.156	87.528
	113.132		C12 - IsoParaffin - 1	0.005	0.005	0.002	1.451
Aromatics							
Mono-Aromatics	45.631	71-42-3	Benzene	0.734	0.646	0.730	222.725
	69.077	108-88-3	Toluene	12.625	11.261	10.644	3789.205
	84.740	100-41-4	Ethylbenzene	2.131	1.901	1.559	634.694
	85.985	108-38-3	m-Xylene	5.649	5.055	4.134	1682.769
	86.126	106-42-3	p-Xylene	2.623	2.356	1.920	781.401
	88.935	95-47-6	o-Xylene	1.523	1.338	1.115	453.684
	93.094	98-82-8	i-Propylbenzene	0.030	0.027	0.020	8.966
	96.556	103-65-1	n-Propylbenzene	0.549	0.493	0.355	162.621
	97.413	620-14-4	1-Methyl-3-ethylbenzene	2.289	2.048	1.480	677.453
	97.643	622-96-8	1-Methyl-4-ethylbenzene	1.072	0.963	0.693	317.369
	98.268	108-67-8	1,3,5-Trimethylbenzene	1.443	1.290	0.933	427.024
	99.349	611-14-3	1-Methyl-2-ethylbenzene	0.786	0.690	0.508	232.631
	100.999	95-63-6	1,2,4-Trimethylbenzene	4.057	3.583	2.622	1200.810
	102.643	538-93-2	i-Butylbenzene	0.194	0.176	0.112	57.190
	103.853	526-73-8	1,2,3-Trimethylbenzene	0.582	0.503	0.376	172.206
	104.217	535-77-3	1-Methyl-3-i-propylbenzene	0.028	0.026	0.016	8.359
	104.617	99-87-6	1-Methyl-4-i-propylbenzene	0.112	0.101	0.065	33.084
	106.547	141-93-5	1,3-Diethylbenzene	0.068	0.061	0.040	20.121
	106.829	1074-43-7	1-Methyl-3-n-propylbenzene	0.705	0.633	0.408	207.476
	107.166	105-05-5	1,4-Diethylbenzene	0.237	0.212	0.137	69.632
	107.262	104-51-8	n-Butylbenzene	0.037	0.033	0.022	10.962
	107.383	934-74-7	1,3-Dimethyl-5-ethylbenzene	0.222	0.195	0.128	65.332
	107.625	135-01-3	1,2-Diethylbenzene	0.045	0.039	0.026	13.226
	108.234	1074-17-5	1-Methyl-2-n-propylbenzene	0.077	0.068	0.044	22.563
	109.080	1758-88-9	1,4,Dimethyl-2-ethylbenzene	0.173	0.153	0.100	51.036
	109.239	874-41-9	1,3-Dimethyl-4-ethylbenzene	0.187	0.164	0.108	54.928
	109.743	934-80-5	1,2-Dimethyl-4-ethylbenzene	0.459	0.406	0.266	135.093
	110.285	2870-04-4	1,3-Dimethyl-2-ethylbenzene	0.239	0.208	0.138	70.408
	111.195		1-Methyl-4-t-butylbenzene	0.037	0.034	0.020	10.963
	111.415	933-98-2	1,2-Dimethyl-3-ethylbenzene	0.154	0.134	0.089	45.420
	111.866	4218-48-8	1-Ethyl-4-i-propylbenzene	0.031	0.027	0.016	9.050
	112.349		1,2,4,5-Tetramethylbenzene	0.375	0.327	0.217	110.320
	112.616	527-53-7	1,2,3,5-Tetramethylbenzene	0.521	0.452	0.302	153.348
	113.755		C11 - Aromatic - 3	0.059	0.052	0.031	17.430

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Aromatics	114.071		1,2-Di-i-propylbenzene	0.059	0.051	0.028	17.265
	114.286	1595-16-0	1-methyl-4-(1-methylpropyl)be	0.085	0.074	0.045	24.946
	114.442		C11 - Aromatic - 4	0.047	0.041	0.025	13.773
	114.846	5161-04-6	Benzene, 1-methyl-4-(2-methylpropyl)	0.051	0.044	0.027	14.827
	115.259	538-68-1	n-Pentylbenzene	0.020	0.017	0.010	5.869
	115.486		tert-Pentylbenzene	0.088	0.077	0.046	25.921
	115.798	577-55-9	1-Methyl-2-n-butylbenzene	0.039	0.034	0.021	11.513
	115.908		C11 - Aromatic - 6	0.049	0.045	0.026	14.427
	116.369	100-18-5	1,4-Di-i-propylbenzene	0.073	0.064	0.035	21.437
	117.251		C12-Aromatic-1	0.023	0.021	0.011	6.871
	117.593	7364-19-4	1t-Butyl-4-ethylbenzene	0.014	0.013	0.007	4.212
	117.895		1,3-Di-n-propylbenzene	0.065	0.057	0.031	19.021
	118.005		C11 - Aromatic - 11	0.037	0.034	0.019	10.824
	118.559		C11 - Aromatic - 12	0.025	0.023	0.013	7.278
	119.487	102-25-0	1,3,5-Triethylbenzene	0.006	0.005	0.003	1.823
Naphthalenes	116.813	91-20-3	Naphthalene	0.169	0.128	0.103	52.159
	123.440	91-57-6	2-Methylnaphthalene	0.009	0.007	0.005	2.774
	124.306	90-12-0	1-Methylnaphthalene	0.005	0.004	0.003	1.501
Naphtheno/Olefir	113.946	874-35-1	5-Methylindan	0.163	0.141	0.096	47.931
	114.943	824-63-5	2-Methylindan	0.162	0.141	0.095	47.781
Indenes	105.045		Indan	0.219	0.175	0.144	65.778
	105.640		Indene	0.519	0.416	0.341	156.008
	109.395		2-Methylindan	0.057	0.046	0.034	17.206
	114.695	824-22-6	4-Methylindan	0.218	0.189	0.128	64.103
	117.008		4,7-Dimethyl Indane	0.009	0.007	0.005	2.624
	117.414		Dimethyl Indane - 1	0.010	0.008	0.005	3.038
Naphthenes							
Mono-Naphthene	27.596	287-92-3	Cyclopentane	0.305	0.316	0.338	85.857
	40.665	96-37-7	Methylcyclopentane	1.205	1.245	1.112	339.547
	47.550	110-82-7	Cyclohexane	0.617	0.613	0.569	173.801
	53.349	1759-58-6	1t,3-Dimethylcyclopentane	0.137	0.141	0.108	38.547
	53.934	2532-58-3	1c,3-Dimethylcyclopentane	0.102	0.106	0.081	28.707
	54.556	822-50-4	1t,2-Dimethylcyclopentane	0.131	0.134	0.103	36.801
	59.646	16491-15-9	Cyclopentene, 1,5-dimethyl-	0.017	0.018	0.014	4.867
	61.513	108-87-2	Methylcyclohexane	0.542	0.544	0.428	152.583
	62.456	4516-69-2	1,1,3-Trimethylcyclopentane	0.015	0.015	0.010	4.114
	64.289	1640-89-7	Ethylcyclopentane	0.036	0.037	0.029	10.269
	66.343	4850-28-6	1c,2t,4-Trimethylcyclopentane	0.014	0.014	0.010	3.951
	67.859	15890-40-1	1t,2c,3-Trimethylcyclopentane	0.012	0.012	0.008	3.360
	73.222		1,3-dimethyl-t-cyclohexane	0.070	0.070	0.048	19.722
	76.528	2207-03-6	1t,3-Dimethylcyclohexane	0.031	0.030	0.021	8.620
	78.821		C8 - MonoNaph - 3	0.015	0.015	0.010	4.185
	82.172	1678-91-7	Ethylcyclohexane	0.048	0.047	0.033	13.412

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.D 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Components by Group

Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Mono-Naphthene	89.911		trans-1,3-Diethylcyclopentane	0.007	0.006	0.004	1.997
	101.550	1678-98-4	i-Butylcyclohexane	0.018	0.018	0.010	5.091
Di/Bicyclo-Naphtl							
Olefins							
n-Olefins	9.621	115-11-7	Isobutene	0.016	0.021	0.022	4.502
	9.662	106-98-9	Butene-1	0.018	0.023	0.024	4.962
	10.507	624-64-6	t-Butene-2	0.072	0.092	0.100	20.328
	11.247	590-18-1	c-Butene-2	0.085	0.106	0.118	24.035
	16.725	109-67-1	Pentene-1	0.328	0.396	0.363	92.420
	19.228	646-04-8	t-Pentene-2	0.832	0.992	0.921	234.391
	20.261	627-20-3	c-Pentene-2	0.456	0.538	0.505	128.401
	33.446	592-41-6	Hexene-1	0.158	0.180	0.146	44.508
	36.435	13269-52-8	t-Hexene-3	0.257	0.291	0.237	72.378
	36.909	4050-45-7	t-Hexene-2	0.394	0.446	0.363	110.939
	38.737	7688-21-3	c-Hexene-2	0.209	0.233	0.193	58.832
	55.464	592-76-7	Heptene-1	0.028	0.031	0.022	7.935
	57.328	14686-14-7	t-Heptene-3	0.031	0.034	0.025	8.787
	58.270	7642-10-6	c-Heptene-3	0.024	0.027	0.019	6.871
	59.170	14686-13-6	t-Heptene-2	0.015	0.017	0.012	4.257
	110.905	693-61-8	2-Undecene, (E)-	0.017	0.017	0.009	4.613
Iso-Olefins	13.445	563-45-1	3-Methylbutene-1	0.245	0.302	0.271	68.928
	17.577	563-46-2	2-Methylbutene-1	0.498	0.592	0.551	140.212
	20.941	513-35-9	2-Methylbutene-2	1.019	1.190	1.129	287.222
	29.196	691-38-3	4-Methyl-c-pentene-2	0.044	0.050	0.040	12.346
	29.838	674-76-0	4-Methyl-t-pentene-2	0.128	0.147	0.118	35.957
	33.221	763-29-1	2-Methylpentene-1	0.220	0.249	0.203	62.043
	35.633	760-21-4	2-Ethylbutene-1	0.064	0.071	0.059	17.898
	37.401	625-27-4	2-Methylpentene-2	0.333	0.372	0.307	93.747
	37.815	922-62-3	3-Methyl-c-pentene-2	0.256	0.284	0.237	72.243
	40.080	3404-73-7	3,3-Dimethylpentene-1	0.305	0.336	0.242	86.052
	42.525	594-56-9	2,3,3-Trimethylbutene-1	0.013	0.015	0.011	3.749
	46.634	3404-61-3	3-Methylhexene-1	0.016	0.017	0.012	4.389
	47.225	3524-73-0	5-Methylhexene-1	0.043	0.048	0.034	12.223
	49.268	15840-60-5	2-Methyl-c-hexene-3	0.040	0.044	0.031	11.166
	49.614	3769-23-1	4-Methylhexene-1	0.011	0.012	0.009	3.054
	50.261	3404-55-5	4-Methyl-t/c-hexene-2	0.050	0.055	0.039	14.019
	54.838		C7 - Iso-Olefin - 2	0.022	0.024	0.018	6.235
	56.799	4914-89-0	3-Methyl-c-hexene-3	0.014	0.015	0.011	3.819
	57.679	6094-02-6	2-Methylhexene-1	0.056	0.062	0.044	15.773
	58.545	2738-19-4	2-Methyl-2-hexene	0.026	0.028	0.020	7.199
	58.788	10574-36-4	3-Methyl-c-hexene-2	0.019	0.021	0.015	5.494
	60.073	20710-38-8	3-Methyl-t-hexene-2	0.014	0.015	0.011	4.032
	60.857	4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-	0.013	0.014	0.010	3.544
Naphtheno-Olefir	22.527	1574-41-0	1,3-Cyclopentadiene	0.007	0.008	0.008	1.979

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2A.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Components by Group

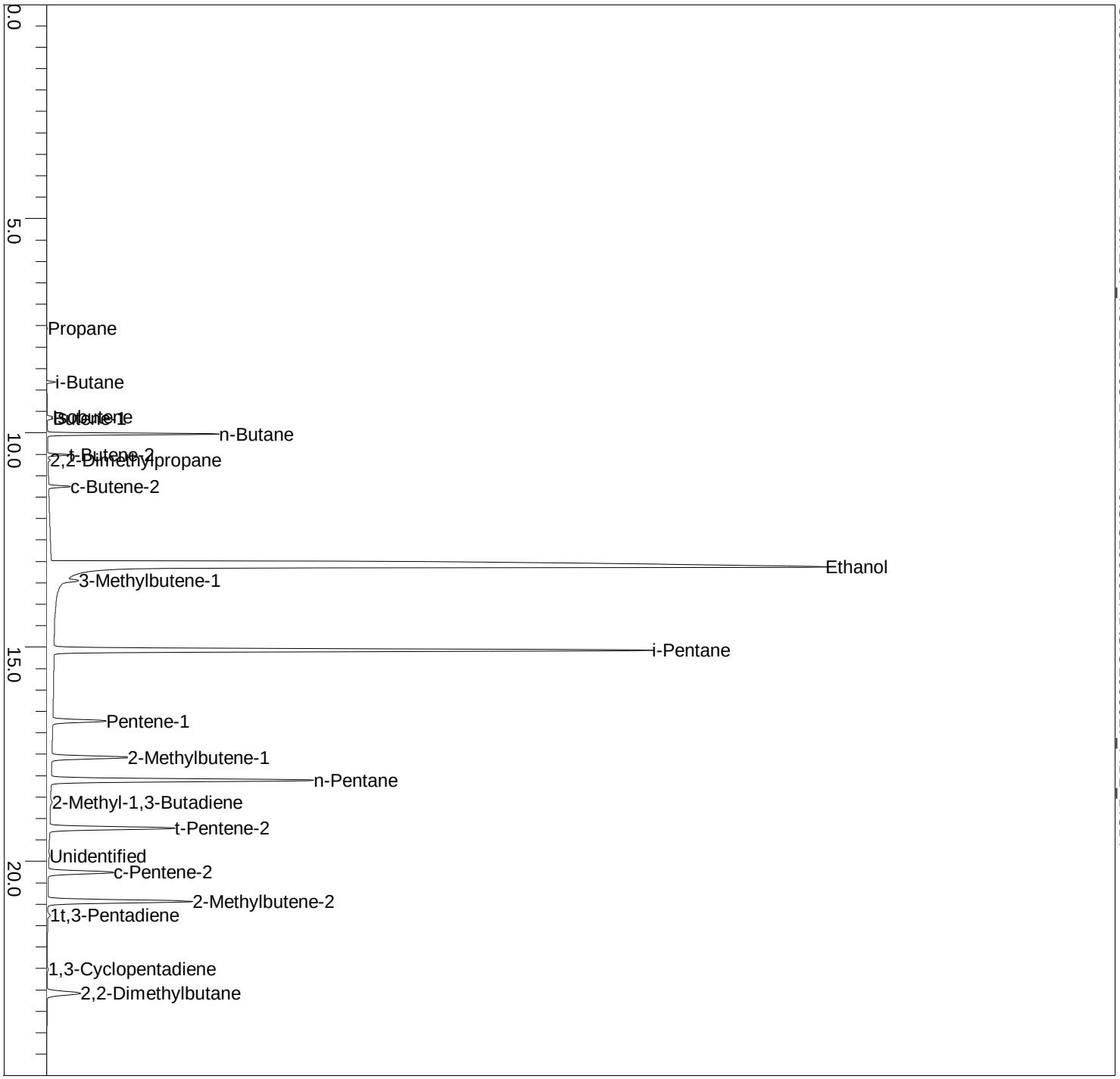
Group	Time	CASNO	Component	%Wgt	%Vol	%Mol	Area
Naphtheno-Olefir	25.736	142-29-0	Cyclopentene	0.193	0.193	0.220	55.939
	37.033	1120-62-3	3-Methylcyclopentene	0.098	0.099	0.093	27.611
	45.828	693-89-0	1-Methylcyclopentene	0.351	0.349	0.332	101.379
	51.147	110-83-8	Cyclohexene	0.044	0.042	0.041	12.323
Di-Olefins	18.621	78-79-5	2-Methyl-1,3-Butadiene	0.011	0.012	0.012	3.164
	21.266	2004-70-8	1t,3-Pentadiene	0.015	0.018	0.018	4.495
	45.422	1528-30-9	C6-Diolefin-1	0.015	0.015	0.014	4.177
Oxygenates	13.125	64-17-5	Ethanol	21.748	21.315	36.673	2523.196
	26.899	71-23-8	n-Propanol	0.073	0.070	0.094	14.306
	48.053	71-36-3	n-Butanol	0.054	0.053	0.057	11.594
Unidentified	19.873		Unidentified	0.005	0.006	0.006	1.873
	26.983		Unidentified	0.059	0.068	0.054	20.285
	28.726		Unidentified	0.055	0.057	0.048	18.827
	50.835		Unidentified	0.041	0.046	0.034	14.321
	63.356		Unidentified	0.057	0.062	0.041	19.817
	72.447		Unidentified	0.017	0.019	0.012	6.014
	74.457		Unidentified	0.011	0.011	0.008	3.870
	82.974		Unidentified	0.009	0.009	0.006	3.065
	85.150		Unidentified	0.009	0.009	0.005	3.004
	88.745		Unidentified	0.031	0.035	0.019	10.638
	93.840		Unidentified	0.060	0.064	0.033	20.831
	94.524		Unidentified	0.005	0.004	0.419	1.862
	94.524		Unidentified	0.005	0.006	0.003	1.862
	100.353		Unidentified	0.071	0.055	0.035	24.509
	100.487		Unidentified	0.191	0.198	0.095	65.824
	101.165		Unidentified	0.116	0.128	0.064	39.963
	101.287		Unidentified	0.069	0.073	0.038	23.913
	102.193		Unidentified	0.007	0.006	0.004	2.278
	102.900		Unidentified	0.042	0.038	0.025	14.638
	103.199		Unidentified	0.039	0.041	0.020	13.581
	103.688		Unidentified	0.006	0.005	0.004	1.946
	108.081		Unidentified	0.039	0.041	0.019	13.531
	108.355		Unidentified	0.042	0.043	0.021	14.353
	108.435		Unidentified	0.038	0.040	0.019	13.148
	108.744		Unidentified	0.098	0.102	0.049	33.803
	109.168		Unidentified	0.236	0.208	0.137	81.546
	110.710		Unidentified	0.006	0.006	0.003	2.147
	111.039		Unidentified	0.023	0.024	0.013	7.855
	111.974		Unidentified	0.015	0.013	0.008	5.064
	113.483		Unidentified	0.020	0.021	0.009	6.737
	115.146		Unidentified	0.015	0.016	0.007	5.194

Plus

Recovery = 100.00

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2_B.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Sample Chromatogram



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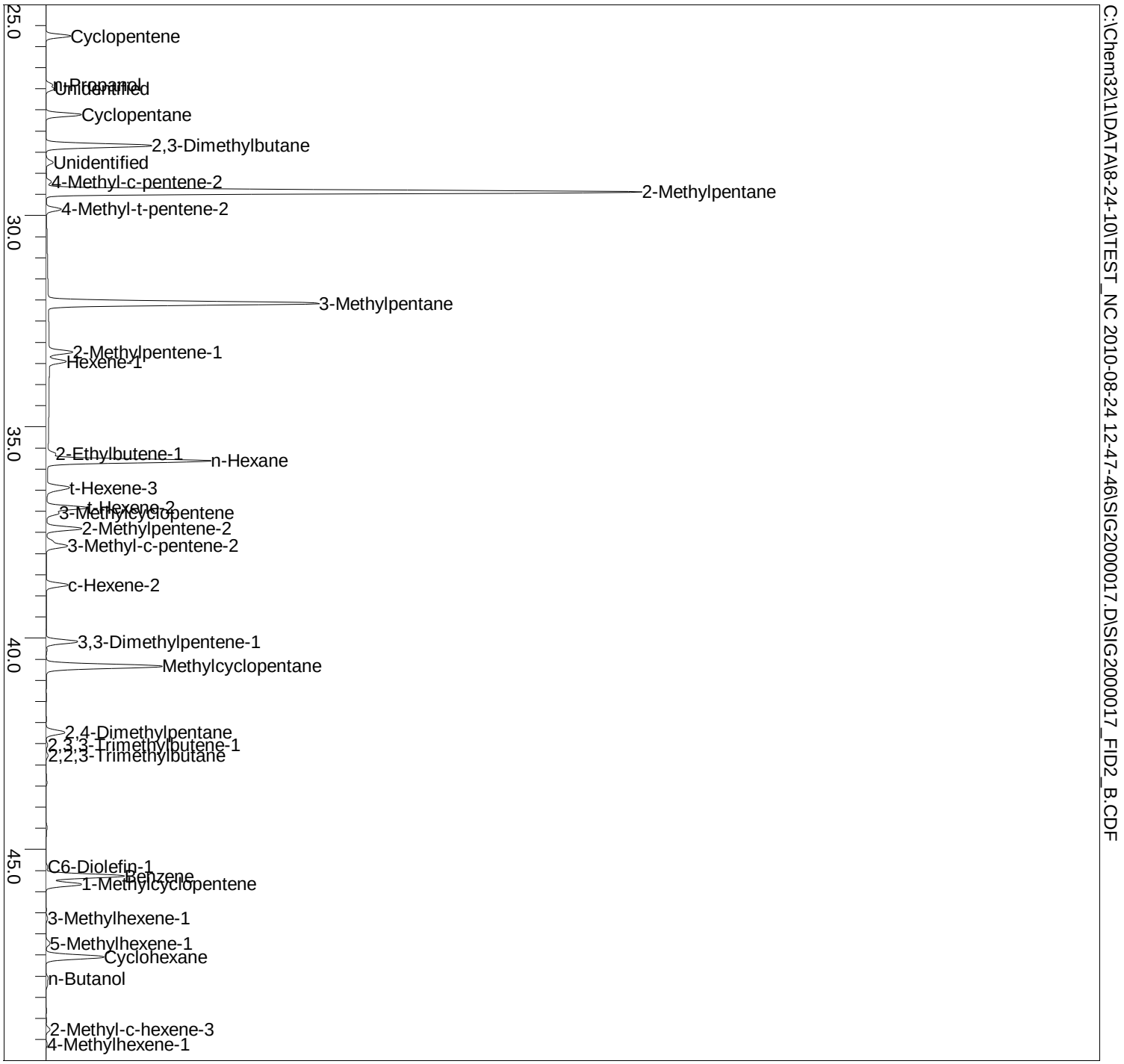
Sample: ODDB-91335 Operator: AAD
Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Sample Chromatogram



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Parameter: C:\Chem32\SeparationSystems\HCE4\ODDB-91335
LIMS Id:

Sample Chromatogram

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Sample Chromatogram

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Sample: ODDB-91335 Operator: AAD
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Sample Chromatogram

File: C:\Chem32\1\DATA\8-24-10\TEST_NC 2010-08-24 12-47-46\SIG2000017.D\SIG2000017_FID2_B.CDF 26-Aug-10, 10:43:13
Sample: ODDB-91335 Operator: AAD
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LIMS Id:

Sample Chromatogram