Case Studies/
Lessons Learned

Oregon Department of Agriculture
Michael Odenthal
Forestry near Forest Grove
Aminocyclopyrachlor on Rights-of-Way

- Temporary Rule
- Effective September 28, 2018 – March 26, 2019
- No use of Aminocyclopyrachlor products on Rights-of-Way
- All formulations of Perspective, Method, Streamline, Viewpoint
Perspective and Pine Trees
Perspective

- Do not apply this product in areas where the roots of desirable trees and/or shrubs may extend unless injury or loss can be tolerated. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend well beyond the tree canopy.

- Certain species may, in particular, be sensitive to low levels of DuPontTM PERSPECTIVE® including but not limited to, conifers (such as Douglas fir, Norway spruce, ponderosa pine and white pine), …
Dicamba

Alligare Dicamba 4 may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to Alligare Dicamba 4 during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING ALLIGARE DICAMBA 4.

• Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of Alligare Dicamba 4 with the roots of desirable plants such as trees and shrubs.
What’s the take home

• Know your products
  • How they work
• Read the Label - those warning statements are there for a reason
Area Map
## Daily Spray Report

**Date:** 4/27/18  
**Location:** 5107

### Chemicals Used (Product Name)

<table>
<thead>
<tr>
<th>Chemical Code</th>
<th>Product Name</th>
<th>Registration No.</th>
<th>Units</th>
<th>Water Used</th>
<th>Dilution/Spot Spray</th>
<th>Total Quantity of Chemicals Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>240SL</td>
<td>Teler XP</td>
<td>932-1561</td>
<td>17</td>
<td>2</td>
<td>20.49</td>
<td></td>
</tr>
</tbody>
</table>

**Chemical Code:** 240SL  
**Product Name:** Teler XP

**Registration No.:** 932-1561

### Sites Treated

- **Road Sites (Not Included That Apply):**
  - Shoulder
  - Median
  - Sign Post
  - Median Bank
  - Curb
  - S=rain

### Notes

- **Type of Partner:** Other C1E1
- **Estimated Amount of Gallons:** 357

### Conditions

- **Spray Time:** 8 AM to 10 AM
- **Temperature:** 60°F to 84°F
- **Weather Conditions:** Cloudy
- **Wind Conditions:** Light

**Sprayer Equipment Number:** 04-0521

**Conservation District:** No BLM

**Sprayer Application Date:** 4/27/18 6:00 AM

**Sprayer Application Signature:** [Signature]

**Distribution Original to District Manager:** Copy to Section Supervisor

**Licence No.:** 464-04918773-4

**Certified Copy:** [Stamp]
Reason for Sampling: Alleged Drift
Sample Received By: Bdinntorn B. Nuanual on 5/23/18.

# ANALYTICAL REPORT

<table>
<thead>
<tr>
<th>Sample AUF180625-9: Field #3 Wheat Lab. No.: 18-B448 Test No.</th>
<th>Analysis Requested</th>
<th>Analytical Results</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>5330</td>
<td>Glyphosate</td>
<td>&lt;0.032 ppm MRL=0.032 ppm</td>
<td>JRW</td>
</tr>
<tr>
<td>5612</td>
<td>Aminocyclopyrachlor</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>JRW</td>
</tr>
<tr>
<td>5992</td>
<td>Chlorsulfuron</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>TBK</td>
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</table>

<table>
<thead>
<tr>
<th>Sample AUF180625-10: Field #3 Wheat Lab. No.: 18-B449 Test No.</th>
<th>Analysis Requested</th>
<th>Analytical Results</th>
<th>Analyst</th>
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<td>Glyphosate</td>
<td>0.028 ppm MRL=0.010 ppm</td>
<td>JRW</td>
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<tr>
<td>5612</td>
<td>Aminocyclopyrachlor</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>JRW</td>
</tr>
<tr>
<td>5992</td>
<td>Chlorsulfuron</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>TBK</td>
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</table>

<table>
<thead>
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<th>Sample AUF180625-11: Field #3 Wheat Lab. No.: 18-B450 Test No.</th>
<th>Analysis Requested</th>
<th>Analytical Results</th>
<th>Analyst</th>
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<td>Glyphosate</td>
<td>0.024 ppm MRL=0.010 ppm</td>
<td>JRW</td>
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<tr>
<td>5612</td>
<td>Aminocyclopyrachlor</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>JRW</td>
</tr>
<tr>
<td>5992</td>
<td>Chlorsulfuron</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>TBK</td>
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<table>
<thead>
<tr>
<th>Sample AUF180625-12: Field #3 Wheat Lab. No.: 18-B451 Test No.</th>
<th>Analysis Requested</th>
<th>Analytical Results</th>
<th>Analyst</th>
</tr>
</thead>
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<td>Glyphosate</td>
<td>0.045 ppm MRL=0.010 ppm</td>
<td>JRW</td>
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<tr>
<td>5612</td>
<td>Aminocyclopyrachlor</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>JRW</td>
</tr>
<tr>
<td>5992</td>
<td>Chlorsulfuron</td>
<td>&lt;0.010 ppm MRL=0.010 ppm</td>
<td>TBK</td>
</tr>
</tbody>
</table>
What is the take home

- We won’t cite you if we can’t prove it
- We will ask lots of questions
- Your crop could be detained if there is a tolerance issue even if you are the victim
What is the take home

- Starting to see residents of the area getting very sensitive to pesticide applications
- Be very aware of your surroundings
- Pick products that won’t offend the senses
What’s the take home

• Don’t assume your customer knows the answers
• Know your products
• When you add two products with the same active ingredient make sure you don’t go over the maximum allowed per application or annually
What’s the take home

• **Read your label!!!!**
• **The label you have on the container is the label you must follow unless there is a 24C or Section 18.**
• **Double check your consultant**
Marijuana
2000 plants x 1 lbs/plant x $800/lbs = $1,600,000
What is the take home

• Coexist
• Drifting onto Marijuana could be expensive
CROSSBOW®
Specialty Herbicide
Low Volatile Weed and Brush Herbicide

For the control of most kinds of unwanted trees and brush, as well as annual and perennial broadleaf weeds on rangeland, permanent grass pastures, conservation reserve program (CRP) acres, fence rows.

Active Ingredient(s):
2,4-dichlorophenoxyacetic acid, butoxyethyl ester .............. 34.4%
triclopyr BEE: 3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxyethyl ester .......... 16.5%
Other Ingredients .......... 49.1%
Total .......... 100.0%

®Trademark of Dow AgroSciences LLC
Contains Petroleum Distillates
Acid Equivalents: 2,4-dichlorophenoxyacetic acid -
23.7% - 2 lb/gal triclopyr - 11.9% - 1 lb/gal

Keep Out of Reach of Children
CAUTION

Refer to label booklet for additional precautionary information and Directions for Use.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Net Contents Liquid: 1 Quart (0.946 liters)
Specialty Herbicide

Low Volatile Weed and Brush Herbicide

For the control of most kinds of unwanted trees and brush, as well as annual and perennial broadleaf weeds on rangeland, permanent grass pastures, conservation reserve program (CRP) acres, fence rows, non-irrigation ditchbanks, roadsides, other non-crop areas and industrial sites

Active Ingredient(s):
- 2,4-dichlorophenoxyacetic acid, butoxyethyl ester .......................................................... 34.4%
- triclopyr BEE: 3,5,6-trichloro-2-pyridinylxyacetic acid, butoxyethyl ester .................................. 16.5%

Other Ingredients .................................................................................................................. 49.1%
Total .................................................................................................................................. 100.0%

Contains Petroleum Distillates
Acid Equivalents: 2,4-dichlorophenoxyacetic acid - 23.7% - 2 lb/gal
triclopyr - 11.9% - 1 lb/gal

EPA Reg. No. 62719-260
Application Instructions

Restrictions:

Rangeland and Permanent Pastures
- **Preharvest Interval:** Do not cut forage for hay within 14 days of application. For program lands, such as CRP, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.
- **Maximum Application Rate:** Apply no more than 1 gallon (1 lb ae triclopyr + 2 lb ae 2,4-D) per acre per growing season on range and pasture sites, including rights of way, fence rows or any area where grazing or harvesting is allowed.
- Use 2 gallons or more of spray solution per acre.
- Do not make more than one application per year.
- Do not apply within 30 days of previous application.
- If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

Non-Cropland

Postemergence (Annual and Perennial Weeds):
- Do not make more than two applications per year
- Maximum of 1 gallon (1 lb ae triclopyr + 2 lb ae per acre 2,4-D) per application.
- Minimum of 30 days between application.
- Use 2 gallons or more of spray solution per acre.

Postemergence (Woody Plants):
- Limited to 1 application per year.
- Maximum of 2 gallons (2 lb ae triclopyr + 4 lb ae per acre 2,4-D) per year.
- Use 2 gallons or more of spray solution per acre.

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
40 CFR 161 Appendix A

- Noncrop is pesticide use site group 10
  - Uncultivated agricultural areas (nonfood producing)
  - Uncultivated nonagricultural areas (outdoor)
  - Directed Pest Control to Pests’ Nests
40 CFR 161 Appendix A

- Ornamental plants and forest trees pesticide use site group 2
  - Ornamental plants
  - Ornamental trees, shrubs, and vines
  - Lawn and turf grasses
  - Forest trees non ornamental
  - Forest tree nurseries
  - Forest trees: dead trees/logs/stumps in the forest or in plantings
General Use Precautions and Restrictions

Crossbow is formulated as a low volatile ester. However, the combination of spray contact with impervious surfaces, such as roads and rocks, and increasing ambient air temperatures, may result in an increase in the volatility potential for this herbicide, increasing a risk for off-target injury to sensitive crops such as grapes and tomatoes.
Agri Star®

CROSSROAD®

Low Volatile Weed and Brush Herbicide

ACTIVE INGREDIENTS:
2,4-dichlorophenoxyacetic acid, butoxyethyl ester. .................................................. 34.4%
Triclopyr BEE: 3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxyethyl ester. ........ 16.5%
INERT INGREDIENTS. ................................................................................................. 49.1%
TOTAL ............................................................................................................. 100.0%

Contains Petroleum Distillates

Acid Equivalents: 2,4-dichlorophenoxyacetic acid - 23.7% - 2 lb/gal; triclopyr - 11.9% - 1 lb/gal isomer
Specific by AOAC Method No. 978.05 (15th Ed.)

For the control of most kinds of unwanted trees and brush, as well as annual and perennial broadleaf weeds on rangeland, permanent grass pastures, conservation reserve program (CRP) acres, fence rows, non-irrigation ditch banks, roadsides, other non-crop areas and industrial sites.

KEEP OUT OF REACH OF CHILDREN

MANUFACTURED BY:

ALBAUGH, LLC
**TURF**

Broadcast Treatment of Residential, Commercial, and Recreational Turf and Commercial Sod Farms

To be applied only under the direct supervision of Commercial applicators responsible for turf weed control programs.

<table>
<thead>
<tr>
<th>WEEDS CONTROLLED:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Black medic</td>
<td>Cornspeedwell (b)</td>
</tr>
<tr>
<td>Bull thistle (a)</td>
<td>Creeping beggarweed</td>
</tr>
<tr>
<td>Burdock (a)</td>
<td>Dandelion</td>
</tr>
<tr>
<td>Buttercup (a)</td>
<td>Docks</td>
</tr>
<tr>
<td>Canada thistle (a)</td>
<td>Field bindweed</td>
</tr>
<tr>
<td>Catnip</td>
<td>Goldenrod</td>
</tr>
<tr>
<td>Chamise</td>
<td>Ground ivy (b)</td>
</tr>
<tr>
<td>Chickweeds (common &amp; mouseear)</td>
<td>Henbit</td>
</tr>
<tr>
<td>Chicory</td>
<td>Knavel</td>
</tr>
<tr>
<td>Cinquefoil</td>
<td>Lambsquarters</td>
</tr>
<tr>
<td>Clover</td>
<td>Lespedeza</td>
</tr>
<tr>
<td>Cocklebur</td>
<td>Matchweed</td>
</tr>
<tr>
<td>Cornflower</td>
<td>Mustards (a)</td>
</tr>
</tbody>
</table>

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Apply 2 to 4 pints (0.5 to 1 lb. 2,4-D ae) of CROSSROAD® in enough water to make 20 to 200 gallons total spray per acre to control broadleaf weeds growing in tall fescue, bluegrass, or perennial ryegrass turf. Do not use on other grass species, such as bentgrass or St. Augustine grass, unless injury can be tolerated.

CROSSROAD® at 3 pints per acre (0.75 lb. 2,4-D ae) or 1.1 ounce per 1,000 square feet will provide control of most weeds listed on the container label. The use of 4 pints per acre (1 lb. 2,4-D or 1.5 ounces per 1,000 square feet) is suggested for those weeds followed by (a). Optimum control of those species followed by (b) has been obtained when two applications of 3 pints per acre (0.75 lb. 2,4-D ae/acre) have been made 4 weeks apart. Apply from early spring through early fall when weeds are growing.

Applications should be made 4 weeks apart to minimize grass injury. Newly seeded turf should be mowed two or three times before being treated. Do not water for 24 hours after application. Do not reseed for 3 weeks after application.
What is the take home

• Co Exist
• Know your neighbor
• Know your product
• Pick a product that may not irritate the neighbors
• Use the product with the correct label
Questions

Michael Odenthal
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503-986-4655
modenthal@oda.state.or.us

Ludwigia hexapetala