Appendix D. Additional Data from the Weiser Watershed Advisory Group

Blank page

WEISER RIVER WATERSHED ADVISORY GROUP

RECEIVED BY
FEB 24 2004
IDAHO DEPT. OF ENVIRONMENTAL QUALITY

Ms. Toni Hardesty
Idaho Dept. of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255

Feb. 19, 2004

Dear Ms. Hardesty;

Thank you for coming to Weiser and meeting with the Weiser River Watershed Advisory Group on Feb. 11, 2004. We feel the meeting was very constructive. We hope to build on that meeting and to ultimately produce a TMDL for the Weiser River Watershed which will lead us to improved water quality while protecting the economic viability of our citizens and communities.

Enclosed is material which the Weiser River WAG agreed to provide to you. Included is temperature data, historic photos, and the most recent letter from the U.S. Army Corps of Engineers to Flood Control District No. 3.

Please note the time of sampling on the temperature data is nearly always in the morning, (coolest part of day). We know of no man caused sources of temperature increase. There are, however, many sources of natural hot water throughout the watershed.

The historic pictures taken in the 1940s, though not of high quality, show the meandering course the Weiser River once took from the Galloway diversion dam to the Snake River. Over time the Army Corps of Engineers has constructed flood control levees and straightened the River. As we discussed on Feb. 11, we believe much of the sediment load during high flow events is caused by these levees forcing high velocity water against unprotected dirt banks, causing erosion of those banks. Examples of this can be seen throughout the watershed. Please also note that the riparian vegetation appears to be quite short. The historic photos of Midvale show much less riparian vegetation than is present today.

The letter from the Corps of Engineers to Flood Control District No. 3 is particularly important as it pertains to riparian vegetation. Please note the recommendation that vegetation be removed from the levees.

Finally, we wish to remind you of the discussion we had concerning possible sources of natural background phosphorous. We believe the underlying volcanic tuff to be a possible source. We ask that a discussion of that potential be included.

Thanks again for your efforts. We look forward to the successful completion of our task.

Sincerely,

Joe Qualls

Joe Qualls
Vice chair, Weiser River Watershed Advisory Group

847 East 9th Street *Weiser, ID 83672* *(208) 549-4250* *Fax: (208) 549-4229*

prompted the early settlers to leave well established homes and loved ones, knowing qu[illegible] possibly they would never see them again. Traveling [illegible]er great hardships, with almost insurmountable problems, to sink their roots in the unknown. If a hill was in the way they went over it or around it. Only death could stop them. What was the force behind this? Whatever it was, it engulfed Middle Valley.

At the time of the white man's entrance this basin Here was a virgin land of rich unexploited soil. The fact that the Indians h[illegible] first right to it mattered naught. Friendship on the p[illegible] of the Indians availed them no rewards. They soon found their land occupied.

Our records show that the first white settler to look upon this paradise of beauty, land, wooded mountains, water and much game was J. H. Reed. The family settled here in 1868 on what is still known as the Reed place. Other settlers soon followed.

An Early Picture of the Town
1909

This was shipping day. Several stock men had brought their cattle in to be shipped out.

The tent and the covered wagon had been set up by the shippers. Looking at the picture with a glass, a woman, the cook, can be seen standing in the doorway of the tent. A man is riding away on a white horse.

Midvale in 1909
taken from "Roots of Middle Valley"
by Gerald Yongue
published by Idaho Mountain Graphics
Copyright 1980

94

Midvale, Idaho. 1907

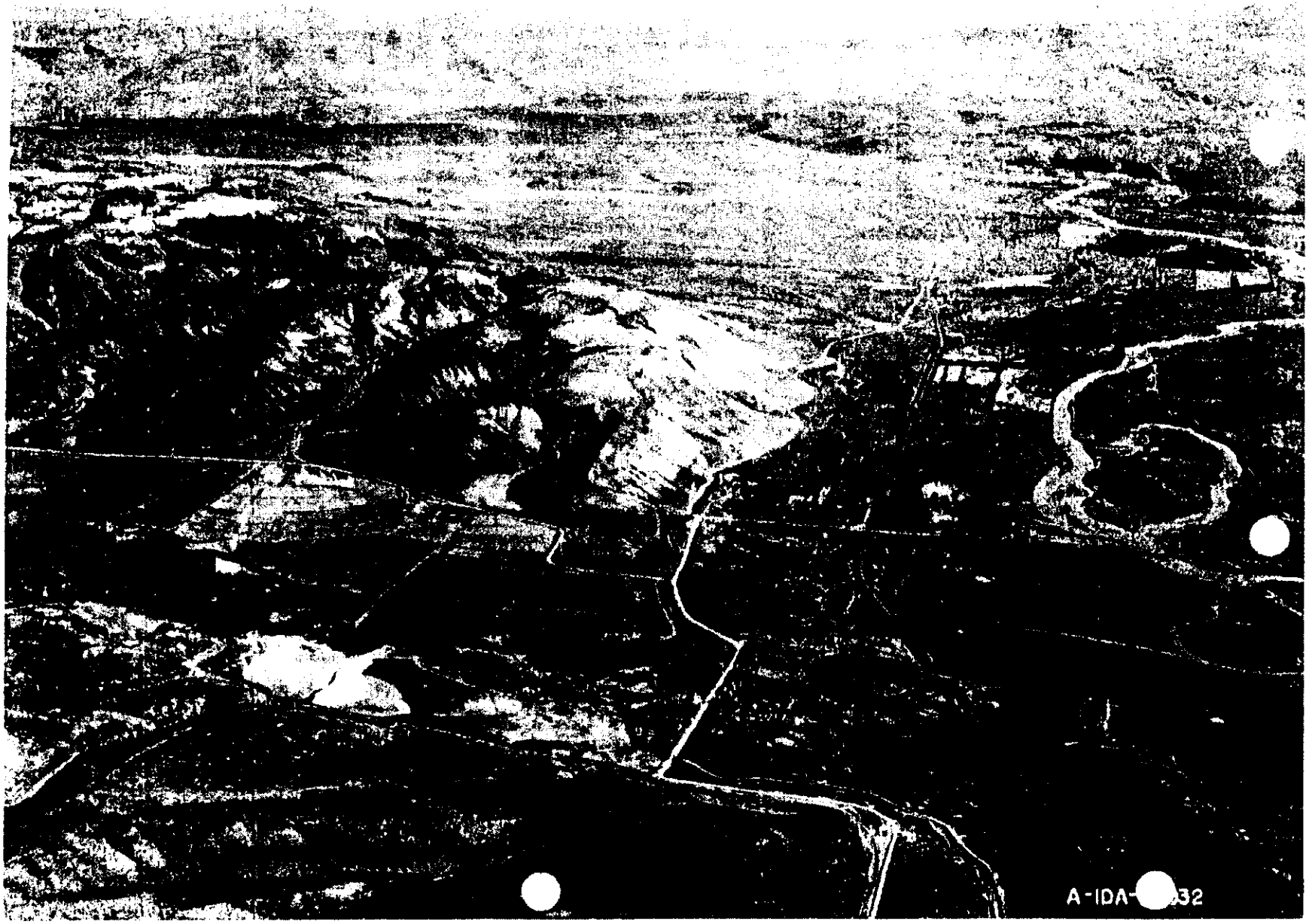
original photo at Midvale Public Library

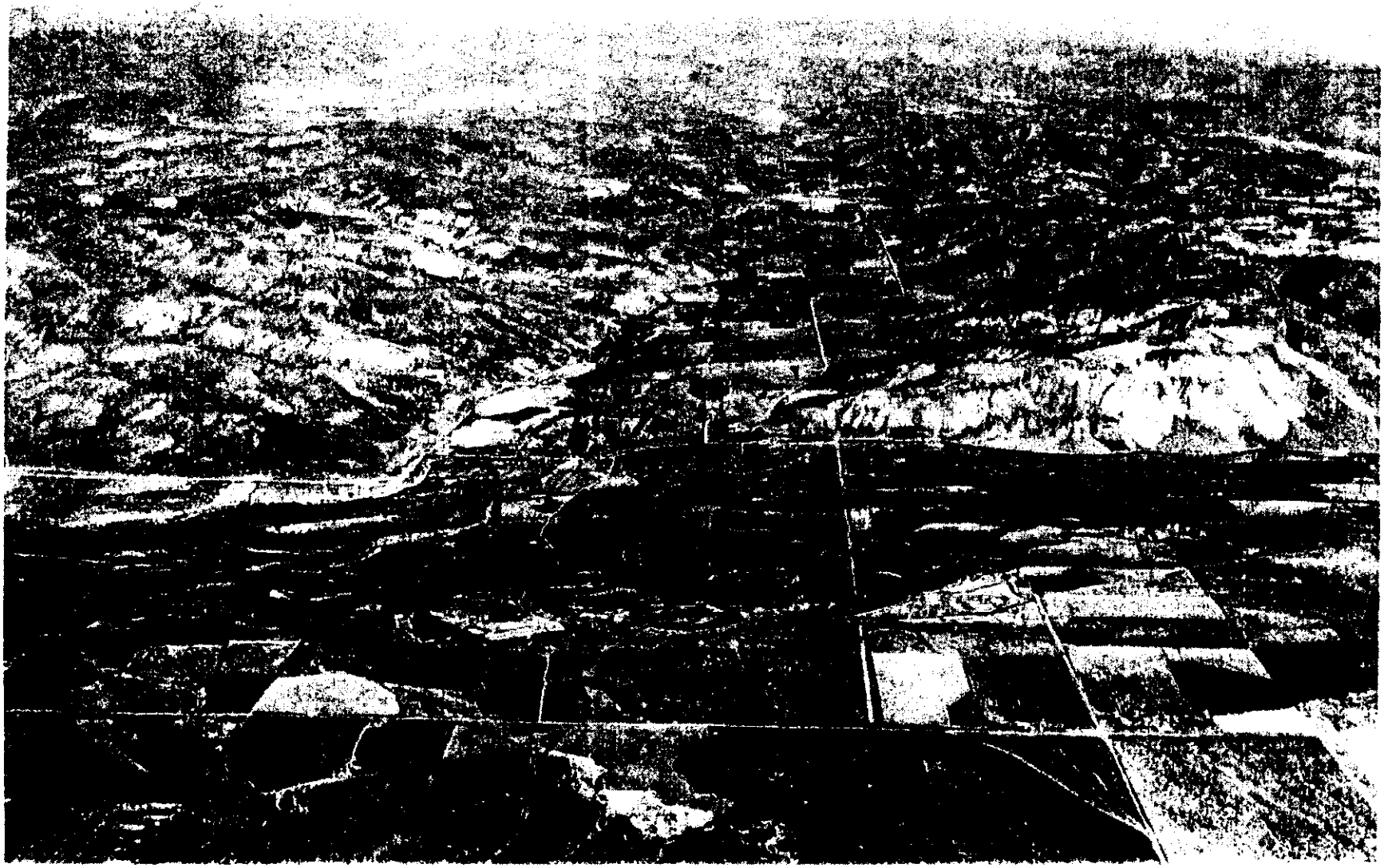
(34)

Looking East, up River from mouth of [illegible]

Tom Yankey has original photo. (99)

circa 1940





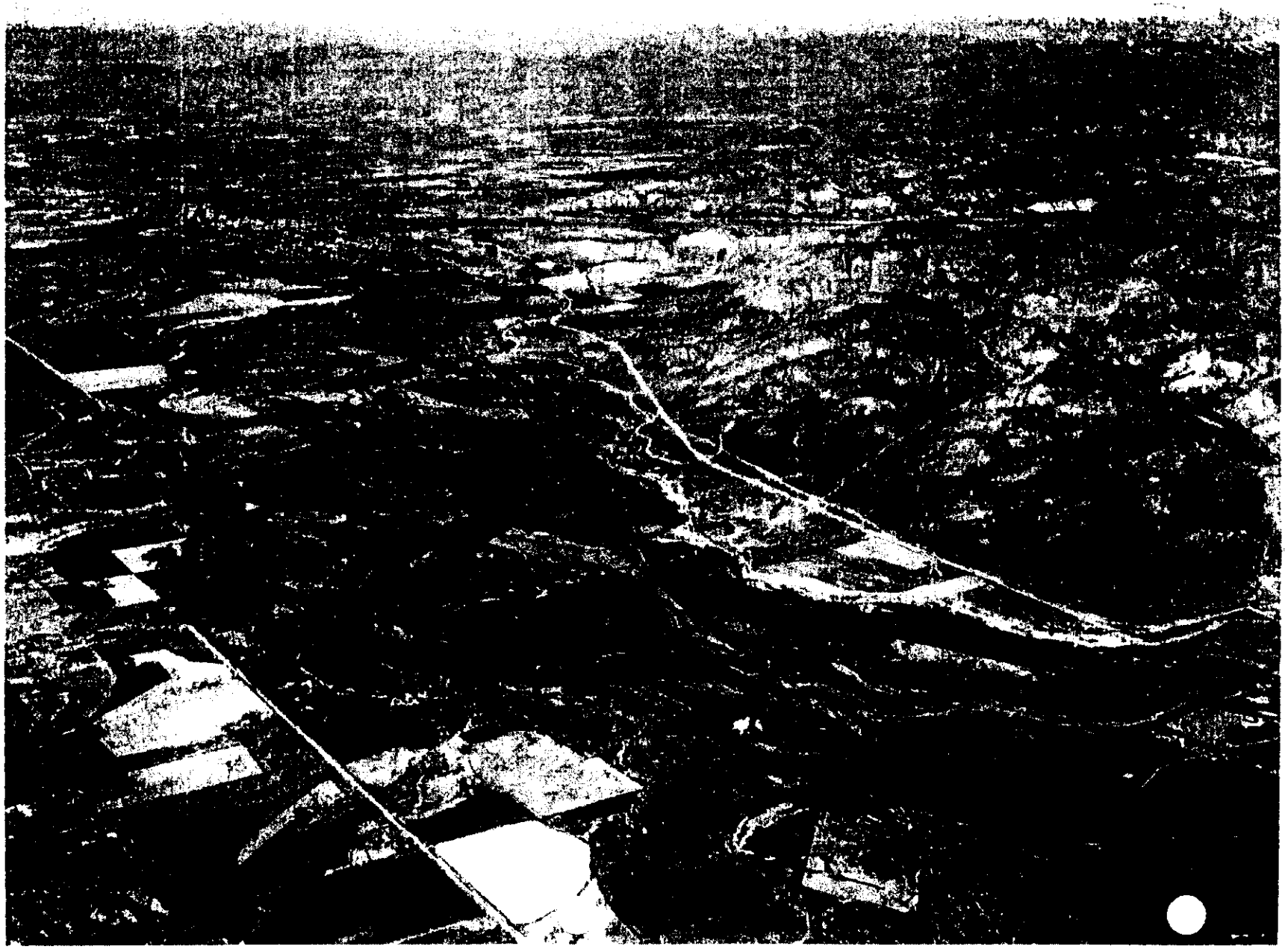
Weiser River at mouth of Mann Creek

Tom Yankey has original photo (JR) circa 1940

Looking West, Crown River, [illegible]

Tom Yankey has original photo. (JR)

circa 1940



U.S. ARMY CORPS OF ENGINEERS
WALLA WALLA DISTRICT
WALLA WALLA, WA
99362-9265

From: Karen Walker
Civil Engineer

TELEPHONE (509) 527-7147
FAX (509) 527-7821

To: Mr. Joe Qualls

Fax: 208-414-1816

- [ ] First Class
- [ ] Express Mail
- [ ] UPS/Federal Express
- [x] Facsimile (3 Pages)

Subject: Weiser River Vegetation

A copy of the letter from the US Army Corps of Engineers to Flood Control District No. 3, attention Mr. Art Correia, regarding the inspection of the Weiser flood control projects performed in August 2003.

Thanks,

Karen Walker

Karen Walker

18-Feb-04

Date

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
201 NORTH THIRD AVENUE
WALLA WALLA, WASHINGTON 99362-1876

REPLY TO
ATTENTION OF

February 19, 2004

Emergency

Flood Control District No. 3
Attn: Mr. Art Correia
1826 Cove Rd
Weiser ID 83672

Dear Mr. Correia:

On August 13, 2003, Karen Walker of the US Army Corps of Engineers, Walla Walla District Office, met with you and inspected the Weiser flood control projects located on the Weiser River in Cambridge ID. The projects consist of earthen levees. The inspection was in accordance with the Corps of Engineers Continuing Eligibility Inspection program under Public Law 84-99.

Smith & Green: The levees are located on the right bank of the river. They are approximately 9000 feet long. Access along the crest of the levees is excellent. The riprap protection on the upstream end of the Green levee is in good condition. There is no riprap protection on the downstream end. There are spots of riprap protection on the Smith levee. These are in good condition. There is vegetation at the toe of the levees, particularly willow trees, and a few large trees. The levees have ruts from vehicle access, but they do not endanger the integrity of the levees.

Lyle: The levee is located on the right bank of the river. It is approximately 1800 feet long. Access along the crest of the levee is excellent. There is little riprap protection on the slopes. There is vegetation on the riverside slope, especially at the toe of the levee.

Twin Bridges: The levee is located on the left bank of the river. It extends 1800 feet upstream of the bridge and 1100 feet downstream. Access along the crest of the downstream levee is excellent. Access to the upstream levee was not granted. There is a significant amount of vegetation on the riverside slopes and on the upstream landside slope. There is little riprap protection on the slopes.

Dickerson-Sweet: The levee is located on the right bank of the river. The Dickerson levee is approximately 3600 feet long and the Sweet levee is approximately 10550 feet long. Access along the crest of the levee is excellent. There is little riprap protection on the slopes. There is vegetation and some trees on the riverside slopes, particularly at the toe of the levee. The brush on the landside slope was recently burned. The Dickerson levee has ruts from vehicle access, but they do not endanger the integrity of the levee.

Printed on Recycled Paper

Kirk Downstream: The levee is located on the left bank of the river. It is approximately 4200 feet long. Access along the crest of the levee is excellent. The riprap area repaired since the 1996 flood is still in good condition. There is vegetation, particularly willow trees, at the toe of the levee.

Kirk Upstream: The levee is located on the left bank of the river. It is approximately 2500 feet long. Access for inspection is poor due to vegetation growth, but there is sufficient access across the field during an emergency. Only the upstream section was accessed for inspection. There are willows on the riverside toe of the levee. The riverside slope is steep and may be unstable during high flows.

There is a significant amount of vegetation on all six levees that may threaten the integrity of the projects and hinder visual inspections if allowed to continue to grow. The root structure of large trees have been known to lose strength during periods of high water or high winds, resulting in the tree tipping over, displacing riprap or portions of the levee section. This produces unwanted holes in the riprap protection or levee section, exposing the embankment to possible erosion. It is recommended the trees growing within the riprap sections be removed. The remaining trees growing within the levee prism should be monitored closely and removed if they show evidence of root failure.

The operation and maintenance of the Weiser Flood Control Projects is rated acceptable.

This letter does not constitute approval by the State of Idaho, National Marine Fisheries Service, or the Corps of Engineers Regulatory Office to perform maintenance work within riparian areas.

Please submit your maintenance report showing the activities and expenditures you have had in maintaining the flood control project during the past year. If we can be of any assistance, please contact Mr. Herb Bessey at 509-527-7144.

Sincerely,

Herb Bessey

G. Herbert Bessey
Chief, Emergency Branch

Riparian Shade and Stream Temperature: A Perspective

Larry L. Larson and Shane L. Larson

Reductions in salmon populations over the past 20 years have created a sense of urgency for improved management of watersheds, fish habitat and water quality within the Columbia River Basin. One management approach that has gained in popularity is to increase woody vegetation in riparian zones. The intent behind these plantings is to increase bank stability, stream debris and provide shade for stream temperature control (Beschta 1991)

Oregon Department of Forestry (1994) has established forest rules and regulations for riparian zones of 40 live conifer trees per 1,000 feet along large streams and 30 live conifer trees per 1,000 feet along medium streams. Similarly, Oregon Department of Environmental Quality is developing water temperature standards for streams throughout the state. In northeastern Oregon the Upper Grande Ronde River Plan established watershed standards that require meadows to have at least 80% of the banks covered with shrubs, of which, at least 50% should be more than 8 feet tall (Anderson et. al. 1993). These approaches reflect the view that streamside forests profoundly influence habitat structure and food resources of stream systems. Additionally, tree height and distance away from the stream are considered meaningful indicators of aquatic habitat components including wood recruitment and degree of shade (Thomas et. al. 1993).

Activities by man that modify the amount of shade over streams have been associated with changes in water temperature (Brown et. al. 1971). Some researchers have concluded that loss of vegetation in a riparian area due to grazing, logging, or overuse by other activities can be directly linked to undesirable water temperatures due to the loss of shade (Anderson et. al. 1993).

The establishment of vegetation shade along streams to control stream temperature may seem reasonable upon first review. However this is a simplistic view of a complex and dynamic system. The purpose of this paper is to provide a discussion of energy exchange within a body of water and to consider the contribution of vegetation shade to that process. This discussion will occur in two sections: 1) Characteristics of water, water heating, and water cooling, and 2) The creation of woody vegetation shade in riparian areas. This paper is not intended to provide a complete review of the physics of energy exchange, nor will it provide discussions of more complicated forms of energy exchange in streams. Four equations (boxed) are provided as reference material in this paper. They are not required to read the text of this paper.

Characteristics of Water, Water Heating, and Water Cooling

Energy exchange is described by the First and Second Law of Thermodynamics (Halliday and Resnick 1988). These laws tell us that we can transform but not create or destroy energy and that the direction of energy exchange will occur from areas of high concentration toward areas of lower concentration.

The heating of a natural body of water is governed by two primary radiation sources: the sun, and the ambient radiation emitted by the atmosphere and the earth. A representative value for this daily incoming radiation in the temperate zone on a clear summer day would be 332 W m^{-2} of solar radiation and 330 W m^{-2} of ambient radiation (Satterlund and Adams 1992). The distinction between radiation sources is necessary because rock, vegetation, water, road surfaces etc. absorb, emit and reflect radiation differently, and can significantly affect radiation inputs in a given area.

An average of 18% of the solar radiation striking the atmosphere actually reaches the surface of the earth as direct radiation. An additional 28% will arrive at the earth surface as diffuse and scattered radiation (Trewartha 1968). Shade is created by intercepting direct solar radiation and preventing it from reaching the surface of the earth.

Visible solar radiation is predominantly in the range from violet to red (400 nanometers to 700 nm). These wavelengths are mid-range to the total solar radiation that reaches the earth. Water is transparent to visible solar radiation (the radiation is not absorbed) and is least likely to absorb the energy contained in the blue (400 nm) and green (500 nm) color bands (Hollaender 1956). Approximately 95% of visible radiation will penetrate a column of clear water to a depth of 3 feet and over 75% will penetrate to a depth of 30 feet (Hollaender 1956, Sellers 1974). This characteristic permits us to see objects in the water and photosynthesis to occur beneath the surface of the water.

In contrast, water is opaque to near-infrared (700–1,000 nm) and ambient (>1,000 nm) radiation. Nearly 90% of this radiation is absorbed in the top 0.5 inch of a water column and 100% will be absorbed within the top 4.0 inches (Hollaender 1956, Sellers 1974). The absorption of this energy warms the top 4 inches of the water column without directly warming the water at greater depths. These interactions (visible, near-infrared, and ambient radiation) vary with the season of the

year, time of day, water turbidity, and surface turbulence.

Energy exchange between water nd incoming radiation can be estimated mathematically (Equations derived from Sec. 7-8, Eqn. 21 and Sec. 20-3, Eqn. 3 are provided in the the following box; Halliday and Resnick 1988).

$$\tau = \frac{Q}{P} = \frac{Q}{SA}$$

Where

$$Q = mc\,(T_f - T_i)$$

Here, τ is time (s); P is the total energy delivered to the water per second (W); Q is the amount of heat deposited in the body of water (J); A is the surface area of the body of water exposed to the radiation (m^2); m is the mass of the body of water (kg); c is the specific heat capacity of water (4,190 J kg^{-1} @ 288°K); T_f is the final temperature of the body of water (K); T_i is the initial temperature of the body of water; and S is the radiation at the surface of the water (W m^{-2}).

To illustrate, assume there is a stationary column of water (12 inches x 12 inches x 12 inches deep at 60°F) that is receiving the radiation amount (average) received at La Grande, Oregon at Noon and 2 PM, 734 W m^{-2} and 674 W m^{-2} respectively (Solar Monitoring Lab. 1987). Also assume that none of the incoming radiation is reflected by the water surface and that none of the radiation can escape once it penetrates the surface of the water column. Given these constraints it would take 16 minutes to raise the temperature of the water column by 1° F at Noon and 17.5 minutes at 2 PM. However to be accurate this estimation would need to be corrected for changes in the water surface reflectance, the transparency of water to visible radiation, heat exchange with other thermal bodies (i.e. soil), and the mixing associated with a stream environment. These factors increase the length of time required to detect a measurable increase in water temperature. If shade were introduced into this example it would intercept direct solar radiation. It would have little influence on diffuse, scattered or ambient radiation sources.

The problem of water cooling is a more complex issue both conceptually and mathematically. Water must convert and radiate its internal energy (in the form of heat) out into the thermal reservoir of the atmosphere. This process is governed by a partial differential equation known as the 'one dimensional heat equation,' or the 'diffusion equation' (Sec. 8-3, Eqn. 8-60, equations are provided as follows; Matthews and Walker 1970).

$$\frac{\partial^2 T}{\partial x^2} - \frac{1}{\kappa}\frac{\partial T}{\partial t} = 0$$

Where

$$\kappa = \frac{k}{\rho c}$$

Here x is the position in the water column (m), κ is a constant depending on the thermal conductivity k, the heat capacity c, and the mass density ρ.

The solutions to this equation depend strongly on the initial temperature distribution assumed for the body of water, and the temperature of the air mass over the water. For simplicity we will use the water column previously described and assume that there is no heat exchange through the sides or bottom of the water column. In addition, we assume that the water and air each have uniform temperatures (water, 77°F; air, 68°F) before the onset of cooling, then as it cools, a temperature gradient forms between the top (coolest) layer of water, and the deepest (warmest) layer. Given these constraints, the rate of cooling will be a strong function of time and water depth, slowing down as the water and air mass approach the same temperature. In this example, water at a depth of 4 inches will cool only 4.5°F in approximately 1.5 days. This demonstrates that cooling water by diffusion is a relatively slow process. It does not illustrate the influence of stream mixing or any of the more complex thermal exchanges that could occur within a water channel.

This example would seem to be contrary to one's ideas about cooling. When one steps from full sunlight into shade, it appears to be cooler. This is not because of a rapid cooling effect brought on by shade, but rather a manifestation of a human body's response to full sunlight. **Shade does not produce cooling, but rather prevents heating by direct solar radiation.**

If the water is in contact with an energy source (i.e. air, soil, etc.) that has a greater temperature, energy will be transferred into the water body. As a result water traveling through shade will gain energy if the air mass temperature is greater than the temperature of the water.

The Creation of Woody Vegetation Shade in Riparian Areas

Shade creation is bound by a number of constraints. The angle and direction of solar radiation is controlled by global position, time of year and time of day. The greatest solar angle during the summer in the northern hemisphere occurs at Noon on June 21 and decreases on the days preceding and following the summer solstice. Similarly, the greatest daily solar angle occurs at Noon (standard time) and decreases in both the AM and PM.

The greatest intensity of solar radiation occurs when the sun is directly overhead. Deviations from the zenith position reduce the intensity of radiation by spreading energy over a larger surface area (Trewartha 1968, Satterlund and Adams 1992). Therefore the greatest reduction in direct radiation through the use of shade would occur at the time of the greatest solar angle.

An illustration of the influence of the solar angle on shading is provided in Figure 1. In this illustration the trees are 20 and 50 feet in height and July shadows (45° N Lat.) are being cast at 12:00 Noon and 2:00 PM, respectively. The trees are 10 feet from the edge of a 40 foot wide water channel that flows from east to west. Given these parameters the 20 foot tree does not cast a shadow on the water at either time. The 50 foot tree would cast a shadow extending 12 feet into the

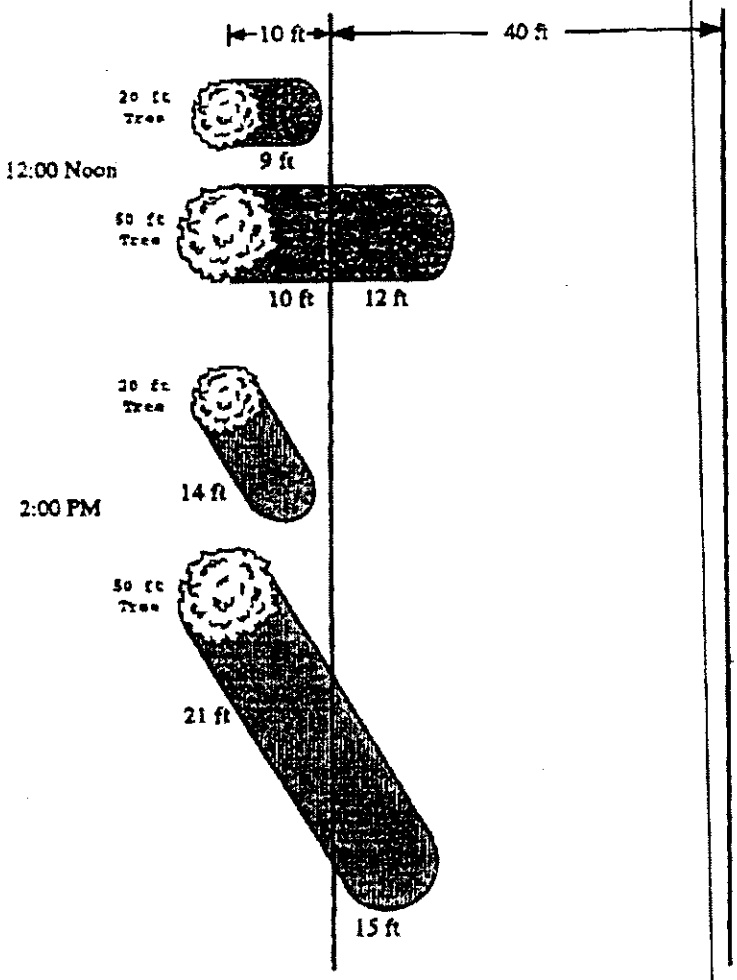


Fig. 1. *Shadows cast by 20 and 50 foot trees in July (45° North Latitude) at 12:00 noon and 2:00 PM along a 40 foot wide stream channel flowing east to west. Shadow lengths are measured along the centerline of the shadow. The trees are planted 10 feet from the stream channel.*

channel at noon and 15 feet into the channel at 2:00 pm. The implication of this illustration is that a 'windbreak' of 50 foot trees would expose 60 to 70% of the water to direct solar radiation.

Observations and Conclusions

Based upon the above discussion there are a number of observations that can be made. The capacity of a stream to buffer against temperature increase is directly influenced by water volume and the size of the surface area that is exposed to the energy source. This capacity can be modified directly through the addition of snowmelt and interflow. Similarly, over-night low air temperature will modify the daily temperature range of a stream by influencing pre-dawn water temperature.

The specific heat of water allows water to absorb considerable amounts of energy before its temperature will increase. Similarly, a warmed stream must release significant amounts of energy before cooling can take place. The minimum temperature that water can be cooled will be the lowest temperature in the local environment (i.e. air or stream bank temperature). This means that it will be difficult to cool a stream in a warm environment. This statement is true whether the stream is shaded or not.

It is true that shade can be used to intercept direct solar radiation over water. However, in reality this interception will yield only limited benefit in many situations. Total surface radiation is comprised of solar radiation (direct, diffuse and scattered) and ambient radiation. Direct sunlight only accounts for approximately 20% of the total, and as a result, shaded areas can receive up to 80% of the total radiative energy available at the surface. Furthermore the ability of woody vegetation (the physical limitation of height growth) to shade a stream decreases with increasing stream width. The value of shade is further influenced by the structure and orientation of the woody vegetation that creates the shade. A stream running east or west will have an entirely different shading pattern than one running north or south. Shade generated from a tall canopy of cottonwoods with an open understory will result in a different shading influence (i.e. canopy closure and air movement) than a mixed conifer community with multiple vegetation strata. Shade generated by the topography and/or stream channel will also contribute different levels of shading and exposure for water. Consequently, shade standards should indicate the amount of shade needed, not the quantity and size of woody vegetation.

Woody vegetation is only one component in a riparian ecosystem. Its importance is dependent upon site conditions and is site specific. Watershed attributes such as air mass characteristics, elevation gradient, adiabatic rate, channel (water) width and depth, water velocity, surrounding landscape, and interflow inputs all influence water temperature and can be of equal or greater importance to stream temperature than vegetation shade.

The history of land management in riparian zones includes periods of channelization, tree removal, the development of stream structures, the removal of large woody debris, and corridor fencing. All of these management strategies, like the current desire to control stream temperature with vegetation shade, were intended to meet a recognized land management need. Unfortunately the application of a standardized management strategy

that does not account for the dynamic nature of a riparian zone will likely lead to more failures than successes. Land management decisions need to be site specific and they need to be made by qualified land managers. Streamside vegetation can improve bank stability, increase habitat for some species of wildlife, and serve as a component in the system as a whole, but shade does not control stream temperature.

Literature Cited

Anderson, J., R. Beschta, P. Boehne, D. Bryson, R. Gill. S. Howes, B. McIntosh, M. Purser, J. Rhodes, and J. Zakel. 1993. A comprehensive approach to restoring habitat conditions needed to protect threaten salmon species in a severely degraded river—The upper grande ronde river anadromous fish habitat protection, restoration and monitoring plan. p 175–179. *In:* Riparian management: common threads and shared interests. USDA Rocky Mt. For. and Ran. Exp. Sta. Gen. Tech. Rep. 226. Albuquerque, N.M.

Beschta, R. L. 1991. Stream habitat management for fish in northwestern United States: The role of riparian vegetation. American Fisheries Society Symposium. 10:53–58.

Brown, G., G. Swank, and J. Rothacher. 1971. Water temperature in the Steamboat drainage. USDA Pacific Northwest Forest and Range Experiment Station. Res. Pap. PNW-119. Portland, Ore.

Halliday, D. and R. Resnick. 1988. Fundamentals of physics. 3rd ed. John Wiley & Sons Inc., New York.

Hollaender, A. 1955. Radiation Biology. Vol 1-3. McGraw-Hill, New York.

Matthews, J. and Walker, R. L. 1970. Mathematical methods of physics. Addison-Wesley Publishing Company, Inc. New York.

Matthews, J. and Walker, R.L. 1970. Mathematical methods of physics. Addison-Wesley Publishing Company, Inc. New York.

Oregon Department of Forestry. 1994. Forest practice water protection rules. Division 24 and 57. Salem, Ore.

Satterlund, D. R. and P. W. Adams. 1992. Wildland watershed management. 2nd ed. John Wiley & Sons Inc. New York.

Sellers, W. D. 1974. Physical Climatology. University of Chicago Press. Chicago, Ill.

Solar Monitoring Lab. 1987. Pacific northwest solar radiation data. University of Oregon. Eugene, Ore.

Thomas, J. W. et al. 1993. Forest ecosystem management: an ecological, economic, and social assessment. USDA Forest Service. U. S. Government Printing Office, Washington D. C.

Trewartha, G. T. 1968. An introduction to climate. McGraw-Hill. New York.

Authors are associate professor Department of Rangeland Resources, Oregon State University, Corvallis, ORE. 97331 and graduate research assistant Department of Physics, Montana State University, Bozeman, Mont. 59717.

Irrigation Company Name, Address

SUNNYSIDE
WEISER

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-10-03	Certified Applicator's Name: CARL McELHINNEY
Location of Application: BRIDGE BELOW DIVERSON	Certified Applicator's License #: 2500
	Application recommended by: ART CORREA
Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) B	Date of Contact: NA
Magnacide H per cfs: .5	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 1 hrs	Gallons per hour: (calculated) 9
Water Temperature: 70 °F	Gallon per hour: (actual) 9.9
Container No. DW 8523	Orifice size: 0 43 inches
Start contents: 43.9 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 9.9 gal	Application concentration: ppm (not to exceed 15 ppm)
Quantity remaining: 34.0 gal	(gal/cfs X 1884) / (time (min.)) = ppm
Time started: ~~7:06~~ am pm	Cylinder = 52.4 gal
Time ended: 8.06 am pm	2450 skid = 347.0 gal
Time (actual): 2 HRS	2300 skid = 325.8 gal
Approximate Wind Velocity: 0 mph	2500 skid = 354.1 gal
Wind Direction:	3000 skid = 424.9 gal
	Magnacide H wt. = 7.06 lbs/gal
	Notes: 408 GROSS 20 mi 53208 Billed

Irrigation Company Name, Address

SCHWENK FELDER
CAMBRIDGE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 07-07-03	Certified Applicator's Name: CARL McELHINNEY
Location of Application: DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: BROCK ROBBINS
Aquatic weeds(s) present: MIL FOIL - MOSS	Worker Protection Notification
Condition Code: (A,B,C, etc.) D-E	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 15-SCFS cfs	Name of Person Contacted: NA
Treatment time: 2½ hrs	Gallons per hour: (calculated) 13
Water Temperature: 64 °F	Gallon per hour: (actual) 13.3
Container No. E 8440	Orifice size: .048 inches
Start contents: 33.3 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 33.3 gal	Application concentration: ppm (not to exceed 15 ppm)
Quantity remaining: gal	(gal/cfs X 1884) = ppm (time (min.))
Time started: 8:20 am pm	Cylinder = 52.4 gal
Time ended: 11:30 am pm	2450 skid = 347.0 gal
Time (actual): 2½ HRS	2300 skid = 325.8 gal
Approximate Wind Velocity: 0 mph	2500 skid = 354.1 gal
Wind Direction:	3000 skid = 424.9 gal
	Magnacide H wt. = 7.06 lbs/gal

Notes: WEIR 1HR
BARN 1HR
WESTON SCHWENKFELDER ½ HR
Billed 53175

Irrigation Company Name, Address

SUNNYSIDE IRRIG
WEISER I D

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 6-17-03	Certified Applicator's Name: CARL McELHINNEY
Location of Application: DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: ART CORRIEA

Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) B	Date of Contact: NA
Magnacide H per cfs: .5	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 1 hrs	Gallons per hour: (calculated) 9
Water Temperature: 65 °F	Gallon per hour: (actual) 8.9
	Orifice size: .043 inches
	Pressure setting: 20 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm)
	(gal/cfs X 1884) = ppm (time (min.))

Container No. E 8440	
Start contents: 42.2 gal	
Total quantity used: (GPH X hours) (actual) 8.9 gal	
Quantity remaining: 33.3 gal	
Time started: 7.00 am pm	
Time ended: 8.00 am pm	
Time (actual): 1	
Approximate Wind Velocity: 0 mph	
Wind Direction:	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: 407# GROSS LEFT
235# NET "

2 qm

Billed
52916

Irrigation Company Name, Address

SUNNY SIDE

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 6-2-03	Certified Applicator's Name: CARL McELHINNEY
Location of Application: AT DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: ART CORREA
Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: 8.50	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 1 hrs	Gallons per hour: (calculated) 13.
Water Temperature: 56 °F	Gallon per hour: (actual) 13.45
Container No. SA 108412 E8440 3.25 CAL full	Orifice size: .048 inches
Start contents: gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 13.45 gal	Application concentration: ppm (not to exceed 15 ppm)
Quantity remaining: 42.2 gal	(gal/cfs X 1884) = 10.5 ppm (time (min.))
Time started: 7.00 am pm	Cylinder = 52.4 gal
Time ended: 8.00 am pm	2450 skid = 347.0 gal
Time (actual): 1 HR	2300 skid = 325.8 gal
Approximate Wind Velocity: -0- mph	2500 skid = 354.1 gal
Wind Direction:	3000 skid = 424.9 gal
	Magnacide H wt. = 7.06 lbs/gal
	Notes: 20 mi Billed 52625

Irrigation Company Name, Address
JW HOLMES
INDIAN VALLEY ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application:	7-31-02
Location of Application:	SOUTH OF INDIAN VALLEY STORE
Aquatic weeds(s) present:	MILFOIL
Condition Code: (A,B,C, etc.)	C
Magnacide H per cfs:	.5
Flow rate in canal:	5 cfs
Treatment time:	2 hrs
Water Temperature:	65 °F
Container No.	
Start contents:	34.7 gal
Total quantity used: (GPH X hours) (actual)	2.3 gal
Quantity remaining:	32.4 gal
Time started:	9:30 am pm
Time ended:	11:30 am pm
Time (actual):	2 HR
Approximate Wind Velocity:	W 3 mph
Wind Direction:	WEST

Certified Applicator's Name:	CARL McELHINEY
Certified Applicator's License #:	2500
Application recommended by:	JOE HOLMES

Worker Protection Notification
Date of Contact: NA
Time of Contact: NA
Name of Person Contacted: NA

Gallons per hour: (calculated)	1.25
Gallon per hour: (actual)	1.15
Orifice size:	.016 inches
Pressure setting:	15 p.s.i.g
Application concentration: ppm (not to exceed 15 ppm)	
(gal/cfs X 1884) = / (time (min.))	ppm

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:
49826
100 miles

Irrigation Company Name, Address
Silmar

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-16-02	Certified Applicator's Name: CARL MC
Location of Application: AT DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: ART CORREA

Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) C-D	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 1000 INCH 2½ WEIR 40 cfs	Name of Person Contacted: NA
Treatment time: 1 hrs	Gallons per hour: (calculated)
Water Temperature: 72 °F	Gallon per hour: (actual) 10.5
Container No.	Orifice size: .045 inches
Start contents: 52.4 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 10.5 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = (time (min.)) ppm
Quantity remaining: 41.9 gal	
Time started: 7:58 am 8:58 pm	
Time ended: 8:58 am pm	
Time (actual): 1 HR	
Approximate Wind Velocity: 0 mph	
Wind Direction:	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: Billed #49739 20 ml.

Irrigation Company Name, Address

MIDDLE DITCH

MIDVALE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 7-2-02	Certified Applicator's Name: CARL McELHINNY
Location of Application: MIDVALE DIVERSON	Certified Applicator's License #: 2500
	Application recommended by: BOSCO BOSLER
Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) D	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 3 hrs	Gallons per hour: (calculated) 10
Water Temperature: 72 °F	Gallon per hour: (actual) 12
Container No.	Orifice size: .045 inches
Start contents: 36.5 gal	Pressure setting: 24 p.s.i.g
Total quantity used: (GPH X hours) (actual) 36.5 gal	Application concentration: ppm (not to exceed 15 ppm)
Quantity remaining: -0- gal	(gal/cfs X 1884) = ppm (time (min.))
Time started: 12:50 am pm	
Time ended: 4.00 am pm	
Time (actual): 3 HR 10 min	
Approximate Wind Velocity: 0 mph	
Wind Direction:	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: 1.4 weeks

#49613

Irrigation Company Name, Address

SCHWEN FELDER
CAMBRIDGE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-2-02	Certified Applicator's Name: CARL McELHINNEY
Location of Application: DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: BROCK ROBBINS
Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) D-E	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
	Name of Person Contacted: NA
Flow rate in canal: 15 cfs	Gallons per hour: (calculated) 12
Treatment time: 2½ hrs	Gallon per hour: (actual) 12
Water Temperature: 64 °F	Orifice size: .085 inches
	Pressure setting: 24 p.s.i.g
Container No. DW 10529	Application concentration: ppm (not to exceed 15 ppm)
Start contents: 14.1 52.4 gal	(gal/cfs X 1884) = ppm (time (min.))
Total quantity used: (GPH X hours) (actual) 30 gal	Cylinder = 52.4 gal 2450 skid = 347.0 gal 2300 skid = 325.8 gal 2500 skid = 354.1 gal 3000 skid = 424.9 gal
Quantity remaining: gal	
Time started: 900 am (pm)	Magnacide H wt. = 7.06 lbs/gal
Time ended: 12:30 am (pm)	Notes: 4 WEIR 28 miles Billed 49612 *WEIR *BARN *WESTON SCHWENK PROPS 78 miles
Time (actual): 2½	
Approximate Wind Velocity: 0 mph	
Wind Direction:	

Irrigation Company Name, Address
SUNNYSIDE DITCH
WELSER

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 6-29-02	Certified Applicator's Name: CARL McELHINNEY
Location of Application: SUNNYSIDE CANAL DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: CARL McELHINNEY
Aquatic weeds(s) present: MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: 1	Time of Contact: NA
Flow rate in canal: 25-30 cfs	Name of Person Contacted: NA
Treatment time: 24 HRS hrs	Gallons per hour: (calculated) 7.2
Water Temperature: 73 °F	Gallon per hour: (actual) 6.55
Container No. DW 10529	Orifice size: .035 inches
Start contents: 27.2 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 13.1 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = / (time (min.)) ppm
Quantity remaining: 14.1 gal	Cylinder = 52.4 gal 2450 skid = 347.0 gal 2300 skid = 325.8 gal 2500 skid = 354.1 gal 3000 skid = 424.9 gal
Time started: 6:00 am pm	Magnacide H wt. = 7.06 lbs/gal
Time ended: 8:00 am pm	Notes: .8 ON WEIR APPROX 1200 IN 20 miles billed 49569
Time (actual): 2 HRS	
Approximate Wind Velocity: 0 mph	
Wind Direction:	

Irrigation Company Name, Address
SUNNY SIDE DITCH
WEISER ID 83672

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application:	6-3-02
Location of Application:	SUNNY SIDE CANAL
Aquatic weeds(s) present:	MILFOIL PONDWEED
Condition Code: (A,B,C, etc.)	C
Magnacide H per cfs:	1
Flow rate in canal:	12 SOA INCH 25-30 cfs
Treatment time:	3 HR hrs
Water Temperature:	55 °F
Container No.	DW 10529
Start contents:	52.4 gal
Total quantity used: (GPH X hours) (actual)	17.7 gal
Quantity remaining:	34.7 gal
Time started:	6:15 am pm
Time ended:	9.30 am pm
Time (actual):	3 HRS
Approximate Wind Velocity:	C mph
Wind Direction:	

Certified Applicator's Name:	CARL McELHINNEY
Certified Applicator's License #:	2500
Application recommended by:	CARL McELHINNEY

Worker Protection Notification	
Date of Contact:	NA
Time of Contact:	NA
Name of Person Contacted:	NA

Gallons per hour: (calculated)	7.2
Gallon per hour: (actual)	5.9
Orifice size:	.035 inches
Pressure setting:	20 p.s.i.g
Application concentration: ppm (not to exceed 15 ppm)	

(gal/cfs X 1884) = ppm
(time (min.))

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:

Billed 49157

20 mi

COST
43.52

Irrigation Company Name, Address
LOWER CRANE CR
WEISER ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 8-21-01	Certified Applicator's Name: CARL MCELHINNEY
Location of Application: CRANE CR DIVERSION DWIGHT MADDOX	Certified Applicator's License #: 2500
	Application recommended by: DAVE MADDOX
Aquatic weeds(s) present: MILFOIL MOSS	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: 1	Time of Contact: NA
Flow rate in canal: 7 cfs (350-400")	Name of Person Contacted: NA
Treatment time: 2 hrs	Gallons per hour: (calculated) 3.2
Water Temperature: 68 °F	Gallon per hour: (actual) 3.2
Container No. E 9223	Orifice size: .025 inches
Start contents: 12.9 gal	Pressure setting: 15 p.s.i.g
Total quantity used: (GPH X hours) (actual) 6.4 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = / (time (min.)) ppm
Quantity remaining: 6.5 gal	
Time started: 10:45 am / pm	
Time ended: 12.45 am / pm	
Time (actual): 2 HRS	
Approximate Wind Velocity: 0 mph	
Wind Direction: —	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:
8.11.01
#47184
28 mi

Irrigation Company Name, Address

MIDDLE DITCH
MIDVALE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 8-1-01	Certified Applicator's Name: CARL McELHINNEY
Location of Application: MIDVALE DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: BOSCO
Aquatic weeds(s) present: MILFOIL POND WEED	Worker Protection Notification
	Date of Contact: NA
Condition Code: (A,B,C, etc.) C-D	Time of Contact: NA
	Name of Person Contacted: NA
Magnacide H per cfs: 1.0	Gallons per hour: (calculated) 11.8
Flow rate in canal: 40 cfs	Gallon per hour: (actual) 10.1
Treatment time: 3 hrs	Orifice size: .045 inches
Water Temperature: 68 °F	Pressure setting: 20 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm)
	(gal/cfs X 1884) / (time (min.)) = 8 ppm
Container No. E 8726 E9223	
Start contents: 24.1 EMPTIED 19.2 gal	
Total quantity used: (GPH X hours) 24.1 (actual) 30.4 6.3 gal	Cylinder = 52.4 gal 2450 skid = 347.0 gal 2300 skid = 325.8 gal 2500 skid = 354.1 gal 3000 skid = 424.9 gal
Quantity remaining: E9223 12.9 gal	
Time started: 10 am pm	Magnacide H wt. = 7.06 lbs/gal
Time ended: 1 am pm	Notes: 1.4 ON WEIR 58 MI. Billed #47112
Time (actual): 3 HRS	
Approximate Wind Velocity: 3 mph	
Wind Direction: SE	

Irrigation Company Name, Address
SUNNY SIDE DITCH
WEISER ID

331
172
159

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-17-01	Certified Applicator's Name: CARL McELHINNEY
Location of Application: SUNNY SIDE DITCH GALLOWAY DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: CURTIS HICKEY

Aquatic weeds(s) present: MIL FOIL PONDWEED	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: 1	Time of Contact: NA
Flow rate in canal: 1250 IN 2530 cfs	Name of Person Contacted: NA
Treatment time: 3 hrs	Gallons per hour: (calculated) 7.2
Water Temperature: 65 °F	Gallon per hour: (actual) 7.5
Container No. E 9223	Orifice size: .035 inches
Start contents: 41.65 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 22.5 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = 7.85 ppm (time (min.))
Quantity remaining: 19.2 gal	
Time started: 5:55 am pm	
Time ended: 9:15 am pm	
Time (actual): 3 HR 20 MIN	
Approximate Wind Velocity: 0 mph	
Wind Direction: –	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: 1.0 ON WEIR 20 mi

Billed 46980

Irrigation Company Name, Address
SCHWENK FELDER DITCH
CAMBRIDGE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-10-01	Certified Applicator's Name: CARL MCELHINNEY
Location of Application: SCHWENK FELDER DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: BROCK ROBBINS

Aquatic weeds(s) present: MILFOIL PONDWEED	Worker Protection Notification
	Date of Contact: NA
Condition Code: (A,B,C, etc.) D-E	Time of Contact: NA
	Name of Person Contacted: NA
Magnacide H per cfs: 1.5	Gallons per hour: (calculated) 6.8
Flow rate in canal: 15-17 cfs	Gallon per hour: (actual) 3.3 plugged filter
Treatment time: 3½ hrs	Orifice size: .045 inches
Water Temperature: 70 °F	Pressure setting: 6.7 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = ppm (time (min.))

Container No. E 9223	
Start contents: 52.4 gal	
Total quantity used: (GPH X hours) (actual) 10.75 gal	
Quantity remaining: 41.65 gal	
Time started: 9:15 am pm	
Time ended: 12:55 am pm	
Time (actual): 3-25	
Approximate Wind Velocity: -0- mph	
Wind Direction: -0-	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: 2½ HR AT WEIR 76 mi
.75 HR AT Schwenkfelder Home
S46
464
76#
plugged filter
WEIR 4-5 BILLED 46979 10.75 gal

Irrigation Company Name, Address

MIDVALE DITCH

MIDVALE

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 7-6-01	Certified Applicator's Name: CARL McELHINNEY
Location of Application: MIDVALE	Certified Applicator's License #: 2500
	Application recommended by: BOSCO

Aquatic weeds(s) present: POND WEED, milfoil	Worker Protection Notification
Condition Code: (A,B,C, etc.) D-E	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 3 HR 20 min hrs	Gallons per hour: (calculated) 14
Water Temperature: 74 °F	Gallon per hour: (actual) 12.2
Container No. E9222 DW10416	Orifice size: .045 inches
Start contents: 26.4 / 16.0 gal	Pressure setting: 29-30 p.s.i.g
Total quantity used: 26.4 (GPH X hours) / 16.0 (actual) / 42.4 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = ppm (time (min.))
Quantity remaining: 0 / 0 gal	
Time started: 9:40 am pm	
Time ended: 1:10 am pm	
Time (actual): 3 HRS 30 MIN	
Approximate Wind Velocity: -0- mph	
Wind Direction:	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: 58 miles

Billed 46859

1.87 HR BRIDGE

1½ VALLEY ROAD

Irrigation Company Name, Address

MIDDLE DITCH

MIDVALE ID

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 6-12-01	Certified Applicator's Name: CARL McELWINNEY
Location of Application: MIDVALE	Certified Applicator's License #: 2500
	Application recommended by: BOSCO

Aquatic weeds(s) present: MILFOIL, PONDWEED (SOME)	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: .5	Time of Contact: NA
Flow rate in canal: 40 CFS cfs	Name of Person Contacted: NA
Treatment time: 2½ hrs	Gallons per hour: (calculated) 10
Water Temperature: 57 °F	Gallon per hour: (actual) 10.4
Container No. SA08368	Orifice size: .043 inches
Start contents: 26 gal (355 GROSS)	Pressure setting: 17 p.s.i.g
Total quantity used: (GPH X hours) (actual) 26 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) / (time (min.)) = 8.2 ppm
Quantity remaining: -0- gal	
Time started: 9.00 am / 11.30 pm	
Time ended: 11.30 am / pm	
Time (actual): 2½	
Approximate Wind Velocity: 5 mph	
Wind Direction: W	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:

Billed 46510

58 miles

Irrigation Company Name, Address

SUNNY SIDE DITCH

WEISER ID 83672

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS

EPA Registration #10707-9

Date of Application: 5-31-01	Certified Applicator's Name: CARL McELHINNEY
Location of Application: SUNNY SIDE DITCH	Certified Applicator's License #: 2500
	Application recommended by: CURTIS MICKEY

Aquatic weeds(s) present: MILFOIL MOSS	Worker Protection Notification
Condition Code: (A,B,C, etc.) C	Date of Contact: NA
Magnacide H per cfs: 1	Time of Contact: NA
Flow rate in canal: 25-30 cfs (1250 INCH)	Name of Person Contacted: NA
Treatment time: 3 hrs	Gallons per hour: (calculated) 7.2
Water Temperature: 65 °F	Gallon per hour: (actual) 7.8
Container No. DW 11483	Orifice size: .035 inches
Start contents: 23.4 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 23.4 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) / (time (min.)) = 9.6 ppm
Quantity remaining: 0 gal	
Time started: 9.00 am/pm	
Time ended: 12.00 am/pm	
Time (actual):	
Approximate Wind Velocity: -0- mph	
Wind Direction: —	

Cylinder	= 52.4 gal ✓
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:

20 miles

Billed 46508

Irrigation Company Name, Address
MIDDLE DITCH
MIDVALE

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 8-18-00	Certified Applicator's Name: CARL McELHINNEY
Location of Application: WASH CO MIDVALE	Certified Applicator's License #: 2500
	Application recommended by: BOSCO BOSLER

Aquatic weeds(s) present: PONDWEED MILFOIL	Worker Protection Notification
Condition Code: (A,B,C, etc.) D	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 30 cfs	Name of Person Contacted: NA
Treatment time: 3 hrs	Gallons per hour: (calculated) 10
Water Temperature: 65 °F	Gallon per hour: (actual) ~~8~~ 10
Container No. DW 11493	Orifice size: .043 inches
Start contents: 52.4 gal	Pressure setting: 20 p.s.i.g
Total quantity used: (GPH X hours) (actual) 29 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = (time (min.)) ppm
Quantity remaining: 23.4 gal	
Time started: 11.00 am pm	
Time ended: 2 00 am pm	
Time (actual): 3 HRS	
Approximate Wind Velocity: -0-0 mph	
Wind Direction: —	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes:
Bill #44175 58 mi
1.1 x 2 x 12
90 SEC X 26.7

Irrigation Company Name, Address
SCHWENK FELDER CANAL
CAMBRIDGE

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-26-00	Certified Applicator's Name: CALL McELHINNEY
Location of Application: SCHWENK FELDER DIVERSION	Certified Applicator's License #: 2500
	Application recommended by: ROYCE SCHWENKFELDER

Aquatic weeds(s) present: MILFOIL MOSS POND WEED	Worker Protection Notification
Condition Code: (A,B,C, etc.) E	Date of Contact: NA
Magnacide H per cfs: 1.50	Time of Contact: NA
Flow rate in canal: 15 cfs	Name of Person Contacted: NA
Treatment time: 4 hrs	Gallons per hour: (calculated) 6.5
Water Temperature: 68 °F	Gallon per hour: (actual) 5.9
Container No. SAO 4937	Orifice size: .032 inches
Start contents: 43 gal	Pressure setting: 25 p.s.i.g
Total quantity used: (GPH X hours) (actual) 29.7 gal	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = 12.4 ppm (time (min.))
Quantity remaining: 13.3 gal	
Time started: 9:30 am pm	
Time ended: 2:30 am pm	
Time (actual): 5 HRS	
Approximate Wind Velocity: 0 mph	
Wind Direction: - -	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: STRT 11:40 76 miles
1 3/4 HR AT WEIR
1 1/2 HR A BARN Billed
1 1/2 SCHWENKFELDERS #43968
4 WEIR
IS 500'

Irrigation Company Name, Address
FARMERS SUPPLY
WEISER

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-7-00	Certified Applicator's Name: CARL McELHINNEY
Location of Application: MIDVALE DITCH	Certified Applicator's License #: 2500
	Application recommended by: HARMON HORTON

Aquatic weeds(s) present: MILFOIL MOSS POND WEED	Worker Protection Notification
Condition Code: (A,B,C, etc.)	Date of Contact: NA
Magnacide H per cfs:	Time of Contact: NA
Flow rate in canal: 25-30 cfs	Name of Person Contacted: NA
Treatment time: 3hr 20min hrs	Gallons per hour: (calculated)
Water Temperature: 65 °F	Gallon per hour: (actual) 17
	Orifice size: .048 inches
	Pressure setting: 29 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = ppm (time (min.))

Container No. SA02526 SA04937	Cylinder = 52.4 gal
Start contents: 36.3 54.2 gal	2450 skid = 347.0 gal
Total quantity used: (GPH X hours) (actual) 45.7 gal	2300 skid = 325.8 gal
Quantity remaining: 43 gal	2500 skid = 354.1 gal
Time started: 10.20 am pm	3000 skid = 424.9 gal
Time ended: 1.00 am pm	Magnacide H wt. = 7.06 lbs/gal
Time (actual):	Notes: 43.29 58 miles
Approximate Wind Velocity: -0- mph	
Wind Direction: —	

Irrigation Company Name, Address

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 7-5-00	Certified Applicator's Name: CARL McELHINNEY
Location of Application: SUNNY SIDE DITCH GALLOWAY	Certified Applicator's License #: 2500 #
	Application recommended by: CURTIS HICKEY

Aquatic weeds(s) present: MILFOIL MOSS POND WEED	Worker Protection Notification
Condition Code: (A,B,C, etc.) D, E	Date of Contact: NA
Magnacide H per cfs: 1.5	Time of Contact: NA
Flow rate in canal: 25-30 1250'N cfs	Name of Person Contacted: NA
Treatment time: 3 hrs	Gallons per hour: (calculated) 11.5
Water Temperature: 65 °F	Gallon per hour: (actual)
	Orifice size: .048 inches
	Pressure setting: 19 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) = / (time (min.)) ppm

Container No. DW 10636 SA02526	
Start contents: 52.4 21.4 gal	
Total quantity used: (GPH X hours) (actual) 37.4 gal	
Quantity remaining: DW 10636 36.3 gal	
Time started: 10:30 am / pm	
Time ended: 1:45 am / pm	
Time (actual): 3:15	
Approximate Wind Velocity: 5 mph	
Wind Direction: S	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

Magnacide H wt. = 7.06 lbs/gal

Notes: # 43928 20 miles

Irrigation Company Name, Address

MAGNACIDE H APPLICATION RECORD FOR IRRIGATION CANALS
EPA Registration #10707-9

Date of Application: 6.22.00	Certified Applicator's Name: CARL McELHINNEY
Location of Application: MIDDLE DITCH NORTH OF MIDVALE	Certified Applicator's License #: 2500
	Application recommended by: BOSCO BOSLER

Aquatic weeds(s) present: MILLFOIL PONDWEED MOSS	Worker Protection Notification
Condition Code: (A,B,C, etc.) D	Date of Contact: NA
Magnacide H per cfs: 1.05	Time of Contact: NA
Flow rate in canal: 40 cfs	Name of Person Contacted: NA
Treatment time: 2 ½ hrs	Gallons per hour: (calculated) 14.2
Water Temperature: 65 °F	Gallon per hour: (actual) 14
	Orifice size: .048 inches
	Pressure setting: 30 p.s.i.g
	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) / (time (min.)) = 11 ppm

Container No. OW 1114 SAO 8526	
Start contents: 11 GAL 52.4 gal	
Total quantity used: 42 (GPH X hours) (actual) gal	
Quantity remaining: OW 1114 Empty SAO 8526 21.4 gal	
Time started: 9:50 am / pm	
Time ended: 12:50 am / pm	
Time (actual): 3 HRS	
Approximate Wind Velocity: 10-12 mph	
Wind Direction: FROM NORTH	

Cylinder = 52.4 gal	
2450 skid = 347.0 gal	
2300 skid = 325.8 gal	
2500 skid = 354.1 gal	
3000 skid = 424.9 gal	

Magnacide H wt. = 7.06 lbs/gal

Notes: 58 miles
1.4
VALLEY & LOUIE FAYE ROAD
SECOND APPLIC NEXT TIME
#43651

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 8-23-99	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER 2500

Aquatic weed(s) present:	Gallons per hour: (calculated)
Weed growth condition: (A,B,C, etc.) B	Gallons per hour: (actual) GPH
Application concentration: gal/cfs	Orifice size: 045 0.0 inches
Flow rate in canal: cfs	Pressure setting: 40 p.s.i.g
Treatment time: hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 70 F	

Container No. DUL 1455	
Start contents: gal	
Quantity used: 28 gal (GPH X hours) (actual)	
Quantity remaining: 21.6 gal	
Time started: 9:50 AM	
Time ended: 11:50	
Time (actual): 2 hrs	

Cylinder	= 152.4 gal
2450 skid	= 1347.0 gal
2300 skid	= 1325.8 gal
2500 skid	= 1354.1 gal
3000 skid	= 1424.9 gal

322
- 169
153

41049

58

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-28-99	OPERATOR'S NAME CARL McELHANEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER 2500

Aquatic weed(s) present:	Gallons per hour: (calculated)
Weed growth condition: (A, B, C, etc.) B	Gallons per hour: (actual) GPH
Application concentration: gal/cfs	Orifice size: .045 0.0 inches
Flow rate in canal: cfs	Pressure setting: 40 p.s.i.g
Treatment time: hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 70 F	

Container No. SA02646 Empty DW L 1485 Full	
Start contents: 28 gal	
Quantity used: 29 gal (GPH X hours) (actual)	
Quantity remaining: gal	
Time started: 10 AM	
Time ended: 12 AM	
Time (actual): 2 hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

41048

29

38

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-25-99	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER 2500

Aquatic weed(s) present: MIL FOIL	Gallons per hour: (calculated)
Weed growth condition: (A,B,C, etc.) D	Gallons per hour: (actual) GPH
Application concentration: gal/cfs	Orifice size: .045 0.0 inches
Flow rate in canal: cfs	Pressure setting: 30 p.s.i.g
Treatment time: hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 54 F	

Container No.	SA 05057 SA 0266 46
Start contents:	10 gal 52.4
Quantity used: (GPH X hours) (actual)	28 gal
Quantity remaining:	22.4 gal 0
Time started:	10:00 AM
Time ended:	12:30
Time (actual):	hrs

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

58

#41046

28

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 8-24-98	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION WASH CO	LICENSE NUMBER 2500

Aquatic weed(s) present: PONDWEED MILFOIL	Gallons per hour: (calculated) 12
Weed growth condition: (A,B,C, etc.) C-D	Gallons per hour: (actual) 15 GPH
Application concentration: .50 gal/cfs	Orifice size: .045 0.0 inches
Flow rate in canal: 42 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 2 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 65 F	

Container No. SA05057	
Start contents: 39 gal	445#
Quantity used: 29 gal (GPH X hours) (actual)	239#
Quantity remaining: 10 gal	
Time started: 10:15 Am	
Time ended: 12:15	
Time (actual): 2 hrs	

Cylinder	= 152.4 gal
2450 skid	= 1347.0 gal
2300 skid	= 1325.8 gal
2500 skid	= 1354.1 gal
3000 skid	= 1424.9 gal

1.8 WEIR

168 miles

58 miles

#37537

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-22-98	OPERATOR'S NAME Bruce Gochnour
IRRIGATION DISTRICT/COMPANY Weiser	CERTIFIED APPLICATOR'S NAME (If different from operator)
LOCATION OF APPLICATION Grimmett cattercal at Pringle Road	LICENSE NUMBER 2855

Aquatic weed(s) present: Moss	Gallons per hour: (calculated) 7.2
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) GPH
Application concentration: 0.18 gal/cfs	Orifice size: 0.035 0.0 inches
Flow rate in canal: 40 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 1 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 5.65 = ppm
Water temperature: 78° F	

Container No. SA05057	
Start contents: gal	
Quantity used: gal (GPH X hours) (actual)	
Quantity remaining: gal	
Time started: 9:15 AM	
Time ended: 10:15 AM	
Time (actual): 1 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

5.3 gal

37192

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-22-98	OPERATOR'S NAME Bruce Gochnour
IRRIGATION DISTRICT/COMPANY Weiser	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION Gathering Canal Lyle Bridge	LICENSE NUMBER 2855

Aquatic weed(s) present: Moss	Gallons per hour: (calculated) 7.2
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) GPH
Application concentration: 0.048 gal/cfs	Orifice size: .35 0.0 inches
Flow rate in canal: 150 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 1 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 1.51 = ppm
Water temperature: 74° F	

Container No. SA05057	
Start contents: 49.8 gal	520# 445#
Quantity used: (GPH X hours) (actual) gal	
Quantity remaining: gal	
Time started: 0735	
Time ended: 0835	
Time (actual): 1 hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

5.3 gal

37191

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-17-98	OPERATOR'S NAME CARL McCLHINNEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION WASH CO	LICENSE NUMBER 2500

Aquatic weed(s) present: MILFOIL MOSS	Gallons per hour: (calculated) 7.8
Weed growth condition: (A,B,C, etc.) B-C	Gallons per hour: (actual) 7.8 GPH
Application concentration: .50 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 38.40 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 2 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 70 F	

Container No. SA 10955	
Start contents: 15.6 gal	280 #
Quantity used: ~~7.8~~ gal (GPH X hours) (actual) 15.6	
Quantity remaining: 0 gal	
Time started: 10:00 AM	
Time ended: NOON	
Time (actual): 2 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

1.6 WEIR

~~78~~ SEC
73
36
~~128~~

36993

58 miles

9' X 3' DEEP
38-40
~~34~~ CFS

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 8-20-97	OPERATOR'S NAME CARL MELCHENNEY
IRRIGATION DISTRICT/COMPANY MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION WASH COUNTY	LICENSE NUMBER 2500

Aquatic weed(s) present: MILFOIL MOSS	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B, C	Gallons per hour: (actual) 7.9 GPH
Application concentration: gal/cfs	Orifice size: .036 0.0 inches
Flow rate in canal: 450 cfs	Pressure setting: 25 p.s.i.g
Treatment time: 2 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 5.5 = ppm
Water temperature: 68 F	

Billed # 33766

Container No. DW 10337 SA 10955	
Start contents: 52.4 gal 2.5 gal 52.4	
Quantity used: (GPH X hours) (actual) 15.8 gal	
Quantity remaining: 39.1 gal	
Time started: 10:45	
Time ended: 12:45	
Time (actual): 2 hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

1.3 WEIR

537

443 # Left

½ HOUR 2.5 gal

58 miles

94 # used FROM SA 10955

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-29-97	OPERATOR'S NAME
IRRIGATION DISTRICT/COMPANY Weiser IRRIG	CERTIFIED APPLICATOR'S NAME (if different from operator)
LOCATION OF APPLICATION WASH CO	LICENSE NUMBER

Aquatic weed(s) present: mlfoil	Gallons per hour: (calculated)
Weed growth condition: (A,B,C, etc.) B	Gallons per hour: (actual) 7 GPH
Application concentration: gal/cfs	Orifice size: 36 0.0 inches
Flow rate in canal: 120 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 1 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 70 F	

38572

Container No. DW10337	
Start contents: gal	
Quantity used: (GPH X hours) (actual) 7 gal	
Quantity remaining: 26.5 gal	
Time started: 11:30	
Time ended: 12:30	
Time (actual): 1 hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

7

Bosu... Middle Di...
355-2281

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION: 7-21-97	OPERATOR'S NAME: Gene Fanshiesman
IRRIGATION DISTRICT/COMPANY: Middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator):
LOCATION OF APPLICATION: Midvale	LICENSE NUMBER: 4179

Aquatic weed(s) present: Melfoil & moss	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B + C	Gallons per hour: (actual) GPH
Application concentration: gal/cfs	Orifice size: 0.0 inches .35
Flow rate in canal: cfs	Pressure setting: p.s.i.g 25
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: F 70°	

33568

Container No. DW 10 33 7	
Start contents: gal 52.4	
Quantity used: gal (GPH X hours) (actual)	
Quantity remaining: gal	
Time started: 11:15 Am	
Time ended: 1:55 PM	
Time (actual): hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

58 miles

15.9

7-21-97
539 gross
417
112 used

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-24-97	OPERATOR'S NAME Gene Froshies Ar
IRRIGATION DISTRICT/COMPANY Schwen & Elden-Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) Carl McElhiney
LOCATION OF APPLICATION Adams Co	LICENSE NUMBER 2500

Aquatic weed(s) present: Milfoil & moss	Gallons per hour: (calculated) 9.2
Weed growth condition: (A,B,C, etc.) C - D	Gallons per hour: (actual) GPH
Application concentration: 6.7 gal/cfs	Orifice size: 0.0 inches .035
Flow rate in canal: 13 cfs	Pressure setting: p.s.i.g 35
Treatment time: 3 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 6.7 = ppm
Water temperature: 55 F	

Container No. DW 12088	
Start contents: 32.8 gal	
Quantity used: (GPH X hours) (actual) 32.8 gal	
Quantity remaining: 0 gal 0	
Time started: 10:30 Am	
Time ended: 2:30 pm	
Time (actual): hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

76

Billed 32912

Water guage 1.2

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION: June 20 97	OPERATOR'S NAME:
IRRIGATION DISTRICT/COMPANY: Middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator): Gene Freshiesan
LOCATION OF APPLICATION: Midvale	LICENSE NUMBER: 4176

Aquatic weed(s) present: Milfoil + Moss	Gallons per hour: (calculated)
Weed growth condition: (A,B,C, etc.) B + C	Gallons per hour: (actual) GPH
Application concentration: .25 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 5.0 cfs	Pressure setting: 25 p.s.i.g
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) / (time (min.)) = ppm
Water temperature: 56 F	

Container No. DW 120 88	
Start contents: 52.4 gal	
Quantity used: (GPH X hours) (actual) 19.6 gal	
Quantity remaining: 32.8 gal	
Time started: 10:10	
Time ended:	
Time (actual): hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed 32911

58 miles

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION Aug 6, 1996	OPERATOR'S NAME Carl McElhiney
IRRIGATION DISTRICT/COMPANY Middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Froshiesar
LOCATION OF APPLICATION Midvale	LICENSE NUMBER C-6805

Aquatic weed(s) present: milfoil + moss	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) RC	Gallons per hour: (actual) GPH
Application concentration: .25 gal/cfs	Orifice size: 0.0 inches 35
Flow rate in canal: 5.0 cfs	Pressure setting: p.s.i.g 25
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: F 62	

Container No. AC 10 96	
Start contents: 234 lb. gal	
Quantity used: 18.7 gal (GPH X hours) (actual)	
Quantity remaining: 234 lb gal	
Time started: 11:00 Am	
Time ended: 1:30	
Time (actual): 2½ hrs	

Cylinder	= 52.4 gal
2450 skid	= 347.0 gal
2300 skid	= 325.8 gal
2500 skid	= 354.1 gal
3000 skid	= 424.9 gal

We used 132 lb.

#29421

58 miles

18.7 GAL

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION July 18, 1996	OPERATOR'S NAME Carl McIlhinney
IRRIGATION DISTRICT/COMPANY Middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Froshiesar
LOCATION OF APPLICATION Michvale	LICENSE NUMBER C-6805

Aquatic weed(s) present: Milfoil [illegible]	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B.C.	Gallons per hour: (actual) GPH
Application concentration: gal/cfs .25	Orifice size: 0.0 inches .035
Flow rate in canal: cfs 5.0	Pressure setting: p.s.i.g 25
Treatment time: hours 2.5	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) / (time (min.)) 4.3 = ppm
Water temperature: F 65	

Container No. Sho 4966	
Start contents: gal 19.5	
Quantity used: gal (GPH X hours) (actual) 19.5	
Quantity remaining: gal 0	
Time started: 11:30 Am	
Time ended: 2:30	
Time (actual): hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

29275

58.6

Water gauge 1ft 3.0

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION: July 2, 96	OPERATOR'S NAME: Carl McKinney
IRRIGATION DISTRICT/COMPANY: MIDDLE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator): Gene Froshiesar
LOCATION OF APPLICATION: MIDVALE	LICENSE NUMBER: C-6805

Aquatic weed(s) present: Milfoil + Moss	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B,C	Gallons per hour: (actual) GPH
Application concentration: .25 gal/cfs	Orifice size: 0.0 inches .035
Flow rate in canal: 5.0 cfs	Pressure setting: p.s.i.g 25
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 4.3 = ppm
Water temperature: 65 F	

Container No. SHO 4966	
Start contents: 46.7 gal	
Quantity used: (GPH X hours) (actual) 20.25 gal	
Quantity remaining: 26.45 gal	
Time started: 11:00 Am	
Time ended: 1:30 pm	
Time (actual): 2 hrs 1/2 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

#2895

Gross left 351.1 lb.

miles 58.6

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-2-96	OPERATOR'S NAME CAL MCchinney
IRRIGATION DISTRICT/COMPANY Weiser Irrigaton	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Frosliesar
LOCATION OF APPLICATION Washington Co.	LICENSE NUMBER C-6805

Aquatic weed(s) present: Mil Foil & moss	Gallons per hour: (calculated) 7.
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) GPH 7.9
Application concentration: gal/cfs	Orifice size: 0.0 inches 35
Flow rate in canal: cfs	Pressure setting: 20 p.s.i.g
Treatment time: 1 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 64° F	

Container No. AC1104	
Start contents: gal 7.9	
Quantity used: gal (GPH X hours) (actual)	
Quantity remaining: gal	
Time started: 8:05	
Time ended: 9:05	
Time (actual): hrs 1:00	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

20 miles

Bill 28949

10:37

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-20-96	OPERATOR'S NAME Carl McElhinney
IRRIGATION DISTRICT/COMPANY SCHWENFELDER DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Froshiesar
LOCATION OF APPLICATION ADAMS CO.	LICENSE NUMBER C-6805

Aquatic weed(s) present: MILFOIL / MOSS	Gallons per hour: (calculated) 9.2
Weed growth condition: (A,B,C, etc.) C-D	Gallons per hour: (actual) 8.3 GPH
Application concentration: 6.7 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 13 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 3 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 6.7 = ppm
Water temperature: 58 F	

Container No. AC-1104	
Start contents: 36.5 gal	
Quantity used: 25.5 gal (GPH X hours) (actual)	
Quantity remaining: 11 gal	
Time started: 10:35 AM	
Time ended: 1:35 PM	
Time (actual): 3 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Bill of 28670

70 miles

END GROSS

257

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-12-96	OPERATOR'S NAME Carl Melhinney
IRRIGATION DISTRICT/COMPANY Weiser Irrigation	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Foshieson
LOCATION OF APPLICATION Washington County	LICENSE NUMBER C-6805

Aquatic weed(s) present: Mil Foil & moss	Gallons per hour: (calculated) 7
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) 8.2 GPH
Application concentration: gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: ~~2~~ 80 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 65 F	

Container No. DW 85 80 AC1104	
Start contents: 11.1 gal	
Quantity used: 20.5 gal (GPH X hours) (actual)	
Quantity remaining: 43 gal AC1104	
Time started: 9:00 am	
Time ended: 12.25	
Time (actual): 2½ hrs	

(MOVING TIME OUT)

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

20 miles

Billed

28498

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION Aug 22 - 95	OPERATOR'S NAME Carl McKinney
IRRIGATION DISTRICT/COMPANY Weiser Irrigation	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Froschesan
LOCATION OF APPLICATION West County	LICENSE NUMBER C-6805

Aquatic weed(s) present: Mil Foil & Moss	Gallons per hour: (calculated) 7
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) 7.5 GPH
Application concentration: ~~45 gal/cfs~~ gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: ~~cfs~~ 4500 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 8 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 65 °F	

Container No. DW1025	
Start contents: 15 gal	
Quantity used: 15 gal (GPH X hours) (actual)	
Quantity remaining: 51.4 gal DW8580	-0- DW1025
Time started: 8:18 Am	
Time ended: 10:20	
Time (actual): 2 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed:
25253

20 miles

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-25-95	OPERATOR'S NAME Carl McLhinney
IRRIGATION DISTRICT/COMPANY WEISER IRRIG	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Throckmorton
LOCATION OF APPLICATION WASH COUNTY	LICENSE NUMBER C-6805

Aquatic weed(s) present: M/L Foil & Moss	Gallons per hour: (calculated) 7
Weed growth condition: (A,B,C, etc.) A	Gallons per hour: (actual) 6.56 GPH
Application concentration: gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 80 cfs	Pressure setting: 20 p.s.i.g
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: F 72	

Container No. DW 9486	
Start contents: 52.4 gal	
Quantity used: 16.4 gal (GPH X hours) (actual)	
Quantity remaining: 36 gal	
Time started: 11:53 AM	
Time ended: 3.30	
Time (actual): 2.5 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed #24744

20 miles

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-21-95	OPERATOR'S NAME Carl McLHinney
IRRIGATION DISTRICT/COMPANY midvale Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) Gene Froshiesar
LOCATION OF APPLICATION Midvale	LICENSE NUMBER C-6805

Aquatic weed(s) present: milfoil / moss	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B-C	Gallons per hour: (actual) GPH
Application concentration: .25 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 50 cfs	Pressure setting: 25 p.s.i.g
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 4.3 = ppm
Water temperature: 70 F	

Container No. DW 11684	
Start contents: 16 gal	
Quantity used: (GPH X hours) (actual) 16 gal	
Quantity remaining: -0- gal	
Time started: 11:15 AM	
Time ended: 2:15 PM	
Time (actual): 2.5 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed
#24638

34.6
miles

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-3-95	OPERATOR'S NAME CARL McELHINNEY / GREG MI
IRRIGATION DISTRICT/COMPANY MIDVALE DITCH	CERTIFIED APPLICATOR'S NAME/ (if different from operator) Tim KAUTZ
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER C-6805

Aquatic weed(s) present: MILFOIL / MOSS	Gallons per hour: (calculated) 7.9
Weed growth condition: (A,B,C, etc.) B-C	Gallons per hour: (actual) 6.9 GPH
Application concentration: .25 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 50 cfs	Pressure setting: 25 p.s.i.g
Treatment time: 2.5 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 4.3 = ppm
Water temperature: 58 F	

Container No. SA04823 52.4 DW10625	
Start contents: 8.9 gal 8.9 52.4 8.1	
Quantity used: 17.1 gal (GPH X hours) (actual)	
Quantity remaining: 44.3 gal	
Time started: 10:20 AM	
Time ended: 12:50	
Time (actual): 2.5 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

1.5 ON WEIR

800 743-5964

52 miles Billed 24280

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-29-95	OPERATOR'S NAME CARL McELHINNEY / Gene CROSHE
IRRIGATION DISTRICT/COMPANY SCHWONKELDER DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM KAUTZ
LOCATION OF APPLICATION ADAMS CO.	LICENSE NUMBER 0-2500

Aquatic weed(s) present: MILFOIL / MOSS	Gallons per hour: (calculated) 9.2
Weed growth condition: (A,B,C, etc.) C-D	Gallons per hour: (actual) 8.3 GPH
Application concentration: 6.7 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 13 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 3 hours	Application concentration: ppm ~~6.7~~ (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 6.7 = ppm
Water temperature: 58 F	

3' SN WEIR

Container No. SA04823	
Start contents: 33.8 gal	
Quantity used: 24.9 gal (GPH X hours) (actual) 8.3	
Quantity remaining: 8.9 gal	
Time started: 10:50 AM	
Time ended: 1:50 PM	
Time (actual): 3 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed 24242

~~42~~ miles 76

Billed # 24242

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 8-4-94	OPERATOR'S NAME CARL MCELLINNEY
IRRIGATION DISTRICT/COMPANY MIDVALE	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM KRAUTZ
LOCATION OF APPLICATION WASH COUNTY	LICENSE NUMBER C 6805

Aquatic weed(s) present: POND WEED	Gallons per hour: (calculated) 12
Weed growth condition: (A,B,C, etc.) D	Gallons per hour: (actual) 13.7 GPH
Application concentration: ~~48~~ gal/cfs	Orifice size: 45 0.0 inches
Flow rate in canal: 48 CFS cfs	Pressure setting: 30 p.s.i.g
Treatment time: 2 hr 20 min hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 75° F	

Container No. SA 04756 DW 10320	
Start contents: 14.3 gal 52.4	
Quantity used: 14.3 gal (GPH X hours) 13.4 (actual) 27.7	
Quantity remaining: 0 gal 39.0	
Time started: 9:40 AM	
Time ended: 12 NOON	
Time (actual): hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

#20978

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-12-94	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM ISAUTZ
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER C-6805

52 miles

Aquatic weed(s) present: milfoil moss	Gallons per hour: (calculated) 6.8
Weed growth condition: (A,B,C, etc.) C	Gallons per hour: (actual) 6 GPH
Application concentration: gal/cfs	Orifice size: .032 0.0 inches
Flow rate in canal: 1.3 on weir 48.78 cfs	Pressure setting: 28 p.s.i.g
Treatment time: 1½ hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) = ppm
Water temperature: 67° F	

Container No. SA 04756	
Start contents: 50.4 gal	
Quantity used: 9 gal (GPH X hours) (actual)	
Quantity remaining: 41.4 gal	
Time started: 10:35 AM	
Time ended: 12:05	
Time (actual): 1½ hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

Billed #20521

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-20-94	OPERATOR'S NAME Handel / Froehlein
IRRIGATION DISTRICT/COMPANY Schwenkfelder/Ditch Co.	CERTIFIED APPLICATOR'S NAME (if different from operator) Tim Kouty
LOCATION OF APPLICATION Schwenkfelder	LICENSE NUMBER 0-2500

Aquatic weed(s) present: Milfoil / Moss	Gallons per hour: (calculated) 7.9 ~~[illegible]~~
Weed growth condition: (A,B,C, etc.) C+ D-	Gallons per hour: (actual) ~~8~~ 8.03 GPH
Application concentration: 7.9 gal/cfs	Orifice size: 35 0.0 inches
Flow rate in canal: 13 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 3 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 6.28 = ppm
Water temperature: 64° F	

Container No. DW 4162 W	
Start contents: 52.4 gal	
Quantity used: 24.1 gal (GPH X hours) (actual) 8.03	
Quantity remaining: 28.3 gal	
Time started: 10:30	
Time ended: 13:30 Pm	
Time (actual): 3.0 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

$$\frac{8/15 \times 1884}{180} = 6.28 \text{ ppm}$$

Billed 20256

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 6-13-94	OPERATOR'S NAME TIM KAUTZ
IRRIGATION DISTRICT/COMPANY Middle Ditch	CERTIFIED APPLICATOR'S NAME (if different from operator) CARL MCCLHINNEY
LOCATION OF APPLICATION Midvale	LICENSE NUMBER 0-2500

Aquatic weed(s) present: MOSS - Pondweed	Gallons per hour: (calculated) 9.2
Weed growth condition: (A,B,C, etc.) A-B	Gallons per hour: (actual) 7.7 GPH
Application concentration: .18 gal/cfs	Orifice size: .035 0.0 inches
Flow rate in canal: 42 cfs	Pressure setting: 30 PSI p.s.i.g
Treatment time: 1½ hours	Application concentration: ppm 3.8 (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 3.8 = ppm
Water temperature: 65 F	

Applied by CARL + GENE CROSHIESAR

Container No. DW 10283	
Start contents: 18.1 gal	
Quantity used: 11.5 gal (GPH X hours) (actual)	
Quantity remaining: 6.6 gal	
Time started: 10 AM	
Time ended: 11:30 AM	
Time (actual): 1½ hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

225' x 10'
57 SEC
38 CFS
42 By Weir measure
1.C

52 miles Round trip

Billed
#20091

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 9-3-93	OPERATOR'S NAME TIM KIAUTZ
IRRIGATION DISTRICT/COMPANY MIDVALE	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM KIAUTZ
LOCATION OF APPLICATION MIDVALE	LICENSE NUMBER C 6805

Aquatic weed(s) present: MIL FOIL	Gallons per hour: (calculated) 6.64
Weed growth condition: (A,B,C, etc.) A-B	Gallons per hour: (actual) 6.3 GPH
Application concentration: .166 gal/cfs	Orifice size: .032 0.0 inches
Flow rate in canal: 40 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 1 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 5.2 = ppm
Water temperature: 64 F	

Container No. DW11612	
Start contents: 6.3 gal	
Quantity used: (GPH X hours) (actual) 6.3 gal	
Quantity remaining: -0- gal	
Time started: 9:30 AM	
Time ended: 10:30	
Time (actual): 1 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

TIM KIAUTZ
CARL McELHINNEY

BILLED # 16983

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 8-6-93	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY MIDVALE DITCH	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM KAUTZ
LOCATION OF APPLICATION WASH CO. HEAD OF DITCH	LICENSE NUMBER O 2500

Aquatic weed(s) present: MILFOIL MOSS PONDWEED	Gallons per hour: (calculated) 12.5
Weed growth condition: (A,B,C, etc.) C	Gallons per hour: (actual) ~~12.5~~ 10.75 GPH
Application concentration: .5 gal/cfs	Orifice size: .041 0.0 inches
Flow rate in canal: 50 cfs	Pressure setting: 30 p.s.i.g
Treatment time: hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 6.75 = ppm
Water temperature: 68 F	

Container No. DW 11612	
Start contents: 27.8 gal	
Quantity used: (GPH X hours) (actual) 21.5 gal	
Quantity remaining: 6.3 gal	
Time started: 9:30 AM	
Time ended: 11:30	
Time (actual): 2 hrs	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

1.8 ON WEIR

3x10 x 60 Sec 100'

GENE FROSHIESAR
CARL McELHINNEY
TIM KAUTZ

Billed on # 16562

MAGNACIDE H APPLICATION RECORD

EPA Reg. #10707-9

DATE OF APPLICATION 7-8-93	OPERATOR'S NAME CARL McELHINNEY
IRRIGATION DISTRICT/COMPANY MIDVALE DITCH CO	CERTIFIED APPLICATOR'S NAME (if different from operator) TIM KAUTZ
LOCATION OF APPLICATION	LICENSE NUMBER 0 2500

Aqustic weed(s) present: WATER MILL FOIL POND WEED	Gallons per hour: (calculated) 9.0
Weed growth condition: (A,B,C, etc.) C	Gallons per hour: (actual) 8.7 GPH
Application concentration: .66 gal/cfs ADJUSTED FOR WATER TEMP	Orifice size: .035 0.0 inches
Flow rate in canal: 30 cfs	Pressure setting: 30 p.s.i.g
Treatment time: 2 hours	Application concentration: ppm (not to exceed 15 ppm) (gal/cfs X 1884) (time (min.)) 10.3 = ppm
Water temperature: 59 F	

Container No. DW 3536	
Start contents: 52.4 gal	
Quantity used: (GPH X hours) (actual) 17.4 gal	
Quantity remaining: 36 gal	
Time started: 10:55 AM	
Time ended: 1:00 PM	
Time (actual): 2 hrs 5 min	

Cylinder	=	52.4 gal
2450 skid	=	347.0 gal
2300 skid	=	325.8 gal
2500 skid	=	354.1 gal
3000 skid	=	424.9 gal

PRESENT GENE PROSHIESAK
RON HANDEL
CARL McELHINNEY
DALE CARPENTER

Billed #15925