



KANSAS CORPORATION COMMISSION 1219074
OIL & GAS CONSERVATION DIVISION

Form must be Typed
Form must be Signed
All blanks must be Filled

For KCC Use:
Effective Date:
District #
SGA? Yes No

NOTICE OF INTENT TO DRILL

Must be approved by KCC five (5) days prior to commencing well

Form KSONA-1, Certification of Compliance with the Kansas Surface Owner Notification Act, MUST be submitted with this form.

Expected Spud Date: month day year

OPERATOR: License#
Name:
Address 1:
Address 2:
City: State: Zip:
Contact Person:
Phone:

CONTRACTOR: License#
Name:

Well Drilled For: Well Class: Type Equipment:
Oil Gas Enh Rec Storage Disposal Seismic; # of Holes Other
Infield Pool Ext. Wildcat Other
Mud Rotary Air Rotary Cable
If OWWO: old well information as follows:

Operator:
Well Name:
Original Completion Date: Original Total Depth:

Directional, Deviated or Horizontal wellbore? Yes No
If Yes, true vertical depth:
Bottom Hole Location:
KCC DKT #:

Spot Description:
- - - Sec. Twp. S. R. E W
feet from N / S Line of Section
feet from E / W Line of Section
Is SECTION: Regular Irregular?
(Note: Locate well on the Section Plat on reverse side)

County:
Lease Name: Well #:
Field Name:
Is this a Prorated / Spaced Field? Yes No
Target Formation(s):
Nearest Lease or unit boundary line (in footage):
Ground Surface Elevation: feet MSL
Water well within one-quarter mile: Yes No
Public water supply well within one mile: Yes No
Depth to bottom of fresh water:
Depth to bottom of usable water:
Surface Pipe by Alternate: I II
Length of Surface Pipe Planned to be set:
Length of Conductor Pipe (if any):
Projected Total Depth:
Formation at Total Depth:
Water Source for Drilling Operations: Well Farm Pond Other:
DWR Permit #: (Note: Apply for Permit with DWR )
Will Cores be taken? Yes No
If Yes, proposed zone:

AFFIDAVIT

The undersigned hereby affirms that the drilling, completion and eventual plugging of this well will comply with K.S.A. 55 et. seq.

It is agreed that the following minimum requirements will be met:

- 1. Notify the appropriate district office prior to spudding of well;
2. A copy of the approved notice of intent to drill shall be posted on each drilling rig;
3. The minimum amount of surface pipe as specified below shall be set by circulating cement to the top; in all cases surface pipe shall be set through all unconsolidated materials plus a minimum of 20 feet into the underlying formation.
4. If the well is dry hole, an agreement between the operator and the district office on plug length and placement is necessary prior to plugging;
5. The appropriate district office will be notified before well is either plugged or production casing is cemented in;
6. If an ALTERNATE II COMPLETION, production pipe shall be cemented from below any usable water to surface within 120 DAYS of spud date. Or pursuant to Appendix "B" - Eastern Kansas surface casing order #133,891-C, which applies to the KCC District 3 area, alternate II cementing must be completed within 30 days of the spud date or the well shall be plugged. In all cases, NOTIFY district office prior to any cementing.

Submitted Electronically

For KCC Use ONLY
API # 15 -
Conductor pipe required feet
Minimum surface pipe required feet per ALT. I II
Approved by:
This authorization expires:
(This authorization void if drilling not started within 12 months of approval date.)
Spud date: Agent:

Remember to:

- File Certification of Compliance with the Kansas Surface Owner Notification Act (KSONA-1) with Intent to Drill;
- File Drill Pit Application (form CDP-1) with Intent to Drill;
- File Completion Form ACO-1 within 120 days of spud date;
- File acreage attribution plat according to field proration orders;
- Notify appropriate district office 48 hours prior to workover or re-entry;
- Submit plugging report (CP-4) after plugging is completed (within 60 days);
- Obtain written approval before disposing or injecting salt water.
- If well will not be drilled or permit has expired (See: authorized expiration date) please check the box below and return to the address below.

Well will not be drilled or Permit Expired Date:
Signature of Operator or Agent:

For KCC Use ONLY

API # 15 - \_\_\_\_\_

**IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW**

In all cases, please fully complete this side of the form. Include items 1 through 5 at the bottom of this page.

Operator: \_\_\_\_\_

Lease: \_\_\_\_\_

Well Number: \_\_\_\_\_

Field: \_\_\_\_\_

Number of Acres attributable to well: \_\_\_\_\_

QTR/QTR/QTR/QTR of acreage: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Location of Well: County: \_\_\_\_\_

\_\_\_\_\_ feet from  N /  S Line of Section

\_\_\_\_\_ feet from  E /  W Line of Section

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  E  W

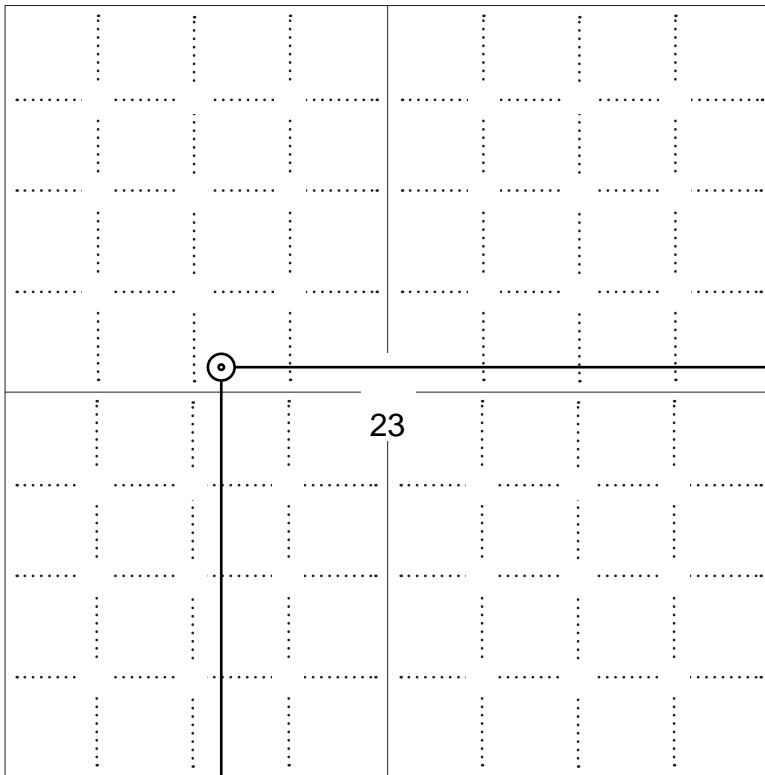
Is Section:  Regular or  Irregular

**If Section is Irregular, locate well from nearest corner boundary.**

Section corner used:  NE  NW  SE  SW

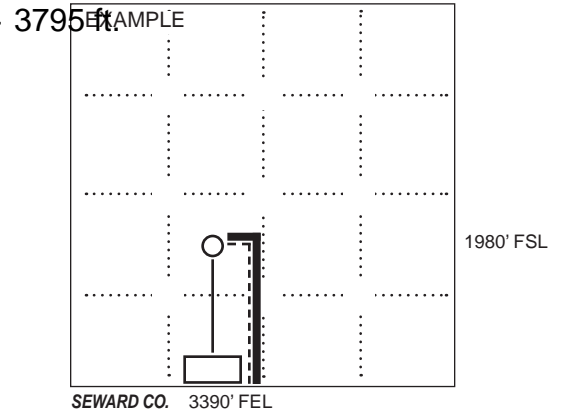
**PLAT**

Show location of the well. Show footage to the nearest lease or unit boundary line. Show the predicted locations of lease roads, tank batteries, pipelines and electrical lines, as required by the Kansas Surface Owner Notice Act (House Bill 2032). You may attach a separate plat if desired.



**LEGEND**

- Well Location
- Tank Battery Location
- Pipeline Location
- Electric Line Location
- Lease Road Location



**NOTE: In all cases locate the spot of the proposed drilling locaton.**

2805 ft.

**In plotting the proposed location of the well, you must show:**

1. The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.
2. The distance of the proposed drilling location from the south / north and east / west outside section lines.
3. The distance to the nearest lease or unit boundary line (in footage).
4. If proposed location is located within a prorated or spaced field a certificate of acreage attribution plat must be attached: (C0-7 for oil wells; CG-8 for gas wells).
5. The predicted locations of lease roads, tank batteries, pipelines, and electrical lines.

**APPLICATION FOR SURFACE PIT***Submit in Duplicate*

|   |  |  |  |
|---|--|--|--|
| Operator Name:  |  | License Number:  |  |
| Operator Address:   |  |  |  |
| Contact Person:   |  | Phone Number:  |  |
| Lease Name & Well No.:  |  | Pit Location (QQQQ):<br>____ - ____ - ____ - ____  |  |
| Type of Pit:<br><input type="checkbox"/> Emergency Pit <input type="checkbox"/> Burn Pit<br><input type="checkbox"/> Settling Pit <input type="checkbox"/> Drilling Pit<br><input type="checkbox"/> Workover Pit <input type="checkbox"/> Haul-Off Pit<br><i>(If WP Supply API No. or Year Drilled)</i>             |  | Pit is:<br><input type="checkbox"/> Proposed <input type="checkbox"/> Existing<br>If Existing, date constructed:<br>_____<br>Pit capacity:<br>_____ (bbls)   |  |
| Is the pit located in a Sensitive Ground Water Area? <input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Chloride concentration: _____ mg/l<br><i>(For Emergency Pits and Settling Pits only)</i>   |  |
| Is the bottom below ground level?<br><input type="checkbox"/> Yes <input type="checkbox"/> No   |  | Artificial Liner?<br><input type="checkbox"/> Yes <input type="checkbox"/> No  |  |
| How is the pit lined if a plastic liner is not used?  |  |  |  |
| Pit dimensions (all but working pits):    _____ Length (feet)    _____ Width (feet) <input type="checkbox"/> N/A: Steel Pits<br>Depth from ground level to deepest point: _____ (feet) <input type="checkbox"/> No Pit  |  |  |  |
| If the pit is lined give a brief description of the liner material, thickness and installation procedure.   |  | Describe procedures for periodic maintenance and determining liner integrity, including any special monitoring.  |  |
| Distance to nearest water well within one-mile of pit:<br>_____ feet    Depth of water well _____ feet  |  | Depth to shallowest fresh water _____ feet.<br>Source of information:<br><input type="checkbox"/> measured <input type="checkbox"/> well owner <input type="checkbox"/> electric log <input type="checkbox"/> KDWR   |  |
| <b>Emergency, Settling and Burn Pits ONLY:</b><br>Producing Formation: _____<br>Number of producing wells on lease: _____<br>Barrels of fluid produced daily: _____<br>Does the slope from the tank battery allow all spilled fluids to flow into the pit? <input type="checkbox"/> Yes <input type="checkbox"/> No |  | <b>Drilling, Workover and Haul-Off Pits ONLY:</b><br>Type of material utilized in drilling/workover: _____<br>Number of working pits to be utilized: _____<br>Abandonment procedure: _____<br>_____<br>Drill pits must be closed within 365 days of spud date. |  |
| Submitted Electronically  |  |  |  |

**KCC OFFICE USE ONLY**
 Liner     Steel Pit     RFAC     RFAS

 Date Received: \_\_\_\_\_ Permit Number: \_\_\_\_\_ Permit Date: \_\_\_\_\_ Lease Inspection:     Yes     No

**CERTIFICATION OF COMPLIANCE WITH THE  
KANSAS SURFACE OWNER NOTIFICATION ACT**

*This form must be submitted with all Forms C-1 (Notice of Intent to Drill); CB-1 (Cathodic Protection Borehole Intent); T-1 (Request for Change of Operator Transfer of Injection or Surface Pit Permit); and CP-1 (Well Plugging Application). Any such form submitted without an accompanying Form KSONA-1 will be returned.*

Select the corresponding form being filed:  C-1 (Intent)  CB-1 (Cathodic Protection Borehole Intent)  T-1 (Transfer)  CP-1 (Plugging Application)

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_ Fax: ( \_\_\_\_\_ ) \_\_\_\_\_

Email Address: \_\_\_\_\_

Well Location:

\_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ Sec. \_\_\_\_ Twp. \_\_\_\_ S. R. \_\_\_\_  East  West

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

*If filing a Form T-1 for multiple wells on a lease, enter the legal description of the lease below:*

**Surface Owner Information:**

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

*When filing a Form T-1 involving multiple surface owners, attach an additional sheet listing all of the information to the left for each surface owner. Surface owner information can be found in the records of the register of deeds for the county, and in the real estate property tax records of the county treasurer.*

*If this form is being submitted with a Form C-1 (Intent) or CB-1 (Cathodic Protection Borehole Intent), you must supply the surface owners and the KCC with a plat showing the predicted locations of lease roads, tank batteries, pipelines, and electrical lines. The locations shown on the plat are preliminary non-binding estimates. The locations may be entered on the Form C-1 plat, Form CB-1 plat, or a separate plat may be submitted.*

**Select one of the following:**

- I certify that, pursuant to the Kansas Surface Owner Notice Act (House Bill 2032), I have provided the following to the surface owner(s) of the land upon which the subject well is or will be located: 1) a copy of the Form C-1, Form CB-1, Form T-1, or Form CP-1 that I am filing in connection with this form; 2) if the form being filed is a Form C-1 or Form CB-1, the plat(s) required by this form; and 3) my operator name, address, phone number, fax, and email address.
- I have not provided this information to the surface owner(s). I acknowledge that, because I have not provided this information, the KCC will be required to send this information to the surface owner(s). To mitigate the additional cost of the KCC performing this task, I acknowledge that I must provide the name and address of the surface owner by filling out the top section of this form and that I am being charged a \$30.00 handling fee, payable to the KCC, which is enclosed with this form.

*If choosing the second option, submit payment of the \$30.00 handling fee with this form. If the fee is not received with this form, the KSONA-1 form and the associated Form C-1, Form CB-1, Form T-1, or Form CP-1 will be returned.*

I Submitted Electronically

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Shari Feist Albrecht, Chair  
Jay Scott Emler, Commissioner  
Pat Apple, Commissioner

Sam Brownback, Governor

August 18, 2014

JIM MIETCHEN  
Heavy Oil Treatment Solutions, LLC  
1513 MUSTANG DR  
BALDWIN CITY, KS 66006

Re: Notice of Intent to Drill  
API 15-103-21401-00-00  
MINI-FARM 14  
NW/4 Sec.23-12S-20E  
Leavenworth County, Kansas

Dear Mr. Mietchen:

Records indicate that three domestic water wells are located less than 660 feet from this proposed location. Eastern Kansas Surface Casing Order #133,891-C for Area 3, paragraph 2 states, "No well shall be drilled closer than 660 feet of an existing domestic or municipal water well without written owner notification, a copy of which must be attached to the drilling intent form during filing. Special casing and cementing requirements may be imposed in those areas producing fresh and usable water."

Please provide us with a copy of the owner notification to further the processing of your notice of intent to drill. Copies of the water well records are attached.

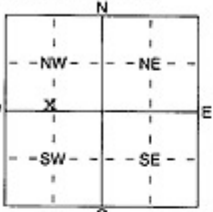
I may be contacted at 316-337-6200 if you need additional information.

Rick Hestermann  
Production Department



Scan of WWC5 Form

WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No. \_\_\_\_\_

|  |              |  |                             |   |                                  |
|--|--------------|--|-----------------------------|---|----------------------------------|
| 1 LOCATION OF WATER WELL:<br>County: <u>Leavenworth</u>  |              | Fraction<br><u>SE 1/4 SW 1/4 NW 1/4</u>  | Section Number<br><u>23</u> | Township Number<br><u>T 12 S</u>  | Range Number<br><u>R 20E E/W</u> |
| Distance and direction from nearest town or city street address of well if located within city?<br><u>6 3/4 West Linwood</u>   |              |  |                             |   |                                  |
| 2 WATER WELL OWNER: <u>Gerald Hundley</u><br>RR#, St. Address, Box # : <u>717 Locust</u><br>City, State, ZIP Code : <u>Dudora, Ks. 66025</u><br>Board of Agriculture, Division of Water Resources<br>Application Number: _____   |              |  |                             |   |                                  |
| 3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:   |              | 4 DEPTH OF COMPLETED WELL <u>XX</u> <u>105'</u> ft. ELEVATION: _____                                   |                             |   |                                  |
|   |              | Depth(s) Groundwater Encountered: 1 _____ ft. 2 _____ ft. 3 _____ ft.                                  |                             |   |                                  |
|  |              | WELL'S STATIC WATER LEVEL <u>58'</u> ft. below land surface measured on <u>mo/day/yr</u> <u>8-6-03</u> |                             |   |                                  |
| Pump test data: Well water was _____ ft. after _____ hours pumping _____ gpm   |              |  |                             |   |                                  |
| Est. Yield <u>1.5</u> gpm: Well water was _____ ft. after _____ hours pumping _____ gpm  |              |  |                             |   |                                  |
| WELL WATER TO BE USED AS:<br>1 Domestic    3 Feedlot    5 Public water supply    8 Air conditioning    11 Injection well<br>2 Irrigation    4 Industrial    6 Oil field water supply    9 Dewatering    12 Other (Specify below)   |              |  |                             |   |                                  |
| Was a chemical/bacteriological sample submitted to Department? Yes _____ No <u>X</u> ; If yes, mo/day/yr sample was submitted _____<br>Water Well Disinfected? Yes <u>X</u> No _____   |              |  |                             |   |                                  |
| 5 TYPE OF BLANK CASING USED:<br>1 Steel    3 RMP (SR)<br><u>2 PVC</u> 4 ABS  |              | 5 Wrought iron    8 Concrete tile<br>6 Asbestos-Cement    9 Other (specify below)<br>7 Fiberglass      |                             | CASING JOINTS: Glued <u>X</u> Clamped _____<br>Welded _____<br>Threaded _____ |                                  |
| Blank casing diameter <u>5"</u> in. to _____ ft. Dia _____ in. to _____ ft. Dia _____ in. to _____ ft.   |              |  |                             |   |                                  |
| Casing height above land surface <u>24"</u> in. weight <u>2.82</u> lbs./ft. Wall thickness or gauge No. <u>2.50</u>  |              |  |                             |   |                                  |
| TYPE OF SCREEN OR PERFORATION MATERIAL:<br>1 Steel    3 Stainless Steel    5 Fiberglass <u>7 PVC</u> 10 Asbestos-Cement<br>2 Brass    4 Galvanized Steel    6 Concrete tile <u>8 RMP (SR)</u> 11 Other (Specify) _____<br>9 ABS    12 None used (open hole)  |              |  |                             |   |                                  |
| SCREEN OR PERFORATION OPENINGS ARE:<br>1 Continuous slot    3 Mill slot    5 Gauzed wrapped <u>6 Sawcut</u> 11 None (open hole)<br>2 Louvered shutter    4 Key punched    6 Wire wrapped    9 Drilled holes<br>7 Torch cut    10 Other (specify) _____ ft.   |              |  |                             |   |                                  |
| SCREEN-PERFORATED INTERVALS: From <u>65'</u> ft. to <u>105'</u> ft. From _____ ft. to _____ ft.  |              |  |                             |   |                                  |
| GRAVEL PACK INTERVALS: From <u>25'</u> ft. to <u>105'</u> ft. From _____ ft. to _____ ft.  |              |  |                             |   |                                  |
| 6 GROUT MATERIAL: 1 Neat cement    2 Cement grout <u>3 Bentonite</u> 4 Other _____   |              |  |                             |   |                                  |
| Grout intervals: From <u>3'</u> ft. to <u>25'</u> ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.  |              |  |                             |   |                                  |
| What is the nearest source of possible contamination:<br>1 Septic tank <u>4 Lateral lines</u> 7 Pit privy    10 Livestock pens    14 Abandoned water well<br>2 Sewer lines    5 Cess pool    8 Sewage lagoon    11 Fuel storage    15 Oil well/Gas well<br>3 Watertight sewer lines    6 Seepage pit    9 Feedyard    12 Fertilizer storage    16 Other (specify below) _____  |              |  |                             |   |                                  |
| Direction from well? <u>East</u> How many feet? <u>200'</u>  |              |  |                             |   |                                  |
| FROM   | TO           | LITHOLOGIC LOG   | FROM                        | TO  | PLUGGING INTERVALS               |
| 0  | 7            | clay brown silty   |                             |   |                                  |
| 7  | 9            | clay orange  |                             |   |                                  |
| 9  | 17           | yellow clay  |                             |   |                                  |
| 17   | 23           | brown fine sand  |                             |   |                                  |
| 23   | 29           | yellow clay  |                             |   |                                  |
| 29   | 35           | grey clay  |                             |   |                                  |
| 35   | 36           | fine/course sand brown   |                             |   |                                  |
| 36   | <u>XX</u> 43 | grey shale   |                             |   |                                  |
| 43   | 48           | brown shaly sandstone  |                             |   |                                  |
| 48   | 57           | brown sandstone  |                             |   |                                  |
| 57   | 60           | grey sandy shale   |                             |   |                                  |
| 60   | 67           | grey sandstone   |                             |   |                                  |
| 67   | 71           | brown grey sandstone   |                             |   |                                  |
| 71   | 105          | grey sandstone   |                             |   |                                  |
| 7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) <u>8-7-03</u> and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's Licence No <u>182</u> This Water Well Record was completed on (mo/day/yr) <u>8-7-03</u><br>under the business name of <u>STRADER DRILLING CO., INC</u> by (signature) <u>[Signature]</u> |              |  |                             |   |                                  |
| INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies 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. Fee of \$5.00 for each constructed well.                           |              |  |                             |   |                                  |

Kansas Geological Survey  
Comments to webadmin@kgs.ku.edu

URL=<http://www.kgs.ku.edu/Magellan/WaterWell/index.html>  
Display Programs Updated July 2, 2014  
Data added continuously.

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

|   |   |                             |                                  |                                 |
|---|---|-----------------------------|----------------------------------|---------------------------------|
| 1 LOCATION OF WATER WELL:<br>County: <b>LEAVENWORTH</b> | Fraction<br><b>NW 1/4 NE 1/4 SW 1/4</b> | Section Number<br><b>23</b> | Township Number<br><b>T 12 S</b> | Range Number<br><b>R 20 E/W</b> |
|---|---|-----------------------------|----------------------------------|---------------------------------|

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

**1 1/2 north, 2 1/2 west of Fall Leaf**

2 WATER WELL OWNER: **Glenn E. Davis**  
 RR#, St. Address, Box # : **Rt. 4 Box 242**  
 City, State, ZIP Code : **Lawrence, KS 66044**

Board of Agriculture, Division of Water Resources  
Application Number: \_\_\_\_\_

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

|   |    |   |    |
|---|----|---|----|
| N |    |   |    |
|   | NW |   | NE |
|   |    | X |    |
|   | SW |   | SE |
| S |    |   |    |

4 DEPTH OF COMPLETED WELL: **112** ft. ELEVATION: \_\_\_\_\_ ft.

Depth(s) Groundwater Encountered 1. **92-112'** ft. 2. \_\_\_\_\_ ft. 3. \_\_\_\_\_ ft.

WELL'S STATIC WATER LEVEL **54'** ft. below land surface measured on mo/day/yr **7-24-90**

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

Est. Yield **15** gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm

Bore Hole Diameter **8 3/4** in. to \_\_\_\_\_ ft., and \_\_\_\_\_ in. to \_\_\_\_\_ ft.

WELL WATER TO BE USED AS:

|                       |                    |                          |
|-----------------------|--------------------|--------------------------|
| 5 Public water supply | 8 Air conditioning | 11 Injection well        |
| 1 Domestic            | 3 Feedlot          | 6 Oil field water supply |
| 2 Irrigation          | 4 Industrial       | 7 Lawn and garden only   |
|                       |                    | 10 Monitoring well       |

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

Water Well Disinfected? Yes **X** No \_\_\_\_\_

5 TYPE OF BLANK CASING USED:

|         |            |                   |                         |   |
|---------|------------|-------------------|-------------------------|---|
| 1 Steel | 3 RMP (SR) | 6 Asbestos-Cement | 9 Other (specify below) | CASING JOINTS: Glued <b>X</b> Clamped _____ |
| 2 PVC   | 4 ABS      | 7 Fiberglass      |                         | Welded _____                                |
|         |            |                   |                         | Threaded _____                              |

Blank casing diameter **5"** in. to **0-66** ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft.

Casing height above land surface **24"** in., weight **2.82** lbs./ft. Wall thickness or gauge No. **258**

TYPE OF SCREEN OR PERFORATION MATERIAL:

|         |                    |                 |            |                          |
|---------|--------------------|-----------------|------------|--------------------------|
| 1 Steel | 3 Stainless steel  | 5 Fiberglass    | 8 RMP (SR) | 10 Asbestos-cement       |
| 2 Brass | 4 Galvanized steel | 6 Concrete tile | 9 ABS      | 11 Other (specify) _____ |
|         |                    |                 |            | 12 None used (open hole) |

SCREEN OR PERFORATION OPENINGS ARE:

|                    |               |                  |                          |                     |
|--------------------|---------------|------------------|--------------------------|---------------------|
| 1 Continuous slot  | 3 Mill slot   | 5 Gauzed wrapped | 8 Saw cut                | 11 None (open hole) |
| 2 Louvered shutter | 4 Key punched | 6 Wire wrapped   | 9 Drilled holes          |                     |
|                    |               | 7 Torch cut      | 10 Other (specify) _____ |                     |

SCREEN-PERFORATED INTERVALS: From **66** ft. to **112** ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

GRAVEL PACK INTERVALS: From **25** ft. to **112** ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other **Hole plug**

Grout Intervals: From **0** ft. to **25** ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

What is the nearest source of possible contamination:

|                          |                 |                 |                        |                          |
|--------------------------|-----------------|-----------------|------------------------|--------------------------|
| 1 Septic tank            | 4 Lateral lines | 7 Pit privy     | 10 Livestock pens      | 14 Abandoned water well  |
| 2 Sewer lines            | 5 Cess pool     | 8 Sewage lagoon | 11 Fuel storage        | 15 Oil well/Gas well     |
| 3 Watertight sewer lines | 6 Seepage pit   | 9 Feedyard      | 12 Fertilizer storage  | 16 Other (specify below) |
|                          |                 |                 | 13 Insecticide storage |                          |

Direction from well? **south** How many feet? **220'**

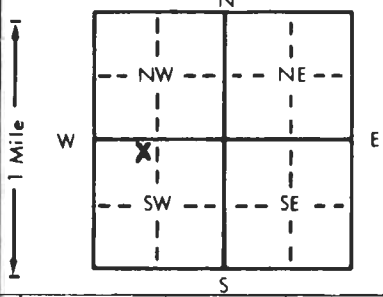
| FROM | TO  | LITHOLOGIC LOG          | FROM | TO | PLUGGING INTERVALS |
|------|-----|-------------------------|------|----|--------------------|
| 0    | 4   | Top Soil                |      |    |                    |
| 4    | 15  | Clay-Brown              |      |    |                    |
| 15   | 21  | Fine Sand-Brown         |      |    |                    |
| 21   | 35  | Clay-Brown              |      |    |                    |
| 35   | 39  | Fine Sand-Brown         |      |    |                    |
| 39   | 70  | Shaley Limestone-Yellow |      |    |                    |
| 70   | 110 | Sandstone-Grey          |      |    |                    |
| 110  | 112 | Limestone-Grey          |      |    |                    |

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) **7-24-90** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **182**. This Water Well Record was completed on (mo/day/yr) **7-27-90** under the business name of **STRADER DRILLING CO., INC.** by (signature) *Dale Skren*

1 LOCATION OF WATER WELL: Fraction NE 1/4 NW 1/4 SW 1/4 Section Number 23 Township Number T 12 S Range Number R 20 E  
 County: LEAWATH  
 Distance and direction from nearest town or city street address of well if located within city?  
1/2 N 2 EAST OF LAWRENCE

2 WATER WELL OWNER: ED. SCHEURICH  
 RR#, St. Address, Box #: 1300 NEW HAMPSHIRE  
 City, State, ZIP Code: LAWRENCE KS 66044  
 Board of Agriculture, Division of Water Resources  
 Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:



4 DEPTH OF COMPLETED WELL: 8.9 ft. ELEVATION: ..... ft.  
 Depth(s) Groundwater Encountered: 11. 30 ft. 22. 41.5 ft. 33. .... ft.  
 WELL'S STATIC WATER LEVEL: 311 ft. below land surface measured on mo/day/yr: JULY 16, 1983  
 Pump test data: Well water was 877 ft. after 1 hours pumping: 1 1/2 gpm  
 Est. Yield 1 1/2 gpm: Well water was ..... ft. after ..... hours pumping ..... gpm  
 Bore Hole Diameter: 9 3/8 in. to 4.0 ft., and 6 1/2 in. to 8.9 ft.  
 WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well  
 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Lawn and garden only 10 Observation 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 BLANK CASING USED: 5 Wrought iron 8 Concrete tile CASING JOINTS:  Glued  Clamped  
 1 Steel  3 RMP (SR)  6 Asbestos-Cement 9 Other (specify below)  Welded  
 2 PVC  4 ABS  7 Fiberglass  Threaded  
 Blank casing diameter: 5 in. to 2.9 ft., Dia. .... in. to ..... ft., Dia. .... in. to ..... ft.  
 Casing height above land surface: 2.0 in., weight ..... lbs./ft. Wall thickness or gauge No. 0.207  
 TYPE OF SCREEN OR PERFORATION MATERIAL: 7 PVC 10 Asbestos-cement  
 1 Steel  3 Stainless steel 5 Fiberglass  8 RMP (SR) 11 Other (specify) .....  
 2 Brass  4 Galvanized steel 6 Concrete tile 9 ABS 12 None used (open hole)  
 SCREEN OR PERFORATION OPENINGS ARE: 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 1 Continuous slot  3 Mill slot 6 Wire wrapped  9 Drilled holes  
 2 Louvered shutter  4 Key punched 7 Torch cut 10 Other (specify) .....  
 SCREEN-PERFORATED INTERVALS: From 2.9 ft. to 8.9 ft., From ..... ft. to ..... ft.  
 GRAVEL PACK INTERVALS: From 2.2 ft. to 8.9 ft., From ..... ft. to ..... ft.

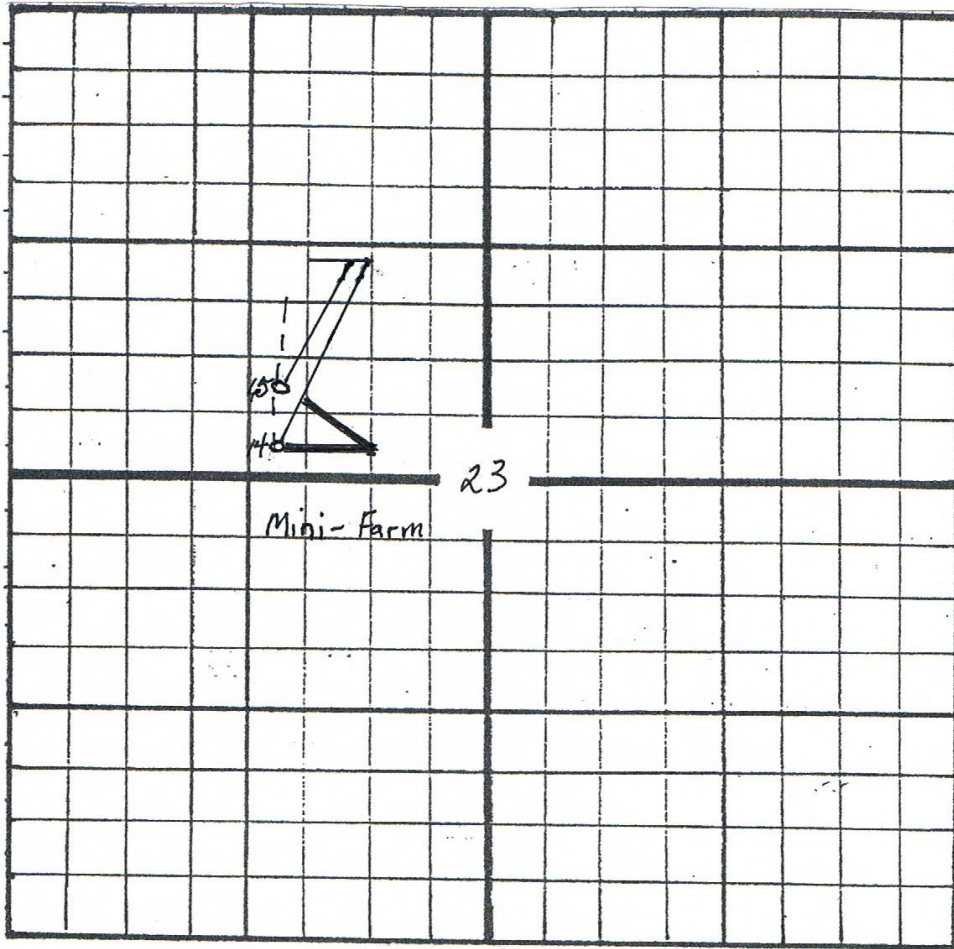
6 GROUT MATERIAL:  Neat cement 2 Cement grout  3 Bentonite 4 Other .....  
 Grout Intervals: From 0 ft. to 5 ft., From 5 ft. to 2.2 ft., From ..... ft. to ..... ft.  
 What is the nearest source of possible contamination: BENTONITE CEMENT  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 13 Insecticide storage  
 Direction from well? SOUTH EAST How many feet? APP 175'

| FROM | TO | LITHOLOGIC LOG              | FROM | TO | LITHOLOGIC LOG |
|------|----|-----------------------------|------|----|----------------|
| 0    | 3  | SOIL                        |      |    |                |
| 3    | 5  | SANDY CLAY                  |      |    |                |
| 5    | 30 | CLAY                        |      |    |                |
| 30   | 35 | SANDY CLAY                  |      |    |                |
| 35   | 41 | SHALE                       |      |    |                |
| 41   | 85 | SANDY SHALE STREAKS OF SAND |      |    |                |
| 85   | 89 | LIME                        |      |    |                |

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was  (1) constructed,  (2) reconstructed, or  (3) plugged under my jurisdiction and was completed on (mo/day/year) JULY 16 - 83 and this record is true to the best of my knowledge and belief: Kansas Water Well Contractor's License No. 119 This Water Well Record was completed on (mo/day/yr) AUG 16 - 83 under the business name of JUGMAN BROS DRILLING CO by (signature) John B. Jugman

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

onB



Property owner was notified on previously approved drilling intent.

Jim Mietchen

August 18, 2014

JIM MIETCHEN  
Heavy Oil Treatment Solutions, LLC  
1513 MUSTANG DR  
BALDWIN CITY, KS 66006

Re: Drilling Pit Application  
API 15-103-21401-00-00  
MINI-FARM 14  
NW/4 Sec.23-12S-20E  
Leavenworth County, Kansas

Dear JIM MIETCHEN:

District staff has inspected the above referenced location and has determined that the reserve pit shall be constructed **without slots**, the bottom shall be flat and reasonably level, and the free fluids must be removed. The fluids are to be removed from the reserve pit as soon as practical after drilling operations have ceased.

**If production casing is set all completion fluids shall be removed from the working pits daily. NO completion fluids or non-exempt wastes shall be placed in the reserve pit.**

The fluids should be taken to an authorized disposal well. Please call the District Office at (620) 432-2300 when the fluids have been removed. Please file form CDP-5 (August 2008), Exploration and Production Waste Transfer, through KOLAR within 30 days of fluid removal.

**A copy of this letter should be posted in the doghouse along with the approved Intent to Drill.** If you have any questions or concerns please feel free to contact the District Office at (620) 432-2300.

## Summary of Changes

Lease Name and Number: MINI-FARM 14

API/Permit #: 15-103-21401-00-00

Doc ID: 1219074

Correction Number: 1

Approved By: Rick Hestermann 08/18/2014

| Field Name  | Previous Value                                   | New Value                     |
|---|--|-------------------------------|
| Contractor License Number                         |  | 33734                         |
| Contractor Name                                   | Advise on ACO-1 --<br>Must be licensed by<br>KCC | Hat Drilling LLC              |
| Depth Of Water Well                               | 112  | 105                           |
| ElevationPDF                                      | 905 Estimated                                    | 867 Estimated                 |
| Expected Spud Date                                | 10/22/2013                                       | 08/23/2014                    |
| Feet to Nearest Water Well Within One-Mile of Pit | 867  | 425                           |
| Ground Surface Elevation                          | 905  | 867                           |
| KCC Only - Approved By                            | Rick Hestermann<br>10/17/2013                    | Rick Hestermann<br>08/18/2014 |
| KCC Only - Approved Date                          | 10/17/2013                                       | 08/18/2014                    |
| KCC Only - Date Received                          | 10/17/2013                                       | 08/18/2014                    |

Summary of changes for correction 1 continued

| Field Name                                    | Previous Value  | New Value   |
|---|---|---|
| KCC Only - Regular Section Quarter Calls      | SE SE SE NW   | SW SW SE NW   |
| LocationInfoLink                              | <a href="https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=23&amp;t2805">https://solar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=23&amp;t2805</a> | <a href="https://kolar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=23&amp;t3795">https://kolar.kgs.ku.edu/kcc/detail/locationInformation.cfm?section=23&amp;t3795</a> |
| Number of Feet East or West From Section Line | 2805  | 3795  |
| Quarter Call 3                                | SE  | SW  |
| Quarter Call 3                                | SE  | SW  |
| Quarter Call 4 - Smallest                     | SE  | SW  |
| Quarter Call 4 - Smallest                     | SE  | SW  |
| Save Link                                     | <a href="https://solar.kgs.ku.edu/kcc/detail/operatorEditDetail.cfm?docID=1163512">../../kcc/detail/operatorEditDetail.cfm?docID=1163512</a>                                    | <a href="https://kolar.kgs.ku.edu/kcc/detail/operatorEditDetail.cfm?docID=1219074">../../kcc/detail/operatorEditDetail.cfm?docID=1219074</a>                                    |

## Summary of Attachments

Lease Name and Number: MINI-FARM 14

API: 15-103-21401-00-00

Doc ID: 1219074

Correction Number: 1

Approved By: Rick Hestermann 08/18/2014

Attachment Name

Water Well Intent

Water\_Well\_1

Water\_Well\_2

Water\_Well\_3

Fluid