

2012 Crop Year NPDES Permit Annual Report

Malecha Dairy Inc.
14846 County Road 33
Villard, MN 56385



Alan D. Larsen, PE
1700 Technology Dr. NE, Suite 124 Willmar, MN 56201
320-235-1970 or 320-894-5396



Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

Animal Feedlot or Manure Storage Area Annual Report

NPDES/SDS Permit Program

Doc Type: Permitting Annual Report

Instructions on Page 8

Facility Information

Name: Malecha Dairy Registration number: 121-76594
 Location: Sec. 26, Westport Township, Pope County Phone: 320-815-1448
 Address: 14846 Co. Rd. 33
 City: Villard State: MN Zip: 56385
 E-mail address: greg@malechainc.com
 NPDES/SDS Permit number: MN Reporting period: **(09/01/2011 – 08/31/2012) ***

National Pollutant Discharge Elimination System (NPDES) /State Disposal System (SDS)

The reporting period for all the information required in this report has changed to the 12-month cropping period. Please see Part IV Item C. below for an explanation of 12-month cropping period.

I. Type and Number of Animals

Report the maximum number of each type of animal confined at this facility at any one time.

Type	Number in open confinement	Number housed under roof
Mature dairy cow (over 1,000 pounds)		1,124
Mature dairy cow (under 1,000 pounds)		
Dairy heifer		
Dairy calf		200
Veal		
Beef slaughter steer/heifer, stock cow, or bull		
Beef feeder cattle (stocker or backgrounding), heifer		
Beef cow and calf pair		
Beef calf (weaned)		
Swine (over 300 pounds)		
Swine (between 55 and 300 pounds)		
Swine (under 55 pounds)		
Horses		
Sheep or lamb		
Chickens w/liquid manure systems		
Broiler chickens w/dry manure systems		
Layer hens w/dry manure systems		
Turkeys (over 5 pounds)		
Turkeys (under 5 pounds)		
Ducks		
Others (List Types):		
1.		
2.		

II. Manure and Process Wastewater Production

Report the estimated amount of manure and process wastewater that were generated at this facility in the 12-month period covered by this report. Process wastewater is any wastewater that is handled or stored separately from the manure such as feedpad runoff or milkhouse waste.

- A. Amount of manure generated in the 12-month period covered by this report. Liquid 11,812,968 gallons and/or solid _____ tons.
- B. Amount of process wastewater generated in the 12-month period covered by this report: N/A gallons.

III. Manure and Process Wastewater Transferred to Other Persons

Report the estimated amount of manure and process wastewater that was transferred to other persons in the 12-month period covered by this report. Transferred manure includes all application to land that is not owned, rented, or under direct control of the feedlot owner/operator.

- A. Amount of manure transferred in the 12-month period covered by this report: Liquid 4,382,285 gallons and/or solid _____ tons.
- B. Amount of process wastewater transferred in the 12-month period covered by this report: N/A gallons
- C. All transferred manure records for the 12 month period (Sept. 1, 2011 to August 31, 2012) must be submitted on the form Records When Manure Ownership is Transferred – 300 or More Animal Units shown on pages 11 and 12 of this report, or an electronic record form can be found at: <http://www.pca.state.mn.us/index.php/view-document.html?gid=13360>

IV. Land and Application of Manure and Process Wastewater

(Complete this section for *non-transferred* manure only. If all manure is transferred go to Section V now.)

- A. Report the total number of acres of land that are covered by this facility's manure and nutrient management plan (MMP). Include all land application acres covered by the Manure Management Plan (MMP), whether or not they were used for land application during the 12-month period covered by this report.

Total number of land application acres covered by the MMP: 1,182 acres

- B. Report the total number of acres of land where manure or process wastewater generated at this facility was spread. Include only land application areas that are under the control of this facility.

Total number of acres under the control of the facility used for land application in the 12-month period covered by this report: 330 acres.

- C. All land application records for the 12 month period (Sept 1, *Year 1* to Aug 31, *Year 2*) corresponding to the *crop year* that ended during calendar year of this report must be submitted on the form *Records for 300 or more AU* shown on pages 6 and 7 of this report, or on the electronic records form found in the MPCA manure management planner at <http://www.pca.state.mn.us/index.php/view-document.html?gid=3556> An example of a 12-month cropping period is shown below (example Sept 1, 2011 to Aug 31, 2012). Emergency applications of liquid manure on frozen or snow covered soils must also be reported in Section IX on page 4.



V. Summary of Discharges

(Does not apply to any occurrences in which manure was land applied in accordance with Minn. R. 7020).

Provide a summary of each discharge of manure, litter, and/or process wastewater from the production area(s) that occurred in the 12-month period covered by this report. Attach additional sheets, if needed.

A discharge is a release of manure, litter, and/or process wastewater to waters of the state by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, leaching, or any other means.

Date ^a	Time ^b	Location ^{c,f}	Description ^{d,f}	Volume ^e

^a **Date:** The date of the discharge. If the discharge was detected after it happened, give an estimate of the date when the discharge occurred.

^b **Time:** The time of the discharge. If the discharge was detected after it happened, give an estimate of the time when the discharge occurred.

^c **Location:** The location of the discharge to waters of the United States. Be specific. Include the name of the water body and a specific description of where the manure, litter, or process wastewater entered the water body. Include landmarks or other points of reference (e.g., Three Mile Creek, at southeast corner of feedlot where creek bends to the west).

^d **Description:** Provide other relevant information about the discharge, including the source, cause, composition (e.g., emergency overflow of process wastewater from lagoon #2), and impacts observed (e.g., fish kill in water body).

^o **Volume:** Give an estimate of the number of gallons or tons of manure, litter, or process wastewater discharged. This information is not required by the NPDES Confined Animal Feeding Operation regulations to be included in the annual report.

VI. Manure and Nutrient Management Plan

(Complete this section for non-transferred manure only. If all manure is transferred go to Section VII now.)

- A. Indicate whether the facility's current MMP was either developed by or reviewed and approved by (check all that apply):
- Natural Resource Conservation Service (NRCS) certified Technical Service Provider for nutrient management planning
 - Certified Crop Advisor
 - Someone who completed at least two parts of the Minnesota Extension Service Manure Management Workshop series (offered since 2004)
 - Other – Please note that the Minnesota Pollution Control Agency (MPCA) does not require facility owners to use a certified nutrient management planner to prepare or approve MMPs.
- B. Was the MMP updated or modified during the past calendar year? Yes No
If yes, check each of the following ways that the MMP was modified:
- Changed rate of application due to changes in:
 Manure nutrient content Method of application Crop rotation
 Rates of supplemental commercial fertilizer Other (explain): _____
 - Changed fields due to:
 Fields no longer available for application Additional acreage became available
 Avoiding use of high soil test phosphorus fields New manure sources
 Other (explain): _____
 - Changed setbacks and/or management in sensitive areas: Yes No
 - Changed timing of application so that more manure is applied during:
 Summer Early fall Late fall Winter Spring

VII. Instances of Non Compliance Not Previously Reported

During the 12 month period covered by this report, have there been any instances of noncompliance which have not been reported to the MPCA?

Yes No If yes, please provide the information requested in items A.-D., below, with this annual report.

- A. Description of the noncompliance and its cause: _____
- B. The period that the operation was in noncompliance with permit conditions, including exact dates and times.
- C. In those cases where the noncompliance has not been corrected, the anticipated time it is expected to continue
- D. Description of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

VIII. Damage and Repair of Any Manure Storage Area

Was there any damage done to any of the manure storage areas at the facility? Yes No

If yes, provide the information requested in items A-F below for each incident of damage to each manure storage area with this Annual Report:

- A. Identify the manure storage area(s) that was/were damaged: _____
- B. Describe the damage(s) done to the manure storage area(s): _____
- C. Describe the corrective action(s) taken to repair the damage(s) to the manure storage area(s): _____
- D. Provide the date when the damage(s) was/were discovered: _____
- E. Provide the date when the corrective action(s) was/were taken: _____
- F. Did the damage(s) cause an overflow of manure or process wastewater from any liquid manure storage area: _____

IX. Emergency Applications of Liquid Manure on Frozen or Snow-Covered Soils

If no emergency applications of non-transferred manure were made during the 12-month period covered by this Annual Report, skip this section and go to next Section X now.

Otherwise submit the reason(s) for the emergency application(s) and then complete the table below before moving on to Section X. List reason(s) for emergency application(s) below:

Field ID	Gallon/acre applied	Total gallons applied to field	Emergency actions taken (enter number from list below)	Distance between applied manure and closest sensitive feature* (feet)	N applied during emergency application (lb/a)	P2O5 applied during emergency Application (lb/a)	Total N applied for the entire cropping year to emergency application area (lb/a)	Total P2O5 applied for the entire cropping year to emergency application area (lb/a)

Emergency actions taken (select one and enter number above):

1. Transferred manure to another liquid manure storage area at facility.
2. Transferred manure to another liquid manure storage area **not** at facility.
3. Only the minimum amount of manure was applied to alleviate the emergency situation.
4. Other (attach details).

*Sensitive features include: Lakes, streams, intermittent streams, drainage ditches without berms, open tile intakes, wells, wetlands, and sinkholes. Only include distance to those features within the field, or within 300 feet from the edge of the field. If over 300 feet, enter >300.

X. Manure composting activities (does not apply to composting of dead animals)

Are there any manure composting activities occurring at the facility? Yes No If no, go to Section XII now.

If yes, provide the information required in Part III, item E.2 of the General NPDES/SDS Permit with this Annual Report.

Quantities and sources of manure, bulking agents, and /or solid waste. Quantity: _____ source(s): _____

Analysis of the finished compost: pH _____ moisture content: _____ particle size: _____

NPK ratio: _____ soluble salt content: _____

Attach the temperature and retention time data for all compost produced.

XI. Permanent and Temporary Closure of Any Portion of the Facility during the 12 Month Period of this Report.

If there were no cessations of use of all or any part of the facility as defined in Part IV, Item A. of the General NPDES/SDS Permit, go on to Section XIII now. Otherwise complete the rest of this section below.

List the animal holding areas and manure storage areas closed below:

The dates they were closed (mm/dd/yyyy): _____

Actions taken to prevent discharges below:

Enter records of all land applications of manure and manure-contaminated soils from the closed facilities on the record keeping forms on pages 6 and 7 of this report.

XII. Groundwater Monitoring Results from the 12 Month Period of this Report

If groundwater monitoring is not required at the facility, go to the next section now. Otherwise continue with this section.

Did any monitoring system construction or repairs occur? Yes No

Attach the information required in Part III, item G.5 of the General NPDES/SDS Permit. Attach all results obtained from monitoring wells and/or perimeter tile, including all analytic results, any groundwater elevation data, any monitoring system construction or repairs, and any MPCA-required interpretation of results.

XIII. Certification

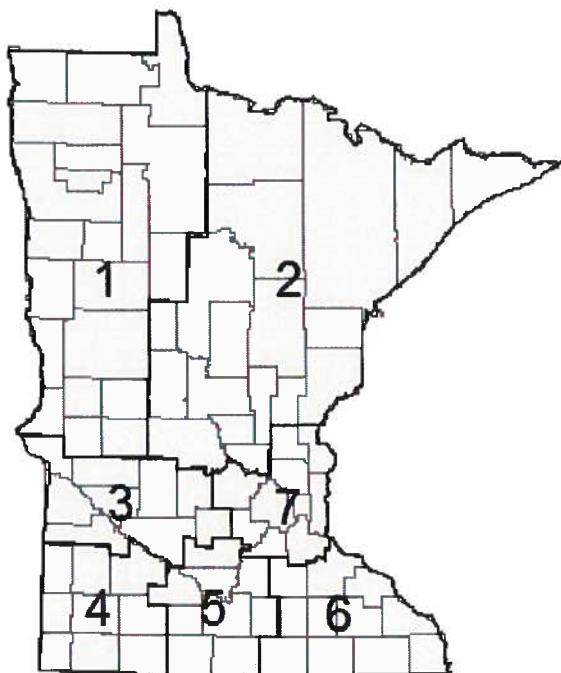
I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator:

Print name: _____ Title: _____
Signature: _____ Date: _____

Submit by March 1st of each year
Submit to your MPCA Regional Office at the address provided below:

Minnesota Pollution Control Agency – Regional Offices



- 1) [Detroit Lakes:](#) 714 Lake Avenue, Suite 220
Detroit Lakes, MN 56501
Phone: 218-847-1519 · Fax: 218-846-0719
- 2) [Brainerd:](#) 7678 College Road, Suite 105
Baxter, MN 56425
Phone: 218-828-2492 · Fax: 218-828-2594
- 3) [Willmar:](#) 1601 Highway 12 East, Suite 1
Willmar, MN 56201
Phone: 320-214-3786 · Fax: 320-214-3787
- 4) [Marshall:](#) 504 Fairgrounds Road, Suite 200
Marshall, MN 56258
Phone: 507-537-7146 · Fax: 507-537-6001
- 5) [Mankato:](#) 12 Civic Center Plaza, Suite 2165
Mankato, MN 56001
Phone: 507-389-5977 · Fax: 507-389-5422
- 6) [Rochester:](#) 18 Wood Lake Drive Southeast
Rochester, MN 55904
Phone: 507-285-7343 · Fax: 507-280-5513
- 7) [St. Paul:](#) 520 Lafayette Road North
St. Paul, MN 55155
Phone: 651-296-6300 800-657-3864

XIII. Certification

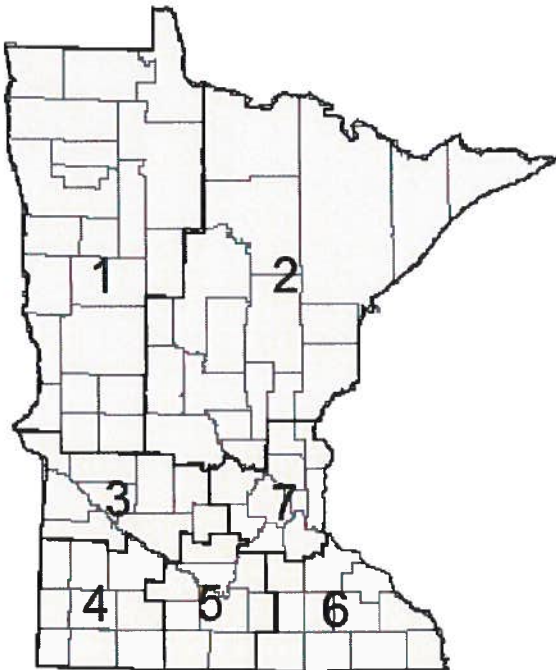
I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator:

Print name: Todd Malecha Title: Owner
Signature:  Date: February 28, 2013

Submit by March 1st of each year
Submit to your MPCA Regional Office at the address provided below:

Minnesota Pollution Control Agency – Regional Offices



- 1) [Detroit Lakes:](#) 714 Lake Avenue, Suite 220
Detroit Lakes, MN 56501
Phone: 218-847-1519 · Fax: 218-846-0719
- 2) [Brainerd:](#) 7678 College Road, Suite 105
Baxter, MN 56425
Phone: 218-828-2492 · Fax: 218-828-2594
- 3) [Willmar:](#) 1601 Highway 12 East, Suite 1
Willmar, MN 56201
Phone: 320-214-3786 · Fax: 320-214-3787
- 4) [Marshall:](#) 504 Fairgrounds Road, Suite 200
Marshall, MN 56258
Phone: 507-537-7146 · Fax: 507-537-6001
- 5) [Mankato:](#) 12 Civic Center Plaza, Suite 2165
Mankato, MN 56001
Phone: 507-389-5977 · Fax: 507-389-5422
- 6) [Rochester:](#) 18 Wood Lake Drive Southeast
Rochester, MN 55904
Phone: 507-285-7343 · Fax: 507-280-5513
- 7) [St. Paul:](#) 520 Lafayette Road North
St. Paul, MN 55155
Phone: 651-296-6300 800-657-3864

Land Application of Manure Planning Worksheet (Fields 1 - 25)



Name of Facility Where Manure is Generated: Malecha Dairy Inc.

121-76594/MNG440710

Is a Licensed Commercial Animal Waste Technician Used? Yes Name: Precision Pumping

License Number: _____

Manure Source Summary

Source 1: <u>Basin & Pit</u>	N: <u>19</u>	K: <u>18</u>
Source 2: <u>Calf Pack</u>	N: <u>7</u>	K: <u>7</u>
Source 3: <u>Compost Barn</u>	N: <u>10</u>	K: <u>9</u>
Source 4: _____	N: _____	K: _____
Source 5: _____	N: _____	K: _____
Source 6: _____	N: _____	K: _____
Source 7: _____	N: _____	K: _____
Source 8: _____	N: _____	K: _____

Field Information Summary	Soil Testing Summary	Crops Grown Summary		Nutrients Needed From Manure Application to Meet Yield Goal (lb/ac) after accounting for nutrients from fertilizer, previous manure applications, and credits from previous crops				Manure Source (1-8)	Manure Application Information (Nutrients for the 2012 Crop) Application Typically 9/1/2011 to 8/31/2012		Nitrogen (lb N/ac)		Phosphorus (lb P ₂ O ₅ /ac)		Potassium (lb K ₂ O/ac)	
		Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Removal)	Potassium (Removal)		Acres Receiving Manure (from the chosen source)	Max Nitrogen Based Application Rate (gals or tons per acre)	N from Manure (Available this year)	Excess Available N (negative for deficiency)	P from Manure (Available this year)	P in Excess of Removal (negative for deficiency)	K from Manure (Available this year)	K in Excess of Removal (negative for deficiency)
Field ID	Soil Test Phosphorus (P) Field Average (ppm)															
15 Thordson 220	14 Olsen	Alfalfa-Good	Alfalfa-Good	---	302	65	277									
8 Dairy Barn	15 Olsen	Corn Silage	Soybeans	140	---	95	185	1	22	17,680	164	24	93	-2	284	99
6 Tower Farm	12 Olsen	Corn	Corn Silage	91	---	65	36					-91	---	-65	---	-36
5 of North Shop	65 Bray	Corn Silage	Corn Silage	86	---	95	185					-86	---	-95	---	-185
7 South of Shop	56 Bray	Corn Silage	Corn Silage	76	---	95	185					-76	---	-95	---	-185
11 Esher	27 Bray	Alfalfa-Good	Soybeans	---	302	65	277	1	100	37,125	345	43	196	131	597	320
10 Kirkoff	41 Bray	Corn Silage	Alfalfa-Good	30	---	95	185	1	128	17,680	164	134	93	-2	284	99
CD2 Danstrom	7 Olsen	Corn	Alfalfa-Poor	140	---	65	36					-140	---	-65	---	-36
CD7 Danstrom	5 Olsen	Corn	Corn	180	---	65	36					-180	---	-65	---	-36
20 Loxterkamp East	3 Olsen	Corn Silage	Soybeans	140	---	95	185	1	80	12,652	117	-23	67	-28	203	18



Field Information Summary	Acres After Setbacks	Soil Testing Summary		Crops Grown Summary		Nutrients Needed From Manure Application to Meet Yield Goal (lb/ac) after accounting for nutrients from fertilizer, previous/other manure applications, and credits from previous crops				Manure Application Information (Nutrients for the 2012 Crop) Application Typically 9/1 to 8/31/2012			Nitrogen (lb N/ac)		Phosphorus (lb P ₂ O ₅ /ac)		Potassium (lb K ₂ O/ac)				
		Field ID	Soil Test Phosphorus (P) Field Average (ppm)	Crop Utilize the Nutrients Applied	Crop Most Recently Harvested	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Removal)	Potassium (Removal)	Manure Source (1-8)	Method of Application and Incorporation	Acres Receiving Manure (from the chosen source)	Max Nitrogen Based Application Rate (gals or tons per acre)	N from Manure (Available this year)	Excess Available N (negative for deficiency)	P from Manure (Available this year)	P in Excess of Removal (negative for deficiency)	K from Manure (Available this year)	K in Excess of Removal (negative for deficiency)		
8 Dairy Barn (SPLIT)	88	15	Olsen	Corn Silage	Soybeans	140	---	95	185	---	---	---	---	---	---	---	---	---	---		

Land Application of Manure Planning Worksheet (Fields 26-50)

Field Information Summary	Acres After Setbacks	Soil Testing Summary	Crops Grown Summary		Nutrients Needed From Manure Application to Meet Yield Goal (lb/ac) after accounting for nutrients from fertilizer, previous manure applications, and credits from previous crops	Manure Source (1-b)	Method of Application and Incorporation NPDES permitted sites cannot apply liquid manure in the winter (unless emergency)	Acres Receiving Manure (from the chosen source)		Manure Application Information (Nutrients for the 2012 Crop) Application Typically 9/1 to 8/31/2012		Nitrogen (lb N/ac)		Phosphorus (lb P ₂ O ₅ /ac)		Potassium (lb K ₂ O/ac)	
			Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested				Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Removal)	Potassium (Removal)	N from Manure (Available this year)	Excess Available N (negative for deficiency)	P from Manure (Available this year)	P in Excess of Removal (negative for deficiency)	K from Manure (Available this year)	K in Excess of Removal (negative for deficiency)

Total Acres in Plan = _____ will transfer ownership of the remaining amount of manure.

Table A: Summary of Applied and Remaining Manure and Acres Receiving Manure

Source Description	Amount Applied	Amount Remaining	Acres Applied	Source Description	Amount Applied	Amount Remaining	Acres Applied
Source 1: Basin & Pit	7,376,660	4,436,308	330	Source 5:			
Source 2: Calf Pack	0	0	0	Source 6:			
Source 3: Compost Barn				Source 7:			
Source 4:				Source 8:			

Records When Manure Ownership is Transferred - 300 or More Animal Units
Records for Feedlot Owners (manure generator) and Commercial Applicators

Copy 1: Kept by feedlot owner where manure is generated after completion of step #1.

Copy 2: Kept by applicator after completion of step #3.

Copy 3: Returned to feedlot owner where manure was generated after completion of step #3.

Step 1: Manure Generation. Completed by feedlot owner where manure is generated.

Name and Address of Facility Where Manure Generated:

Malecha Dairy, Inc.
14846 County Road 33
Villard, MN 56385

Date(s) of Transfer: March 25-28, 2012

Total Quantity Transferred: 4,382,285

tons gallons

Manure Analysis Results (must be representative of manure transferred)			
Manure Source: <u>Earthen Basin</u>	Date Analyzed: <u>5-1-2012</u>		
N: <u>21</u>	P ₂ O ₅ : <u>10</u>	K ₂ O: <u>24</u>	Units <input type="checkbox"/> lb/ton <input checked="" type="checkbox"/> lb/1000 gallons

Name and Address of Company or Individual Taking Manure from Feedlot:

Todd & Louise Malecha
14846 County Road 33
Villard, MN 56385

Step 2: Short-Term Stockpiling. Completed by owner of the stockpile - Provide form to person applying manure. If no stockpile, go to step 3.

Stockpile Location(s)				Quantity Stockpiled (tons)	Date Stockpile Established	Date Land Applied
County	Township	Section	Quarter			

Step 3: Manure Application. Completed by individual applying the manure at the time of application. Return a copy to the feedlot owner where manure was generated within 60 days after applying manure. See the back of this form for manure spreading requirements when manure is from a facility with 300 or more animal units.

Name of Company or Individual that Applied Manure: _____ Mailing Address: _____

Minnesota Department of Agriculture License Number of Commercial Applier: _____

Field ID	County	Township	Section	Application Rate (tons or gallons/ac)
Fredericks	Pope	Westport	11	21,000 Gal/Ac