KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1073033

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34291
Name: Hodges, Dennis D. and/or Peggy D.
Address 1: 1827 Rd Z
Address 2:
City: Reading State: KS Zip: 66868 + ____
Contact Person: Dennis Hodges
Phone: (620) 256-6668
CONTRACTOR: License # 33217
Name: Three Rivers Exploration, LLC
Wellsite Geologist: David B. Griffin, RG #498
Purchaser:

Designate Type of Completion:

- [x] New Well [ ] Re-Entry [ ] Workover
- [x] Oil [ ] WSW [ ] SWD [ ] SIOW
- [ ] Gas [ ] D&A [ ] ENHR [ ] SIGW
- [ ] OG [ ] GSW [ ] Temp. Abd.
- [ ] CM *(Coal Bed Methane)*
- [ ] Cathodic [ ] Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening [ ] Re-perf. [ ] Conv. to ENHR [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

9/26/2011	10/01/2011	1/19/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-031-23047-00-00
Spot Description:
__ - NW - NW - NW Sec. 12 Twp. 21 S. R. 13 [x] East [ ] West
4950 Feet from [ ] North / [x] South Line of Section
330 Feet from [ ] East / [x] West Line of Section

Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [ ] SE [x] SW

County: Coffey
Lease Name: Hodges Well #: 5
Field Name: Finnerty
Producing Formation: Burgess SS
Elevation: Ground: 1138 Kelly Bushing: 1111
Total Depth: 1827 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 150 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 0 ppm Fluid volume: 80 bbls
Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite:

Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. [ ] East [ ] West
County: Permit #:

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

- [x] Letter of Confidentiality Received
  Date: 01/29/2012 Denied
- [ ] Confidential Release Date:
- [x] Wireline Log Received
- [x] Geologist Report Received
- [ ] UIC Distribution

ALT [x] I [ ] II [ ] III Approved by: Deanna Garrison Date: 01/30/2012

Side Two

1073033

Operator Name: Hodges, Dennis D. and/or Peggy D. Lease Name: Hodges Well #: 5

Sec. 12 Twp. 21 S. R. 13 ☑ East ☐ West County: Coffey

INSTRUCTIONS: Show important tops and base of formations penetrated. 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 Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

Open Hole; Dual Induction, Compensated Densiy Sidewall Deutron, Miro Logs
Cased Hole; Gamma Ray Neutron Log

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.675	25	150	Class A Portlanc	100	
Longstring	7.875	5.5	15.5	1823	Thick Set	135	675#s Kol-Seal

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
	-			
	-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
3	1726.5 to 1729.5	Acid, 7.5%, 200 gals	same

TUBING RECORD: Size: 2.875 Set At: 1660 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 1/20/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	2	0	80		24

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☑ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
Burgess SS
1726.5-1729.5

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

Form	ACO1 - Well Completion
Operator	Hodges, Dennis D. and/or Peggy D.
Well Name	Hodges 5
Doc ID	1073033

Tops

Name	Top	Datum
Base KC	1092	+46
Cherokee	1376	-238
U. Squirrel SS, 10'	1388	-250
L. Squirrel SS, 13'	1431	-293
Ardmore LS	1481	-343
Burgess SS, 40'	1726	-588
Mississippian Dol	1774	-638
Rotary TD (GL)	1827	-689

CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 31614
LOCATION Eureka
FOREMAN Steve Mac

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT API # 15-031-23047

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9-27-11		Hodges # 5	12	21S	17E	Coffey

CUSTOMER: Dennis D. Hodges
MAILING ADDRESS: 1827 Rd 2
CITY: Reading | STATE: KS | ZIP CODE: 66868

TRUCK #	DRIVER	TRUCK #	DRIVER
445	Alan M		
441	Jim		

JOB TYPE Surface Q | HOLE SIZE 12 1/4 | HOLE DEPTH 160' | CASING SIZE & WEIGHT 8 5/8
CASING DEPTH 150 | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT 14.5# | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING 15'
DISPLACEMENT 5 1/2 bbls | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safety Meeting: Rig up To 8 5/8 Casing. Break Circulation With 5 bbls Fresh Water. Mix 100 sks Class A Cement W/ 3% Calcl 2% Gel 1/4# Flo Seal. Displace With 5 1/2 bbls Fresh Water. Shut In. Good Cement Returns To Surface. Job Complete. Rig down.

Thank You

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401S	1	PUMP CHARGE	775.00	775.00
5406	45	MILEAGE	4.00	180.00
1104S	100 sks	Class A Cement	14.25	1425.00
1102	280#	Calcl 3%	.70	196.00
1118B	150#	Gel 2%	.20	30.00
1107	25#	Flo-Seal 1/4# per sk	2.22	55.50
5407		Ton Mileage Bulk Truck	min	330.00
		Total 3105.39 P.O. Check #		
	5% Discount	- 155.27 1712		
		Total 2950.12		
			Sub Total	2997.50
		6.5%	SALES TAX	107.89
			ESTIMATED TOTAL	3105.39

Ravin 3737

AUTHORIZTION Dennis D Hodges TITLE Owner / Operator DATE 9-27-11

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's

CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 33235
LOCATION Eureka
FOREMAN Steve Mead

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT API 15-031-23041?

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-1-11		Hodges #5	12	21S	15E	Coffey

CUSTOMER: Dennis & Peggy Hodges
MAILING ADDRESS: 1827 Rd. Z
CITY: Reading | STATE: Ks | ZIP CODE: 66868

TRUCK #	DRIVER	TRUCK #	DRIVER
445	Alann		
515	Calin		
437	Jim		

JOB TYPE Long String | HOLE SIZE 7 7/8 | HOLE DEPTH 1527' | CASING SIZE & WEIGHT 5½ 15.5# New
CASING DEPTH 1523' | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT 13.6# | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING
DISPLACEMENT 24½ | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safty Meeting. Rig up to 5½ Casing. Break Circulation with 5bbl Fresh water. Pump 12bbl Caustic Soda pre flush. 5bbl fresh water spacer. Mix 135 sks Thick set Cement w/ 5# Kol-Seal per sk @ 13.6# gal. Wash out pump & lines. Release latch down plug. Displace with 24½ bbl Fresh Water. Final Pumping Pressure 1100#. Bump plug to 1600# wait 2 min. Release pressure. Plug held. Had Good Circulation During Job
Job Complete Rig down
Thank You

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	975.00	975.00
5406	45	MILEAGE	4.00	180.00
1126A	135sks	Thick set Cement	18.30	2470.50
1110A	675#	Kol-Seal 5# per sk	.44	297.00
1107	100#	Caustic Soda (Pre flush)	1.52	152.00
5407A	7.43	Ton Mileage Bulk Truck	1.26	421.28
5502C	4hrs	80bbl Vacuum Truck	90.00	360.00
1123	3000 gallons	City water	15.60/1000	46.80
4159	1	5½" AFU Float Shoe	344.00	344.00
4454	1	5½" Latch down plug	254.00	254.00
4130	5	5½" x 7⅞ Centralizer	48.00	240.00
4104	1	5½" Basket	229.00	229.00
	Total 6223.68			
	5% Discount 311.15		SubTotal	5969.58
	Total 5912.53	Paid check #6717	SALES TAX	254.10
Ravin 3737			ESTIMATED TOTAL	6223.68

AUTHORIZTION Dennis D. Hodges TITLE Owner/Operator DATE 10-1-11

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form

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

Kansas
Corporation Commission

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

January 29, 2012

Dennis Hodges
Hodges, Dennis D. and/or Peggy D.
1827 Rd Z
Reading, KS 66868

Re: ACO1
API 15-031-23047-00-00
Hodges 5
NW/4 Sec.12-21S-13E
Coffey County, Kansas

Dear Production Department:

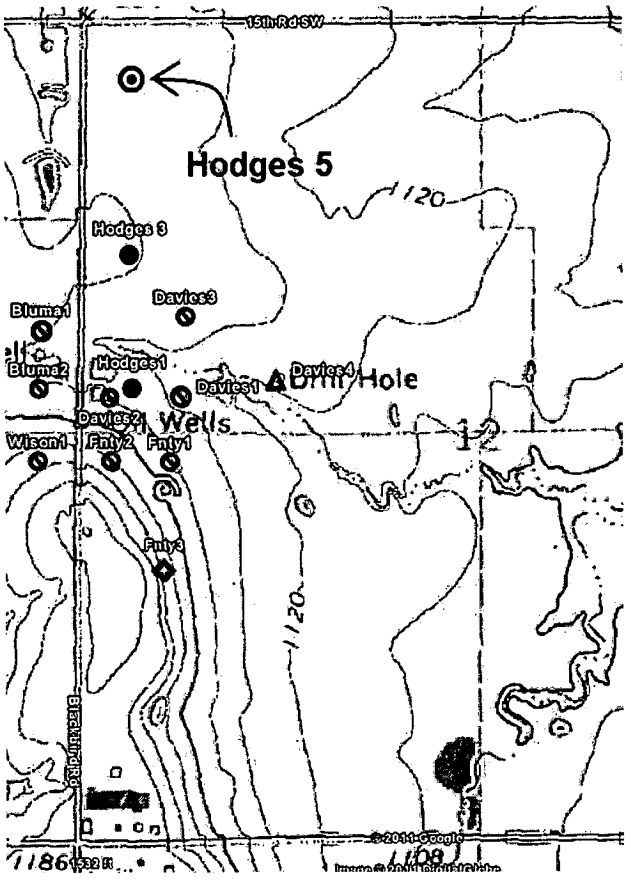
We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Dennis Hodges

Geological Wellsite Report

By David Griffin, RG
GGR, Inc. (Griffin Geological Resources)
October 3, 2011



Well Info: Hodges 5
NW NW NW/4
4950' fsl, 330' fwl
Section 12, T21S-R13E
Coffey County, KS
API No. 15-031-23047
GPS Coordinates
W-95.938833, N38.242306
Datum: GL, Elev. 1138.2' Svy
RTD: 1827', GL
Status: $5\frac{1}{2}$ Pipe Set,
Burgess SS Test

Operator: Dennis D. and
Peggy D. Hodges
1827 Road Z
Reading, Kansas 66868
Operator License No.: 34291
Contact: Dennis Hodges

Contractor: Three Rivers Exploration, LLC
Contractor License No.: 33217
Owner: Dave Farthing

Objectives: Primary objective, evaluate the Burgess Sandstone
Secondary objective, evaluate the Squirrel Sandstones.

Drilling Notes:

September 26, 2011, Spud, Set 151', $8\frac{5}{8}$" Surface Casing
October 1, 2011, Reached Total Depth of 1827', GL
Bit One, $7\frac{7}{8}$" PDC Bit from 150' to 1609'
Bit Two, $7\frac{7}{8}$" Button Bit from 1609' to TD at 1827'
Native fresh water mud to 1546', Chemical Gel Mud 1546' to TD

Geological Supervision:

David Griffin, RG, provided wellsite supervision on September 29, 30 and October 1, 2011. Drilling was witnessed from 1200' to TD at 1827', samples were microscopically examined from 1300' to 1827'.

Cement Co.: Consolidated Oil Well Service Co., Contractor License No.: 04996

Geological Datums:

Geologic Tops					
Dennis and Peggy Hodges				*Dennis and Peggy Hodges*	
Hodges 5				*Hodges 3*	
NW NW NW/4				*N/2 NW SW NW/4*	
Sec. 12-T21S-R13E				*Sec. 12-T21S-R13E*	
Zones of Interest	OH Log Tops GL Elev. 1138.2'		S C T O R M C P	OH Log Tops GL Elev. 1142'	
	Depth	Subsea		Depth	Subsea
Base Kansas City	1092	46	-4	1090	52
Cherokee	1376	-238	-3	1377	-235
Upper Squirrel SS	1388	-250	-12	1380	-238
Base SS	1401	-263	-7	1398	-256
Lower Squirrel SS	1431	-293	-7	1428	-286
Base SS	1444	-306	-2	1446	-304
Ardmore LS	1481	-343	-6	1480	-338
Burgess SS	1726	-588	-8	1721	-579
Top Best Pay Zone, (Porosity)	1728	-590	-11	1721	-579
Base Pay (75% SW Cutoff)	1731	-593	+1	1736	-594
Top Potential Lower Pay	1740	-602		na	
Base Pay (75% SW Cutoff)	1748	-610		na	
Base SS	1766	-628	+3	1773	-631
Mississippian Dol	1774	-636	-3	1775	-633
Rotary Total Depth	1827	-689		1824	-682

Structural Comparisons:

Structural comparison of the top of the Burgess Sandstone Pay Zone indicates that Hodges 5 is structurally 11' low to Hodges 3, a new pending producer well lying ~1100' to the south.

Gas Detection, Logs, Cores, DST's:

Digital total gas detection and rate of penetration was performed from 1300' to TD at 1827'. Dual induction and dual porosity open hole log was ran by Osage Wireline. No cores or DST's were obtained for this well.

Descriptions of Oil Show Zones:

Upper Squirrel SS

1388' to 1401', GL, (-250'), 13' thick, Very Good to Excellent Pay Zone Potential

Sandstone, dark brown, mostly clean, very fine to fine grained sub-angular quartz, loose grains to clusters, mostly good porosity, good odor, very good to excellent show of free brown oil rinsing from samples and bleeding into sample bags, very good live oil show and odor from pit; heavy oil below 1400', (-262); Siltstone, shale, 10% to 50%, very light gray to gray. Total gas readings peaked at 795 units which are 650 units of the background reading of approximately 135 units, no gas bubbles observed.

Pay Zone was flagged from 1388.5' to 1396' using an Rw of 0.15 and cutoffs for saltwater (Sw) of 75%, porosity (Phi) of 17%.

Oil In-Place for the flagged pay zone interval was estimated at 28,516 barrels using 440' well spacing. The recovery factor is highly variable, but for comparison purposes, a 10% recovery factor would result in approximately 2,852 barrels produced. See attached sheet of saltwater calculations.

Lower Squirrel SS

1431' to 1444', GL, (-293'), 13' thick, No Pay Zone Potential

Sandstone, dark gray, micaceous, very fine to fine grained sub-angular quartz, loose grains to clusters, mostly good porosity with minor tite, good odor; good show of dark brown heavy oil rinsing from samples and bleeding into sample bags, no show of oil in pit, no tar present; Siltstone and shale interbeds, 20%, dark gray. Total gas readings peaked at 429 units which is 254 units of background of approximately 175 units.

Pay Zone was flagged from 1429' to 1435' using an Rw of 0.15 and cutoffs for Sw of 70%, Phi of 17% and VSH of 0.8.

Oil In-Place for the flagged pay zone interval was estimated at 203 barrels using a 440' well spacing. Due to the heavy gravity and high saltwater calculations, this zone has no potential for commercial pay zone. See attached sheet of saltwater calculations.

Burgess SS

1726' to 1766', GL, (-588'), 40' thick, Very Good Pay Zone Potential 1728'-1733'

Sandstone, light brown, light gray brown to light gray, mostly clean, very fine to medium grained, sub-rounded to sub-angular quartz, loose grains to clusters, fair to very good porosity with minor tite zones of quartz re-crystallization, pyrite common from 1739'-1747', detail discussion below.

(1726'-1728'), Sandstone, 50%, light brown, fair to mostly good porosity, patchy tite in 20%, very fine to fine grained, very good odor, mostly very good show of free brown oil rinsing from samples and bleeding into sample bags, very good oil odor coming from pit. Total gas readings peaked at 109 units, which is 76 units above background of 33 units.

(1728'-1733'), Sandstone, 80%, brown, very fine to fine grained, sub-rounded, good porosity, strong odor in samples, strong odor and moderate oil show from pit, excellent show of free brown oil rinsing from samples and bleeding into sample bags. Total gas readings peaked at 59 units.

(1733'-1735'), Sandstone, 40%, light brown, very fine to fine grained, good porosity, good odor, very good show of free oil; Sandstone, 20%, fair to good porosity, fair patchy oil stain. Overall, very good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 49 units.

(1735'-1737'), Sandstone, 30%, light grayish-brown, very fine to fine grained, fair to good porosity, very good show of free oil; Sandstone, 30%, fair to good porosity, fair to good show of free oil; Sandstone, 10%, fair porosity, no show. Overall, good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 37 units.

(1737'-1739'), Shale, 30%, gray to dark gray; Sandstone, 40%, very fine to fine grained, good porosity, good show of free oil; Sandstone, 20%, fair to good porosity mostly with some tite, fair to good show of free oil; Sandstone, 10%, no show. Overall, good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 35 units.

(1739'-1743'), Sandstone, 50%, light grayish-brown, very fine to fine grained, fair porosity, good to very good show of free oil; Sandstone, 20%, fair to good porosity mostly with some tite, slight show of free oil; Sandstone, 10%, no show. Overall, good to very good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 39 units.

(1743'-1745'), Sandstone, 80%, light grayish-brown, very fine, fine to minor medium grained, fair to good porosity, good to very good show of free oil; Sandstone, 20%, tite to fair porosity, no show, pyrite common. Overall, good to very good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 45 units.

(1745'-1747'), Sandstone, 20%, light grayish-brown, very fine, fine to minor medium grained, fair to good porosity, good to very good show of free oil; Sandstone, 50%, very fine to fine grained, fair to good porosity, fair to good show of free oil, pyrite common. Overall, good to very good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 45 units.

(1747'-1748'), Sandstone, 20%, light grayish-brown, very fine to medium grained, fair to good porosity, good show of free oil; Sandstone, 30%, good porosity, fair show of free oil, pyrite minor; Sandstone, 40%, slight show of free oil. Overall, good show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 45 units.

(1748'-1750'), Sandstone, 15%, light grayish-brown, very fine to medium grained, fair porosity, fair show of free oil; Sandstone, 25%, good porosity, slight show of free oil; Sandstone, 40%, poor to fair porosity, no oil show. Overall, fair show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 45 units.

(1750'-1755'), Sandstone, 90%, light gray, fine to medium grained, good to very good porosity, many loose grains, no show of oil; Sandstone, 5%, slight show of oil. Overall, trace show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 33 units.

(1755'-1768'), Sandstone, 90%, light gray, fine to medium grained, poor to very good porosity, many loose grains and hard clusters, no show of oil; Sandstone, 5%, slight show of oil. Overall, trace show of free oil rinsing from samples and bleeding into sample bag. Total gas readings peaked at 33 units.

Medium to bright fluorescence from oil stain was as follows:

1726'-1728', 50% Bright, Very Good Pay Potential
1728'-1733', 80% Bright, Excellent Potential
1733'-1735', 60%, (40% Bright, 20% Medium), Good Potential
1735'-1737', 60%, (30% Bright, 30% Medium), Good Potential, Possibly Water Transition Zone
1737'-1739', 60%, (30% Bright, 30% Medium), Good Potential, Log shows mostly shale
1739'-1743', 70%, (20% Bright, 50% Medium), Good to Very Good Potential
1743'-1745', 80%, (40% Bright, 40% Medium), Good to Very Good Potential
1745'-1747', 70%, (20% Bright, 50% Medium), Good to Very Good Potential, Water Transition Zone
1747'-1748', 50%, (20% Bright, 30% Medium), Water Transition
1748'-1750', 25%, Medium, Water Transition
1750'-1762', 5%, Medium, Possible Cross Sample Contamination, Water Zone

Based on sample observations, the best potential pay zone lies from 1728' to1733'. A potential commercial lower pay zone lies from 1739' to 1745', but will probably be accompanied by an increase in saltwater. Pay Zone was flagged from 1729' to 1731', 1740' to 1741' and 1744' to 1748' using an Rw of 0.2 and cutoffs for Sw of 75%, Phi of 16% and VSH of 0.8. See attached sheet of saltwater calculations.

Oil In-Place in the flagged pay zone interval was estimated at 10,182 barrels using a 660' well spacing. It is thought that potential pay zone exists from 1728' to 1733', however the zone may be too thin to be adequately resolved by the deep induction logging tool which results in a lower than actual Rt value. Also, pyrite may negatively bias the Rt value from 1739' to 1747'.

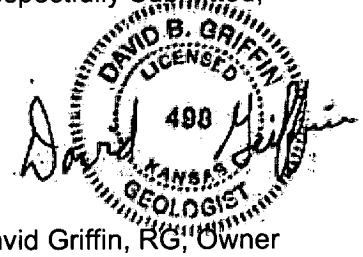
Summary:

Hodges 5 contained Upper Squirrel Sandstone from 1388' (-250) to 1401', (13' thick) with a very good to excellent show of free brown oil rinsing from samples and appearing in pit throughout. The Upper Squirrel Sandstone has very good to excellent potential as pay zone with saltwater calculations that ranged from 35% to 56%. Lower Squirrel Sandstone was present from 1431', (-293) to 1444', (12' thick) with good shows of heavy oil. The Lower Squirrel Sandstone has no pay zone potential with saltwater calculations that are no better that 70%. Burgess Sandstone was present from 1726' (-588) to 1766', (40' thick) and contained mostly good to excellent show of free brown oil from 1726' to 1747'. Based on sample observations, the Burgess Sandstone has excellent pay zone potential from 1728' to 1733', however saltwater calculations are lower than anticipated which reduced the amount of flagged pay zone. The top of the Burgess Sandstone Porosity is structurally 11' low to Hodges 3, a new potential Burgess Sandstone producer well lying ~1100' to the south. Due to the very good to excellent potential of the Upper Squirrel and Burgess Sandstones, $5\frac{1}{2}$" production casing was set.

Recommendations:

It is recommended that the Burgess Sandstone be perforated from 1728' to 1731', GL and tested naturally through perforations. A cased hole GRN log should be correlated with the open-hole and sample log to aid in properly placing the perforations. The Upper Squirrel Sandstone could also be tested with perforations from 1389' to 1396' and sand frac'd. However, a separate well development with waterflood plan on 440' acre spacing should be considered.

Respectfully Submitted,



David Griffin, RG, Owner
GGR Inc. (Griffin Geological Resources)
Lawrence, Kansas
785-842-3665

Attachment: Sample Log, Saltwater and OIP Calculations

Hodges 5
Upper Squirrel Sandstone Saltwater and Oil in Place Calculations
NW NW NW/4, Sec. 12-T21S-R13E, Coffey County, KS
October 3, 2011

Model = Archie

PARAMETERS	
X	
Y	
A	1
M	1.8
N	2
RW	0.15
CTHK	20.5
AVPHI	0.18
FTOIL	0.93
PAYFEET	8
Estimated Oil-In-Place	
440' Spacing	28,516
10%OIP	2,852
DMIN	
DMAX	
GL	1138
LTD	
BHT	
ST	
RMF	
RMFT	

CUT-OFFS	
PHICUT	0.17
SWCUT	0.75
VSHCUT	na
BVWCUT	0.22

Colors:

Zone	Depth	Thick	Porosity RT	Porosity PHI	RWA	RO	MA	SW	BVW	VSH	FT PAY	BOI	Barrels Oil In-Place Per Acre
1	1386	0.5	8.58	15.1%	0.28	4.53	2.14	72.7%	0.109	0.862	0	1.12	0
2	1386.5	0.5	8.74	15.2%	0.29	4.44	2.16	71.3%	0.109	0.908	0	1.12	0
3	1387	0.5	9.01	15.5%	0.31	4.32	2.19	69.3%	0.107	0.922	0	1.12	0
4	1387.5	0.5	9.46	15.9%	0.34	4.11	2.25	65.9%	0.105	0.922	0	1.12	0
5	1388	0.5	10.04	16.5%	0.39	3.83	2.34	61.8%	0.102	0.901	0	1.12	0
6	1388.5	0.5	10.77	17.7%	0.48	3.39	2.47	56.1%	0.099	0.892	0.04	1.12	269
7	1389	0.5	11.73	19.2%	0.60	2.93	2.64	50.0%	0.096	0.983	0.05	1.12	332
8	1389.5	0.5	12.93	20.2%	0.73	2.66	2.79	45.3%	0.092	1.089	0.06	1.12	383
9	1390	0.5	14.40	20.6%	0.84	2.57	2.89	42.2%	0.087	1.121	0.06	1.12	413
10	1390.5	0.5	16.18	20.8%	0.96	2.53	2.98	39.5%	0.082	1.055	0.06	1.12	436
11	1391	0.5	17.99	20.8%	1.06	2.54	3.05	37.6%	0.078	0.930	0.06	1.12	450
12	1391.5	0.5	19.46	20.2%	1.09	2.68	3.04	37.1%	0.075	0.796	0.06	1.12	439
13	1392	0.5	20.76	19.5%	1.09	2.85	3.02	37.0%	0.072	0.695	0.06	1.12	425
14	1392.5	0.5	21.88	19.2%	1.12	2.93	3.02	36.6%	0.070	0.596	0.06	1.12	421
15	1393	0.5	22.57	19.0%	1.13	2.98	3.02	36.4%	0.069	0.486	0.06	1.12	419
16	1393.5	0.5	22.85	19.0%	1.16	2.97	3.03	36.0%	0.069	0.405	0.06	1.12	422
17	1394	0.5	22.84	19.3%	1.18	2.90	3.05	35.6%	0.069	0.368	0.06	1.12	430
18	1394.5	0.5	22.60	19.6%	1.20	2.83	3.07	35.4%	0.069	0.359	0.06	1.12	438
19	1395	0.5	21.51	19.6%	1.14	2.83	3.04	36.3%	0.071	0.376	0.06	1.12	432
20	1395.5	0.5	19.43	18.6%	0.94	3.09	2.89	39.9%	0.074	0.394	0.06	1.12	388
21	1396	0.5	17.02	17.2%	0.72	3.55	2.69	45.7%	0.079	0.399	0.05	1.12	325
22	1396.5	0.5	14.97	16.7%	0.60	3.77	2.57	50.2%	0.084	0.437	0	1.12	0
23	1397	0.5	13.38	16.7%	0.54	3.74	2.51	52.9%	0.089	0.534	0	1.12	0
24	1397.5	0.5	12.06	16.6%	0.48	3.78	2.45	56.0%	0.093	0.653	0	1.12	0
25	1398	0.5	10.96	16.2%	0.42	3.95	2.36	60.1%	0.098	0.704	0	1.12	0
26	1398.5	0.5	10.01	16.0%	0.37	4.08	2.29	63.8%	0.102	0.691	0	1.12	0
27	1399	0.5	9.23	16.1%	0.35	4.01	2.26	65.9%	0.106	0.691	0	1.12	0
28	1399.5	0.5	8.73	16.8%	0.35	3.72	2.28	65.3%	0.110	0.733	0	1.12	0
29	1400	0.5	8.50	17.2%	0.36	3.55	2.30	64.6%	0.111	0.765	0	1.12	0
30	1400.5	0.5	8.42	16.9%	0.34	3.69	2.26	66.2%	0.112	0.780	0	1.12	0
31	1401	0.5	8.40	16.3%	0.32	3.93	2.22	68.4%	0.111	0.872	0	1.12	0
32	1401.5	0.5	8.43	16.0%	0.31	4.04	2.20	69.2%	0.111	1.016	0	1.12	0
33	1402	0.5	8.45	16.1%	0.32	4.01	2.21	68.9%	0.111	1.092	0	1.12	0
34	1402.5	0.5	8.48	16.4%	0.33	3.87	2.23	67.6%	0.111	1.079	0	1.12	0
35	1403	0.5	8.53	16.8%	0.35	3.71	2.27	65.9%	0.111	1.026	0	1.12	0
36	1403.5	0.5	8.53	17.1%	0.35	3.62	2.28	65.1%	0.111	0.981	0	1.12	0
37	1404	0.5	8.47	17.1%	0.35	3.62	2.28	65.4%	0.112	0.974	0	1.12	0
38	1404.5	0.5	8.41	17.1%	0.35	3.59	2.28	65.4%	0.112	0.951	0	1.12	0
39	1405	0.5	8.36	17.3%	0.35	3.54	2.29	65.1%	0.112	0.914	0	1.12	0
40	1405.5	0.5	8.36	17.2%	0.35	3.57	2.28	65.3%	0.112	0.886	0	1.12	0
41	1406	0.5	8.43	16.9%	0.34	3.70	2.26	66.2%	0.112	0.860	0	1.12	0

Hodges 5

Lower Squirrel Sandstone Saltwater and Oil in Place Calculations

NW NW NW/4, Sec. 12-T21S-R13E, Coffey County, KS

October 3, 2011

Model = Archie

PARAMETERS	
X	
Y	
A	1
M	1.8
N	2
RW	0.15
CTHK	30.5
AVPHI	0.17
FTOIL	0.07
PAYFEET	1
Estimated Oil-In-Place	
440' Spacing	2,033
10% OIP	203
DMIN	
DMAX	
GL	1138
LTD	
BHT	
ST	
RMF	
RMFT	

CUT-OFFS	
PHICUT	0.17
SWCUT	0.7
VSHCUT	0.8
BVWCUT	0.22

Colors:

Zone	Depth	Thick	Porosity RT	Porosity PHI	RWA	RO	MA	SW	BVW	VSH	FT PAY	BOI	Barrels Oil In-Place Per Acre
1	1420	0.5	7.25	16.9%	0.29	3.69	2.18	71.3%	0.120	1.006	0	1.12	0
2	1420.5	0.5	6.91	16.6%	0.27	3.78	2.14	74.0%	0.123	1.023	0	1.12	0
3	1421	0.5	6.55	16.1%	0.24	4.01	2.07	78.3%	0.126	1.042	0	1.12	0
4	1421.5	0.5	6.24	15.7%	0.22	4.19	2.02	81.9%	0.129	1.070	0	1.12	0
5	1422	0.5	6.03	15.9%	0.22	4.11	2.01	82.5%	0.131	1.121	0	1.12	0
6	1422.5	0.5	5.94	16.4%	0.23	3.89	2.03	80.9%	0.133	1.144	0	1.12	0
7	1423	0.5	6.01	16.8%	0.24	3.72	2.07	78.7%	0.132	1.168	0	1.12	0
8	1423.5	0.5	6.20	16.3%	0.24	3.91	2.05	79.4%	0.130	1.152	0	1.12	0
9	1424	0.5	6.40	14.6%	0.20	4.78	1.95	86.4%	0.126	1.028	0	1.12	0
10	1424.5	0.5	6.57	12.6%	0.16	6.28	1.82	97.7%	0.123	0.837	0	1.12	0
11	1425	0.5	6.74	11.4%	0.13	7.49	1.75	105.4%	0.120	0.713	0	1.12	0
12	1425.5	0.5	6.93	11.6%	0.14	7.23	1.78	102.1%	0.119	0.718	0	1.12	0
13	1426	0.5	7.24	12.7%	0.18	6.13	1.88	92.0%	0.117	0.801	0	1.12	0
14	1426.5	0.5	7.64	13.8%	0.22	5.32	1.98	83.4%	0.115	0.897	0	1.12	0
15	1427	0.5	7.96	14.3%	0.24	4.96	2.04	79.0%	0.113	0.953	0	1.12	0
16	1427.5	0.5	8.05	14.1%	0.24	5.08	2.04	79.4%	0.112	0.980	0	1.12	0
17	1428	0.5	7.94	13.4%	0.21	5.61	1.97	84.1%	0.112	0.955	0	1.12	0
18	1428.5	0.5	7.71	12.5%	0.18	6.31	1.90	90.4%	0.113	0.882	0	1.12	0
19	1429	0.5	7.40	12.2%	0.17	6.66	1.85	94.8%	0.115	0.818	0	1.12	0
20	1429.5	0.5	7.07	12.7%	0.17	6.17	1.87	93.4%	0.119	0.820	0	1.12	0
21	1430	0.5	6.77	14.0%	0.20	5.18	1.94	87.4%	0.122	0.838	0	1.12	0
22	1430.5	0.5	6.50	15.5%	0.23	4.31	2.02	81.5%	0.126	0.831	0	1.12	0
23	1431	0.5	6.17	16.7%	0.25	3.77	2.07	78.2%	0.130	0.822	0	1.12	0
24	1431.5	0.5	5.80	17.7%	0.26	3.40	2.11	76.6%	0.135	0.819	0	1.12	0
25	1432	0.5	5.43	18.8%	0.27	3.05	2.14	74.9%	0.141	0.826	0	1.12	0
26	1432.5	0.5	5.11	20.0%	0.28	2.71	2.19	72.9%	0.146	0.782	0	1.12	0
27	1433	0.5	4.89	21.0%	0.30	2.48	2.24	71.2%	0.150	0.722	0	1.12	0
28	1433.5	0.5	4.78	21.8%	0.31	2.33	2.27	69.8%	0.152	0.732	0.03	1.12	227
29	1434	0.5	4.74	22.0%	0.31	2.30	2.28	69.6%	0.153	0.786	0.03	1.12	231
30	1434.5	0.5	4.74	21.5%	0.30	2.38	2.25	70.8%	0.153	0.804	0	1.12	0
31	1435	0.5	4.76	21.0%	0.29	2.48	2.22	72.3%	0.152	0.774	0	1.12	0
32	1435.5	0.5	4.78	20.8%	0.28	2.53	2.21	72.7%	0.151	0.748	0	1.12	0
33	1436	0.5	4.82	20.6%	0.28	2.58	2.20	73.1%	0.151	0.748	0	1.12	0
34	1436.5	0.5	4.85	20.3%	0.27	2.65	2.18	73.9%	0.150	0.756	0	1.12	0
35	1437	0.5	4.87	20.3%	0.27	2.66	2.18	73.9%	0.150	0.770	0	1.12	0
36	1437.5	0.5	4.89	20.5%	0.28	2.60	2.20	72.9%	0.150	0.774	0	1.12	0
37	1438	0.5	4.91	20.6%	0.28	2.59	2.21	72.6%	0.149	0.726	0	1.12	0
38	1438.5	0.5	4.94	20.2%	0.28	2.67	2.18	73.5%	0.149	0.691	0	1.12	0
39	1439	0.5	4.98	19.9%	0.27	2.75	2.17	74.3%	0.148	0.682	0	1.12	0
40	1439.5	0.5	5.02	19.8%	0.27	2.76	2.17	74.2%	0.147	0.636	0	1.12	0
41	1440	0.5	5.06	20.0%	0.28	2.72	2.18	73.4%	0.147	0.551	0	1.12	0
42	1440.5	0.5	5.09	20.3%	0.29	2.64	2.21	72.0%	0.146	0.472	0	1.12	0
43	1441	0.5	5.14	20.5%	0.30	2.61	2.23	71.3%	0.146	0.446	0	1.12	0
44	1441.5	0.5	5.24	20.2%	0.29	2.68	2.22	71.5%	0.144	0.483	0	1.12	0
45	1442	0.5	5.42	19.7%	0.29	2.80	2.21	71.9%	0.141	0.548	0	1.12	0
46	1442.5	0.5	5.65	19.2%	0.29	2.92	2.20	71.9%	0.138	0.622	0	1.12	0
47	1443	0.5	5.94	18.6%	0.29	3.10	2.19	72.3%	0.134	0.652	0	1.12	0
48	1443.5	0.5	6.28	17.5%	0.27	3.44	2.15	74.1%	0.130	0.618	0	1.12	0
49	1444	0.5	6.63	16.6%	0.26	3.79	2.11	75.6%	0.126	0.602	0	1.12	0
50	1444.5	0.5	7.00	16.0%	0.26	4.04	2.10	75.9%	0.122	0.631	0	1.12	0
51	1445	0.5	7.41	15.6%	0.26	4.25	2.10	75.7%	0.118	0.687	0	1.12	0
52	1445.5	0.5	7.83	15.5%	0.27	4.28	2.12	73.9%	0.115	0.790	0	1.12	0
53	1446	0.5	8.20	15.8%	0.30	4.15	2.17	71.1%	0.112	0.868	0	1.12	0
54	1446.5	0.5	8.51	16.2%	0.32	3.96	2.22	68.2%	0.111	0.927	0	1.12	0
55	1447	0.5	8.79	16.6%	0.35	3.80	2.27	65.7%	0.109	1.021	0	1.12	0
56	1447.5	0.5	9.02	16.8%	0.36	3.72	2.30	64.2%	0.108	1.111	0	1.12	0
57	1448	0.5	9.21	16.8%	0.37	3.71	2.31	63.5%	0.107	1.137	0	1.12	0
58	1448.5	0.5	9.37	16.9%	0.38	3.69	2.32	62.7%	0.106	1.097	0	1.12	0
59	1449	0.5	9.49	17.0%	0.39	3.63	2.34	61.9%	0.105	1.019	0	1.12	0
60	1449.5	0.5	9.55	17.0%	0.39	3.63	2.35	61.7%	0.105	0.982	0	1.12	0
61	1450	0.5	9.67	17.1%	0.40	3.62	2.36	61.2%	0.104	0.994	0	1.12	0

Hodges 5

Burgess Sandstone Saltwater and Oil in Place Calculations

NW NW NW/4, Sec. 12-T21S-R13E, Coffey County, KS

October 3, 2011

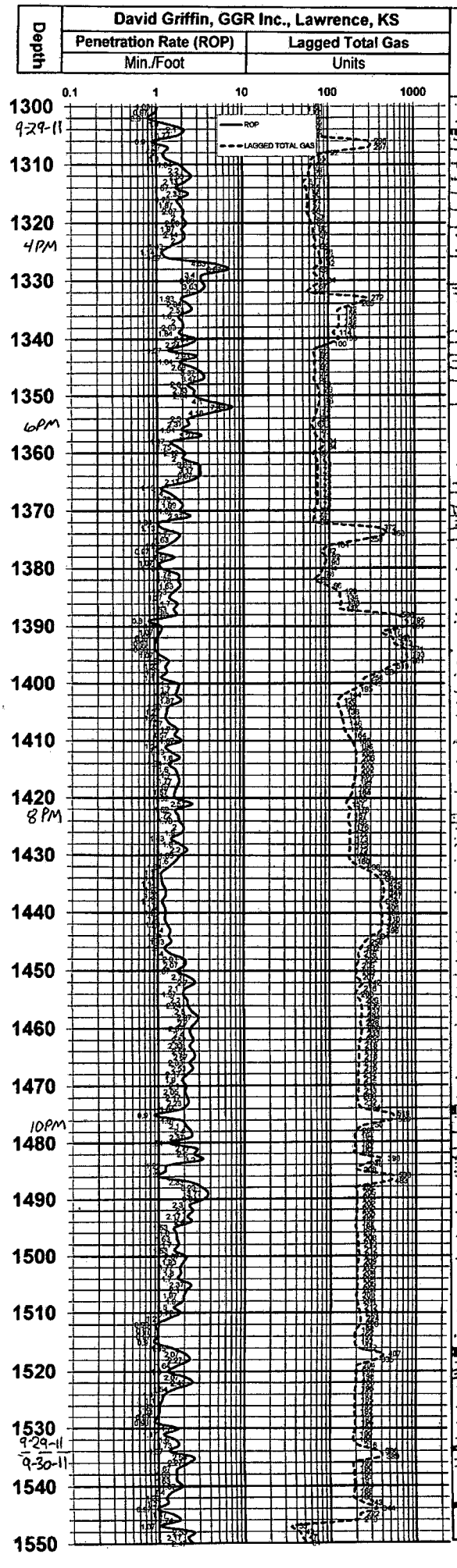
Model = Archie

PARAMETERS	
X	
Y	
A	1
M	1.8
N	2
RW	0.2
CTHK	46.5
AVPHI	0.20
FTOIL	0.48
PAYFEET	8.5
Estimated Oil-In-Place	
660' Spacing	10,192
10%OIP	1,019
DMIN	
DMAX	
GL	1138
LTD	
BHT	
ST	
RMF	
RMFT	

CUT-OFFS	
PHICUT	0.16
SWCUT	0.75
VSHCUT	0.8
BVWCUT	0.22

Colors:

Zone	Depth	Thick	Porosity RT	Porosity PHI	RWA	RO	MA	SW	BVW	VSH	FT PAY	BOI	Barrels Oil In-Place Per Acre
1	1724	0.5	0.71	16.1%	0.03	5.36	0.70	274.1%	0.441	1.117	0	1.14	0
2	1724.5	0.5	0.96	15.2%	0.04	5.48	0.85	238.8%	0.420	1.129	0	1.14	0
3	1725	0.5	1.17	16.1%	0.04	5.36	0.97	213.6%	0.443	1.116	0	1.14	0
4	1725.5	0.5	1.50	16.2%	0.06	5.31	1.11	188.0%	0.530	1.083	0	1.14	0
5	1726	0.5	2.02	15.9%	0.07	5.50	1.25	165.2%	0.582	0.967	0	1.14	0
6	1726.5	0.5	2.70	15.3%	0.09	5.86	1.39	147.2%	0.625	0.798	0	1.14	0
7	1727	0.5	3.55	15.1%	0.12	6.00	1.52	129.9%	0.196	0.630	0	1.14	0
8	1727.5	0.5	4.48	16.1%	0.17	5.34	1.70	109.1%	0.176	0.524	0	1.14	0
9	1728	0.5	5.38	18.2%	0.25	4.30	1.93	89.4%	0.163	0.495	0	1.14	0
10	1728.5	0.5	6.08	20.1%	0.34	3.59	2.13	76.9%	0.155	0.418	0	1.14	0
11	1729	0.5	6.41	21.1%	0.39	3.30	2.23	71.7%	0.151	0.295	0.03	1.14	203
12	1729.5	0.5	6.40	21.5%	0.40	3.17	2.26	70.4%	0.152	0.234	0.03	1.14	217
13	1730	0.5	6.13	21.7%	0.39	3.13	2.24	71.5%	0.155	0.247	0.03	1.14	211
14	1730.5	0.5	5.76	21.7%	0.37	3.12	2.20	73.6%	0.160	0.245	0.03	1.14	196
15	1731	0.5	5.39	22.2%	0.36	3.01	2.19	74.7%	0.166	0.200	0.03	1.14	191
16	1731.5	0.5	5.06	22.6%	0.35	2.90	2.18	75.7%	0.171	0.164	0	1.14	0
17	1732	0.5	4.73	22.4%	0.32	2.95	2.12	79.0%	0.177	0.167	0	1.14	0
18	1732.5	0.5	4.42	21.9%	0.29	3.09	2.04	83.6%	0.183	0.191	0	1.14	0
19	1733	0.5	4.19	21.8%	0.27	3.10	2.00	86.0%	0.188	0.255	0	1.14	0
20	1733.5	0.5	4.09	22.1%	0.27	3.02	2.00	85.9%	0.190	0.315	0	1.14	0
21	1734	0.5	4.13	22.2%	0.27	3.01	2.01	85.4%	0.189	0.291	0	1.14	0
22	1734.5	0.5	4.31	21.9%	0.28	3.08	2.02	84.5%	0.185	0.239	0	1.14	0
23	1735	0.5	4.60	21.5%	0.29	3.19	2.04	83.3%	0.179	0.238	0	1.14	0
24	1735.5	0.5	4.84	20.4%	0.28	3.49	2.02	84.1%	0.172	0.323	0	1.14	0
25	1736	0.5	5.29	18.5%	0.25	4.16	1.94	88.7%	0.164	0.471	0	1.14	0
26	1736.5	0.5	5.63	16.6%	0.22	5.08	1.86	95.0%	0.157	0.574	0	1.14	0
27	1737	0.5	5.94	15.6%	0.21	5.69	1.82	97.9%	0.152	0.622	0	1.14	0
28	1737.5	0.5	6.20	15.5%	0.22	5.75	1.84	96.3%	0.149	0.760	0	1.14	0
29	1738	0.5	6.34	15.9%	0.23	5.50	1.88	93.1%	0.148	0.912	0	1.14	0
30	1738.5	0.5	6.30	17.0%	0.26	4.87	1.94	88.0%	0.149	0.884	0	1.14	0
31	1739	0.5	6.10	18.6%	0.30	4.11	2.03	82.1%	0.153	0.692	0	1.14	0
32	1739.5	0.5	5.86	20.3%	0.33	3.54	2.12	77.7%	0.157	0.436	0	1.14	0
33	1740	0.5	5.70	21.5%	0.36	3.18	2.18	74.7%	0.161	0.249	0.03	1.14	185
34	1740.5	0.5	5.63	22.2%	0.38	3.00	2.22	73.0%	0.162	0.183	0.03	1.14	205
35	1741	0.5	5.62	22.1%	0.37	3.03	2.21	73.4%	0.162	0.188	0.03	1.14	200
36	1741.5	0.5	5.71	21.0%	0.34	3.32	2.15	76.3%	0.160	0.190	0	1.14	0
37	1742	0.5	5.93	19.5%	0.31	3.78	2.08	79.8%	0.156	0.170	0	1.14	0
38	1742.5	0.5	6.28	18.2%	0.29	4.30	2.02	82.7%	0.151	0.148	0	1.14	0
39	1743	0.5	6.77	17.5%	0.29	4.60	2.02	82.5%	0.144	0.154	0	1.14	0
40	1743.5	0.5	7.31	18.0%	0.33	4.38	2.10	77.4%	0.139	0.177	0	1.14	0
41	1744	0.5	7.76	18.8%	0.38	4.07	2.19	72.4%	0.136	0.173	0.03	1.14	176
42	1744.5	0.5	7.98	18.9%	0.40	3.99	2.22	70.8%	0.134	0.156	0.03	1.14	189
43	1745	0.5	7.89	19.2%	0.40	3.92	2.22	70.4%	0.135	0.183	0.03	1.14	193
44	1745.5	0.5	7.60	19.6%	0.40	3.75	2.23	70.3%	0.138	0.210	0.03	1.14	199
45	1746	0.5	7.32	19.7%	0.39	3.72	2.22	71.3%	0.141	0.193	0.03	1.14	193
46	1746.5	0.5	7.11	19.5%	0.38	3.79	2.18	73.0%	0.142	0.173	0.03	1.14	179
47	1747	0.5	6.96	19.5%	0.37	3.79	2.17	73.8%	0.144	0.147	0.03	1.14	174
48	1747.5	0.5	6.87	19.8%	0.37	3.69	2.18	73.3%	0.145	0.127	0.03	1.14	181
49	1748	0.5	6.74	19.6%	0.36	3.75	2.16	74.6%	0.146	0.171	0.02	1.14	170
50	1748.5	0.5	6.47	18.5%	0.31	4.18	2.06	80.3%	0.148	0.246	0	1.14	0
51	1749	0.5	6.08	17.0%	0.25	4.83	1.93	89.2%	0.152	0.253	0	1.14	0
52	1749.5	0.5	5.65	17.0%	0.23	4.85	1.89	92.7%	0.158	0.216	0	1.14	0
53	1750	0.5	5.31	18.8%	0.26	4.05	1.96	87.3%	0.164	0.181	0	1.14	0
54	1750.5	0.5	5.08	20.6%	0.30	3.44	2.05	82.3%	0.169	0.153	0	1.14	0
55	1751	0.5	4.92	20.9%	0.29	3.35	2.05	82.5%	0.172	0.140	0	1.14	0
56	1751.5	0.5	4.81	20.5%	0.28	3.48	2.00	85.0%	0.174	0.149	0	1.14	0
57	1752	0.5	4.73	20.8%	0.28	3.38	2.01	84.6%	0.176	0.160	0	1.14	0
58	1752.5	0.5	4.59	21.1%	0.28	3.28	2.02	84.6%	0.179	0.145	0	1.14	0
59	1753	0.5	4.40	20.1%	0.24	3.60	1.92	90.5%	0.182	0.133	0	1.14	0
60	1753.5	0.5	4.22	18.9%	0.21	4.01	1.83	97.5%	0.184	0.143	0	1.14	0
61	1754	0.5	4.10	19.5%	0.22	3.78	1.85	96.0%	0.188	0.155	0	1.14	0
62	1754.5	0.5	4.02	21.1%	0.24	3.30	1.93	90.7%	0.191	0.167	0	1.14	0
63	1755	0.5	3.89	21.8%	0.25	3.11	1.95	89.4%	0.195	0.153	0	1.14	0
64	1755.5	0.5	3.67	22.0%	0.24	3.06	1.92	91.3%	0.201	0.117	0	1.14	0
65	1756	0.5	3.42	22.5%	0.23	2.93	1.90	92.5%	0.208	0.103	0	1.14	0
66	1756.5	0.5	3.21	23.0%	0.23	2.81	1.89	93.5%	0.215	0.126	0	1.14	0
67	1757	0.5	3.04	23.0%	0.21	2.83	1.85	96.5%	0.221	0.150	0	1.14	0
68	1757.5	0.5	2.88	22.9%	0.20	2.83	1.81	99.1%	0.227	0.149	0	1.14	0
69	1758	0.5	2.74	23.5%	0.20	2.71	1.81	99.4%	0.232	0.145	0	1.14	0
70	1758.5	0.5	2.61	24.1%	0.20	2.58	1.81	99.5%	0.240	0.147	0	1.14	0
71	1759	0.5	2.50	24.5%	0.20	2.51	1.80	100.2%	0.247	0.148	0	1.14	0
72	1759.5	0.5	2.41	25.3%	0.20	2.38	1.81	99.3%	0.253	0.156	0	1.14	0
73	1760	0.5	2.34	26.3%	0.21	2.22	1.84	97.4%	0.258	0.154	0	1.14	0
74	1760.5	0.5	2.27	26.7%	0.21	2.16	1.84	97.3%	0.260	0.148	0	1.14	0
75	1761	0.5	2.23	26.2%	0.20	2.23	1.80	99.9%	0.262	0.144	0	1.14	0
76	1761.5	0.5	2.22	25.5%	0.19	2.34	1.76	102.7%	0.262	0.136	0	1.14	0
77	1762	0.5	2.24	25.0%	0.19	2.42	1.74	103.9%	0.263	0.136	0	1.14	0
78	1762.5	0.5	2.32	24.8%	0.19	2.46	1.76	102.8%	0.265	0.145	0	1.14	0
79	1763	0.5	2.48	24.9%	0.20	2.44	1.81	99.2%	0.267	0.159	0	1.14	0
80	1763.5	0.5	2.73	24.8%	0.22	2.46	1.88	94.9%	0.269	0.174	0	1.14	0
81	1764	0.5	3.06	23.8%	0.23	2.66	1.90	93.2%	0.272	0.179	0	1.14	0
82	1764.5	0.5	3.47	21.9%	0.23	3.08	1.88	94.2%	0.206	0.193	0	1.14	0
83	1765	0.5	4.00	19.9%	0.22	3.66	1.85	95.7%	0.190	0.261	0	1.14	0
84	1765.5	0.5	4.65	18.3%	0.22	4.27	1.85	95.8%	0.175	0.432	0	1.14	0
85	1766	0.5	5.53	16.8%	0.22	4.94	1.86	94.4%	0.159	0.661	0	1.14	0
86	1766.5	0.5	6.74	15.3%	0.23	5.88	1.87	93.5%	0.143	0.892	0	1.14	0
87	1767	0.5	8.14	13.7%	0.23	7.14	1.87	93.6%	0.129	1.101	0	1.14	0
88	1767.5	0.5	9.50	12.7%	0.23	8.18	1.87	92.8%	0.118	1.226	0	1.14	0
89	1768	0.5	10.64	12.2%	0.24	8.85	1.89	91.2%	0.111	1.228	0	1.14	0
90	1768.5	0.5	11.48	11.5%	0.23	9.79	1.87	92.3%	0.106	1.173	0	1.14	0
91	1769	0.5	12.13	11.0%	0.23	10.61	1.86	93.5%	0.103	1.132	0	1.14	0
92	1769.5	0.5	12.81	11.2%	0.25	10.24	1.90	89.4%	0.100	1.068	0	1.14	0
93	1770	0.5	13.58	12.2%	0.31	8.83	2.00	80.6%	0.098	1.055	0	1.14	0



Well: Hodges 5	Pg. 1 of 3
Location: NW NW NW4, 4950' fsl & 330' fwl, Section 12-T21S-R13E, Cfy Co.	Datum/Elev. GL 1138.2'
Sample Descriptions (Lagged)	Tops/Remarks

Operator: Dennis and Peggy Hodges

Drlg Contr: Three Rivers Exploration, LLC

API No.: 15-031-23047

7 7/8" PDC Bit

Native Mud

10' sampler

Sh, gy to blk

LS, gy to dk bn, vf-slty/fn-gd ϕ, organics/pyrite? No odor

sh, blk

sh, dk gy

LS, ltgy, dns, foss, slisilty

sh, gn-gy, silty

sh, ltgn-gy to dkgy, mottled

LS, O-w to lt gy

sh, blk, Good gas bubbler

Cherokee

LS, gy-bn to lt tn

sh, dkgy to ltgy

1376 (-238)

Begin 5' smpls @ 1390

slt-vfg, ltgn-gy, lmy pr ϕ, NS

U. Squirrel ss

slt-vfg, bn, 20% fo, patchy oil stn; sl t AA, 20% ϕ, NS No free oil, ~20% sh, silty, vlg

1388 (-250)

~13' Thick

-Pay Zone-

SS, Dk Bn, vf-fg mst, gd-vgd ϕ, gd odor, chert, tr se gns

1388-92, VG SFO,

1392-96, VG-Ex SFO,

1396-1400, G SFO, patchy v. calc & tite,

1400-1405, Fr-G SFO, Heavier oil

Much oil in pit throughout

Base ss

1401 (-263)

sh, gy to dkgy, stmte

sh, dkgy, ptly silty, mte

sh, dkgy

LS, Dkgy, slisdy, few foss

sh, dkgy

L. Squirrel ss

1431 (-293)

13' Thick

-Not Pay Zone-

SS, Dkgy, vf-fg sn, mostly gd ϕ, gd odor, mica, mostly gd sh, hvy oil/rinsing + in bag, No oil in pit

1431-93, Gd Show Hvy Oil rinsing + in bag

1493-96, Fr show Hvy Oil, slight free oil

Base ss

1444 (-306)

sh, dkgy, v silty, mte, ~10% cs lam, hd, prly NS

sh, dkgy, ptly silty

coal

LS, dk bn to gy, dns

LS, bk to dkgy, dns

sh, blk

slt-vfg, vlg, dns, NS

SS, ltgy to tn-gy, vf gn to cs silt, ptly limey; interbdd sh, ltgy & slt-vfg

SS, vlg, vf-fsn, gd ϕ, NS;

coal

LS, gy, shly, dns

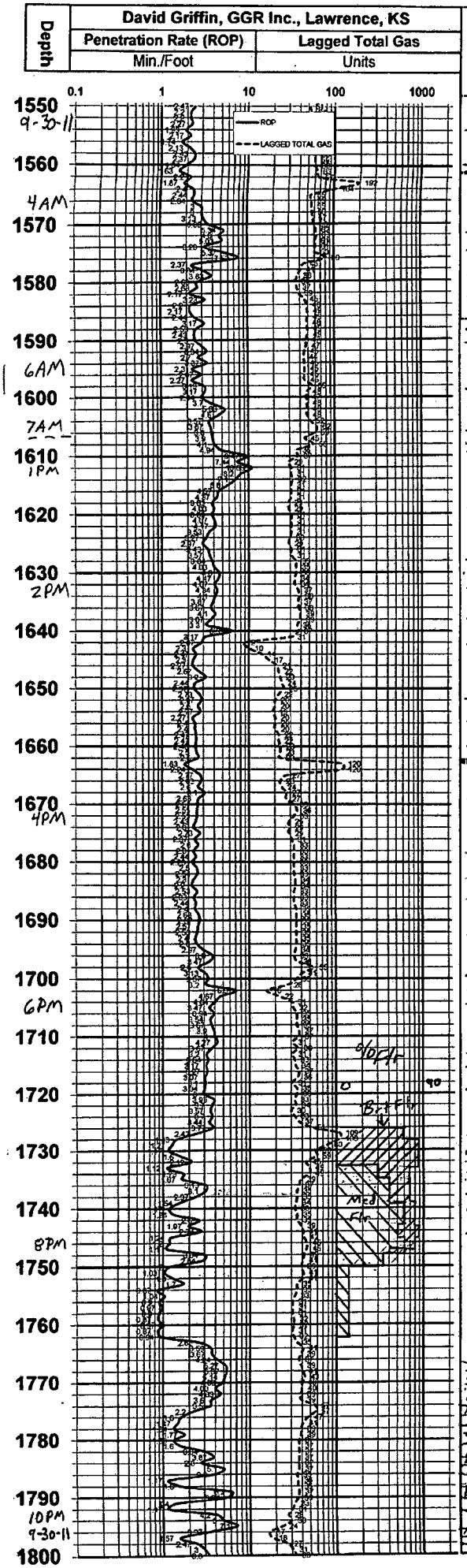
sh, vlg-g

coal

sh, gy, ptly calc, limey

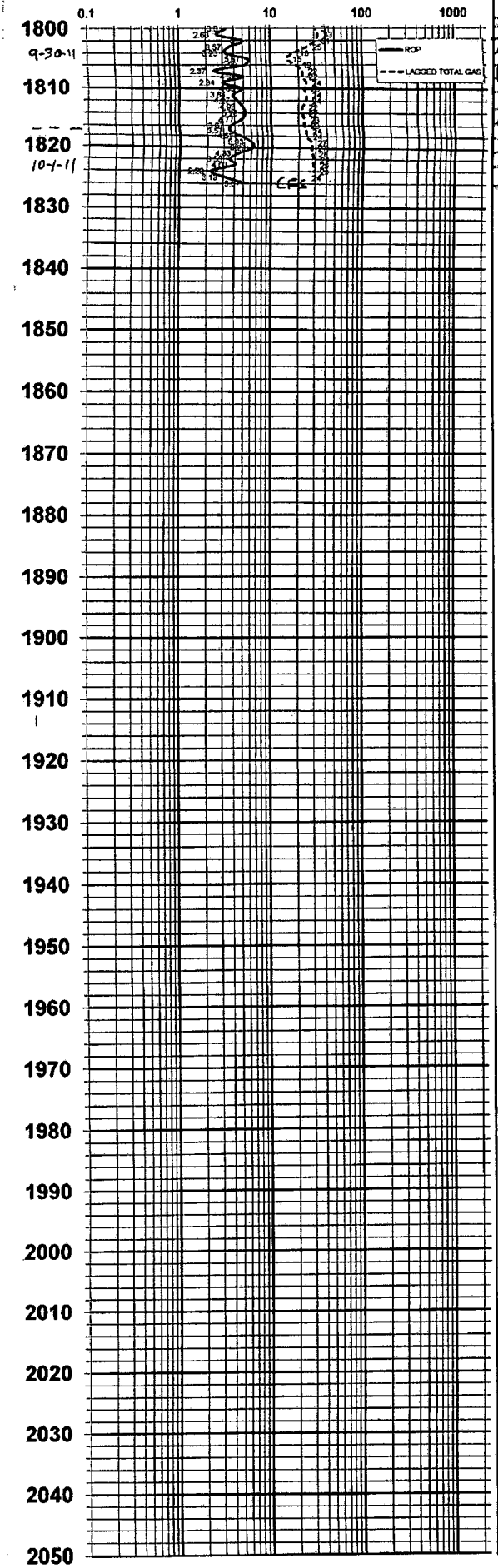
start mud up 1546'

coal



Well: Hodges 5	Pg. 2 of 3
Location: NW NW NW4, 4950' fsl & 330' fwl, Section 12-T21S-R13E, Cfy Co.	Datum/Elev. GL 1138.2'
Sample Descriptions (Lagged)	Tops/Remarks
sh, gy to dgy	
sh, vdg to blk	
coal	
sh, gy to vdkgy	
sh, (Red Bed) maroon, clay, minor Bn & gy	
slt st, ltgy, ns	
sh, vdkg to blk, mln vlg-gy	
sh, gy, silty, 10% slt st, lam, gy	1609', Button Bit Trip
sh, gy	
sh vdg to blk, 20% slt st lam	
sh, vlg to dg, blu-gy	
AA	dump (pre-mix) mud
sh, gy to blk	
coal	
sh, mostly vdgy to blk	Annular Velocity ~138 ft/min.
sh, vlg to dg	
SS, vltgy, vf-f, pr-fr ϕ, clean, NS No Odor, NO Flr	
sh, vdkgy, sli silty, mtc	Dump more pre-mix
	Burgess SS
1726'-28' SS, 50%, ltBn, vf-fgn, mstly gd ϕ. Vgd Odor, VGSFO; ~20% is patchy site	1726 (-588)
1728'-33' SS, 80%, Bn, vf-f, sb-rd, gd ϕ, strg Odor, EXCSFO, VGd Flr	Start 5' samples Potential Pay Zone 1726-37, 39-47'
1732'-35' SS, 40%, ltBn, gd ϕ, VGSFO	Best Pay Zone 1728'-33'
1735'-37' SS, 30%, ltgy-bn, VGSFO; SS, 30% lt gy-bn, fr-GSFO; ss, 10% NS	
1737-39' sh, gy to dkgy, 80%; 40% SS, GSFO	
1739'-43' SS, 50%, ltgy-bn, Gd-VGSFO, fr-gd ϕ SS, 20%, sl ISFO, Pyr. common	Lower Pay? Zone 1739-43'
1742-45' SS, 80%, ltgy-bn, vf-f, mln wed gn, Fr. fr-gd ϕ, GSFO to VGSFO; ss, 20% w/NS	
1745-47' SS, 70%, ltgy-bn; c-VGSFO; 10% slt stn obv Pyr.	
1747-48' SS, 20% GSFO; 30% FrSFO; 40% NS	
1748-50' SS, 15% FrSFO, Frd; 25% SI SFO; 40% NS	
1750'-55' SS, 90%, f-md gn, Sb-Rd to Sbang, fr-vgd ϕ, many lse gns, some Ld cistrs. FrSFO	Base SS 1766 (-628)
1755'-66' SS, 70%, Gy f-m, S-Rd, pr-vgd ϕ FR show, some hard in bottom	
1766'-71' sh, vari-col; slt st, 20%, mic-gyst; calc, vlg, 20%	
1771-75' AA, but 10% calc	
Dol, lt tn-gy, calc; vfcrl, pr ϕ, calc, occ vlg 5%, NS	
Dol, AA w/ ss, tn-gy, f-cs xln, chts-15%, NS	
Dol, bn-gy, 35%, cxln, fr-gd ϕ, NS; LS 40%, bn-gy, 10% calc + sh, NS	
LS, Gy stn, vf-mxln, also lge xtals, NS	

Depth	David Griffin, GGR Inc., Lawrence, KS		Lithology	Shows	Well: Hodges 5	Pg. 3 of 3
	Penetration Rate (ROP)	Lagged Total Gas			Location: NW NW NW4, 4950' fsl & 330' fwl, Section 12-T21S-R13E, Cfy Co.	Datum/Elev. GL 1138.2'
	Min./Foot	Units			Sample Descriptions (Lagged)	Tops/Remarks



Dol, 40%, tn-gy, vf-f x/m, frvg ϕ
pr 1xϕ, 10% lg gfe xtalk
Ls, Gnstn, 50%, vf-m x/m, fr ϕ, NS

Ls + Dol, AA, NS, Poor Sample

Mostly Dol, Poor Sample

Open-Hole Logged
By
Osage Wireline

RTD
1827(-689)

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

Kansas
Corporation Commission

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

January 30, 2012

Dennis Hodges
Hodges, Dennis D. and/or Peggy D.
1827 Rd Z
Reading, KS 66868

Re: ACO-1
API 15-031-23047-00-00
Hodges 5
NW/4 Sec.12-21S-13E
Coffey County, Kansas

Dear Dennis Hodges:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 9/26/2011 and the ACO-1 was received on January 29, 2012 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department