

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

Test Certificate

Description:

Black Mineral Powder

Sample ID:

MSP-21220B

Lot No:

Location:

Received:
Completed:

8/3/2020 8/10/2020 Client: Morningstar Minerals

ent. Morningstar Min

P.O. Box 9

Farmington, NM 87499

Lab No: 200884-01

Analysis	Result	Per Unit	Specifications	Method
Aluminum	5,008	ppm	Report	ICP-OES USP <730>
Antimony	2.282	ppm	Report	ICP-OES USP <730>
Arsenic	0.268	ppm	Report	ICP-MS USP <730>
Barium	45.60	ppm	Report	ICP-OES USP <730>
Beryllium	0.504	ppm	Report	ICP-OES USP <730>
Bismuth	1.106	ppm	Report	ICP-OES USP <730>
Boron	47.83	ppm	Report	ICP-OES USP <730>
Cadmium	< 0.001	ppm	Report	ICP-MS USP <730>
Calcium	1,200	ppm	Report	ICP-OES USP <730>
Cerium	8.864	ppm	Report	ICP-MS USP <730>
Cesium	0.043	ppm	Report	ICP-MS USP <730>
Chromium	5.046	ppm	Report	ICP-OES USP <730>
Cobalt	2.360	ppm	Report	ICP-OES USP <730>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By:

Kristina Nolff-Quality Technician

Dated:

8/10/2020

Printed: 8/10/2020 2:34:44 PM



40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

Test Certificate

Description:

Black Mineral Powder

Sample ID:

MSP-21220B

Lot No:

Location:

Received:

8/3/2020

Completed:

8/10/2020

Client: Morningstar Minerals

P.O. Box 9

Farmington, NM 87499

Lab No: 200884-01

Analysis	 Result	Per Unit	Specifications	Method
Copper	10.71	ppm	Report	ICP-OES USP <730>
Dysprosium	0.628	ppm	Report	ICP-MS USP <730>
Erbium	0.351	ppm	Report	ICP-MS USP <730>
Europium	0.163	ppm	Report	ICP-MS USP <730>
Gadolinium	0.734	ppm	Report	ICP-MS USP <730>
Gallium	3.693	ppm	Report	ICP-MS USP <730>
Germanium	< 0.001	ppm	Report	ICP-MS USP <730>
Gold	<0.5	ppm	Report	ICP-OES USP
Hafnium	1.248	ppm	Report	ICP-MS USP <730>
Holmium	0.122	ppm	Report	ICP-MS USP <730>
Indium	0.014	ppm	Report	ICP-MS USP <730>
Iridium	0.027	ppm	Report	ICP-MS USP <730>
Iron	2,297	ppm	Report	ICP-OES USP <730>
Lanthanum	5.980	ppm	Report	ICP-OES USP <730>
Lead	7.049	ppm	Report	ICP-MS USP <730>
Lithium	6.028	ppm	Report	ICP-OES USP <730>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By:

Kristina Nolff-Quality Technician

Dated:

8/10/2020

Printed: 8/10/2020 2:34:44 PM



Page 2 of 5

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

Test Certificate

Description:

Black Mineral Powder

Sample ID:

MSP-21220B

Lot No:

Location:

Received: Completed: 8/3/2020

8/10/2020

Client: Morningstar Minerals

P.O. Box 9

Farmington, NM 87499

Lab No: 200884-01

Analysis	Result	Per Unit	Specifications	Method
Lutetium	0.492	ppm	Report	ICP-MS USP <730>
Magnesium	259.8	ppm	Report	ICP-OES USP <730>
Manganese	26.64	ppm	Report	ICP-OES USP <730>
Mercury	<0.001	ppm	Report	ICP-MS USP <730>
Molybdenum	1.674	ppm	Report	ICP-OES USP <730>
Neodymium	3.488	ppm	Report	ICP-MS USP <730>
Nickel	2.906	ppm	Report	ICP-OES USP <730>
Niobium	19.92	ppm	Report	ICP-OES USP <730>
Osmium	0.011	ppm	Report	ICP-MS USP <730>
Palladium	8,291	ppm	Report	ICP-MS USP <730>
Phosphorus	17.19	ppm	Report	ICP-OES USP <730>
Platinum	0.069	ppm	Report	ICP-MS USP <730>
Potassium	86.35	ppm	Report	ICP-OES USP <730>
Praseodymium	0.971	ppm	Report	ICP-MS USP <730>
Rhenium	0.018	ppm	Report	ICP-MS USP <730>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Dated:

8/10/2020

Printed: 8/10/2020 2:34:44 PM



Page 3 of 5

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

Test Certificate

Description:

Black Mineral Powder

Sample ID:

MSP-21220B

Lot No:

Location:

8/3/2020

Received: Completed:

8/10/2020

Client: Morningstar Minerals

P.O. Box 9

Farmington, NM 87499

Lab No: 200884-01

Analysis	Result	Per Unit	Specifications	Method
Rhodium	0.175	ppm	Report	ICP-MS USP <730>
Rubidium	0.314	ppm	Report	ICP-MS USP <730>
Ruthenium	< 0.001	ppm	Report	ICP-MS USP <730>
Samarium	0.690	ppm	Report	ICP-MS USP <730>
Scandium	2.904	ppm	Report	ICP-MS USP <730>
Selenium	6.508	ppm	Report	ICP-OES USP <730>
Silicon	356.9	ppm	Report	ICP-OES USP <730>
Silver	<0.5	ppm	Report	ICP-OES USP <730>
Sodium	437.1	ppm	Report	ICP-OES USP <730>
Strontium	26.89	ppm	Report	ICP-OES USP <730>
Sulfur	4,176	ppm	Report	ICP-OES USP <730>
Tantalum	0.043	ppm	Report	ICP-MS USP <730>
Tellurium	3.244	ppm	Report	ICP-OES USP <730>
Terbium	0.111	ppm	Report	ICP-MS USP <730>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By:

Kristina Nolff-Quality Technician

Dated:

8/10/2020

Printed: 8/10/2020 2:34:44 PM



Page 4 of 5

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

Test Certificate

Description:

Black Mineral Powder

Sample ID:

MSP-21220B

Lot No:

Location:

Received: Completed:

8/3/2020 8/10/2020

Client: Morningstar Minerals

P.O. Box 9

Farmington, NM 87499

Lab No: 200884-01

Analysis	Result	Per Unit	Specifications	Method
Thallium	<0.5	ppm	Report	ICP-OES USP <730>
Thorium	17.19	ppm	Report	ICP-OES USP <730>
Thulium	0.048	ppm	Report	ICP-MS USP <730>
Tin	< 0.001	ppm	Report	ICP-MS USP <730>
Titanium	452.6	ppm	Report	ICP-OES USP <730>
Tungsten	1.711	ppm	Report	ICP-OES USP <730>
Vanadium	11.50	ppm	Report	ICP-OES USP <730>
Ytterbium	0.310	ppm	Report	ICP-MS USP <730>
Yttrium	5.862	ppm	Report	ICP-OES USP <730>
Zinc	15.20	ppm	Report	ICP-OES USP <730>
Zirconium	34.79	ppm	Report	ICP-OES USP <730>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By:

Dated:

8/10/2020

Printed: 8/10/2020 2:34:44 PM



Page 5 of 5



Laboratory Analysis Report

Morning Star Farms Dennis Bagnall 777 N Valley Farms Rd Coolidge AZ 85128

Project: 5964

Date Received: 8/3/2020

Date Reported: 8/14/2020

PO Number: 5964

Lab Number: 933275-1

Sample ID: MSP-21220B

Description:

Fertilizer

Test	Method	Result	Units	Levels
Chloride, Cl	9251	119	ppm	
Fluoride, F	EPA 300.0	<50	ppm	
Iodine, I	3050/6020A	< 0.10	ppm	
Carbon (Total), C	AOAC 972.43	48.60	%	

Humic/Fulvic Acids: AOAC Method

Test	Method	Result	Units	Levels
Humic Acid	AOAC	53.99	%	
Hydrophobic Fulvic Acid Fraction	AOAC	2.28	%	

Lamar et al., 2014 (JAOAC 97(3): 721-730)



IAS LABORATORIES

2515 East University Drive Phoenix, AZ 85034 Office: (602) 273-7248

INVOICE

Date	Invoice No.
02/17/2022	2200656

PO Number:

Terms:

0.00

Remit Due Date:

02/17/2022

Morningstar Minerals 22 Cr 3956 Farmington, NM 87401

Project Manager:

Gregory Thompson

Project:

Calcium

Work Order(s):

22B0194

Analysis/Description	Matrix	Qty	Unit Cost	Extended Cost
Mercury (Hg)	Other	1	\$60.00	\$60.00
Lead (Pb)	Other	1	\$21.00	\$21.00
Calcium (Ca) - Total	Other	1	\$21.00	\$21.00
Arsenic (As)	Other	1	\$21.00	\$21.00

Invoice Total:

\$123.00

Remit To:

Accounts Receivable

Inter Ag Services Inc. 2515 E. University Dr. Phoenix, AZ 85034