

1 LOCATION OF WATER WELL: Fraction Section Number Township Number Range Number
 COUNTY: 088 SEWARD NW 1/4 NW 1/4 NE 1/4 32 T 34 S R 34 W

Distance and direction from nearest town or city street address of well if located within city?
 APPROX. 5 MILES WEST OF LIBERAL

2 WATER WELL OWNER: ENGEL, JACK Board of Agriculture, Division of Water Resources
 RR#, St. Address, Box #: 1110 W. JORDAN AVE.
 City, State, ZIP code: LIBERAL, KS 67901- Application Number: 42,492

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: 4 DEPTH OF COMPLETED WELL 668 ELEVATION: 0
 Depth(s) Groundwater Encountered 1. 0 ft. 2. 0 ft. 3. 0 ft.
 WELL'S STATIC WATER LEVEL 175 ft. below land surface measured on mo/day/yr 06/12/97
 Pump test data: Well water was 244 ft. after 4 hours pumping 1410 gpm
 Estimated Yield 1410 gpm: Well water was 0 ft. after 0 hours pumping 0 gpm
 Bore Hole Diameter 24 in. to 668 ft., and in. to 0 ft.
 WELL WATER TO BE USED AS: 02 IRRIGATION
 Was a chemical/bacteriological sample submitted to department? No ;
 If yes, mo/day/yr sample was submitted Water well disinfected? Yes

5 TYPE OF BLANK CASING USED: 01 STEEL CASING JOINTS: WELDED
 Blank casing diameter 16 in. to 668 ft., Dia in. to 0 ft., Dia in. to 0 ft.
 Casing height above land surface 12 in., weight 42 lbs/ft. Wall thickness or gauge No. .250
 TYPE OF SCREEN OR PERFORATION MATERIAL: 01 STEEL
 SCREEN OR PERFORATION OPENINGS ARE: 01 CONT. SLOT

SCREEN PERFORATED INTERVALS: From 340 ft. to 560 ft., From 0 ft. to 0 ft.
 From 583 ft. to 663 ft., From 0 ft. to 0 ft.
 GRAVEL PACK INTERVALS: From 20 ft. to 236 ft., From 0 ft. to 0 ft.
 From 236 ft. to 668 ft., From 0 ft. to 0 ft.

6 GROUT MATERIAL 03 BENTONITE
 Grout Intervals: From 0 ft. to 20 ft., From 0 ft. to 0 ft., From 0 ft. to 0 ft.
 What is the nearest source of possible contamination: NONE OBSERVED
 Direction from well? How many feet? 0

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	2	02 SILT			
2	10	03 SILTY CLAY			
10	18	04 SANDY CLAY			
18	25	04 SANDY CLAY 31 CALICHE 07 FINE SAND			
25	47	06 VERY FN SAND 01 CLAY			
47	71	04 SANDY CLAY 31 CALICHE 07 FINE SAND			
71	85	06 VERY FN SAND 01 CLAY			
85	97	04 SANDY CLAY			
97	116	05 SAND 13 FINE GRAVEL			
116	142	04 SANDY CLAY			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was Constructed under my jurisdiction and was completed on (mo/day/year) 06/07/97 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 145 This Water Well Record was completed on (mo/day/yr) 06/18/97 under the business name of HENKLE DRILLING & SUPPLY by (signature)

(Continued)

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FROM	TO	LITHOLOGIC LOG
142	180	04 SANDY CLAY 20 LIMESTONE
167	180	04 SANDY CLAY 20 LIMESTONE
180	209	05 SAND 01 CLAY
209	220	04 SANDY CLAY
220	278	05 SAND 01 CLAY
278	315	04 SANDY CLAY 07 FINE SAND
315	321	20 LIMESTONE
321	341	04 SANDY CLAY 20 LIMESTONE
341	373	05 SAND 01 CLAY
373	379	04 SANDY CLAY 20 LIMESTONE
379	420	05 SAND 20 LIMESTONE 01 CLAY
420	488	05 SAND 01 CLAY
488	509	07 FINE SAND 01 CLAY
509	550	05 SAND 01 CLAY
550	560	07 FINE SAND 01 CLAY 20 LIMESTONE
560	580	01 CLAY 20 LIMESTONE 05 SAND
580	600	05 SAND 20 LIMESTONE 31 CALICHE
600	665	05 SAND 01 CLAY
665	675	01 CLAY 07 FINE SAND
675	700	19 SHALE

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by (signature) *Bruce J. Reichmuth*