



# Midwest Laboratories Inc.®

Report Number  
14-023-2150

13611 "B" Street • Omaha, Nebraska 68144-3693 • (402) 334-7770 • FAX (402) 334-9121  
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## REPORT OF ANALYSIS

For: ( 7294) CALCIUM PRODUCTS INC  
(515)373-6554

**Mail to:**

**CALCIUM PRODUCTS INC  
PO BOX 281  
GILMORE CITY IA 50541-**

PO/Proj. #: P21690  
ANDREW HOIBERG  
5916 VALLEY ROAD AMES IA 50014

Date Reported: 01/23/14  
Date Received: 01/16/14  
Date Sampled: 01/15/14  
Time Sampled: Not Supplied

Lab number: 2224650

Analysis	Level Found	Units	Detection Limit	Method	Analyst-Date	Verified-Date
<u>Sample ID: PELL00114</u>						
Moisture	0.86	%	0.10	AOAC 17E 950.01 100C	jsp-01/20	mgn-01/23
Calcium	23.80	%	0.01	ICAP	krr-01/20	mgn-01/23
Magnesium	5.56	%	0.01	ICAP	krr-01/20	mgn-01/23
Total Neutralizing Val(CaCO3 eq)	88.20	%	0.10	AOAC 955.01	jsp-01/17	mgn-01/23
ECCE	78.94	%		CALCULATED	acm-01/23	mgn-01/23
Sieve analysis (% passing 4 mesh)	100	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 8 mesh)	99	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 60 mesh)	83	%		WET SIEVE	acm-01/23	mgn-01/23
Mercury (total)	n.d.	mg/kg	0.05	EPA 7471	cjm-01/23	kkh-01/23
Zinc (total)	6.8	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Selenium (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Lead (total)	n.d.	mg/kg	5.0	EPA 6010	rrd-01/23	kkh-01/23
Nickel (total)	8.8	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Molybdenum (total)	n.d.	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cobalt (total)	n.d.	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cadmium (total)	n.d.	mg/kg	0.50	EPA 6010	rrd-01/23	kkh-01/23
Arsenic (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Sieve Analysis (% passing 100 mesh)	75	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 20 mesh)	96	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 200 mesh)	64	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 30 mesh)	94	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 80 mesh)	78	%		RO-TAP SHAKER (5 MIN)	acm-01/23	mgn-01/23



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Account: 7294 CALCIUM PRODUCTS INC

Report Number: 14-023-2150

Analysis	Level Found	Units	Detection Limit	Method	Analyst-Date	Verified-Date
<u>Sample ID: AGL 00314</u>						
Moisture	7.41	%	0.10	AOAC 17E 950.01 100C	jsp-01/20	mgn-01/23
Calcium	30.10	%	0.01	ICAP	krr-01/20	mgn-01/23
Magnesium	0.25	%	0.01	ICAP	krr-01/20	mgn-01/23
Total Neutralizing Val(CaCO3 eq)	84.21	%	0.10	AOAC 955.01	jsp-01/17	mgn-01/23
ECCE	58.10	%		CALCULATED	acm-01/23	mgn-01/23
Sieve analysis (% passing 4 mesh)	93	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 8 mesh)	83	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 60 mesh)	58	%		WET SIEVE	acm-01/23	mgn-01/23
Mercury (total)	n.d.	mg/kg	0.05	EPA 7471	cjm-01/23	kkh-01/23
Zinc (total)	56.6	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Selenium (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Lead (total)	n.d.	mg/kg	5.0	EPA 6010	rrd-01/23	kkh-01/23
Nickel (total)	24.5	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Molybdenum (total)	8.9	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cobalt (total)	1.9	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cadmium (total)	1.18	mg/kg	0.50	EPA 6010	rrd-01/23	kkh-01/23
Arsenic (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Sieve Analysis (% passing 100 mesh)	55	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 20 mesh)	71	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 200 mesh)	47	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 30 mesh)	64	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 80 mesh)	56	%		RO-TAP SHAKER (5 MIN)	acm-01/23	mgn-01/23



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Account: 7294 CALCIUM PRODUCTS INC

Report Number: 14-023-2150

Analysis	Level Found	Units	Detection Limit	Method	Analyst-Date	Verified-Date
<u>Sample ID: AGL 00214</u>						
Moisture	2.60	%	0.10	AOAC 17E 950.01 100C	jsp-01/20	mgn-01/23
Calcium	17.80	%	0.01	ICAP	krr-01/20	mgn-01/23
Magnesium	11.30	%	0.01	ICAP	krr-01/20	mgn-01/23
Total Neutralizing Val(CaCO3 eq)	94.20	%	0.10	AOAC 955.01	jsp-01/17	mgn-01/23
ECCE	60.85	%		CALCULATED	acm-01/23	mgn-01/23
Sieve analysis (% passing 4 mesh)	100	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 8 mesh)	92	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 60 mesh)	45	%		WET SIEVE	acm-01/23	mgn-01/23
Mercury (total)	n.d.	mg/kg	0.05	EPA 7471	cjm-01/23	kkh-01/23
Zinc (total)	742	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Selenium (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Lead (total)	160	mg/kg	5.0	EPA 6010	rrd-01/23	kkh-01/23
Nickel (total)	5.3	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Molybdenum (total)	n.d.	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cobalt (total)	1.9	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cadmium (total)	2.35	mg/kg	0.50	EPA 6010	rrd-01/23	kkh-01/23
Arsenic (total)	10.8	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Sieve Analysis (% passing 100 mesh)	35	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 20 mesh)	74	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 200 mesh)	24	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 30 mesh)	68	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 80 mesh)	37	%		RO-TAP SHAKER (5 MIN)	acm-01/23	mgn-01/23

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Account: 7294 CALCIUM PRODUCTS INC

Report Number: 14-023-2150

Analysis	Level Found	Units	Detection Limit	Method	Analyst-Date	Verified-Date
<u>Sample ID: AGL 00114</u>						
Moisture	4.99	%	0.10	AOAC 17E 950.01 100C	jsp-01/20	mgn-01/23
Calcium	20.50	%	0.01	ICAP	krr-01/20	mgn-01/23
Magnesium	9.02	%	0.01	ICAP	krr-01/20	mgn-01/23
Total Neutralizing Val(CaCO3 eq)	87.02	%	0.10	AOAC 955.01	jsp-01/17	mgn-01/23
ECCE	62.13	%		CALCULATED	acm-01/23	mgn-01/23
Sieve analysis (% passing 4 mesh)	99	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 8 mesh)	95	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 60 mesh)	55	%		WET SIEVE	acm-01/23	mgn-01/23
Mercury (total)	n.d.	mg/kg	0.05	EPA 7471	cjm-01/23	kkh-01/23
Zinc (total)	14.6	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Selenium (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Lead (total)	9.8	mg/kg	5.0	EPA 6010	rrd-01/23	kkh-01/23
Nickel (total)	5.0	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Molybdenum (total)	n.d.	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cobalt (total)	1.1	mg/kg	1.0	EPA 6010	rrd-01/23	kkh-01/23
Cadmium (total)	n.d.	mg/kg	0.50	EPA 6010	rrd-01/23	kkh-01/23
Arsenic (total)	n.d.	mg/kg	10.0	EPA 6010	rrd-01/23	kkh-01/23
Sieve Analysis (% passing 100 mesh)	50	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 20 mesh)	70	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 200 mesh)	39	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 30 mesh)	65	%		WET SIEVE	acm-01/23	mgn-01/23
Sieve Analysis (% passing 80 mesh)	52	%		RO-TAP SHAKER (5 MIN)	acm-01/23	mgn-01/23

Notes:

n.d. - Not Detected.

AOAC - Association of Official Analytical Chemists.

ICAP - Inductively Coupled Argon Plasma.

ECCE (Effective Calcium Carbonate Equivalent) represents the Total Neutralizing Value (CaCO3 Equivalent) adjusted for effectiveness

For questions contact



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Notes:

based on the particle size of the Lime. This percentage (ECCE)  
multiplied by 20 yields the lbs. of effective Lime per ton of material.  
Sample(s) was prepared for EPA 6010 analysis by EPA method 3050b.

Rob Ferris  
Client Service Representative

rob.ferris@midwestlabs.com (402) 829-9871