

## **CERTIFICATE OF ANALYSIS**

**PRODUCT NAME:** CBD Tincture - Natural

PRODUCT STRENGTH: 450 mg

FILL LOT NUMBER: 20LL039k11

SOFTGEL LOT NUMBER: 92519

**BEST BY DATE**: 6/1/21

### Click on the links to view third party reports!

### Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Golden to Amber	PASS
Odor	SOP-100	Characteristic - olive oil and hemp	PASS
Appearance	SOP-100	Golden to Amber oil in brown glass bottle with dropper	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	SOP-132	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results	Pass/Fail
Potency - Total CBD	SOP-111	427.5-562.2 mg CBD LOQ**: 10 PPM† (0.001%)	<u>481mg</u>	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
FL Compliant Pesticide Panel	SOP-111	Florida State Hemp Program Rule 5B-57.014: Action Limits for Pesticides	ND	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	Below LOD	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	Below LOD	PASS
Microbial - Aspergillus	SOP-111	Complies with USP 61/62	Below LOD	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): 1.5 PPM Cadmium (Cd): 0.5 PPM Mercury (Hg): 1.0 PPM Lead (Pb): 0.5 PPM	Below LOQ	PASS

<sup>\*</sup> Level of Quantitation, † Parts Per Million

Quality Certified by: Darcis Moran 02.26.2020

Darcie Moran Manager of Quality Date



Order #: 49154 Order Name: 450.Nat.039. Batch#: 20LL039K11 Received: 02/17/2020 Completed: 02/19/2020



### Sample



N/D D9-THC 1.760% Total CBD

487.9 mg Cannabinoids per bottle

481.0 mg CBD per

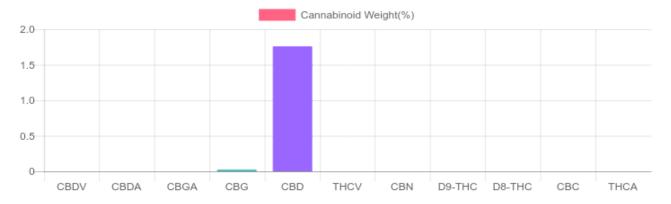
1 bottle = 30 ml per bottle x density (.911) x Cannabinoid concentration

#### Cannabinoids Test

SHIMADZU INTEGRATED UPLC-PDA GSL SOP 400

UPLOADED: 02/18/2020 10:35:01

Cannabinoids	LOQ	weight(%)	mg/g	mg/bottle
D9-THC	10 PPM	N/D	N/D	N/D
THCA	10 PPM	N/D	N/D	N/D
CBD	10 PPM	1.760%	17.600	481.0
CBDA	20 PPM	N/D	N/D	N/D
CBDV	20 PPM	N/D	N/D	N/D
CBC	10 PPM	N/D	N/D	N/D
CBN	10 PPM	N/D	N/D	N/D
CBG	10 PPM	0.025%	0.251	6.9
CBGA	20 PPM	N/D	N/D	N/D
D8-THC	10 PPM	N/D	N/D	N/D
THCV	10 PPM	N/D	N/D	N/D
TOTAL D9-THC		N/D	N/D	N/D
TOTAL CBD*		1.760%	17.600	481.0
TOTAL CANNABINOIDS		1.785%	17.851	487.9



Reporting Limit 10 ppm \*Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification

Dr. Andrew Hall, Ph.D., Chief Scientific Officer

Ben Witten, MS, MT., Lab Director

**Green Scientific Labs** info@greenscientificlabs.com 1-833 TEST CBD









Order #: 49154 Order Name: 450.Nat.039. Batch#: 20LL039K11 Received: 02/17/2020 Completed: 02/19/2020



### **PESTICIDE ANALYSIS:**

GSL SOP 401 PREPARED: 02/17/2020 16:22:31 UPLOADED: 02/18/2020 12:10:59

GCMS-MS - Shimadzu GCMS-TQ8040

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pest
CAPTAN	0.700	N/D	0.003	0.001	CYPE
CHLORDANE	0.100	N/D	0.003	0.001	FIPRO
CHLORFENAPYR	0.100	N/D	0.003	0.001	FLUD
COUMAPHOS	0.100	N/D	0.003	0.001	PARA
CYFLUTHRIN	2.000	N/D	0.003	0.001	PENT

Pesticide	Action Level	LOQ	LOD	
resticide	(ppm)	(ppm)	(ppm)	(ppm)
CYPERMETHRIN	1.000	N/D	0.003	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001
PARATHION-METHYL	0.100	N/D	0.003	0.001
PENTACHLORONITROBENZENE	0.100	N/D	0.003	0.001

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001	IMIDACLOPRID	5.000	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001	KRESOXIM-METHYL	0.100	N/D	0.010	0.005
ACEQUINOCYL	0.100	N/D	0.001	0.001	MALATHION	0.500	N/D	0.005	0.001
ACETAMIPRID	0.100	N/D	0.005	0.001	METALAXYL	2.000	N/D	0.001	0.001
ALDICARB	0.100	N/D	0.005	0.001	METHIOCARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001	METHOMYL	1.000	N/D	0.001	0.001
BIFENAZATE	0.100	N/D	0.005	0.001	MEVINPHOS	0.100	N/D	0.001	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001	MYCLOBUTANIL	0.100	N/D	0.005	0.001
BOSCALID	0.100	N/D	0.005	0.001	NALED	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001	OXAMYL	0.500	N/D	0.001	0.001
CARBOFURAN	0.100	N/D	0.001	0.001	PACLOBUTRAZOL	0.100	N/D	0.005	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005	PERMETHRINS	0.500	N/D	0.005	0.001
CHLORPYRIFOS	0.100	N/D	0.001	0.001	PHOSMET	0.100	N/D	0.005	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001	PIPERONYL	0.000	N/D	0.004	0.004
DAMINOZIDE	0.100	N/D	0.005	0.001	BUTOXIDE	3.000	N/D	0.001	0.001
DIAZINON	0.100	N/D	0.001	0.001	PRALLETHRIN	0.100	N/D	0.005	0.005
DICHLORVOS	0.100	N/D	0.005	0.001	PROPICONAZOLE	0.100	N/D	0.010	0.005
DIMETHOATE	0.100	N/D	0.001	0.001	PROPOXUR	0.100	N/D	0.001	0.001
DIMETHOMORPH	2.000	N/D	0.005	0.001	PYRETHRINS	0.500	N/D	0.005	0.005
ETHOPROPHOS	0.100	N/D	0.001	0.001	(PYRETHRIN I)	0.500	IN/D	0.005	0.005
ETOFENPROX	0.100	N/D	0.001	0.001	PYRIDABEN	0.100	N/D	0.005	0.001
ETOXAZOLE	0.100	N/D	0.010	0.005	SPINETORAM	0.100	N/D	0.001	0.001
FENHEXAMID	0.100	N/D	0.005	0.001	SPINOSAD	0.100	N/D	0.001	0.001
FENOXYCARB	0.100	N/D	0.005	0.001	SPIROMESIFEN	0.100	N/D	0.005	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001	SPIROTETRAMAT	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	SPIROXAMINE	0.100	N/D	0.001	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	TEBUCONAZOLE	0.100	N/D	0.005	0.001
IMAZALIL	0.100	N/D	0.005	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
					THIAMETHOXAM	5.000	N/D	0.001	0.001
					TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

 ${\sf N/D} = {\sf Not\ Detected}, {\sf A/LOQ} = {\sf Above\ LOQ\ Level}, {\sf B/LOQ} = {\sf Below\ LOQ\ Level}, {\sf B/LOD} = {\sf Below\ LOD\ Level}, {\sf B/LOD} = {\sf Below\ LOD\ Level}, {\sf B/LOD} = {\sf Below\ LOD\ Level}, {\sf B/LOD\ Level}, {\sf B$ 

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Order #: 49154 Order Name: 450.Nat.039. Batch#: 20LL039K11 Received: 02/17/2020 Completed: 02/19/2020



### **RESIDUAL SOLVENTS:**

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 02/17/2020 18:04:23 Uploaded: 02/18/2020 09:06:54

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
DICHLOROETHANE	1	N/D	1	0.5
DICHLOROMETHANE	1	N/D	1	0.5
ETHANOL	5,000	B/LOQ	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
SOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	N/D	140	20
PROPANE	5,000	N/D	20	1
TOLUENE	890	N/D	53	1
TRICHLOROETHENE	1	N/D	0	0
XYLENES	2,170	N/D	130	20

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Order #: 49154 Order Name: 450.Nat.039. Batch#: 20LL039K11 Received: 02/17/2020 Completed: 02/19/2020



### **Microbial Analysis:**

Microbial Analysis GSL SOP 406

Uploaded: 02/18/2020 17:49:14

PCR - Agilent AriaMX <b>Test</b>	Test Method Used	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
STEC E.COLI*	USP 61/62†	ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
SALMONELLA*	USP 61/62†	ARIAMX PCR	5 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
ASPERGILLUS	USP 61/62†	ARIAMX PCR	ASP_LOD***	PRESENCE / ABSENT	BELOW LOD	PASS
YEAST AND MOLD	USP 61/62†	ARIAMX PCR	363.05518 CFU/G**	1,000	BELOW THRESHOLD	PASS
TOTAL AEROBIC BACTERIA	USP 61/62†	ARIAMX PCR	0.25316 CFU/G**	10,000	BELOW THRESHOLD	PASS
COLIFORM	USP 61/62†	ARIAMX PCR	3.41539 CFU/G**	100	BELOW THRESHOLD	PASS
ENTEROBACTERIACEAE	USP 61/62†	ARIAMX PCR	0.32951 CFU/G**	100	BELOW THRESHOLD	PASS

<sup>†</sup> USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc) \* STEC and Salmonella run as Multiplex

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<sup>\*\*</sup> CFU/g Calculation based on Select Category Type Gummy MIP/Extract Flower matrix

<sup>\*\*\*\*</sup> Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA



Order #: 49154 Order Name: 450.Nat.039. Batch#: 20LL039K11 Received: 02/17/2020 Completed: 02/19/2020



### **Mycotoxin Analysis:**

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 02/18/2020 12:10:58

Analyte	Action LvI (ppb)	Results (ppb)
AFLATOXIN B1	20	N/D
AFLATOXIN B2	20	N/D
AFLATOXIN G1	20	N/D
AFLATOXIN G2	20	N/D
OCHRATOXIN A	20	N/D

LOQ is 4ppb, LOD is 1ppb

### **Heavy Metals Analysis:**

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 02/17/2020 17:35:00

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb

### Water Activity:

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 02/18/2020 11:06:51

Water

0.65

### Filth and Foreign Materials Analysis:

Microscope - Amscope Simul-Focal Trinocular Stereo Zoom Microscope - GSL SOP 409

Uploaded: 02/18/2020 11:02:19

Pass: No Foreign Materials Detected

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Order #: 37180

Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



### Sample

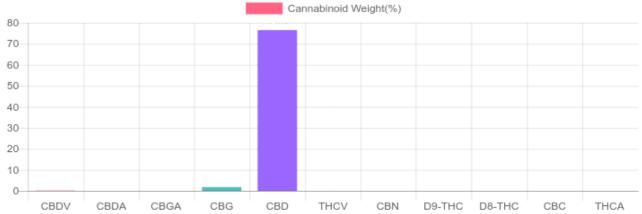


N/D D9-THC **76.48%**Total CBD

#### **Cannabinoids Test**

SHIMADZU INTEGRATED UPLC-PDA

GSL SOP 400	PREPARED: 09/27/201	19 22:34:39 <b>UPLOADE</b>	<b>):</b> 09/30/2019 12:49:03
Cannabinoids	LOQ	weight(%)	mg/g
D9-THC	10 PPM	N/D	N/D
THCA	10 PPM	N/D	N/D
CBD	10 PPM	76.48%	764.84
CBDA	20 PPM	N/D	N/D
CBDV	20 PPM	0.11%	1.10
CBC	10 PPM	N/D	N/D
CBN	10 PPM	N/D	N/D
CBG	10 PPM	1.79%	17.90
CBGA	20 PPM	N/D	N/D
D8-THC	10 PPM	N/D	N/D
THCV	10 PPM	N/D	N/D
TOTAL D9-THC		N/D	N/D
TOTAL CBD*		76.48%	764.84
TOTAL CANNABINOIDS		78.38%	783.84



Reporting Limit 100 ppm

\*Total CBD = CBD + CBDA x 0.877

N/D - Not Detected, B/LOQ - Below Limit of Quantification



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com











Order #: 37180

Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



### **TERPENES: TOTAL (0.027%)**

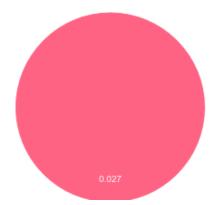
Headspace GCMS - Shimadzu GCMS QP2020 with HS20

Terpene	Results (%)	LOQ (%)	LOD (%)
GERANIOL	0.027%	0.0067%	0.0063%

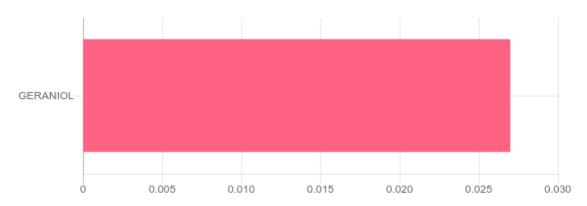
GSL SOP 404

Prepared: 09/27/2019 22:57:12 Uploaded: 09/30/2019 17:51:50

#### **Terpenes Breakdown**



### **Top Terpenes Results:**



#### Tested for but not present:

ALPHA-PINENE, CAMPHENE, BETA-MYRCENE, BETA-PINENE, 3-CARENE, ALPHA-TERPINENE, TRANS-BETA-OCIMENE, LIMONENE, P-CYMENE, CIS-BETA-OCIMENE, EUCALYPTOL, GAMMA-TERPINENE, TERPINOLENE, LINALOOL, ISOPULEGOL, CARYOPHYLLENE, HUMULENE, CIS-NEROLIDOL, TRANS-NEROLIDOL, GUAIOL, CARYOPHYLLENE OXIDE, ALPHA-BISABOLOL



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Order #: 37180

Order #: 37160 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



### **PESTICIDE ANALYSIS:**

GSL SOP 401 PREPARED: 09/27/2019 22:39:46 UPLOADED: 09/30/2019 20:39:11

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)	Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001	IMAZALIL	0.100	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001	IMIDACLOPRID	5.000	N/D	0.005	0.001
ACEQUINOCYL	0.100	N/D	0.001	0.001	KRESOXIM-METHYL	0.100	N/D	0.010	0.005
ACETAMIPRID	0.100	N/D	0.005	0.001	MALATHION	0.500	N/D	0.005	0.001
ALDICARB	0.100	N/D	0.005	0.001	METALAXYL	2.000	N/D	0.001	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001	METHIOCARB	0.100	N/D	0.005	0.001
BIFENAZATE	0.100	N/D	0.005	0.001	METHOMYL	1.000	N/D	0.001	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001	MEVINPHOS	0.100	N/D	0.001	0.001
BOSCALID	0.100	N/D	0.005	0.001	MYCLOBUTANIL	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001	NALED	0.100	N/D	0.005	0.001
CARBOFURAN	0.100	N/D	0.001	0.001	OXAMYL	0.500	N/D	0.001	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005	PACLOBUTRAZOL	0.100	N/D	0.005	0.001
CHLORPYRIFOS	0.100	N/D	0.001	0.001	PERMETHRINS	0.500	N/D	0.005	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001	PHOSMET	0.100	N/D	0.005	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001	PIPERONYL	2.000	NID	0.004	0.004
DIAZANON	0.100	N/D	0.001	0.001	BUTOXIDE	3.000	N/D	0.001	0.001
DICHLORVOS	0.100	N/D	0.005	0.001	PRALLETHRIN	0.100	N/D	0.005	0.005
DIMETHOATE	0.100	N/D	0.001	0.001	PROPICONAZOLE	0.100	N/D	0.010	0.005
DIMETHOMORPH	2.000	N/D	0.005	0.001	PROPOXUR	0.100	N/D	0.001	0.001
ETHOPROPHOS	0.100	N/D	0.001	0.001	PYRETHRINS	0.500	N/D	0.005	0.005
ETOFENPROX	0.100	N/D	0.001	0.001	(PYRETHRIN I)	0.500	IN/D	0.005	0.005
ETOXAZOLE	0.100	N/D	0.010	0.005	PYRIDABEN	0.100	N/D	0.005	0.001
FENHEXAMID	0.100	N/D	0.005	0.001	SPINETORAM	0.100	N/D	0.001	0.001
FENOXYCARB	0.100	N/D	0.005	0.001	SPINOSAD	0.100	N/D	0.001	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001	SPIROMESIFEN	0.100	N/D	0.005	0.001
FIPRONIL	0.100	N/D	0.003	0.001	SPIROTETRAMAT	0.100	N/D	0.001	0.001
FLONICAMID	0.100	N/D	0.025	0.010	SPIROXAMINE	0.100	N/D	0.001	0.001
FLUDIOXONIL	0.100	N/D	0.003	0.001	TEBUCONAZOLE	0.100	N/D	0.005	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001	THIACLOPRID	0.100	N/D	0.001	0.001
					THIAMETHOXAM	5.000	N/D	0.001	0.001
					TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level



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Order #: 37180 Order #: 37160 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



### **RESIDUAL SOLVENTS:**

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405

Prepared: 09/27/2019 22:31:38 Uploaded: 09/30/2019 18:55:54

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
DICHLOROETHANE	1	N/D	1	0.5
DICHLOROMETHANE	1	N/D	1	0.5
ETHANOL	5,000	N/D	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
SOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	B/LOQ	140	20
PROPANE	5,000	N/D	20	1
OLUENE	890	N/D	53	1
TRICHLOROETHENE	1	N/D	0	0
KYLENES	2,170	N/D	130	20















Order #: 37180 Order #: 37160 Order Name: BSO2.092519.A Batch#: BSO2.092519.A Received: 09/27/2019 Completed: 10/01/2019



### **Heavy Metals Analysis:**

ICP-MS - Shimadzu ICPMS-2030

GSL SOP 403

Uploaded: 09/30/2019 21:50:39

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb











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