



December 24, 2015

Eagle Environmental Consulting, Inc.

Martin C Eckert III

4101 Inca Street

Denver

CO 80211

Project Name - Noble - State M 36-5 & 7-36

Project Number - [none]

Attached are your analytical results for Noble - State M 36-5 & 7-36 received by Origins Laboratory, Inc. December 21, 2015. This project is associated with Origins project number X512326-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	X512326-01	Water	December 18, 2015 15:35	12/21/2015 10:20
MW-02	X512326-02	Water	December 18, 2015 15:10	12/21/2015 10:20
MW-03	X512326-03	Water	December 18, 2015 14:20	12/21/2015 10:20
MW-04	X512326-04	Water	December 18, 2015 16:05	12/21/2015 10:20
MW-05R	X512326-05	Water	December 18, 2015 15:50	12/21/2015 10:20
MW-06	X512326-06	Water	December 18, 2015 14:45	12/21/2015 10:20
MW-15R	X512326-07	Water	December 18, 2015 15:25	12/21/2015 10:20
MW-19	X512326-08	Water	December 18, 2015 14:35	12/21/2015 10:20
MW-20	X512326-09	Water	December 18, 2015 14:55	12/21/2015 10:20

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

www.originslaboratory.com

XS12326

ORIGINS
LABORATORY, INC

Client: Eagle Environmental Consulting, Inc.
Address: 4101 Inca St V
Telephone Number: Denver CO 80211
303 433 8479
Email Address: MCE3@eagle-enviro.com

Project Manager: Martin Eckert III
Project Name: State M 36-5 & 7-36
Project Number: JS
Samples Collected By: JS

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summary		
MW-01	12/18/15	1535	3	X				X				1
MW-02		1510										2
MW-03		1420										3
MW-04		1605										4
MW-05R		1550										5
MW-06		1445										6
MW-15R		1525										7
MW-19		1435										8
MW-20		1455										9
												10

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
Ad M	12/18/15	1805	Ad M	12/18/15	1905	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/>
Ad M	12/21/15	1020	Ad M	12/21/15	1030	48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>

Date Results Needed: *None*

Temp Received: 4.9

*Bill to Jacob

Origins Laboratory, Inc.

Jefe Pellegrini

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Eagle Environmental Consulting, Inc.

4101 Inca Street

Denver

CO

80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: YS12326

Client: Eagle Env

Client Project ID: Noble - State

Checklist Completed by: Jeff Smith

Shipped Via: HIP

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 12/22/15

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐

Cooler Number/Temperature: 1 / 4.9 °C 1 / 1 °C 1 / 1 °C (Describe) 1 / 1 °C

Thermometer ID: TOU3

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCC
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) Jeff Smith

Date/Time Reviewed 12/22/15

Origins Laboratory, Inc.

Jen Pellegrini

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Eagle Environmental Consulting, Inc.
4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

MW-01

12/18/2015 3:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. X512326-01 (Water)

BTEX by EPA 8260C

Benzene	1.9	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	6.5	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	99.0 %	84-121			"	"	"
Surrogate: Toluene-d8	102 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	97.4 %	84-114			"	"	"

Origins Laboratory, Inc.



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Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-02

12/18/2015 3:10:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-02 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"
Surrogate: Toluene-d8	103 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"

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Project: Noble - State M 36-5 & 7-36

MW-03

12/18/2015 2:20:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-03 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	106 %	84-121			"	"	"
Surrogate: Toluene-d8	107 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	99.6 %	84-114			"	"	"

Origins Laboratory, Inc.



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Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-04

12/18/2015 4:05:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-04 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"
Surrogate: Toluene-d8	105 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	98.0 %	84-114			"	"	"

Origins Laboratory, Inc.



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Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-05R

12/18/2015 3:50:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-05 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	107 %	84-121			"	"	"
Surrogate: Toluene-d8	107 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"

Origins Laboratory, Inc.



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4101 Inca Street
Denver CO 80211

Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

MW-06

12/18/2015 2:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. X512326-06 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"
Surrogate: Toluene-d8	107 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"

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Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-15R

12/18/2015 3:25:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-07 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"
Surrogate: Toluene-d8	105 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	98.0 %	84-114			"	"	"

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4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-19

12/18/2015 2:35:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-08 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	106 %	84-121			"	"	"
Surrogate: Toluene-d8	107 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	98.8 %	84-114			"	"	"

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Denver CO 80211

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Project Number: [none]

Project: Noble - State M 36-5 & 7-36

MW-20

12/18/2015 2:55:00PM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

Origins Laboratory, Inc.

X512326-09 (Water)

BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B5L2301	12/23/2015	12/23/2015
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"
Surrogate: Toluene-d8	106 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"

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Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - 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 B5L2301 - EPA 5030B (Water)

Blank (B5L2301-BLK1)

Prepared: 12/23/2015 Analyzed: 12/23/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5	105		84-121			
Surrogate: Toluene-d8	62		"	62.5	98.7		85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5	101		84-114			

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Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - 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 B5L2301 - EPA 5030B (Water)

LCS (B5L2301-BS1)

Prepared: 12/23/2015 Analyzed: 12/23/2015

Benzene	51.8	1.0	ug/L	50.0		104	73.3-129			
Toluene	50.6	1.0	"	50.0		101	76.2-123			
Ethylbenzene	51.3	1.0	"	50.0		103	73.6-130			
m,p-Xylene	103	2.0	"	100		103	76.1-126			
o-Xylene	51.6	1.0	"	50.0		103	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		102	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.0	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

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Project Number: [none]

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Volatile Organic Compounds by GC/MS SW846 8260C - 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 B5L2301 - EPA 5030B (Water)

Matrix Spike (B5L2301-MS1)		Source: X512327-01			Prepared: 12/23/2015 Analyzed: 12/23/2015					
Benzene	49.6	1.0	ug/L	50.0	ND	99.3	74-130			
Toluene	48.5	1.0	"	50.0	ND	97.0	73-131			
Ethylbenzene	50.1	1.0	"	50.0	ND	100	76-132			
m,p-Xylene	101	2.0	"	100	ND	101	69-139			
o-Xylene	50.3	1.0	"	50.0	ND	101	74-131			
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		99.0	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.4	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

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Martin C Eckert III
Project Number: [none]
Project: Noble - State M 36-5 & 7-36

Volatile Organic Compounds by GC/MS SW846 8260C - 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 B5L2301 - EPA 5030B (Water)

Matrix Spike Dup (B5L2301-MSD1)		Source: X512327-01			Prepared: 12/23/2015 Analyzed: 12/23/2015					
Benzene	48.7	1.0	ug/L	50.0	ND	97.4	74-130	1.87	20	
Toluene	47.6	1.0	"	50.0	ND	95.2	73-131	1.89	20	
Ethylbenzene	48.6	1.0	"	50.0	ND	97.2	76-132	3.04	20	
m,p-Xylene	98.3	2.0	"	100	ND	98.3	69-139	2.66	20	
o-Xylene	49.0	1.0	"	50.0	ND	98.0	74-131	2.60	20	
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		98.5	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.4	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

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4101 Inca Street

Denver CO 80211

Martin C Eckert III

Project Number: [none]

Project: Noble - State M 36-5 & 7-36

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President