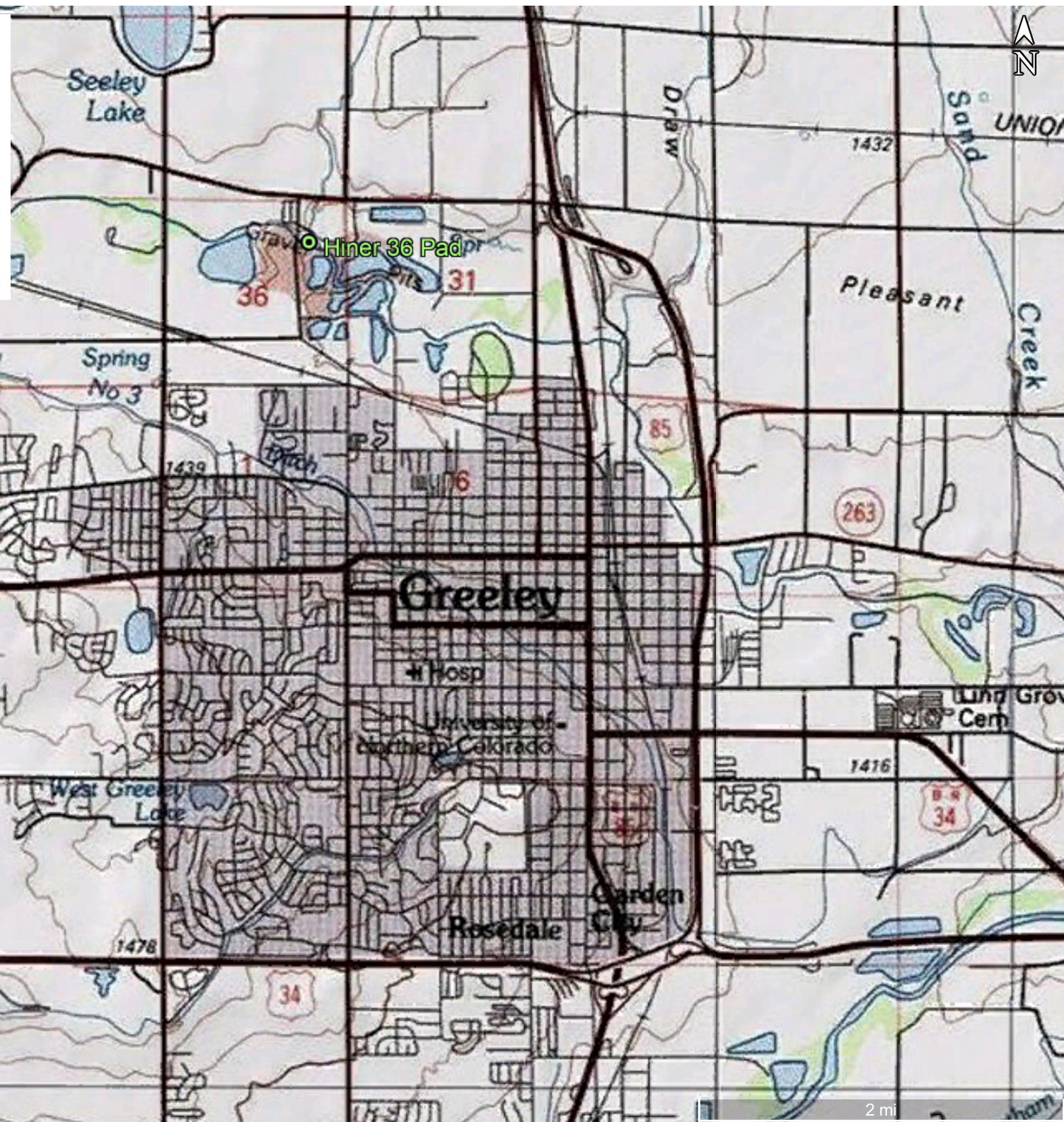
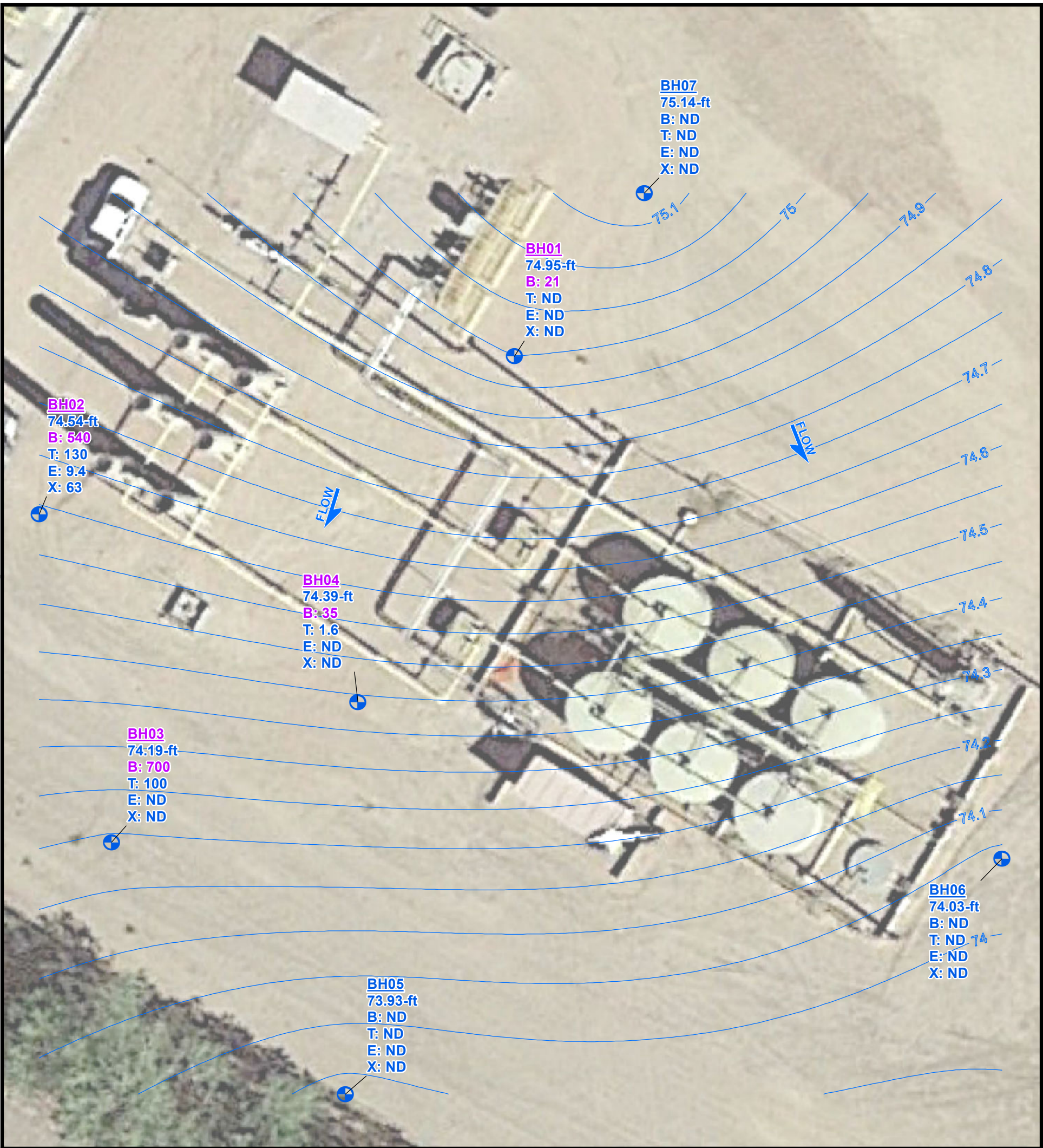




Topographic Location  
Map  
"Hiner Tank Battery"







**Extraction Oil & Gas**  
**Hiner 36 Tank Battery**  
**COGCC Location ID: 446538**  
**Temporary Monitoring Well Layout & GW Elevations for the 2/21/2020 Sampling Event**

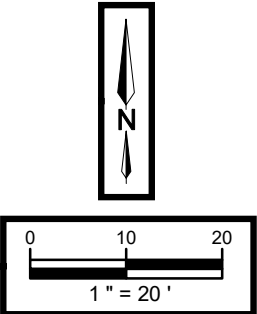
Legal Description: NENE, Sec 36, T6N R66W  
County: Weld  
Land Use: Non-Cropland  
Topography: Not Available  
Run-Off Risk: Low  
Soil Type: Aquolls and Aquepts  
Receiving Waters: Cache la Poudre River



- BH01**  
80.60-ft
- Temp. Monitoring Well Location & Relative GW Elevation
- Estimated Groundwater Contour
- Estimated Groundwater Flow Direction

\* Sample ID in Purple font indicates a regulatory exceedance.

\* Concentration Units in ug/L.  
\* ND - Non-Detect



Sample ID	Latitude NAD83	Longitude NAD83
BH01	40.449073	-104.719683
BH02	40.448991	-104.720012
BH03	40.448818	-104.719963
BH04	40.448891	-104.719792
BH05	40.448684	-104.719802
BH06	40.448807	-104.719347
BH07	40.449160	-104.719593

Spatial data collected for this project was acquired using a GPS with submeter accuracy. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and the underlying aerial imagery. To accurately reflect field conditions, illustrated data may have been manually corrected in order to fit with the aerial imagery reference points and other collected data points.



## Laboratory Results Summary Table - Groundwater Hiner 36 Pad

			Organic Compounds (µg/L)			
COGCC Allowable Concentration (Water)			5	1,000	700	10,000
Location	Sample Date	Sample ID	Benzene	Toluene	Ethylbenzene	Xylenes - total
Hiner 36 Pad	2/21/20	BH01	21	<1.0	<1.0	<2.0
Hiner 36 Pad	2/21/20	BH02	540	130	9.4	63
Hiner 36 Pad	2/21/20	BH03	700	100	<1.0	<2.0
Hiner 36 Pad	2/21/20	BH04	35	1.6	<1.0	<2.0
Hiner 36 Pad	2/21/20	BH05	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	2/21/20	BH06	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	2/21/20	BH07	<1.0	<1.0	<1.0	<2.0

**Attachment A**

**Laboratory Analytical Report**



# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 28, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Hiner 36

Work Order #2002214

Enclosed are the results of analyses for samples received by Summit Scientific on 02/21/20 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President



Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2002214-01	Water	02/21/20 15:15	02/21/20 16:00
BH02	2002214-02	Water	02/21/20 14:10	02/21/20 16:00
BH03	2002214-03	Water	02/21/20 14:40	02/21/20 16:00
BH04	2002214-04	Water	02/21/20 14:20	02/21/20 16:00
BH05	2002214-05	Water	02/21/20 13:47	02/21/20 16:00
BH06	2002214-06	Water	02/21/20 13:30	02/21/20 16:00
BH07	2002214-07	Water	02/21/20 15:00	02/21/20 16:00

Summit Scientific

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# Sample Receipt Checklist

S2 Work Order 2002214

Client: Apex/XOG

Client Project ID: Hiner 36

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: \_\_\_\_\_

☒ ☐ ☐ ☐ ☐

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

Temp (°C)	8.3
-----------	-----

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> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	On Ice
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 samples with holding times due within 48 hours sample 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? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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.				

MP

Custodian Printed Name or Initials

*Muri Premer*

Signature of Custodian

2/21/20

Date/Time





Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH01**  
**2002214-01 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 15:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>21</b>	1.0		ug/l	1	2002234	02/24/20	02/25/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **02/21/20 15:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		109 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		95.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %		21-167		"	"	"	"	

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH02**  
**2002214-02 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>540</b>	10		ug/l	10	2002234	02/24/20	02/25/20	EPA 8260B	
<b>Toluene</b>	<b>130</b>	1.0		"	1	"	"	"	"	
<b>Ethylbenzene</b>	<b>9.4</b>	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>63</b>	2.0		"	"	"	"	"	"	

Date Sampled: **02/21/20 14:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		83.5 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %		21-167		"	"	"	"	

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH03**  
**2002214-03 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>700</b>	10		ug/l	10	2002234	02/24/20	02/25/20	EPA 8260B	
<b>Toluene</b>	<b>100</b>	1.0		"	1	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **02/21/20 14:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		78.3 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		94.4 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %		21-167		"	"	"	"	

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH04**  
**2002214-04 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>35</b>	1.0		ug/l	1	2002234	02/24/20	02/25/20	EPA 8260B	
<b>Toluene</b>	<b>1.6</b>	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **02/21/20 14:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		108 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		95.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %		21-167		"	"	"	"	

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH05**  
**2002214-05 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 13:47**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2002234	02/24/20	02/25/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/21/20 13:47**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH06**  
**2002214-06 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2002234	02/24/20	02/25/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/21/20 13:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**BH07**  
**2002214-07 (Water)**

**Summit Scientific**

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

Date Sampled: **02/21/20 15:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2002234	02/24/20	02/25/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **02/21/20 15:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		115 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

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

### Summit Scientific

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

#### Batch 2002234 - EPA 5030 Water MS

##### Blank (2002234-BLK1)

Prepared: 02/24/20 Analyzed: 02/25/20

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.8		"	13.3		104	23-173			
Surrogate: Toluene-d8	12.4		"	13.3		92.7	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	21-167			

##### LCS (2002234-BS1)

Prepared: 02/24/20 Analyzed: 02/25/20

Benzene	34.4	1.0	ug/l	33.3		103	51-132			
Toluene	36.1	1.0	"	33.3		108	51-138			
Ethylbenzene	39.5	1.0	"	33.3		118	58-146			
m,p-Xylene	70.4	2.0	"	66.7		106	57-144			
o-Xylene	37.8	1.0	"	33.3		114	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.5		"	13.3		101	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.0	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.1	21-167			

##### Matrix Spike (2002234-MS1)

Source: 2002194-41

Prepared: 02/24/20 Analyzed: 02/25/20

Benzene	33.8	1.0	ug/l	33.3	ND	101	34-141			
Toluene	35.1	1.0	"	33.3	ND	105	27-151			
Ethylbenzene	38.4	1.0	"	33.3	ND	115	29-160			
m,p-Xylene	68.4	2.0	"	66.7	ND	103	20-166			
o-Xylene	36.7	1.0	"	33.3	ND	110	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3		106	23-173			
Surrogate: Toluene-d8	12.9		"	13.3		96.9	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.1	21-167			

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

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

**Batch 2002234 - EPA 5030 Water MS**

Matrix Spike Dup (2002234-MSD1)		Source: 2002194-41			Prepared: 02/24/20 Analyzed: 02/25/20					
Benzene	34.8	1.0	ug/l	33.3	ND	105	34-141	3.00	30	
Toluene	36.2	1.0	"	33.3	ND	109	27-151	3.28	30	
Ethylbenzene	40.1	1.0	"	33.3	ND	120	29-160	4.26	30	
m,p-Xylene	71.6	2.0	"	66.7	ND	107	20-166	4.53	30	
o-Xylene	38.4	1.0	"	33.3	ND	115	33-159	4.52	30	
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.3		107	23-173			
Surrogate: Toluene-d8	12.9		"	13.3		96.5	20-170			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.0	21-167			

Summit Scientific

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Extraction Oil&Gas  
370 17th Street Suite 5300  
Denver CO, 80202

Project: Hiner 36  
Project Number: 744.2001.01-446538  
Project Manager: Maggie Graham

**Reported:**  
02/28/20 15:19

### 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