

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



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.



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.

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

XS12320

ORIGINS LABORATORY, INC

Client: Eagle Environmental Consulting, Inc.
 Address: 4101 Inca St
 Telephone Number: Denver CO 80211
 303 433 0479
 Email Address: MCE3@eagle-enviro.com

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

page 1 of 1

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis		Sample Instructions					
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #	Other	Date		Time				
MW-01	12/18/15	1535	3	X				X										
MW-02		1510																
MW-03		1420																
MW-04		1605																
MW-05R		1550																
MW-06		1445																
MW-15R		1525																
MW-19		1435																
MW-20		1455																
Relinquished By:	Date:	Time:	# of Containers	Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #	Other	Date:	Time:	Turnaround Time:	Same Day	48 Hr	72 Hr	
[Signature]	12/18/15	1805	3	X				X				12/18/15	1805		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Relinquished By:	Date:	Time:	# of Containers	Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa #	Other	Date:	Time:	Turnaround Time:	Standard			
[Signature]	12/21/15	1020	3									12/21/15	1020	Standard	<input checked="" type="checkbox"/>			

Temp Received: 4.9
 Date Results Needed: *Note*

Origins Laboratory, Inc.

Jefe Pellegrini

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.

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 _____ °C _____ °C (Describe)
 Thermometer ID: TOUB

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.		X		
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 HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)	X			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.

Jeff Smith 12/22/15
 Reviewed By (Project Manager) Date/Time Reviewed

Origins Laboratory, Inc.



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.

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
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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.



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.

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-02
12/18/2015 3:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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			"	"	"	

Origins Laboratory, Inc.



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.

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-03
12/18/2015 2:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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.



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.

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-04

12/18/2015 4:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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.



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.

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-05R

12/18/2015 3:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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.



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.

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-06

12/18/2015 2:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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

Origins Laboratory, Inc.



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.

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-15R

12/18/2015 3:25:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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			"	"	"	

Origins Laboratory, Inc.



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.

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-19
12/18/2015 2:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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			"	"	"	

Origins Laboratory, Inc.



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.

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-20
12/18/2015 2:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

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			"	"	"	

Origins Laboratory, Inc.



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.

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

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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			

Origins Laboratory, Inc.



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.

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

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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			

Origins Laboratory, Inc.



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.

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

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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			

Origins Laboratory, Inc.



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.

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

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

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			

Origins Laboratory, Inc.



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.

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

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.



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.

Jen Pellegrini For Noelle Doyle Mathis, President