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Parametrix, Inc.-(PMX)
 700 NE Multnomah, Suite 1160
 Portland, OR 97232

Project: Bumerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman

Sampled: 9/20/99 to 9/22/99
 Received: 9/23/99
 Reported: 10/21/99 01:43

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-4,15	P909453-02	Soil	9/20/99
MW-5,15	P909453-07	Soil	9/20/99
UST	P909453-10	Water	9/22/99
MW-6,15	P909453-12	Soil	9/21/99
MW-4	P909453-18	Water	9/22/99
MW-5	P909453-19	Water	9/22/99
MW-6	P909453-20	Water	9/22/99
Trip Blank	P909453-21	Water	9/22/99

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document.
 This analytical report must be reproduced in its entirety

North Creek Analytical, Inc.
 Environmental Laboratory Network

Philip Nerenberg, Laboratory Manager



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Parametrix, Inc. (PMX)
 700 NE Multnomah, Suite 1160
 Portland, OR 97232
 Project: Emerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Gasoline Hydrocarbons per NW TPH-Gx Method
 North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Analyzed	Surrogate	Reporting Limit	Result	Units	Notes*
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MW-4.15	Gasoline Range Hydrocarbons	0990716	9/24/99	9/29/99	"	50.0-150	ND	mg/kg dry	Soil
P909453-02									
MW-5.15	Gasoline Range Hydrocarbons	0990716	9/24/99	9/29/99	"	50.0-150	ND	mg/kg dry	Soil
P909453-07									
MW-6.15	Gasoline Range Hydrocarbons	0990716	9/24/99	9/29/99	"	50.0-150	ND	mg/kg dry	Soil
P909453-12									
MW-4	Gasoline Range Hydrocarbons	0990773	9/27/99	9/27/99	"	50.0-150	ND	ug/l	Water
P909453-18									
MW-5	Gasoline Range Hydrocarbons	0990773	9/27/99	9/27/99	"	50.0-150	ND	ug/l	Water
P909453-19									
MW-6	Gasoline Range Hydrocarbons	0990773	9/27/99	9/27/99	"	50.0-150	ND	ug/l	Water
P909453-20									

Surrogate: 4-BFB

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*Refer to end of report for text of notes and definitions.



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 700 NE Multnomah, Suite 1160
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Diesel and Heavy Range Hydrocarbons per NWTPH-DX Method North Creek Analytical - Portland

Analyte	Batch	Date	Date	Surrogate	Reporting	Result	Units	Notes*
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MW-4.15	Diesel Range Organics	0990802	9/27/99	9/28/99	P909453-02	25.0	48.0	mg/kg dry	1
	Heavy Oil Range Hydrocarbons	"	"	"	"	50.0	ND	"	
	Surrogate: 1-Chlorooctadecane	"	"	"	"	109	%		
MW-5.15	Diesel Range Organics	0990802	9/27/99	9/28/99	P909453-07	25.0	ND	mg/kg dry	
	Heavy Oil Range Hydrocarbons	"	"	"	"	50.0	ND	"	
	Surrogate: 1-Chlorooctadecane	"	"	"	"	88.5	%		
MW-6.15	Diesel Range Organics	0990802	9/27/99	9/28/99	P909453-12	25.0	ND	mg/kg dry	
	Heavy Oil Range Hydrocarbons	"	"	"	"	50.0	ND	"	
	Surrogate: 1-Chlorooctadecane	"	"	"	"	50.0-150	%		
MW-4	Diesel Range Organics	0990874	9/29/99	9/29/99	P909453-18	0.250	0.995	mg/l	2
	Heavy Oil Range Hydrocarbons	"	"	"	"	0.500	1.75	"	2
	Surrogate: 1-Chlorooctadecane	"	"	"	"	50.0-150	%		
MW-5	Diesel Range Organics	0990874	9/29/99	9/29/99	P909453-19	0.250	0.432	mg/l	2
	Heavy Oil Range Hydrocarbons	"	"	"	"	0.500	0.632	"	2
	Surrogate: 1-Chlorooctadecane	"	"	"	"	50.0-150	%		
MW-6	Diesel Range Organics	0990874	9/29/99	9/29/99	P909453-20	0.250	ND	mg/l	
	Heavy Oil Range Hydrocarbons	"	"	"	"	0.500	ND	"	
	Surrogate: 1-Chlorooctadecane	"	"	"	"	50.0-150	%		

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Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Sampled: 9/20/99 to 9/22/99
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 Project: Emerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman
 Parametrix, Inc.-(PMX)
 700 NE Multnomah, Suite 1160
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Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-4.15L Lead	1090021	10/1/99	10/4/99	P909453-02 EPA 6010A	10.0	ND	Soil mg/kg dry	
MW-5.15L Lead	1090021	10/1/99	10/4/99	P909453-07 EPA 6010A	10.0	ND	Soil mg/kg dry	
MW-6.15L Lead	1090021	10/1/99	10/4/99	P909453-12 EPA 6010A	10.0	ND	Soil mg/kg dry	
MW-4 Lead	1090076	10/4/99	10/5/99	P909453-18 EPA 6020	0.00100	0.0155	Water mg/l	
MW-5 Lead	1090076	10/4/99	10/5/99	P909453-19 EPA 6020	0.00100	0.0270	Water mg/l	
MW-6 Lead	1090076	10/4/99	10/5/99	P909453-20 EPA 6020	0.00100	0.0117	Water mg/l	

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Parametrix, Inc. (PMX) Project: Emerald Petroleum
700 NE Multnomah, Suite 1160 Project Number: N/A
Portland, OR 97232 Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Date	Surrogate	Limit	Reporting	Result	Units	Notes
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MW-5.151	0990779	9/27/99	9/29/99	P909453-07	2500	ND	ug/kg dry	Soil		
Acetone	"	"	"	"	100	ND	"	"	"	"
Benzene	"	"	"	"	100	ND	"	"	"	"
Bromobenzene	"	"	"	"	100	ND	"	"	"	"
Bromochloromethane	"	"	"	"	100	ND	"	"	"	"
Bromodichloromethane	"	"	"	"	100	ND	"	"	"	"
Bromoforn	"	"	"	"	1000	ND	"	"	"	"
Bromomethane	"	"	"	"	2500	ND	"	"	"	"
2-Butanone	"	"	"	"	100	ND	"	"	"	"
n-Butylbenzene	"	"	"	"	100	ND	"	"	"	"
sec-Butylbenzene	"	"	"	"	100	ND	"	"	"	"
tert-Butylbenzene	"	"	"	"	1000	ND	"	"	"	"
Carbon disulfide	"	"	"	"	200	ND	"	"	"	"
Carbon tetrachloride	"	"	"	"	100	ND	"	"	"	"
Chlorobenzene	"	"	"	"	200	ND	"	"	"	"
Chloroethane	"	"	"	"	100	ND	"	"	"	"
Chloroform	"	"	"	"	500	ND	"	"	"	"
Chloromethane	"	"	"	"	100	ND	"	"	"	"
2-Chlorotoluene	"	"	"	"	100	ND	"	"	"	"
4-Chlorotoluene	"	"	"	"	100	ND	"	"	"	"
1,2-Dibromo-3-chloropropane	"	"	"	"	100	ND	"	"	"	"
Dibromochloromethane	"	"	"	"	100	ND	"	"	"	"
1,2-Dibromomethane	"	"	"	"	100	ND	"	"	"	"
Dibromomethane	"	"	"	"	100	ND	"	"	"	"
1,2-Dichlorobenzene	"	"	"	"	100	ND	"	"	"	"
1,3-Dichlorobenzene	"	"	"	"	100	ND	"	"	"	"
1,4-Dichlorobenzene	"	"	"	"	500	ND	"	"	"	"
Dichlorodifluoromethane	"	"	"	"	100	ND	"	"	"	"
1,1-Dichloroethane	"	"	"	"	100	ND	"	"	"	"
1,2-Dichloroethane	"	"	"	"	100	ND	"	"	"	"
1,1-Dichloroethene	"	"	"	"	100	ND	"	"	"	"
cis-1,2-Dichloroethene	"	"	"	"	100	ND	"	"	"	"
trans-1,2-Dichloroethene	"	"	"	"	100	ND	"	"	"	"
1,2-Dichloropropane	"	"	"	"	100	ND	"	"	"	"
1,3-Dichloropropane	"	"	"	"	100	ND	"	"	"	"
2,2-Dichloropropane	"	"	"	"	100	ND	"	"	"	"
1,1-Dichloropropene	"	"	"	"	100	ND	"	"	"	"
cis-1,3-Dichloropropene	"	"	"	"	100	ND	"	"	"	"
trans-1,3-Dichloropropene	"	"	"	"	100	ND	"	"	"	"

North Creek Analytical - Portland

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Parametrix, Inc.-(PMX) 700 NE Multnomah, Suite 1160 Portland, OR 97232
 Project: Emerald Petroleum Project Number: N/A
 Sampled: 9/20/99 to 9/22/99 Received: 9/23/99 Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B
 North Creek Analytical - Portland

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
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MW-5.15 (continued)	0990779	9/27/99	9/29/99	P909453-07	100	ND	ug/kg dry Soil	
Ethylbenzene	"	"	"	"	200	ND	"	
Hexachlorobutadiene	"	"	"	"	1000	ND	"	
2-Hexanone	"	"	"	"	100	ND	"	
Isopropylbenzene	"	"	"	"	100	ND	"	
p-Isopropyltoluene	"	"	"	"	500	ND	"	
4-Methyl-2-pentanone	"	"	"	"	500	ND	"	
Methylene chloride	"	"	"	"	100	ND	"	
Naphthalene	"	"	"	"	100	ND	"	
n-Propylbenzene	"	"	"	"	100	ND	"	
Styrene	"	"	"	"	100	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"	"	100	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"	"	100	ND	"	
Tetrachloroethene	"	"	"	"	100	ND	"	
Toluene	"	"	"	"	100	ND	"	
1,2,3-Trichlorobenzene	"	"	"	"	100	ND	"	
1,2,4-Trichlorobenzene	"	"	"	"	100	ND	"	
1,1,1-Trichloroethane	"	"	"	"	100	ND	"	
1,1,2-Trichloroethane	"	"	"	"	100	ND	"	
Trichloroethene	"	"	"	"	100	ND	"	
Trichlorofluoromethane	"	"	"	"	100	ND	"	
1,2,3-Trichloropropane	"	"	"	"	100	ND	"	
1,2,4-Trimethylbenzene	"	"	"	"	100	ND	"	
1,3,5-Trimethylbenzene	"	"	"	"	100	ND	"	
Vinyl chloride	"	"	"	"	100	ND	"	
o-Xylene	"	"	"	"	100	ND	"	
m,p-Xylene	"	"	"	"	200	ND	"	
Surrogate: 4-BFB	"	"	"	"	70.0-130	85.8	%	
Surrogate: 1,2-DCA-d4	"	"	"	"	65.0-135	90.4	"	
Surrogate: Dibromofluoromethane	"	"	"	"	65.0-130	92.2	"	
Surrogate: Toluene-d8	"	"	"	"	70.0-120	94.1	"	

North Creek Analytical - Portland

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network

*Refer to end of report for text of notes and definitions

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[illegible]

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Water								

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Sampled: 9/20/99 to 9/22/99	Project: Emerald Petroleum	Project Manager: Anne Ackerman	Reported: 10/21/99 01:43
Received: 9/23/99	Project Number: N/A		

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Parametrix, Inc. (PMX)
700 NE Multnomah, Suite 1160
Portland, OR 97232
Project: Emerald Petroleum
Project Number: N/A
Project Manager: Anne Ackerman
Sampled: 9/20/99 to 9/22/99
Received: 9/23/99
Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Date	Analyzed	Surrogate	Reporting	Limit	Result	Units	Notes*
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UST (continued)
Ethylbenzene 0990764 9/25/99 9/27/99 50.0 ug/l Water

Hexachlorobutadiene	"	"	"	"	"	"	500	ND	"	"	"
2-Hexanone	"	"	"	"	"	"	50.0	134	"	"	"
Isopropylbenzene	"	"	"	"	"	"	50.0	ND	"	"	"
p-Isopropyltoluene	"	"	"	"	"	"	250	ND	"	"	"
4-Methyl-2-pentanone	"	"	"	"	"	"	250	ND	"	"	"
Methylene chloride	"	"	"	"	"	"	50.0	1050	"	"	"
Naphthalene	"	"	"	"	"	"	50.0	316	"	"	"
n-Propylbenzene	"	"	"	"	"	"	50.0	ND	"	"	"
Styrene	"	"	"	"	"	"	50.0	ND	"	"	"
1,1,1,2-Tetrachloroethane	"	"	"	"	"	"	50.0	ND	"	"	"
1,1,2,2-Tetrachloroethane	"	"	"	"	"	"	50.0	725	"	"	"
Tetrahydroethene	"	"	"	"	"	"	50.0	3940	"	"	"
Toluene	"	"	"	"	"	"	50.0	ND	"	"	"
1,2,3-Trichlorobenzene	"	"	"	"	"	"	50.0	ND	"	"	"
1,2,4-Trichlorobenzene	"	"	"	"	"	"	50.0	287	"	"	"
1,1,1-Trichloroethane	"	"	"	"	"	"	50.0	ND	"	"	"
1,1,2-Trichloroethane	"	"	"	"	"	"	50.0	ND	"	"	"
Trichloroethene	"	"	"	"	"	"	50.0	ND	"	"	"
Trichlorofluoromethane	"	"	"	"	"	"	50.0	ND	"	"	"
1,2,3-Trichloropropane	"	"	"	"	"	"	50.0	4290	"	"	"
1,2,4-Trimethylbenzene	"	"	"	"	"	"	50.0	1240	"	"	"
1,3,5-Trimethylbenzene	"	"	"	"	"	"	50.0	ND	"	"	"
Vinyl chloride	"	"	"	"	"	"	50.0	5450	"	"	"
o-Xylene	"	"	"	"	"	"	100	12100	"	"	"
m,p-Xylene	"	"	"	"	"	"	93.5	"	"	"	"
Surrogate: 4-BFB	"	"	"	"	"	"	75.0-135	113	"	"	"
Surrogate: 1,2-DCA-d4	"	"	"	"	"	"	70.0-135	107	"	"	"
Surrogate: Dibromofluoromethane	"	"	"	"	"	"	80.0-125	96.0	"	"	"
Surrogate: Toluene-d8	"	"	"	"	"	"	80.0-120	"	"	"	"

North Creek Analytical - Portland

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Portland, OR 97232

Project: Emerald Petroleum
Project Number: N/A
Project Manager: Anne Ackerman
Sampled: 9/20/99 to 9/22/99
Received: 9/23/99
Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Analized	Surrogate	Reporting	Limit	Result	Units	Notes*
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MW4
Acetone
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoforn
Bromomethane
2-Butanone
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
1,2-Dibromo-3-chloropropane
Dibromochloromethane
1,2-Dibromomethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
cis-1,2-Dichloroethane
trans-1,2-Dichloroethane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropane
cis-1,3-Dichloropropane
trans-1,3-Dichloropropane

0990764 9/25/99 9/27/99
P909453-18

25.0 ug/l
Water

*Refer to end of report for text of notes and definitions.

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Parametrix, Inc. (PMX) 700 NE Multnomah, Suite 1160 Portland, OR 97232
 Project: Emerald Petroleum Project Manager: Anne Ackerman
 Project Number: N/A
 Sampled: 9/20/99 to 9/22/99 Received: 9/23/99 Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B
 North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Date	Analyzed	Surrogate	Reporting	Limit	Result	Units	Notes
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MW-4 (continued)	Ethylbenzene	0990764	9/25/99	9/27/99	P909453-18	1.00	ND	ug/l	Water		
	Hexachlorobutadiene					2.00	ND				
	2-Hexanone					10.0	ND				
	Isopropylbenzene					1.00	ND				
	p-Isopropyltoluene					1.00	ND				
	4-Methyl-2-pentanone					1.00	ND				
	Methylene chloride					5.00	ND				
	Naphthalene					5.00	ND				
	n-Propylbenzene					1.00	ND				
	Styrene					1.00	ND				
	1,1,1,2-Tetrachloroethane					1.00	ND				
	1,1,2,2-Tetrachloroethane					1.00	ND				
	Tetrachloroethene					1.00	ND				
	Toluene					1.00	15.1				
	1,2,3-Trichlorobenzene					1.00	ND				
	1,2,4-Trichlorobenzene					1.00	ND				
	1,1,1-Trichloroethane					1.00	ND				
	1,1,2-Trichloroethane					1.00	2.01				
	Trichloroethene					1.00	ND				
	Trichlorofluoromethane					1.00	ND				
	1,2,3-Trichloropropane					1.00	ND				
	1,2,4-Trichlorobenzene					1.00	ND				
	1,3,5-Trichlorobenzene					1.00	ND				
	Vinyl chloride					1.00	ND				
	o-Xylene					1.00	ND				
	m,p-Xylene					2.00	ND				
Surrogate: 4-BFB						75.0-135					
Surrogate: 1,2-DCA-d4						70.0-135					
Surrogate: Dibromofluoromethane						80.0-125					
Surrogate: Toluene-d8						80.0-120					
									96.0	%	
									108		
									103		

North Creek Analytical - Portland

*Refer to end of report for text of notes and definitions.

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*Refer to end of report for text of notes and definitions.

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[illegible]

Analyte	Batch	Date	Date	Surrogate	Reporting	Limit	Result	Units	Notes*
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Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Reported:	10/21/99 01:43
Received:	9/23/99
Sampled:	9/20/99 to 9/22/99



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Parametrix, Inc.-(PMX) 700 NE Multnomah, Suite 1160 Portland, OR 97232
 Project: Emerald Petroleum Project Number: N/A Project Manager: Anne Ackerman
 Sampled: 9/20/99 to 9/22/99 Received: 9/23/99 Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B
 North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Date	Analyzed	Surrogate	Reporting	Limit	Result	Units	Notes*
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MTW-5 (continued)	0990764	9/25/99	9/27/99	P909453-19	Water	ND	1.00	ug/l	ND	2.00	93.5	%
Ethylbenzene						ND	1.00		ND	1.00	3.67	
Hexachlorobutadiene						ND	2.00		ND	1.00	ND	
2-Hexanone						ND	10.0		ND	1.00	ND	
Isopropylbenzene						ND	1.00		ND	1.00	ND	
p-Isopropyltoluene						ND	1.00		ND	1.00	ND	
4-Methyl-2-pentanone						ND	5.00		ND	5.00	ND	
Methylene chloride						ND	5.00		ND	5.00	ND	
Naphthalene						ND	1.00		ND	1.00	ND	
n-Propylbenzene						ND	1.00		ND	1.00	ND	
Styrene						ND	1.00		ND	1.00	ND	
1,1,1,2-Tetrachloroethane						ND	1.00		ND	1.00	ND	
1,1,2,2-Tetrachloroethane						ND	1.00		ND	1.00	ND	
Tetrachloroethene						ND	1.00		ND	1.00	23.6	
Toluene						ND	1.00		ND	1.00	ND	
1,2,3-Trichlorobenzene						ND	1.00		ND	1.00	ND	
1,2,4-Trichlorobenzene						ND	1.00		ND	1.00	ND	
1,1,1-Trichloroethane						ND	1.00		ND	1.00	3.67	
1,1,2-Trichloroethane						ND	1.00		ND	1.00	ND	
Trichloroethene						ND	1.00		ND	1.00	2.53	
Trichlorofluoromethane						ND	1.00		ND	1.00	ND	
1,2,3-Trichloropropane						ND	1.00		ND	1.00	ND	
1,2,4-Trimethylbenzene						ND	1.00		ND	1.00	ND	
1,3,5-Trimethylbenzene						ND	1.00		ND	1.00	ND	
Vinyl chloride						ND	1.00		ND	1.00	ND	
o-Xylene						ND	1.00		ND	1.00	ND	
m,p-Xylene						ND	2.00		ND	1.00	ND	
Surrogate: 4-BFB						ND	75.0-135		93.5	96.0	114	%
Surrogate: 1,2-DCA-d4						ND	70.0-135		114	103	103	%
Surrogate: Dibromofluoromethane						ND	80.0-125		103	103	103	%
Surrogate: Toluene-d8						ND	80.0-120		103	103	103	%

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Parameter, Inc. (PMX) Project: Emerald Petroleum
 700 NE Multnomah, Suite 1160 Project Number: N/A
 Portland, OR 97232 Project Manager: Anne Ackerman
 Sampled: 9/20/99 to 9/22/99 Received: 9/23/99 Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Analyzed	Surrogate	Reporting	Limit	Result	Units	Notes*
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MTW-6 Acetone 0990764 9/25/99 9/27/99 P909453-20 ug/l Water

trans-1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
cis-1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
1,1-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
trans-1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
1,3-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
2,2-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
1,1-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
cis-1,3-Dichloropropene	"	"	"	"	"	1.00	ND	"	"	"
trans-1,3-Dichloropropene	"	"	"	"	"	1.00	ND	"	"	"
Bromobenzene	"	"	"	"	"	1.00	ND	"	"	"
Bromochloromethane	"	"	"	"	"	1.00	ND	"	"	"
Bromomethane	"	"	"	"	"	1.00	ND	"	"	"
2-Butanone	"	"	"	"	"	10.0	ND	"	"	"
n-Butylbenzene	"	"	"	"	"	25.0	ND	"	"	"
sec-Butylbenzene	"	"	"	"	"	1.00	ND	"	"	"
tert-Butylbenzene	"	"	"	"	"	1.00	ND	"	"	"
Carbon disulfide	"	"	"	"	"	1.00	ND	"	"	"
Carbon tetrachloride	"	"	"	"	"	10.0	ND	"	"	"
Chlorobenzene	"	"	"	"	"	2.00	ND	"	"	"
Chloroethane	"	"	"	"	"	1.00	ND	"	"	"
Chloroform	"	"	"	"	"	2.00	ND	"	"	"
Chloromethane	"	"	"	"	"	1.00	ND	"	"	"
2-Chlorotoluene	"	"	"	"	"	5.00	ND	"	"	"
4-Chlorotoluene	"	"	"	"	"	1.00	ND	"	"	"
1,2-Dibromo-3-chloropropane	"	"	"	"	"	1.00	ND	"	"	"
Dibromochloromethane	"	"	"	"	"	1.00	ND	"	"	"
1,2-Dibromomethane	"	"	"	"	"	1.00	ND	"	"	"
Dibromomethane	"	"	"	"	"	1.00	ND	"	"	"
1,2-Dichlorobenzene	"	"	"	"	"	1.00	ND	"	"	"
1,3-Dichlorobenzene	"	"	"	"	"	1.00	ND	"	"	"
1,4-Dichlorobenzene	"	"	"	"	"	1.00	ND	"	"	"
Dichlorodifluoromethane	"	"	"	"	"	1.00	ND	"	"	"
1,1-Dichloroethane	"	"	"	"	"	5.00	ND	"	"	"
1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
1,1-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
cis-1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
trans-1,2-Dichloroethane	"	"	"	"	"	1.00	ND	"	"	"
1,2-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
1,3-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
2,2-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
1,1-Dichloropropane	"	"	"	"	"	1.00	ND	"	"	"
cis-1,3-Dichloropropene	"	"	"	"	"	1.00	ND	"	"	"
trans-1,3-Dichloropropene	"	"	"	"	"	1.00	ND	"	"	"

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*Refer to end of report for text of notes and definitions.

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network

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[illegible]

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Paranetrix, Inc.-(PMX)	Project: Emerald Petroleum	Sampled: 9/20/99 to 9/22/99
700 NE Multnomah, Suite 1160	Project Number: N/A	Received: 9/23/99
Portland, OR 97232	Project Manager: Anne Ackerman	Reported: 10/21/99 01:43

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Parametrix, Inc. (PMX) Project: Emerald Petroleum
 700 NE Multnomah, Suite 1160 Project Number: N/A
 Portland, OR 97232 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Volatile Organic Compounds per EPA Method 8260B
 North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Analyzed	Surrogate	Reporting	Limit	Result	Units	Notes
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Trip Blank 0990876 9/29/99 9/29/99 P909453-21
 Acetone 25.0 ug/l
 Benzene 1.00 ND
 Bromobenzene 1.00 ND
 Bromochloromethane 1.00 ND
 Bromodichloromethane 1.00 ND
 Bromoform 1.00 ND
 Bromomethane 10.0 ND
 2-Butanone 25.0 ND
 n-Butylbenzene 1.00 ND
 sec-Butylbenzene 1.00 ND
 tert-Butylbenzene 1.00 ND
 Carbon disulfide 10.0 ND
 Carbon tetrachloride 2.00 ND
 Chlorobenzene 1.00 ND
 Chloroethane 2.00 ND
 Chloroform 1.00 ND
 Chloromethane 5.00 ND
 2-Chlorotoluene 1.00 ND
 4-Chlorotoluene 1.00 ND
 1,2-Dibromo-3-chloropropane 1.00 ND
 Dibromochloromethane 1.00 ND
 1,2-Dibromomethane 1.00 ND
 Dibromomethane 1.00 ND
 1,2-Dichlorobenzene 1.00 ND
 1,3-Dichlorobenzene 1.00 ND
 1,4-Dichlorobenzene 1.00 ND
 Dichlorodifluoromethane 5.00 ND
 1,1-Dichloroethane 1.00 ND
 1,2-Dichloroethane 1.00 ND
 1,1-Dichloroethene 1.00 ND
 cis-1,2-Dichloroethene 1.00 ND
 trans-1,2-Dichloroethene 1.00 ND
 1,2-Dichloropropane 1.00 ND
 1,3-Dichloropropane 1.00 ND
 2,2-Dichloropropane 1.00 ND
 1,1-Dichloropropane 1.00 ND
 cis-1,3-Dichloropropane 1.00 ND
 trans-1,3-Dichloropropane 1.00 ND

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Parametrix, Inc. (PMX) Project Emerald Petroleum
 700 NE Multnomah, Suite 1160 Project Number: N/A
 Portland, OR 97232 Project Manager: Anne Ackerman
 Sampled: 9/20/99 to 9/22/99 Received: 9/23/99 Reported: 10/21/99 01:43

Volatile Organic Compounds per EPA Method 8260B
 North Creek Analytical - Portland

Analyte	Batch	Date	Prepared	Date	Analyzed	Surrogate	Limit	Reporting	Result	Units	Notes*
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Trip Blank (continued)											
Ethylbenzene	0990876	9/29/99	9/29/99					1.00	ND	ug/l	Water
Hexachlorobutadiene								2.00	ND		
2-Hexanone								10.0	ND		
Isopropylbenzene								1.00	ND		
p-Isopropyltoluene								1.00	ND		
4-Methyl-2-pentanone								1.00	ND		
Methylene chloride								5.00	ND		
Naphthalene								1.00	ND		
n-Propylbenzene								1.00	ND		
Styrene								1.00	ND		
1,1,1,2-Tetrachloroethane								1.00	ND		
1,1,2,2-Tetrachloroethane								1.00	ND		
1,1,2,2-Tetrachloroethane								1.00	ND		
Toluene								1.00	ND		
1,2,3-Trichlorobenzene								1.00	ND		
1,2,4-Trichlorobenzene								1.00	ND		
1,1,1-Trichloroethane								1.00	ND		
1,1,2-Trichloroethane								1.00	ND		
Trichloroethene								1.00	ND		
Trichlorofluoromethane								1.00	ND		
1,2,3-Trichloropropane								1.00	ND		
1,2,4-Trimethylbenzene								1.00	ND		
1,3,5-Trimethylbenzene								1.00	ND		
Vinyl chloride								1.00	ND		
o-Xylene								1.00	ND		
m,p-Xylene								2.00	ND		
Surrogate: 4-BFB								75.0-135	103	%	
Surrogate: 1,2-DCA-d4								70.0-135	109		
Surrogate: Dibromofluoromethane								80.0-125	100		
Surrogate: Toluene-d8								80.0-120	94.5		

P909453-21

0990876 9/29/99 9/29/99

North Creek Analytical - Portland
 Philip Nerenberg, Laboratory Manager
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Parametrix, Inc.-(PMX)
 700 NE Multnomah, Suite 1160
 Portland, OR 97232
 Project: Emerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Dry Weight Determination North Creek Analytical - Portland

Sample Name	Lab ID	Matrix	Result	Units
MW-4,15'	P909453-02	Soil	93.7	%
MW-5,15'	P909453-07	Soil	91.2	%
MW-6,15'	P909453-12	Soil	93.3	%

North Creek Analytical - Portland

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
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Parametrix, Inc. (PMIX) 700 NE Multnomah, Suite 1160
 Project: Emerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Gasoline Hydrocarbons per MW/LPH-G Method/Quality Control
 North Creek Analytical, Inc. Portland

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% Limit	% Notes
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Batch: 0990716	Date Prepared: 9/24/99	Extraction Method: EPA 5030	Blank	Gasoline Range Hydrocarbons	9/28/99	ND	mg/kg dry	2.50	70.4
LCS	0990716-BS1			Gasoline Range Hydrocarbons	9/28/99	31.3	mg/kg dry	50.0-150	117
Surrogate: 4-BFB	"					2.50		50.0-150	106
Duplicate	0990716-DUP2	P909367-07		Gasoline Range Hydrocarbons	9/28/99	ND	mg/kg dry	50.0-150	69.9
Surrogate: 4-BFB	"					3.36		50.0-150	50.0
Duplicate	0990716-DUP3	P909206-02		Gasoline Range Hydrocarbons	9/28/99	1530	mg/kg dry	50.0-150	1.98
Surrogate: 4-BFB	"					3.26		50.0-150	NR

Batch: 0990773	Date Prepared: 9/27/99	Extraction Method: EPA 5030	Blank	Gasoline Range Hydrocarbons	9/27/99	ND	ug/l	80.0	107
LCS	0990773-BS1			Gasoline Range Hydrocarbons	9/27/99	1250	ug/l	50.0-150	102
Surrogate: 4-BFB	"					50.0		50.0-150	101
Duplicate	0990773-DUP1	P909408-01		Gasoline Range Hydrocarbons	9/27/99	10100	ug/l	50.0-150	84.8
Surrogate: 4-BFB	"					50.0		50.0-150	1.96

Batch: 0990773	Date Prepared: 9/27/99	Extraction Method: EPA 5030	Blank	Gasoline Range Hydrocarbons	9/27/99	ND	ug/l	80.0	107
LCS	0990773-BS1			Gasoline Range Hydrocarbons	9/27/99	1250	ug/l	50.0-150	102
Surrogate: 4-BFB	"					50.0		50.0-150	101
Duplicate	0990773-DUP1	P909408-01		Gasoline Range Hydrocarbons	9/27/99	10100	ug/l	50.0-150	84.8
Surrogate: 4-BFB	"					50.0		50.0-150	1.96

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Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
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Parametrix, Inc. (PMX) 700 NE Multnomah, Suite 1160
 Project: Emerald Petroleum
 Project Number: N/A
 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Diesel and Heavy Range Hydrocarbons per NW-PPH-DX Method/Quality Control

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% Limit	% Notes
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Batch: 0990802	Date Prepared: 9/27/99	Extraction Method: TPH-D Extraction	Blank	0990802-BLKI	9/28/99	ND	mg/kg dry	25.0	50.0
Heavy Oil Range Hydrocarbons	"	"	ND	"	9/28/99	ND	mg/kg dry	50.0	93.0
Surrogate: 1-Chlorooctadecane	"	5.00	4.65	"	"	50.0	"	50.0-150	"

LCS	0990802-BSI	9/28/99	126	124	mg/kg dry	98.4	91.1	50.0-150	71.0
Heavy Oil Range Hydrocarbons	"	"	51.4	46.8	"	"	"	50.0-150	"
Surrogate: 1-Chlorooctadecane	"	5.00	3.55	"	"	"	"	50.0-150	"

Duplicate	0990802-DUP1	P909453-02	9/28/99	48.0	49.4	mg/kg dry	50.0	2.87	50.0
Diesel Range Organics	"	"	ND	ND	"	"	"	50.0-150	"
Surrogate: 1-Chlorooctadecane	"	5.34	5.63	"	"	"	"	50.0-150	105

Duplicate	0990802-DUP2	P909464-03	9/28/99	2980	2290	mg/kg dry	50.0	26.2	50.0
Heavy Oil Range Hydrocarbons	"	ND	ND	59.8	"	"	"	50.0-150	105
Surrogate: 1-Chlorooctadecane	"	5.41	5.68	"	"	"	"	50.0-150	"

Batch: 0990874	Date Prepared: 9/29/99	Extraction Method: TPH-D Extraction	Blank	0990874-BLKI	9/29/99	ND	mg/l	0.250	0.500
Diesel Range Organics	"	"	ND	ND	"	"	"	50.0-150	110
Heavy Oil Range Hydrocarbons	"	"	ND	ND	"	"	"	50.0-150	"
Surrogate: 1-Chlorooctadecane	"	0.100	0.110	"	"	"	"	50.0-150	110

LCS	0990874-BSI	9/29/99	2.55	2.74	mg/l	107	101	50.0-150	110
Diesel Range Organics	"	"	1.32	1.33	"	"	"	50.0-150	"
Surrogate: 1-Chlorooctadecane	"	0.100	0.110	"	"	"	"	50.0-150	"

LCS Dup	0990874-BSDI	9/29/99	2.55	2.77	mg/l	109	102	50.0	1.85
Diesel Range Organics	"	"	1.32	1.34	"	"	"	50.0-150	"
Heavy Oil Range Hydrocarbons	"	"	0.100	0.107	"	"	"	50.0-150	107
Surrogate: 1-Chlorooctadecane	"	"	"	"	"	"	"	50.0	0.985

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* Refer to end of report for text of notes and definitions

North Creek Analytical, Inc.
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Parameter: Inc.-(PMX)
700 NE Multnomah, Suite 1160
Portland, OR 97232
Project: Emerald Petroleum
Project Number: N/A
Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

10000 Samples per EPA 6000/7000 Sales Methods/Quality Control
North Creek Analytical - Portland

Analyte	Date	Spike	Sample	QC	Result	Units	Reporting Limit	Recovery	% Limit	% Notes
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Batch: 1090021 Date Prepared: 10/1/99 Extraction Method: EPA 3050
Blank 10/4/99 ND mg/kg dry 10.0
LCS 1090021-BS1
Lead 10/4/99 100 mg/kg dry 86.0
Duplicate 1090021-DUP1
Lead 10/4/99 40.2 mg/kg dry 33.7
Matrix Spike 1090021-MS1
Lead 10/4/99 107 40.2 mg/kg dry 134
Matrix Spike 1090021-MS2
Lead 10/4/99 108 ND mg/kg dry 87.6
Batch: 1090076 Date Prepared: 10/4/99 Extraction Method: EPA 200/3005
Blank 1090076-BL1K1
Lead 10/5/99 ND mg/l 0.00100
LCS 1090076-BS1
Lead 10/5/99 0.100 mg/l 0.0960
Duplicate 1090076-DUP1
Lead 10/5/99 0.0176 mg/l 0.0174
Matrix Spike 1090076-MS1
Lead 10/5/99 0.100 0.0176 mg/l 0.111
Matrix Spike 1090076-MS2
Lead 10/5/99 0.100 0.0155 mg/l 0.105
Batch: 1090076 Date Prepared: 10/5/99 Extraction Method: EPA 200/3005
Blank 1090076-BL1K1
Lead 10/5/99 ND mg/l 0.00100
LCS 1090076-BS1
Lead 10/5/99 0.100 mg/l 0.0960
Duplicate 1090076-DUP1
Lead 10/5/99 0.0176 mg/l 0.0174
Matrix Spike 1090076-MS1
Lead 10/5/99 0.100 0.0176 mg/l 0.111
Matrix Spike 1090076-MS2
Lead 10/5/99 0.100 0.0155 mg/l 0.105

North Creek Analytical - Portland
*Refer to end of report for text of notes and definitions.

[Signature]

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[illegible]

Analyte	Date	Spike	Sample	QC	Units	Recovery Limits	% Limit	RPD	% Notes
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Volatile Organic Compounds per EPA Method 8260B, Quality Control

Paranetrix, Inc.-(PMX)	Project: Emerald Petroleum	Project Number: N/A	Reported: 10/21/99 01:43
700 NE Multnomah, Suite 1160			Received: 9/23/99
Portland, OR 97232	Project Manager: Anne Ackerman		Sampled: 9/20/99 to 9/22/99

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Parametrix, Inc. (PMX) Project: Emerald Petroleum Project Number: N/A
 700 NE Multnomah, Suite 1160 Project Manager: Anne Ackerman
 Portland, OR 97232 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

North Creek Analytical - Portland
 Volatile Organic Compounds per EPA Method 8260B Quality Control

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% RPD	% Notes
---------	------	-------	--------	----	-------	-----------------	----------	-------	---------

Blank (continued)	0990764-BLKI	9/27/99	ND	ug/l	1.00				
trans-1,3-Dichloropropene			ND		1.00				
Ethylbenzene			ND		1.00				
Hexachlorobutadiene			ND		2.00				
2-Hexanone			ND		10.0				
Isopropylbenzene			ND		1.00				
p-Isopropyltoluene			ND		1.00				
4-Methyl-2-pentanone			ND		5.00				
Methylene chloride			ND		5.00				
Naphthalene			ND		1.00				
n-Propylbenzene			ND		1.00				
Styrene			ND		1.00				
1,1,1,2-Tetrachloroethane			ND		1.00				
1,1,2,2-Tetrachloroethane			ND		1.00				
Toluene			ND		1.00				
1,2,3-Trichlorobenzene			ND		1.00				
1,2,4-Trichlorobenzene			ND		1.00				
1,1,1-Trichloroethane			ND		1.00				
1,1,2-Trichloroethane			ND		1.00				
Trichloroethene			ND		1.00				
Trichlorofluoromethane			ND		1.00				
1,2,3-Trichloropropane			ND		1.00				
1,2,4-Trichlorobenzene			ND		1.00				
1,3,5-Trimethylbenzene			ND		1.00				
Vinyl chloride			ND		1.00				
o-Xylene			ND		1.00				
m,p-Xylene			ND		2.00				
Surrogate: 4-BFB			20.0		18.8				
Surrogate: 1,2-DC4-d4			20.0		22.3				
Surrogate: Dibromofluoromethane			20.0		20.5				
Surrogate: Toluene-d8			20.0		18.3				
ICS	0990764-BSI	9/27/99	20.0		18.0				
Benzene			20.0	ug/l	80.0-125	90.0			
Chlorobenzene			20.0		80.0-125	96.0			
1,1-Dichloroethene			20.0		70.0-135	96.5			
Toluene			20.0		80.0-125	91.0			
Trichloroethene			20.0		70.0-130	92.5			

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 *Refer to end of report for text of notes and definitions.



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Parameter, Inc.-(PMX) Project: Emerald Petroleum
700 NE Multnomah, Suite 1160 Project Number: N/A
Portland, OR 97232 Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Volatile Organic Compounds per EPA Method 8260B/Quality Control

Analyte	Date	Spike	Sample	QC	Reporting Limit	Recovery	% Limit	% Notes
	Analyzed	Level	Result	Result	Units	Recovery	Limit	

LCS (continued)								
Surrogate: 4-BFB	9/27/99	20.0	18.7	18.7	ug/l	75.0-135	93.5	
Surrogate: 1,2-DCA-d4		20.0	21.4	21.4		70.0-135	107	
Surrogate: Dibromofluoromethane		20.0	20.4	20.4		80.0-125	102	
Surrogate: Toluene-d8		20.0	19.3	19.3		80.0-120	96.5	

LCS Dup								
Benzenes	9/27/99	20.0	18.4	18.4	ug/l	80.0-125	92.0	2.20
Chlorobenzene		20.0	19.2	19.2		80.0-125	96.0	0
1,1-Dichloroethane		20.0	19.3	19.3		70.0-135	96.5	0
Toluene		20.0	17.8	17.8		80.0-125	89.0	2.22
Trichloroethane		20.0	18.2	18.2		70.0-130	91.0	1.63
Surrogate: 4-BFB		20.0	19.1	19.1		75.0-135	95.5	
Surrogate: 1,2-DCA-d4		20.0	21.5	21.5		70.0-135	108	
Surrogate: Dibromofluoromethane		20.0	21.0	21.0		80.0-125	105	
Surrogate: Toluene-d8		20.0	19.4	19.4		80.0-120	97.0	

Extraction Method: MeOH Extraction

Date Prepared: 9/27/99
0990779-BLKI

Blank	9/27/99	ND	ND	2500	ug/kg dry			
Acetone		ND	ND	100				
Benzenes		ND	ND	100				
Bromobenzene		ND	ND	100				
Bromochloromethane		ND	ND	100				
Bromodichloromethane		ND	ND	100				
Bromofluoromethane		ND	ND	100				
Bromomethane		ND	ND	1000				
2-Butanone		ND	ND	2500				
n-Butylbenzene		ND	ND	100				
sec-Butylbenzene		ND	ND	100				
tert-Butylbenzene		ND	ND	100				
Carbon disulfide		ND	ND	1000				
Carbon tetrachloride		ND	ND	200				
Chlorobenzene		ND	ND	100				
Chloroethane		ND	ND	200				
Chloroform		ND	ND	100				
Chloromethane		ND	ND	500				
2-Chlorotoluene		ND	ND	100				
4-Chlorotoluene		ND	ND	100				
1,2-Dibromo-3-chloropropane		ND	ND	100				

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Parametrix, Inc. (PMX) Project: Emerald Petroleum
700 NE Multnomah, Suite 1160 Project Number: N/A
Portland, OR 97232 Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Volatiles Organic Compounds per EPA Method 8260B/Quality Control

North Creek Analytical - Portland

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% RPD	% Notes
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Blank (continued)	9/27/99	ND	ug/kg dry	100	ND	100	100	100	100
Dibromochloromethane	"	ND	"	100	ND	100	100	100	100
Dibromomethane	"	ND	"	100	ND	100	100	100	100
1,2-Dichlorobenzene	"	ND	"	100	ND	100	100	100	100
1,3-Dichlorobenzene	"	ND	"	100	ND	100	100	100	100
1,4-Dichlorobenzene	"	ND	"	100	ND	100	100	100	100
Dichlorodifluoromethane	"	ND	"	500	ND	100	100	100	100
1,1-Dichloroethane	"	ND	"	100	ND	100	100	100	100
1,2-Dichloroethane	"	ND	"	100	ND	100	100	100	100
trans-1,2-Dichloroethene	"	ND	"	100	ND	100	100	100	100
1,2-Dichloropropane	"	ND	"	100	ND	100	100	100	100
1,3-Dichloropropane	"	ND	"	100	ND	100	100	100	100
2,2-Dichloropropane	"	ND	"	100	ND	100	100	100	100
1,1-Dichloropropene	"	ND	"	100	ND	100	100	100	100
cis-1,3-Dichloropropene	"	ND	"	100	ND	100	100	100	100
trans-1,3-Dichloropropene	"	ND	"	100	ND	100	100	100	100
Ethylbenzene	"	ND	"	100	ND	100	100	100	100
Hexachlorobutadiene	"	ND	"	200	ND	100	100	100	100
2-Hexanone	"	ND	"	1000	ND	100	100	100	100
Isopropylbenzene	"	ND	"	100	ND	100	100	100	100
p-Isopropyltoluene	"	ND	"	100	ND	100	100	100	100
4-Methyl-2-pentanone	"	ND	"	500	ND	100	100	100	100
Methylene chloride	"	ND	"	500	ND	100	100	100	100
Naphthalene	"	ND	"	100	ND	100	100	100	100
n-Propylbenzene	"	ND	"	100	ND	100	100	100	100
Styrene	"	ND	"	100	ND	100	100	100	100
1,1,1,2-Tetrachloroethane	"	ND	"	100	ND	100	100	100	100
1,1,2,2-Tetrachloroethane	"	ND	"	100	ND	100	100	100	100
Tetrachloroethene	"	ND	"	100	ND	100	100	100	100
Toluene	"	ND	"	100	ND	100	100	100	100
1,2,3-Trichlorobenzene	"	ND	"	100	ND	100	100	100	100
1,2,4-Trichlorobenzene	"	ND	"	100	ND	100	100	100	100
1,1,1-Trichloroethane	"	ND	"	100	ND	100	100	100	100
1,1,2-Trichloroethane	"	ND	"	100	ND	100	100	100	100
Trichloroethene	"	ND	"	100	ND	100	100	100	100
Trichlorofluoromethane	"	ND	"	100	ND	100	100	100	100

North Creek Analytical - Portland

*Refer to end of report for text of notes and definitions.

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
Environmental Laboratory Network



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Parametrix, Inc. (PMX) Project: Emerald Petroleum
700 NE Multnomah, Suite 1160 Project Number: N/A
Portland, OR 97232 Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Volume Organic compounds per EPA Method 8260B, Quality Control
North Creek Analytical - Portland

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% Limit	RPD	% Notes
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Blank (continued)	1,2,3-Trichloropropane	9/27/99	ND	ND	ug/kg dry	100				
	1,2,4-Trimethylbenzene		ND	ND		100				
	1,3,5-Trimethylbenzene		ND	ND		100				
	Vinyl chloride		ND	ND		100				
	o-Xylene		ND	ND		100				
	m,p-Xylene		ND	ND		200				
	Surrogate: 4-BFB	2000	2160			70.0-130	108			
	Surrogate: 1,2-DCA-d4	2000	1990			65.0-135	99.5			
	Surrogate: Dibromofluoromethane	2000	2110			65.0-130	106			
	Surrogate: Toluene-d8	2000	2250			70.0-120	113			
LCS	Benzenes	9/29/99	2500	2400	ug/kg dry	80.0-135	96.0			
	Chlorobenzene		2500	2230		80.0-135	89.2			
	1,1-Dichloroethene		2500	2120		60.0-150	84.8			
	Toluene		2500	2300		80.0-130	92.0			
	Trichloroethene		2500	2020		70.0-135	80.8			
	Surrogate: 4-BFB	2000	1750			70.0-130	87.5			
	Surrogate: 1,2-DCA-d4	2000	1560			65.0-135	78.0			
	Surrogate: Dibromofluoromethane	2000	1670			65.0-130	83.5			
	Surrogate: Toluene-d8		1880			70.0-120	94.0			
	Matrix Spike	0990779-MS1	2590	2600	ug/kg dry	60.0-135	100			
Matrix Spike Dup	Benzenes	9/29/99	2590	2590		60.0-135	91.9			
	Chlorobenzene		2590	2380		65.0-125	91.9			
	1,1-Dichloroethene		2590	2280		60.0-135	88.0			
	Toluene		2590	2480		60.0-125	95.8			
	Trichloroethene		2590	2150		60.0-125	83.0			
	Surrogate: 4-BFB	2080	1820			70.0-130	87.5			
	Surrogate: 1,2-DCA-d4	2080	1730			65.0-135	83.2			
	Surrogate: Dibromofluoromethane	2080	1910			65.0-130	91.8			
	Surrogate: Toluene-d8		2020			70.0-120	97.1			
	Matrix Spike Dup	0990779-MSD1	2590	2530	ug/kg dry	60.0-135	97.7			
	Benzenes	9/29/99	2590	2320		65.0-125	89.6			
	Chlorobenzene		2590	2170		60.0-135	83.8			
	1,1-Dichloroethene		2590	2170		60.0-135	83.8			
	Toluene		2590	2420		60.0-125	93.4			
	2.54									
	2.53									
	2.50									
	2.50									
	2.50									
	2.54									

North Creek Analytical - Portland
* Refer to end of report for text of notes and definitions

2

*Refer to end of report for text of notes and definitions.

Analyte	Date	Spike	Sample	QC	Result	Units	Reporting Limit	Recovery	% Limit	% RPD	% Notes
Matrix Spike Dup (continued)	0990779-MSD1	P909303-03	2590	ND	2060	ug/kg dry	60.0-125	79.5	25.0	4.31	
Trichloroethene	9/29/99	2590	ND	2060	1810	ug/kg dry	70.0-130	87.0			
Surrogate: 4-BFB		2080			1810		70.0-130	87.0			
Surrogate: 1,2-DCA-d4		2080			1710		65.0-135	82.2			
Surrogate: Dibromofluoromethane		2080			1760		65.0-130	84.6			
Surrogate: Toluene-d8		2080			1980		70.0-120	95.2			
Batch: 0990876	Date Prepared: 9/29/99	Extraction Method: EPA 5030									
Blank	0990876-BLK1	9/29/99	ND	ug/l	25.0						
Acetone					ND						
Benzene					ND						
Bromobenzene					ND						
Bromochloromethane					ND						
Bromodichloromethane					ND						
Bromoforn					ND						
Bromomethane					ND						
2-Butanone					ND						
n-Butylbenzene					ND						
sec-Butylbenzene					ND						
tert-Butylbenzene					ND						
Carbon disulfide					ND						
Carbon tetrachloride					ND						
Chlorobenzene					ND						
Chloroethane					ND						
Chloroform					ND						
Chloromethane					ND						
2-Chlorotoluene					ND						
4-Chlorotoluene					ND						
1,2-Dibromo-3-chloropropane					ND						
Dibromochloromethane					ND						
1,2-Dibromomethane					ND						
Dibromomethane					ND						
1,2-Dichlorobenzene					ND						
1,3-Dichlorobenzene					ND						
1,4-Dichlorobenzene					ND						
Dichlorodifluoromethane					ND						
1,1-Dichloroethane					ND						
1,2-Dichloroethane					ND						
1,1-Dichloroethene					ND						

Volatile Organic Compounds by EPA Method 8260B/Quality Control
North Creek Analytical - Portland

Parametrix, Inc.-(PMX)	Project: Emerald Petroleum	Sampled: 9/20/99 to 9/22/99
700 NE Multnomah, Suite 1160	Project Number: N/A	Received: 9/23/99
Portland, OR 97232	Project Manager: Anne Ackerman	Reported: 10/21/99 01:43

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Parametrix, Inc.-(PMX) 700 NE Multnomah, Suite 1160 Portland, OR 97232
Project: Emerald Petroleum Project Number: N/A
Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Volatiles Organic Compounds per EPA Method 8260B/Quality Control

North Creek Analytical - Portland

Analyte	Date	Spike	Sample	QC	Units	Reporting Limit	Recovery	% RPD	% Limit	% Note
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Blank (continued)	0990876-BLKI	9/29/99	ND	ug/l	1.00	1.00	1.00	1.00	1.00	1.00
cis-1,2-Dichloroethene			ND		1.00	1.00	1.00	1.00	1.00	1.00
trans-1,2-Dichloroethene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,2-Dichloropropane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,3-Dichloropropane			ND		1.00	1.00	1.00	1.00	1.00	1.00
2,2-Dichloropropane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1-Dichloropropene			ND		1.00	1.00	1.00	1.00	1.00	1.00
cis-1,3-Dichloropropene			ND		1.00	1.00	1.00	1.00	1.00	1.00
trans-1,3-Dichloropropene			ND		1.00	1.00	1.00	1.00	1.00	1.00
Ethylbenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
Hexachlorobutadiene			ND		2.00	2.00	2.00	2.00	2.00	2.00
2-Hexanone			ND		10.0	10.0	10.0	10.0	10.0	10.0
Isopropylbenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
p-Isopropyltoluene			ND		1.00	1.00	1.00	1.00	1.00	1.00
4-Methyl-2-pentanone			ND		5.00	5.00	5.00	5.00	5.00	5.00
Methylene chloride			ND		5.00	5.00	5.00	5.00	5.00	5.00
Naphthalene			ND		1.00	1.00	1.00	1.00	1.00	1.00
n-Propylbenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
Styrene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1,1,2-Tetrachloroethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1,2,2-Tetrachloroethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1,2,2-Tetrachloroethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
Toluene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,2,3-Trichlorobenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,2,4-Trichlorobenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1,1-Trichloroethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,1,2-Trichloroethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
Trichloroethene			ND		1.00	1.00	1.00	1.00	1.00	1.00
Trichlorofluoromethane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,2,3-Trichloropropane			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,2,4-Trichlorobenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
1,3,5-Trimethylbenzene			ND		1.00	1.00	1.00	1.00	1.00	1.00
Vinyl chloride			ND		1.00	1.00	1.00	1.00	1.00	1.00
o-Xylene			ND		1.00	1.00	1.00	1.00	1.00	1.00
m,p-Xylene			ND		2.00	2.00	2.00	2.00	2.00	2.00
Surrogate: 4-BFB	20.0	18.8	"	"	75.0-135	94.0	75.0-135	94.0	75.0-135	94.0
Surrogate: 1,2-DC4-d4	20.0	21.4	"	"	70.0-135	107	70.0-135	107	70.0-135	107
Surrogate: Dibromofluoromethane	20.0	20.5	"	"	80.0-125	103	80.0-125	103	80.0-125	103
Surrogate: Toluene-d8	20.0	18.0	"	"	80.0-120	90.0	80.0-120	90.0	80.0-120	90.0

North Creek Analytical - Portland

*Refer to end of report for text of notes and definition

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
Environmental Laboratory Network



Seattle 18938 120th Avenue NE, Suite 101, Bothell, WA 98011-6508
426,420,9200 fax 425,420,9210
East 11115 Montgomery, Suite B, Spokane, WA 99208-4778
509,824,9200 fax 509,824,9290
Portland 8406 SW Nimbus Avenue, Beaverton, OR 97008-7182
503,908,9200 fax 503,908,9210
20392 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541,383,9310 fax 541,382,7588

Parametrix, Inc.-(PMX) Project: Emerald Petroleum
700 NE Multnomah, Suite 1160 Project Number: N/A
Portland, OR 97232 Project Manager: Anne Ackerman
Reported: 10/21/99 01:43
Received: 9/23/99
Sampled: 9/20/99 to 9/22/99

Analyte	Date	Spike	Level	Sample	QC	Reporting Limit	Recovery	% RPD	% Notes
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LCS	0990876-BS1	20.0	18.2	ug/l	80.0-125	91.0	96.5	95.5	81.0	88.5
Benzene		20.0	19.3	"	80.0-125	96.5				
Chlorobenzene		20.0	19.1	"	70.0-135	95.5				
1,1-Dichloroethene		20.0	16.2	"	80.0-125	81.0				
Toluene		20.0	17.7	"	70.0-130	88.5				
Trichloroethene		20.0	17.8	"	75.0-135	89.0				
Surrogate: 4-BFB		20.0	20.7	"	70.0-135	104				
Surrogate: 1,2-DCA-d4		20.0	19.7	"	80.0-125	98.5				
Surrogate: Dibromofluoromethane		20.0	17.0	"	80.0-120	85.0				
Surrogate: Toluene-d8		20.0								

LCS Dup	0990876-BS1	20.0	18.5	ug/l	80.0-125	92.5	25.0	1.63		
Benzene		20.0	19.6	"	80.0-125	98.0	25.0	1.54		
Chlorobenzene		20.0	19.7	"	70.0-135	98.5	25.0	3.09		
1,1-Dichloroethene		20.0	16.8	"	80.0-125	84.0	25.0	3.64		
Toluene		20.0	18.1	"	70.0-130	90.5	25.0	2.23		
Trichloroethene		20.0	18.9	"	75.0-135	94.5				
Surrogate: 4-BFB		20.0	21.3	"	70.0-135	106				
Surrogate: 1,2-DCA-d4		20.0	20.6	"	80.0-125	103				
Surrogate: Dibromofluoromethane		20.0	17.9	"	80.0-120	89.5				
Surrogate: Toluene-d8		20.0								

North Creek Analytical - Portland

*Refer to end of report for text of notes and definitions.

North Creek Analytical, Inc.
Environmental Laboratory Network

Philip Nerenberg, Laboratory Manager



Seattle 18398 120th Avenue NE, Suite 101, Bothell, WA 98011-9908
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99208-4776
 Portland 9408 SW Nimbus Avenue, Beaverton, OR 97008-7132
 Bend 20382 Empire Avenue, Suite F-1, Bend, OR 97701-5711
 Band 641.883.9310 fax 541.382.7588

Parametrix, Inc.-(PMIX) Project: Emerald Petroleum
 700 NE Multnomah, Suite 1160 Project Number: N/A
 Portland, OR 97232 Project Manager: Anne Ackerman
 Reported: 10/21/99 01:43
 Received: 9/23/99
 Sampled: 9/20/99 to 9/22/99

Notes and Definitions

1. Detected hydrocarbons may be due to weathered diesel or bunker oil.
2. Detected hydrocarbons may be due to oil, but also include non-petroleum peaks that suggests the presence of biogenic interferences.
3. The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
4. RPD is not applicable for analyte concentrations less than 5 times the MRL.

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
 Recov. Recovery
 RPD Relative Percent Difference

North Creek Analytical - Portland

Philip Nerenberg, Laboratory Manager

North Creek Analytical, Inc.
 Environmental Laboratory Network



CHAIN OF CUSTODY REPORT

Work Order #

9909453

18039 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2952
East 11115 Montgomery, Suite B. Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9200
6,05 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

TURNAROUND REQUEST in Business Days *

REPORT TO: Parachute			ATTENTION: Steve		
ADDRESS: 700 NE Multnomah #1160			ADDRESS: 700 NE Multnomah #1160		
PHONE: 233 2400			FAX: 233 4825		
PROJECT NAME: Enrollment			ANALYSIS REQUEST: Analysis Request		
PROJECT NUMBER: 27 34103			P.O. NUMBER: 27 34103		
SAMPLED BY: Althea			NCA QUOTE #:		
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NCA SAMPLE ID (Laboratory Use Only)	NCA QUOTE #:		
1. MW-4, 5'	9/20/99 1112		MW-4, 5'		
2. MW-4, 15'	9/20/99 1105		MW-4, 15'		
3. MW-4, 25'	9/20/99 1122		MW-4, 25'		
4. MW-4, 35'	9/20/99 1142		MW-4, 35'		
5. MW-4, 45'	9/20/99 1152		MW-4, 45'		
6. MW-5, 5'	9/20/99 1430		MW-5, 5'		
7. MW-5, 15'	9/20/99 1445		MW-5, 15'		
8. MW-5, 25'	9/20/99 1450		MW-5, 25'		
9. MW-5, 35'	9/20/99 1455		MW-5, 35'		
10. MW-5, 45'	9/22/99 1600		MW-5, 45'		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Althea			PRINT NAME: Althea		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99			DATE: 9/22/99		
PRINT NAME: Steve			PRINT NAME: Steve		
FIRM: NCA			FIRM: NCA		
TIME: 1700			TIME: 1700		
RECEIVED BY: Steve			RECEIVED BY: Steve		
DATE: 9/22/99					



CHAIN OF CUSTODY REPORT

Work Order #

18939 130th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (206) 481-9200 FAX 485-2992
 East 11115 Montgomeery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9280
 1065 S W Nimbus Avenue, Beaverton, OR 97008-7132 (503) 643-9200 FAX 644-2202

REPORT TO: Parametrix
ATTENTION: Anne Adamson
ADDRESS: 700 NE Multnomah #1160
Portland OR 97232
PHONE: 233 2400 FAX: 233 4825
PROJECT NAME: Emerald Peral
PROJECT NUMBER: 27 3154 03
SAMPLED BY: Allen
CLIENT SAMPLE IDENTIFICATION
SAMPLING DATE/TIME
NCA SAMPLE ID (Laboratory Use Only)
ANALYSIS REQUEST: NMTM-g, NMTM-d+o, VOCs, Total lead
P.O. NUMBER
NCA QUOTE #
PRINT NAME: Anne Adamson
DATE: 9/22/99
TIME: 1700
FIRM: NCA
RECEIVED BY: [Signature]
PRINT NAME: Larry Spangler
DATE: 9/22/99
TIME: 1030
FIRM: NCA
ADDITIONAL REMARKS: 100% Spangler

NO.	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NCA SAMPLE ID	ANALYSIS REQUEST	RECEIVED BY	PRINT NAME	DATE	TIME	FIRM
1	MW-6, 5'	9/21/99 810		X					
2	MW-6, 15'	9/21/99 815		X					
3	MW-6, 25'	9/21/99 820							
4	MW-6, 35'	9/21/99 825							
5	MW-6, 45'	9/21/99 830							
6	MW-6, 55'	9/21/99 835							
7	MW-6, 65'	9/21/99 840		X					
8	MW-6, 75'	9/21/99 845		X					
9	MW-6, 85'	9/21/99 850		X					
10	MW-6, 95'	9/21/99 855		X					
11	MW-6, 105'	9/21/99 860		X					
12	MW-6, 115'	9/21/99 865		X					
13	MW-6, 125'	9/21/99 870		X					
14	MW-6, 135'	9/21/99 875		X					
15	MW-6, 145'	9/21/99 880		X					
16	MW-6, 155'	9/21/99 885		X					
17	MW-6, 165'	9/21/99 890		X					
18	MW-6, 175'	9/21/99 895		X					
19	MW-6, 185'	9/21/99 900		X					
20	MW-6, 195'	9/21/99 905		X					
21	MW-6, 205'	9/21/99 910		X					
22	MW-6, 215'	9/21/99 915		X					
23	MW-6, 225'	9/21/99 920		X					
24	MW-6, 235'	9/21/99 925		X					
25	MW-6, 245'	9/21/99 930		X					
26	MW-6, 255'	9/21/99 935		X					
27	MW-6, 265'	9/21/99 940		X					
28	MW-6, 275'	9/21/99 945		X					
29	MW-6, 285'	9/21/99 950		X					
30	MW-6, 295'	9/21/99 955		X					
31	MW-6, 305'	9/21/99 960		X					
32	MW-6, 315'	9/21/99 965		X					
33	MW-6, 325'	9/21/99 970		X					
34	MW-6, 335'	9/21/99 975		X					
35	MW-6, 345'	9/21/99 980		X					
36	MW-6, 355'	9/21/99 985		X					
37	MW-6, 365'	9/21/99 990		X					
38	MW-6, 375'	9/21/99 995		X					
39	MW-6, 385'	9/21/99 1000		X					
40	MW-6, 395'	9/21/99 1005		X					
41	MW-6, 405'	9/21/99 1010		X					
42	MW-6, 415'	9/21/99 1015		X					
43	MW-6, 425'	9/21/99 1020		X					
44	MW-6, 435'	9/21/99 1025		X					
45	MW-6, 445'	9/21/99 1030		X					
46	MW-6, 455'	9/21/99 1035		X					
47	MW-6, 465'	9/21/99 1040		X					
48	MW-6, 475'	9/21/99 1045		X					
49	MW-6, 485'	9/21/99 1050		X					
50	MW-6, 495'	9/21/99 1055		X					
51	MW-6, 505'	9/21/99 1060		X					
52	MW-6, 515'	9/21/99 1065		X					
53	MW-6, 525'	9/21/99 1070		X					
54	MW-6, 535'	9/21/99 1075		X					