



4/4/18	
N. Wall ~ 3'	
B	<0.002
T	<0.005
E	<0.005
X	<0.005
N	<0.010
G	<0.50
D	<50
EC	0.641
pH	8.6
SAR	0.86

4/4/18	
Floor ~ 6'	
B	<0.002
T	<0.005
E	<0.005
X	<0.005
N	<0.010
G	<50
D	<50

**LEGEND**

- SOIL SAMPLE LOCATION
- FENCE LINE
- CONTAINMENT BERM
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY

4/4/18	
N. Wall ~ 3'	
B	<0.002
T	<0.005
E	<0.005
X	<0.005
N	<0.010
G	<0.50
D	<50
EC	0.300
pH	8.6
SAR	0.130

DATE SAMPLED  
LOCATION and DEPTH (ft)  
BENZENE (mg/kg)  
TOLUENE (mg/kg)  
ETHYLBENZENE (mg/kg)  
TOTAL XYLENES (mg/kg)  
NAPHTHALENE (mg/kg)  
TPH-GRO (mg/kg)  
TPH-DRO (mg/kg)  
EC mmhos/cm  
pH Units  
SAR Units

4/4/18	
Floor ~ 6'	
B	<0.002
T	<0.005
E	<0.005
X	<0.005
N	<0.010
G	<50
D	<50

DATE SAMPLED  
LOCATION and DEPTH (ft)  
BENZENE (mg/kg)  
TOLUENE (mg/kg)  
ETHYLBENZENE (mg/kg)  
TOTAL XYLENES (mg/kg)  
NAPHTHALENE (mg/kg)  
TPH-GRO (mg/kg)  
TPH-DRO (mg/kg)

**Figure 1  
SITE MAP**

**Dinner 14-13, 14, 15 (Center vault)**  
Facility ID - 332186  
SENW Sec 14, T6N, R65W - 40.48749°N 104.63483°W  
Weld County, Colorado

API No. <b>05-123-21946</b>	Prepared by <b>PH</b>	Drawn by <b>TDA</b>
Date <b>5/29/18</b>	Reviewed by <b>PH</b>	Filename <b>V174A</b>



# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

April 17, 2018

Paul Henehan  
Fremont Environmental  
PO Box 1289  
Wellington, CO 80549

RE: Noble - Dinner 14-14, 15 Center Vault

Enclosed are the results of analyses for samples received by Summit Scientific on 04/05/18 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury For Ben Shrewsbury  
President / Laboratory Director



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
Project Manager: Paul Henehan

**Reported:**  
04/17/18 16:26

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W. WALL 3FT	1804062-01	Soil	04/04/18 00:00	04/05/18 15:00
FLOOR 6FT	1804062-02	Soil	04/04/18 00:00	04/05/18 15:00

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Summit Scientific

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**Sample Receipt Checklist**

S2 Work Order: 1804062

Client: Fremont Env. Client Project ID: Noble - Dinner 14-14, 15 (Center Vault)

Shipped Via: Hand Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Matrix (check all that apply):  Air  Soil/Solid  Water  Other: \_\_\_\_\_  
(Describe)

Cooler ID					
Temp (°C)	<u>5.7</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.

Nakita  
Custodian Printed Name

[Signature]  
Signature or Initials of Custodian

4/15/18 1500  
Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
Project Manager: Paul Henehan

**Reported:**  
04/17/18 16:26

**W. WALL 3FT  
1804062-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	1804034	04/06/18	04/06/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		85.5 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		104 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.0 %	70-130		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1804037	04/06/18	04/06/18	EPA 8015M	

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		106 %	80-124		"	"	"	"	

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	<b>2530</b>	2.50	mg/kg dry	1	1804121	04/16/18	04/17/18	EPA 6020B	

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
 Project Manager: Paul Henehan

**Reported:**  
 04/17/18 16:26

**W. WALL 3FT  
 1804062-01 (Soil)**

**Summit Scientific**

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Magnesium	519	1.00	mg/kg dry	1	1804121	04/16/18	04/17/18	EPA 6020B	
Sodium	181	5.00	"	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.860	0.100	units	1	1804077	04/14/18	04/17/18	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.641	0.0100	mmhos/cm	1	1804068	04/13/18	04/13/18	EPA 120.1	
% Solids	92.8		%	"	1804111	04/16/18	04/16/18	Calculation	
pH	8.6		pH Units	"	1804076	04/06/18	04/14/18	EPA 9045D	

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 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
 Project Manager: Paul Henehan

Reported:  
 04/17/18 16:26

**FLOOR 6FT**  
**1804062-02 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0050	mg/kg	1	1804034	04/06/18	04/06/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	50	"	"	"	"	"	"	

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		84.4 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		104 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.1 %	70-130		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1804037	04/06/18	04/06/18	EPA 8015M	

Date Sampled: **04/04/18 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		100 %	80-124		"	"	"	"	

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Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
Project Manager: Paul Henehan

Reported:  
04/17/18 16:26

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

Analyte	Reporting			Spike	Source	%REC			RPD	Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD		

#### Batch 1804034 - EPA 5030 Soil MS

##### Blank (1804034-BLK1)

Prepared & Analyzed: 04/05/18

Benzene	ND	0.0050	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Naphthalene	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0338		"	0.0396		85.5	70-130			
Surrogate: Toluene-d8	0.0418		"	0.0400		105	70-130			
Surrogate: 4-Bromofluorobenzene	0.0337		"	0.0400		84.2	70-130			

##### LCS (1804034-BS1)

Prepared & Analyzed: 04/05/18

Benzene	0.0734	0.0050	mg/kg	0.100		73.4	86-121			
Toluene	0.0764	0.0050	"	0.100		76.4	76-137			
Surrogate: 1,2-Dichloroethane-d4	0.0312		"	0.0396		78.8	70-130			
Surrogate: Toluene-d8	0.0420		"	0.0400		105	70-130			
Surrogate: 4-Bromofluorobenzene	0.0326		"	0.0400		81.5	70-130			

##### Matrix Spike (1804034-MS1)

Source: 1804061-01

Prepared & Analyzed: 04/05/18

Benzene	0.0808	0.0050	mg/kg	0.100	ND	80.8	86-121			
Toluene	0.0824	0.0050	"	0.100	ND	82.4	76-137			
Surrogate: 1,2-Dichloroethane-d4	0.0341		"	0.0396		86.1	70-130			
Surrogate: Toluene-d8	0.0423		"	0.0400		106	70-130			
Surrogate: 4-Bromofluorobenzene	0.0323		"	0.0400		80.8	70-130			

##### Matrix Spike Dup (1804034-MSD1)

Source: 1804061-01

Prepared & Analyzed: 04/05/18

Benzene	0.0713	0.0050	mg/kg	0.100	ND	71.3	86-121	12.5	20	
Toluene	0.0722	0.0050	"	0.100	ND	72.2	76-137	13.2	20	
Surrogate: 1,2-Dichloroethane-d4	0.0328		"	0.0396		82.7	70-130			
Surrogate: Toluene-d8	0.0420		"	0.0400		105	70-130			
Surrogate: 4-Bromofluorobenzene	0.0329		"	0.0400		82.2	70-130			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
 Project Manager: Paul Henehan

**Reported:**  
 04/17/18 16:26

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

**Batch 1804037 - EPA 3550A**

<b>Blank (1804037-BLK1)</b>				Prepared & Analyzed: 04/05/18							
C10-C28 (DRO)	ND	50	mg/kg								
<b>LCS (1804037-BS1)</b>				Prepared & Analyzed: 04/05/18							
C10-C28 (DRO)	530	50	mg/kg	500	106	81.4-129					
<b>Matrix Spike (1804037-MS1)</b>				<b>Source: 1804061-01</b>		Prepared & Analyzed: 04/05/18					
C10-C28 (DRO)	470	50	mg/kg	500	14.9	91.0	77.8-133				
<b>Matrix Spike Dup (1804037-MSD1)</b>				<b>Source: 1804061-01</b>		Prepared & Analyzed: 04/05/18					
C10-C28 (DRO)	508	50	mg/kg	500	14.9	98.5	77.8-133	7.76	8.48		

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Reported:  
04/17/18 16:26

**Soluble Nutrients by EPA 6020/USDA60 6(2, 3A) - Dry Weight Basis - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

**Batch 1804121 - General Preparation**

**Blank (1804121-BLK1)**

Prepared: 04/16/18 Analyzed: 04/17/18

Calcium	ND	2.50	mg/kg wet							
Magnesium	ND	1.00	"							
Sodium	ND	5.00	"							

**LCS (1804121-BS1)**

Prepared: 04/16/18 Analyzed: 04/17/18

Calcium	1120	2.50	mg/kg wet	1000		112	70-130			
Magnesium	1180	1.00	"	1000		118	70-130			
Sodium	1220	5.00	"	1000		122	70-130			

**Duplicate (1804121-DUP1)**

Source: 1804237-01

Prepared: 04/16/18 Analyzed: 04/17/18

Calcium	11100	2.50	mg/kg dry		10200			8.55	20	
Magnesium	1670	1.00	"		1570			5.79	20	
Sodium	260	5.00	"		259			0.300	20	

**Matrix Spike (1804121-MS1)**

Source: 1804237-01

Prepared: 04/16/18 Analyzed: 04/17/18

Calcium	11600	2.50	mg/kg dry	1230	10200	111	70-130			
Magnesium	2800	1.00	"	1230	1570	100	70-130			
Sodium	1680	5.00	"	1230	259	116	70-130			

**Matrix Spike Dup (1804121-MSD1)**

Source: 1804237-01

Prepared: 04/16/18 Analyzed: 04/17/18

Calcium	11600	2.50	mg/kg dry	1230	10200	110	70-130	0.0979	25	
Magnesium	2900	1.00	"	1230	1570	108	70-130	3.55	25	
Sodium	1670	5.00	"	1230	259	115	70-130	0.866	25	

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Project Number: RC# 815902570  
 Project Manager: Paul Henehan

**Reported:**  
 04/17/18 16:26

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

Analyte	Reporting		Spike Level	Source		%REC		RPD		Notes
	Result	Limit		Units	Result	%REC	Limits	RPD	Limit	

**Batch 1804068 - General Preparation**

<b>Blank (1804068-BLK1)</b>			Prepared & Analyzed: 04/13/18							
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
<b>LCS (1804068-BS1)</b>			Prepared & Analyzed: 04/13/18							
Specific Conductance (EC)	0.786	0.0100	mmhos/cm			80-120				
<b>Duplicate (1804068-DUP1)</b>			<b>Source: 1804004-02</b>		Prepared & Analyzed: 04/13/18					
Specific Conductance (EC)	0.446	0.0100	mmhos/cm			0.410			8.33	20

**Batch 1804076 - General Preparation**

<b>Duplicate (1804076-DUP1)</b>			<b>Source: 1804004-02</b>		Prepared: 04/06/18 Analyzed: 04/14/18					
pH	8.3		pH Units			8.2			0.484	20

**Batch 1804111 - General Preparation**

<b>Duplicate (1804111-DUP1)</b>			<b>Source: 1804061-01</b>		Prepared & Analyzed: 04/16/18					
% Solids	93.4		%			93.0			0.429	20

Summit Scientific

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PO Box 1289  
Wellington CO, 80549

Project: Noble - Dinner 14-14, 15 Center Vault

Project Number: RC# 815902570  
Project Manager: Paul Henehan

**Reported:**  
04/17/18 16:26

### Notes and Definitions

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