

**WATER WELL RECORD**

**Form WWC-5**

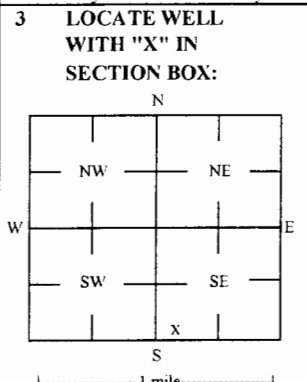
Division of Water Resources App. No.

Well ID **MW4**

Original Record  Correction  Change in Well Use

**1 LOCATION OF WATER WELL:** County Ellis Fraction SE ¼ SW ¼ SW ¼ SE ¼ Section Number 32 Township Number T 13 S Range Number R 18 E  W

**2 WELL OWNER:** Last Name: Fort Hays State University First:                      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:   
 Business: Fort Hays State University  
 Address: 411 Lyman  
 Address:                       
 City: Hays State: KS ZIP:                     



**4 DEPTH OF COMPLETED WELL:** 25 ft  
 Depth(s) Groundwater Encountered: 1)                      ft  
 2)                      ft 3)                      ft, or 4)  Dry Well  
 WELL'S STATIC WATER LEVEL: 16.59 ft  
 below land surface, measured on (mo-day-yr) 6/26/2017  
 above land surface, measured on (mo-day-yr)                       
 Pump test data: Well water was                      ft after                      hours pumping                      gpm  
 Water well was                      ft after                      hours pumping                      gpm  
 Estimated Yield:                      gpm  
 Bore Hole Diameter: 7.25 in to                      ft, and                      in to                      ft

**5 Latitude:** 38.87144 (decimal degrees)  
**Longitude:** 99.34360 (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:** 1990.26 ft  Ground Level  TOC  
 Source:  Land Survey  GPS  Topographic Map  
 Other                     

**7 WELL WATER TO BE USED AS:**

1 Domestic:  Household  Lawn & Garden  Livestock  Irrigation  Feedlot  Industrial

2  Public Water Supply: well ID                       
 3  Dewatering: how many wells?                       
 4  Aquifer Recharge: well ID                       
 5  Monitoring: well ID **MW4**  
 6 Environmental Remediation: well ID                       
 7  Air Sparge  Soil Vapor Extractor  Recovery  Injection

8  Oil Field Water Supply: lease                       
 9 Test Hole: well ID                       
 Cased  Uncased  Geotechnical  
 10 Geothermal: How many bores?                       
 a) Closed Loop  Horizontal  Vertical  
 b) Open Loop  Surface Discharge  Inj. of Water  
 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 2 in. to 10 ft, Diameter                      in. to                      ft, Diameter                      in. to                      ft,  
 Casing height above land surface -0.56 in. Weight                      lbs./ft. Well 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 10 ft. to 25 ft. From                      ft. to                      ft. From                      ft. to                      ft.  
 GRAVEL PACK INTERVALS: From 8 ft. to 25 ft. From                      ft. to                      ft. From                      ft. to                      ft.

**9 GROUT MATERIAL:**  Neat cement  Cement grout  Bentonite  Other Concrete: 0-0.5'  
 Grout intervals: From 0.5 ft. to 8 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? SE Distance from well? ~165 ft

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	0.3	Topsoil, silt			
0.3	11	Silt			
11	15	Silty clay			
15	17	Silty sand			
17	19	Sand, fine to coarse			
19	25	Sand, fine to coarse, with silty clay fingers			

Notes: KDHE ID: Fort Hays State University Power Plant; U6-026-14679  
 Target of monitoring well is shallow groundwater, <20' of grout was installed at the direction of KDHE.

**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) 6/13/17 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) 7/10/17 under the business name of Larsen & Associates, Inc. Signature

# SMH CONSULTANTS

June 28, 2017

Larsen & Associates, Inc.  
 Jessica Chapman  
 1311 East 25<sup>th</sup> Street, Suite B  
 Lawrence, Kansas 66046  
 Email: Jess@larsenenvironmental.com

RE: Project No. 1706MN1174

Jessica:

The following is the information requested on a Monitoring Well Site, Fort Hays State University Power Plant, 411 Lyman Street, Hays, Ellis County, Kansas.

Point	North Coord.	East Coord.	Distance SW Cor. North	From S.32 East	Elev. Top Of Rim or PK Nail	Elev. Top of PVC Pipe	Latitude North	Longitude West
SW Corner S.32-T13S-R18W	10000	10000						
MW1	10062.98	13354.53	62.98	3354.53	1988.48	1988.09	38.87087	99.34330
MW2	10131.10	13380.69	131.10	3380.69	1989.19	1988.89	38.87106	99.34321
MW3	10054.91	13522.35	54.91	3522.35	1988.33	1988.13	38.87084	99.34272
MW4	10268.30	13269.71	268.30	3269.71	1990.82	1990.26	38.87144	99.34360
MW5	10040.07	13306.50	40.07	3306.50	1988.06	1987.72	38.87081	99.34347
MW6	10027.19	13415.01	27.19	3415.01	1986.79	1986.47	38.87077	99.34309
Site BM	10031.69	13402.12	31.69	3402.12		BM Elevation = 1989.99		

BM Description: "□" Square cut on light pole base #639.

MW1, MW2, MW3, MW5, MW6 are in the: SW¼ SE¼ SW¼ SE¼ S.32-T13S-R18W  
 MW4 is in the: SE¼ SW¼ SW¼ SE¼ S.32-T13S-R18W

If you have any questions, please do not hesitate in giving us a call.

Sincerely,



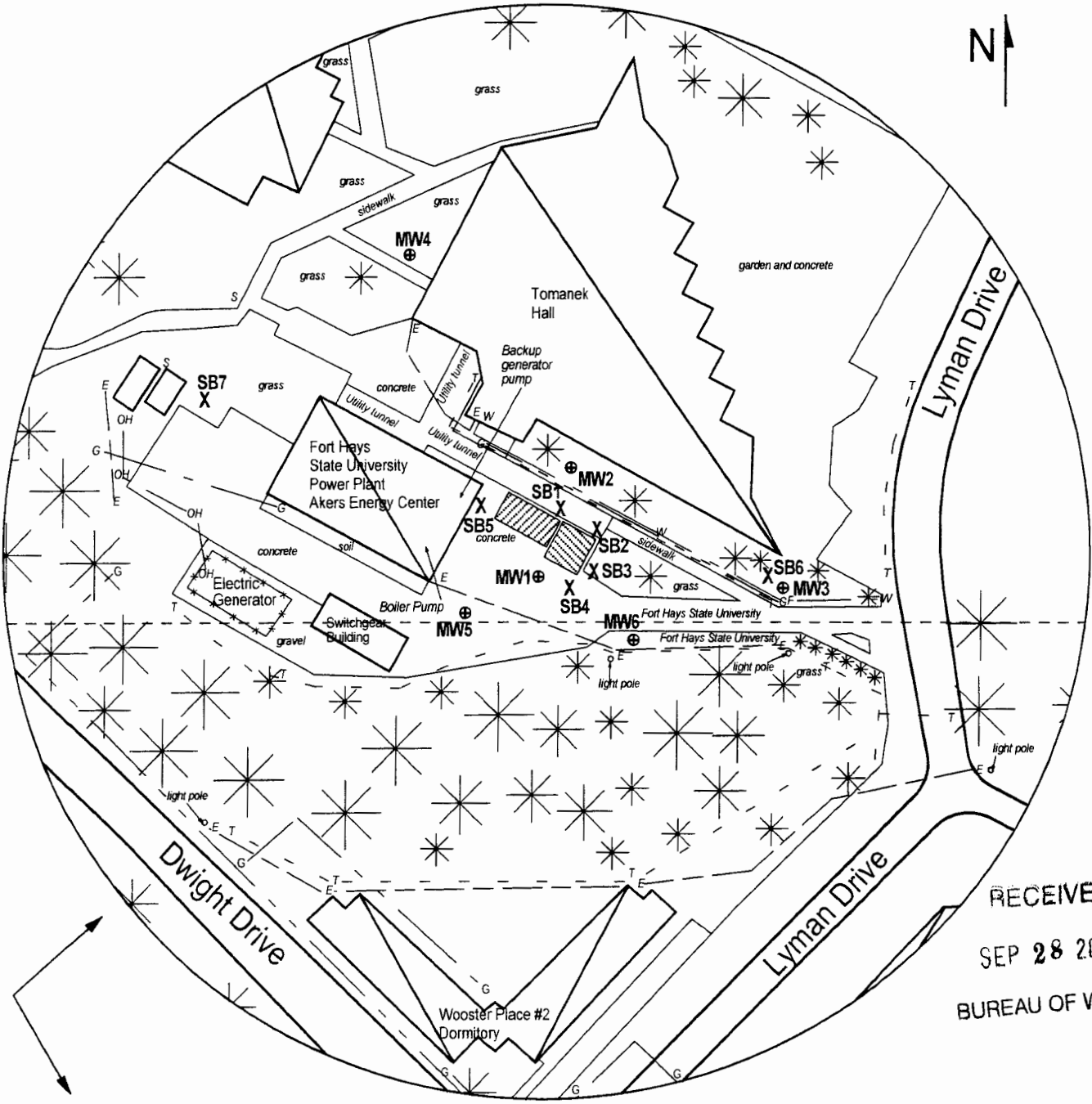
Tim Sloan, L.S.  
 SMH CONSULTANTS

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BUREAU OF WATER

NOTE: Figures exhibited within this report are only to be used within the context of this report. Placement of property lines, wells, structures, and roads is based on the available information from county appraiser maps, surveys, site visits, and/or previous vendor reports and should be considered approximate.



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Estimated Groundwater  
 Flow Direction

FIGURE 2.1 - 350 FT RADIUS AREA BASE MAP

**LEGEND:**

- Approximate Location of Former UST Basin
- Approximate Location of Active UST Basin
- Building with Basement
- Approximate Location of Property Line
- Monitoring Well (Installed 6/13-14/17)
- Soil Boring (Drilled 6/14-15/17)
- Sewer Cover
- Electric Lines (2 - 6 ft BGS)
- Gas Lines (2 - 6 ft BGS)
- Overhead Lines (25-40 ft high)
- Telephone Lines (2 - 6 ft BGS)



**PROJECT:**  
 Fort Hays State University  
 Power Plant  
 411 Lyman St.  
 Hays, KS  
 KDHE ID: U6-026-14679  
 Date: 6/26/17



1311 E 25th St., Suite B (785) 841-8707 office  
 Lawrence, KS 66046 (785) 865-4282 fax

NOTE Utility depths, heights and locations are approximate.