



KANSAS CORPORATION COMMISSION 1069998
OIL & GAS CONSERVATION DIVISION

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 # _____

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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total 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

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1069998

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <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> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Production Drilling, Inc.
Well Name	CRISSMAN 4
Doc ID	1069998

All Electric Logs Run

Dual induction log
radiation guard log
compensated density neutron log
cement bond log

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

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

No. 5025

Date	10-14-11	Sec.	1	Twp.	13	Range	18	County	Ellis	State	Ks	On Location		Finish	10:15 PM	
Lease	Crisman	Well No.	4		Location		Hwy 2N 24E									
Contractor	Discovery Drilling Rig							Owner								
Type Job	Surface							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.								
Hole Size	12 1/4		T.D.		221		Charge To									
Csg.	8 5/8 2-3/16		Depth		221		Production Drilling									
Tbg. Size			Depth				Street									
Tool			Depth				City				State					
Cement Left in Csg.	10-15		Shoe Joint		The above was done to satisfaction and supervision of owner agent or contractor.											
Meas Line			Displace		13 3/4 13 1/2		Cement Amount Ordered									

EQUIPMENT

Pumptrk	5	No.	Cementer	Stump	Common	150
			Helper			
Bulktrk	8	No.	Driver	Clair	Poz. Mix	
			Driver			
Bulktrk		No.	Driver	Diana	Gel.	3
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling 158
	Mileage

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

Pumptrk Charge Surface

Mileage 4

Tax

Discount

Total Charge

X Signature

[Handwritten Signature]

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

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

No. 102

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-27-11	1	13	18	Ellis	Kansas		12:15pm
Lease <i>Crisman</i>	Well No. <i>4</i>		Location <i>F-70 9 Commencement Hwy 3 1/2 E N 30</i>				
Contractor <i>Discovery Drilling Rig 1</i>				Owner 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 <i>DV Tool Top</i>	Hole Size <i>7 7/8</i>			Charge To <i>Production Drilling</i>			
Csg. <i>S 15.50lb</i>	T.D. <i>3095</i>			Street			
Tbg. Size	Depth <i>3094</i>			City			
Tool <i>DV Tool</i>	Depth <i>1320</i>			State			
Cement Left in Csg.	Shoe Joint			The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line	Displace <i>3 1/2 SBL</i>			Cement Amount Ordered <i>250 Q mix 1/2 lb Flow Seal</i>			
EQUIPMENT				<i>Used 210</i>			
Pumptrk <i>5</i>	No.	Cementer <i>Steve</i>		Common <i>210 QMDC</i>			
Bulktrk <i>10</i>	No.	Driver <i>Dave</i>		Poz. Mix			
Bulktrk	No.	Driver <i>Michael</i>		Gel.			
JOB SERVICES & REMARKS				Calcium			
Remarks:				Hulls			
Rat Hole <i>30sv</i>				Salt			
Mouse Hole <i>20</i>				Flowseal <i>62#</i>			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
DV or Port Collar <i>1320</i>				CFL-117 or CD110 CAF 38			
<i>Open tool & pump circulation</i>				Sand			
<i>30sv Rat Hole</i>				Handling <i>19 250</i>			
<i>20sv Mouse Hole</i>				Mileage			
FLOAT EQUIPMENT				Guide Shoe			
<i>Mix 210 sv Release plug</i>				Centralizer			
<i>Land plug @ 5000 psi & close tool</i>				Baskets			
<i>Cement did circulate</i>				AFU Inserts			
				Float Shoe			
				Latch Down			
<i>[Signature]</i>				Pumptrk Charge <i>4</i>			
				Mileage <i>prod Long 2 stage</i>			
				Tax			
				Discount			

Top

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

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

No. 101

Date	10-27-11	Sec.	1	Twp.	13	Range	18	County	Ellis	State	Kansas	On Location		Finish	10:45 AM
Lease	Cassman	Well No.	4			Location	T-70 Commercial Pkwy 3W 1E 10 1/2N								
Contractor	Discovery Drilling Rig					Owner	To Quality Oilwell Cementing, Inc.								
Type Job	DV. Bottom					You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.									
Hole Size	7 7/8		T.D.	3695			Charge To	Production Drilling							
Csg.	5 1/2 15.50h		Depth	3694			Street								
Tbg. Size			Depth				City	State							
Tool	DV #56		Depth	1320			The above was done to satisfaction and supervision of owner agent or contractor.								
Cement Left in Csg.	2.3		Shoe Joint	23'			Cement Amount Ordered	150 Common 10% Surt							
Meas Line			Displace	87 1/2 Bbl			500 Gal Mud Clean	10 Bbl KCL							

EQUIPMENT

Pumptrk	5	No.	Cementer		Common	150
			Helper	Steve		
Bulktrk	8	No.	Driver	Dave	Poz. Mix	
			Driver	Dave		
Bulktrk		No.	Driver	Dave	Gel.	
			Driver	Dave		

JOB SERVICES & REMARKS

Remarks:	Calcium
Rat Hole	Hulls
Mouse Hole	Salt 13
Centralizers	Flowseal
Baskets	Kol Seal KCL 16 gal
DV or Port Collar	Mud CLR 48 500
	CFL-117 or CD110 CAF 38
	Sand
	Handling 163
	Mileage

FLOAT EQUIPMENT

Land Plus @ 1200/yr	Guide Shoe	100' scratchers
Flood Hold	Centralizer	9 Tubes
	Baskets	3
	AFU Inserts	
	Float Shoe	1
	Latch Down	
		D.V. Tool at Latch Down Plug
	Pumptrk Charge	4 2
	Mileage	prod long string stage
		Tax
		Discount

Bottom



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Production Drilling
1023 Reservatiron Road
Hays, KS 67601
ATTN: Marty Patterson

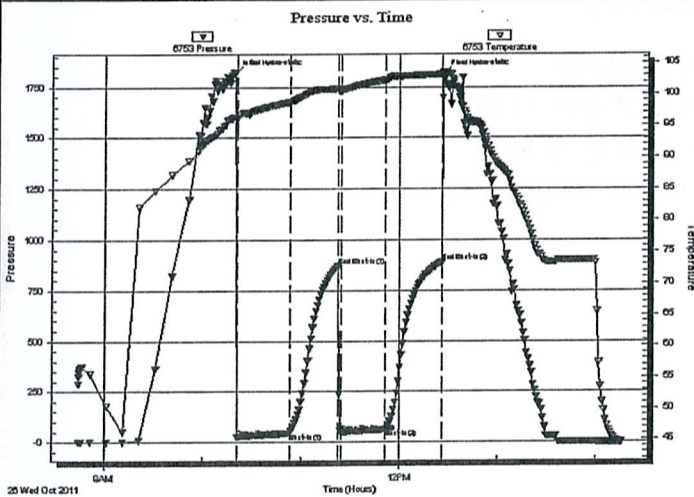
1-13s 18w Ellis,KS
Chrissman #4
Job Ticket: 44837 DST#: 2
Test Start: 2011.10.26 @ 08:44:19

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:20:49
Time Test Ended: 14:16:19
Interval: **3620.00 ft (KB) To 3646.00 ft (KB) (TVD)**
Total Depth: 3646.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Paul Simpson
Unit No: 47
Reference Elevations: 2117.00 ft (KB)
2109.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6753 Outside
Press@RunDepth: 62.00 psig @ 3623.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.10.26 End Date: 2011.10.26 Last Calib.: 1899.12.30
Start Time: 08:44:24 End Time: 14:16:18 Time On Btm: 2011.10.26 @ 10:19:49
Time Off Btm: 2011.10.26 @ 12:27:19

TEST COMMENT: IF - 3/4" blow building to 9"
ISI - surface died
FF - 1/2" blow building to 7 1/2" blow
FSI - surface blow died in 2 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1820.70	96.33	Initial Hydro-static
1	22.94	95.98	Open To Flow (1)
33	44.56	98.71	Shut-In(1)
63	870.04	100.83	End Shut-In(1)
65	50.35	100.47	Open To Flow (2)
92	62.00	102.22	Shut-In(2)
127	891.87	103.10	End Shut-In(2)
128	1815.43	103.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud cut oil 60%oil 40% mud	0.15
100.00	clean oil	1.39

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Production Drilling
1023 Reservatrion Road
Hays, KS 67601
ATTN: Marty Patterson

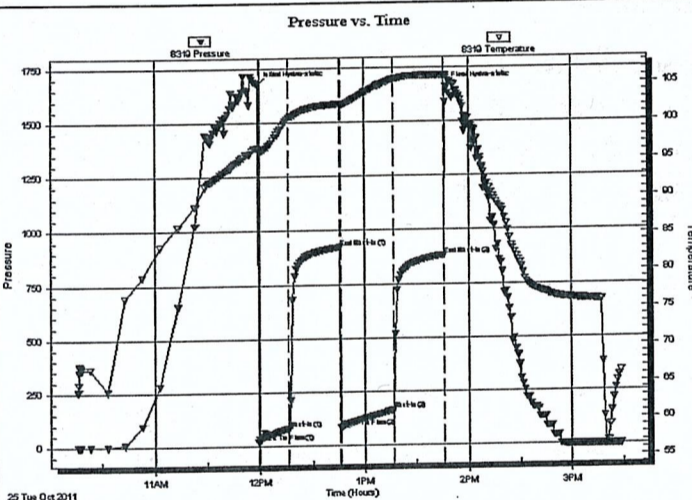
1-13s 18w Ellis,KS
Chrissman #4
Job Ticket: 44836 DST#: 1
Test Start: 2011.10.25 @ 10:16:06

GENERAL INFORMATION:

Formation: **Lansing C-D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:59:06
Time Test Ended: 15:29:06
Test Type: Conventional Bottom Hole (Initial)
Tester: Paul Simpson
Unit No: 47
Interval: **3410.00 ft (KB) To 3450.00 ft (KB) (TVD)**
Total Depth: 3450.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2117.00 ft (KB)
2109.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8319 **Outside**
Press@RunDepth: 164.37 psig @ 3411.00 ft (KB)
Start Date: 2011.10.25 End Date: 2011.10.25
Start Time: 10:16:11 End Time: 15:29:05
Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2011.10.25 @ 11:58:36
Time Off Btm: 2011.10.25 @ 13:47:06

TEST COMMENT: IF- strong bottom of bucket in 2 minutes
IS- blow built to 4 "
FF- strong blow bottom of bucket in 3 minutes
FSI- bottom of bucket in 7 minutes



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1675.15	96.47	Initial Hydro-static
1	19.36	96.07	Open To Flow (1)
18	81.85	100.57	Shut-In(1)
47	923.66	102.32	End Shut-In(1)
48	86.89	102.14	Open To Flow (2)
78	164.37	105.58	Shut-In(2)
107	883.19	106.02	End Shut-In(2)
109	1659.35	105.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	sl oil & MCW 3%o 92%w 5%m	0.56
120.00	gsy sl w & mco 10%g 80%o 5%w 5%m	1.68
200.00	gsy oil 20%g 80@o	2.81
0.00	2270' gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)