

Report to:  
Sabre Beebe



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

SIMCOE LLC

Project Name: BHD  
Work Order: E102076  
Job Number: 20095-0001  
Received: 2/23/2021

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
3/2/21

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM009792018-1 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 3/2/21

Sabre Beebe  
1199 Main Ave. Suite 242  
Durango, CO 81301



Project Name: BHD  
Workorder: E102076  
Date Received: 2/23/2021 3:15:00PM

Sabre Beebe,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/23/2021 3:15:00PM, under the Project Name: BHD.

The analytical test results summarized in this report with the Project Name: BHD apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Sample Summary

SIMCOE LLC 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	BHD	<b>Reported:</b>  03/02/21 17:05
	Project Number:	20095-0001	
	Project Manager:	Sabre Beebe	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Jaquez GC A3E API 3004523559	E102076-01A	Aqueous	02/23/21	02/23/21	Poly 500mL



## Sample Data

SIMCOE LLC 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: BHD Project Number: 20095-0001 Project Manager: Sabre Beebe	<b>Reported:</b> 3/2/2021 5:05:48PM
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### Jaquez GC A3E API 3004523559

#### E102076-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Wet Chem/Gravimetric by SM2540C</b>	mg/L	mg/L	Analyst: RAS		Batch: 2109024	
Total Dissolved Solids	<b>4370</b>	25.0	1	02/24/21	03/02/21	
<b>Wet Chemistry by 9040C/4500H+B</b>	pH Units	pH Units	Analyst: JL		Batch: 2110003	
pH @25°C	<b>6.58</b>		1	03/01/21 11:36	03/01/21 16:10	
<b>Wet Chemistry by SM2320B</b>	mg/L	mg/L	Analyst: JL		Batch: 2110008	
Total Alkalinity (as CaCO <sub>3</sub> at pH 4.5)	<b>238</b>	10.0	1	03/01/21	03/01/21	
<b>Wet Chemistry by 9050A/2510B</b>	uS/cm	uS/cm	Analyst: JL		Batch: 2110002	
Specific Conductance (@ 25 C)	<b>7050</b>	10.0	1	03/01/21	03/01/21	
<b>Dissolved Metals by EPA 6010C</b>	mg/L	mg/L	Analyst: AC		Batch: 2110001	
Calcium	<b>83.3</b>	10.0	10	03/01/21	03/01/21	
Iron	ND	20.0	10	03/01/21	03/01/21	
Magnesium	<b>10.3</b>	10.0	10	03/01/21	03/01/21	
Potassium	<b>79.8</b>	50.0	50	03/01/21	03/01/21	
Sodium	<b>1660</b>	100	50	03/01/21	03/01/21	
Sodium Absorption Ratio	<b>45.7</b>		1	03/02/21	03/02/21	
<b>Anions by EPA 300.0/9056A</b>	mg/L	mg/L	Analyst: IY		Batch: 2109021	
Fluoride	ND	2.50	10	02/24/21	02/24/21	
Chloride	<b>1250</b>	20.0	10	02/24/21	02/24/21	
Nitrite-N	ND	2.50	10	02/24/21 09:13	02/24/21 14:21	
Nitrate-N	ND	2.50	10	02/24/21 09:13	02/24/21 14:21	
o-Phosphate-P	ND	2.50	10	02/24/21 09:13	02/24/21 14:21	
Sulfate	<b>1090</b>	20.0	10	02/24/21	02/24/21	



QC Summary Data

SIMCOE LLC	Project Name:	BHD	Reported:
1199 Main Ave. Suite 242	Project Number:	20095-0001	
Durango CO, 81301	Project Manager:	Sabre Beebe	3/2/2021 5:05:48PM

Wet Chem/Gravimetric by SM2540C

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

Blank (2109024-BLK1)					Prepared: 02/24/21 Analyzed: 03/02/21				
Total Dissolved Solids	ND	10.0							
LCS (2109024-BS1)					Prepared: 02/24/21 Analyzed: 03/02/21				
Total Dissolved Solids	120	10.0	100		120	55-134			
Duplicate (2109024-DUP1)					Source: E102077-01 Prepared: 02/24/21 Analyzed: 03/02/21				
Total Dissolved Solids	800	25.0		823		2.77	5		



QC Summary Data

SIMCOE LLC	Project Name:	BHD	Reported:
1199 Main Ave. Suite 242	Project Number:	20095-0001	
Durango CO, 81301	Project Manager:	Sabre Beebe	3/2/2021 5:05:48PM

Wet Chemistry by 9040C/4500H+B

Analyst: JL

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

LCS (2110003-BS1)

Prepared: 03/01/21 Analyzed: 03/01/21

pH	7.94		8.00		99.6	98.75-101.25			
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Duplicate (2110003-DUP1)

Source: E102076-01 Prepared: 03/01/21 Analyzed: 03/01/21

pH	6.61			6.58		0.455	20		
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QC Summary Data

SIMCOE LLC	Project Name:	BHD	Reported:
1199 Main Ave. Suite 242	Project Number:	20095-0001	
Durango CO, 81301	Project Manager:	Sabre Beebe	3/2/2021 5:05:48PM

Wet Chemistry by SM2320B

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

LCS (2110008-BS1)

Prepared: 03/01/21 Analyzed: 03/01/21

Total Alkalinity (as CaCO3 at pH 4.5)	284	10.0	250	114	70-130				
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Duplicate (2110008-DUP1)

Source: E102077-01 Prepared: 03/01/21 Analyzed: 03/01/21

Total Alkalinity (as CaCO3 at pH 4.5)	130	10.0		128		1.55	20		
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## QC Summary Data

SIMCOE LLC 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: BHD Project Number: 20095-0001 Project Manager: Sabre Beebe	<b>Reported:</b> 3/2/2021 5:05:48PM
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## Wet Chemistry by 9050A/2510B

Analyst: JL

Analyte	Result uS/cm	Reporting Limit uS/cm	Spike Level uS/cm	Source Result uS/cm	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2110002-BLK1)

Prepared: 03/01/21 Analyzed: 03/01/21

Specific Conductance (@ 25 C) ND 10.0

## LCS (2110002-BS1)

Prepared: 03/01/21 Analyzed: 03/01/21

Specific Conductance (@ 25 C) 1440 10.0 1410 102 98-102

## Duplicate (2110002-DUP1)

Source: E102076-01 Prepared: 03/01/21 Analyzed: 03/01/21

Specific Conductance (@ 25 C) 7080 10.0 7050 0.425 20



## QC Summary Data

SIMCOE LLC	Project Name:	BHD	<b>Reported:</b>
1199 Main Ave. Suite 242	Project Number:	20095-0001	
Durango CO, 81301	Project Manager:	Sabre Beebe	3/2/2021 5:05:48PM

## Dissolved Metals by EPA 6010C

Analyst: AC

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

## Blank (2110001-BLK1)

Prepared: 03/01/21 Analyzed: 03/01/21

Calcium	ND	1.00
Iron	ND	2.00
Magnesium	ND	1.00
Potassium	ND	1.00
Sodium	ND	2.00

## LCS (2110001-BS1)

Prepared: 03/01/21 Analyzed: 03/01/21

Calcium	50.9	1.00	50.0	102	80-120
Iron	99.3	2.00	100	99.3	80-120
Magnesium	50.1	1.00	50.0	100	80-120
Potassium	4.85	1.00	5.00	97.0	80-120
Sodium	18.7	2.00	20.0	93.4	80-120

## Matrix Spike (2110001-MS1)

Source: E102083-01 Prepared: 03/01/21 Analyzed: 03/01/21

Calcium	522	1.00	50.0	479	85.4	75-125	
Iron	97.9	2.00	100	ND	97.9	75-125	
Magnesium	322	1.00	50.0	274	96.6	75-125	
Potassium	12.8	5.00	5.00	6.27	131	75-125	M3
Sodium	589	10.0	20.0	548	203	75-125	M3

## Matrix Spike Dup (2110001-MSD1)

Source: E102083-01 Prepared: 03/01/21 Analyzed: 03/01/21

Calcium	517	1.00	50.0	479	75.4	75-125	0.963	20	
Iron	97.0	2.00	100	ND	97.0	75-125	0.924	20	
Magnesium	320	1.00	50.0	274	92.4	75-125	0.654	20	
Potassium	12.9	5.00	5.00	6.27	133	75-125	0.699	20	M3
Sodium	593	10.0	20.0	548	225	75-125	0.762	20	M3



## QC Summary Data

SIMCOE LLC	Project Name:	BHD	<b>Reported:</b>
1199 Main Ave. Suite 242	Project Number:	20095-0001	
Durango CO, 81301	Project Manager:	Sabre Beebe	3/2/2021 5:05:48PM

## Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	

## Blank (2109021-BLK1)

Prepared: 02/24/21 Analyzed: 02/24/21

Fluoride	ND	0.250
Chloride	ND	2.00
Nitrite-N	ND	0.250
Nitrate-N	ND	0.250
o-Phosphate-P	ND	0.250
Sulfate	ND	2.00

## LCS (2109021-BS1)

Prepared: 02/24/21 Analyzed: 02/24/21

Fluoride	2.64	0.250	2.50	106	90-110	
Chloride	25.0	2.00	25.0	99.8	90-110	
Nitrite-N	2.55	0.250	2.50	102	90-110	
Nitrate-N	2.76	0.250	2.50	111	90-110	L2
o-Phosphate-P	12.7	0.250	12.5	101	90-110	
Sulfate	24.6	2.00	25.0	98.5	90-110	

## LCS Dup (2109021-BSD1)

Prepared: 02/24/21 Analyzed: 02/24/21

Fluoride	2.63	0.250	2.50	105	90-110	0.531	20
Chloride	24.8	2.00	25.0	99.1	90-110	0.740	20
Nitrite-N	2.53	0.250	2.50	101	90-110	0.591	20
Nitrate-N	2.75	0.250	2.50	110	90-110	0.326	20
o-Phosphate-P	12.4	0.250	12.5	99.3	90-110	2.20	20
Sulfate	24.2	2.00	25.0	97.0	90-110	1.51	20

## QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



## Definitions and Notes

SIMCOE LLC	Project Name:	BHD	
1199 Main Ave. Suite 242	Project Number:	20095-0001	<b>Reported:</b>
Durango CO, 81301	Project Manager:	Sabre Beebe	03/02/21 17:05

L2	The LCS spike recovery was above acceptance limits. This analyte was not detected in the sample.
M3	Matrix spike recovery was outside quality control limits due to matrix interference. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





## Envirotech Analytical Laboratory

Printed: 2/24/2021 4:37:00PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	SIMCOE LLC	Date Received:	02/23/21 15:15	Work Order ID:	E102076
Phone:	(970) 828-4060	Date Logged In:	02/23/21 15:28	Logged In By:	Alexa Michaels
Email:	sabre.beebe@ikavenergy.com	Due Date:	03/02/21 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Sean CasausComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? No

Sample Cooler

7. Was a sample cooler received? No
8. If yes, was cooler received in good condition? NA
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C No

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 19.7°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? Yes
27. If yes, does the COC specify which phase(s) is to be analyzed? No

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Email- Sabre.beebe@ikavenergy.com

Email- Sabre.beebe@ikavenergy.com

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
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**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 20872

CONDITIONS OF APPROVAL

Operator:				OGRID:	Action Number:	Action Type:
SIMCOE LLC	1199 Main Ave., Suite 101	Durango, CO81301		329736	20872	GAS ANALYSIS
OCD Reviewer				Condition		
mkuehling				None		