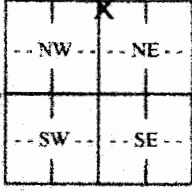


WATER WELL RECORD Form WWC-5

☒ Original Record ☐ Correction ☐ Change in Well UseDivision of Water
Resources App. No.

Well ID

W Water Well 2

1 LOCATION OF WATER WELL: County: <u>McPherson</u>		Fraction NW¼ NW¼ NW¼ NE¼	Section Number <u>15</u>	Township Number T <u>21</u> S	Range Number R <u>1</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W
2 WELL OWNER: Last Name: <u>Yost</u> First: <u>Brian</u> Business Address: <u>379 28th Ave.</u> City: <u>Moundridge</u> State: <u>KS</u> ZIP: <u>67107</u>		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: <input type="checkbox"/> <u>4 miles East, 2 miles North & 3/4 mile East of Moundridge</u>			
3 LOCATE WELL WITH "X" IN SECTION BOX: N  W E S 1 mile	4 DEPTH OF COMPLETED WELL: <u>44</u> ft. Depth(s) Groundwater Encountered: 1) <u>7</u> ft. 2) _____ ft. 3) _____ ft. or 4) <input type="checkbox"/> Dry Well WELL'S STATIC WATER LEVEL: <u>7</u> ft. <input checked="" type="checkbox"/> below land surface, measured on (mo-day-yr) <u>06/14/2013</u> <input type="checkbox"/> 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: <u>30</u> gpm Bore Hole Diameter: <u>9</u> in. to <u>50</u> ft. and _____ in. to _____ ft.		5 Latitude: <u>38.23174</u> (decimal degrees) Longitude: <u>97.41691</u> (decimal degrees) Datum: <input type="checkbox"/> WGS 84 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27 Source for Latitude/Longitude: <input type="checkbox"/> GPS (unit make/model: _____) (WAAS enabled? <input type="checkbox"/> Yes <input type="checkbox"/> No) <input type="checkbox"/> Land Survey <input type="checkbox"/> Topographic Map <input type="checkbox"/> Online Mapper: _____		
	6 Elevation: <u>1521</u> ft. <input checked="" type="checkbox"/> Ground Level <input type="checkbox"/> TOC Source: <input type="checkbox"/> Land Survey <input type="checkbox"/> GPS <input type="checkbox"/> Topographic Map <input checked="" type="checkbox"/> Other <u>KOLAR</u>				

7 WELL WATER TO BE USED AS:

- | | | |
|---|---|---|
| 1. Domestic:
<input type="checkbox"/> Household
<input type="checkbox"/> Lawn & Garden
<input checked="" type="checkbox"/> Livestock | 5. <input type="checkbox"/> Public Water Supply: well ID _____ | 10. <input type="checkbox"/> Oil Field Water Supply: lease _____ |
| 2. <input type="checkbox"/> Irrigation | 6. <input type="checkbox"/> Dewatering: how many wells? _____ | 11. Test Hole: well ID _____
<input type="checkbox"/> Cased <input type="checkbox"/> Uncased <input type="checkbox"/> Geotechnical |
| 3. <input type="checkbox"/> Feedlot | 7. <input type="checkbox"/> Aquifer Recharge: well ID _____ | 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 |
| 4. <input type="checkbox"/> Industrial | 8. <input type="checkbox"/> Monitoring: well ID _____ | 13. <input type="checkbox"/> Other (specify): _____ |
| | 9. Environmental Remediation: well ID _____
<input type="checkbox"/> Air Sparge <input type="checkbox"/> Soil Vapor Extraction
<input type="checkbox"/> Recovery <input type="checkbox"/> Injection | |

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 5 in. to 24 ft. Diameter _____ in. to _____ ft. Diameter _____ in. to _____ ft.
Casing height above land surface 12 in. Weight 2.37 lbs./ft. Wall thickness or gauge No. 214

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 24 ft. to 44 ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft.GRAVEL PACK INTERVALS: From 40 ft. to 44 ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft.**9 GROUT MATERIAL:** ☐ Neat cement ☐ Cement grout ☒ Bentonite ☐ Other _____Grout Intervals: From 0 ft. to 20 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) Future hog pens
Direction from well? S Distance from well? 50 ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	1	Topsoil			
1	13	Clay, brown			
13	25	Clay, green/tan w/fine sand			
25	35	Sand, fine			
35	45	Sand, medium w/lots of clay			
45	50	Shale, gray/green			
Notes:					

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) 06/14/2013 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 138 This Water Well Record was completed on (mo-day-year) 06/25/2013 under the business name of Peterson Irrigation, Inc.

Send one copy to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well.

KS Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-3565.

Visit us at <http://www.kdheks.gov/waterwell/index.html>

KSA 82a-1212

West Water Well 2



1000 Corey Road
P.O. Box 886
Hutchinson, KS 67504-0886
620-665-5661
FAX: 620-665-0559
TOLL FREE: 877-464-0623
www.sdklabs.com

Page 1 of 1

Sample # 2847.14
Sample: Water
Other ID: 2

Date Received: 6/16/2014 12:10:00
Date/Time Sampled: 6/16/2014 9:10:00
Date Reported: 06/18/2014
Total Fee: \$ 74.00

Yost, Brian
379 28th Avenue
Moundridge, Ks 67107

W Water Well

ANALYSIS

	Result	Units	Date/Time Analyzed	Analyst
++Chloride - SM 4500-Cl B	4.99	mg/L	6/17/2014 09:00	KO
++Ammonia-Nitrogen - SM 4500-NH3 B	0.28	mg/L	6/18/2014 08:25	MH
++Total Kjeldahl Nitrogen - SM 4500-N B	0.28	mg/L	6/17/2014 06:50	MH
++Nitrate-Nitrogen - SM 4500-NO3 D	Less than 1.0	mg/L	6/16/2014 13:45	KO

* Denotes analysis was subcontracted to another laboratory for state compliance - see attached.

Methods of analysis per EPA-600 or EPA SW-846, 3rd Ed., 1986 or Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

++Denotes NELAP/KDHE Accredited Method. Lab Certificate #E-10152. Results meet all requirements of NELAC unless noted.

Approved By: *M. A. Hogan*, Quality Assurance Officer

Matt Hogan

Copies

The results reported pertain only to the samples as received by the laboratory





1000 Corey Road
P.O. Box 886
Hutchinson, KS 67504-0886
620-665-5661
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Page 1 of 1

Sample # 3812.13

Sample: Water

Other ID: #2

West Water Well

Yost, Brian

379 28th Avenue

Moundridge, Ks 67107

Date Received: 9/12/2013 14:25:00

Date/Time Sampled: 9/12/2013 11:40:00

Date Reported: 09/23/2013

Total Fee: \$72.00

ANALYSIS

	Result	Units	Date/Time Analyzed	Analyst
--pH - SM 4500-H+ B	7.38	s.u.	9/12/2013 16:34	SE
--Chloride - SM 4500-Cl B	10.00	mg/L	9/13/2013 14:00	SE
--Total Hardness - SM 2340B	304	mg/L		
--Total Kjeldahl Nitrogen - SM 4500-N B	0.56	mg/L	9/13/2013 09:10	MH
--Nitrate-Nitrogen - SM 4500-NO3 D	Less than 1.0	mg/L	9/13/2013 15:15	SE
--Calcium - SM 3111B	71.40	mg/L	9/17/2013 10:00	AV
--Magnesium - SM 3111B	13.30	mg/L	9/17/2013 10:00	AV
--Sodium - SM 3111B	42.00	mg/L	9/17/2013 10:00	AV
--Sulfate - SM 4500 SO4 E	11.30	mg/L	9/13/2013 10:40	SE
--Iron - SM 3120B	0.096	mg/L	9/19/2013 16:00	AV
--Manganese - SM 3120B	0.225	mg/L	9/19/2013 16:00	AV
--Electrical Conductivity - SM 2510B	595	umhos/cm	9/13/2013 12:40	SE
TDS-Total Dissolved Solids - Calculated	422	mg/L		

* Denotes analysis was subcontracted to another laboratory for state compliance - see attached.

Methods of analysis per EPA-800 or EPA SW-846, 3rd Ed., 1985 or Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

--Denotes NELAP/KDHE Accredited Method. Lab Certificate #E-10162. Results meet all requirements of NELAC unless noted.

Approved By:

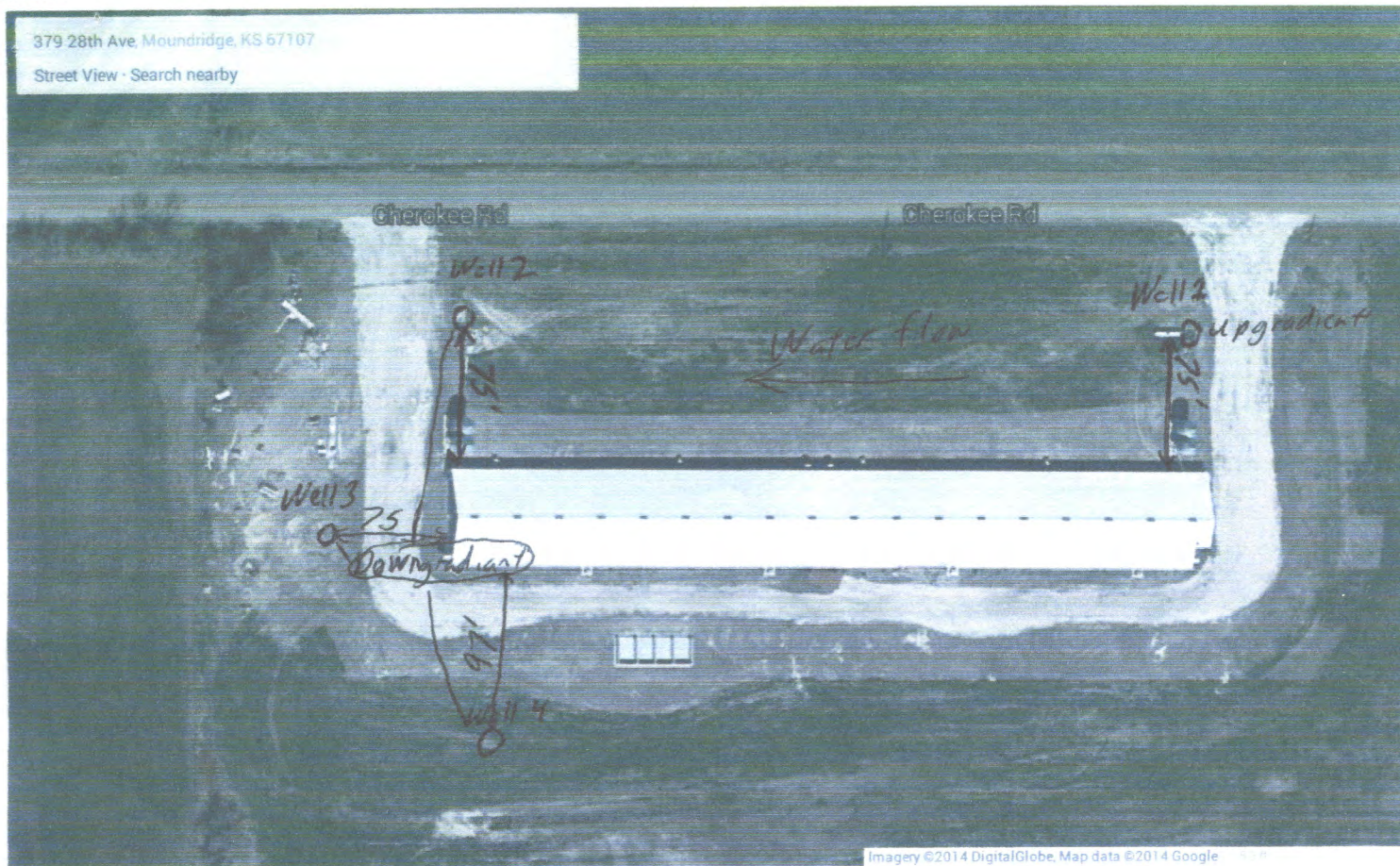
M. H. Hogan
Matt Hogan



The results reported pertain only to the samples as received by the laboratory

379 28th Ave, Moundridge, KS 67107

Street View · Search nearby

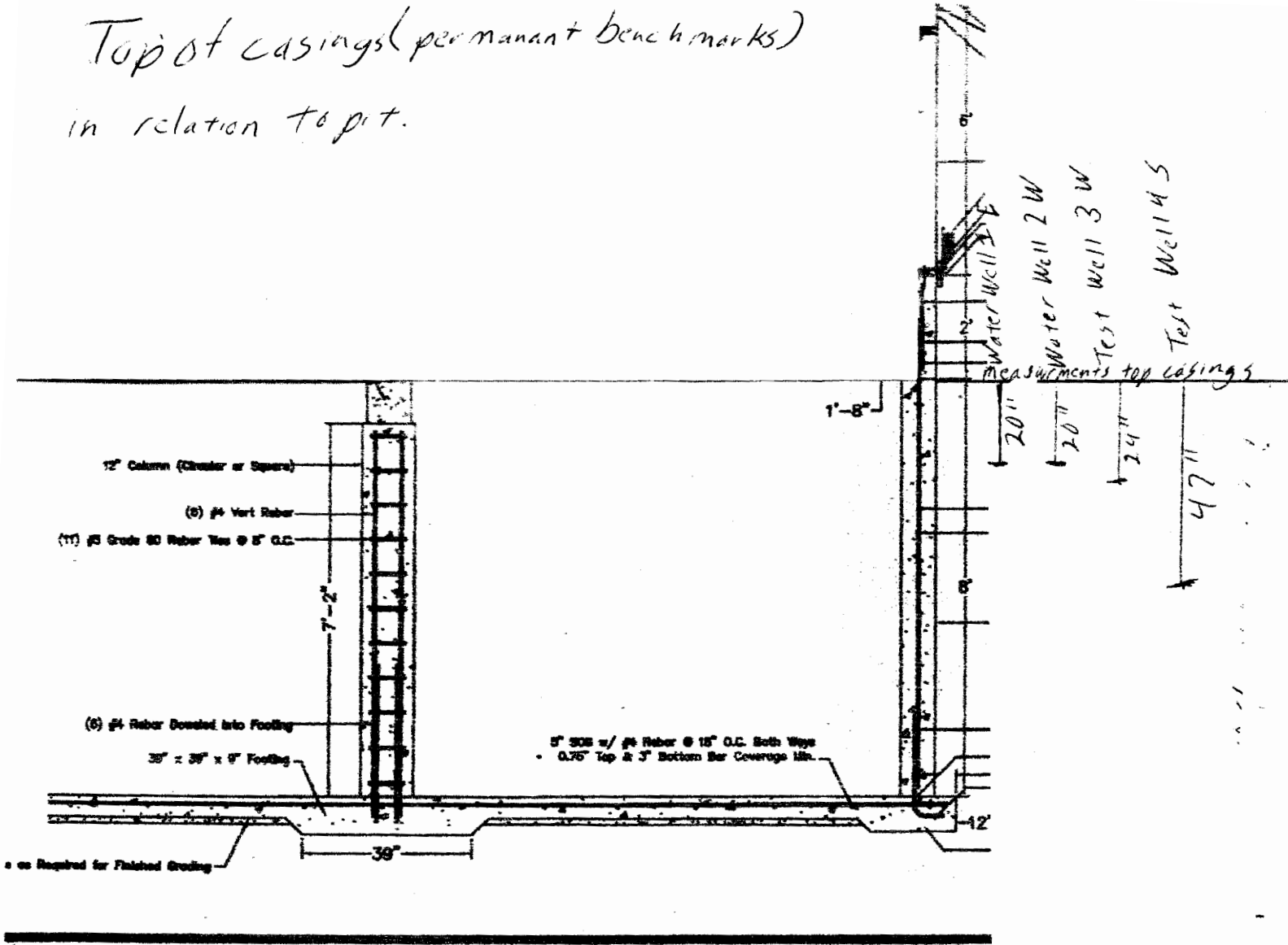


Brian Yost historic static water levels and total depth measurments.

[illegible]

Field notes and deviations from GMP ;

Top of casings (permanent benchmarks)
in relation to pit.



Brian Yost ground well monitoring plan

My monitoring wells are already completed. Included is a well log from the well drillers showing how they did them. Two of the wells are monitoring wells, the other two are water supply wells that supply water to my barns. I have one upgradient well and three downgradient wells. Also included is a map showing the locations of the wells.

I am including Peterson Irrigation's well log to show how the wells were constructed. I poured a two foot pad around each test well, then anchored a large steel pipe on the it with a lid and a padlock. I will have steel pipes cemented in the ground to protect my water wells.

I plan to check the wells sometime in May. I will first inspect the well pad, the casing, well cap protective casing, elevation mark and locks, noting anything that needs attention. Then I plan to check static water level with a weighted tape measure, drop it until I hear it hit the water, since it is only about 7 feet . Then I will let it drop to the bottom of well, to measure the depth of my well. I will measure to the top of casing since that is my permanent benchmark. Included is a survey showing the height of my wells in relation to my hog barn.

To purge the well I plan to use my air compressor. I will do this by putting a hose down wells three and four and run it until the required amount of water is run out of my well. I figured the volume of my casing, run my air compressor at 25 psi, and then collected the water. I had 19 gallons per minute. For well three I need 30 gallons, so I will run it for 2 minutes. For well four I need 36.5 gallons so I will run it for 2 minutes. The water wells are running constantly so they will not need purging.

To collect the water samples I will drop a clean cup down wells three and four, decontaminating it with non-phosphate soap and rinsing it with distilled water between wells, and dumping it into clean containers provided by SDK laboratories. For the water wells one and two I will go in the barn and collect it in clean containers from a faucet.

I will also include;

- Base map with monitoring wells;
- Table compiling historic static water levels and elevations;
- Table compiling historic analytical results with excessive concentrations including total nitrogen;
- A copy of field notes and/or field data sheet;
- A copy of analytical laboratory reports for the sample results;
- Chain of custody records;
- A description of any deviations from the GMP that occurred during the sampling event and reasons for the deviation.

10/1/2017
10/1/2017
10/1/2017

Note: The well drillers said they hit water at 7.5 feet, I don't believe that's right. We did extensive excavating before the project, we hit water at 10.5 feet, static water level is at 7 feet. There is a three foot layer of clay right above water line. We dug a hole 9 feet deep, left it sit for about a week, and had no water coming into the hole. It seems the static water level has come up some, it was very dry when we checked it originally, been wetter since.