OCT 1 4 2011

CONSERVATION DIVISION WICHITA, KS

THE STATE CORPORATION COMMISSION **OF THE STATE OF KANSAS**

Before Commissioners:

Mark Sievers, Chairman Ward Lovd Thomas E. Wright

In the Matter of Establishing Rules for) Horizontal Wells Drilled in the Mississippi Formation in the State of Kansas.

Docket No. 12-CONS-117-CEXC CONSERVATION DIVISION

APPLICATION TO ESTABLISH RULES FOR HORIZONTAL WELLS DRILLED IN THE MISSISSIPPI FORMATION

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COMES NOW the Staff of the State Corporation Commission of the State of Kansas ("Staff") and requests that the State Corporation Commission of the State of Kansas ("Commission" or "KCC") establish and adopt rules governing horizontal wells drilled in the Mississippi formation in Kansas. In support of its application, Staff states the following.

1. Horizontal drilling in the Mississippi formation is increasing in the state at a rapid pace. Staff expects horizontal drilling operations to continue to accelerate for the foreseeable future. Staff has determined that many of the Commission's regulations, which were adopted primarily for vertical wells, are not appropriate for horizontal wells and horizontal drilling operations.

Staff held a series of meetings with industry and other interested parties to discuss 2. appropriate rules to regulate horizontal wells and horizontal drilling operations in the Mississippi Based on consensus reached at those meetings, Staff is recommending that the formation. following rules be adopted to regulate horizontal wells drilled in the Mississippi formation.

2011-10-14 14:24:23 Kansas Corporation Commission /S/ Patrice Petersen-Klein

I. Notice of Intent to Drill

3. Provided a horizontal well drilled in the Mississippi formation meets all statewide or special field rules setback requirements, the Notice of Intent to Drill may be approved by Staff without the operator having filed an application pursuant to K.A.R. 82-3-103a.

4. The Notice of Intent to Drill a horizontal well in the Mississippi formation shall be submitted on a form prescribed by the Commission, and each operator filing the form shall comply with all accompanying instructions.

5. The Notice of Intent to Drill form and accompanying instructions is attached and included in this application as Exhibit A.

6. Operators are not prohibited from filing an application for a well location exception, when necessary, pursuant to K.A.R. 82-3-108.

II. Oil & Gas Allowables

7. Horizontal wells classified as oil wells pursuant to K.A.R. 82-3-101(a)(81)(I) shall be assigned a production allowable of 200 barrels of oil per day for each 660 feet of the wells horizontal completion interval. Any remainder of less than 660 feet should result in a corresponding proportionate addition to the calculated allowable.

8. Horizontal wells classified as gas wells pursuant to K.A.R. 82-3-101(a)(81)(E) shall be assigned a production allowable of three (3) million cubic feet per day.

9. Operators are not prohibited from filing an application for a special allowable, when appropriate, pursuant to K.A.R. 82-3-203 or K.A.R. 82-3-312.

2

III. Testing Gas Wells

10. Horizontal gas wells cannot be tested in the conventional manner for testing vertical gas wells and shall be exempt from the gas well testing requirements contained in K.A.R. 82-3-303 and K.A.R. 82-3-304. Furthermore, the testing of horizontal gas wells is unnecessary based on the method established in Paragraph 8 for assigning an allowable to these wells.

IV. Gas Flaring

11. Flaring of gas from a horizontal well drilled into the Mississippi formation is authorized under the following conditions:

- a. An affidavit on a form prescribed by the Commission shall be filed within five
 (5) days after commencement of flaring. A copy of the affidavit form is attached and included in this application as Exhibit B.
- b. Prior to flaring, the operator shall ensure that the site is inspected and approved by the appropriate district office.
- c. Gas may be flared for a period not to exceed 30 producing days following the initial horizontal completion or recompletion.
- d. Flaring may be authorized by Staff upon written request for an additional 30 producing day period, if necessary.
- e. If flaring is necessary beyond the initial period and one extension period, the operator shall request any additional flaring pursuant to K.A.R. 82-3-208 or K.A.R. 82-3-314.
- f. All flared gas shall be continuously metered, measured, or monitored, and the chart or record shall be retained by the operator for two years and furnished to Commission staff within five business days of any request.

V. High Volume Pumps

12. The use of high volume pumps on horizontal wells drilled in the Mississippi formation are authorized and are exempt from the application filing requirements of K.A.R. 82-3-131.

VI. Well Completion Report

13. A well completion report, including compliance with all instructions, must be filed within the time frame specified in K.A.R. 82-3-106(e) for each horizontal well drilled in the Mississippi formation on a form prescribed by the Commission.

14. The well completion report form and accompanying instructions is attached and included in this application as Exhibit C.

VII. Staff's Recommendation

15. Staff believes it is necessary to adopt special rules for horizontal drilling into the Mississippi formation because of the rapid increase in the number of Mississippian horizontal wells being drilled and the amount of activity Staff anticipates will occur over the next several years. The special rules will allow for the wells to be permitted and operated in an expeditious manner, without the need for multiple applications for exceptions to regulations that were adopted with a purpose to regulate vertical wells.

16. Based on the discussions and experience of the horizontal drilling workgroup, and all of the related subcommittees, Staff believes these rules will not conflict with the Commission's statutory duties of preventing waste, protecting correlative rights, and protecting water resources.

17. A copy of this Application and Notice of Hearing has been sent U.S. mail postageprepaid to the current members of the Oil & Gas Advisory Committee, designated pursuant to

4

K.S.A. 55-153, Kansas Independent Oil & Gas Association (KIOGA), Eastern Kansas Oil & Gas Association (EKOGA), Kansas Petroleum Counsel (KPC), Southwest Kansas Royalty Owners Association (SWKROA), Eastern Kansas Royalty Owners Association (EKROA), and to known interested parties. Notice of the Application is being published in *The Wichita Eagle* newspaper, *The Kansas Register*, and the official county newspapers of the 12 counties where the most activity is currently occurring. Staff requests that the Commission find that this notice is adequate and satisfies due process and to waive any other notice requirements.

WHEREFORE, for the reasons set forth in this Application, Staff asks the Commission to adopt the rules requested herein for all horizontal wells drilled in the Mississippi formation in the state.

Respectfully submitted,

John McCánnón, KS Bar No. 08277 Litigation Counsel Kansas Corporation Commission Conservation Division Finney State Office Building 130 S. Market, Room 2078 Wichita, Kansas 67202-3802 (316) 337-6200 (telephone) (316) 337-6106 (facsimile)

Attorney for the Conservation Division of the State Corporation Commission of the State of Kansas and the Public Generally Cast Martin Stands

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Mas No

Effective Date: District #

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KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

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NOTICE OF INTENT TO DRILL Must be approved by KCC five (5) days prior to commencing well

Form KSONA-1, Certification of Comp ce with the Kenese Surface Comer Notification Act. MUST be submitted with this form. Spot Deportation: . Expected Spud Date: mainth der -8. R. Sec Tep _ -0000 lest from N / S Line of Section OPERATOR: Licensel t Address 1:

Address 2: City: _ State: Zio: ٠. Contact Person: ...

Phone:

Norma^{*}

CONTRACTOR: Licenset Name:

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| Length of Conductor Pipe (if any): | |
| Projected Total Depth: | <u></u> |
| Formation at Total Depth | |
| Nater Bource for Drilling Operations: | |
| Well Farm Pond Other: | |
| DWR Permit #: | |
| (Mole: Apply for Parnet with DMR | |
| Mil Conts be teken? | |
| 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 el. seq.

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

- 1. Notify the appropriate district office prior to epudding of well;
- 2. A copy of the approved notice of intent to drill shell be posted on each drilling rig;
- 3. The minimum amount of surface pipe as specified below shall be set by circulation coment 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 pleasment is necessary prior to phygolog;
- 5. The appropriate district office will be notified before will be either plugged of production caving is carriented in; 6. If an ALTERNATE II COMPLETION, production pipe shall be carriented from below any usable water to surface within 120 DAVE of eputi date. Or pursuant to Appendix "B" - Eastern Kansas surface casing order #133,001-C; which applies to the KCC Displict S great, alternate if certaining must be completed within 30 days of the spud date or the well shall be plugged. In all cases, MQT#Y district office prior to any comonling.

I hereby certify that the statements made herein are true and to the best of my knowledge and belief.

| els: Signature of Operator or Agent: | |
|--------------------------------------|--|
| For KGC Use ONLY API # 15 | Alementiber do: - File Cartification of Compliance with the Kanese Surface Owner Notification Act (KRONA-1) with Intent to Drill; - File Drill PR Application (form CDP-1) with Intent to Drill; - File Completion Form ACO-1 within 120 days of ease date; - File Completion Form ACO-1 within 120 days of ease date; - File conseque attribution plat according to Iteld prevention orders; - Notify appropriate district office 48 hours prior to workowst or re-drivy; - Submit plugging report (CP-4) after plugging is completed (within 80 days); - Obtain written approved before disposing or injecting and weter. - If well will not be drilled or permit has appred (ties: authorized application date) please check the box below and return to the address below. - Well will not be drilled or permit by the address below. - Well will not be drilled or permit by the address below. |

Exhibit A Page 1 of 12 APIR 15-

IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

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

| Operator: | Location of Well; County: |
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| Field: | Sec Twp S. R 🔲 E 🛄 W |
| Number of Acres attributable to well: OTRACTRACTRACTR of sonsage: | le Section: Regular or fragular |
| | If Section is irregular, locate well from pearent corner boundary. |

Section corner used: NE NW SE SW

PLAT

Show location of the well. Show fortage to the nearest lease or woll boundary line. Show the prodicted locations of lease roads, lank ballerise, pipelines and electrical lines, as required by the Ranses Surface Owner Notice Act (House Bill 2032). You may ettach a separate plat If desired.

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|---------------|---|--------------------------|-------------------------|----------------------------|-------|--------------------------------|--|
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- The manner in which you are using the depicted plat by identifying section lines. i.e. 1 section. 1 exciton with 8 surrounding sections.
 4 sections, etc.
- 2. The distance of the proposed drilling location from the south / north and east / west cutaids section lines.
- 3. The distance to the nearest lesse or unit boundary line (in footage).
- 4. If proposed location is located within a protected or speciet field a certificate of sorage stribution plat must be utached; (CD-7 for oil wells; CG-6 for gas wells).
- 5. The predicted locations of lesse roads, tank batteries, pipelines, and electrical lines.

For KCC Use

District #

| For KC | Ç Use: |
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SGA? Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

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| through all uncensolidated meterials that is minimum of 20 left into 1 | the underlying formation. Isotict office on plug length and placement is necessary prior to plugging; goad or production casing is comented in; |
| 4. If the well is dry hole, an agroome tableween the operator and the d | istrict office on plug length and piecement is necessary prior to plugging; |
| 5. The appropriate district office will be height before well is either plu | gged of production casing is comented in; |
| If an ALTERNATE II COMPLETION, production pipe shall be carrien | ned from below any usable water to surface within 120 BAYS of spud dele. |
| | #133,801-C, which applies to the KCC District & snee, alternate II comenting be plugged. In all causes, NOTIFY elisticit pittles prior to any camenting. |
| hereby certify that the statements made herein are into and to the best of | |
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| inte: Signature of Operator or Agent: | THE |
| en 1997 - En | 1 Remember to: |
| For NCC Use ONLY | - File Certilization of Compliance with the Kanese Surface Camer Hollication |
| API#15. | Act (KSONA-1) with Intent to Diff; |
| Conductor pipe required | - File Drill Pit Application (form) CDP-1) with Intent to Drill; |
| Minimum surface pipe required fast per ALT. [] [] II | - File Completion Form ACC-1 within 120 depx of upped date; |
| | - File acreage situation piet encoding in field providen orders: |
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Hall to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichka, Kanuss 67202 API # 16 - 88

IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

In all cases, please fully complete this side of the form, include tiens I through 5 at the bottom of this page.

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| Field: 8e | Sec. 84 Twp. 84 8. R. 8k |
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8 PLAT

Show location of the well. Show loolage to the nearest lease or unit boundary line. Show the predictest locations of lease roads, task betteries, pipelines and electrical lines, as required by the Kanses Sarlice Owner Noice Act (House Bit 2032). You may attach a separate plat if desired.



NOTE: In all cause locate the appt of the proposed drilling location.

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

- 1. The menner in which you are using the depicted plat by identifying section lines, i.e. 1 section. 1 section with 8 sussending 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 fortage).
- If proposed location is located within a prorated or spaced field a certificate of screage elifibution plat must be attained; [CD-7 lot of weils: CG-8 for gas wells).
- 5. The predicted locations of lease roads, tank betteries, pipelines, and electrical linus.

NOTICE OF INTENT TO DRILL (FORM C-1) INSTRUCTIONS

General Instructions.

- 1. Form must be typed.
- 2. Form must be signed.
- 3. All applicable blanks must be completed.

4. Form must be submitted with a completed Form KSONA-1 and the required plat map.

Section 1: Expected Spud Date. Enter the Month, Day, and Year when the operator expects to drill the subject well.

Section 2: Operator Information.

2a. License #. Enter the operator's license number. To verify KCC operator license information, check the Commission's website at http://kcc.ks.gov/conservation/oil_license.cgi or contact the Conservation Division's Licensing Department at (316) 337-6194. 2b. Name. Enter the operator's full name as it appears on operator's license.

2c. Address. Enter the operator's street or P.O. Box mailing address.

2d. City/State/Zip. Enter the operator's city, state, and zip code.

2e. Contact Person. Enter the name of the individual who will be the operator's contact person for this Intent, should Conservation Division Staff need to contact the operator about the Intent. The contact person may be the operator or the operator's agent. 2f. Phone. Enter the phone number of the contact person, so Conservation Division Staff may easily reach the contact person if necessary to discuss the Intent.

<u>Section 3: Drilling Contractor</u>. The drilling contractor is the operator that will be performing the physical operations of drilling the well. The contractor may or may not be the same as the operator listed in Section 2.

3a. License #. Enter the contractor's license number. To verify KCC operator license information, check the Commission's website at http://kcc.ks.gov/conservation/oil_license.cgi or contact the Conservation Division's Licensing Department at (316) 337-6200. 3b. Name. Enter the contractor's full name as it appears on its operator's license.

Section 4: Well Purpose; Well Class; and Type of Equipment

4a. Well Drilled For.

4a(1). Mark the appropriate box for the purpose the well is being drilled. Mark all that apply.

4a(2). For only OWWO Intents to reenter a plugged wellbore or deepen an existing wellbore, complete this section with the following information for the existing well:

4a(2)(a). Operator. The name of the last operator of the existing well.

4a(2)(b). Name. The name under which the well was last operated.

4a(2)(c). Original Completion Date. The date on which the existing well was originally completed.

4a(2)(d). Original Total Depth. Original total depth of the existing well.

4b. Well Class. Mark the appropriate box for the class of well for which drilling authority is sought.

4c. Type Equipment. Mark the appropriate box for the type of drilling equipment the contractor will use to drill the well.

<u>Section 5: Directional, Deviated or Horizontal Wellbore.</u> Mark the appropriate box to indicate whether the well for which the operator is seeking drilling authority will be a directional, deviated, or horizontal wellbore. Commission Regulation K.A.R. 82-3-103a(a) provides that the operator must notify the Commission for any hole where intended deviation from the surface to the top of the producing formation exceeds seven degrees (7°). If the answer is no, the operator may proceed to Section 6. A separate application pursuant to K.A.R. 82-3-103a is not necessary if:

- i. the operator certifies that all points of the effective completion interval will comply with statewide setback rules established in K.A.R. 82-3-108,
- ii. provides the information listed below in .pdf format along with this intent on KOLAR,
- iii. certifies that a blowout preventer will be utilized during drilling operations, and
- iv. certifies that a directional survey and all other requested information will be provided with the ACO-1 Well Completion form.

5a. **True Vertical Depth**. True vertical depth is that depth at the point of entry perpendicular to the surface as measured from the elevation of the kelly bushing on the drilling rig.

5b. Bottom Hole Location. The geographic location of the proposed bottom hole location ($\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section, Township, Range). 5c. KCC DKT #. If the operator has filed an application under K.A.R. 82-3-103a(a), enter the application's Docket Number.

5d. Effective Completion Interval. For open hole horizontal wellbore completions, the effective completion interval is the point at which the wellbore contacts the producing formation until the wellbore terminates, including any isolation packers. For cased horizontal wellbore completions, the effective completion interval is from the first perforation to the last perforation.

5e. Information to upload as .pdf file in KOLAR:

i. A brief description of the leased acreage, including a statement regarding the unitization of leased interests if necessary, and

ii. A plat map that clearly depicts each lease or unit boundary, the surface location of the wellbore (include the footages from the nearest lease or unit boundary), the proposed horizontal path of the wellbore and its terminus (including the footages from the nearest lease or unit boundary).

Section 6: Proposed Well Location and Other Information.

6a. Spot Description. Enter the spot location of the proposed well (1/4 1/4 1/4 1/4).

6b. Sec., Twp., R. Enter the Section, Township and Range in which the proposed well is located, and mark the appropriate box to indicate if the range is East or West of the Sixth Principal Meridian.

6c. Footage Location. This is where the operator reports the location of the proposed well from the North or South section line and the East or West section line. The operator should enter the number of feet the proposed well is located from the North or South section line and mark the appropriate box for the measurement to indicate if the footage is from the North or South section line. Follow the same procedure for the location of the proposed well from the East or West section line.

6d. Regular or Irregular Section. Mark the appropriate box to indicate whether the section is regular or irregular.

6e. County. Enter the county in which the proposed well is located.

6f. Lease Name and Well Number. Enter the name of the lease and the well number.

6g. Field Name. List the name of the field from which the well will produce. Field names are available on the KGS web site (http://www.kgs.ku.edu/Magellan/Field/index.html).

6h. Prorated/Spaced Field. Mark the appropriate box to indicate whether the targeted field is spaced or prorated by Commission Order. See http://kcc.ks.gov/conservation/summary_prorated_fields.pdf for a list of spaced or prorated oil and gas fields. 6i. Target Formation(s). Enter the name of the target geologic formation or formations.

6]. Nearest Lease or Unit Boundary. Enter the distance from the proposed well to the nearest lease or unit boundary.

6k. Ground Surface Elevation. Enter the elevation (from sea level) of the proposed well location.

61. Water Well Within One-Quarter Mile. Review water well records with the Kansas Geological Survey and mark the appropriate box to indicate whether there is a water well within a ¼-mile radius of the proposed well location. Water well information is available on the Survey's website, at http://www.kgs.ku.edu/Magellan/WaterWell/index.html.

6m. Public Water Supply Well Within One Mile. Review water well records with the Kansas Geological Survey and mark the appropriate box to indicate whether a public water supply well is within one mile of the proposed well.

on. Depth to Bottom of Fresh Water. Enter the number of feet from the surface to the bottom of the deepest fresh water zone in the proposed well. This number is subject to change upon review by Conservation Division Staff.

60. Depth to Bottom of Usable Water. Enter the number of feet from the surface to the bottom of the deepest usable water zone in the proposed well. This number is subject to change upon review by Conservation Division Staff.

6p. Surface Pipe By Alternate 1 or 2. Mark the appropriate box to indicate whether Alternate 1 or 2 surface casing requirements will be followed. This selection is subject to change upon review by Conservation Division Staff.

6q. Length of Surface Pipe Planned to be Set. Enter the length of surface pipe to be set in the proposed well. This number is subject to change upon review by Conservation Division Staff.

6r. Length of Conductor Pipe Required. Enter the length of conductor pipe required in the proposed well. This number is subject to change upon review by Conservation Division Staff.

6s. Projected Total Depth. Enter the projected total depth of the proposed well.

6t. Formation at Total Depth. Enter the name of the geologic formation present at the projected total depth of the proposed well. 6u. Water Source for Drilling Operations. If the water source for drilling operations at the proposed well is a well or farm pond, mark the appropriate box. If another water source will be utilized, mark the "Other" box and enter the water source for the proposed well's drilling operations in the blank provided to the right of that box.

6v. DWR Permit #. Enter the permit number given by the Division of Water Resources office. If the operator will obtain DWR Permit in the future, mark the "Note: Apply for Permit with DWR" box.

6w. Cores.

6w(1). Mark the appropriate box to indicate whether core samples will be taken.

6w(2). If yes, provide the proposed zone from which core samples will be taken.

<u>Section 7: Affidavit</u>. The Affidavit is the operator's oath that the drilling, completion, and eventual plugging of the proposed well will comply with Chapter 55 of the Kansas Statutes Annotated. The operator or its agent must read all six requirements of the Affidavit, date and sign the agreement, and provide their title/position with the operator in the appropriate blanks.

<u>Section 8: Plat.</u> For all wells, complete 8a through 8m described below, and complete the plat map showing the location of the proposed well and the preliminary estimated locations of tank batteries, pipelines, electrical lines, and lease roads. Refer to the Legend to the right of the plat map for the symbols to be used. Surrounding wells are not required on the plat map. For wells subject to a basic proration order, complete the plat map on the Intent and also provide the plat map on Form CG-8 or CO-7 as required by K.A.R. 82-3-103(a)(2)(K).

8a. API Number. To be left blank. Conservation Division Staff will assign the API Number for the proposed well.

8b. Operator. Enter the operator's full name as it appears on the operator's license.

8c. Lease. Enter the name of the lease upon which the proposed well is to be located.

8d. Well Number. Enter the number of the proposed well.

8e. Field. Enter the oil or gas field in which the proposed well is located.

8f. Number Acres Attributable to the Well. Enter the number of acres attributable to the well. An acreage attribution plat must be attached to the Intent for wells located in spaced or prorated fields (Form CO-7 for oil wells and Form CG-8 for gas wells).

8g. QTR/QTR/QTR/QTR of Acreage. Operator should enter the 1/4 1/4 1/4 1/4 Section location of the acreage attributable to the well. 8h. Location of Well: County. Enter the county in which the proposed well is located.

8i. Feet from North/South Section Line. Enter the proposed well's location, in feet, from the North or South section line and mark the appropriate box to indicate the section line used.

8j. Feet from East/West Section Line. Enter the proposed well's location, in feet, from the East or West section line and mark the appropriate box to indicate the section line used.

8k. Section, Township, Range. Enter the Section, Township, and Range in which the proposed well is to be located, and mark the appropriate box to indicate whether the range number is East or West.

81. Regular or Irregular Section. Mark the appropriate box to indicate whether the section in which the proposed well is located is a regular or irregular section.

8m. Nearest Corner Boundary (For Irregular Sections Only). Mark the appropriate box to indicate which corner boundary of the irregular section is nearest to the proposed well.

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form COP-1 May 2010 Form must be Typed

APPLICATION FOR SURFACE PIT

Submit in Duplicate

| Operator Name: | | | Lipsinee Manber: | | |
|--|--|--|---|--|--|
| | | | | | |
| Operator Address: | | | | | |
| Contact Person; | | | Phone Number; | | |
| Louise Name & Well No.: | | the Management Math Anno 19 | Pit Location (GQQQ): | | |
| Type of Pit: | Pit is: | | | | |
| Emergency Pit Burn Pit | Proposed | Exterting | SecR East [] West | | |
| Settling Pit Drilling Pit | If Examing, data co | natructed: | Feel from North / South Line of Section | | |
| Workover Pit Haul-Off Pit (#WP Supply API No. or Year Dyllow) | Pit capacity: | | Feet from East / West Line of Suction | | |
| | | (bbis) | Gounty | | |
| le the pil located is a Sansitive Ground Water A | 1988? | No | Chloride concentration: mg/. (For Everyway Pite and Datting Pite anty) | | |
| Is the bottom below ground level? | Artificial Liner? | <u>م</u> لاً | How is the pit fixed if a plantic liner is not used? | | |
| | Length (fe | | | | |
| | · · · | | (Width (fact)) [1] N/A: Bland Pite (Widt) [1] NO.Pit | | |
| Distance to means i water well within one mile o | Distance to meanest water well within one-mile of pit: Depth to shallowest lineh water feet. Source of Informations | | | | |
| feet Dupth of water well | | . meesured | | | |
| Emergency, Setting and Burn Pits ONLY: | | | over and Haul-Off Pite ONLY: | | |
| Producing Formation: | | | lerisl utilized in drilling/workovers | | |
| Berrels of fluid produced delty: | · · · · · · · · · · · · · · · · · · · | Aberdonment | | | |
| Does the slope from the tank bettery allow uil a flow into the pil? Yes No | pilled fluide to | the closed within 385 days of spint duris. | | | |
| I hereby certify that the above statements are true and correct to the best of my knowledge and belief. Date Date Signature of Applicant or Apent | | | | | |
| | | | | | |
| | | | | | |
| Date Received: Permit Number: Permit Date: Lease inspection: No | | | | | |
| Mail to: KCC - Conservation Division, 130 8. Market - Room 2078, Wichita, Kansas 67202 | | | | | |

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form GDP-1 May 2010 Form must be Typed

APPLICATION FOR SURFACE PIT

Submit in Duplicate

| Operator Name: 1a | | naturation (a dalla false) ar sine francés de la desarro | License Number: 15 | |
|---|---------------------------------|--|---|--|
| Operator Addresse: 1C | | | | |
| Context Person: 1d | | | Phone Number: 1e | |
| Leade Name & Well No.: 28 | <u></u> | | Pit Location (GGQQ): 2d | |
| Type of Pit: 2b | Pilis: 2c | •••••••••••••••••••••••••••••••••••••• | <u>2d(1)</u> | |
| Emergency Pit Burn Pit | Proposed | Edatino | Sec. 2d(2) Twp R East West | |
| Settling Pit Drilling Pit | If Existing, date con | | | |
| Workover Pit Haul-Off Pit | 20(1) | | 2d(3)_Feet from North / South Line of Section | |
| (If WP Supply API No. or Your Drilled) | Pit capacity: | - <i>201</i> , | Feet from East / West Line of Section | |
| an a | <u>2c(2)</u> | (bbis) | 2d(4) County | |
| Is the pit located in a Sensitive Ground Water A | vee? Yes | No | Chloride concentration; 21 mg/l (For Emergency Pite and Salling Pite only) | |
| Is the bottom below ground level? | Artificial Liner? | ko2ħ, | How is the pit lined if a plastic liner is not used? 21 | |
| Pit dimensione (all but working pite):2 | 2j, Length (fei | n <u>- 2</u> | | |
| Depth fro | om ground level to des | peis point: | 2j (feet) No Pit | |
| If the plt is lined give a brief description of the il material, thickness and installation procedure. | her | Describe proce liner integrity, in | dures for periodic maintenance and determining cluding any special monitoring. | |
| | Ser Street | | <u>,</u> | |
| | | | 4 | |
| | | | | |
| | | Depth to shallo Source of Inform | west fresh water <u>6</u> lest. hetion: | |
| 5 lost Depth of water well 5 lest | | meesured | well owner C electric log KDWR | |
| Emergency, Settling and Burn Pits ONLY: | | Drilling, Works | ver and Haul-Off Pita ONLY: | |
| Producing Formation: 7 | | Type of materia | l utilized in drilling/workover; 8 | |
| Number of producing wells on lesse: | | 1 | ding pits to be utilized; 8 | |
| Barrels of fluid produced delity: 7 | | Abandonment | procedure: 8 | |
| Does the slope from the tank battery allow all a flow into the pit? | pilled fluide to | Orill pits must b | e closed within 355 days of spud date. | |
| I hereby certify that the above statements are true and correct to the best of my knowledge and belief. | | | | |
| | | | | |
| 9 | Marine Million of Marine Marine | | | |
| Date | | S | nature of Applicant of Agent | |
| | KCC | OFFICE USE O | | |
| Date Received: Permit Num | ber: | Permi | t Date:Lease inspection: Yes. No | |
| Mail to: KCC - Conservation Division, 130 8. Market - Room 2076, Wichita, Kanass 67202 | | | | |

APPLICATION FOR SURFACE PIT (FORM CDP-1)

Instructions

General Instructions.

- All Notices of Intent to Drill must include an Application for Surface Τċ. Pit, even if steel pits will be used.
- Operators need to submit two copies of all CDP-1s. 2
- 3. Form must be typed.

Section 1: Operator Information.

- 1a. Operator Name. Enter the operator's full name as It appears on operator's license.
- 1b. License Number. Enter the operator's license number. To verify KCC operator license information check the Commission's website at http://kcc.iss.com/scrassmelice/sit.icense.coj or contact the Conservation Division's Licensing Department at (315) 337-6194.
- 10
- Operator Address. Enter the operator's mailing address. Contact Person. Enter the name of the individual who will be 14 the operator's contact person for this Application for Surface Pil, should Conservation Division Staff need to contact the operator about the Application for Surface Pit. The contact person may be the operator or the operator's agent.
- 1e. Phone Number. Enter the phone humber of the contact period, so that Conservation Division Staff may easily reach the contact person if necessary.

Section 2: Lease/Well/Pit Information.

- 2a. Lease Name & Well No. Enter the name of the lease, and if applicable the well number, at which the pit is or will be located.
- Type of Pit. Mark the appropriate box to indicate the type of pit. 2h Note-if the pit is a workover pit, the operator must enter the API No. or Year Drilled of the well which is to be worked over.
- Proposed or Edisting Pit. Operator should mark the appropriate 2c. box to indicate if the pit is proposed or already exists.
 - 2c(1). Existing Pits. The operator should provide the date pit was constructed.
 - Proposed and Existing Pits. The operator must provide 2c(2). the pit capacity.
- 2d. Pit Location.
 - 2d(1). % % % % Section. The operator should list the location of the pit by 14 14 14 34 Section.
 - 2d(2), Sec., Twp., and R. The operator should enter the Section, Township and Range Number in which the pit is located, and should mark either the "East" or "West" box to indicate If the Range # is East or West.
 - Footage Location. This is where the operator reports 2d(3). the location of the pit from the North or South section line and the East or West section line. Enter in the blank provide the number of feet the pit is or will be from the North or South section line and then mark the appropriate box for the measurement to indicate if the footage is from the North or South section line. Follow the serve procedure with respect to the location of the pit from the East or West section line.
 - 20(4) County. Enter the county in which the pit is or will be located.
- Sensitive Groundwater Area. Mark the appropriate box as to whether or not the pill is located in a Sensitive Groundwater 28 Area. Operators may find a listing of Sensitive Groundwater Areas in Table III of the Conservation Division's Rules and Regulations. The Commission's rules and regulations for the conservation of all and gas, inducting Table III, are available in an Adobe pdf Ne from the Conservation Division's website at <u>http://koc.ks.gov/</u> comervation/ sim.
- Chloride Concentration (for emergency and setting pits only). 2. Indicate the chloride concentration level of fluids which the pit is or will be used to contain. A sample should be taken from the sallwater tank. This micrimation is needed to determine the potential for contamination should the salt water tank discharge into the emergency plt.

- 20. Below Ground Level. Mark the enpropriate box to indicate whether the bottom of the pit is below ground level.
- 2h. Artificial Liner. Mark the appropriate box to indicate whether the bit is or will be constructed with an artificial litter.
- Other Liner. Explain how the pit is constructed if a plastic liner is 2 not used.
- Pit Dimensions (all but working pits). For all but steel pits, anter the length, width, and depth (from ground level to the despect point) in feet of the pit. If the pit is a steel pit; the operator only needs to mark the "steel pits" box. If no pits will be used, mark the "No Pit" box. 21.

Section 3: Description of Liner.

If the pit is lined, enter a brief description of the liner material. Incloses, and installation procedure.

Section 4: Description of Maintenance.

Enter a brief description of the procedures used for periodic meintenance and determining liner integrity, including any special monitoring.

Section 5: Distance to Nearest Water Well Within One Mile of Pit.

Enter the distance to the neenest water well within one mile of the pit location and the total depth of the water welt. If there are not any water wells within a one-mile radius of the pit location, the space should be left blank. Water well information is evaluable from the Kansas Geological Survey's website, or http://www.kos.ku.dth/ Magellan/Mata/Wel/Index.html.

Section 5: Shallowest Freshwater Depth.

Enter the depth to the shallowest fresh water in the area of the pit and mark the appropriate box as the source of the freshwater information.

Section 7: Emergency, Settling, and Barn Pite OMLY.

Enter the formation from which wells on the lease are producing. the number of producing wells on the lease, and the number of berrels of fluids produced daily on the lease. The operator should elso mark the appropriate box to indicate if the elope of the tank ballery allows all spilled fluids to flow in the pit.

Section 8: Drilling, Workover, and Haul-Off Pite ONLY.

Enter the type of material tillized to the drilling or workover of the well, the number of working pits to be utilized, and the procedure to be used for abandoning the pits after work at the well is complete.

Section 9: Affidevit.

Date and sign the certification that the above statements are true and correct to the best of the signee's knowledge and belief.

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

CERTIFICATION OF COMPLIANCE WITH THE KANSAS SURFACE OWNER NOTIFICATION ACT

Form ICADAA Joly 2010 Form Blatt De Typed Form Indat Lise Signed Michaelts must be Filled

This form must be submitted with all Forms C-1 (Notice of Intent to Drill): CB-1 (Cathodic Protoction Borehole Intent): T-1 (Request for Change of Operator Transfer of Injection or Surface Pri Permitty and CP-1 (Nett Plugging Application). Any such form submitted without an accompanying form KSONA-1 will be returned.

Select the corresponding form being flad: XIC-1 ment CB-1 (canade Projection Bowhole ment 14) (parallel CP-1 Project Autoritor)

| OPERATOR: License # | | | | | |
|---|---|--|--|--|--|
| Phone: () Per: () Email Address: | | | | | |
| Surface Owner Information: Neme: Address 1: Address 2 City: Stati: Zip: | When Plug a Form 7-1 involving multiple surface involves, stach on odditional sheet theory of all of the information to the left for each surface preser. Surface owner information can be beend to the records of the register of deads for the county, and in the real extents property tax records of the county important. | | | | |

If this form is being submitted with a Form C-1 (numt) or CB-1 (Cathodic Protection Bowhole Intent), you must supply the surface owners and the KGC with a plutshowing 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 platmay be submitted.

Select one of the following:

I certify that, pursuant to the Kenses Surface Owner Notice Act (House Bill 2002), I have provided the blowing 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-4, Form T-3, or Form CP-1 that I am fling in connection with this form; 2) if the form being fled is a Form C-1 or Form CB-1, the plet(s) inquired by this form; and 3) my operator name, address, phone number, fix, 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 miligate the additional cost of the KCC performing this task, I acknowledge that I am being charged a \$3500 hending the, payable to the KCC, which is enclosed with the form.

If choosing the second option, submit payment of the \$3000handling he with this form. If the fee is not received with this form, the KSONA-1 form and the essociated Form C-1, Form CB-1, Form T-1, or Form CP-1 will be returned.

I hereby certify that the statements made herein are true and correct to the best of my knowledge and belief.

| Date: | Signature of Operator or A | . Tibe: |
|-------|---|---------|
| | a an inder an | |

Mill to: KCC - Conservation Division, 1305, Merket - Room 20/8 Wichitz, Kanses 67202

Exhibit A Page 11 of 12

TOPOGRAPHIC LAND SURVEYORS OF ARKANEAS 6708 MORTH CLA WHITE 1051'FNL - 280'FWL Section _ 26 fownship _ 22 28 Advant Miler .A 23 24 97 2. 28 25 D NINCE LOCATION -= = ==== X- 190001 MOL F Y- 1000174 1000001 316350 444 - - - - -D 0 CRID 27 26 25 34 35 36 -0.0.2 Scole: 1"= 1000" ELEVATION: Operator: 549' Gr. at Stake Lease Nome: Well No .: 1-26H Topography & Vegetation Los. fell in rolling posture. Powerline to the West Reference Stokes or Alternate Location Stokes Set <u>None</u> Good Drill Site? _____Yes Best Accessibility to Location From North Distance & Direction from Hwy Jet or Town From Jet. of Hwy 31 & Hwy 5 in Romance AR, ao ±0.75 mi. South on Hwy 5, then ±1.37 mi. East on Blocklack Min Rd., then ±800' South on Rosers Rd. Well is East of Rogers Rd. GISTERE 2011 .P STATE OF LONG: 92'02'50.0"W LAT: 35.211355478 L. <u>Billy R. Wieon</u> a Registere and an authorized agent of Topographic do hereby certify that the above describe was surveyed and stated on the ground 811 Billy R ed Land Su graphic Land Surveyors, described well location ground as shown herei LAT: 30.21130040 STATE PLANE COORDINATES: ZONE: AR-NORTH X: 1965695 Artenace Reg. No. ____811 OMAL LAN 310591 Y. STATE PLANE COORDINATES: ZONE: AR-NORTH X: 1998174 STATE PLANE COORDINATES: ZONE: AR-NORTH X: 1990361 319462 312334

Page 12 of 12

Y:

Kansas Corporation Commission Oil & Gas Conservation Division

Affidavit for Flaring from a Mississippi Horizontal Well

| Sta | te of) | | | | | | | |
|-----|---|-----------------------|--------|---|-----------------|----------------|------------------------|--------------------|
| Col | nty of) \$\$: | | | | | | | |
| | | d name), of lawful a | ege ar | nd being first duly | y sworn, aileç | ges and state: | s as follows: | |
| 1. | i am | | (| itle) for the opera | ator named b | elow. | | |
| 2. | Operator Information: License #: | | 3. | Well Informatio | | | <u></u> | |
| | Name: | | | Lease Name: _ Surface Spot: _ County: | | Sec T | | East / West |
| | Contact Person: Phone #: | | | Feet from | North / | South Line | | |
| 4. | The flaring of gas from the above-located well for a (Check all applicable) a Evaluation and determination of whether b Evaluation and determination of whether | r the quility of the | gas m | eets pipeline sp | ecifications; o | or . | son(s): | |
| 5. | Operator will conduct the flaring of gas from the ab well from injury and damage. | ove-located opera | ons i | n a manner so a: | s to protect a | Il persons and | t property in t | he vicinity of the |
| 6. | The gas flared from the above well has been analy sulfide. | zed for hydrogen | Clfide | tH₂S) content ar | nd contains le | ess than 25 pa | arts per millio | n of hydrogen |
| 7. | Operator will meter, measure, or monitor the volun Commission upon request. | ne of gas flared, rel | ain su | r internation t | r two years, | and provide s | such informat | ion to the |
| | The above and foregoing statements are true and | correct according to | o my l | knowledge, intern | mation, and t | oelief. | | |
| | | | - | | Signature | e of Afflant | | |
| | Subscribed and swom to before me on this | day of | | | | , 20 | | |
| | by | * | | | | | | |
| | | | - | 1 <u>91 </u> | Notary Pu | blic | | |
| | My appointment expires: | | | | | | | |
| | | | | | | | | |

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

| WELL | HISTORY | - DESCRIPTION OF WELL & LEASI | 2 |
|----------------|------------|---------------------------------|----------|
| a a griftinger | 1001014171 | - DEADINE LIAN AL MEET OF FENSI | F |

| OPERATOR: License # | API No. 15 |
|--|---|
| Name; | Spot Description; |
| Addrees 1: | Sec TwpS. R East West |
| Address 2: | Feet from [] North 7 [] South Line of Section |
| City: State: Zip:+ | |
| Contact Person: | Footages Calculated from Nearest Outside Section Corner: |
| Phone: () | |
| CONTRACTOR: License # | County: |
| Name: | Lease Name: Well #: |
| Wellsite Geologist: | Field Name: |
| Purchaser: | Producing Formation: |
| Designate Type of Completion: | Elevation: Ground: Ketly Bushing: |
| New Well Re-Entry Workover | Total Depth: Plug Back Total Depth: |
| | Amount of Surface Pipe Set and Cemented at: Feet |
| | Multiple Stage Cementing Collar Used? |
| GG GSW Temp. Abd. | If yes; show depth set; Feet |
| CM (Coel Bed Methane) | If Alternate II completion, cement circulated from: |
| Cathodic Other (Core, Expl., etc.): | feet depth to: ex ont. |
| If Workover/Re-entry: Old Well Info as follows: | |
| Operator: | Drilling Fluid Management Plan (Dele must be collected from the Reserve Pit) |
| Öriginal Comp. Date: Original Total Depth: | Chloride content: ppm Fluid volume: bbis |
| Deepening Re-perf. Conv. to ENHR Conv. to SWD | Dewatering method used: |
| Plug Back: Plug Back Total Depth | Location of fluid disposal if havied offsite: |
| Commingled Permit #: | Operator Name: |
| Dusi Completion Permit #: | License Neme: License #: |
| SWD Permit #: | QuarterSecTwpS. R East West |
| ENHR Permit #: G\$W Permit #: | County: Permit #: |
| | |
| Spud Date.or Date Reached TD Completion Date or Recompletion Date | |
| Kansas 67202, within 120 days of the spud data, recompletion, workover or or of side two of this form will be held confidential for a period of 12 months if re | h the Kansae Corporation Commission, 130 S. Merkel - Room 2078, Wichita, conversion of a well. Rule 82-3-130, 82-3-105 and 82-3-107 apply. Information quested in writing and submitted with the form (see rule 82-3-107 for confiden- ell report shall be attached with this form. ALL CEMENTING TICKETS MUST form with all temporarily sbandoned wells. |

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the cil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

_ Date: ____

Signature: ____

Tille: ____

| KCC Office Use ONLY | | | | | | |
|------------------------------------|--|--|--|--|--|--|
| Letter of Confidentiality Received | | | | | | |
| Date; | | | | | | |
| Confidential Release Date: | | | | | | |
| Wireline Log Rebelved | | | | | | |
| Geologist Report Received | | | | | | |
| UIC Distribution | | | | | | |
| ALT 1 H H Approved by: Date: | | | | | | |

| Operator Name: | Lease Name: Well #: |
|---|--|
| Sec TwpS. R | County: |
| INSTRUCTIONS: Show important tops and base of formations penetro | ated. Detail all cores. Report all final copies of drill stems tests giving interval tested, |
| time tool open and closed, flowing and shut-in pressures, whether shut | in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid |
| recovery, and flow rates if gas to surface test, along with final chart(s). | Attach extra sheet if more space is needed. Attach complete copy of all Electric Wirs- |

| · · · · · · · · · · · · · · · · · · · | | |
|---------------------------------------|-------------------------|-------------------|
| line Logs surveyed. | Attach final geological | well site report. |

- -- -- -- --

| Name | | Тор | Datum |
|------|-----------------------------|--------------------|--|
| | | | |
| | | ····· | |
| M S | Setting Type of | # Sacks Used | Type and Percent Additives |
| | | | |
| | face, intermed ht Ft. | Ft. Dapth Carrient | face, infermediale, production, etc. hl Setting Type of # Sacks |

| Purpose: | Depth Top Bottom | Type of Gement | # Sacks Used | Type and Parcent Additives. |
|--------------------------------|---------------------|----------------|--------------|-----------------------------|
| Protect Casing Plug Back TD | | | | |
| Plug Off Zone | | | | |

| Shols Per Fool PERFORATION RECORD Specify Foolage of E | | | 1D - Bridge P Each Interval I | ridge Plugs Sel/Type Acid; Fracture, 8 Nervel Perforated (Amount.e | | | ement Squeeze Record d of Material Used) | Depth | | |
|---|----------|-------------------------|----------------------------------|---|---------------|--------------------|---|------------------------------|---------------|----------|
| | | . • | | | | | | | | |
| | | | | | | | | <u> </u> | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TUBING RECORD: | Si | | Sei Al | | Packe | r'At: | Linet Ri | | No | |
| Date of First, Resumed | Product | ion, SWD or ENHI | ξ. | Producing N | lethad: | ping 🗋 | Gas Lift | 🗌 Other, (Explain) |) | |
| Estimated Production Per 24 Hours | | chi Bố | is. | Ges | Mcf | Wat | br | Bbis. | Gas-Oli Ralio | Gravity |
| DISPOSIT | ION OF (| BAS: | | | METHOD | OF COMPLE | ETION: | | PRODUCTION I | NTERVAL: |
| Vented Sol (If vented, Si | | Used on Lease 2-78.) | | Open Hole Olher (Specify) | Perl . | Dually (Submit) | | Commingled (Submit ACO-4) | | |

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichitz, Kansas 67202

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE Form ACO-1 June 2000 Form Must Be Typed Form must be Signed All bianks must be Filled

| OPERATOR: License #18 | API No. 15 - 1p |
|---|---|
| Name: <u>1</u> b | Spot Description: 19 |
| Address 1: 1C | 1q Sec. 1q Twp. 1q S. R. 1q East West |
| Address 2: 1C | 1r(1) Feet from D North / D South Line of Section |
| City: 1d State: 1d + 1d + 1d | 1r(2) Feet from East / West Line of Section |
| Contact Person; 18 | Footages Calculated from Nearest Outside Section Corner: |
| Phone: (| |
| CONTRACTOR: License # 19 | County: 11 |
| Name: <u>1h</u> | Lease Name: <u>14</u> |
| Wellstte Geologist: | Field Name: <u>1v</u> |
| Purchaser: 1j | Producing Formation: |
| Designate Type of Completion: 1k | Elevation: Ground: 1x(1) Kelly Bushing: 1x(2) |
| New Well Re-Entry Workover | Total Depth; 1y Plug Back Total Depth; 12 |
| Oti WSW SWD SłOW Ges D6A ENHR SłGW OG GSW Temp. Abd. CM (Coel Bed Methane) GSW Temp. Abd. Cathodic Other (Core, Expl., etc.): | Amount of Surface Pipe Set and Cemented at: |
| Deepening Re-peri. Conv. to ENHR Conv. to SWD Conv. to GSW Plug Back: Plug Back: Plug Back: Permit #: | Chloride content: <u>28</u> ppm Fluid volume: <u>2b</u> bbls Dewatering method used: <u>2C</u> Location of fluid disposal if hauled offsite: 24/41 |
| Dusl Completion Permit #: | Operator Name: 2d(1) |
| SWD Permit #: | Lesse Name: 2d(2) License #: 2d(3) |
| ENHR Permit #: | Quarter 20(4) Sec. 20(4) Twp. 20(4) S. R. 20(4) Esst West |
| GSW Permit #: | County: 2d(5) Permit #; 2d(6) |
| <u>1m 10</u> | |
| Spud Date or Date Reached TD Completion Date or Recompletion Date | |

INSTRUCTIONS: An original and two copies of this form shall be filled with the Kansas Corporation Commission, 150 S. Martet - Room 2078, withins, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-108 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT

I am the alfiant and I hereby certily that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully compiled with and the statements herein are complete and correct to the best of my knowledge.

Signature: 3a

Title: 3b

| * | KCC Office Use ONLY |
|----|------------------------------------|
| | Latter of Confidentiality Received |
| | Dete: |
| | Confidential Beleese Date: |
| | Witeline Log Received |
| | Geologist Report Received |
| | UIC Distribution |
| AL | I I I I I Approved by: Date: |

Date: 3C

| Operator Name: 42 | Lesse Neme: _4b Well #: _4b |
|---|-----------------------------|
| Sec. <u>4C</u> Twp. <u>4C</u> S. R. <u>4C</u> East Weet | County: 40 |

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tasts giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

| Drill Stem Tests Taken (Altech Additional Sheets) | 5a | Yee | No | | Log | Formation (Top), Depth and Datur | n 🗌 Sample |
|--|----------------|-------------------------|----------------------|------------|------|----------------------------------|------------|
| Samples Sent to Geological Survey | 5b | Ves | No | | Name | Тор | Délum |
| Cores Taken Electric Log Run Electric Log Submitted Electronically (Il no. Submit Copy) | 5c 5d 5e | ☐ Yês ☐ Yês ☐ Yês | No No No | | | 59 | |
| List All E. Logs Run: 51 | | | | A The Mark | | | |

| 68 CASING RECORD IN New Used Report all altrigs eel-conductor, surface, intermediate, production, etc. | | | | | | | | |
|--|-------|-------|--------------|-------|-------|-------|-------|--|
| Purpose of String Size Hole Size Casing Weight Setting Type of # Secks Type and Percent Drited Set (in O.D.) Lbs. / FL Depth Cement Used Additives | | | | | | | | |
| 6b(1) | 6b(2) | 60(3) | 66(4) | 6b(5) | 6b(6) | 6b(7) | 6b(8) | |
| | | | | | | | | |
| , | | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: 7a | Dupth Top Bottom | Type of Cemeni | # Sacks Used | Type and Percent Additives |
|---|---------------------|----------------|--------------|----------------------------|
| Perforate Protect Casing Plug Back TD | 7b | 7c | 7d | 76 |
| Plug Off Zone | | | | |

| Shola Per Fool | PERFORATION R Specify Foole | ECORD - Bridge Plugs Sel/Typ ge of Each Interval Perforated | | Acid, Frecture, Shot, Cement Squeeze Record (Amount and Kind of Meterial Used) | | | |
|--------------------------------------|--------------------------------|--|-------------------|---|--|--|--|
| 8a | 8 b | | 8c | | 8d | | |
| | | <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> | | | | | |
| | | | | | ······································ | | |
| | | · | | | | | |
| | | | | | | | |
| TUBING RECORD: | | Set At: Packer De(2) Be(3) | | No 9b | - | | |
| Dete of First, Resumed 90 | Production, SWD or ENHR. | Producing Method: | ing 🛄 Gas Lift [|] Other (Explain)9d | | | |
| Estimated Production Per 24 Hours | Oli Bbla. 90(1) | Ges Mol 90(2) | Water 90(3) | Bbls. Gas-Oit Ratio 9e(4) | Gravity 9e(5) | | |
| 9e(6) Disposit | ION OF GAS: | 9e(7) METHOD (Open Hole Perf. | | PRODUCTION Commingled 99(8) | INTERVAL: | | |
| | ibmit ACO-18.) | Other (Specify) | (Submit ACO-5) (1 | Submit ACO-4) | | | |

Mell to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kanses 67202

WELL COMPLETION FORM (FORM ACO-1) INSTRUCTIONS

General Instructions.

- 1. The ACO-1 form must be typed.
- 2. All horizontal wellbore completions are required to upload the additional information with their ACO-1 on KOLAR as listed below in Section 10.

ACO-1 SIDE I

Section 1: Operator, Contractor, and Well Information.

- 1a. License #. Enter the operator's license number. To verify KCC operator license information, check the Commission's website at http://kcc.ks.gov/conservation/oil_license.cgi or contact the Conservation Division's Licensing Department at (316) 337-6200.
- 1b. Name. Enter the operator's full name as it appears on the operator's license.
- 1c. Address. Enter the operator's mailing address (street or PO Box).
- 1d. City/State/Zip. Enter the operator's city, state, and zip code that corresponds with the operator's mailing address in "1c."
- 1e. Contact Person. Enter the name of the individual who will be the operator's contact person for this Well Completion Form, should Conservation Division Staff need to contact the operator about the Form. The contact person may be the operator or the operator's agent.
- 1f. Phone. Enter the phone number of the contact person listed in "1e" above.
- 1g. Contractor License #. Enter the Drilling Contractor's license number. The drilling contractor may be the operator or the operator's agent. To verify KCC operator license information check the Commission's website at http://kcc.ks.gov/conservation/oil_license.cgi or contact the Conservation Division's Licensing Department at (316) 337-6200.
- 1h. Contractor Name. Enter the name of the drilling contractor for the subject well as it appears on the drilling contractor's operator license. The drilling contractor may be the operator or the operator's agent.
- 1j. Wellsite Geologist. Enter the name of the wellsite geologist witnessing the completion work.
- 1j. **Purchaser.** Enter the name of the purchaser of the oil and/or gas produced from the subject well.
- 1k. Designate Type of Completion. Mark the appropriate box to indicate if the subject well completion is a new well, re-entry, or workover. In addition, mark the appropriate box(es) to indicate the type of completion. Multiple boxes may be checked, if more than one applies.

11. Old Well Information. <u>Only complete this section if the subject well is a workover or</u> reentry.

11(1). **Operator**. Enter the name of the last operator of the subject wellbore, prior to workover or re-entry operations.

11(2). Well Name. Enter the name under which the subject well was last operated.

11(3). Original Completion Date. Enter the date on which the subject well was originally completed.

11(4). Original Total Depth. Enter the original total depth of the subject well.

11(5). Deepening, Re-perforate, Convert to Enhanced Recovery/Saltwater Disposal/Gas Storage. Mark the appropriate box(es) to indicate whether, through workover/re-entry operations, the operator has deepened, re-perforated, and/or converted the subject wellbore to an enhanced recovery or saltwater disposal well. Multiple boxes may be marked, if more than one applies. For each box that is marked, enter the corresponding permit number to the right of the box.

- 1m. Spud Date or Recompletion Date. For new wells, enter the date on which the well was spud. For workovers and re-entries, enter the date on which current recompletion operations were commenced.
- 1n. Date Reached TD. Enter the date on which the operator reached total depth.
- 10. Completion Date or Recompletion Date. For new wells, enter the date on which the new well was completed. For workovers and re-entries, enter the date on which recompletion operations were finished.
- 1p. API No. Enter the API Number for the subject well. This number is subject to change upon review by Conservation Division Staff. Production Staff will contact the operator if major changes are made to the subject well's API Number.
- 1q. Spot Location. Enter the geographic location of the subject well by ¼¼¼¼, Section, Township, and Range. Mark the appropriate box to indicate if the range is east or west of the Sixth Principal Meridian.
- 1r. Footage Location from Section Lines.

1r(1). Enter the number of feet the subject well is located from the South or North section line and circle from which section line the measurement was taken.

1r(2). Enter the number of feet the subject well is located from the East or West section line and circle from which section line the measurement was taken.

- 1s. Footages Calculated From Nearest Outside Section Corner. Mark the appropriate box indicating the outside section corner nearest the location of the subject well.
- 1t. County. Enter the county in which the subject well is located.
- 1u. Lease Name/Well Number. Enter the name of the lease and the well number.
- 1v. Field Name. List the name of the field in which the well is located. Field names are available on the KGS web site, http://www.kgs.ku.edu/Magellan/Field/index.html, or the Independent Oil & Gas Service's website, http://www.iogsi.com.
- 1w. **Producing Formation**. Enter the name of the geologic formation from which the well is producing.
- 1x. Elevation.
 - 1x(1). Ground. Enter the elevation in feet above sea level for the subject well's location. 1x(2). Kelly Bushing. Enter the elevation in feet above sea level of the Kelly bushing during drilling operations.
- ly. Total Depth. Enter the total depth of the subject well.
- 1z. Plug Back Total Depth. Enter the total depth of the plug back in the subject well.
- laa. Amount of Surface Pipe Set and Cemented. Enter the depth to which surface pipe is set and cemented in the subject well.
- 1bb. Multiple Stage Cementing Collar Used.

1bb(1). Mark the appropriate box to indicate if the operator used a multiple stage cementing collar to complete/recomplete the subject well.

1bb(2). If multiple stage cementing collar was used, fill in the blank with the depth at which the multiple stage cementing collar was set.

1cc. Alternate II Completion. If the subject well is an Alternate II Completion, enter the depth to which cement was circulated and the number of sacks of cement used.

Section 2: Drilling Fluid Management Plan.

- 2a. Chloride Content. Enter the chloride content in parts per million of reserve pit fluids.
- 2b. Fluid Volume. Enter the volume in barrels of reserve pit fluids used.
- 2c. Dewatering Method Used. Enter the dewatering method used at the subject well during drilling operations.

2d. Location of Fluid Disposal if Hauled Offsite.

2d(1). **Operator Name**. Enter the name of the operator who disposed of the drilling fluids. 2d(2). **Lease Name**. Enter the name of the lease at which the drilling fluids were disposed. 2d(3). **License Number**. Enter the license number of the operator who disposed of the drilling fluids. To verify KCC operator license information check the Commission's website at http://kcc.ks.gov/conservation/oil_license.cgi, or contact the Conservation Division's Licensing Department at (316) 337-6200.

2d(4). Geographic Location. Enter the geographic location of the lease on which drilling fluids were disposed by ¼, Section, Township, and Range. Mark the appropriate box to indicate if the Range is East or West of the Sixth Principal Meridian.

2d(5). County. Enter the county in which the fluid disposal is located.

2d(6). **Permit Number.** If the fluid will be hauled offsite and injected into an enhanced recovery or disposal well, enter the permit number under which the operator is authorized to conduct injection operations into the well.

Section 3: Verification.

- 3a. Signature. The operator or the operator's agent must sign the Well Completion Form to verify that, to the best of their knowledge, all statutory and regulatory requirements have been complied with, and the information on the form is complete and accurate.
- 3b. Title. The title, with respect to the operator, of the individual signing the form.

3c. Date. Enter the date on which the form is completed.

ACO-1 SIDE II

Section 4: Operator and Well Information.

- 4a. Operator Name. Enter the operator's full name as it appears on the operator's license.
- 4b. Lease Name/Well Number. Enter the lease name and well number for the subject well.
- 4c. Geographic Location. Enter the location of the subject well by Section, Township, and Range, and mark the appropriate box to indicate if the Range is East or West of the Sixth Principal Meridian.
- 4d. County. Enter the name of the county in which the subject well is located.

Section 5: Logs, Samples, and Test Reporting.

- 5a. Drill Stem Tests. Mark the appropriate box to indicate whether drill stem tests were taken. If drill stem tests were taken, additional sheets must be attached to the ACO-1.
- 5b. Samples Sent to Geological Survey. Mark the appropriate box to indicate if geologic samples were taken and sent to the Kansas Geologic Survey.
- 5c. Cores Taken. Mark the appropriate box to indicate if cores were taken.
- 5d. Electric Log Run. Mark the appropriate box to indicate if electric log(s) were run on the subject well.

- 5e. Electric Log Submitted Electronically. If electric logs were run on the subject well, indicate whether the electric logs were submitted to the KCC electronically.
- 5f. List All Electric Logs Run. If electric logs were run on the subject well, list all of the electric logs conducted.
- 5g. Formation (Top), Depth, and Datum. Mark the appropriate "Log" or "Sample" box, or both boxes, to indicate whether the formation information is derived from a driller's log or geologic samples. Enter the name of each producing or storage formation penetrated, the formation top, and the datum of the formation top. The formation datum is the distance from the formation top to the mean sea level. It may be a positive or a negative number.

Section 6: Casing Record.

- 6a. New or Used. Mark the appropriate box to indicate if the subject well's casing is new or had been previously used.
- 6b. Casing Strings Used. For each separate string of casing used, enter the following information for each string:
 - 6b(1). Purpose of String. The purpose of the casing string.
 - 6b(2). Size Hole Drilled. The size of hole drilled for the casing string.
 - 6b(3). Size Casing Set. The outside diameter of the casing.
 - 6b(4). Weight. The weight of the casing set, expressed in pounds per foot.
 - 6b(5). Setting Depth. The depth to which the casing string is set.
 - 6b(6). Type of Cement. The type of cement used to set the casing string.
 - 6b(7). # Sacks Used. The number of sacks of cement used to set the casing string.
 - 6b(8). Type and Percent Additives. The type and percent additives to the cement used to set the casing string.

Section 7: Additional Cementing/Squeeze Record.

- 7a. **Purpose.** Mark the appropriate blank to indicate the purpose of the additional cementing/squeeze. If more than one purpose applies, mark all that apply.
- 7b. Depth Top Bottom. Enter the depth of the additional cementing from top to bottom.
- 7c. Type of Cement. Enter the type of cement used for the additional cementing.
- 7d. Number of Sacks Used. Enter the number of sacks used for the additional cementing.
- 7e. Type and Percent Additives. Enter they type and percent of additives to the additional cementing.

Section 8: Perforation, Acid, Fracture, Shot, and Cement Squeeze Record. For each set of perforations in the subject well, enter the following information.

Periorations in the subject wen, enter the following information

- 8a. Shots per foot. Enter the number of perforations per foot.
- 8b. Perforation Record Bridge Plugs Set/Type and Specific Footage of Each Interval Perforated. Enter the type of bridge plugs, the depth at which the bridge plugs are set at each perforation interval, and the depth of each interval perforated.
- 8c. Acid, Fracture, Shot, Cement Squeeze Record. Enter the amount and kind of material used for any acid, fracture, or shot treatment, and any cement squeeze at each perforation interval.
- 8d. Depth. Enter the depth of the acid, fracture, shot, or cement squeeze at each perforation interval.

Section 9: Miscellaneous.

9a. Tubing Record.

- 9a(1). Size. Enter the size of tubing set in the subject well.
- 9a(2). Set at. Enter the depth at which the tubing is set in the subject well.
- 9a(3). Packer at. Enter the depth at which the tubing packer is set in the subject well.
- 9b. Liner Run. Mark the appropriate box to indicate if a liner is in the subject well.
- 9c. Date of First or Resumed Production, SWD, or ENHR. For newly completed wells, enter the date of first production, saltwater disposal, or enhanced recovery operations. For workovers or re-entries, enter the date of resumed production, saltwater disposal, or enhanced recovery operations.
- 9d. **Producing Method.** Mark the appropriate box to indicate by which method the subject well is producing: flowing, pumping, gas lift, or other. If the "other" box is marked, write in a brief explanation of the producing method.
- 9e. Estimated Production Per 24 Hours. Enter the following information regarding the estimated production from the subject well over a 24-hour period:

9e(1). Oil Bbls. Enter the estimated number of barrels oil produced from the subject well in a 24-hour period.

9e(2). Gas Mcf. Enter the estimated amount of gas produced from the subject well in a 24-hour period, expressed in thousands of cubic feet.

9e(3). Water Bbls. Enter the estimated number of barrels water produced from the subject well in a 24-hour period.

9e(4). Gas-Oil Ratio. Enter the gas-oil ratio for production from the subject well.

9e(5). Gravity. The API gravity (density) of produced oil, measured in degrees.

9e(6). **Disposition of Gas.** Mark the appropriate box to indicate the disposition of any gas produced from the subject well as vented, sold, or used on lease. If the gas is vented, you must submit an ACO-18 with the ACO-1.

9e(7). Method of Completion; Production Interval. Mark the appropriate box to indicate if the production interval in the subject well is open hole, perforated, dually completed, commingled, or other. If the "other" box is marked, specify the method of completion in the blank provided. If the subject well is producing from commingled zones, you must file an ACO-4 form. If the subject well is dually completed, you must file an ACO-5 form. 9e(8). Production Interval. Enter the footages where the wellbore is perforated.

Section 10: Information to upload in .pdf format on KOLAR for horizontal wellbores.

- 1. Upload a directional survey indicating the final path of the horizontal wellbore.
- 2. Upload a plat map depicting the well as it is drilled.
 - a. For horizontal wellbores completed open hole, the plat must depict the surface location, the point at which the wellbore encounters the producing formation (depth and distance from the nearest lease or unit boundary line), any isolation packers and the terminus of the wellbore (depth and distance from the nearest lease or unit boundary line). The lease and unit boundaries must be clearly depicted. Include GPS latitude and longitude readings for each point and specify which GPS planar projection was used to determine any footages listed on the map.
 - b. For cased horizontal wellbores, upload a plat that shows the well as it is drilled, including the surface location, the point the wellbore enters the producing

formation (depth and distance from the nearest lease or unit boundary line), the location of the first perforation (depth and distance from the nearest lease or unit boundary line), the location of the last perforation (depth and distance from the nearest lease or unit boundary line), and the terminus of the wellbore (depth and distance from the nearest lease or unit boundary line). The lease and unit boundaries must be clearly depicted. Include GPS latitude and longitude readings for each point and specify which GPS planar projection was used to determine any footages listed on the map.

3. All operators must certify that the information contained on the plat depicting the well as drilled is accurate. Furthermore, all operators must retain the well's completion information depicting how the wellbore was perforated for the life of the well and make it available upon Commission request.



| 22 28 manufact 400 | | | + | 23 24 26 | |
|--|--|---|---|---|---|
| | OP PERF. (7,414' MD) 058'FNL - 717'FWL | ==== | ===== | | |
| NORMAN D | | BOTTOM PERF. (1121'FNL - 700 <u>St. Durmi La</u> | 11,322' MD) | BOTTOM X= 199 Y= 319 | 0358 |
| GRID | | 0 | Vere V | | |
| 27 26 | | | | 26 25 35 36 | |
| This location has been very carefully state the best official survey records, maps, and p but its accuracy is not guaranteed, Review this plat and notify us immediate erator: ase Name: | notographs available to | Well No.: $1-20$ | allowing information was red using a GPS receiver source ±2-3 Meters. ELEVATION 549' Gr. at | 1: | 1"- 1000 |
| Good Drill Site? Yes | Reference Stak | | otion OPENNO BOTTOWNO BEANNO POWIT AN POWIT AN WITH GPS | CLANDING POINT A DLE BYCOMMITCH P LUSTED, MOE SUM NOD/OR CONTANCE D SUTTOMHOLE AND CELEVER USING NECEVER USING S AND STATION | NO PROPOS REVED BY REVED. TO LANDING CALCULATE DETERMINE |
| Best Accessibility to Location <u>Fro</u> Distance & Direction from Hwy Jct or Town <u>From Jct</u> ±1.37 mi. East on Blacklack Mtn | of Hwy 31 & Hwy 5 | | to ±0.75 mi. South | on Hwy 5, ti | |
| Invi SURFACE LOCATION 1051' FROM NORTH SEC. LINE 280' FROM WEST SEC. LINE DATUM: <u>NAD-27</u> LAT: <u>35'12'40.9"N</u> LONG: <u>92'02'50.0"W</u> LAT: <u>35.211365478</u> LONG: <u>92.047217631</u> | oice # <u>164084</u> . Date | | LED PL | T | |
| STATE PLANE COORDINATES: ZONE: <u>AR-NORTH</u> X: <u>1985895</u> Y: <u>319581</u> | BOTTOM HOL 1119 FROM 563' FROM DATUM: NAD- LAT: <u>35.21</u> LONG: <u>92.03</u> | NORTH SEC. LINE EAST SEC. LINE 27 0780479 | STATE PLANE COORDINATES: ZONE: <u>AR-NORTH</u> X: <u>1990358</u> Y: <u>319359</u> | Exhibit C | |

Page 11 of 4

VERIFICATION

STATE OF KANSAS)) ss: COUNTY OF SEDGWICK)

John McCannon, being first duly sworn, deposes and says that he is Litigation Counsel for the Conservation Division of the State Corporation Commission of the State of Kansas, and that he has read and is familiar with the foregoing "Application to Establish Rules for Horizontal Wells Drilled in the Mississippi Formation", and that the statements contained therein are true and correct to the best of his knowledge, information and belief.

John McCannon

Litigation Counsel State Corporation Commission of the State of Kansas, Conservation Division

SUBSCRIBED AND SWORN to before me on this /4 _____ day of <u>Detober</u> 2011.

Notary Public

My Commission expires:

PAULA J. MURRAY

CERTIFICATE OF SERVICE

I hereby certify that on 10 - 14 - 2011, I caused a true and correct copy of the foregoing "Horizontal Well Rules Application" to be served by placing the same in the United States mail, postage prepaid, to the following parties:

Edward P. Cross, Executive President KIOGA 800 SW Jackson, Ste 1400 Topeka, KS 66612-1216

David Bleakley EKOGA 4350 Shawnee Mission Pkwy, Ste 280 Fairway, KS 66205

Kenny Carter EKROA 18240 K47 Hwy Altoona, KS 66710

Ken Peterson, Executive Director KPC 800 SW Jackson St #1005 Topeka, KS 66612

Erick E. Nordling SWKROA PO Box 250 Hugoton, Kansas 67951-0250

Hugo Speiker EKROA P.O. Box 295 Fredonia, KS 66736

J M Vess Vess Oil Corporation 1700 Waterfront Pkwy, Bldg 500 Wichita, KS 67206-6619 Douglas H McGinness II CMX Inc. 1700 N Waterfront Pkwy, Bldg 300B Wichita, KS 67206

Bryan T. Reeder Reeder Operating LLC 4925 Greenville Ave., Ste 1400 Dallas, TX 75206

David Belden D & Z Exploration, Inc 901 N Elm St. PO Box 159 St Elmo, IL 62458

Matt Hester Vitruvian Exploration, LLC 4 Waterway SQ. Pl., Ste 400 The Woodlands, TX 77380

Ben Crouch OSAGE Resources, LLC 6209 N K61 Hwy Hutchinson, KS 67502-8608

James R. Lawson Lawco Exploration, Inc. 113 S. Main PO Box 425 Bentonville, AR 72712

Klee R Watchous Palomino Petroleum, Inc. 4924 SE 84th St Newton, KS 67114-8827

Gary Taraba, VP & Gen Counsel Rosewood Resources, Inc. 2101 Cedar Springs Rd, Ste 1500 Dallas, TX 75201 Chuck Long Husky Ventures, Inc. 204 N. Robinson, Ste 1800 Oklahoma City, OK 73102

Tracy Streeter, Director Kansas Water Office 901 S. Kansas Ave Topeka, Kansas 66612

David W. Barfield Division of Water Resources Kansas Department of Agriculture 109 SW 9th St, 2nd Floor Topeka, Kansas 66612-1283

Office of the Secretary Kansas Department of Wildlife, Parks and Tourism 1020 S. Kansas, Rm 200 Topeka, KS 66612-1327

Robert Moser, MD, Secretary Kansas Department of Health and Environment 1000 SW Jackson St., Ste 410 Topeka, KS 66612-1367

Dale Rodman, Secretary of Agriculture Kansas Department of Agriculture 109 SW 9th St, 4th Floor Topeka, KS 66612-1280

And via-e-mail to:

Alan DeGood Aletha Dewbre Bill Lamb Bob Costello Bob Lytle Brent Sonnier Brett Blazer Byron E. Trust

Charles Steincamp Charles Woodin Clint Goos Damonica Pierson Dana G. Wreath **David Bengston** David G. Seely David Jervis David Nickel Dean Pattisson Diana Edmiston Diana Coe **E** Richmond Erik Bartsch Gil Messersmith Greg Melton **Javier Macias** J Carlson Jeff Kennedy Jeffrey D. Jabara Jimmie Hammontree John Callen John Chandler John Donley John Pike Karen Sharp Kathy Gentry Kenny Carter Kenton L. Hupp **Kyle Nevels** Linda Guthrie Martin Medina M Brown Michael Irvin Mike Cochran Mike Dealy **Richard Felts Richard Lewis Richard Smith** Sam Ritchie Stan Smith S Lambert Steve Ladner

Steve White Steven Bryson Terry Holdren Tim Boese Tim McKee Tom Rhoads Tom Schnittker Wayne Woolsey

ammon John McCannon

Litigation Counsel Kansas Corporation Commission