

Oregon Department of Agriculture

Fertilizer Program

Laboratory Analysis Results

January 1 – December 31, 2006

Official samples of fertilizer, agricultural mineral, agricultural amendment, and lime products are collected by the Department on a continuing basis. Samples are collected to determine if the guaranteed analysis identified on the product label is being satisfied. Routine product sampling provides a two-fold benefit: 1. Consumer protection for buyers; and 2. Identification of potential process problems for blenders and manufacturers.

A sample is considered deficient and in violation if the lab analysis of any guaranteed element is below the stated guarantee by an amount greater than the investigational allowance. The Department uses investigational allowances developed by the Association of American Plant Food Control Officials (AAPFCO). These investigational allowances were officially adopted by the Department as Oregon Administrative Rule (OAR) 603-059-0070 and are available on the fertilizer program's web page:

<http://oregon.gov/oda/pest/fertilizer.shtml>

Sample analysis results are sorted alphabetically by company name. Company location denotes where the product is registered from, and not necessarily where the sample was collected. Product names marked with an asterisk (*) are custom mixes. These custom mix products do not require registration and were sampled at the location listed.

Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Actagro, LLC Biola, California	Micro Booster	Sulfur (S)	3.03%	2.5%	No
		Iron (Fe)	1.33%	1%	No
		Manganese (Mn)	1.14%	1%	No
		Zinc (Zn)	3.15%	3%	No
	3-12-3 Phocon	Total Nitrogen (N)	3.4%	3%	No
		Available Phosphate (P ₂ O ₅)	11.8%	12%	No
		Soluble Potash (K ₂ O)	3.3%	3%	No
		Iron (Fe)	0.122%	0.1%	No
		Zinc (Zn)	0.177%	0.25%	Yes
Agro-Culture Liquid Fertilizers St. Johns, Michigan	9-24-3 Pro-Germinator	Total Nitrogen (N)	8.7%	9%	No
		Available Phosphate (P ₂ O ₅)	23.8%	24%	No
		Soluble Potash (K ₂ O)	3.9%	3%	No
		Iron (Fe)	0.275%	0.1%	No
	2-1-6 Sure-K	Total Nitrogen (N)	3%	2%	No
		Available Phosphate (P ₂ O ₅)	1.1%	1%	No
		Soluble Potash (K ₂ O)	8.8%	6%	No

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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Agro-Culture Liquid Fertilizers St. Johns, Michigan	27-0-0-1 High NRG-N w/S	Total Nitrogen (N)	26.3%	27%	No
		Sulfur (S)	1%	1%	No
American Agriculture Portland, Oregon	1-5-8 Super Micro Part A	Total Nitrogen (N)	0.93%	1%	No
		Available Phosphate (P ₂ O ₅)	5%	5%	No
		Soluble Potash (K ₂ O)	11.1%	8%	No
		Magnesium (Mg)	1.3%	1%	No
		Sulfur (S)	1.58%	1%	No
		Boron (B)	0.016%	0.02%	No
		Copper (Cu)	0.014%	0.01%	No
		Iron (Fe)	0.14%	0.12%	No
		Manganese (Mn)	0.053%	0.05%	No
		Molybdenum (Mo)	0.0009%	0.0008%	No
		Zinc (Zn)	0.014%	0.01%	No
		9-7-14 Vita Grow	Total Nitrogen (N)	8.9%	9%
	Available Phosphate (P ₂ O ₅)		6.4%	7%	No
	Soluble Potash (K ₂ O)		16.4%	14%	No
	Calcium (Ca)		9.2%	9.5%	No
	Magnesium (Mg)		1.9%	1.5%	No
	Sulfur (S)		2.35%	1.5%	No
	Boron (B)		0.025%	0.03%	No
	Chlorine (Cl) (Max)		0.15%	1%	No
	Copper (Cu)		0.02%	0.02%	No
	Iron (Fe)		0.17%	0.15%	No
	Manganese (Mn)		0.12%	0.075%	No
	Molybdenum (Mo)		0.0015%	0.001%	No
	Zinc (Zn)	0.024%	0.02%	No	
	4-14-24 Vita Grow Super Micro	Total Nitrogen (N)	3.6%	4%	No
		Available Phosphate (P ₂ O ₅)	13.3%	14%	No
		Soluble Potash (K ₂ O)	29.7%	24%	No
		Magnesium (Mg)	3.6%	3%	No
		Boron (B)	0.032%	0.06%	Yes
		Chlorine (Cl) (Max)	0.29%	2%	No
		Copper (Cu)	0.031%	0.04%	No
		Iron (Fe)	0.35%	0.3%	No
		Manganese (Mn)	0.14%	0.15%	No
Molybdenum (Mo)		0.0023%	0.002%	No	
Zinc (Zn)		0.042%	0.04%	No	
American Agritech Tempe, Arizona		2-0-0 Cal Mag Plus	Total Nitrogen (N)	1.9%	2%
	Calcium (Ca)		2.5%	3.2%	Yes
	Magnesium (Mg)		1.42%	1.2%	No
	Iron (Fe)		0.094%	0.1%	No
Bella Via, LLC Rohnert Park, California	16-0-0 Metanaturals Organic Nitrogen	Total Nitrogen (N)	13.5%	16%	Yes
		Urea Nitrogen	13.0%	0%	Yes
Bloomington Wholesale Garden Supply Bloomington, Indiana	10-10-2 Sunleaves Peruvian Seabird Guano	Total Nitrogen (N)	11.2%	10%	No
		Available Phosphate (P ₂ O ₅)	14.9%	10%	No
		Soluble Potash (K ₂ O)	4.2%	2%	No

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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Caltec Agri Marketing Services Modesto, California	0.309-1.7-0.6 Kelpak Liquid Seaweed Concentrate	Total Nitrogen (N)	0.43%	0.309%	No
		Available Phosphate (P ₂ O ₅)	1.56%	1.7%	No
		Soluble Potash (K ₂ O)	1.2%	0.6%	No
Down to Earth Distributors Eugene, Oregon	3-2-2 Vegan Mix 100% Natural Fertilizer	Total Nitrogen (N)	2.5%	3%	Yes
		Available Phosphate (P ₂ O ₅)	1.9%	2%	No
		Soluble Potash (K ₂ O)	2.8%	2%	No
ENP, Inc. Mendota, Illinois	Age Old Organics Guano – Fruit	Total Nitrogen (N)	6.2%	2%	No
		Available Phosphate (P ₂ O ₅)	18.78%	10%	No
		Soluble Potash (K₂O)	1%	20%	Yes
		Calcium (Ca)	14.4%	1%	No
Fox Farm Soil & Fertilizer Co. Arcata, California	6-4-4 Grow Big Liquid Plant Food	Total Nitrogen (N)	6.5%	6%	No
		Available Phosphate (P ₂ O ₅)	4.2%	4%	No
		Soluble Potash (K ₂ O)	5.4%	4%	No
		Magnesium (Mg)	1.04%	0.6%	No
		Sulfur (S)	0.77%	0.5%	No
		Boron (B)	0.21%	0.2%	No
		Copper (Cu)	0.78%	0.05%	No
		Iron (Fe)	0.24%	0.1%	No
		Manganese (Mn)	0.0891%	0.05%	No
		Molybdenum (Mo)	0.164%	0.0009%	Yes
	Zinc (Zn)	0.0948%	0.05%	No	
	0-3-0 Peace of Mind Rock Phosphate	Available Phosphate (P ₂ O ₅)	3.2%	3%	No
		Calcium (Ca)	25.2%	26%	No
		Magnesium (Mg)	0.33%	3.44%	Yes
Futchatec Distribution Ltd. Burnaby, British, Columbia	1.8-0.5-3.1 Dutch Master One Flower	Total Nitrogen (N)	1.6%	1.8%	No
		Available Phosphate (P ₂ O ₅)	0.94%	0.5%	No
		Soluble Potash (K ₂ O)	3.9%	3.1%	No
		Calcium (Ca)	0.75%	1.45%	Yes
		Magnesium (Mg)	0.48%	0.5%	No
		Sulfur (S)	0.1%	0.3%	No
		Boron (B)	0.0035%	0.003%	No
		Copper (Cu)	0.0016%	0.002%	No
		Iron (Fe)	0.024%	0.04%	Yes
		Manganese (Mn)	0.004%	0.005%	No
		Molybdenum (Mo)	0.001%	0.001%	No
Zinc (Zn)	0.003%	0.002%	No		
Green Air Products, Inc. Gresham, Oregon	Micro Base B	Total Nitrogen (N)	1.54%	1.5%	No
		Available Phosphate (P ₂ O ₅)	3.8%	3.9%	No
		Soluble Potash (K ₂ O)	9.6%	7.47%	No
Grigg Bros. Albion, Idaho	8-0-4 + 10 Ca Tru-Foliar Sili-Kal B	Total Nitrogen (N)	9.4%	8%	No
		Soluble Potash (K ₂ O)	4.1%	4%	No
		Calcium (Ca)	10.4%	10%	No
		Boron (B)	0.044%	0.04%	No

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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Grigg Bros. Albion, Idaho	13-2-3 + Iron Tru-Foliar Gary's Green Ultra	Total Nitrogen (N)	13.3%	13%	No
		Available Phosphate (P ₂ O ₅)	1.9%	2%	No
		Soluble Potash (K ₂ O)	3.7%	4%	No
		Copper (Cu)	0.13%	0.12%	No
		Iron (Fe)	1.34%	1.4%	No
		Manganese (Mn)	0.23%	0.2%	No
		Zinc (Zn)	0.19%	0.2%	No
Lebanon Seaboard Corp. Lebanon, Pennsylvania	18-2-5 NutriFoliar Fertilizer + Micros	Total Nitrogen (N)	17.8%	18%	No
		Available Phosphate (P ₂ O ₅)	1.9%	2%	No
		Soluble Potash (K ₂ O)	4.6%	5%	No
		Sulfur (S)	0.035%	1.2%	Yes
		Copper (Cu)	0.1%	0.1%	No
		Iron (Fe)	0.94%	1%	No
		Manganese (Mn)	0.11%	0.1%	No
		Zinc (Zn)	0.1%	0.1%	No
Light Manufacturing Co. Portland, Oregon	Golden Grow – Grow Part "A"	Total Nitrogen (N)	5.6%	5%	No
		Available Phosphate (P ₂ O ₅)	18.9%	19%	No
		Soluble Potash (K ₂ O)	32.1%	30%	No
		Magnesium (Mg)	3.3%	3%	No
		Sulfur (S)	3.79%	4%	No
	Golden Grow – Grow Part "B"	Total Nitrogen (N)	12.6%	15.5%	Yes
		Calcium (Ca)	20%	19%	No
	Golden Grow – Grow Micro-Gold Micro Nutrient Concentrate	Boron (B)	0.029%	0.036%	No
		Copper (Cu)	0.007%	0.006%	No
		Iron (Fe)	0.28%	0.31%	No
		Manganese (Mn)	0.22%	0.14%	No
		Molybdenum (Mo)	0.0017%	0.001%	No
		Zinc (Zn)	0.075%	0.05%	No
	0-9-7 Golden Grow Bloom Builder	Available Phosphate (P ₂ O ₅)	9%	9%	No
		Soluble Potash (K ₂ O)	8.6%	7%	No
Miller Chemical & Fertilizer Corporation Hanover, Pennsylvania	2-8-14 Greenstim	Total Nitrogen (N)	2.4%	2%	No
		Available Phosphate (P ₂ O ₅)	8.2%	8%	No
		Soluble Potash (K ₂ O)	15.6%	14%	No
		Chlorine (Cl) Maximum	0.3%	0.25%	No
		Copper (Cu)	0.096%	0.01%	No
		Iron (Fe)	0.127%	0.1%	No
		Natural Science Research Carson, California	2-5-4 NSR Greenleaves Bloom Juice	Total Nitrogen (N)	2.8%
Available Phosphate (P₂O₅)	3.4%			5%	Yes
Soluble Potash (K ₂ O)	5.8%			4%	No
Calcium (Ca)	1.62%			1%	No
Magnesium (Mg)	0.56%			0.5%	No
North Pacific Ag Products Portland, Oregon	Jerico Products Pacific Pearl Oyster Shell Shell Flour	Calcium (Ca)	34.5%	36%	Yes
		Calcium Carbonate Equivalent (CCE)	95.7%	62%	No

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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?	
Peak Minerals-Azomite, Inc. Branson, Missouri	Azomite Soil Sweetener	Soluble Potash (K ₂ O)	0.1%	0.2%	No	
		Calcium (Ca)	15.1%	15.8%	No	
		Magnesium (Mg)	0.52%	0.5%	No	
		Chlorine (Cl)	0.06%	0.1%	Yes	
		Sodium (Na)	0.31%	0.1%	No	
		Calcium Carbonate (CaCO₃)	37.8%	43%	Yes	
		Magnesium Carbonate (MgCO ₃)	1.8%	0.7%	No	
		Calcium Carbonate				
		Equivalent (CCE)	42.6%	45%	No	
		% Passing 100 Mesh Sieve	82.1%	100%	Yes	
		% Passing 40 Mesh Sieve	92.2%	100%	No	
		% Passing 20 Mesh Sieve	98.1%	100%	No	
		% Passing 10 Mesh Sieve	99.6%	100%	No	
Lime Score	39.28	44	Yes			
Moisture (Maximum)	4.15%	2%	Yes			
Rain Shadow Technologies Lake Stevens, Washington	Bloomax Part A	Total Nitrogen (N)	3.4%	7%	Yes	
		Soluble Potash (K₂O)	2%	3%	Yes	
		Calcium (Ca)	3.5%	7%	Yes	
		Iron (Fe)	0.1%	0.24%	Yes	
Round Butte Seed Growers Culver, Oregon	25-6-6-4(S) Super Grow	Total Nitrogen (N)	25.6%	25%	No	
		Available Phosphate (P ₂ O ₅)	6%	6%	No	
		Soluble Potash (K ₂ O)	7.1%	6%	No	
		Sulfur (S)	3.9%	4%	No	
Soda Springs Phosphate II Soda Springs, Idaho	0-3-0 Ida-Gro Pelletized Phosphate	Available Phosphate (P ₂ O ₅)	6.5%	3%	No	
		Iron (Fe)	0.9%	1.5%	Yes	
The Guano Company Trinidad, California	5-5-1 Super Bat Super Tea Mix	Total Nitrogen (N)	1.2%	5%	Yes	
		Available Phosphate (P₂O₅)	2.2%	5%	Yes	
		Soluble Potash (K ₂ O)	0.6%	1%	No	
Wilbur-Ellis Company Suver, Oregon	16-16-16-5.07(S)*	Total Nitrogen (N)	16.1%	16%	No	
		Available Phosphate (P₂O₅)	15%	16%	Yes	
		Soluble Potash (K ₂ O)	17.9%	16%	No	
		Magnesium (Mg)	2.87%	2.53%	No	
		Sulfur (S)	5.12%	5.07%	No	
	16-16-16-6.2(S)*	Total Nitrogen (N)	16%	16%	No	
		Available Phosphate (P ₂ O ₅)	15.8%	16%	No	
		Soluble Potash (K ₂ O)	16.6%	16%	No	
		Sulfur (S)	6.66%	6.2%	No	
Wilbur-Ellis Company Yakima, Washington	0-0-60	Soluble Potash (K ₂ O)	61.2%	60%	No	
	11-52-0	Total Nitrogen (N)	10.9%	11%	No	
		Available Phosphate (P ₂ O ₅)	52.8%	52%	No	

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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Wilbur-Ellis Company Yakima, Washington	High Calcium Pelletized Lime	Calcium Carbonate (CaCO ₃)	94.4%	94%	No
		Magnesium Carbonate (MgCO ₃)	1.9%	1%	No
		Calcium Carbonate Equivalent (CCE)	96.3%	94%	No
		% Passing 100 Mesh Sieve	88%	70%	No
		% Passing 40 Mesh Sieve	98%	98%	No
		% Passing 20 Mesh Sieve	98.6%	100%	No
		% Passing 10 Mesh Sieve	98.8%	100%	No
		Moisture	< 1%	1.01%	No
		Oregon Lime Score	93.82	91	No