

H & C OIL OPERATING, INC.
P.O. Box 86
Plainville, KS 67663
785-434-7434 Phone/785-688-4200 Fax

Water Well

I, **Bette Tien**, hereby after this date, **April 16, 2012** or
after H & C Oil Operating, Inc. moves off (well name) **Tien 28-3**
Sec. 28 T. 6S R. 23W. County **Graham** State **Kansas** takes all and
full responsibilities of water well drilled on lease.

Drilled for the purpose of supplying H & C Oil Operating, Inc. with water to drill
above said lease.

Signed: Bette Tien
Bette Tien, Land Owner

Signed: Charles R. Ramsey
H & C Oil Operating Representative

WATER WELL RECORD

Form WWC-5

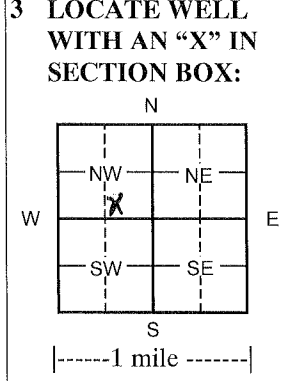
Division of Water Resources App. No. 20110343

1 LOCATION OF WATER WELL: Graham	Fraction	Section Number	Township Number	Range Number
	W2 ¼ SW ¼ SE ¼ NW ¼	28	T 6 S	R 23 <input type="checkbox"/> E <input checked="" type="checkbox"/> W

Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here
North of Hill city to Y Rd—West to 250th Ave—1 ½ north—1/2 west

Global Positioning System (GPS) information:
 Latitude: _____ (in decimal degrees)
 Longitude: _____ (in decimal degrees)
 Elevation: _____
 Datum: WGS 84, NAD 83, NAD 27
 Collection Method:
 GPS unit (Make/Model: _____)
 Digital Map/Photo, Topographic Map, Land Survey
 Est. Accuracy: <3 m, 3-5 m, 5-15 m, >15 m

2 WATER WELL OWNER **Bette Tien**
 RR#, St. Address, Box # **931 W 1100 Rd**
 City, State, ZIP Code **Prairie View, KS 67664**



4 DEPTH OF COMPLETED WELL 205 ft.
 Depth(s) Groundwater Encountered (1) _____ ft. (2) _____ ft. (3) _____ ft.
 WELL'S STATIC WATER LEVEL _____ ft. below land surface measured on mo/day/yr _____
 Pump test data: Well water was _____ ft. after _____ hours pumping _____ gpm
 EST. YIELD _____ gpm: Well water was _____ ft. after _____ hours pumping _____ gpm
 WELL WATER TO BE USED AS: Public water supply Geothermal Injection well
 Domestic Feedlot Oil field water supply Dewatering Other (Specify below)
 Irrigation Industrial Domestic-lawn & garden Monitoring well
 Was a chemical/bacteriological sample submitted to Department? Yes No
 If yes, mo/day/yr sample was submitted _____
 Water Well Disinfected? Yes No

5 TYPE OF CASING USED: Steel PVC Other _____
 CASING JOINTS: Glued Clamped Welded Threaded
 Casing diameter 4.5 in. to 165 ft., Diameter _____ in. to _____ ft., Diameter _____ in. to _____ ft.
 Casing height above land surface 18 in., Weight 2.38 lbs./ft. Wall thickness or gauge No. .248

TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel PVC Other (Specify) _____
 Brass Galvanized Steel None used (open hole)
SCREEN OR PERFORATION OPENINGS ARE:
 Continuous Slot Mill slot Gauze wrapped Torch cut Drilled holes None (open hole)
 Louvered shutter Key punched Wire wrapped Saw cut Other (specify) _____
SCREEN-PERFORATED INTERVALS: From 165 ft. to 205 ft., From _____ ft. to _____ ft.
 From _____ ft. to _____ ft., From _____ ft. to _____ ft.
GRAVEL PACK INTERVALS: From 20 ft. to 205 ft., From _____ ft. to _____ ft.
 From _____ ft. to _____ ft., From _____ ft. to _____ ft.

6 GROUT MATERIAL: Neat cement Cement grout Bentonite Other _____
 Grout Intervals From 0 ft. to 20 ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.
 What is the nearest source of possible contamination:
 Septic tank Lateral lines Pit privy Livestock pens Insecticide storage Other (specify below)
 Sewer lines Cesspool Sewage lagoon Fuel storage Abandoned water well
 Watertight sewer lines Seepage pit Feedyard Fertilizer storage Oil well/gas well None
 Direction from well _____ Distance from well _____

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	2	Surface	75	113	Clay & fine sand lenses
2	15	Loess	113	140	Fine to med sand sand & gravel
15	21	Fine sand & caliche	140	142	Clay
21	28	Clay	142	171	Med sand & gravel
28	30	Caliche	171	210	Med sand & gravel
30	50	Clay caliche & fine sand strks			
50	52	Caliche hard			
52	68	Sandstone & fine sand lenses			
68	73	Caliche fine sand lenses			
73	75	Fine sand			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo/day/year) 8/1/11 and this record is true to the best of my knowledge and belief.
 Kansas Water Well Contractor's License No. 554. This Water Well Record was completed on (mo/day/year) 8-8-11
 under the business name of Woofter Pump & Well Inc. by (signature) Jay C. Woofter

INSTRUCTIONS: Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Visit us at <http://www.kdheks.gov/waterwell/index.html>.

TIEN

Bureau of Water
Geology Section
1000 SW Jackson St, Ste 420
Topeka, KS 66612-1367



COPY

Phone: 785-296-3565
Fax: 785-296-5509
rharper@kdheks.gov
www.kdheks.gov/geo

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

April 10, 2012

H & C OIL OPERATING INC
PO BOX 86
PLAINVILLE, KS 67663

Re: Appropriation of Water, Application Number 20110343 00

Dear Sir/Madam:

The Division of Water Resources, Kansas Department of Agriculture (DWR) has notified the Kansas Department of Health and Environment (KDHE) the above described Temporary Permit has been issued. The Temporary Permit originally authorized the use of groundwater to be withdrawn by means of the water supply well located as described below:

1 well located in the SW SE NW of SECT 28, T6S, R23W, Graham County, Kansas.

Temporary Permits are issued for a duration of 6 months by the DWR. After the Temporary Permit expires KDHE considers the water well abandoned and Kansas Administrative Regulation (K.A.R.) 28-30-7(a) requires abandoned water wells to be plugged or caused to be plugged by the landowner. Once a water well has been plugged, K.A.R. 28-30-4 requires a plugging report (Form WWC-5 or WWC-5 AP@) to be completed and returned to KDHE.

Please answer the following question concerning the water well. Sign on the signature line and return this letter to: KDHE, Attn: Geology Section, Bureau of Water, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367 within two weeks from the date of this letter. If this form is not returned within two weeks, this may result in a follow-up by KDHE to determine the status of the well. If you have questions or need assistance with the form please contact Richard Harper at (785) 296-3565 or by e-mail at rharper@kdheks.gov.

Sincerely,

Richard Harper, LG
Water Well Unit Chief
Geology Section/Bureau of Water

cc: KDHE
NWDO
Graham 01

RECEIVED
MAY 02 2012
BUREAU OF WATER