Fee Paid: \$110.00 HHSS Fee: \$70.00 Well Registration or Area Permit DNR Cash Fund: \$18.50 WWDF: 21.50 Billing ID: 37235 Source: Nebraska On Line **Accepted** Use: Irrigation Owner ID: 122164 Status: Decommission Registration Active Registered Import ID: 135524068325492 Status: G-165091 Well Date: Number: Registration Date: 12/12/2012 Well ID: 220323 NRD: Lower Big Blue Last Change Call Up Last Change 12/12/2012 hsparks Call Up Date: User: Code: Owner: ContactID Type SeqNum Begin Date End Date Name **Display** 122164 Owner 1 12/12/2012 Maschman Ag Inc, Certificate ID FirstName LastName Contractor: 3919403 Loren C. Taylor Drilling Firm: Employer ID Employer Charles Sargent Irrigation Inc - Geneva 397913 A. Well Location: NW1/4SE1/4 of Section 20 Township 4 North, Range 2 (East E/W), Jefferson County B. Natural Resource District: Lower Big Blue Latitude Longitude Well GPS Coordinates: 40° 17' 43.50" -097° 13' 20.90" **GPS Required** Lat/Long DD 40.29542 -97.22247 C. The well is: $\underline{1362}$ feet from the \underline{S} Section line and $\underline{1381}$ feet from the \underline{E} section line. D. Street address or block, lot and subdivision: Addr/Sub Div ___ Block No ___ Lot ___ E. Location of water use, if applicable (give legal description): SE S20 T4 R2E G. Well reference letter(s) if applicable: ___ Well In A Series Well Part of a Series with Site Plan: No Series # of Wells Reg Total # Wells Acres Acres Cert NRD Appr StartDate EndDate Comment Series Reg Num (External Source) Code Description Wells in the Series 219120 No 12/4/2012 PRO Single WellID RegCD StartDate EndDate Project 220323 G-165091 12/4/2012 Permits Aprvd Date(s) Aprvd Date(s) Area Permit LBB-9/26/2012 SWater App Code 771 GeoPermit Industrial MWF Transfer WSP Swater Conduct Code Other **HHSS** HHSS PWS ID ITN NDEQ 5. Purpose of Well Irrigation Other Use __ Notes Well Considered a replacement by NRD(WellID, 7. Replacement well information. RegCD) A. Is this well a Replacement well? No Repl No __ NRD Approval Date __ Well Replacement Reg CD B. Registration number of abandoned well: ___ If not registered, date abandoned well was constructed ___ C. Abandoned well last operated ___ D. Replacement well is ___ feet from abandoned well. E. Original well pump column size: ___ inches. F. [] Original water well decommissioned [] I hereby certify that the original water well will be decommissioned within 180 days after such construction of the replacement water well. [] I hereby certify that the original water well will be modified and equipped to pump 50 gallons per minute or less within 180 days after such construction of the replacement water well.] Livestock [] Monitoring 1 Observation [] Nonconsumptive or de minimus use approved by the applicable natural resources district. [] Decommission/Modification certification form is submitted by landowner (Must be submitted before registering well)

G.	Location	of	water	use	of	original	well:	_

Decommission Information Decommission Date: ___ Ву

8. Pump Information.

A. Is Pump installed at this time? Yes

Free Flowing Well: No

Pump present but Well Inactive: No Well active, no pump installed: No

B. License No.

CertificateID FirstName LastName Employer

39454 Nathan R Jacobson Charles Sargent Irrigation, Inc.

- C. Pumping Rate $\underline{1000}$ gallons per minute.
- E. Drop pipe diameter 8 inches.
- G. Pump equipment installed: 12/4/2012
- I. This well wll be used to pump less than 50 gpm? No
- D. Pumping water level 104 feet.
- F. Length of pipe 160 in feet.
- H. Pump Brand/Type Sargent Pipe Company

- 9. Well Construction Information
- A. Total well depth: 271 feet.
- C. Well Construction began: 11/27/2012
- E. Bore hole diameter in inches. Top 30 Bottom 30
- F. Casing and Screen Joints are: Glued

- B. Static water level 96 feet.
- D. Well Construction Completed: 12/4/2012
- Other Joints description: ___
- H. Total Estimate Capacity of Well 1000 gallons per minute.
 I. Pumping water level at capacity: 104 feet.
- 10. Well Construction (Casing & Screen) c, d, e & f measurements should be in inches to three decimal places Record Count = 2

WellID FromDepth	* ToDe	oth* Case/Scre	en InsideDi	am Outsid	leDiam CaseThickne	ss ScrnSlc	tSize Materia	I ScreenTname
2203230	191	casing	14.75	16	0.625		Plastic	PVC
220323 191	271	screen	14.75	16	0.625	0.05	Plastic	PVC

^{*} are in Feet, all else is in inches

11. Grout and Gravel Pack

Record Count = 4

WellID FromDep	th ToDepth	Grout/Grave	Material Description ¹	Quantity Gravel ²	Volume &Type Grout ³
2203235	10	grout	Bentonite Seal		.5 Super Sack
220323 10	95	gravel	Gravel Well Pack	17 Cubic Yards	
220323 95	100	grout	Bentonite Seal		.5 Super Sack
220323 100	271	gravel	Gravel Well Pack	37 Cubic Yards	

^{*} are in Feet, all else is in inches

12. Well Geologic Materials Logged

WellID FromDepth*	ToDepth*	Туре	Hardness	Color	Other/Drilling Action
2203230	20	Top Soil	Loose	Brown	brown clay
220323 20	40	Clay	Loose	Brown	& tan
220323 40	55	Clay	Dense/Stiff	Brown	
220323 55	60	Sandy Clay	Dense/Stiff	Brown	
220323 60	80	Fine Sand	Loose	Tan	clay layers
22032380	88	Fine Sand	Loose	Tan	
22032388	98	Clay	Dense/Stiff	Tan	& blue
220323 98	100	Sand fine-med	Dense/Stiff	Tan	
220323 100	108	Fine Sand	Dense/Stiff	Tan	
220323 108	120	Sand med-coarse	Dense/Stiff	Tan	medium gravel
220323 120	140	Sand med-coarse	Dense/Stiff	Tan	fine gravel
220323 140	160	Sand med-coarse	Dense/Stiff	Tan	fine sand layer
220323 160	180	Sand med-coarse	Dense/Stiff	Tan	medium gravel
220323 180	200	Sand med-coarse	Dense/Stiff	Tan	brown clay strip
220323 200	220	Sand fine-med	Dense/Stiff	Tan	trace of gravel
220323 220	240	Sand fine-med	Dense/Stiff	Tan	clay strips
220323 240	260	Sand fine-med	Dense/Stiff	Tan	fine gravel
220323 260	280	Sand fine-med	Dense/Stiff	Tan	medium gravel
220323 280	300	Sand med-coarse	Dense/Stiff	Tan	clay strip

^{*} are in Feet.

¹Description of gravel pack, i.e. engineered gravel pack, or gravel pit description (1/4 down) or brand name (best sand) natural formation, drilling cuttings, soil backfill

²Quantity #cubic yards, #Tons, #Sacks - (for drilling cuttings and soil backfill estimate quantity) Calculation assistance available on web

³Volume & Type: #gallons of a slurry, #Barrels of a slurry, #sacks used in the slurry, #Bags of non-slurry bentonite (chip-pellet-