



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1172627  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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

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

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

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

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

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

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

CONTRACTOR: License # \_\_\_\_\_

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

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- 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
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

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

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

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

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

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

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  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: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

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

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1172627

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

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

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				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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# Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

## DRILLER'S LOG

Operator: Hupfer Operating, Inc. Lic# 30380 Contractor: Discovery Drilling Co., Inc. LIC#31548  
P.O. Box 3912 PO Box 763  
Shawnee, KS 66203-0912 Hays, KS 67601

Lease: Morgenstern # 6 Location: 1745 FNL - 1270 FWL  
SW/NW/SE/NE  
Section 9/ 16S/ 13W  
Barton County, KS

Loggers Total Depth: 3392' API#15- 009-25,876-00-00  
Rotary Total Depth: 3396' Elevation: 1910 GI - 1918 KB  
Commenced: 10/3/2013 Completed: 10/9/1013  
Casing: 8 5/8" @ 478' W/215sks Status: D & A

### DEPTHS & FORMATIONS (All from KB)

Surface. Sand & Shale	<u>0'</u>	Shale	<u>894'</u>
Dakota Sand	<u>291'</u>	Shale & Lime	<u>1591'</u>
Shale	<u>315'</u>	Shale	<u>1963'</u>
Cedar Hill Sand	<u>355'</u>	Shale & Lime	<u>2527'</u>
Red Bed Shale	<u>560'</u>	Lime & Shale	<u>2948'</u>
Anhydrite	<u>865'</u>	RTD	<u>3396'</u>
Base Anhydrite	<u>894'</u>		

STATE OF KANSAS )  
) ss  
COUNTY OF ELLIS )

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

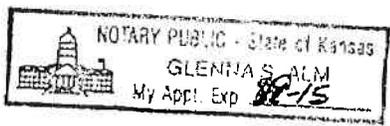
\_\_\_\_\_  
Thomas H. Alm

Subscribed and sworn to before me on 10-15-13

My Commission expires: 8-9-15

(Place stamp or seal below)

\_\_\_\_\_  
Notary Public



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

785-483-2025  
85-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7523

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-1-13	9	16	13	Barton	KS		1:30 AM
				Location Susank 3N			

Lease Morgenstern Well No. 5 Owner

Contractor Discovery #2 To Quality Oilwell Cementing, Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Production String Charge To Hupfer Operating

Hole Size 7 7/8 T.D. 3395' Street

Csg. 5 1/2 Depth 3392' City State

Tbg. Size Depth The above was done to satisfaction and supervision of owner agent or contractor.

Tool Depth Cement Amount Ordered 170 Q-Pro C 10% Salt

Cement Left in Csg. 28.03' Shoe Joint 28.03' Cement Amount Ordered 170 Q-Pro C 10% Salt

Meas Line Displace 80 bbl 5% Gilsomite

**EQUIPMENT** Common 170 Q-pro C

Pumptrk 17 No. Cementer/Helper Cody Poz. Mix

Bulktrk 8 No. Driver Clayton Gel.

Bulktrk PU No. Driver Brett Calcium

**JOB SERVICES & REMARKS** Hulls

Remarks: Salt 15

Rat Hole 30" Flowseal

Mouse Hole 15" Kol-Seal 850#

Centralizers 1,3,5,7,9,11 Mud CLR 48 - 500 Gal

Baskets 2 CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

Handling 197

Mileage 5 1/2 **FLOAT EQUIPMENT**

Run 500 Gal Mud Flush Guide Shoe

Plug Rat & Mouse hole Mixed 125 sx Q Pro-c down 5 1/2 Centralizer - 6

Displaced 80 bbl of Water Lift Pressure @ 700 lbs Baskets - 1

Landed Plug @ 1500 lbs AFU Inserts

Plug held Float Shoe Latch Down - 1

Packer Shoe - 1 Rubber Plug - 1 Pumptrk Charge prod Long String Mileage 24

X Signature *AA Hupfer*

Tax  
Discount  
Total Charge

MORGENSTERN #6 - DST #1  
API 15-009-25,876-00-00

DST #1 LANSING - 3240' TO 3330' 30-30-30-30  
RECOVERED 30" OIL CUT MUD ISEP 230 FSEP 319  
IFP 72-74 FFP 74-77

DST #2 ARBUCKLE - 3356 TO 3383' 30-45-30-45  
RECOVERED 2' CLEAN OIL and 5' OIL CUT MUD  
ISEP 1020 FSEP 835 IFP 37-42 FFP 39-40

DST #3 ARBUCKLE - 3356 TO 3391 30-30-45-45  
RECOVERED 5' CLEAN OIL, 120" OIL CUT MUD and  
120' OIL SPOTTED MUDDY WATER - ISEP 1080, FSEP 1040  
IFP 52-95 FFP 97-156

DST #4 ARBUCKLE 3358 TO 3396 30-30-45-45  
RECOVERED 1740" VERY LIGHT OIL SPOTTED  
WATER ISEP 1140 FSEP 1137 IFP 92-495  
FFP #98 - 832