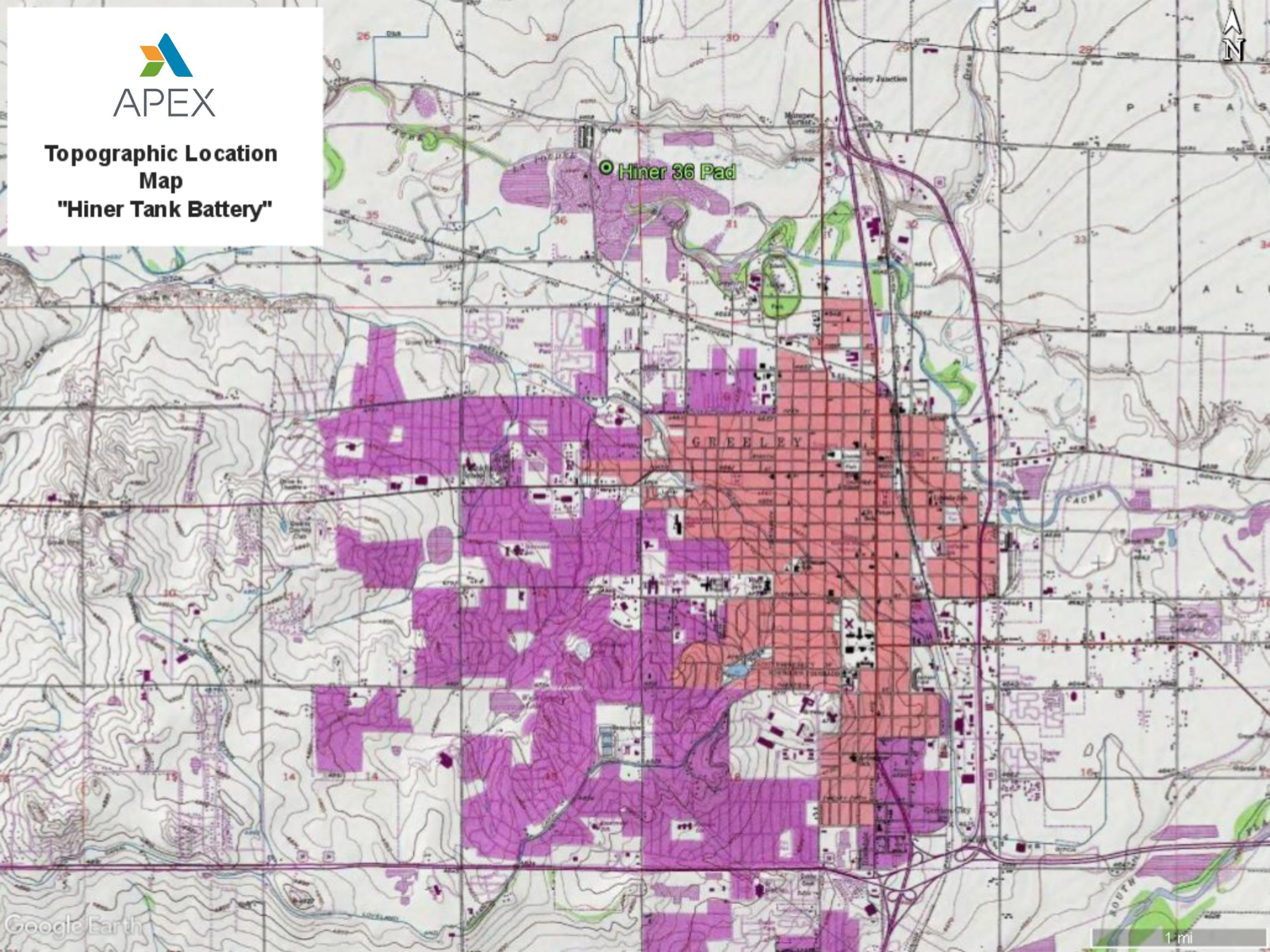
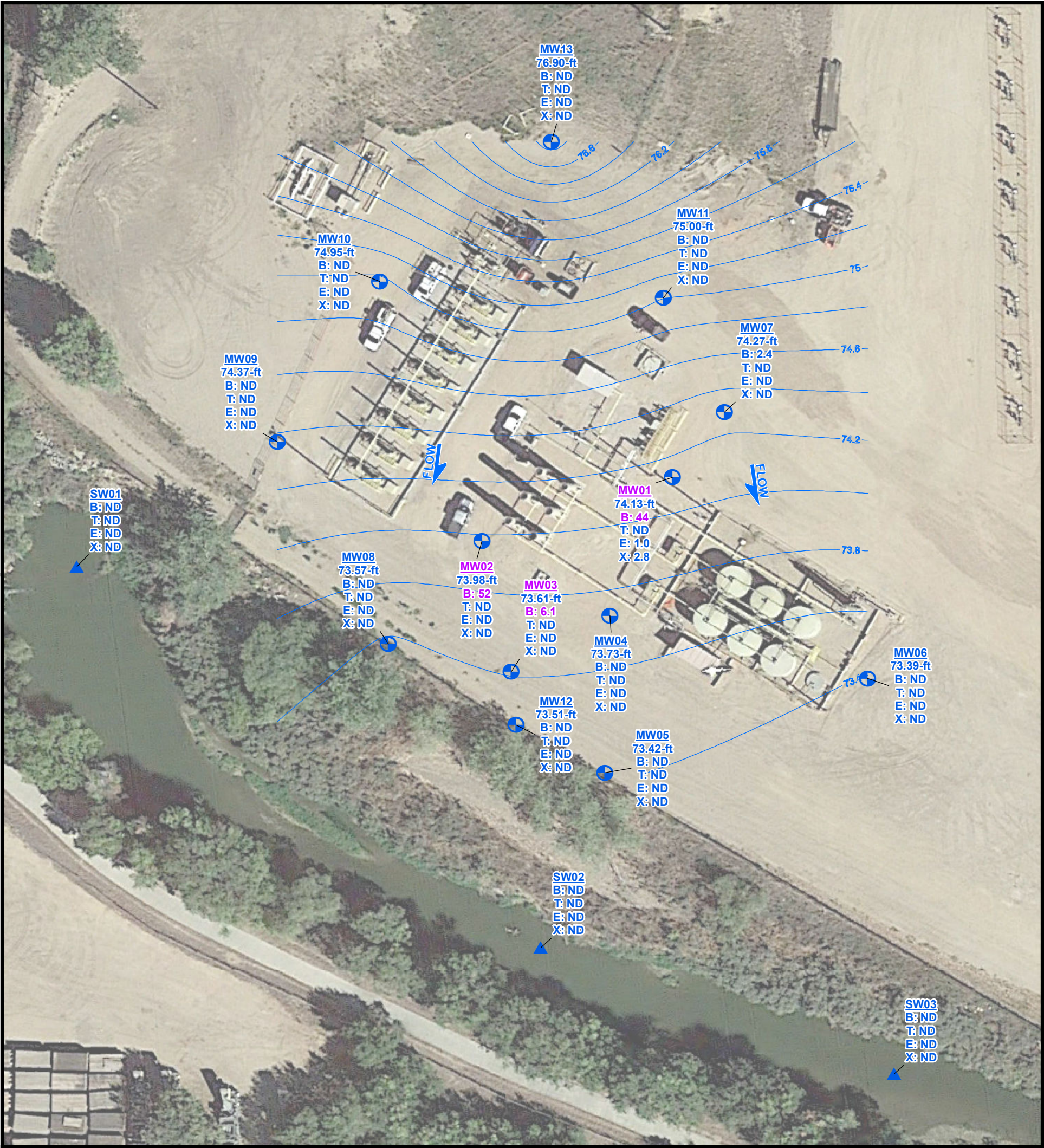




**Topographic Location  
Map  
"Hiner Tank Battery"**

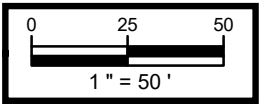






**Extraction Oil & Gas**  
**Hiner 36 Tank Battery**  
**COGCC Location ID: 446538**  
**Temporary Monitoring Well Layout &**  
**GW Elevations for the**  
**8/19/2020 Sampling Event**

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



Temp. Monitoring  
Well Location &  
Relative GW  
Elevation



Estimated  
Groundwater Flow  
Direction



Estimated  
Groundwater  
Contour



Surface Water  
Sample

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

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



Sample ID	Latitude NAD83	Longitude NAD83	Sample ID	Latitude NAD83	Longitude NAD83
GW01	40.449073	-104.719683	GW09	40.448991	-104.720012
GW02	40.448991	-104.720012	GW10	40.448818	-104.719963
GW03	40.448818	-104.719963	GW11	40.448891	-104.719792
GW04	40.448891	-104.719792	GW12	40.448684	-104.719802
GW05	40.448684	-104.719802	GW13	40.448807	-104.719347
GW06	40.448807	-104.719347	SW01	40.448958	-104.720712
GW07	40.449160	-104.719593	SW02	40.448454	-104.719913
GW08	40.449073	-104.719683	SW03	40.448285	-104.719303

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 2019

			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	6/10/19	BH01	160	11	39	150
Hiner 36 Pad	6/10/19	BH02	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	6/10/19	BH03	1.9	<1.00	1.8	<2.00
Hiner 36 Pad	6/10/19	BH04	280	<1.00	9.3	<2.00
Hiner 36 Pad	7/10/19	BH05	38	<1.00	<1.00	<2.00
Hiner 36 Pad	7/10/19	BH06	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	7/10/19	BH07	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH01	29	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH02	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH03	7.6	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH04	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH05	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH06	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	BH07	7.9	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	SW01	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	SW02	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	8/8/19	SW03	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH01	20	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH02	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH03	3	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH04	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH05	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH06	<1.00	<1.00	<1.00	<2.00
Hiner 36 Pad	11/5/19	BH07	2.2	<1.00	<1.00	<2.00



## Laboratory Results Summary Table - Groundwater Q1 & Q2 2020

			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
Hiner 36 Pad	5/12/20	BH01	96	<1.0	4.1	7.9
Hiner 36 Pad	5/12/20	BH02	59	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH03	<1.0	1.4	1.6	<2.0
Hiner 36 Pad	5/12/20	BH04	25	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH05	1.7	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH06	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH07	25	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH08	9.4	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH09	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH10	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH11	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH12	170	<1.0	<1.0	<2.0
Hiner 36 Pad	5/12/20	BH13	<1.0	<1.0	<1.0	<2.0



# Laboratory Results Summary Table - Groundwater Q3 2020

			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	8/19/20	MW01	44	<1.0	1.0	2.8
Hiner 36 Pad	8/19/20	MW02	52	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW03	6.1	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW04	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW05	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW06	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW07	2.4	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW08	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW09	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW10	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW11	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW12	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	MW13	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	SW01	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	SW02	<1.0	<1.0	<1.0	<2.0
Hiner 36 Pad	8/19/20	SW03	<1.0	<1.0	<1.0	<2.0

**Attachment A**

**Laboratory Analytical Report**

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 26, 2020

Maggie Graham

Extraction Oil&Gas

370 17th Street Suite 5300

Denver, CO 80202

RE: Hiner 36

Work Order #2008171

Enclosed are the results of analyses for samples received by Summit Scientific on 08/19/20 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW01	2008171-01	Water	08/19/20 13:15	08/19/20 16:20
MW02	2008171-02	Water	08/19/20 12:15	08/19/20 16:20
MW03	2008171-03	Water	08/19/20 11:10	08/19/20 16:20
MW04	2008171-04	Water	08/19/20 12:30	08/19/20 16:20
MW05	2008171-05	Water	08/19/20 10:45	08/19/20 16:20
MW06	2008171-06	Water	08/19/20 10:30	08/19/20 16:20
MW07	2008171-07	Water	08/19/20 12:50	08/19/20 16:20
MW08	2008171-08	Water	08/19/20 12:00	08/19/20 16:20
MW09	2008171-09	Water	08/19/20 11:40	08/19/20 16:20
MW10	2008171-10	Water	08/19/20 10:45	08/19/20 16:20
MW11	2008171-11	Water	08/19/20 12:20	08/19/20 16:20
MW12	2008171-12	Water	08/19/20 11:30	08/19/20 16:20
MW13	2008171-13	Water	08/19/20 11:10	08/19/20 16:20
SW01	2008171-14	Water	08/19/20 13:50	08/19/20 16:20
SW02	2008171-15	Water	08/19/20 13:55	08/19/20 16:20
SW03	2008171-16	Water	08/19/20 14:00	08/19/20 16:20

Summit Scientific

*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.*



# Summit Scientific

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310 ♦ 303-374-5933 Fax

2008171.1

Page 1 of 2

Client: APEX Companies, LLC

Address: 1746 Cole Blvd. Suite 250

City/State/Zip: Lakewood, Colorado 80101

Phone: 720-501-5065

Sampler Name: Sage Maher

Project Manager: Maggie Graham 720-501-5065; 907-538-7699c MaggieGraham@ApexCos.com

E-Mail: DenverRemediation@ApexCos.com jcarlish@Extraction.com

Project Name: Hiner 36

Project Number: 744.2001.01-446538

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix		Analyze For:										Special Instructions
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX	Samday	VOC						
MW01	8/19/20	1315	3	X				X		MP	X	X	X	X	X	X	X	X	X	Call Maggie Graham with questions
MW02		1215									X	X	X	X	X	X	X	X	please * msh MW06 all other samples on standard turn	
MW03		1110									X	X	X	X	X	X	X	X		
MW04		1230									X	X	X	X	X	X	X	X		
MW05		1045									X	X	X	X	X	X	X	X		
MW06		1036									X	X	X	X	X	X	X	X		
MW07		1250									X	X	X	X	X	X	X	X		
MW08		1200									X	X	X	X	X	X	X	X		
MW09		1140									X	X	X	X	X	X	X	X		
MW10		1045									X	X	X	X	X	X	X	X		
Relinquished by: <u>[Signature]</u> 8/19/20 16:20				Received by: <u>[Signature]</u> 08-19-20 16:20				Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>										Notes		
Relinquished by:				Received by:				Sample Integrity:										Circle applicable regulatory agency:		
Relinquished by:				Received in Lab by:				Temperature Upon Receipt: <u>2.7</u>										COGCC/CDPHE		
Relinquished by:				Received in Lab by:				Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										Client Name: <u>XOU</u>		

# Summit Scientific

Page 2 of 2

Sampler Name: Sage Maher

Project Number:

[www.s2scientific.com](http://www.s2scientific.com)



# Sample Receipt Checklist

S2 Work Order 2008171

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)	2.7
-----------	-----

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"/>	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MW06 same day
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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



Signature of Custodian

8/19/20

Date/Time





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW01**  
**2008171-01 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 13:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>44</b>	1.0	ug/l	1		2008222	08/20/20	08/21/20	EPA 8260B	
Bromobenzene	ND	1.0	"	"		"	"	"	"	
Bromochloromethane	ND	5.0	"	"		"	"	"	"	
Bromodichloromethane	ND	2.0	"	"		"	"	"	"	
Bromoform	ND	1.0	"	"		"	"	"	"	
Bromomethane	ND	1.0	"	"		"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"		"	"	"	"	
Chlorobenzene	ND	1.0	"	"		"	"	"	"	
Chlorodibromomethane	ND	1.0	"	"		"	"	"	"	
Chloroethane	ND	1.0	"	"		"	"	"	"	
Chloroform	ND	3.0	"	"		"	"	"	"	
Chloromethane	ND	1.0	"	"		"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"		"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"		"	"	"	"	
Dibromomethane	ND	1.0	"	"		"	"	"	"	
Dichlorodifluoromethane	ND	1.0	"	"		"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"		"	"	"	"	
Ethyl tert-butyl ether	ND	10	"	"		"	"	"	"	
<b>Ethylbenzene</b>	<b>1.0</b>	1.0	"	"		"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"		"	"	"	"	
Isopropylbenzene	ND	1.0	"	"		"	"	"	"	
<b>m,p-Xylene</b>	<b>2.8</b>	2.0	"	"		"	"	"	"	
Methylene Chloride	ND	5.0	"	"		"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"		"	"	"	"	
<b>Naphthalene</b>	<b>1.0</b>	1.0	"	"		"	"	"	"	
n-Butylbenzene	ND	1.0	"	"		"	"	"	"	
n-Propylbenzene	ND	1.0	"	"		"	"	"	"	
o-Xylene	ND	1.0	"	"		"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"		"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"		"	"	"	"	
Styrene	ND	1.0	"	"		"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"		"	"	"	"	
Tert-butyl alcohol	ND	20	"	"		"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW01**  
**2008171-01 (Water)**

**Summit Scientific**

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

tert-Butylbenzene	ND	1.0	ug/l	1	2008222	08/20/20	08/21/20	EPA 8260B
Tetrachloroethene	ND	1.0	"	"	"	"	"	"
Toluene	ND	1.0	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"
Trichloroethene	ND	1.0	"	"	"	"	"	"
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"
Vinyl chloride	ND	1.0	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"
<b>1,2,4-Trimethylbenzene</b>	<b>3.4</b>	1.0	"	"	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"
<b>1,3,5-Trimethylbenzene</b>	<b>1.0</b>	1.0	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"

Date Sampled: **08/19/20 13:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW01**  
**2008171-01 (Water)**

**Summit Scientific**

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

Surrogate: 4-Bromofluorobenzene	103 %	21-167	2008222	08/20/20	08/21/20	EPA 8260B
---------------------------------	-------	--------	---------	----------	----------	-----------

Summit Scientific

*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.*





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW02**  
**2008171-02 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 12:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>52</b>	1.0		ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/19/20 12:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		105 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		99.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.7 %		21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW03**  
**2008171-03 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>6.1</b>	1.0		ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/19/20 11:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		104 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		99.7 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.5 %		21-167		"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW04**  
**2008171-04 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 12:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.1 %	21-167		"	"	"	"	

Summit Scientific

*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.*





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW05**  
**2008171-05 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.2 %	21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW06**  
**2008171-06 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008196	08/19/20	08/19/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.2 %	21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW07**  
**2008171-07 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>2.4</b>	1.0		ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/19/20 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		105 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		97.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.5 %		21-167		"	"	"	"	

Summit Scientific

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.





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW08**  
**2008171-08 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.0 %	21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW09**  
**2008171-09 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.9 %	21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW10**  
**2008171-10 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 10:45**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.7 %	21-167		"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW11**  
**2008171-11 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 12:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.6 %	21-167		"	"	"	"	

Summit Scientific

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.





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW12**  
**2008171-12 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Bromobenzene	ND	1.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	2.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chlorodibromomethane	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	3.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	1.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
m,p-Xylene	ND	2.0	"	"	"	"	"	"	
Methylene Chloride	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW12**  
**2008171-12 (Water)**

**Summit Scientific**

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

tert-Butylbenzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B
Tetrachloroethene	ND	1.0	"	"	"	"	"	"
Toluene	ND	1.0	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"
Trichloroethene	ND	1.0	"	"	"	"	"	"
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"
Vinyl chloride	ND	1.0	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"

Date Sampled: **08/19/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		105 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %		20-170		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36

Project Number: [none]

Project Manager: Maggie Graham

**Reported:**

08/26/20 10:42

**MW12**

**2008171-12 (Water)**

**Summit Scientific**

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

Surrogate: 4-Bromofluorobenzene	83.6 %	21-167	2008222	08/20/20	08/20/20	EPA 8260B
---------------------------------	--------	--------	---------	----------	----------	-----------

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**MW13**  
**2008171-13 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.6 %	21-167		"	"	"	"	

Summit Scientific

*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.*





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**SW01**  
**2008171-14 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 13:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 13:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.6 %	21-167		"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**SW02**  
**2008171-15 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 13:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/20/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 13:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.7 %	21-167		"	"	"	"	

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**SW03**  
**2008171-16 (Water)**

**Summit Scientific**

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

Date Sampled: **08/19/20 14:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	2008222	08/20/20	08/21/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/19/20 14:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.0 %	21-167		"	"	"	"	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

## 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 2008196 - EPA 5030 Water MS

##### Blank (2008196-BLK1)

Prepared & Analyzed: 08/19/20

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.7		"	13.3	103	23-173				
Surrogate: Toluene-d8	12.9		"	13.3	97.0	20-170				
Surrogate: 4-Bromofluorobenzene	11.4		"	13.3	85.3	21-167				

##### LCS (2008196-BS1)

Prepared & Analyzed: 08/19/20

Benzene	33.8	1.0	ug/l	33.3	101	51-132				
Toluene	34.3	1.0	"	33.3	103	51-138				
Ethylbenzene	37.2	1.0	"	33.3	112	58-146				
m,p-Xylene	75.1	2.0	"	66.7	113	57-144				
o-Xylene	35.9	1.0	"	33.3	108	53-146				
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3	107	23-173				
Surrogate: Toluene-d8	13.2		"	13.3	99.2	20-170				
Surrogate: 4-Bromofluorobenzene	12.0		"	13.3	90.2	21-167				

##### Matrix Spike (2008196-MS1)

Source: 2008144-01

Prepared & Analyzed: 08/19/20

Benzene	33.8	1.0	ug/l	33.3	ND	102	34-141			
Toluene	35.0	1.0	"	33.3	ND	105	27-151			
Ethylbenzene	37.3	1.0	"	33.3	ND	112	29-160			
m,p-Xylene	76.3	2.0	"	66.7	ND	114	20-166			
o-Xylene	36.1	1.0	"	33.3	ND	108	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3	107	23-173				
Surrogate: Toluene-d8	12.9		"	13.3	96.8	20-170				
Surrogate: 4-Bromofluorobenzene	12.0		"	13.3	90.1	21-167				

Summit Scientific

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.





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008196 - EPA 5030 Water MS**

Matrix Spike Dup (2008196-MSD1)			Source: 2008144-01		Prepared & Analyzed: 08/19/20					
Benzene	34.2	1.0	ug/l	33.3	ND	103	34-141	0.970	30	
Toluene	34.4	1.0	"	33.3	ND	103	27-151	1.56	30	
Ethylbenzene	37.3	1.0	"	33.3	ND	112	29-160	0.0804	30	
m,p-Xylene	75.6	2.0	"	66.7	ND	113	20-166	0.935	30	
o-Xylene	36.1	1.0	"	33.3	ND	108	33-159	0.00	30	
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.3		109	23-173			
Surrogate: Toluene-d8	12.9		"	13.3		96.5	20-170			
Surrogate: 4-Bromofluorobenzene	12.1		"	13.3		90.5	21-167			

**Batch 2008222 - EPA 5030 Water MS**

Blank (2008222-BLK1)			Prepared: 08/20/20 Analyzed: 08/21/20							
Benzene	ND	1.0	ug/l							
Benzene	ND	1.0	"							
Toluene	ND	1.0	"							
Bromobenzene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	2.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Carbon tetrachloride	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
Chlorodibromomethane	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	3.0	"							
Chloromethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Dichlorodifluoromethane	ND	1.0	"							
Di-isopropyl ether	ND	5.0	"							
Ethyl tert-butyl ether	ND	10	"							
Ethylbenzene	ND	1.0	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							
m,p-Xylene	ND	2.0	"							

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008222 - EPA 5030 Water MS**

**Blank (2008222-BLK1)**

Prepared: 08/20/20 Analyzed: 08/21/20

Methyl tert-butyl ether	ND	5.0	ug/l
Methylene Chloride	ND	5.0	"
Naphthalene	ND	1.0	"
n-Butylbenzene	ND	1.0	"
n-Propylbenzene	ND	1.0	"
o-Xylene	ND	1.0	"
p-Isopropyltoluene	ND	1.0	"
sec-Butylbenzene	ND	1.0	"
Styrene	ND	1.0	"
Tert-amyl methyl ether	ND	1.0	"
Tert-butyl alcohol	ND	20	"
tert-Butylbenzene	ND	1.0	"
Tetrachloroethene	ND	1.0	"
Toluene	ND	1.0	"
trans-1,2-Dichloroethene	ND	1.0	"
trans-1,3-Dichloropropene	ND	1.0	"
Trichloroethene	ND	1.0	"
Trichlorofluoromethane	ND	1.0	"
Vinyl chloride	ND	1.0	"
1,1,1,2-Tetrachloroethane	ND	1.0	"
1,1,1-Trichloroethane	ND	1.0	"
1,1,2,2-Tetrachloroethane	ND	1.0	"
1,1,2-Trichloroethane	ND	1.0	"
1,1-Dichloroethane	ND	1.0	"
1,1-Dichloroethene	ND	1.0	"
1,1-Dichloropropene	ND	1.0	"
1,2,3-Trichlorobenzene	ND	1.0	"
1,2,3-Trichloropropane	ND	1.0	"
1,2,4-Trichlorobenzene	ND	1.0	"
1,2,4-Trimethylbenzene	ND	1.0	"
1,2-Dibromo-3-chloropropane	ND	1.0	"
1,2-Dibromoethane (EDB)	ND	1.0	"
1,2-Dichlorobenzene	ND	1.0	"
1,2-Dichloroethane (EDC)	ND	1.0	"
1,2-Dichloropropane	ND	1.0	"
1,3,5-Trimethylbenzene	ND	1.0	"
1,3-Dichlorobenzene	ND	1.0	"
1,3-Dichloropropane	ND	1.0	"

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008222 - EPA 5030 Water MS**

**Blank (2008222-BLK1)**

Prepared: 08/20/20 Analyzed: 08/21/20

1,4-Dichlorobenzene	ND	1.0	ug/l							
2,2-Dichloropropane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.3		105	23-173			
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.3		105	23-173			
Surrogate: Toluene-d8	13.3		"	13.3		99.7	20-170			
Surrogate: Toluene-d8	13.3		"	13.3		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	13.5		"	13.3		101	21-167			
Surrogate: 4-Bromofluorobenzene	13.5		"	13.3		101	21-167			

**LCS (2008222-BS1)**

Prepared: 08/20/20 Analyzed: 08/21/20

Benzene	41.2	1.0	ug/l	50.0		82.3	51-132			
Benzene	41.2	1.0	"	50.0		82.3	70-130			
Toluene	42.4	1.0	"	50.0		84.8	51-138			
Bromobenzene	48.3	1.0	"	50.0		96.6	70-130			
Ethylbenzene	48.2	1.0	"	50.0		96.4	58-146			
Bromochloromethane	54.8	5.0	"	50.0		110	70-130			
m,p-Xylene	84.7	2.0	"	100		84.7	57-144			
Bromodichloromethane	54.1	2.0	"	50.0		108	70-130			
o-Xylene	43.6	1.0	"	50.0		87.2	53-146			
Bromoform	56.0	1.0	"	50.0		112	70-130			
Bromomethane	59.0	1.0	"	50.0		118	70-130			
Carbon tetrachloride	51.4	1.0	"	50.0		103	70-130			
Chlorobenzene	48.7	1.0	"	50.0		97.4	70-130			
Chlorodibromomethane	54.8	1.0	"	50.0		110	70-130			
Chloroethane	57.1	1.0	"	50.0		114	70-130			
Chloroform	53.7	3.0	"	50.0		107	70-130			
Chloromethane	43.0	1.0	"	50.0		86.0	70-130			
cis-1,2-Dichloroethene	53.8	1.0	"	50.0		108	70-130			
cis-1,3-Dichloropropene	52.3	1.0	"	50.0		105	70-130			
Dibromomethane	54.5	1.0	"	50.0		109	70-130			
Dichlorodifluoromethane	45.2	1.0	"	50.0		90.3	70-130			
Di-isopropyl ether	54.8	5.0	"	50.0		110	70-130			
Ethyl tert-butyl ether	54.3	10	"	50.0		109	70-130			
Ethylbenzene	48.2	1.0	"	50.0		96.4	70-130			
Hexachlorobutadiene	45.2	1.0	"	50.0		90.4	70-130			
Isopropylbenzene	55.1	1.0	"	50.0		110	70-130			

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

## 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 2008222 - EPA 5030 Water MS

##### LCS (2008222-BS1)

Prepared: 08/20/20 Analyzed: 08/21/20

m,p-Xylene	84.7	2.0	ug/l	100		84.7	70-130
Methylene Chloride	46.4	5.0	"	50.0		92.8	70-130
Naphthalene	52.7	1.0	"	50.0		105	70-130
n-Butylbenzene	53.2	1.0	"	50.0		106	70-130
n-Propylbenzene	54.5	1.0	"	50.0		109	70-130
o-Xylene	43.6	1.0	"	50.0		87.2	70-130
p-Isopropyltoluene	54.0	1.0	"	50.0		108	70-130
sec-Butylbenzene	54.3	1.0	"	50.0		109	70-130
Styrene	48.8	1.0	"	50.0		97.6	70-130
Tert-amyl methyl ether	54.8	1.0	"	50.0		110	70-130
Tert-butyl alcohol	231	20	"	250		92.5	70-130
tert-Butylbenzene	48.2	1.0	"	50.0		96.3	70-130
Tetrachloroethene	48.0	1.0	"	50.0		95.9	70-130
Toluene	42.4	1.0	"	50.0		84.8	70-130
trans-1,2-Dichloroethene	52.8	1.0	"	50.0		106	70-130
trans-1,3-Dichloropropene	53.2	1.0	"	50.0		106	70-130
Trichloroethene	53.8	1.0	"	50.0		108	70-130
Trichlorofluoromethane	51.2	1.0	"	50.0		102	70-130
Vinyl chloride	49.2	1.0	"	50.0		98.5	70-130
1,1,1,2-Tetrachloroethane	51.6	1.0	"	50.0		103	70-130
1,1,1-Trichloroethane	54.2	1.0	"	50.0		108	70-130
1,1,2,2-Tetrachloroethane	46.2	1.0	"	50.0		92.5	70-130
1,1,2-Trichloroethane	53.0	1.0	"	50.0		106	70-130
1,1-Dichloroethane	53.6	1.0	"	50.0		107	70-130
1,1-Dichloroethene	53.3	1.0	"	50.0		107	70-130
1,1-Dichloropropene	49.4	1.0	"	50.0		98.9	70-130
1,2,3-Trichlorobenzene	49.6	1.0	"	50.0		99.2	70-130
1,2,3-Trichloropropane	51.5	1.0	"	50.0		103	70-130
1,2,4-Trichlorobenzene	47.8	1.0	"	50.0		95.7	70-130
1,2,4-Trimethylbenzene	56.9	1.0	"	50.0		114	70-130
1,2-Dibromo-3-chloropropane	59.4	1.0	"	50.0		119	70-130
1,2-Dibromoethane (EDB)	52.0	1.0	"	50.0		104	70-130
1,2-Dichlorobenzene	48.1	1.0	"	50.0		96.1	70-130
1,2-Dichloroethane (EDC)	51.2	1.0	"	50.0		102	70-130
1,2-Dichloropropane	51.8	1.0	"	50.0		104	70-130
1,3,5-Trimethylbenzene	48.5	1.0	"	50.0		97.0	70-130
1,3-Dichlorobenzene	47.4	1.0	"	50.0		94.8	70-130
1,3-Dichloropropane	50.3	1.0	"	50.0		101	70-130

Summit Scientific

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.





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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008222 - EPA 5030 Water MS**

**LCS (2008222-BS1)**

Prepared: 08/20/20 Analyzed: 08/21/20

1,4-Dichlorobenzene	47.2	1.0	ug/l	50.0		94.3	70-130
2,2-Dichloropropane	46.9	1.0	"	50.0		93.8	70-130
2-Chlorotoluene	47.8	1.0	"	50.0		95.6	70-130
4-Chlorotoluene	47.3	1.0	"	50.0		94.6	70-130
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.3		104	23-173
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.3		104	23-173
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167

**Matrix Spike (2008222-MS1)**

Source: 2008171-01

Prepared: 08/20/20 Analyzed: 08/21/20

Benzene	64.2	1.0	ug/l	50.0	43.6	41.2	34-141
Benzene	84.2	1.0	"	50.0	43.6	81.2	70-130
Toluene	45.4	1.0	"	50.0	ND	90.8	27-151
Bromobenzene	51.8	1.0	"	50.0	ND	104	70-130
Ethylbenzene	53.9	1.0	"	50.0	1.03	106	29-160
Bromochloromethane	53.0	5.0	"	50.0	ND	106	70-130
m,p-Xylene	94.3	2.0	"	100	2.76	91.5	20-166
Bromodichloromethane	55.4	2.0	"	50.0	ND	111	70-130
o-Xylene	47.6	1.0	"	50.0	ND	95.3	33-159
Bromoform	53.4	1.0	"	50.0	ND	107	70-130
Bromomethane	61.6	1.0	"	50.0	ND	123	70-130
Carbon tetrachloride	57.8	1.0	"	50.0	ND	116	70-130
Chlorobenzene	52.7	1.0	"	50.0	ND	105	70-130
Chlorodibromomethane	54.0	1.0	"	50.0	ND	108	70-130
Chloroethane	52.5	1.0	"	50.0	ND	105	70-130
Chloroform	55.5	3.0	"	50.0	ND	111	70-130
Chloromethane	48.8	1.0	"	50.0	ND	97.6	70-130
cis-1,2-Dichloroethene	55.2	1.0	"	50.0	ND	110	70-130
cis-1,3-Dichloropropene	51.8	1.0	"	50.0	ND	104	70-130
Dibromomethane	51.4	1.0	"	50.0	ND	103	70-130
Dichlorodifluoromethane	45.0	1.0	"	50.0	ND	90.1	70-130
Di-isopropyl ether	54.7	5.0	"	50.0	ND	109	70-130
Ethyl tert-butyl ether	53.1	10	"	50.0	ND	106	70-130
Ethylbenzene	53.9	1.0	"	50.0	1.03	106	70-130
Hexachlorobutadiene	51.9	1.0	"	50.0	ND	104	70-130
Isopropylbenzene	61.6	1.0	"	50.0	ND	123	70-130

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

## 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 2008222 - EPA 5030 Water MS

Matrix Spike (2008222-MS1)	Source: 2008171-01			Prepared: 08/20/20 Analyzed: 08/21/20						
m,p-Xylene	94.3	2.0	ug/l	100	2.76	91.5	70-130			
Methylene Chloride	44.1	5.0	"	50.0	ND	88.2	70-130			
Naphthalene	52.5	1.0	"	50.0	1.04	103	70-130			
n-Butylbenzene	61.0	1.0	"	50.0	ND	122	70-130			
n-Propylbenzene	62.1	1.0	"	50.0	ND	124	70-130			
o-Xylene	47.6	1.0	"	50.0	ND	95.3	70-130			
p-Isopropyltoluene	61.1	1.0	"	50.0	ND	122	70-130			
sec-Butylbenzene	61.0	1.0	"	50.0	ND	122	70-130			
Styrene	47.4	1.0	"	50.0	ND	94.9	70-130			
Tert-amyl methyl ether	51.4	1.0	"	50.0	ND	103	70-130			
Tert-butyl alcohol	291	20	"	250	ND	116	70-130			
tert-Butylbenzene	53.8	1.0	"	50.0	ND	108	70-130			
Tetrachloroethene	51.6	1.0	"	50.0	ND	103	70-130			
Toluene	45.4	1.0	"	50.0	ND	90.8	70-130			
trans-1,2-Dichloroethene	55.6	1.0	"	50.0	ND	111	70-130			
trans-1,3-Dichloropropene	51.2	1.0	"	50.0	ND	102	70-130			
Trichloroethene	49.6	1.0	"	50.0	ND	99.3	70-130			
Trichlorofluoromethane	51.1	1.0	"	50.0	ND	102	70-130			
Vinyl chloride	50.0	1.0	"	50.0	ND	99.9	70-130			
1,1,1,2-Tetrachloroethane	54.7	1.0	"	50.0	ND	109	70-130			
1,1,1-Trichloroethane	57.3	1.0	"	50.0	ND	115	70-130			
1,1,2,2-Tetrachloroethane	55.3	1.0	"	50.0	ND	111	70-130			
1,1,2-Trichloroethane	50.5	1.0	"	50.0	ND	101	70-130			
1,1-Dichloroethane	55.2	1.0	"	50.0	ND	110	70-130			
1,1-Dichloroethene	54.4	1.0	"	50.0	ND	109	70-130			
1,1-Dichloropropene	53.8	1.0	"	50.0	ND	108	70-130			
1,2,3-Trichlorobenzene	53.9	1.0	"	50.0	ND	108	70-130			
1,2,3-Trichloropropane	51.4	1.0	"	50.0	ND	103	70-130			
1,2,4-Trichlorobenzene	54.1	1.0	"	50.0	ND	108	70-130			
1,2,4-Trimethylbenzene	63.8	1.0	"	50.0	3.41	121	70-130			
1,2-Dibromo-3-chloropropane	55.3	1.0	"	50.0	ND	111	70-130			
1,2-Dibromoethane (EDB)	49.8	1.0	"	50.0	ND	99.7	70-130			
1,2-Dichlorobenzene	51.2	1.0	"	50.0	ND	102	70-130			
1,2-Dichloroethane (EDC)	49.0	1.0	"	50.0	ND	98.0	70-130			
1,2-Dichloropropane	53.2	1.0	"	50.0	ND	106	70-130			
1,3,5-Trimethylbenzene	54.6	1.0	"	50.0	1.01	107	70-130			
1,3-Dichlorobenzene	52.5	1.0	"	50.0	ND	105	70-130			
1,3-Dichloropropane	48.9	1.0	"	50.0	ND	97.8	70-130			

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008222 - EPA 5030 Water MS**

**Matrix Spike (2008222-MS1)**

Source: 2008171-01

Prepared: 08/20/20 Analyzed: 08/21/20

1,4-Dichlorobenzene	51.7	1.0	ug/l	50.0	ND	103	70-130		
2,2-Dichloropropane	43.9	1.0	"	50.0	ND	87.9	70-130		
2-Chlorotoluene	53.8	1.0	"	50.0	ND	108	70-130		
4-Chlorotoluene	53.1	1.0	"	50.0	ND	106	70-130		
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.3		94.5	23-173		
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.3		94.5	23-173		
Surrogate: Toluene-d8	13.2		"	13.3		98.9	20-170		
Surrogate: Toluene-d8	13.2		"	13.3		98.9	20-170		
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167		
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167		

**Matrix Spike Dup (2008222-MSD1)**

Source: 2008171-01

Prepared: 08/20/20 Analyzed: 08/21/20

Benzene	81.5	1.0	ug/l	50.0	43.6	75.8	70-130	3.28	30
Benzene	61.5	1.0	"	50.0	43.6	35.8	34-141	4.33	30
Bromobenzene	53.4	1.0	"	50.0	ND	107	70-130	3.00	30
Toluene	47.2	1.0	"	50.0	ND	94.5	27-151	4.00	30
Ethylbenzene	56.6	1.0	"	50.0	1.03	111	29-160	4.84	30
Bromochloromethane	53.0	5.0	"	50.0	ND	106	70-130	0.0754	30
m,p-Xylene	99.1	2.0	"	100	2.76	96.3	20-166	4.94	30
Bromodichloromethane	57.6	2.0	"	50.0	ND	115	70-130	3.91	30
o-Xylene	49.6	1.0	"	50.0	ND	99.2	33-159	3.99	30
Bromoform	53.2	1.0	"	50.0	ND	106	70-130	0.281	30
Bromomethane	48.3	1.0	"	50.0	ND	96.7	70-130	24.1	30
Carbon tetrachloride	59.8	1.0	"	50.0	ND	120	70-130	3.44	30
Chlorobenzene	55.0	1.0	"	50.0	ND	110	70-130	4.34	30
Chlorodibromomethane	55.1	1.0	"	50.0	ND	110	70-130	1.98	30
Chloroethane	52.3	1.0	"	50.0	ND	105	70-130	0.248	30
Chloroform	56.4	3.0	"	50.0	ND	113	70-130	1.48	30
Chloromethane	46.7	1.0	"	50.0	ND	93.5	70-130	4.35	30
cis-1,2-Dichloroethene	55.4	1.0	"	50.0	ND	111	70-130	0.379	30
cis-1,3-Dichloropropene	53.4	1.0	"	50.0	ND	107	70-130	3.12	30
Dibromomethane	52.3	1.0	"	50.0	ND	105	70-130	1.74	30
Dichlorodifluoromethane	43.0	1.0	"	50.0	ND	86.0	70-130	4.68	30
Di-isopropyl ether	54.5	5.0	"	50.0	ND	109	70-130	0.421	30
Ethyl tert-butyl ether	52.6	10	"	50.0	ND	105	70-130	0.965	30
Ethylbenzene	56.6	1.0	"	50.0	1.03	111	70-130	4.84	30
Hexachlorobutadiene	55.2	1.0	"	50.0	ND	110	70-130	6.13	30
Isopropylbenzene	64.9	1.0	"	50.0	ND	130	70-130	5.25	30

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

## 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 2008222 - EPA 5030 Water MS

##### Matrix Spike Dup (2008222-MSD1)

Source: 2008171-01

Prepared: 08/20/20 Analyzed: 08/21/20

m,p-Xylene	99.1	2.0	ug/l	100	2.76	96.3	70-130	4.94	30	
Methylene Chloride	45.2	5.0	"	50.0	ND	90.4	70-130	2.49	30	
Naphthalene	52.8	1.0	"	50.0	1.04	104	70-130	0.665	30	
n-Butylbenzene	64.8	1.0	"	50.0	ND	130	70-130	5.96	30	
n-Propylbenzene	65.0	1.0	"	50.0	ND	130	70-130	4.61	30	
o-Xylene	49.6	1.0	"	50.0	ND	99.2	70-130	3.99	30	
p-Isopropyltoluene	63.4	1.0	"	50.0	ND	127	70-130	3.68	30	
sec-Butylbenzene	63.6	1.0	"	50.0	ND	127	70-130	4.13	30	
Styrene	50.2	1.0	"	50.0	ND	100	70-130	5.69	30	
Tert-amyl methyl ether	51.2	1.0	"	50.0	ND	102	70-130	0.370	30	
Tert-butyl alcohol	271	20	"	250	ND	109	70-130	6.85	30	
tert-Butylbenzene	56.2	1.0	"	50.0	ND	112	70-130	4.45	30	
Tetrachloroethene	55.2	1.0	"	50.0	ND	110	70-130	6.68	30	
Toluene	47.2	1.0	"	50.0	ND	94.5	70-130	4.00	30	
trans-1,2-Dichloroethene	55.9	1.0	"	50.0	ND	112	70-130	0.520	30	
trans-1,3-Dichloropropene	52.2	1.0	"	50.0	ND	104	70-130	2.03	30	
Trichloroethene	51.6	1.0	"	50.0	ND	103	70-130	3.81	30	
Trichlorofluoromethane	52.0	1.0	"	50.0	ND	104	70-130	1.84	30	
Vinyl chloride	50.1	1.0	"	50.0	ND	100	70-130	0.360	30	
1,1,1,2-Tetrachloroethane	56.4	1.0	"	50.0	ND	113	70-130	3.10	30	
1,1,1-Trichloroethane	57.6	1.0	"	50.0	ND	115	70-130	0.592	30	
1,1,2,2-Tetrachloroethane	54.1	1.0	"	50.0	ND	108	70-130	2.19	30	
1,1,2-Trichloroethane	51.4	1.0	"	50.0	ND	103	70-130	1.82	30	
1,1-Dichloroethane	55.6	1.0	"	50.0	ND	111	70-130	0.686	30	
1,1-Dichloroethene	55.0	1.0	"	50.0	ND	110	70-130	1.08	30	
1,1-Dichloropropene	56.1	1.0	"	50.0	ND	112	70-130	4.13	30	
1,2,3-Trichlorobenzene	55.1	1.0	"	50.0	ND	110	70-130	2.18	30	
1,2,3-Trichloropropane	52.5	1.0	"	50.0	ND	105	70-130	1.96	30	
1,2,4-Trichlorobenzene	56.6	1.0	"	50.0	ND	113	70-130	4.57	30	
1,2,4-Trimethylbenzene	66.6	1.0	"	50.0	3.41	126	70-130	4.39	30	
1,2-Dibromo-3-chloropropane	53.7	1.0	"	50.0	ND	107	70-130	2.95	30	
1,2-Dibromoethane (EDB)	50.4	1.0	"	50.0	ND	101	70-130	1.18	30	
1,2-Dichlorobenzene	53.0	1.0	"	50.0	ND	106	70-130	3.47	30	
1,2-Dichloroethane (EDC)	50.2	1.0	"	50.0	ND	100	70-130	2.40	30	
1,2-Dichloropropane	55.2	1.0	"	50.0	ND	110	70-130	3.71	30	
1,3,5-Trimethylbenzene	57.3	1.0	"	50.0	1.01	113	70-130	4.88	30	
1,3-Dichlorobenzene	54.5	1.0	"	50.0	ND	109	70-130	3.83	30	
1,3-Dichloropropane	49.8	1.0	"	50.0	ND	99.7	70-130	1.90	30	

Summit Scientific

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.



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

**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 2008222 - EPA 5030 Water MS**

Matrix Spike Dup (2008222-MSD1)		Source: 2008171-01			Prepared: 08/20/20 Analyzed: 08/21/20					
1,4-Dichlorobenzene	54.1	1.0	ug/l	50.0	ND	108	70-130	4.57	30	
2,2-Dichloropropane	44.0	1.0	"	50.0	ND	87.9	70-130	0.0228	30	
2-Chlorotoluene	56.1	1.0	"	50.0	ND	112	70-130	4.18	30	
4-Chlorotoluene	54.6	1.0	"	50.0	ND	109	70-130	2.82	30	
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.3		93.1	23-173			
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.3		93.1	23-173			
Surrogate: Toluene-d8	13.3		"	13.3		99.8	20-170			
Surrogate: Toluene-d8	13.3		"	13.3		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.9	21-167			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.9	21-167			

Summit Scientific

*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.*



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

Project: Hiner 36  
Project Number: [none]  
Project Manager: Maggie Graham

**Reported:**  
08/26/20 10:42

### 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