

NOTICE

This scan only represents the application as filed. The information contained herein meets the requirements of K.A.R. 5-3-1 or K.A.R. 5-5-1, and has been found acceptable for filing in the office of the Chief Engineer. The application should not be considered to be a complete application as per K.A.R. 5-3-1b or K.A.R. 5-5-2a.

THE STATE OF KANSAS



KANSAS DEPARTMENT OF AGRICULTURE
Jackie McClaskey, Secretary of Agriculture

DIVISION OF WATER RESOURCES
David W. Barfield, Chief Engineer
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File Number 50154
This item to be completed by the Division of Water Resources.

NOV 01 2018
12:41

APPLICATION FOR PERMIT TO
APPROPRIATE WATER FOR BENEFICIAL USE

KS DEPT OF AGRICULTURE

Filing Fee Must Accompany the Application
(Please refer to Fee Schedule attached to this application form.)

To the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture,
1320 Research Park Drive, Manhattan, Kansas 66502:

1. Name of Applicant (Please Print): William D Blanchat Revocable Trust
Address: 404 W 22nd
City: Harper State KS Zip Code 67058
Telephone Number: (620) 243-2544 (Randal Blanchat Trustee)

2. The source of water is: surface water in _____ (stream)
OR groundwater in Bluff Creek (Chikaskia) (drainage basin)

Certain streams in Kansas have minimum target flows established by law or may be subject to administration when water is released from storage for use by water assurance district members. If your application is subject to these regulations on the date we receive your application, you will be sent the appropriate form to complete and return to the Division of Water Resources.

3. The maximum quantity of water desired is 253.4 acre-feet OR -- _____ gallons per calendar year,
to be diverted at a maximum rate of 800 gallons per minute OR 1.78 cubic feet per second.

Once your application has been assigned a priority, the requested maximum rate of diversion and maximum requested quantity of water under that priority number can **NOT** be increased. Please be certain your requested maximum rate of diversion and maximum quantity of water are appropriate and reasonable for your proposed project and are in agreement with the Division of Water Resources' requirements.

4. The water is intended to be appropriated for (Check use intended):
(a) Artificial Recharge (b) Irrigation (c) Recreational (d) Water Power
(e) Industrial (f) Municipal (g) Stockwatering (h) Sediment Control
(i) Domestic (j) Dewatering (k) Hydraulic Dredging (l) Fire Protection
(m) Thermal Exchange (n) Contamination Remediation

YOU **MUST** COMPLETE AND ATTACH ADDITIONAL DIVISION OF WATER RESOURCES FORM(S) PROVIDING INFORMATION TO SUBSTANTIATE YOUR REQUEST FOR THE AMOUNT OF WATER FOR THE INTENDED USE REFERENCED ABOVE.

For Office Use Only:
F.O. 2 GMD 0 Meets K.A.R. 5-3-1 (YES / NO) Use IRR Source G/S County HP By DAW Date 11/1/18
Code RE3 Fee \$ 300 TR # _____ Receipt Date 11/1/18 Check # 23604

11/1/2018 LCM

5. The location of the proposed wells, pump sites or other works for diversion of water is:

Note: For the application to be accepted, the point of diversion location must be described to at least a 10 acre tract, unless you specifically request a 60 day period of time in which to locate the site within a specifically described, minimal legal quarter section of land.

Battery of 4 wells with a geocenter 2,492 ft N & 4209 ft W of 3-32-7W, Harper Co. *Basin 49*

- (A) One in the NE quarter of the NW quarter of the SW quarter of Section 3, more particularly described as being near a point 2,492 feet North and 4,509 feet West of the Southeast corner of said section, in Township 32 South, Range 7 West, Harper County, Kansas.
- (B) One in the NE quarter of the NW quarter of the SW quarter of Section 3, more particularly described as being near a point 2,492 feet North and 4,359 feet West of the Southeast corner of said section, in Township 32 South, Range 7 West, Harper County, Kansas.
- (C) One in the NE quarter of the NW quarter of the SW quarter of Section 3, more particularly described as being near a point 2,492 feet North and 4,059 feet West of the Southeast corner of said section, in Township 32 South, Range 7 West, Harper County, Kansas.
- (D) One in the NW quarter of the NE quarter of the SW quarter of Section 3, more particularly described as being near a point 2,492 feet North and 3,909 feet West of the Southeast corner of said section, in Township 32 South, Range 7 West, Harper County, Kansas.

If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that a single application may include up to four wells within a circle with a quarter (1/4) mile radius in the same local source of supply which do not exceed a maximum diversion rate of 20 gallons per minute per well.

A battery of wells is defined as two or more wells connected to a common pump by a manifold; or not more than four wells in the same local source of supply within a 300 foot radius circle which are being operated by pumps not to exceed a total maximum diversion rate of 800 gallons per minute and which supply water to a common distribution system.

6. The owner of the point of diversion, if other than the applicant is (please print):

Applicant _____
(name, address and telephone number)

You must provide evidence of legal access to, or control of, the point of diversion from the landowner or the landowner's authorized representative. Provide a copy of a recorded deed, lease, easement or other document with this application. In lieu thereof, you may sign the following sworn statement:

I have legal access to, or control of, the point of diversion described in this application from the landowner or the landowner's authorized representative. I declare under penalty of perjury that the foregoing is true and correct.

Executed on Oct 26, 2018. *Ronald B. Bonchus*
Applicant's Signature

The applicant must provide the required information or signature irrespective of whether they are the landowner. Failure to complete this portion of the application will cause it to be unacceptable for filing and the application will be returned to the applicant.

7. The proposed project for diversion of water will consist of battery of 4 wells and diversion system
(number of wells, pumps or dams, etc.)
and will be completed (by) Spring 2019
(Month/Day/Year - each was or will be completed)

8. The first actual application of water for the proposed beneficial use was or is estimated to be Spring 2019
(Mo/Day/Year)

10/26/18

(Date)

Kansas Department of Agriculture
Division of Water Resources
David W. Barfield, Chief Engineer
1320 Research Park Drive
Manhattan, Kansas 66502

Re: Application
File No. 50154

Minimum Desirable Streamflow

Dear Sir:

I understand that a Minimum Desirable Streamflow requirement has been established by the legislature for the source of supply to which the above referenced application applies.

I understand that diversion of water pursuant to this application will be subject to regulation any time Minimum Desirable Streamflow requirements are not being met.

I also understand that if this application is approved, there could be times, as determined by the Division of Water Resources, when I would not be allowed to divert water. I realize that this could affect the economics of my decision to appropriate water.

I am aware of the above factors, and with the knowledge thereof, request that the Division of Water Resources proceed with processing and approval, if possible, of the above referenced application.

Randal Blanchat
Signature of Applicant

State of Kansas)
) ss
County of Stafford)

Randal Blanchat
(Print Applicant's Name)

I hereby certify that the foregoing instrument was signed in my presence and sworn to before me this 26th day of October, 2018.

Kim Burgey
Notary Public

My Commission Expires:

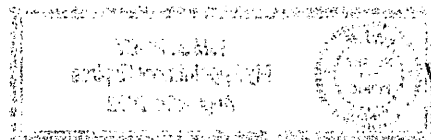


**MINIMUM DESIRABLE STREAMFLOW FORM TO BE USED WHEN
APPLICABLE WHEN FILING AN APPLICATION FOR PERMIT
TO APPROPRIATE WATER FOR BENEFICIAL USE**

The Kansas Legislature has established minimum desirable streamflows for the streams listed below. If your proposed diversion of water is going to be from one of these watercourses or adjacent alluvial aquifers, please complete the back side of this page and submit it along with your application for permit to appropriate water.

Arkansas River
Big Blue River
Chapman Creek
Chikaskia River
Cottonwood River
Delaware River
Little Arkansas River
Little Blue River
Marais des Cygnes River
Medicine Lodge River
Mill Creek (Wabaunsee Co. area)
Neosho River

Ninnescah River
North Fork Ninnescah River
Rattlesnake Creek
Republican River
Saline River
Smoky Hill River
Solomon River
South Fork Ninnescah
Spring River
Walnut River
Whitewater River



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WATER WELL RECORD Form WWC-5

Division of Water Resources App. No.

50154
Blanchat 3
Well ID

Original Record Correction Change in Well Use

1 LOCATION OF WATER WELL:
 County: Harper Fraction NE 1/4 NW 1/4 NW 1/4 SW 1/4 Section Number 3 Township Number T 32 S Range Number R 7 E W

2 WELL OWNER: Last Name: Blanchat First: Bill
 Business: Street or Rural Address where well is located (if unknown, distance and direction from nearest town or intersection): If at owner's address, check here:
 Address: 404 W. 22nd St. From the intersection of NW 90 Rd and NW 20 Ave, .5 mile North and into field on the East side of the road.
 Address: City: Harper State: KS ZIP: 67058

3 LOCATE WELL WITH "X" IN SECTION BOX:
 N

 W X E
 S
 1 mile

4 DEPTH OF COMPLETED WELL: 63 ft.
 Depth(s) Groundwater Encountered: 1) 22 ft. 2) 40 ft. 3) 60 ft., or 4) Dry Well
 WELL'S STATIC WATER LEVEL: 22 ft.
 below land surface, measured on (mo-day-yr) 09/13/2018
 above land surface, measured on (mo-day-yr).....
 Pump test data: Well water was ft. after..... hours pumping gpm
 Well water was ft. after..... hours pumping gpm
 Estimated Yield: gpm
 Bore Hole Diameter: 5 in. to 63 ft. and in. to ft.

5 Latitude: 37.289460 (decimal degrees)
Longitude: 98.073697 (decimal degrees)
 Datum: WGS 84 NAD 83 NAD 27
Source for Latitude/Longitude:
 GPS (unit make/model:)
 (WAAS enabled? Yes No)
 Land Survey Topographic Map
 Online Mapper: Google Earth

6 Elevation: 1445 ft. Ground Level TOC
 Source: Land Survey GPS Topographic Map
 Other KOLAR

7 WELL WATER TO BE USED AS:

1. Domestic: <input type="checkbox"/> Household <input type="checkbox"/> Lawn & Garden <input type="checkbox"/> Livestock	2. <input type="checkbox"/> Irrigation	3. <input type="checkbox"/> Feedlot	4. <input type="checkbox"/> Industrial	5. <input type="checkbox"/> Public Water Supply: well ID	6. <input type="checkbox"/> Dewatering: how many wells?	7. <input type="checkbox"/> Aquifer Recharge: well ID	8. <input type="checkbox"/> Monitoring: well ID	9. Environmental Remediation: well ID	<input type="checkbox"/> Air Sparge <input type="checkbox"/> Soil Vapor Extraction <input type="checkbox"/> Recovery <input type="checkbox"/> Injection	10. <input type="checkbox"/> Oil Field Water Supply: lease	11. Test Hole: well ID Blanchat 3 <input type="checkbox"/> Cased <input checked="" type="checkbox"/> Uncased <input type="checkbox"/> Geotechnical	12. Geothermal: how many bores?	a) Closed Loop <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical b) Open Loop <input type="checkbox"/> Surface Discharge <input type="checkbox"/> Inj. of Water	13. <input type="checkbox"/> Other (specify):
--	--	-------------------------------------	--	--	---	---	---	---	--	--	---	---------------------------------------	--	---

Was a chemical/bacteriological sample submitted to KDHE? Yes No If yes, date sample was submitted:
 Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other None CASING JOINTS: Glued Clamped Welded Threaded
 Casing diameter 0 in. to 0 ft., Diameter 0 in. to 0 ft., Diameter 0 in. to 0 ft.
 Casing height above land surface 0 in. Weight lbs./ft. Wall thickness or gauge No. N/A
TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel Fiberglass PVC Other (Specify)
 Brass Galvanized Steel Concrete tile None used (open hole)
SCREEN OR PERFORATION OPENINGS ARE:
 Continuous Slot Mill Slot Gauze Wrapped Torch Cut Drilled Holes Other (Specify)
 Louvered Shutter Key Punched Wire Wrapped Saw Cut None (Open Hole)
SCREEN-PERFORATED INTERVALS: From ft. to ft., From ft. to ft., From ft. to ft.
GRAVEL PACK INTERVALS: From ft. to ft., From ft. to ft., From ft. to ft.

9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other
 Grout Intervals: From 0 ft. to 25 ft., From ft. to ft., From ft. to ft.
Nearest source of possible contamination:
 Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage
 Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well
 Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well/Gas Well
 Other (Specify) None
 Direction from well? N/A Distance from well? 0 ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	4	Dark Brown Topsoil			
4	6	Brown Sandy Clay			
6	40	Red Clay, Tan Clay			
40	50	Very Fine Sand			WATER RESOURCES RECEIVED
50	55	Medium Gravel			
55	60	Large Gravel			NOV 01 2018
60	63	Red Shale			
			Notes: KS DEPT OF AGRICULTURE		

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo-day-year) 09/13/2018 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 860 This Water Well Record was completed on (mo-day-year) 10/06/2018 under the business name of H2O Drilling LLC

- 9. Will pesticide, fertilizer, or other foreign substance be injected into the water pumped from the diversion works?
 Yes No If "yes", a check valve shall be required.

All chemigation safety requirements must be met including a chemigation permit and reporting requirements.

- 10. If you are planning to impound water, please contact the Division of Water Resources for assistance, prior to submitting the application. Please attach a reservoir area capacity table and inform us of the total acres of surface drainage area above the reservoir.

Have you also made an application for a permit for construction of this dam and reservoir with the Division of Water Resources? Yes No

- If yes, show the Water Structures permit number here _____
- If no, explain here why a Water Structures permit is not required _____

- 11. The application must be supplemented by a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the following information. On the topographic map, aerial photograph, or plat, identify the center of the section, the section lines or the section corners and show the appropriate section, township and range numbers. Also, please show the following information:

- (a) The location of the proposed point(s) of diversion (wells, stream-bank installations, dams, or other diversion works) should be plotted as described in Paragraph No. 5 of the application, showing the North-South distance and the East-West distance from a section line or southeast corner of section.
- (b) If the application is for groundwater, please show the location of any existing water wells of any kind within 1/2 mile of the proposed well or wells. Identify each existing well as to its use and furnish the name and mailing address of the property owner or owners. If there are no wells within 1/2 mile, please advise us.
- (c) If the application is for surface water, the names and addresses of the landowner(s) 1/2 mile downstream and 1/2 mile upstream from your property lines must be shown.
- (d) The location of the proposed place of use should be shown by crosshatching on the topographic map, aerial photograph or plat.
- (e) Show the location of the pipelines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use.

A 7.5 minute U.S.G.S. topographic map may be obtained by providing the section, township and range numbers to: Kansas Geological Survey, 1930 Constant, Campus West, University of Kansas, Lawrence, Kansas 66047.

- 12. List any application, appropriation of water, water right, or vested right file number that covers the same diversion points or any of the same place of use described in this application. Also list any other recent modifications made to existing permits or water rights in conjunction with the filing of this application.

None _____

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13. Furnish the following well information if the proposed appropriation is for the use of groundwater. If the well has not been completed, give information obtained from test holes, if available.

Information below is from: Test holes Well as completed Drillers log attached

Well location as shown in paragraph No.	(A)	(B)	(C)	(D)
Date Drilled	_____	_____	_____	_____
Total depth of well	_____	_____	_____	_____
Depth to water bearing formation	_____	_____	_____	_____
Depth to static water level	_____	_____	_____	_____
Depth to bottom of pump intake pipe	_____	_____	_____	_____

14. The relationship of the applicant to the proposed place where the water will be used is that of

Owner
(owner, tenant, agent or otherwise)

15. The owner(s) of the property where the water is used, if other than the applicant, is (please print):

Applicant
(name, address and telephone number)

(name, address and telephone number)

16. The undersigned states that the information set forth above is true to the best of his/her knowledge and that this application is submitted in good faith.

Dated at _____, Kansas, this _____ day of _____, _____
(month) (year)


(Applicant Signature)

By 
(Agent or Officer Signature)

(Agent or Officer - Please Print)

50154

FEE SCHEDULE

1. The fee for an application for a permit to appropriate water for beneficial use, except for domestic use, shall be (see paragraph No. 2 below if requesting storage):

ACRE-FEET	FEE
0-100	\$200.00
101-320	\$300.00
More than 320	\$300.00 plus \$20.00 for each additional 100 acre-feet or any part thereof.

2. The fee for an application in which storage is requested, except for domestic use, shall be:

ACRE-FEET	FEE
0-250	\$200.00
More than 250	\$200.00 plus \$20.00 for each additional 250 acre-feet of storage or any part thereof.

Note: If an application requests both direct use *and* storage, the fee charged shall be as determined under No. 1 or No. 2 above, whichever is greater, but not both fees.

3. The fee for an application for a permit to appropriate water for water power or dewatering purposes shall be \$100.00 plus \$200.00 for each 100 cubic feet per second, or part thereof, of the diversion rate requested.

Note: The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of \$400.00 when construction of the works for diversion has been completed, except that for applications filed on or after July 1, 2009, for works constructed for sediment control use and for evaporation from a groundwater pit for industrial use shall be accompanied by a field inspection fee of \$200.00.

MAKE CHECKS PAYABLE TO THE KANSAS DEPARTMENT OF AGRICULTURE

ATTENTION

A Water Conservation Plan may be required per K.S.A. 82a-733. A statement that your application for permit to appropriate water may be subject to the minimum desirable streamflow requirements per K.S.A. 82a-703a, b, and c may also be required from you. After the Division of Water Resources has had the opportunity to review your application, you will be notified whether or not you will need to submit a Water Conservation Plan. You also may be required to install a water flow meter or water stage measuring device on your diversion works prior to diverting water. There may be other special conditions or Groundwater Management District regulations that you will need to comply with if this application is approved.

CONVERSION FACTORS

1 acre-foot equals 325,851 gallons

1 million gallons equal 3.07 acre-feet

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IRRIGATION USE SUPPLEMENTAL SHEET

File No. 50154

Name of Applicant (Please Print): William D Blanchat Revocable Trust

1. Please supply the name and address of each landowner, the legal description of the lands to be irrigated, and designate the actual number of acres to be irrigated in each forty acre tract or fractional portion thereof:

Landowner of Record NAME: William D Blanchat Revocable Trust

ADDRESS: 404 W 22nd, Harper KS 67058

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3	32	7W									36	10.5	29	31.5	10.5	36	21	6.5	181

Landowner of Record NAME: _____

ADDRESS: _____

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Landowner of Record NAME: _____

ADDRESS: _____

S	T	R	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

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2. Please complete the following information for the description of the operation for the irrigation project. Attach supplemental sheets as needed.

a. Indicate the soils in the field(s) and their intake rates:

Soil Name	Percent of field (%)	Intake Rate (in/hr)	Irrigation Design Group
Atica Fine Sandy loam	7.8%	2.0 - 6.0	5861
Nalim Loam	90.8%	.2 - .6	5908
Pratt Loamy Fine Sand	.1%	6.0 - 20.0	5929
Fluvents, frequently flooded	1.2%	.6 - 2.0	9982
Total:	100%		

b. Estimate the average land slope in the field(s): 1 %

Estimate the maximum land slope in the field(s): 3 %

c. Type of irrigation system you propose to use (check one):

Center pivot Center pivot - LEPA "Big gun" sprinkler
 Gravity system (furrows) Gravity system (borders) Sideroll sprinkler

Other, please describe: _____

d. System design features:

i. Describe how you will control tailwater: N/A

ii. For sprinkler systems:

(1) Estimate the operating pressure at the distribution system: _____ psi

(2) What is the sprinkler package design rate? 800 gpm

(3) What is the wetted diameter (twice the distance the sprinkler throws water) of a sprinkler on the outer 100 feet of the system? 50 feet

(4) Please include a copy of the sprinkler package design information.

e. Crop(s) you intend to irrigate. Please note any planned crop rotations:

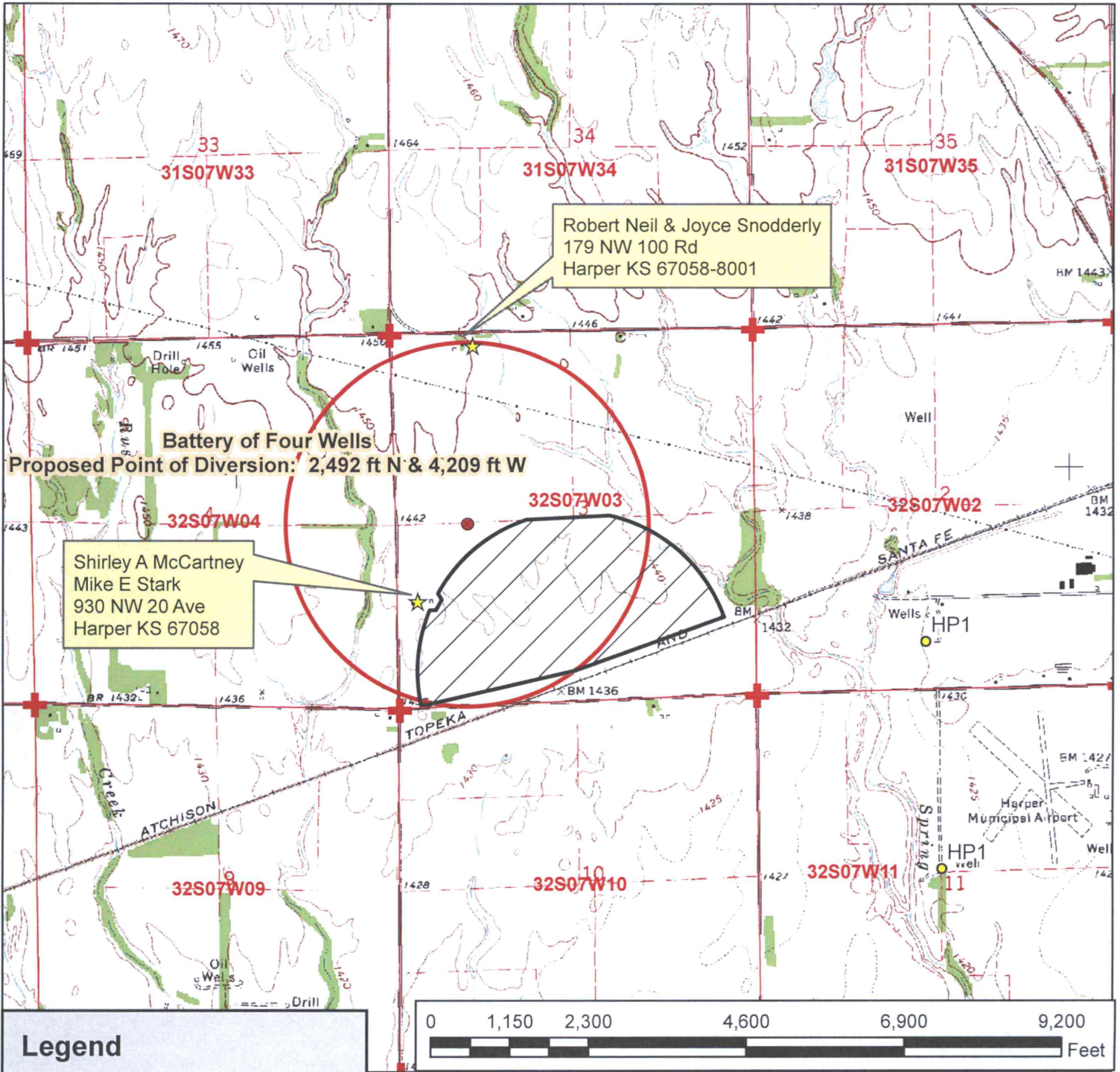
corn, beans, wheat, cotton

f. Please describe how you will determine when to irrigate and how much water to apply (particularly important if you do not plan a full irrigation).

crop consultant

You may attach any additional information you believe will assist in informing the Division of the need for your request.

50154



Robert Neil & Joyce Snodderly
 179 NW 100 Rd
 Harper KS 67058-8001

Shirley A McCartney
 Mike E Stark
 930 NW 20 Ave
 Harper KS 67058

Battery of Four Wells
 Proposed Point of Diversion: 2,492 ft N & 4,209 ft W

Legend

- Water Appropriations
- ⊗ Proposed Point of Diversion
- ★ Domestic Well
- ⊕ Section Corner
- Half Mile Circle
- Section Line
- ▨ Proposed Place of Use

Water Appropriation, File No.

New Application Map
 3-32S-7W // Harper County

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To the best of my knowledge, all groundwater wells within 1/2 mile of the proposed point of diversion have been shown.



Signature

10/26/18 EKF-SFFO 1:24,000 scale

VALLEY  | V-CHART

Valley Dealer

INMAN IRRIGATION
892 Arapaho Rd
Inman, KS 67546
UNITED STATES

Customer

MR Randy Blanchat
847 NE 90TH AVENUE
DANVILLE, KS 67036-8728
USA

Dealer No.

00003440

Field Name

Parent Order No.
Sprinkler Order No. **Blanchat, Randy Half
Circle**
Plant **Valley Systems/Parts**

Dealer PO
Order Date **10/26/2018**
Load Date **10/31/2018**
Method Of Shipment **UPSG**

12 Span Valley Standard Pivot 8000
Machine Flow 800 (GPM)
Pivot Pressure 40 (PSI)

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Parent Order No

Dealer **INMAN IRRIGATION**

Sprinkler Order No

Blanchat, Randy Half

Customer **MR Randy Blanchat**

Circle

Field Name

Valley Standard Pivot 8000 Machine Summary

50154

Span and Overhang

Model	Qty	Length (ft)	Pipe O.D. (in)	Coupler Spacing (in)	D. U. Qty Profile Tire
8000	12	180.0	6 5/8	108	20 Standard 11R x 22.5 Radial Ret
8000	1	18.0	6 5/8	110	3

Field Area

367.8 (Ac) Total
342.7 (Ac) Pivot 360°
25.1 (Ac) EG on 100%
2179.9 (ft) Machine Length
78.4 (ft) End Gun Radius

Flow

800 (GPM)
2.18 (GPM per Acre)
0.12 (in per day) App Rate
0.152 (in) App Depth @ 100%
55.0 (GPM) End Gun

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Messages

Caution: None
Dealer: None

Pressure


40 (PSI) Pivot Pressure
Inlet Pressure
0.0 (ft) Highest Elevation
0.0 (ft) Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11R x 22.5 Radial Retread Tire
52:1 Wheel GB Ratio, LRDU Dist 2161.8 (ft)
31.6 Hrs/360° @ 100% 7.18 (Ft per Min)

Sprinkler -- Computer Spacing

Sprinkler Configuration	Range (ft)
Geist U-Pipe 6(in) PVC 3/4 M NPT x 3/4 F NPT	All
Geist PVC Drop Variable Length 94(in) Ground Clr	
Nelson R3000 D4 - Green 3/4 M NPT ASSY	



Parent Order No

Dealer **INMAN IRRIGATION**

Sprinkler Order No

Blanchat, Randy Half

Customer **MR Randy Blanchat**

Circle


Field Name

Valley Standard Pivot 8000 Machine Summary

Pressure Loss

Pipe Length (ft)	Pipe I.D. (in)	Pipe Finish	C-Factor	Loss (PSI)
2179.9	6.42	Galvanized	150	13.7
Total =				13.7

End Gun(s) & Booster Pump Information



Primary End Gun
Nelson SR75 End Gun
0.5 Nozzle
Berkeley 2 HP Booster Pump

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Span Flow

Span Number	Irrigated Length (ft)	Area (Ac)	Rqd (GPM)	Act (GPM)	Rqd (GPM per Acre)	Act (GPM per Acre)	% Deviation
1	179.9	2.4	4.8	24.8	2.05	10.53	413.3
2	180.1	7.0	14.4	27.8	2.05	3.94	92.3
3	180.1	11.7	24.0	27.3	2.05	2.33	13.7
4	180.1	16.4	33.6	33.6	2.05	2.05	-0.2
5	180.1	21.1	43.2	43.1	2.05	2.05	-0.2
6	180.1	25.8	52.8	53.1	2.05	2.06	0.5
7	180.1	30.4	62.4	62.4	2.05	2.05	0.1
8	180.1	35.1	72.0	71.8	2.05	2.04	-0.3
9	180.1	39.8	81.6	81.7	2.05	2.05	0.1
10	180.1	44.5	91.2	91.3	2.05	2.05	0.2
11	180.1	49.1	100.8	101.0	2.05	2.06	0.2
12	179.8	53.7	110.2	109.7	2.05	2.04	-0.4
O/H	18.1	5.7	12.3	12.4	2.16	2.19	1.2
EG	78.4	25.1	54.6	55.0	2.18	2.19	0.7
Totals		367.8		795			
Drain Sprinkler			6.5	7			
Total Machine Flow				802			

Advanced Options

Drain Sprinkler = Senninger Directional
 Last Sprinkler Coverage = 1 ft
 Sprinkler Coverage Length = 2180.9 ft
 Use Last Coupler= YES
 Minimum Mainline Pressure = 6 PSI

Shipping Options

Ship Drop Hardware
 Ship Endgun Nozzle
 Ship Endgun & Hardware
 Do not ship Endgun Valve / Nozzle Valve Hardware
 Do not ship Boosterpump Hardware

H 5154

Valley Standard Pivot 8000 Machine Sprinkler Chart

58154

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
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1	5.4			Gauge						40.0			
2	14.4			Plug									
3	23.4			Plug									

Sprinkler : Nelson Rotator Assembly



4	32.4	1		16	Lavender	R3000	D4 - Green	84		39.1	42.2	0.3	2.9
5	41.4			Plug									
6	50.4	2	18.0	16	Lavender	R3000	D4 - Green	90		38.6	41.9	0.3	2.9
7	59.4			Plug									
8	68.4	3	18.0	16	Lavender	R3000	D4 - Green	96		38.2	41.7	0.4	2.9
9	77.4			Plug									
10	86.4	4	18.0	16	Lavender	R3000	D4 - Green	96		37.9	41.4	0.5	2.8
11	95.3			Plug									
12	104.3	5	17.9	16	Lavender	R3000	D4 - Green	96		37.7	41.2	0.6	2.8
13	113.3			Plug									
14	122.3	6	18.0	16	Lavender	R3000	D4 - Green	96		37.6	41.1	0.6	2.8
15	131.3			Plug									
16	140.2	7	17.9	16	Lavender	R3000	D4 - Green	90		37.6	40.9	0.7	2.8
17	149.2			Plug									
18	158.2	8	18.0	16	Lavender	R3000	D4 - Green	78		37.8	40.6	0.8	2.8
19	167.2			Plug									
20	176.2	9	18.0	16	Lavender	R3000	D4 - Green	66		38.0	40.5	0.9	2.8
	180.9												

Tower Number : 1 Span Length(ft) : 179.9

21	185.5			Plug									
22	194.5	10	18.3	16	Lavender	R3000	D4 - Green	72		37.6	40.2	1.0	2.8
23	203.5			Plug									
24	212.5	11	18.0	16	Lavender	R3000	D4 - Green	84		37.0	40.1	1.1	2.8
25	221.5			Plug									
26	230.5	12	18.0	16	Lavender	R3000	D4 - Green	90		36.5	39.8	1.2	2.8
27	239.5			Plug									
28	248.5	13	18.0	16	Lavender	R3000	D4 - Green	96		36.1	39.6	1.3	2.8

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
29	257.5			Plug									
30	266.5	14	18.0	16	Lavender	R3000	D4 - Green	96		35.9	39.4	1.4	2.8
31	275.4			Plug									
32	284.4	15	17.9	16	Lavender	R3000	D4 - Green	96		35.7	39.2	1.5	2.8
33	293.4			Plug									
34	302.4	16	18.0	16	Lavender	R3000	D4 - Green	96		35.6	39.1	1.6	2.8
35	311.4			Plug									
36	320.3	17	17.9	16	Lavender	R3000	D4 - Green	90		35.7	39.0	1.7	2.8
37	329.3			Plug									
38	338.3	18	18.0	16	Lavender	R3000	D4 - Green	78		35.8	38.7	1.8	2.7
39	347.3			Plug									
40	356.3	19	18.0	16	Lavender	R3000	D4 - Green	66		36.1	38.5	1.9	2.7
	361.0												
Tower Number : 2 Span Length(ft) : 180.1													
41	365.6			Plug									
42	374.6	20	18.3	16	Lavender	R3000	D4 - Green	72		35.6	38.3	2.0	2.7
43	383.6			Plug									
44	392.6	21	18.0	16	Lavender	R3000	D4 - Green	84		35.1	38.1	2.1	2.7
45	401.6			Plug									
46	410.6	22	18.0	16	Lavender	R3000	D4 - Green	90		34.6	37.9	2.2	2.7
47	419.6			Plug									
48	428.6	23	18.0	16	Lavender	R3000	D4 - Green	96		34.2	37.7	2.3	2.7
49	437.6			Plug									
50	446.6	24	18.0	16	Lavender	R3000	D4 - Green	96		34.0	37.4	2.4	2.7
51	455.5			Plug									
52	464.5	25	17.9	16	Lavender	R3000	D4 - Green	96		33.8	37.3	2.5	2.7
53	473.5			Plug									
54	482.5	26	18.0	16	Lavender	R3000	D4 - Green	96		33.8	37.2	2.6	2.7
55	491.5			Plug									
56	500.4	27	17.9	16	Lavender	R3000	D4 - Green	90		33.8	37.1	2.7	2.7
57	509.4			Plug									
58	518.4	28	18.0	16	Lavender	R3000	D4 - Green	78		34.0	36.8	2.8	2.7
59	527.4			Plug									
60	536.4	29	18.0	17	Lavender/Gray	R3000	D4 - Green	66		34.3	36.6	2.9	3.0

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Valley Standard Pivot 8000 Machine Sprinkler Chart

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Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
541.1		Tower Number : 3		Span Length(ft) : 180.1									
61	545.7			Plug									
62	554.7	30	18.3	17	Lavender/Gray	R3000	D4 - Green	72		33.8	36.4	3.0	3.0
63	563.7			Plug									
64	572.7	31	18.0	17	Lavender/Gray	R3000	D4 - Green	84		33.3	36.3	3.0	3.0
65	581.7			Plug									
66	590.7	32	18.0	17	Lavender/Gray	R3000	D4 - Green	90		32.8	36.0	3.1	3.0
67	599.7			Plug									
68	608.7	33	18.0	18	Gray	R3000	D4 - Green	96		32.5	35.9	3.2	3.3
69	617.7			Plug									
70	626.7	34	18.0	18	Gray	R3000	D4 - Green	96		32.2	35.6	3.3	3.3
71	635.6			Plug									
72	644.6	35	17.9	18	Gray	R3000	D4 - Green	96		32.1	35.5	3.4	3.3
73	653.6			Plug									
74	662.6	36	18.0	19	Gray/Turquoise	R3000	D4 - Green	96		32.1	35.4	3.5	3.7
75	671.6			Plug									
76	680.5	37	17.9	19	Gray/Turquoise	R3000	D4 - Green	90		32.1	35.3	3.6	3.7
77	689.5			Plug									
78	698.5	38	18.0	19	Gray/Turquoise	R3000	D4 - Green	78		32.3	35.1	3.7	3.7
79	707.5			Plug									
80	716.5	39	18.0	19	Gray/Turquoise	R3000	D4 - Green	66		32.6	34.9	3.8	3.7
721.2		Tower Number : 4		Span Length(ft) : 180.1									
81	725.8			Plug									
82	734.8	40	18.3	20	Turquoise	R3000	D4 - Green	72		32.2	34.7	3.9	4.1
83	743.8			Plug									
84	752.8	41	18.0	20	Turquoise	R3000	D4 - Green	84		31.6	34.6	4.0	4.1
85	761.8			Plug									
86	770.8	42	18.0	20	Turquoise	R3000	D4 - Green	90		31.2	34.3	4.1	4.1
87	779.8			Plug									
88	788.8	43	18.0	20	Turquoise	R3000	D4 - Green	96		30.9	34.2	4.2	4.1
89	797.8			Plug									
90	806.8	44	18.0	21	Turq/Yellow	R3000	D4 - Green	96		30.6	34.0	4.3	4.4
91	815.7			Plug									

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
92	824.7	45	17.9	21	Turq/Yellow	R3000	D4 - Green	96		30.5	33.8	4.4	4.4
93	833.7			Plug									
94	842.7	46	18.0	21	Turq/Yellow	R3000	D4 - Green	96		30.5	33.8	4.5	4.4
95	851.7			Plug									
96	860.6	47	17.9	22	Yellow	R3000	D4 - Green	90		30.6	33.7	4.6	4.8
97	869.6			Plug									
98	878.6	48	18.0	21	Turq/Yellow	R3000	D4 - Green	78		30.8	33.5	4.7	4.4
99	887.6			Plug									
100	896.6	49	18.0	22	Yellow	R3000	D4 - Green	66		31.1	33.3	4.8	4.8
	901.3				Tower Number : 5	Span Length(ft) : 180.1							
101	906.0			Plug									
102	915.0	50	18.3	22	Yellow	R3000	D4 - Green	72		30.7	33.2	4.9	4.8
103	924.0			Plug									
104	933.0	51	18.0	23	Yellow/Red	R3000	D4 - Green	84		30.2	33.0	5.0	5.2
105	942.0			Plug									
106	951.0	52	18.0	23	Yellow/Red	R3000	D4 - Green	90		29.7	32.8	5.1	5.2
107	960.0			Plug									
108	969.0	53	18.0	23	Yellow/Red	R3000	D4 - Green	96		29.4	32.7	5.2	5.2
109	978.0			Plug									
110	987.0	54	18.0	23	Yellow/Red	R3000	D4 - Green	96		29.2	32.5	5.2	5.2
111	995.8			Plug									
112	1004.8	55	17.9	23	Yellow/Red	R3000	D4 - Green	96		29.1	32.3	5.3	5.1
113	1013.8			Plug									
114	1022.8	56	18.0	24	Red	R3000	D4 - Green	96		29.1	32.3	5.4	5.7
115	1031.8			Plug									
116	1040.7	57	17.9	24	Red	R3000	D4 - Green	90		29.2	32.2	5.5	5.7
117	1049.7			Plug									
118	1058.7	58	18.0	24	Red	R3000	D4 - Green	78		29.4	32.1	5.6	5.6
119	1067.7			Plug									
120	1076.7	59	18.0	24	Red	R3000	D4 - Green	66		29.7	32.0	5.8	5.6
	1081.4				Tower Number : 6	Span Length(ft) : 180.1							
121	1086.1			Plug									
122	1095.1	60	18.3	24	Red	R3000	D4 - Green	72		29.4	31.8	5.9	5.6

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
123	1104.1			Plug									
124	1113.1	61	18.0	25	Red/White	R3000	D4 - Green	84		28.9	31.7	5.9	6.1
125	1122.1			Plug									
126	1131.1	62	18.0	25	Red/White	R3000	D4 - Green	90		28.5	31.4	6.0	6.0
127	1140.1			Plug									
128	1149.1	63	18.0	25	Red/White	R3000	D4 - Green	96		28.2	31.3	6.1	6.0
129	1158.1			Plug									
130	1167.1	64	18.0	25	Red/White	R3000	D4 - Green	96		28.0	31.1	6.2	6.0
131	1176.0			Plug									
132	1185.0	65	17.9	26	White	R3000	D4 - Green	96		27.9	31.0	6.3	6.5
133	1194.0			Plug									
134	1203.0	66	18.0	26	White	R3000	D4 - Green	96		27.9	31.0	6.4	6.5
135	1212.0			Plug									
136	1220.8	67	17.9	26	White	R3000	D4 - Green	90		28.1	31.0	6.5	6.5
137	1229.8			Plug									
138	1238.8	68	18.0	26	White	R3000	D4 - Green	78		28.3	30.8	6.6	6.5
139	1247.8			Plug									
140	1256.8	69	18.0	27	White/Blue	R3000	D4 - Green	66		28.6	30.8	6.8	7.0
1261.5		Tower Number : 7 Span Length(ft) : 180.1											
141	1266.2			Plug									
142	1275.2	70	18.3	27	White/Blue	R3000	D4 - Green	72		28.3	30.6	6.8	6.9
143	1284.2			Plug									
144	1293.2	71	18.0	27	White/Blue	R3000	D4 - Green	84		27.8	30.5	6.9	6.9
145	1302.2			Plug									
146	1311.2	72	18.0	27	White/Blue	R3000	D4 - Green	90		27.5	30.3	7.0	6.9
147	1320.2			Plug									
148	1329.2	73	18.0	27	White/Blue	R3000	D4 - Green	96		27.2	30.2	7.1	6.9
149	1338.2			Plug									
150	1347.2	74	18.0	27	White/Blue	R3000	D4 - Green	96		27.0	30.0	7.2	6.9
151	1356.1			Plug									
152	1365.1	75	17.9	28	Blue	R3000	D4 - Green	96		27.0	29.9	7.2	7.5
153	1374.1			Plug									
154	1383.1	76	18.0	28	Blue	R3000	D4 - Green	96		27.0	29.9	7.3	7.5

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
155	1392.1			Plug									
156	1401.0	77	17.9	28	Blue	R3000	D4 - Green	90		27.2	29.9	7.4	7.5
157	1410.0			Plug									
158	1419.0	78	18.0	28	Blue	R3000	D4 - Green	78		27.4	29.8	7.6	7.5
159	1428.0			Plug									
160	1437.0	79	18.0	28	Blue	R3000	D4 - Green	66		27.8	29.7	7.7	7.5
	1441.6			Tower Number : 8		Span Length(ft) : 180.1							
161	1446.3			Plug									
162	1455.3	80	18.3	29	Blue/Dark Brown	R3000	D4 - Green	72		27.5	29.5	7.8	7.9
163	1464.3			Plug									
164	1473.3	81	18.0	29	Blue/Dark Brown	R3000	D4 - Green	84		27.0	29.4	7.8	7.9
165	1482.3			Plug									
166	1491.3	82	18.0	29	Blue/Dark Brown	R3000	D4 - Green	90		26.7	29.3	7.9	7.9
167	1500.3			Plug									
168	1509.3	83	18.0	29	Blue/Dark Brown	R3000	D4 - Green	96		26.4	29.2	8.0	7.9
169	1518.3			Plug									
170	1527.3	84	18.0	30	Dark Brown	R3000	D4 - Green	96		26.3	29.0	8.1	8.4
171	1536.2			Plug									
172	1545.2	85	17.9	29	Blue/Dark Brown	R3000	D4 - Green	96		26.2	29.0	8.2	7.9
173	1554.2			Plug									
174	1563.2	86	18.0	30	Dark Brown	R3000	D4 - Green	96		26.3	29.0	8.3	8.4
175	1572.2			Plug									
176	1581.1	87	17.9	30	Dark Brown	R3000	D4 - Green	90		26.5	28.9	8.4	8.4
177	1590.1			Plug									
178	1599.1	88	18.0	30	Dark Brown	R3000	D4 - Green	78		26.7	28.9	8.5	8.4
179	1608.1			Plug									
180	1617.1	89	18.0	31	Dk Brown/Orange	R3000	D4 - Green	66		27.1	28.9	8.7	8.9
	1621.7			Tower Number : 9		Span Length(ft) : 180.1							
181	1626.4			Plug									
182	1635.4	90	18.3	31	Dk Brown/Orange	R3000	D4 - Green	72		26.8	28.7	8.8	8.9
183	1644.4			Plug									
184	1653.4	91	18.0	31	Dk Brown/Orange	R3000	D4 - Green	84		26.4	28.6	8.8	8.9
185	1662.4			Plug									

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
186	1671.4	92	18.0	31	Dk Brown/Orange	R3000	D4 - Green	90		26.1	28.5	8.9	8.8
187	1680.4			Plug									
188	1689.4	93	18.0	31	Dk Brown/Orange	R3000	D4 - Green	96		25.9	28.4	9.0	8.8
189	1698.4			Plug									
190	1707.4	94	18.0	31	Dk Brown/Orange	R3000	D4 - Green	96		25.7	28.2	9.1	8.8
191	1716.3			Plug									
192	1725.3	95	17.9	32	Orange	R3000	D4 - Green	96		25.7	28.1	9.2	9.4
193	1734.3			Plug									
194	1743.3	96	18.0	32	Orange	R3000	D4 - Green	96		25.8	28.2	9.3	9.5
195	1752.3			Plug									
196	1761.2	97	17.9	32	Orange	R3000	D4 - Green	90		26.0	28.3	9.3	9.5
197	1770.2			Plug									
198	1779.2	98	18.0	32	Orange	R3000	D4 - Green	78		26.3	28.2	9.5	9.5
199	1788.2			Plug									
200	1797.2	99	18.0	32	Orange	R3000	D4 - Green	66		26.7	28.3	9.7	9.5
	1801.8				Tower Number : 10	Span Length(ft) : 180.1							
201	1806.5			Plug									
202	1815.5	100	18.3	32	Orange	R3000	D4 - Green	72		26.5	28.1	9.7	9.4
203	1824.5			Plug									
204	1833.5	101	18.0	33	Orange/Dk Green	R3000	D4 - Green	84		26.0	28.0	9.8	10.0
205	1842.5			Plug									
206	1851.5	102	18.0	33	Orange/Dk Green	R3000	D4 - Green	90		25.7	27.8	9.9	10.0
207	1860.5			Plug									
208	1869.5	103	18.0	33	Orange/Dk Green	R3000	D4 - Green	96		25.5	27.8	10.0	10.0
209	1878.5			Plug									
210	1887.5	104	18.0	33	Orange/Dk Green	R3000	D4 - Green	96		25.4	27.7	10.0	10.0
211	1896.4			Plug									
212	1905.4	105	17.9	33	Orange/Dk Green	R3000	D4 - Green	96		25.4	27.7	10.1	10.0
213	1914.4			Plug									
214	1923.4	106	18.0	33	Orange/Dk Green	R3000	D4 - Green	96		25.5	27.7	10.2	10.0
215	1932.4			Plug									
216	1941.3	107	17.9	34	Dark Green	R3000	D4 - Green	90		25.7	27.7	10.3	10.6
217	1950.3			Plug									

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Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
218	1959.3	108	18.0	34	Dark Green	R3000	D4 - Green	78		26.1	27.7	10.4	10.6
219	1968.3			Plug									
220	1977.3	109	18.0	34	Dark Green	R3000	D4 - Green	66		26.5	27.8	10.4	10.6
	1981.9				Tower Number : 11			Span Length(ft) : 180.1					
221	1986.6			Plug									
222	1995.6	110	18.3	34	Dark Green	R3000	D4 - Green	72		26.2	27.7	10.4	10.6
223	2004.6			Plug									
224	2013.6	111	18.0	34	Dark Green	R3000	D4 - Green	84		25.8	27.6	10.7	10.6
225	2022.6			Plug									
226	2031.6	112	18.0	34	Dark Green	R3000	D4 - Green	90		25.6	27.4	10.8	10.6
227	2040.6			Plug									
228	2049.6	113	18.0	35	Dk Green/Purple	R3000	D4 - Green	96		25.4	27.3	10.9	11.1
229	2058.6			Plug									
230	2067.6	114	18.0	35	Dk Green/Purple	R3000	D4 - Green	96		25.3	27.2	11.0	11.1
231	2076.5			Plug									
232	2085.5	115	17.9	35	Dk Green/Purple	R3000	D4 - Green	96		25.3	27.2	11.1	11.1
233	2094.5			Plug									
234	2103.5	116	18.0	35	Dk Green/Purple	R3000	D4 - Green	96		25.4	27.3	11.2	11.1
235	2112.5			Plug									
236	2121.4	117	17.9	35	Dk Green/Purple	R3000	D4 - Green	90		25.6	27.4	11.3	11.1
237	2130.4			Plug									
238	2139.4	118	18.0	35	Dk Green/Purple	R3000	D4 - Green	78		26.0	27.4	11.4	11.1
239	2148.4			Plug									
240	2157.4	119	18.0	36	Purple	R3000	D4 - Green	66		26.4	27.5	11.5	11.7
241	2161.2			B.P.									
	2161.8				Tower Number : 12			Span Length(ft) : 179.8					
242	2166.2			Plug									
243	2175.3	120	18.0	32	Orange	R3000	D4 - Green	72		26.3	28.1	9.3	9.4
					Sprinkler : Senninger Spray								
244	2178.9	121		14	Blue	Directional				25.1	25.1	6.5	7.0
	2179.9				Overhang			Span Length(ft) : 18.1					

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Parent Order No

Dealer **INMAN IRRIGATION**

Sprinkler Order No **Blanchat, Randy Half Circle**

Customer **MR Randy Blanchat**

Field Name

Valley Standard Pivot 8000 Machine Sprinkler Chart

Cpl No	Dist From Pivot (ft)	Spk No	Dist Last Spk (ft)	Nozzle Size	Color	Spk Model	Wear Pad	Drop Length (in)	Regulator	Line (PSI)	Spk (PSI)	Rqd (GPM)	Act (GPM)
--------	----------------------	--------	--------------------	-------------	-------	-----------	----------	------------------	-----------	------------	-----------	-----------	-----------

Sprinkler : Nelson Endgun



245	2179.9	122		0.5		SR75				25.1	59.4	54.8	55.0
-----	--------	------------	--	------------	--	------	--	--	--	------	------	------	------

Primary Endgun Arc Settings: Forward Angle: **45** Reverse Angle: **80**

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Dealer **INMAN IRRIGATION**
 Customer **MR Randy Blanchat**
 Field Name



Sprinkler Order No **Blanchat, Randy Half Circle**
 Parent Order No

Valley Standard Pivot 8000 Percent Timer Data

Setup Information - Valley Computer Control Panel Water Application Constants: Minimum Application = 0.152 (in) Hours Per Revolution = 31.6

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Based on IN

IN Per 360 degrees	Pivot % Timer	Hours Per 360 degrees
0.152	100.0	31.6
0.20	75.9	41.6
0.30	50.6	62.5
0.40	38.0	83.2
0.50	30.4	103.9
0.60	25.3	124.9
0.70	21.7	145.6
0.80	19.0	166.3
0.90	16.9	187.0
1.00	15.2	207.9
1.25	12.1	261.2
1.50	10.1	312.9
1.75	8.7	363.2
2.00	7.6	415.8
2.50	6.1	518.0
3.00	5.1	619.6

Based on % Timer

Pivot % Timer	IN Per 360 degrees	Hours Per 360 degrees
100.0	0.152	31.6
90.0	0.17	35.1
80.0	0.19	39.5
70.0	0.22	45.1
60.0	0.25	52.7
50.0	0.30	63.2
45.0	0.34	70.2
40.0	0.38	79.0
35.0	0.43	90.3
30.0	0.51	105.3
25.0	0.61	126.4
20.0	0.76	158.0
17.5	0.87	180.6
15.0	1.01	210.7
12.5	1.21	252.8
10.0	1.52	316.0
7.5	2.02	421.3
5.0	3.04	632.0

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Field Area

367.8 (Ac) Total
342.7 (Ac) Pivot 360°
25.1 (Ac) EG on 100%
2179.9 (ft) Machine Length
78.4 (ft) End Gun Radius

Flow

800 (GPM)
2.18 (GPM per Acre)
0.12 (in per day) App Rate
0.152 (in) App Depth @ 100%
55.0 (GPM) End Gun

Pressure

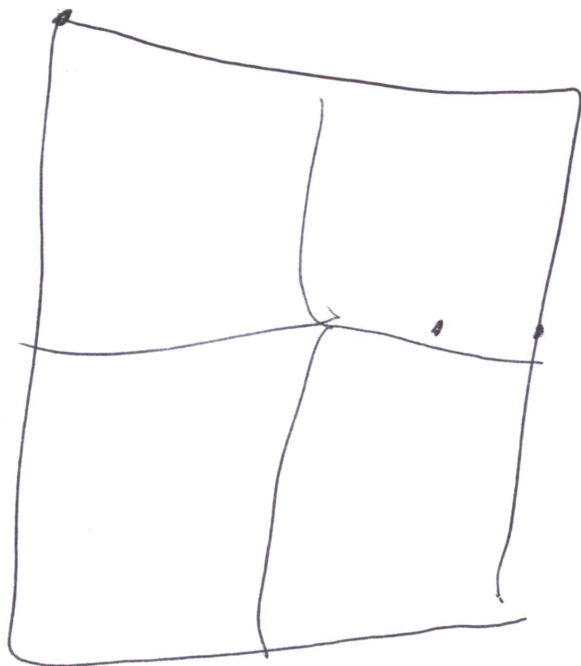
40 (PSI) Pivot Pressure
Inlet Pressure
0.0 (ft) Highest Elevation
0.0 (ft) Lowest Elevation

LRDU Drive Train

34 RPM Center Drive @ 60 Hz freq.
11R x 22.5 Radial Retread Tire
52:1 Wheel GB Ratio, LRDU Dist 2161.8 (ft)
31.6 Hrs/360 @ 100% (7.18) (Ft per Min)

Disclaimer

The information presented in the attached Percent Timer Report is based on variables which cannot be totally controlled by Valmont (including, but not limited to; pivot pressure, inside pipeline surface, end gun throw, end gun arc setting, tire slippage, tire pressure, field slopes, soil variations, sprinkler package installation, well capacity, center drive motor voltage, center drive motor frequency, climatic conditions and other elements and circumstances beyond Valmont's reasonable control). Valmont recommends monitoring the machine for at least one pass through field to obtain an accurate rotation time.



(35 to four posts)

$$\begin{array}{r} 1070 \\ - 300 \\ \hline 770 \end{array}$$

$$\begin{array}{r} 1071 \\ \hline 4209 \\ 3280 \end{array}$$

5280

920

~~scribble~~

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United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Harper County, Kansas



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Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

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Soil Map

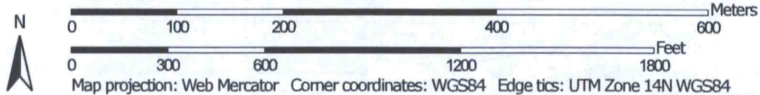
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.

Map Scale: 1:6,890 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip




Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Harper County, Kansas
Survey Area Data: Version 15, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 28, 2016—Aug 31, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5861	Attica fine sandy loam, 1 to 3 percent slopes	13.4	7.8%
5908	Nalim loam, 0 to 1 percent slopes	155.0	90.8%
5929	Pratt loamy fine sand, 5 to 12 percent slopes	0.3	0.1%
9982	Fluvents, frequently flooded	2.1	1.2%
Totals for Area of Interest		170.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

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pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

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Harper County, Kansas

5861—Attica fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2w9kd
Elevation: 1,660 to 2,610 feet
Mean annual precipitation: 25 to 33 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 180 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Attica and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Attica

Setting

Landform: Dunes on paleoterraces
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bt - 8 to 21 inches: fine sandy loam
BC - 21 to 40 inches: fine sandy loam
C - 40 to 79 inches: loamy fine sand

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: Sandy Loam (R079XY122KS)
Hydric soil rating: No

Minor Components

Naron

Percent of map unit: 5 percent

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Landform: Dunes on paleoterraces
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Sandy Loam (R079XY122KS)
Hydric soil rating: No

Hayes

Percent of map unit: 5 percent
Landform: Dunes on paleoterraces
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Sandy Loam (R079XY122KS)
Hydric soil rating: No

Pratt

Percent of map unit: 3 percent
Landform: Dunes on paleoterraces
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Sand Plains (R079XY121KS)
Hydric soil rating: No

Shellabarger

Percent of map unit: 2 percent
Landform: Paleoterraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Loam (R079XY122KS)
Hydric soil rating: No

Carbika

Percent of map unit: 0 percent
Landform: Depressions on interdunes on paleoterraces
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Wet Subirrigated (R079XY133KS)
Hydric soil rating: Yes

Carway

Percent of map unit: 0 percent
Landform: Depressions on interdunes on paleoterraces
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: Wet Subirrigated (R079XY133KS)
Hydric soil rating: Yes

5908—Nalim loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2t4h
Elevation: 1,660 to 2,610 feet

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Custom Soil Resource Report

Mean annual precipitation: 25 to 33 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 180 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Nalim and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nalim

Setting

Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium

Typical profile

Ap - 0 to 10 inches: loam
Bt1 - 10 to 15 inches: clay loam
Bt2 - 15 to 33 inches: clay loam
Bt3 - 33 to 50 inches: sandy loam
BC - 50 to 62 inches: loamy coarse sand
C - 62 to 79 inches: coarse sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 2c
Hydrologic Soil Group: C
Ecological site: Loamy Plains (R079XY115KS)
Hydric soil rating: No

Minor Components

Farnum

Percent of map unit: 20 percent
Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Loamy Plains (R079XY115KS)

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Hydric soil rating: No

Carbika

Percent of map unit: 0 percent

Landform: Depressions on interdunes on paleoterraces

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: Wet Subirrigated (R079XY133KS)

Hydric soil rating: Yes

5929—Pratt loamy fine sand, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2r8yr

Elevation: 1,660 to 2,610 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 55 to 57 degrees F

Frost-free period: 180 to 200 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Pratt and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pratt

Setting

Landform: Dunes on paleoterraces

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Eolian deposits

Typical profile

A - 0 to 8 inches: loamy fine sand

Bt - 8 to 24 inches: loamy fine sand

E and Bt - 24 to 43 inches: loamy fine sand

E and Bt - 43 to 64 inches: fine sand

C - 64 to 79 inches: fine sand

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 2 percent

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Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: Sand Plains (R079XY121KS)

Hydric soil rating: No

Minor Components**Carway**

Percent of map unit: 5 percent

Landform: Depressions on interdunes on paleoterraces

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: Wet Subirrigated (R079XY133KS)

Hydric soil rating: Yes

Tivin

Percent of map unit: 5 percent

Landform: Dunes on paleoterraces

Down-slope shape: Linear, convex

Across-slope shape: Linear, convex

Ecological site: Choppy Sands (R079XY103KS)

Hydric soil rating: No

Attica

Percent of map unit: 3 percent

Landform: Dunes on paleoterraces

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: Sandy Loam (R079XY122KS)

Hydric soil rating: No

Naron

Percent of map unit: 2 percent

Landform: Dunes on paleoterraces

Down-slope shape: Convex

Across-slope shape: Convex

Ecological site: Sandy Loam (R079XY122KS)

Hydric soil rating: No

9982—Fluents, frequently flooded**Map Unit Setting**

National map unit symbol: 1hdsw

Mean annual precipitation: 24 to 31 inches

Mean annual air temperature: 46 to 72 degrees F

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Frost-free period: 205 to 265 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluents, frequently flooded, and similar soils: 100 percent
Minor components: 0 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluents, Frequently Flooded

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 6 inches: silt loam
H2 - 6 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 30 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: Very high (about 12.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B
Hydric soil rating: Unranked

Minor Components

Aquolls, frequently flooded

Percent of map unit: 0 percent
Landform: Depressions, drainageways
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

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JACKIE McCLASKEY, SECRETARY OF AGRICULTURE

11/1/2018

WILLIAM D BLANCHAT, REVOCABLE TRUST
404 W 22ND
HARPER, KS 67058

RE: Application, File No. **50154**

Dear Sir or Madam:

The Division of Water Resources (Division) has received your application for a permit to appropriate water for beneficial use. Your application has been assigned the file number referenced above. Please be aware that the Division may have a large number of pending applications on hand at times and makes every attempt to process them in the order in which they are received. You will be contacted if additional information is required.

Please note, this letter only acknowledges receipt of your application and does not guarantee approval. In accordance with the provisions of the Kansas Water Appropriation Act, the use of water as proposed prior to approval of the application is unlawful.

Additional information about the process may be found on our website at agriculture.ks.gov/divisions-programs/dwr. If you have any other questions, please contact our office at 785-564-6640 or your local Stafford Field Office at 620-234-5311. If you call, please reference the file number so we can help you more efficiently.

Sincerely,

Kristen A. Baum
New Application Unit Supervisor
Division of Water Resources