WATER WELL RECORD Form WWC-5

Division of Water Resources App. No. | Well ID: MW3

■ Original Record ☐ Correction ☐ Change in Well Use

1 LOCATION OF WATER WELL: County: Gove	Fraction: SE ¼ SE ¼ SE ¼ SE ¼	Section Number: 3	Township Number: T 11 S	Range Number: R 30 ☐ E ■ W

2 WELL OWNER: Last Name: First:
Business: Frontier Ag., Inc.
Address: PO Box 248, 415 W. 2nd
Address:
City: Oakley State: KS ZIP: 67748

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: ☐
100 Railroad Ave., Grinnell, KS

3 LOCATE WELL WITH "X" IN SECTION BOX:

N / W / E / S; NW, NE, SW, SE; X in SE; |----------1 mile----------|

4 DEPTH OF COMPLETED WELL: 113.5 ft.
Depth(s) Groundwater Encountered: 1) ..... ft. 2) ..... ft. 3) ..... ft., or 4) ☐ Dry Well
WELL'S STATIC WATER LEVEL: 99.66 ft.
■ below land surface, measured on (mo-day-yr) 9/15-16/15
☐ 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: ..... in. to ..... ft. and ..... in. to ..... ft.

5 Latitude: 39.11903 (decimal degrees)
Longitude: 100.62749 (decimal degrees)
Horizontal 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: .....

6 Elevation: 2904.66 ft. ☐ Ground Level ■ TOC
Source: ■ Land Survey ☐ GPS ☐ Topographic Map ☐ Other .....

7 WELL WATER TO BE USED AS:
1. Domestic: ☐ Household ☐ Lawn & Garden ☐ Livestock
2. ☐ Irrigation
3. ☐ Feedlot
4. ☐ Industrial
5. ☐ Public Water Supply: well ID .....
6. ☐ Dewatering: how many wells? .....
7. ☐ Aquifer Recharge: well ID .....
8. ■ Monitoring: well ID MW3
9. Environmental Remediation: well ID ..... ☐ Air Sparge ☐ Soil Vapor Extraction ☐ Recovery ☐ Injection
10. ☐ Oil Field Water Supply: lease .....
11. Test Hole: well ID ..... ☐ Cased ☐ Uncased ☐ Geotechnical
12. Geothermal: how many bores? ..... a) Closed Loop ☐ Horizontal ☐ Vertical b) Open Loop ☐ Surface Discharge ☐ Inj. of Water
13. ☐ 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 ..... CASING JOINTS: ☐ Glued ☐ Clamped ☐ Welded ■ Threaded
Casing diameter 4 in. to 83.5 ft., Diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft.
Casing height above land surface -0.49 in. Weight ..... lbs./ft. Wall thickness or gauge No. .....

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 83.5 ft. to 113.5 ft., From ..... ft. to ..... ft., From ..... ft. to ..... ft.
GRAVEL PACK INTERVALS: From 80 ft. to 114.05 ft., From ..... ft. to ..... ft., From ..... ft. to ..... ft.

9 GROUT MATERIAL: ☐ Neat cement ☐ Cement grout ■ Bentonite ■ Other Concrete: 0-1'
Grout Intervals: From 1 ft. to 80 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) .....
Direction from well? N Distance from well? ~60' ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	0.5	Gravel			
0.5	5	Organic clay			
5	30	Clayey silt			
30	35	Silty sand			
35	45	Silty sand w/ gravel & clay			
45	70	Sand coarse to fine			
70	75	Clayey sand			
75	114.05	Silty gravel with clay & chalk w/ layers of cemented sand			

Notes:
KDHE ID: Frontier Ag, Inc (Grinnell); U6-032-14725

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) 6/11/15 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 757 This Water Well Record was completed on (mo-day-year) 10/7/15 under the business name of Larsen & Associates, Inc. Signature .....

Mail 1 white copy along with a fee of $5.00 for each constructed well to: Kansas Department of Health and Environment, Bureau of Water, GWTS Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Mail one to Water Well Owner and retain one for your records. Telephone 785-296-5524.

Visit us at http://www.kdheks.gov/waterwell/index.html KSA 82a-1212 **Revised 7/10/2015**

TRITERRA
LAND SERVICES

P.O. Box 546
Clearwater, Kansas 67026
Cell (316) 648-3617 Fax (620) 584-4371
E-mail: triterrals@yahoo.com

SURVEYING OF MONITORING WELLS
FRONTIER AG, INC.
GRINNELL, KANSAS

The above site is in Section 3, Township 11 South, Range 30 West of the Sixth Principal Meridian, Gove County, Kansas. The Southeast corner of Section 3 was assigned coordinates of 00.00 North and 00.00 West.

The vertical control was an NGS benchmark located in the northwest corner of the intersection of Oak Street and Old Hwy 40 and described as a disk set in the top of the west end of a north headwall of a concrete culvert, 17' north of the Hwy centerline and 45' west of the center of Oak Street. A control point was established as a chiseled 'X' on the northwest corner of the Grinnell Community sign base at the southeast corner of the site.

The Latitude and Longitude were recorded from a GPS unit. The site is located on the 7.5' quad map titled "GRINNELL SOUTH".

ID	NORTH	WEST	LATITUDE	LONGITUDE	ELEVATION
SE Corner Sec 3-T11S-R30W	00.00	00.00			
CP	40.46	54.88	39.11895	100.62745	2905.32
MW-1 SE SE SE SE	151.94	48.39	39.11927	100.62743	RIM 2905.34 TOC 2905.05
MW-2 SE SE SE SE	60.05	156.61	39.11901	100.62779	RIM 2905.77 TOC 2905.42
MW-3 SE SE SE SE	81.92	29.13	39.11903	100.62749	RIM 2905.15 TOC 2904.66
MW-4 SE SE SE SE	169.60	272.16	39.11931	100.62823	RIM 2906.22 TOC 2905.99
MW-5 (Sec 2) SW SW SW SW	59.62	-49.39	39.11900	100.62707	RIM 2905.71 TOC 2905.13
MW-6 (Sec 2) SW SW SW SW	177.29	-50.14	39.11934	100.62708	RIM 2905.56 TOC 2905.03
MW-7 SE SE SE SE	181.52	132.74	39.11934	100.62772	RIM 2905.93 TOC 2905.55