

REPORT OF ANALYSIS
PET FOOD ANALYSIS
DRY PET FOOD

Analysis	Level Found		Units	Reporting		Analyst- Date	Verified- Date
	As Received	Dry Weight		Limit	Method		
Sample ID: BISON BITE		Lab Number: 13443049					
Moisture	5.10	//////	%	0.01	AOAC 930.15	vrn7-2020/06/04	cmw4-2020/06/05
Dry matter	94.90	//////	%	0.010	Calculation	Auto-2020/06/05	Auto-2020/06/05
Protein (crude)	59.0	62.2	%	0.20	AOAC 990.03	kjs3-2020/06/04	cmw4-2020/06/05
Fat (acid hydrolysis)	24.9	26.2	%	0.10	AOAC 954.02 (mod)	vrn7-2020/06/05	cmw4-2020/06/05
Fiber (crude)	2.92	3.08	%	0.20	AOCS Ba 6a-05	bjp7-2020/06/04	cmw4-2020/06/05
Ash	4.56	4.80	%	0.10	AOAC 942.05	hen4-2020/06/05	cmw4-2020/06/05
Sulfur (total)	0.68	0.72	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Phosphorus (total)	0.88	0.93	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Potassium (total)	1.28	1.35	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Magnesium (total)	0.11	0.12	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Calcium (total)	0.18	0.19	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Sodium (total)	0.30	0.32	%	0.01	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Iron (total)	239	252	ppm	5.0	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Manganese (total)	10.3	10.8	ppm	1.0	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Copper (total)	85.2	89.8	ppm	1.0	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
Zinc (total)	82.8	87.2	ppm	1.0	AOAC 985.01 (mod)	cvs7-2020/06/04	cmw4-2020/06/05
ME (Atwater - calculated)	4300	4500	Kcal/kg	0.1	Calculation	Auto-2020/06/05	Auto-2020/06/05

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

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REPORT NUMBER

20-157-9240

REPORT DATE
Jun 05, 2020

RECEIVED DATE
Jun 03, 2020

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36692



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ISSUE DATE
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	As Received	Dry Weight		Limit	Method		

ppm = parts per million, ppm = mg/kg Mineral analysis performed by ICAP using a wet digest procedure.

For questions please contact:

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Detailed Method Description(s)

Moisture

Analysis follows MWL FD 016 which is based on AOAC 930.15. A sample is blended, mixed, or ground to obtain a homogenous sub-sample. The sample aliquot is placed in a pre-weighed tin, weighed to get a sample weight and then placed in a 135°C convection oven for two (2) hours. The sample is then removed, cooled in a desiccator and reweighed. The loss in weight is reported as % moisture

Calculation

Analytical results are entered into applicable formulas to provide a calculated result which is reported.

Protein (Crude)

Analysis follows MWL FD 070 which is based on AOAC 990.03. The sample is placed in a combustion instrument and the amount of nitrogen is obtained. The nitrogen value is multiplied by a factor of 6.25 and that value reported as crude protein.

Acid Hydrolysis Fat

Analysis follows FD 027 which is based on AOAC 954.02. A sample is treated with ethanol and hydrochloric acid to help release fat in the sample. Separate treatments of ethyl ether and petroleum ether is used to extract the fat and the ethers collected in a pre-weighed beaker. The ether is evaporated and dried at 70 degrees C to remove remaining ether and moisture and the material remaining in the beaker is reported as "fat".

Crude Fiber

Analysis follows MWL FD 039 which is based on AOCS Ba 6a-05. A small amount of sample is weighed and placed in a membrane bag and sealed. The bag and sample are placed in a container that treats the sample with a variety of chemicals to dissolve materials which leach out of the bag. After repeated washing and rinsing, the bag is dried and reweighed. The material remaining in the bag is reported as crude fiber

Ash

Analysis follows MWL FD 019 which is based on AOAC 942.05. The sample is weighed and placed in a muffle furnace at 600°C. After a period of time, the sample is removed and the remaining material weighed and reported as ash. Moisture and organic material is driven off.

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ICP analysis of Feeds

Analysis follows MWL ME 029 which is based on AOAC 985.01. Samples have been prepared using MWL ME 069 which is a wet ash procedure that requires mineral acids and heat. Sample analysis involves moving the sample extract into the ICP where it is nebulized and introduced into the high temperature plasma which energizes the electrons of the dissolved minerals/metals. As the energized electrons of the minerals/metals return to ground state, energy is released as light. The emitted wavelength(s) and light intensities are used to identify and quantitate the minerals/metals in the sample

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