



4640 Pecos Street | Unit C | Denver, Colorado 80211
303.433.1322 Phone 303.265.9645 Fax

September 29, 2009

Noble Energy Inc.

804 Grand Avenue

Platteville CO 80651

Marty Faraguna

Project Number: N/A

Project: Leonard L17-2,7

Attached are the analytical results for Leonard L17-2,7 received by Origins Laboratory, Inc. 9/28/2009 3:46:00PM. Please let us know if you have any questions, or if we can help with anything at all.

Noelle E Doyle
Laboratory Manager

The analytical results in the following report were analyzed under the guidelines of EPA Methods specified in SW-846. The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. This laboratory report is intended solely for the above addressee and it is only to be used and or reproduced in its entirety.

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Marty Faraguna
Project Number: N/A
Project: Leonard L17-2,7

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Sampled	Date Received
W	X909088-01	Soil	9/28/2009 10:30:00AM	09/28/2009 15:46
E	X909088-02	Soil	9/28/2009 10:00:00AM	09/28/2009 15:46
N	X909088-03	Soil	9/28/2009 11:30:00AM	09/28/2009 15:46
S	X909088-04	Soil	9/28/2009 1:00:00PM	09/28/2009 15:46
B1	X909088-05	Soil	9/28/2009 1:00:00PM	09/28/2009 15:46
B2	X909088-06	Soil	9/28/2009 1:00:00PM	09/28/2009 15:46

Origins Laboratory, Inc.

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Noelle E Doyle, Laboratory Manager

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Marty Faraguna
Project Number: N/A
Project: Leonard L17-2,7

X909088 page 1 of 3



originslaboratory.com

Client: Noble Energy
Address: 804 Grand Ave
Platteville Co 80601
Telephone Number:
E-Mail Address:
Project Manager: mfaraguna
Project Name: Leonard L17-2,7
Project Number:
Samples Collected by: mje

Sample ID - Description	Date Sampled	Time Sampled	Number of Containers				Preservative		Matrix		Analysis	Sample Instructions
			Unpreserved	HCl	HNO ₃	Other -	Groundwater	Soil	Air - Summa Canister #	Other -		
W	9-28-09	10:30	1									1
E	"	10:00	1									2
N	"	11:30	1									3
S	"	1:00	1									4
B1	"	1:00	1									5
B2	"	1:00	1									6
												7
												8
												9
												10

Relinquished by:	Date	Time	Received by:	Date	Time	Temperature Upon Receipt:
Marty Faraguna	9-28-09	3:30	deboon	9-28-09	15:46	

Relinquished by:	Date	Time	Received by:	Date	Time	Turn Around Time:
						24-hr
						48-hr
						72-hr

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Marty Faraguna
Project Number: N/A
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W
X909088-01 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	12.7	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	ND	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.9 %	77.6-134	"	"	"
Surrogate: Toluene-d8	103 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	98.5 %	74.7-123	"	"	"

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Project Number: N/A
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E

X909088-02 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	12.9	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	ND	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.5 %	77.6-134	"	"	"
Surrogate: Toluene-d8	99.5 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	97.7 %	74.7-123	"	"	"

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N
X909088-03 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	7.72	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	ND	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	98.1 %	77.6-134	"	"	"
Surrogate: Toluene-d8	99.5 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	93.3 %	74.7-123	"	"	"

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Project: Leonard L17-2,7

S
X909088-04 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	17.3	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	ND	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.0 %	77.6-134	"	"	"
Surrogate: Toluene-d8	101 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	97.7 %	74.7-123	"	"	"

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B1

X909088-05 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	ND	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	4.56	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.8 %	77.6-134	"	"	"
Surrogate: Toluene-d8	102 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	98.7 %	74.7-123	"	"	"

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Project Number: N/A
Project: Leonard L17-2,7

B2

X909088-06 (Soil)

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

BTEX by EPA 8260B

Benzene	ND	4.00	ug/kg	1	9128001	09/28/2009	09/29/2009
Toluene	ND	4.00	"	"	"	"	"
Ethylbenzene	5.80	4.00	"	"	"	"	"
o-Xylene	ND	4.00	"	"	"	"	"
m,p-Xylene	ND	8.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	96.0 %	77.6-134	"	"	"
Surrogate: Toluene-d8	99.8 %	81.4-121	"	"	"
Surrogate: 4-Bromofluorobenzene	88.5 %	74.7-123	"	"	"

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Volatile Organic Compounds by EPA Method 8260B – Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 9I28001 – EPA 5030B

Blank (9I28001–BLK1)

Prepared: 09/28/2009 Analyzed: 09/29/2009

Benzene	ND	4.00	ug/kg							
Toluene	ND	4.00	"							
Ethylbenzene	ND	4.00	"							
o-Xylene	ND	4.00	"							
m,p-Xylene	ND	8.00	"							
Surrogate: 1,2-Dichloroethane-d4	62.4		ug/L	62.5		99.8	77.6–134			
Surrogate: Toluene-d8	61.9		"	62.5		99.0	81.4–121			
Surrogate: 4-Bromofluorobenzene	62.1		"	62.5		99.4	74.7–123			

LCS (9I28001–BS1)

Prepared: 09/28/2009 Analyzed: 09/29/2009

Benzene	205	4.00	ug/kg	200		102	77.2–128			
Toluene	171	4.00	"	200		85.3	76.3–130			
Surrogate: 1,2-Dichloroethane-d4	63.6		ug/L	62.5		102	77.6–134			
Surrogate: Toluene-d8	62.0		"	62.5		99.2	81.4–121			
Surrogate: 4-Bromofluorobenzene	61.9		"	62.5		99.0	74.7–123			

Matrix Spike (9I28001–MS1)

Source: X909084–01

Prepared: 09/28/2009 Analyzed: 09/29/2009

Benzene	204	4.00	ug/kg	200	3.60	100	77.6–132			
Toluene	170	4.00	"	200	1.28	84.3	74–136			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	62.5		93.6	77.6–134			
Surrogate: Toluene-d8	63.4		"	62.5		101	81.4–121			
Surrogate: 4-Bromofluorobenzene	61.8		"	62.5		98.9	74.7–123			

Matrix Spike Dup (9I28001–MSD1)

Source: X909084–01

Prepared: 09/28/2009 Analyzed: 09/29/2009

Benzene	195	4.00	ug/kg	200	3.60	95.6	77.6–132	4.38	13.1	
Toluene	162	4.00	"	200	1.28	80.5	74–136	4.55	20.9	
Surrogate: 1,2-Dichloroethane-d4	56.7		ug/L	62.5		90.7	77.6–134			
Surrogate: Toluene-d8	63.5		"	62.5		102	81.4–121			
Surrogate: 4-Bromofluorobenzene	61.4		"	62.5		98.3	74.7–123			

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Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference

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