



February 14, 2023

Blue Chip Oil, Inc

Ryan Dornbos

155 E Boardwalk, Suite 400

Fort Collins CO 80525

Project Name - Shannon Roberts

Project Number - [none]

Attached are your analytical results for Shannon Roberts received by Origins Laboratory, Inc. February 09, 2023. This project is associated with Origins project number Y302179-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Blue Chip Oil, Inc
155 E Boardwalk, Suite 400
Fort Collins CO 80525

Ryan Dornbos
Project Number: [none]
Project: Shannon Roberts

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
North 3'	Y302179-01	Soil	February 9, 2023 12:00	02/09/2023 14:50
East 3'	Y302179-02	Soil	February 9, 2023 12:00	02/09/2023 14:50
South 3'	Y302179-03	Soil	February 9, 2023 12:00	02/09/2023 14:50
West 3'	Y302179-04	Soil	February 9, 2023 12:00	02/09/2023 14:50
Floor 4.5'	Y302179-05	Soil	February 9, 2023 12:00	02/09/2023 14:50

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645



4302179

www.originslaboratory.com

page | of |

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix		Analytes				Sample Instructions			
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other	GBL	PH		SAR	Boron	
NORTH 3'	2/19/15	12	3	X													
EAST 3'		12	3	X													
SOUTH 3'		12	3	X													
WEST 3'		12	3	X													
WELL 4.5'		12	3	X													

Client: BLUE CHIP OIL INC
 Address: 155 E BOARDWALK SUITE 400
 Fort Collins, CO 80525
 Project Manager: RYAN DORNOS
 Project Name: SHANNON ROBERTS
 Telephone Number: 303 915 9074 - 8444
 Project Number: 5
 Email Address: ryan@dornbos.com
 Samples Collected By: RYAN DORNOS
 bluechipoil@gmail.com | bluechipoil@msn.com

Temp Received: 5.4 Date Results Needed

Reinquisitioned By: Ryan Dornbos Date: 2/19/15 Time: 1450
 Received By: CHS Date: 2/19/15 Time: 1450
 Turnaround Time: Same Day 48 Hr 72 Hr Standard

WELL EXTRA
 FOR POSSIBLE
 METALS PLEASE

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Origins Laboratory

F-012207-01-R1
 Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 4302179 Client: Blue Chip Oil
 Client Project ID: Shannon Roberts
 Checklist Completed by: EHS/DE Shipped Via: HD
 (UPS, FedEx, Hand-Delivered, Pick-up, etc.)
 Date/time completed: 2/9/23 Airbill #: NA
 Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: _____
 Cooler Number/Temperature: 1 / 15.4 °C _____ / _____ °C _____ / _____ °C (Describe)
 Thermometer ID: 709

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	X			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCl, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			X	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

DE
 Reviewed by (Project Manager)

02/05/2023
 Date/Time Reviewed

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

North 3'
2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
Y302179-01 (Soil)

Boron (DTPA Sorbitol)

Boron	1.10	0.100	mg/L	1	B3B1002	KAP	02/10/2023	02/13/2023	
-------	------	-------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3B0901	ZZZ	02/09/2023	02/09/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: <i>o</i> -Terphenyl	88.8 %	50-150			"	"	"	"	
--------------------------------	--------	--------	--	--	---	---	---	---	--

GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B0903	ZZZ	02/09/2023	02/09/2023	U
Ethylbenzene	ND	0.00200	"	"	"	ZZZ	"	"	U
Toluene	ND	0.00200	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.00200	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	98.0 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.4 %	70-130			"	"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	4.49	0.499	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023	
Magnesium	0.904	0.823	"	"	"	KAP	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

North 3'

2/9/2023 12:00:00PM

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

**Origins Laboratory, Inc.
 Y302179-01 (Soil)**

Metals by Saturated Paste by EPA 6010

Sodium	16.8	0.435	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023
--------	------	-------	-------	----	--------	-----	------------	------------

pH in Soil by 9045D

pH	7.93		pH Units	1	B3B1006	HJD	02/10/2023	02/11/2023
----	------	--	----------	---	---------	-----	------------	------------

SAR by 20B Saturated Paste

SAR	10.3		SAR	1	B3B1003	KAP	02/10/2023	02/13/2023
-----	------	--	-----	---	---------	-----	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.73	0.00500	mmhos/cm	1	B3B1006	HJD	02/10/2023	02/11/2023
---------------------------	------	---------	----------	---	---------	-----	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

East 3'
 2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
 Y302179-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.687	0.0999	mg/L	1	B3B1002	KAP	02/10/2023	02/13/2023	
-------	-------	--------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3B0901	ZZZ	02/09/2023	02/09/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	89.6 %	50-150			"	"	"	"	
------------------------	--------	--------	--	--	---	---	---	---	--

GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B0903	ZZZ	02/09/2023	02/09/2023	U
Ethylbenzene	ND	0.00200	"	"	"	ZZZ	"	"	U
Toluene	ND	0.00200	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.00200	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	90.1 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.2 %	70-130			"	"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.06	0.499	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

East 3'
2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
Y302179-02 (Soil)

Metals by Saturated Paste by EPA 6010

Sodium	8.65	0.435	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023
--------	------	-------	-------	----	--------	-----	------------	------------

pH in Soil by 9045D

pH	8.23		pH Units	1	B3B1006	HJD	02/10/2023	02/11/2023
----	------	--	----------	---	---------	-----	------------	------------

SAR by 20B Saturated Paste

SAR	7.25		SAR	1	B3B1003	KAP	02/10/2023	02/13/2023
-----	------	--	-----	---	---------	-----	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.822	0.00500	mmhos/cm	1	B3B1006	HJD	02/10/2023	02/11/2023
---------------------------	-------	---------	----------	---	---------	-----	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

South 3'
2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
Y302179-03 (Soil)

Boron (DTPA Sorbitol)

Boron	0.304	0.0999	mg/L	1	B3B1002	KAP	02/10/2023	02/13/2023	
-------	-------	--------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3B0901	ZZZ	02/09/2023	02/09/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	90.2 %	50-150			"	"	"	"	
------------------------	--------	--------	--	--	---	---	---	---	--

GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B0903	ZZZ	02/09/2023	02/09/2023	U
Ethylbenzene	ND	0.00200	"	"	"	ZZZ	"	"	U
Toluene	ND	0.00200	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.00200	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	97.3 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	97.0 %	70-130			"	"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	2.54	0.499	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

South 3'

2/9/2023 12:00:00PM

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

**Origins Laboratory, Inc.
 Y302179-03 (Soil)**

Metals by Saturated Paste by EPA 6010

Sodium	ND	0.435	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023
--------	----	-------	-------	----	--------	-----	------------	------------

pH in Soil by 9045D

pH	8.16		pH Units	1	B3B1006	HJD	02/10/2023	02/11/2023
----	------	--	----------	---	---------	-----	------------	------------

SAR by 20B Saturated Paste

SAR	0.170		SAR	1	B3B1003	KAP	02/10/2023	02/13/2023
-----	-------	--	-----	---	---------	-----	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.248	0.00500	mmhos/cm	1	B3B1006	HJD	02/10/2023	02/11/2023
---------------------------	-------	---------	----------	---	---------	-----	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

West 3'

2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
Y302179-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.958	0.100	mg/L	1	B3B1002	KAP	02/10/2023	02/13/2023	
-------	-------	-------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3B0901	ZZZ	02/09/2023	02/09/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	90.1 %	50-150			"	"	"	"	
------------------------	--------	--------	--	--	---	---	---	---	--

GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B0903	ZZZ	02/09/2023	02/09/2023	U
Ethylbenzene	ND	0.00200	"	"	"	ZZZ	"	"	U
Toluene	ND	0.00200	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.00200	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	109 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	96.2 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.1 %	70-130			"	"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	4.26	0.499	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

West 3'

2/9/2023 12:00:00PM

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

**Origins Laboratory, Inc.
 Y302179-04 (Soil)**

Metals by Saturated Paste by EPA 6010

Sodium	25.6	0.435	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023
--------	------	-------	-------	----	--------	-----	------------	------------

pH in Soil by 9045D

pH	8.06		pH Units	1	B3B1006	HJD	02/10/2023	02/11/2023
----	------	--	----------	---	---------	-----	------------	------------

SAR by 20B Saturated Paste

SAR	16.5		SAR	1	B3B1003	KAP	02/10/2023	02/13/2023
-----	------	--	-----	---	---------	-----	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	2.41	0.00500	mmhos/cm	1	B3B1006	HJD	02/10/2023	02/11/2023
---------------------------	------	---------	----------	---	---------	-----	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Floor 4.5'
2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
Y302179-05 (Soil)

Boron (DTPA Sorbitol)

Boron	5.39	0.100	mg/L	1	B3B1002	KAP	02/10/2023	02/13/2023	
-------	------	-------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3B0901	ZZZ	02/09/2023	02/09/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	86.9 %	50-150			"	"	"	"	
------------------------	--------	--------	--	--	---	---	---	---	--

GBTEX+TMBs by 8260D

Benzene	ND	0.00200	mg/kg	1	B3B0903	ZZZ	02/09/2023	02/09/2023	U
Ethylbenzene	ND	0.00200	"	"	"	ZZZ	"	"	U
Toluene	ND	0.00200	"	"	"	ZZZ	"	"	U
Xylenes, total	ND	0.00200	"	"	"	ZZZ	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	ZZZ	"	"	U

Surrogate: 1,2-Dichloroethane-d4	114 %	70-130			"	"	"	"	
Surrogate: Toluene-d8	111 %	70-130			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.5 %	70-130			"	"	"	"	

Metals by Saturated Paste by EPA 6010

Calcium	1.09	0.499	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023	
Magnesium	ND	0.823	"	"	"	KAP	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Floor 4.5'
 2/9/2023 12:00:00PM

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

Origins Laboratory, Inc.
 Y302179-05 (Soil)

Metals by Saturated Paste by EPA 6010

Sodium	26.4	0.435	meq/L	10	[CALC]	KAP	02/10/2023	02/13/2023
--------	------	-------	-------	----	--------	-----	------------	------------

pH in Soil by 9045D

pH	8.49		pH Units	1	B3B1006	HJD	02/10/2023	02/11/2023
----	------	--	----------	---	---------	-----	------------	------------

SAR by 20B Saturated Paste

SAR	32.7		SAR	1	B3B1003	KAP	02/10/2023	02/13/2023
-----	------	--	-----	---	---------	-----	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	2.04	0.00500	mmhos/cm	1	B3B1006	HJD	02/10/2023	02/11/2023
---------------------------	------	---------	----------	---	---------	-----	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3B0901 - EPA 3580										
Blank (B3B0901-BLK1)										
					Prepared: 02/09/2023 Analyzed: 02/09/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	23		"	24.9		93.0	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0901 - EPA 3580

LCS (B3B0901-BS1)

Prepared: 02/09/2023 Analyzed: 02/09/2023

Diesel (C10-C28)	953	50.0	mg/kg	1000		95.3	70-130			
Residual Range Organics (C28-C40)	1120	200	"	1000		112	70-130			
Surrogate: o-Terphenyl	56		"	49.8		112	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3B0901 - EPA 3580										
Matrix Spike (B3B0901-MS1)		Source: Y302171-02			Prepared: 02/09/2023 Analyzed: 02/09/2023					
Diesel (C10-C28)	1290	50.0	mg/kg	1000	166	113	70-130			
Residual Range Organics (C28-C40)	1940	200	"	1000	451	149	70-130			QM-07
Surrogate: o-Terphenyl	47		"	49.8		95.0	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0901 - EPA 3580

Matrix Spike Dup (B3B0901-MSD1)	Source: Y302171-02			Prepared: 02/09/2023 Analyzed: 02/09/2023						
Diesel (C10-C28)	1330	50.0	mg/kg	1000	166	116	70-130	2.73	35	
Residual Range Organics (C28-C40)	1980	200	"	1000	451	153	70-130	2.26	35	QM-07
Surrogate: o-Terphenyl	50		"	49.8		101	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0903 - EPA 5030 (soil)

Blank (B3B0903-BLK1)

Prepared: 02/09/2023 Analyzed: 02/09/2023

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125	100		70-130			
Surrogate: Toluene-d8	0.12		"	0.125	94.1		70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125	107		70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0903 - EPA 5030 (soil)

LCS (B3B0903-BS1)

Prepared: 02/09/2023 Analyzed: 02/09/2023

1,2,4-Trimethylbenzene	0.0879	0.00200	mg/kg	0.100		87.9	70-130			
1,3,5-Trimethylbenzene	0.0898	0.00200	"	0.100		89.8	70-130			
Benzene	0.0899	0.00200	"	0.100		89.9	70-130			
Ethylbenzene	0.0869	0.00200	"	0.100		86.9	70-130			
Naphthalene	0.0885	0.00380	"	0.100		88.5	70-130			
Toluene	0.0902	0.00200	"	0.100		90.2	70-130			
o-Xylene	0.0863	0.00200	"	0.100		86.3	70-130			
m,p-Xylene	0.173	0.00400	"	0.200		86.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		98.3	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		91.8	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0903 - EPA 5030 (soil)

Matrix Spike (B3B0903-MS1)	Source: Y302147-01			Prepared: 02/09/2023 Analyzed: 02/09/2023						
1,2,4-Trimethylbenzene	0.0928	0.00200	mg/kg	0.100	0.00138	91.4	70-130			
1,3,5-Trimethylbenzene	0.0930	0.00200	"	0.100	ND	93.0	70-130			
Benzene	0.0976	0.00200	"	0.100	ND	97.6	70-130			
Ethylbenzene	0.0950	0.00200	"	0.100	ND	95.0	70-130			
Naphthalene	0.0961	0.00380	"	0.100	ND	96.1	70-130			
Toluene	0.0928	0.00200	"	0.100	ND	92.8	70-130			
o-Xylene	0.0952	0.00200	"	0.100	ND	95.2	70-130			
m,p-Xylene	0.189	0.00400	"	0.200	ND	94.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		100	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		95.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		92.4	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

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

Batch B3B0903 - EPA 5030 (soil)

Matrix Spike Dup (B3B0903-MSD1)	Source: Y302147-01			Prepared: 02/09/2023 Analyzed: 02/09/2023						
1,2,4-Trimethylbenzene	0.0984	0.00200	mg/kg	0.100	0.00138	97.1	70-130	5.90	20	
1,3,5-Trimethylbenzene	0.0999	0.00200	"	0.100	ND	99.9	70-130	7.20	20	
Benzene	0.101	0.00200	"	0.100	ND	101	70-130	3.94	20	
Ethylbenzene	0.0968	0.00200	"	0.100	ND	96.8	70-130	1.90	20	
Naphthalene	0.103	0.00380	"	0.100	ND	103	70-130	7.34	20	
Toluene	0.0950	0.00200	"	0.100	ND	95.0	70-130	2.41	20	
o-Xylene	0.0976	0.00200	"	0.100	ND	97.6	70-130	2.43	20	
m,p-Xylene	0.193	0.00400	"	0.200	ND	96.6	70-130	1.93	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		105	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		97.8	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

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

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

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

Batch B3B1002 - DTPA Sorbitol Preparation

Blank (B3B1002-BLK1)

Prepared: 02/10/2023 Analyzed: 02/13/2023

Boron ND 0.100 mg/L

Duplicate (B3B1002-DUP1)

Source: Y302174-01

Prepared: 02/10/2023 Analyzed: 02/13/2023

Boron 0.128 0.100 mg/L 0.115 10.7 50

Batch B3B1003 - Saturated Paste Metals

Blank (B3B1003-BLK1)

Prepared: 02/10/2023 Analyzed: 02/13/2023

Calcium PPM ND 10.0 mg/L

SAR 0.00 SAR

Magnesium PPM ND 10.0 mg/L

Sodium PPM ND 10.0 "

Duplicate (B3B1003-DUP1)

Source: Y302151-01

Prepared: 02/10/2023 Analyzed: 02/13/2023

Calcium PPM 5.03 10.0 mg/L 4.40 13.5 50

SAR 0.00 SAR 7.45 200 200

Magnesium PPM 4.08 10.0 mg/L 3.66 10.9 50

Sodium PPM 97.3 10.0 " 87.4 10.7 50

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
 155 E Boardwalk, Suite 400
 Fort Collins CO 80525

Ryan Dornbos
 Project Number: [none]
 Project: Shannon Roberts

Saturated Paste - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3B1006 - Saturated Paste pH/EC										
Blank (B3B1006-BLK1)					Prepared: 02/10/2023 Analyzed: 02/11/2023					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
Duplicate (B3B1006-DUP1)		Source: Y302151-01			Prepared: 02/10/2023 Analyzed: 02/11/2023					
Specific Conductance (EC)	0.346	0.00500	mmhos/cm		0.300			14.3	25	
pH	8.71		pH Units		8.71			0.00	25	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Blue Chip Oil, Inc
155 E Boardwalk, Suite 400
Fort Collins CO 80525

Ryan Dornbos
Project Number: [none]
Project: Shannon Roberts

Notes and Definitions

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.