

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

ORIGINAL

API NO. 15- 141-203350000
County Osborne
100' E of the
- NW - NE - SW Sec. 2 Twp. 10 Rge. 12 X
2640 Feet from S/N (circle one) Line of Section
3530 Feet from E/W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
NE, SE NW or SW (circle one)
Lease Name Sigle Trust Well # 5
Field Name Sigle North
Producing Formation Kansas City
Elevation: Ground 1916 KB 1921
Total Depth 3469' PBTD 3250'
Amount of Surface Pipe Set and Cemented at 954' Fee
Multiple Stage Cementing Collar Used? Yes X No
If yes, show depth set _____ Fee
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cmt

Operator: License # 3293

Name: Russell Oil, Inc.

Address P.O. Box 272

CONFIDENTIAL

City/State/Zip Russell, KS 67665

Purchaser: Farmland Industries, Inc.

Operator Contact Person: LeRoy Holt II

Phone (913) 483-3954

Contractor: Name: Shields Oil Producers, Inc

License: 5184

Wellsite Geologist: Francis Whisler

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening _____ Re-perf. _____ Conv. to Inj/SWD
Plug Back _____ PBTD
Commingled _____ Docket No. _____
Dual Completion _____ Docket No. _____
Other (SWD or Inj?) Docket No. _____

05-03-97 05-10-97 05-29-97
Spud Date Date Reached TD Completion Date

Drilling Fluid Management Plan AH-1, 9-24-98
(Data must be collected from the Reserve Pit)
Chloride content 72K ppm Fluid volume 380 bbl
Dewatering method used evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name KCC
Lease Name JUL 3 License No. _____
County _____ Twp. _____ S Rng. _____ E/W
Docket No. _____

RELEASED

OCT 1 1998

10-1-98

FROM CONFIDENTIAL

CONFIDENTIAL

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on 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.

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.

Signature [Signature]
Title Vice-President Date 7-1-97

Subscribed and sworn to before me this 1st day of July
19 97.

Notary Public [Signature]

Date Commission Expires _____

CAROLYN GNAD
NOTARY PUBLIC
STATE OF KANSAS
MY APPT EXPIRES 10-22-97

K.C.C. OFFICE USE ONLY		
F	<input checked="" type="checkbox"/>	Letter of Confidentiality Attached
C	<input checked="" type="checkbox"/>	Wireline Log Received
C	<input checked="" type="checkbox"/>	Geologist Report Received
Distribution		
<input checked="" type="checkbox"/>	KCC	<input type="checkbox"/> SWD/Rep
<input type="checkbox"/>	KGS	<input type="checkbox"/> Plug
		<input type="checkbox"/> NGPA
		<input type="checkbox"/> Other
		(Specify)

Operator Name Russell Oil, Inc.

Lease Name Sigle Trust

Well # 5

Sec. 2 Twp. 10 Rge. 12

East

County Osborne

West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests given 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 during test. Attach extra sheets if more space is needed. Attach copy of log.

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
(Submit Copy.)

List All E.Logs Run: RAG, CBL

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Anhydrite	944'	+ 977
Topeka	2836'	- 915
Heebner	3074'	-1153
Toronto	3098'	-1177
LKC	3129'	-1208
Base KC	3458'	-1537
LTD	3469'	-1548

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 1/2"	8 5/8"	24#	954	60/40	350	3% CC 2% gel
Production	7 7/8"	5 1/2"	15.5#	3467'	75 common 50 latex		

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	3186-87	common	200 sx	none

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
4	3178-80'	500 gal. 15% mud acid	

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 7/8"	3246'		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj.	Producing Method
06-02-97	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	25	0	225		37°

Disposition of Gas:

Vented Sold U. n Lease
(if vented, submit)

METHOD OF COMPLETION

Open Hole Perf. Dually Comp. Commingled
 Other (Specify) _____

Production Interval

3178-80'

ALLIED CEMENTING CO., INC.

8347

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell

ORIGINAL

DATE <u>5-21-97</u>	SEC. <u>2</u>	TWP. <u>10</u>	RANGE <u>12</u>	CALLED OUT <u>8:00am</u>	ON LOCATION <u>12:45PM</u>	JOB START <u>1:00PM</u>	JOB FINISH <u>5:15 PM</u>
LEASE <u>SIGGE TRUST</u> WELL # <u>5</u>			LOCATION <u>MURAY SW 3E 1/2 N</u>	COUNTY <u>OSBORNE</u>	STATE <u>KANSAS</u>		
OLD OR <input checked="" type="checkbox"/> NEW (Circle one)							

CONTRACTOR <u>Rapid Well Service</u>	OWNER <u>CONFIDENTIAL</u>
TYPE OF JOB <u>Squeeze (KC)</u>	CEMENT AMOUNT ORDERED <u>200 SK Com.</u>
HOLE SIZE _____ T.D. _____	
CASING SIZE <u>4 1/2</u> DEPTH _____	
TUBING SIZE <u>2 7/8</u> DEPTH _____	
DRILL PIPE _____ DEPTH _____	
TOOL <u>REINHART (Rick)</u> DEPTH <u>3/33</u>	
PRES. MAX <u>2,000#</u> MINIMUM <u>500#</u>	
MEAS. LINE _____ SHOE JOINT _____	
CEMENT LEFT IN CSG. _____	
PERFS. <u>3186-87</u>	
DISPLACEMENT _____	

EQUIPMENT

PUMP TRUCK # <u>177</u>	CEMENTER <u>[Signature]</u>	HELPER <u>Wild</u>
BULK TRUCK # <u>213</u>	DRIVER <u>Brent</u>	
BULK TRUCK # _____	DRIVER _____	

COMMON <u>200</u> @ <u>6.10</u> <u>1220.00</u>
POZMIX _____ @ _____
GEL <u>RELEASED</u> @ _____
CHLORIDE _____ @ _____
<u>OCT 1 1998</u> @ _____
<u>FROM CONFIDENTIAL</u> @ _____
HANDLING _____ @ <u>7.05</u> <u>210.00</u>
MILEAGE <u>32m</u> @ <u>04</u> <u>256.00</u>
<u>NCC</u>
<u>JUL 3</u>
TOTAL <u>1686.00</u>

REMARKS:

Packer @ 3133 - Load Hole, Pressured Backside To 500# (Held) Took Injection Rate of 4 1/2 BPM @ 500#. Mixed 200 SK Com. Cement Stopped & Squeezed @ 2,000#. Released & Washed Around Packer. Rechecked squeeze to 2,000# (Held) Washed CSG. Clean. Pulled to 2800' & Pressured to 300# (Held) SHOT IN.

THANKS

DEPTH OF JOB _____	
PUMP TRUCK CHARGE _____	<u>550.00</u>
EXTRA FOOTAGE _____ @ _____	
MILEAGE <u>32m</u> @ <u>2.85</u> <u>91.20</u>	
PLUG _____ @ _____	

CHARGE TO: Russell Oil Traci

STREET P.O. Box 272

CITY Russell STATE Kan ZIP 67665

TOTAL 641.20

FLOAT EQUIPMENT

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____

TOTAL

To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE _____

PRINTED NAME _____

ALLIED CEMENTING CO., INC.

8761

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL

SERVICE POINT: R

DATE <u>5/10/97</u>	SEC. <u>2</u>	TWP. <u>10</u>	RANGE <u>12</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>9:30pm</u>
LEASE <u>Single Tract</u>	WELL # <u>5</u>	LOCATION <u>Luroy 50N 3E 12 N</u>			COUNTY <u>Osborne</u>	STATE <u>Ks</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Shields D. Iq

TYPE OF JOB production string

HOLE SIZE 7 7/8 T.D. 3470

CASING SIZE 5L DEPTH 3467

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE ✓ SHOE JOINT 21

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT 15.5 84 BBL

EQUIPMENT

177 PUMP TRUCK CEMENTER Dave

HELPER Glen

BULK TRUCK

DRIVER

BULK TRUCK

213 DRIVER Jason

OWNER CONFIDENTIAL

CEMENT

AMOUNT ORDERED 100 com 50 com Latex

500 gal WFR 2

COMMON @

POZMIX @

GEL @

CHLORIDE @

RELEASED @

OCT 1 1998 @

FROM **CONFIDENTIAL** @

MILEAGE @

NOU TOTAL

RECEIVED
 KANSAS CORP ODM
 1997 JUL -2 A 11:51

REMARKS:

plug mouse hole w/ 105k Ratched 151k

Float Head

JUL 3, SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

PLUG 5L Rubber @

@

@

TOTAL

CHARGE TO: Russell Oil Trc

STREET

CITY STATE ZIP

FLOAT EQUIPMENT

1 Guide Shoe @

1 RFD Insert @

& centerbars @

@

@

TOTAL

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 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX

TOTAL CHARGE

DISCOUNT IF PAID IN 30 DAYS

SIGNATURE Burton Beery

Burton Beery
 PRINTED NAME

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

—**TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

—**ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.

—**PRICES AND TAXES:** All merchandise listed in "ALLIED'S" current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.

—**TOWING CHARGES:** ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.

—**PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.

—**DEADHAUL, CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

—**SERVICE CONDITIONS AND LIABILITIES:** 1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the wilful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

ALLIED CEMENTING CO., INC. 8450

15-1411-2033500000

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Russell

ORIGINAL

DATE <u>5-4-97</u>	SEC. <u>2</u>	TWP. <u>10</u>	RANGE <u>12</u>	CALLED OUT <u>11:00am</u>	ON LOCATION <u>12:45pm</u>	JOB START	JOB FINISH <u>6:15pm</u>
LEASE <u>Sgt. Russ</u>		WELL # <u>5</u>		LOCATION <u>5N 3E 12N LURAY</u>		COUNTY <u>Osborne</u>	STATE <u>KS</u>
OLD OR NEW (Circle one)							

CONTRACTOR H. J. D. Drig

TYPE OF JOB SURFACE

HOLE SIZE 12 1/4 T.D.

CASING SIZE 2 3/8 2 1/2 DEPTH 954'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 12'

PERFS.

DISPLACEMENT 60 bbls

OWNER _____ **CONFIDENTIAL**

CEMENT AMOUNT ORDERED 350 bags 6/40 3% CC 1/2 gal

EQUIPMENT

PUMP TRUCK CEMENTER Billie

177 HELPER Will

BULK TRUCK DRIVER 10-1-1998

BULK TRUCK DRIVER Jason

COMMON @ _____

POZMIX @ _____

GEL @ _____

CHLORIDE KCC @ _____

JUL 3

CONFIDENTIAL

HANDLING @ _____

MILEAGE **RELEASED** @ _____

OCT 1 1998

TOTAL _____

RECEIVED
 KANSAS OILFIELD
 224/4/95

REMARKS:

SURFACE pipe DATE 954'

Bagfile plate 5945

1000 gal 2500 gal 6/40 3%

pump plug w/ bubble water

Rem. did circulate ✓

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____

EXTRA FOOTAGE @ _____

MILEAGE @ _____

PLUG Rubber @ _____

TOTAL _____

CHARGE TO: Russell Oil, Inc.

STREET P.O. Box 272

CITY Russell STATE Ks ZIP 67665

FLOAT EQUIPMENT

Bagfile Plate @ _____

@ _____

@ _____

@ _____

@ _____

To Allied Cementing Co., Inc.

You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TOTAL _____

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE Burton Beery

PRINTED NAME

GENERAL TERMS AND CONDITIONS

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(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

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3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the wilful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

FRANCIS C. WHISLER
CERTIFIED PETROLEUM GEOLOGIST
837 EAST 1ST
RUSSELL, KANSAS 67665

ORIGINAL



CONFIDENTIAL

RELEASED

OCT 1 1998

FROM CONFIDENTIAL

15-141-20335

RUSSELL OIL, INC.
Russell, Kansas

GEOLOGICAL REPORT

Sigle Trust No. 5
NW NE SW of Section 2
Twp. 10 South, Rge. 12 West
Osborne County, Kansas

JUL 3

CONFIDENTIAL

May 12, 1997

1997 JUL -2 A 11:53

RUSSELL OIL, INC.
 P O Box 272
 Russell, Kansas

ORIGINAL

Geological Report:

Sigle Trust No. 5
 NW NE SW Sec. 2, 10s, 12w
 Osborne County, Kansas

CONFIDENTIAL

Contractor:

Shields Drilling Co., Inc.

Drilling Commenced:

May 3, 1997

Drilling Completed:

May 10, 1997

Casing Record:

8 5/8" surface casing set at 954' with 350 sx.
 5 1/2" production casing set at 3467' with 125 sx.

Samples:

Saved and examined from 2800' to 3470', RTD.
 Zones of interest are described in this report.

Drilling Time:

Recorded and plotted from 2800' to 3470', RTD.
 A copy of the plotted drilling time/lithology
 log is included with this report.

Drillstem Tests:

3 by Trilobite Testing LLC.

Electric Logs:

Radiation-Guard-Caliper by ELI.

Elevations:

Kelly Bushing: NCC 1921'
 Ground Level: 1916'
 Measurements From: JUL 3 K. B.

Formations:

	Rotary	E. Log	Datums:
	Depths:	Depths:	E. Log:
Anhydrite	944-976	944-976	+ 977
Topeka Lime	2838	2836	- 915
Heebner Shale	3077	3074	-1153
Toronto Lime	3101	3098	-1177
Lansing-Kansas City	3130	3129	-1208
C Zone Porosity	3179	3178	-1257
Base of Kansas City	3462	3458	-1537
Total Depth	3470	3469	-1548

Lithology; Zones of Interest (E. Log Depths) & Test Data:

Lansing-Kansas City:

3129-3138: LS-white, buff, dense with rare light oil stain, some fair saturation, only slight crystalline and pin hole porosity with faint odor, but no free oil. Tested by DST #1.
A zone

DRILLSTEM TEST No. 1: 3111 to 3142: Time Intervals: 30-60-30-60 with weak blow decreasing 1st. open. No blow 2nd. open period.

Recovery: 15' very slight oil cut mud. 5% oil
95% mud

IFP: 44-44
IBHP: 537
FFP: 44-44
FBHP: 514

3158-3170: DOL-white, dense to crystalline, porous with very rare stain. Some white, fossiliferous lime with very rare stain. Slight porosity. Abundant white vitreous chert. Faint odor but no free oil. Tested by DST #2.
B zone

DRILLSTEM TEST No. 2: 3140 to 3170: Time Intervals: 30-60-60-60 with weak blow increasing slightly thru-out.

Recovery: 55' of slight watery mud, with specks of oil on top. 10% water
90% mud

IFP: 55-66
IBHP: 851
FFP: 77-88
FBHP: 796

3178-3184: LS-white, very fine-fine-medium oolitic and oolitic with good porosity and some barren prosity. Good oil stain-saturation, good odor and good show of free gassy oil. Tested by DST #3.
Upper C Zn.

DRILLSTEM TEST No. 3: 3173 to 3185: Time Intervals: 30-60-60-60 with strong blow thru-out test. Off bottom of bucket in 9 minutes.

Recovery: 120' of gas
65' of clean gassy oil
540' of gassy salt water

IFP: 44-121
IBHP: 872
FFP: 154-285
FBHP: 862

Lithology, cont...

3186-3200: LS-white, oolitic-oolitic with less stain and saturation than
Lower C Zn. upper C zone. Separated by 2 ft. hard streak. Good porosity
with barren porosity. Some white, crystalline dolomite with
oil stain. Still show of free gassy oil and good odor. More
abundant barren porosity in lower part. Would be water bearing.
Not tested.

Remarks & Recommendations:

The following table compares the Sigle Trust #5 with the other Sigle
Trust producing wells:

	Sigle Trust # 5	Sigle Trust # 3	Sigle Trust # 2	Sigle Trust # 1
Anhydrite	+ 977	+ 969	+ 971	+ 968
Topeka	- 915	- 917	- 921	- 922
Heebner	-1153	-1155	-1157	-1158
Lansing	-1208	-1211	-1211	-1213
C Zone Porosity	-1257	-1258	-1264	-1261

You will note from the foregoing table that the Sigle Trust #5 ran a few
feet higher, structurally, on all horizons when compared to the other produc-
ing wells on the lease.

During the drilling of the well, shows of oil were noted in the A, B and
C zones of the LKC. Drillstem tests were taken covering each of these zones
but only the C zone recovered commercial oil, although very high water cut.
The drillstems covering the A and B zones indicated non-production from these
zones.

Production casing was set for completion in the upper C zone. I recom-
mend that the zone be perforated from 3178-81.

Respectfully submitted;

Francis C. Whisler
Francis C. Whisler

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

COPY

Test Ticket

CONFIDENTIAL

10141

Well Name & No. Sigle Trust #5 Test No. 1 Date 5-8-95
 Company Russell Oil Company Zone Tested LKC A
 Address Box 272 Russell KS 67665 Elevation 1921 KB 1916 GL
 Co. Rep / Geo. Francis Whisler Cont. Shields #1 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 2 Twp. 10S Rge. 12W Co. Osborne State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3111 - 3142 Initial Str Wt./Lbs. 38,600 Unseated Str Wt./Lbs. 38,600
 Anchor Length 31 Wt. Set Lbs. 20,600 Wt. Pulled Loose/Lbs. 45,000
 Top Packer Depth 3106 Tool Weight 1700
 Bottom Packer Depth 3111 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4"
 Total Depth 3142 Wt. Pipe Run _____ Drill Collar Run _____
 Mud Wt. 9.0 LCM _____ Vis. 52 WL 7.6 Drill Pipe Size 4 1/2 FH Ft. Run 3108
 Blow Description Weak min blow decreasing to surface

FE - no blow

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
<u>15</u>			<u>15</u>
Rec. <u>15</u> Feet Of <u>Very slight oil cut mud</u>	%gas <u>5</u>	%oil _____	%water <u>95</u> %mud _____
Rec. _____ Feet Of <u>none</u>	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of <u>JUL 3</u>	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet Of <u>CONFIDENTIAL</u>	%gas _____	%oil _____	%water _____ %mud _____

BHT 92 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1552 PSI Recorder No. 3114 T-Started 0630
 (B) First Initial Flow Pressure 44 PSI (depth) 2417' ID T-Open 0757
 (C) First Final Flow Pressure 44 PSI Recorder No. 110841 T-Pulled 1057
 (D) Initial Shut-in Pressure 537 PSI (depth) 3137 T-Out 1158
 (E) Second Initial Flow Pressure 44 PSI Recorder No. _____
 (F) Second Final Flow Pressure 44 PSI (depth) _____
 (G) Final Shut-in Pressure 514 packer leaks PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 1455 PSI Initial Shut-in 60 Jars _____

Final Flow 30 Safety Joint _____
 Final Shut-in 60 Straddle _____
50.5 stands Circ. Sub _____
 Sampler _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By F Whisler
 Our Representative Ken Simpson

RELEASED
 OCT 1 1998

Extra Packer _____
 Elect. Rec. _____
 Other _____
 TOTAL PRICE \$ _____

FROM CONFIDENTIAL

TRILOBITE TESTING L.L.C. 15-141-20335-00-00

P.O. Box 362 • Hays, Kansas 67601

CONFIDENTIAL Test Ticket

COPY No. 10142

Well Name & No. Sigle Trust #5 Test No. 2 Date 5-8-97
 Company Russell Oil Company Zone Tested L/KC B
 Address Box 272 - Russell Co 67602 Elevation 1921 KB 196 GL
 Co. Rep / Geo. Francis Whisler Cont. Shields #1 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 2 Twp. 10s Rge. 12w Co. Osburn State Ks
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3140-3170 Initial Str Wt./Lbs. 40,000 Unseated Str Wt./Lbs. 40,000
 Anchor Length 30 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 20,000
 Top Packer Depth 3135 Tool Weight 1700
 Bottom Packer Depth 3140 Hole Size — 7 7/8" Rubber Size 6 3/4"
 Total Depth 3170 Wt. Pipe Run _____ Drill Collar Run 5
 Mud Wt. 9.0 LCM _____ Vis. 48 WL 8.8 Drill Pipe Size 4 1/2 FH Ft. Run 3170
 Blow Description 4 1/2" blow building to 1 1/2"

FF- 4 1/2" blow building to 2 1/2" then decreasing to 2"

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
<u>55</u>	<u>15</u>		<u>55</u>
Rec. <u>55</u> Feet Of <u>sl water mud</u>	%gas	%oil	<u>10% water 90% mud</u>
Rec. _____ Feet Of <u>w/ oil speckled up</u>	%gas	%oil	%water %mud
Rec. _____ Feet Of <u>flow</u>	%gas	%oil	%water %mud
Rec. _____ Feet Of <u>JUL 3</u>	%gas	%oil	%water %mud
Rec. _____ Feet Of _____	%gas	%oil	%water %mud

BHT 96 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1595 PSI Recorder No. 24174 T-Started 18 24
 (B) First Initial Flow Pressure 55 PSI (depth) 3142 T-Open 19 14
 (C) First Final Flow Pressure 66 PSI Recorder No. 110841 T-Pulled 22 44
 (D) Initial Shut-in Pressure 851 PSI (depth) 3165 T-Out 0000
 (E) Second Initial Flow Pressure 77 PSI Recorder No. _____
 (F) Second Final Flow Pressure 88 PSI (depth) _____
 (G) Final Shut-in Pressure 796 PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 1565 PSI Initial Shut-in 60 Jars _____
 Final Flow 60 Safety Joint _____
 Final Shut-in 60 Straddle _____

SI stands
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Elect. Rec. _____
 Other _____
 TOTAL PRICE \$ _____

TRILOBITE TESTING, L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST, TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By F Whisler RELEASED
 Our Representative Cut Simpson OCT 1 1998

FROM CONFIDENTIAL

15-141-20335-00-00
TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 6760

COPY
No. 10143

CONFIDENTIAL Test Ticket

Well Name & No. Sigle Tract #5 Test No. 3 Date 5-9-97
 Company Russell Oil Company Zone Tested LKC 'C'
 Address _____ Elevation 1921 KB 1916 GL
 Co. Rep / Geo. Francis Whisler Cont. Shirley H Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 2 Twp. 10s Rge. 12w Co. Osborne State Ky
 No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3173-3185 Initial Str Wt./Lbs. 40,000 Unseated Str Wt./Lbs. 43,000
 Anchor Length 12 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 41,000
 Top Packer Depth 3168 Tool Weight 1600
 Bottom Packer Depth 3173 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 3185 Wt. Pipe Run _____ Drill Collar Run _____
 Mud Wt. _____ LCM _____ Vis. _____ WL _____ Drill Pipe Size 4 1/2 F11 Ft. Run _____
 Blow Description strong blow building to bottom of bucket in 9
minutes 1st surface blow
FF - 1/2" blow building to bottom of bucket in 5 minutes

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP	%gas	%oil	%water	%mud
Rec. <u>65</u>	<u>120</u>						
Rec. <u>540</u>							
Rec. _____							
Rec. _____							
Rec. _____							

BHT 99 °F Gravity CONFIDENTIAL °API D@ _____ °F Corrected Gravity _____ °API
 RW 1 @ 50 °F Chlorides 28,000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1584 PSI Recorder No. 24174 T-Started 0649
 (B) First Initial Flow Pressure 44 PSI (depth) 3175 T-Open 0802
 (C) First Final Flow Pressure 121 PSI Recorder No. 11084 T-Pulled 1250
 (D) Initial Shut-in Pressure 872 PSI (depth) 3180 T-Out 1358
 (E) Second Initial Flow Pressure 154 PSI Recorder No. _____
 (F) Second Final Flow Pressure 285 PSI (depth) _____
 (G) Final Shut-in Pressure 862 PSI Initial Opening 30 Test _____
 (H) Final Hydrostatic Mud 1519 PSI Initial Shut-in 60 Jars _____
 Final Flow 60 Safety Joint _____
 Final Shut-in 60 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Elect. Rec. _____
 Other _____
 TOTAL PRICE \$ _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By PJ Whisler
Our Representative Paul Simpson

RELEASED
OCT 1 1998

FROM CONFIDENTIAL!