

WATER WELL RECORD Form WWC-5

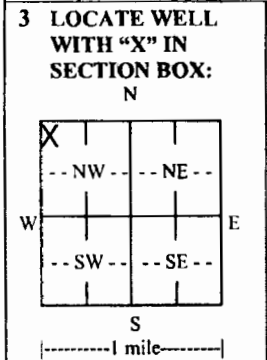
Original Record Correction Change in Well Use

Division of Water Resources App. No.

Well ID MW-4

1 LOCATION OF WATER WELL: County: Seward Fraction NW 1/4 NW 1/4 NW 1/4 NW 1/4 Section Number 32 Township Number T 34 S Range Number R 33 E W

2 WELL OWNER: Last Name: Frontier Fuel First: P.O. Box 148 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: Liberal State: KS ZIP: 67905 1421 N Western Ave, Liberal, KS



4 DEPTH OF COMPLETED WELL: 195 ft.
 Depth(s) Groundwater Encountered: 1) 195 ft.
 2) ft. 3) ft., or 4) Dry Well
 WELL'S STATIC WATER LEVEL: 176.61 ft.
 below land surface, measured on (mo-day-yr) 6/20/17
 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: 8.5 in. to ft. and in. to ft.

5 Latitude: 37.053692 (decimal degrees)
Longitude: 100.940059 (decimal degrees)
 Horizontal Datum: WGS 84 NAD 83 NAD 27
 Source for Latitude/Longitude: EPOCH
 GPS (unit make/model:) (WAAS enabled? Yes No)
 Land Survey Topographic Map
 Online Mapper:
6 Elevation: 2859.50 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 MW-4
 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 155 ft., Diameter in. to ft., Diameter in. to ft.
 Casing height above land surface -6 in. Weight lbs./ft. Wall thickness or gauge No. Sch 40
 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 155 ft. to 195 ft., From ft. to ft., From ft. to ft.
 GRAVEL PACK INTERVALS: From 152 ft. to 195 ft., From ft. to ft., From ft. to ft.

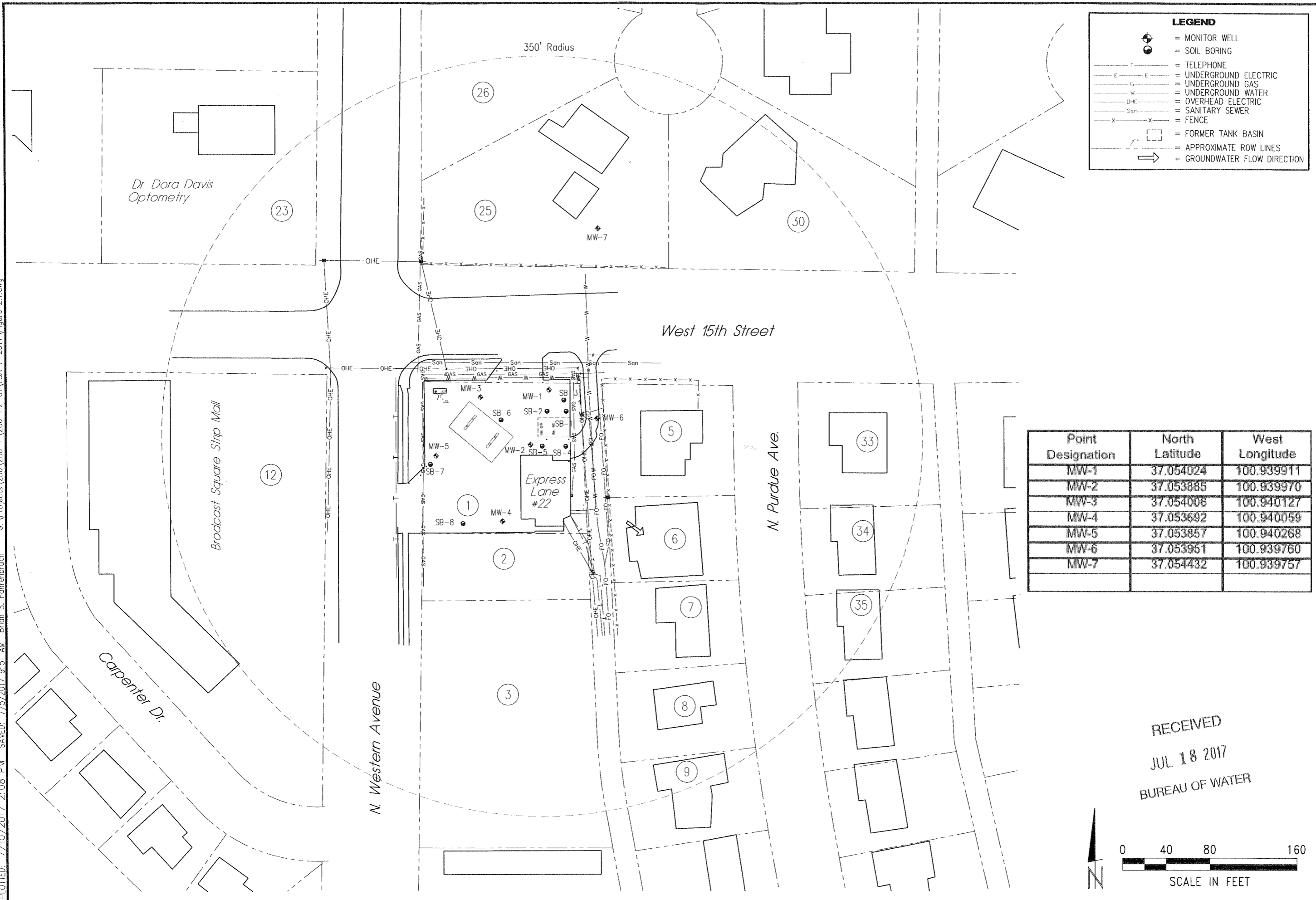
9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other concrete 0-1ft
 Grout Intervals: From 1 ft. to 152 ft., From ft. to ft., From ft. to ft.
 Nearest source of possible contamination:
 Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage
 Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well
 Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well/Gas Well
 Other (Specify)
 Direction from well? Distance from well? ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	0.5	Concrete	134	178	Clay and caliche with sand and gravel
0.5	5	Clayey Silt	178	197	Sand with gravel, caliche and clay
5	24	Sand with clay and caliche			
24	36	Clayey silt and caliche with sand			
36	46	Sand			
46	63	Clayey Silt with sandy clay and caliche			
63	72	Sand with sandy clay			
72	123	Clay and caliche with sand and gravel			
123	134	Sandy Clay with caliche and sand			

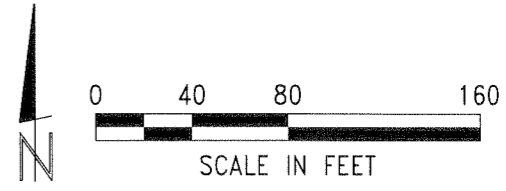
Notes: Express Lane #22 site; KDHE project code: U1-088-14879

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) 6/16/17 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 881 This Water Well Record was completed on (mo-day-year) 7/11/17 under the business name of Woolter Pump and Well Signature

PLOTTED: 7/10/2017 2:08 PM SAVED: 7/5/2017 9:51 AM Brian S. Fahrenbruch G:\Projects\286\286-P2-01\LSA 7-2017\Figure 2.1.dwg



Point Designation	North Latitude	West Longitude
MW-1	37.054024	100.939911
MW-2	37.053885	100.939970
MW-3	37.054006	100.940127
MW-4	37.053692	100.940059
MW-5	37.053857	100.940268
MW-6	37.053951	100.939760
MW-7	37.054432	100.939757



RECEIVED
JUL 18 2017
BUREAU OF WATER

REVISIONS	BY
MILCO Environmental Services, Inc. Kearney, NE (308) 237-5923 McCook, NE (308) 345-4741	
EXPRESS LANE #22 SITE BASE MAP - 350' RADIUS 1421 N. WESTERN AVENUE - LIBERAL, KANSAS U1-088-14879	
SCALE: AS SHOWN	PROJECT NO. M286-P2-01
DATE: JULY, 2017	FIELD BOOK M&A DWG NO.
DRAWN BY: BSF	APRVD BY:
SHEET	
FIGURE 2.1	

This document and the data and designs incorporated herein, as an instrument of professional service, is the property of MILCO and is not to be used in whole or in part, for any other project without the written authorization of MILCO.