WATER WELL RECORD Form WWC-5 KSA 82a-1212

1 LOCATION OF WATER WELL: County: CRAWFORD C | Fraction: SW ¼ SW ¼ NE ¼ | Section Number: 16 | Township Number: T 31 S | Range Number: R 22 E

Distance and direction from nearest town or city street address of well if located within city?

2 WATER WELL OWNER: Inter-Chem Coal Company

RR#, St. Address, Box #: 1887 E. 71st

City, State, ZIP Code: TULSA OKLAHOMA 74136

Board of Agriculture, Division of Water Resources Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: N / NW / NE / W / X / E / SW / SE / S; 1 Mile

4 DEPTH OF COMPLETED WELL 55.2 ft. ELEVATION: 885 (ground level)

Depth(s) Groundwater Encountered 1. — ft. 2. — ft. 3. —

WELL'S STATIC WATER LEVEL 54.0 ft. below land surface measured on mo/day/yr 11/30/87

Pump test data: Well water was ... ft. after ... hours pumping ...

Est. Yield ... gpm: Well water was ... ft. after ... hours pumping ...

Bore Hole Diameter 6 1/4 in. to ... ft., and ... in. to ...

WELL WATER TO BE USED AS: 1 Domestic 2 Irrigation 3 Feedlot 4 Industrial 5 Public water supply 6 Oil field water supply 7 Lawn and garden only 8 Air conditioning 9 Dewatering (10) Observation well 11 Injection well 12 Other (Specify below) ...

Was a chemical/bacteriological sample submitted to Department? Yes ... No X ...; If yes, mo/day/yr sample was mitted

Water Well Disinfected? Yes No

5 TYPE OF BLANK CASING USED: (2) PVC; 1 Steel 3 RMP (SR) 4 ABS 5 Wrought iron 6 Asbestos-Cement 7 Fiberglass 8 Concrete tile 9 Other (specify below) ...

CASING JOINTS: (Glued) Clamped Welded Threaded

Blank casing diameter 2 in. to ... ft., Dia ... in. to ... ft., Dia ... in. to ...

Casing height above land surface 36 in., weight ... lbs./ft. Wall thickness or gauge No. STEEL pipe

TYPE OF SCREEN OR PERFORATION MATERIAL: (7) PVC; 1 Steel 2 Brass 3 Stainless steel 4 Galvanized steel 5 Fiberglass 6 Concrete tile 8 RMP (SR) 9 ABS 10 Asbestos-cement 11 Other (specify) ... 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE: (3) Mill slot; 1 Continuous slot 2 Louvered shutter 4 Key punched 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) ... 11 None (open hole)

SCREEN-PERFORATED INTERVALS: From 50.2 ft. to 55.2 ft., From ... ft. to ...

From ... ft. to ... ft., From ... ft. to ...

GRAVEL PACK INTERVALS: From 49.2 ft. to 55.2 ft., From ... ft. to ...

From ... ft. to ... ft., From ... ft. to ...

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout (3) Bentonite 4 Other ...

Grout Intervals: From ... ft. to ... ft., From ... ft. to ... ft., From ... ft. to ...

What is the nearest source of possible contamination:

1 Septic tank 2 Sewer lines 3 Watertight sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below) none DJJ

Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	1.7	Topsoil/Clay			
1.7	14.2	CLAY			
14.2	16.0	CLAYSTONE			
16.0	26.10	SHALE			
26.10	47.0	SHALE			
47	49.4	SHALE			
49.4	49.6	SHALE			
49.6	50.2	MUDSTONE			
50.2	52.10	SHALE			
52.0	52.3	MUDSTONE			
52.3	53.4	SHALE			
53.4	53.6	LIMESTONE			
53.6	54.7	COAL			
54.7	55.2	SHALE			

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7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and completed on (mo/day/year) 2-29-87 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 419 This Water Well Record was completed on (mo/day/yr) 2-29-87 under the business name of FREDDY VANS by (signature) Fred VanBuskirk

INSTRUCTIONS: Use typewriter or ball point pen, PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send three copies to Kansas Department of Health and Environment, Division of Environment, Environmental Geology Section, Topeka, KS 66620. Send one to WATER WELL OWNER and retain one for your records.