



Montana Basalt &
North Dakota Class 13

BASALT ROAD MATERIAL INFORMATION



DETTON CONSTRUCTION, INC.
P.O. BOX 23
DILLON, MT 59725
OFFICE (406)683-2345

JOHN DETTON
MOBILE (928)792-7400
[johndetton@dettonconstruction.com](mailto: johndetton@dettonconstruction.com)

June 9, 2011

Mr. John Detton
John Detton Construction
P.O. Box 23
Dillon, MT 59725

**RE: John Detton Construction, Inc. Materials Testing
Pioneer Technical Services Project No. 15665**

Dear Mr. Detton;

On June 6th, a sample was delivered to our ASTM/AASHTO accredited materials testing laboratory. The sample was referenced as "Sample 1" and given Lab No. 10969. The testing request consisted of:

- Sieve Analysis of Coarse and Fine Aggregate (ASTM C117, C136).

Table 1 presents our results.

Table 1 – Sieve Analysis

Sieve Size		Lab No. 10969
		Percent Passing
1"	25 mm	100
3/4"	19 mm	97
1/2"	12.5 mm	76
3/8"	9.5 mm	62
# 4	4.75 mm	36
# 10	2.0 mm	19
# 20	0.850 mm	11
# 40	0.425 mm	8
# 60	0.250 mm	7
# 100	0.150 mm	6
# 200	0.075 mm	4.7

The grain size distribution curve is included with this report. We thank you for using Pioneer Technical Services for your geotechnical and materials testing requirements. If you have any questions regarding these results, please contact Todd Lorenzen or Paul Bushnell at (406) 443-6053.

Basalt material, July 14, 2011



Basalt material, July 14, 2011



Basalt material, July 14, 2011



Day 5, July 19, after 1.5 inches of rain
Magnesium Chloride Treated



Day 5, July 19, after 1.5 inches of rain
Magnesium Chloride Treated

Some segregation
on shoulders



Day 5, July 19, after 1.5 inches of rain
Not Treated



Day 5, July 19, after 1.5 inches of rain
Not Treated

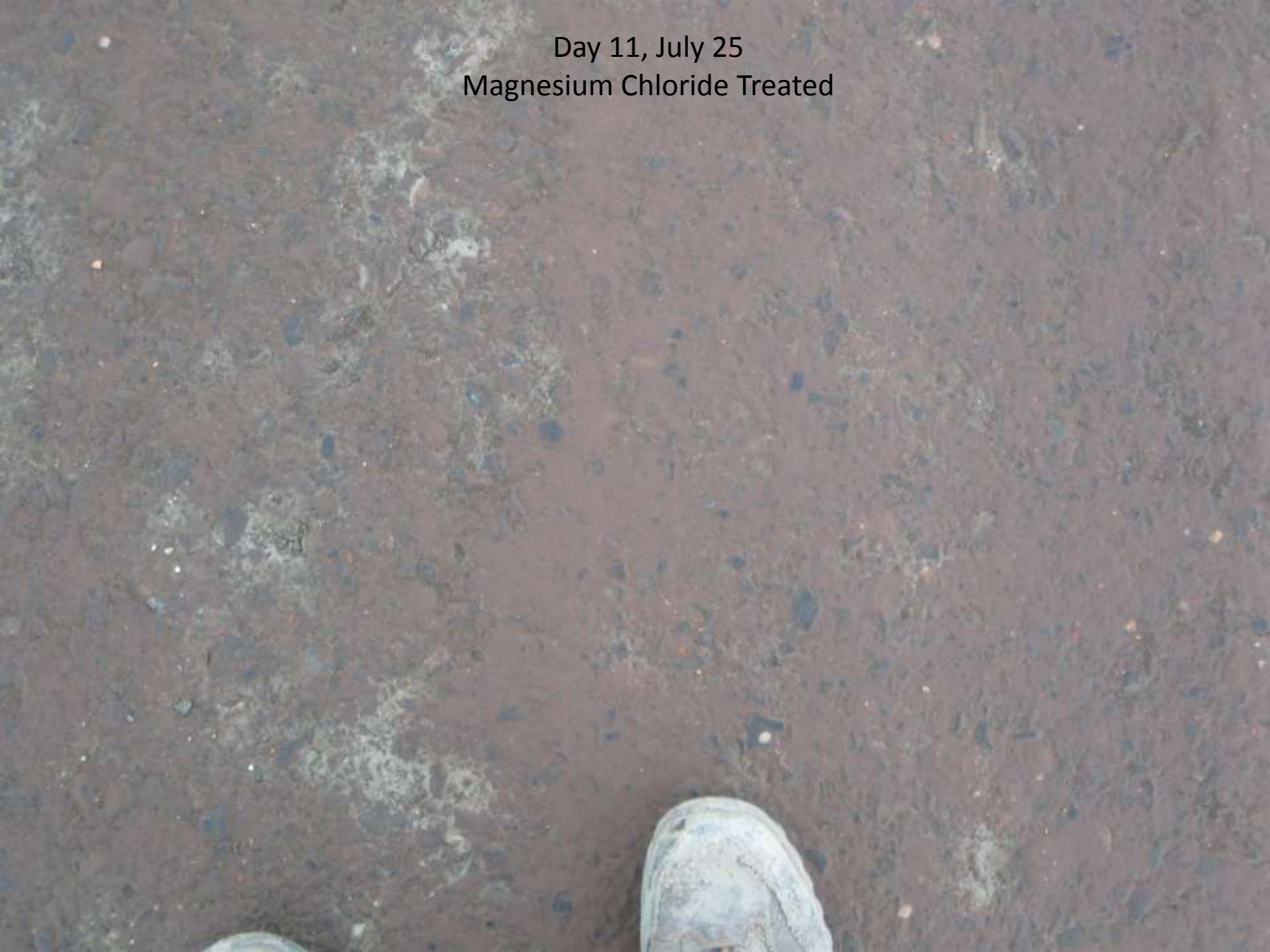
Lots of segregation
on shoulders



Day 11, July 25
Magnesium Chloride Treated



Day 11, July 25
Magnesium Chloride Treated



Day 11, July 25
Non Treated



Day 11, July 25
Non Treated

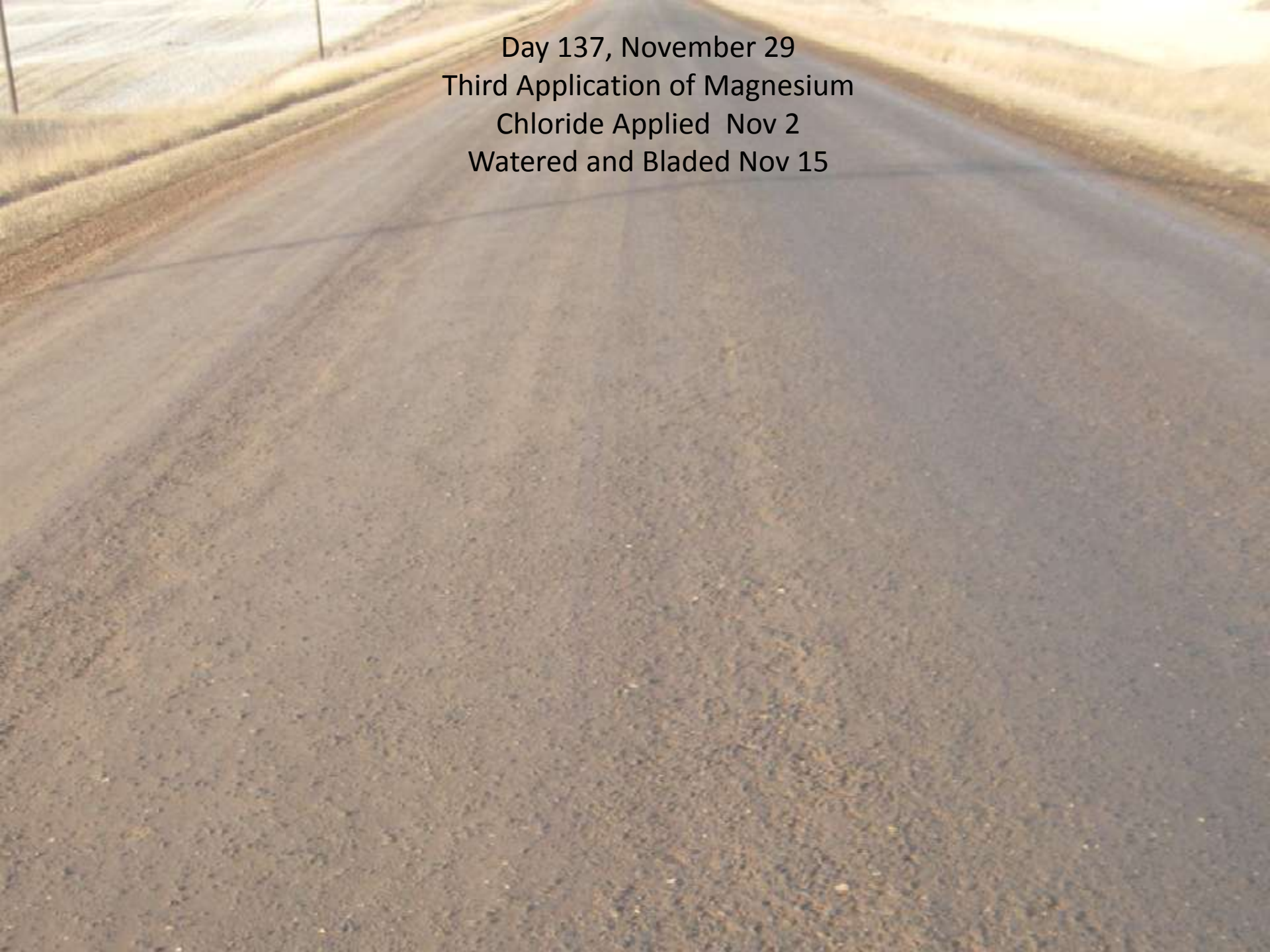


Day 11, July 25
Non Treated



Day 11, July 25
Traffic



A photograph of a paved road, likely asphalt, with a light-colored center line and darker edges. The road is flanked by dry, yellowish-brown grass. The sky is bright and hazy. The text is overlaid in the upper center of the image.

Day 137, November 29
Third Application of Magnesium
Chloride Applied Nov 2
Watered and Bladed Nov 15

Day 137, November 29
Third Application of Magnesium
Chloride Applied Nov 2
Watered and Bladed Nov 15

Nov 29, One Month After First
Application of Magnesium Chloride
on 4" of Class 13

Nov 29, Approx. One Month After
First Application of Magnesium
Chloride on 4" of Class 13



June 22



RT 29
6/22/11