



Vapor Extraction Technology  
1060 Calle Negocio, Suite B  
San Clemente CA, 92673

Project: NA  
Project Number: Petrik Lab - MTBE  
Project Manager: Tom Lahey

**Reported:**  
04/08/04 09:07

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DRAFT: Reactor Inlet-1	0404067-01	Liquid	04/02/04 17:37	04/06/04 17:05
DRAFT: Reactor Inlet-2	0404067-02	Liquid	04/02/04 17:47	04/06/04 17:05
DRAFT: Reactor Effluent-1	0404067-03	Liquid	04/02/04 17:56	04/06/04 17:05
DRAFT: Reactor Effluent-2	0404067-04	Liquid	04/02/04 18:09	04/06/04 17:05
DRAFT: Reactor Effluent-3	0404067-05	Liquid	04/02/04 18:22	04/06/04 17:05

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**DRAFT: Fuel Oxygenates by EPA 8260B**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**DRAFT: Reactor Inlet-1 (0404067-01) Liquid**    **Sampled: 04/02/04 17:37**    **Received: 04/06/04 17:05**

Methyl tert-butyl ether	140	1.0	µg/L	1	B4D0813	04/07/04	04/07/04	EPA 8260B	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		100 %		86-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %		88-110	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.0 %		86-115	"	"	"	"	

**DRAFT: Reactor Inlet-2 (0404067-02) Liquid**    **Sampled: 04/02/04 17:47**    **Received: 04/06/04 17:05**

Methyl tert-butyl ether	110	1.0	µg/L	1	B4D0813	04/07/04	04/07/04	EPA 8260B	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		98.2 %		86-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.2 %		88-110	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.2 %		86-115	"	"	"	"	

**DRAFT: Reactor Effluent-1 (0404067-03) Liquid**    **Sampled: 04/02/04 17:56**    **Received: 04/06/04 17:05**

Methyl tert-butyl ether	ND	1.0	µg/L	1	B4D0813	04/07/04	04/07/04	EPA 8260B	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		105 %		86-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %		88-110	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %		86-115	"	"	"	"	

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**DRAFT: Fuel Oxygenates by EPA 8260B**  
**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						

**DRAFT: Reactor Effluent-2 (0404067-04) Liquid Sampled: 04/02/04 18:09 Received: 04/06/04 17:05**

Methyl tert-butyl ether	ND	1.0	µg/L	1	B4D0813	04/07/04	04/07/04	EPA 8260B	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		105 %		86-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		88-110	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %		86-115	"	"	"	"	

**DRAFT: Reactor Effluent-3 (0404067-05) Liquid Sampled: 04/02/04 18:22 Received: 04/06/04 17:05**

Methyl tert-butyl ether	ND	1.0	µg/L	1	B4D0813	04/07/04	04/07/04	EPA 8260B	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		102 %		86-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %		88-110	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %		86-115	"	"	"	"	

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**DRAFT: Fuel Oxygenates by EPA 8260B - Quality Control**  
**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4D0813 - EPA 5030B P & T**

**Blank (B4D0813-BLK1)**

Prepared & Analyzed: 04/07/04

Methyl tert-butyl ether	ND	1.0	µg/L							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	5.0	"							
<i>Surrogate: Dibromofluoromethane</i>	<i>51.4</i>		<i>"</i>	<i>50.0</i>		<i>103</i>	<i>86-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>49.8</i>		<i>"</i>	<i>50.0</i>		<i>99.6</i>	<i>88-110</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>51.0</i>		<i>"</i>	<i>50.0</i>		<i>102</i>	<i>86-115</i>			

**LCS (B4D0813-BS1)**

Prepared & Analyzed: 04/07/04

Methyl tert-butyl ether	47.4	1.0	µg/L	50.0		94.8	80-120			
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### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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