# **Oregon Department of Agriculture**

## Fertilizer Program

### **Laboratory Analysis Results**

**January 1 – December 31, 2007** 

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?
American Agritech	0.5-0.5-1.0 Original Pure	Total Nitrogen (N)	1.4% 1.1%	0.5%	No
Chandler, Arizona	Blend Metabolic Bloom Formula	Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) Soluble Potash (K <sub>2</sub> O)	1.1%	0.5% 1%	No No
	Tomula	Humic Acid	11%	7%	No
	2-0-0 Cal-Mag Plus	Total Nitrogen (N)	1.8%	2%	No
		Calcium (Ca)	3%	3.2%	No
		Magnesium (Mg)	1.5%	1.2%	No
		Iron (Fe)	0.091%	0.1%	No
American Minerals Quincy, Illinois	Granusol Iron	Iron (Fe)	64.9%	50%	No

Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Ash Grove Cement Company Portland, Oregon	Limestone Flour	Calcium Carbonate (CaCO <sub>3</sub> ) Calcium Carbonate	100.6%	93%	No
		Equivalent (CCE)	96.3%	93%	No
		% Passing 100 Mesh Sieve	90.22%	90%	No
		% Passing 40 Mesh Sieve	99.78%	97%	No
		% Passing 20 Mesh Sieve	100%	99%	No
		% Passing 10 Mesh Sieve	100%	100%	No
		Lime Score	96.16	93	No
		Moisture (Maximum)	0.06%	< 2%	No
Bay Zinc Company, Inc.	Blu-Min 33% Zinc-	Sulfur (S)	18.8%	18%	No
Moxee, Washington	Granular with Sulphur	Zinc (Zn)	35%	33%	No
Bella Via, LLC	16-0-0 Metanaturals	Total Nitrogen (N)	14.01%	16%	Yes
Healdsburg, California	Organic Nitrogen	Ammoniacal Nitrogen	1.2%	3.5%	Yes
ricaldsburg, Galliottila	Organic Milogen	Urea Nitrogen	12.81%	0%	Yes
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	16-0-0 Metanaturals	Total Nitrogen (N)	16.2%	16%	No
	Organic Nitrogen	Ammoniacal Nitrogen	1.6%	3.5%	Yes
		Urea Nitrogen	14.6%	0%	Yes
	3-3-3 Metanaturals	Total Nitrogen (N)	3.5%	3%	No
	Professional Organic	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	3.9%	3%	No
	Plant Nutrient	Soluble Potash (K₂O)	3.4%	3%	No
		Magnesium (Mg)	0.71%	1.2%	No
		Copper (Cu)	0.052%	0.05%	No
		Iron (Fe)	0.22%	0.1%	No
		Manganese (Mn)	0.11%	0.05%	No
		Molybdenum (Mo)	0.0073%	0.0005%	No
		Zinc (Zn)	0.11%	0.1%	No
	Metanaturals Organic Calcium	Calcium (Ca)	5.8%	6%	No
	1-5-5 Metanaturals	Total Nitrogen (N)	1.2%	1%	No
	Professional Organic	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	4.3%	5%	Yes
	Bloom Formula	Soluble Potash (K <sub>2</sub> O)	3.1%	5%	Yes
		Magnesium (Mg)	0.76%	0.5%	No
Green Air Products	0-0-4.5 Bio-Genesis	Soluble Potash (K₂O)	4.7%	4.5%	No
Gresham, Oregon	High Tide Organic Seaweed	Humic Acid	6.4%	6%	No
Grow More	30-10-10 Orchid	Total Nitrogen (N)	29.7%	30%	No
Gardena, California	Growth Formula	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	11.4%	10%	No
		Soluble Potash (K <sub>2</sub> O)	11.9%	10%	No
		Copper (Cu)	0.08%	0.05%	No
		Iron (Fe)	0.12%	0.1%	No
		Manganese (Mn)	0.065%	0.05%	No
		Molybdenum (Mo)	0.00054%	0.0005%	No
		Zinc (Zn)	0.071%	0.05%	No
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Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Hydro-Organics Wholesale/OGM Chico, California	10-3-1 Ancient Organics Primal Grow	Total Nitrogen (N) Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	<b>7.92%</b> 13.5%	<b>10%</b> 3%	Yes No
		Soluble Potash (K <sub>2</sub> O)	0.8%	1%	No
J. R. Simplot Company	9-9-9 Best Super Iron	Total Nitrogen (N)	10.8%	9%	No
Lathrop, California	11% Iron	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	9%	9%	No
		Soluble Potash (K <sub>2</sub> O)	9.8%	9%	No
		Sulfur (S) Iron (Fe)	13.4% 14.7%	11% 11%	No No
Lebanon Seaboard Corp.	20-0-25 Expo Extended	Total Nitrogen (N)	20.1%	20%	No
Lebanon, Pennsylvania	Potassium Sulfate	Soluble Potash (K <sub>2</sub> O)	27.1%	25%	No
	Granular SGN 195	Sulfur (S)	9.2%	8.5%	No
Loveland Products, Inc.	16-0-2 Nortrace Awaken	Total Nitrogen (N)	15.4%	16%	No
Greeley, Colorado		Soluble Potash (K <sub>2</sub> O)	2%	2%	No
		Boron (B)	0.017%	0.02%	No
		Chlorine (CI) Maximum	0.17%	0.01%	Yes
		Copper (Cu)	0.14%	0.15%	No
		Iron (Fe)	0.16%	0.15%	No
		Manganese (Mn)	0.14%	0.15%	No
		Molybdenum (Mo) Zinc (Zn)	0.0008% 3.4%	0.0006% 2.7%	No No
		ZIIIC (ZII)	J. <del>4</del> /0	2.1 /0	110
Marion Ag Service	Pro-Pell-It!	Calcium (Ca)	31.9%	34%	Yes
St. Paul, Oregon	Pelletized Lime	Calcium Carbonate (CaCO <sub>3</sub> ) Calcium Carbonate	79.6%	86%	No
		Equivalent (CCE)	91.3%	86%	No
		Magnesium Carbonate (MgCO <sub>3</sub>		1.48%	No
		% Passing 100 Mesh Sieve	91.73%	89%	No
		% Passing 40 Mesh Sieve	99.5%	99.7%	No
		% Passing 20 Mesh Sieve	99.85%	100%	No
		% Passing 10 Mesh Sieve Lime Score	99.89% 90.7	100% 90	No No
		Moisture (Maximum)	0.38%	2%	No
	Pro-Pell-It!	Calcium (Ca)	36.8%	34%	Yes
	Pelletized Lime	Calcium Carbonate (CaCO <sub>3</sub> ) Calcium Carbonate	91.8%	86%	No
		Equivalent (CCE)	90.4%	86%	No
		Magnesium Carbonate (MgCO <sub>3</sub>		1.48%	No
		% Passing 100 Mesh Sieve	91.2%	89%	No
		% Passing 40 Mesh Sieve	99.66%	99.7%	No
		% Passing 20 Mesh Sieve	99.89%	100%	No
		% Passing 10 Mesh Sieve	99.91%	100%	No
		Lime Score	89.94	90	No
		Moisture (Maximum)	0.31%	< 2%	No
Martrex, Inc.	Zinc Sulfate	Sulfur (S)	17.4%	17%	No
Minnetonka, Minnesota	Monohydrate Granular	Zinc (Zn)	36.9%	35.5%	No
	Manganese Sulfate	Sulfur (S)	19.6%	17%	No
	Monohydrate Granular	Manganese (Mn)	32.9%	31.8%	No

Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
Martrex, Inc. Minnetonka, Minnesota	Copper Sulfate	Sulfur (S) Copper (Cu)	12.5% 24.9%	13.1% 25%	No No
Northwest Agricultural Products Pasco, Washington	Wilco Row Crop	Magnesium (Mg) Sulfur (S) Boron (B) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum (Mo) Zinc (Zn)	0.042% 3.26% 0.215% 2.79% 0.53% 0.88% 0.00082% 4.3%	1% 9.87% 0.13% 1.33% 0.35% 0.67% 0.001% 3.33%	Yes Yes No No No No No No No
Novozymes Biologicals, Inc. Salem, Virginia	0-0-14 Roots KCS Concentrate	Soluble Potash (K2O) Calcium (Ca) Sulfur (S) Iron (Fe) Manganese (Mn) Zinc (Zn)	16.4% 1.22% <b>2.01%</b> 0.2% 0.057% 0.068%	14% 1% 5% 0.1% 0.05% 0.05%	No No Yes No No No
PCS Sales (USA) Inc. Northbrook, Illinois	0-0-60 Muriate of Potash	Soluble Potash (K2O)	64.7%	60%	No
Pendleton Grain Growers Hermiston, Oregon	33.37-0-11.21 *	Total Nitrogen (N) Soluble Potash (K <sub>2</sub> O) Sulfur (S) Boron (B)	30.28% 12.4% 5.81% 0.206%	<b>33.37%</b> 11.21% 3.74% 0.133%	Yes No No No
RSA MicroTech LLC Minneapolis, Minnesota	Ruffin-Tuff Iron 10-G	Sulfur (S) Iron (Fe) Humic Acid	10.1% 10.4% 16.2%	8% 10% 12%	No No No
	RSA 10% Liquid Boron	Boron (B)	10.5%	10%	No
The Horticulturist Choice Wholesale Garden Supply Portland, Oregon	Plant Growth Stimulant	Humic Acid	5.9%	5%	No
	Granular Lime	Calcium (Ca) Calcium Carbonate (CaCO <sub>3</sub> ) Magnesium Carbonate (MgCO <sub>2</sub> ) Calcium Carbonate	,	36% None 0.5%	No Yes No
		Equivalent (CCE)  % Passing 100 Mesh Sieve  % Passing 40 Mesh Sieve  % Passing 20 Mesh Sieve  % Passing 10 Mesh Sieve  Lime Score  Moisture (Maximum)	90.9% 65.8% 99.4% 99.9% 100% 90.25 0.45%	91% None 99% 100% 100% 91 < 2%	No Yes No No No No

Company	Product	Element	Lab Analysis	Label Guarantee	Violation?
The Horticulturist Choice Wholesale Garden Supply	2.5-12-2 Complete for Potting Soil	Total Nitrogen (N)  Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	2.8% <b>11%</b>	2.5% <b>12%</b>	No Yes
Portland, Oregon	•	Soluble Potash (K <sub>2</sub> O)	0%	2%	Yes
		Calcium (Ca)	19%	16%	No
		Magnesium (Mg)	1.3%	1%	No
		Sulfur (S)	1.25%	1%	No
		Iron (Fe)	0.15%	0.1%	No
Turf Care Supply Corp.	35-0-0 PCSCU	Total Nitrogen (N)	34.6%	35%	No
Brunswick, Ohio	Professional Turf Fertilizer Fairway Grade	Sulfur (S)	22.7%	18%	No
Wilbur-Ellis Company	3-15-0 Lighthouse	Total Nitrogen (N)	4.5%	3%	No
Yakima, Washington	Bonemeal Fertilizer	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	15.2%	15%	No
Wilco / Agriliance LLC	11-52-0 Monoammonium	Total Nitrogen (N)	10.8%	11%	No
Mt. Angel, Oregon	Phosphate	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	53.3%	52%	No
	20-0-0 Ammonium Sulfate		20.2%	20%	No
		Sulfur (S)	24.1%	24%	No
	12-43-10 Wilco Start	Total Nitrogen (N)	11.5%	12%	No
		Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	42.3%	43%	No
		Soluble Potash (K <sub>2</sub> O)	13.4%	10%	No
		Sulfur (S)	2.4%	2%	No
		Boron (B)	0.032%	0.02%	No
		Copper (Cu)	0.066%	0.05%	No
		Iron (Fe)	0.16%	0.1%	No
		Manganese (Mn) Molybdenum (Mo)	0.18% 0.0006%	0.1% 0.0005%	No No
		Zinc (Zn)	0.0008%	0.0005%	No
	Hi Score Lime	Calcium Carbonate (CaCO <sub>3</sub> ) Calcium Carbonate	106%	115%	No
		Equivalent (CCE)	109%	115%	No
		% Passing 100 Mesh Sieve	90%	100%	No
		% Passing 40 Mesh Sieve	97.3%	99%	No
		% Passing 20 Mesh Sieve	100%	97%	No
		% Passing 10 Mesh Sieve	100%	93%	No
		Lime Score	107.5	110	No
		Moisture (Maximum)	0.01%	< 2%	No
	16-7-26 Custom Mix	Total Nitrogen (N)	15.2%	16%	Yes
	with Slug Bait *	Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	7.41%	7%	No
		Soluble Potash (K <sub>2</sub> O)	28.7%	26%	No
		Sulfur (S)	5.41%	5.67%	No