

Kansas Corporation Commission Oil & Gas Conservation Division

1099815

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 #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
☐ New Well ☐ Re-Entry ☐ Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	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: sx cmt
If Workover/Re-entry: Old Well Info as follows:	
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	Lease Name: License #:
SWD Permit #:	Quarter Sec TwpS. R
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date	

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.

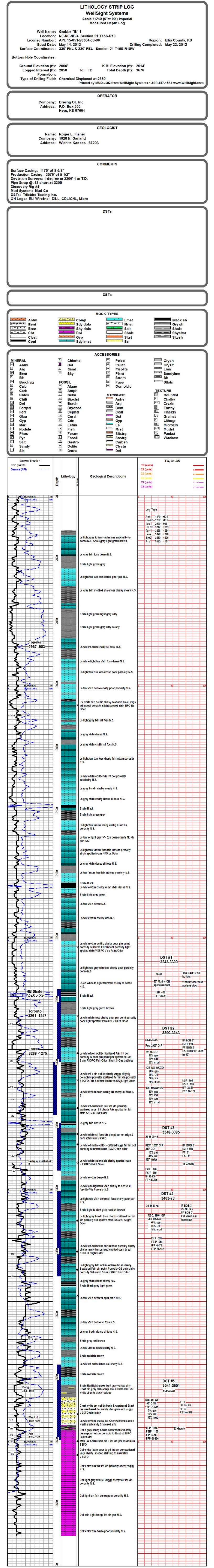
Submitted Electronically

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:

Side Two



Operator Name: _ Lease Name: _ _ Well #: _ 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 Wireline Logs surveyed. Attach final geological well site report. **Drill Stem Tests Taken** Yes No Log Formation (Top), Depth and Datum Sample (Attach Additional Sheets) Name Top Datum Samples Sent to Geological Survey ☐ Yes □ No Cores Taken Yes No Electric Log Run Electric Log Submitted Electronically Yes No (If no, Submit Copy) List All E. Logs Run: CASING RECORD Used New Report all strings set-conductor, surface, intermediate, production, etc. Size Hole Size Casing Weight # Sacks Type and Percent Type of Purpose of String Drilled Set (In O.D.) Lbs. / Ft. Additives Depth Cement Used ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Depth Type of Cement # Sacks Used Type and Percent Additives Top Bottom Perforate **Protect Casing** Plug Back TD Plug Off Zone PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated (Amount and Kind of Material Used) Depth TUBING RECORD: Size: Set At: Packer At: Liner Run: No Yes Producing Method: Date of First, Resumed Production, SWD or ENHR. Pumping Gas Lift Other (Explain) Flowing **Estimated Production** Bbls. Water Bbls. Gas-Oil Ratio Oil Gas Mcf Gravity Per 24 Hours **DISPOSITION OF GAS:** METHOD OF COMPLETION: PRODUCTION INTERVAL: Open Hole Dually Comp. Perf. Commingled Vented Sold Used on Lease (Submit ACO-5) (Submit ACO-4) (If vented, Submit ACO-18.) Other (Specify)



Federal Tax I.D.# 20-2886107 CEMENTING, INC. **QUALITY OILWELL**

127 'ON

Cell 785-324-1041 Home Office P.O. Box 32 Russell, KS 67665 Phone 785-483-2025

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ITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Call 785-324-1041

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

Cell 765-324-1041		The state of	- No. (100 P V)	0.44	On Legation	Finish
Sec.	Twp. Range	religion en	County	State	On Location	0:15.00
Date 5-22-12 20	15 18	EL	ITS	KANSAS		9.13411)
Lease GRABBE B V	Vell No. # 2	Locati	on Hays-5	TO CHETOLAH GO	10R0-1W-	CTUIE
Contractor DISCOUTELY DES	ILING RIG	#4		ETLING OTI	TNC	contract shall be a
Type Job Peop STETNG	CMARK DAGINAM		You are here	ilwell Cementing, Inc. by requested to rent of	cementing equipmen	t and furnish
Hole Size 8 1/2	T.D. 3676			d helper to assist own	er or contractor to d	o work as listed.
CSg. 55"-14LB-NEW	Depth 34.74	1.27	Charge De	CETLING DI	L INC.	CARROTTA -
Tbg. Size	Depth		Street P.). Box 550		
Tool	Depth	ne esona ins	City Has	15	State KAroSA:	3,67601
Cement Left in Csg. 43.3	Shoe Joint 43	.31	The above wa	as done to satisfaction ar	nd supervision of owne	agent or contractor.
Meas Line	Displace 881/2	BLS	Cement Am	ount Ordered 2000	om-10% SA	LT HEMOT
EQUIPN						
Pumptrk#15 No. Cementer No. Helper	ECK		Common 2	60	erit most so at seg of	RETAINING DAMES
Bulktrk# & No. Driver Col	89	Tatus tees	Poz. Mix			
Bulktrk Plu No. Driver Box	8		Gel.	TLIAUO VSQ RW-ERV	er material, CUSTO	ito io nottulos leoi
JOB SERVICES	& REMARKS		Calcium	salbaga aalwisdig as <u>saas daas salaas a</u>	en Corman,	JANGABG -
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Mouse Hole 15 5KS	ons you tenlaps bo	s mort , man	Flowseal	TY is officers agun	1AUO gaakmad bk	bos iscelos viio
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Dreiling Oil Co.

20-15s-18w Ellis, KS

PO Box 550 Hays KS 67601 Grabbe B #2 Job Ticket: 47327

DST#:1

ATTN: Roger Fisher

Test Start: 2012.05.18 @ 20:03:05

GENERAL INFORMATION:

Formation: Toronto/Top Lansing

Deviated: No Whipstock:

Time Tool Opened: 22:12:30

Time Test Ended: 00:38:39

3243.00 ft (KB) To 3300.00 ft (KB) (TVD)

Interval: Total Depth: Hole Diameter:

3300.00 ft (KB) (TVD)

7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole (Initial)

Tester:

Andy Carreira

Unit No:

Reference Elevations:

2014.00 ft (KB)

2006.00 ft (CF)

KB to GR/CF:

8.00 ft

Serial #: 8017 Press@RunDepth:

Inside

psig @

3249.00 ft (KB)

Last Calib .:

Capacity:

8000.00 psig

Start Date:

2012.05.18

End Date:

2012.05.19

Time On Btm:

2012.05.19

Start Time:

20:03:05

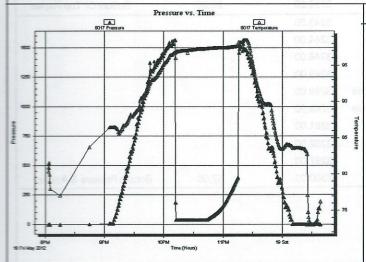
End Time:

00:38:40

Time Off Btm:

TEST COMMENT: IF:(30min) Intermittent Surface Blow, Flushed Tool, Surge, Intermittent Surface Blow.

ISI:(30min) No Return, Pulled tool



	PF	RESSUR	RE SUMMARY
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
	331 - 341	00.4	andered land
		00.7	Ziange Over Sub
ent	108	90.0	rebreast
atoO = Et	83.4	00.0	1901009
		32.00	July Place
		00.1	Wange Over Sub
		15.00	enforations
		3.00	aconflui
		77.6	:ritgne.i looT latoT

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Mud w / oil spcks in tool	0.42

Gas Rates

Choke (inches) Pressure (psig)

Gas Rate (Mcf/d)



Dreiling Oil Co.

20-15s-18w Ellis, KS

PO Box 550 Hays KS 67601

Grabbe B #2 Job Ticket: 47328

DST#: 2

ATTN: Roger Fisher

Test Start: 2012.05.19 @ 09:46:05

GENERAL INFORMATION:

Time Test Ended: 16:14:50

Formation:

LKC"C&D"

Time Tool Opened: 11:32:40

Deviated: No Whipstock:

Test Type: Conventional Bottom Hole (Reset)

Tester:

Andy Carreira

Unit No:

Reference Elevations: 2014.00 ft (KB)

2006.00 ft (CF)

KB to GR/CF:

39

8.00 ft

Total Depth: 3343.00 ft (KB) (TVD)

Interval: 3300.00 ft (KB) To 3343.00 ft (KB) (TVD)

Hole Diameter: 7.88 inchesHole Condition: Poor

Serial #: 8372

Outside

Press@RunDepth: 122.03 psig @ Start Date: 2012.05.19

Start Time:

3305.00 ft (KB)

End Time:

End Date:

2012.05.19 16:14:50

Capacity:

8000.00 psig

Last Calib .: Time On Btm: 2012.05.19

Time Off Btm:

2012.05.19 @ 11:29:50 2012.05.19 @ 14:05:50

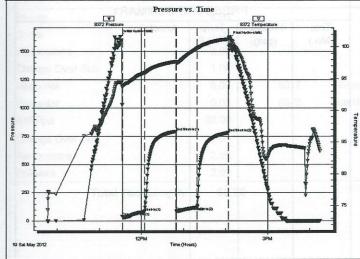
TEST COMMENT: IF:(30min) BOB, 1 min.

09:46:05

ISI:(45min) Return Blow, Built to 1" Died in 15 min.

FF:(30min) BOB, 2 min.

FSI:(45min) Return Blow, BOB 10 min. Died in 40 min.



PRESSURE SUMMARY

Pressure	Temp	Annotation
(psig)	(deg F)	
1633.72	94.41	Initial Hydro-static
38.12	93.65	Open To Flow (1)
81.54	95.94	Shut-In(1)
794.90	97.69	End Shut-In(1)
86.23	97.45	Open To Flow (2)
122.03	99.79	Shut-In(2)
783.66	101.23	End Shut-In(2)
1618.33	101.61	Final Hydro-static
7	1	
	(psig) 1633.72 38.12 81.54 794.90 86.23 122.03 783.66	(psig) (deg F) 1633.72 94.41 38.12 93.65 81.54 95.94 794.90 97.69 86.23 97.45 122.03 99.79 783.66 101.23

Recovery

125.00 M&WCGO g=20% m=10% w=10% o=6091.75 55.00 MCGO g=20% m=30% o=50% 0.77	Length (ft)	Description	Volume (bbl)
55.00 MCGO g=20% m=30% o=50% 0.77	120.00	M&WCGO g=10% m=10% w =20% o=60	91.40
	125.00	M&WCGO g=20% m=10% w =10% o=60)%1.75
0.00 GIP= 2900ft 0.00	55.00	MCGO g=20% m=30% o=50%	0.77
	0.00	GIP= 2900ft	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
O4.1 (0)3=0	. 0°00≥ w ±001±m i	kuleg DODW	94)



Dreiling Oil Co.

20-15s-18w Ellis, KS Grabbe B #2

PO Box 550 Hays KS 67601

Job Ticket: 47329

DST#: 3

ATTN: Roger Fisher

Test Start: 2012.05.20 @ 00:22:05

GENERAL INFORMATION:

Formation:

LKC"E&F"

Deviated: No Whipstock:

ft (KB)

Test Type: Conventional Bottom Hole (Reset)

Tester:

Andy Carreira

Unit No:

2014.00 ft (KB)

Reference Elevations:

2006.00 ft (CF)

KB to GR/CF:

8.00 ft

8000.00 psig

2012.05.20

Interval: Total Depth:

Start Time:

3348.00 ft (KB) To 3385.00 ft (KB) (TVD)

3385.00 ft (KB) (TVD)

Hole Diameter:

Time Tool Opened: 02:07:50

Time Test Ended: 07:01:39

7.88 inches Hole Condition: Poor

Inside

Serial #: 8017

Press@RunDepth:

Start Date:

psig @ 2012.05.20

00:22:05

End Date: End Time:

3349.00 ft (KB)

2012.05.20

07:01:29

Time

(Min.)

Capacity:

Last Calib .:

Time On Btm:

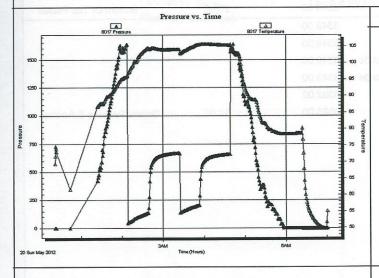
Time Off Btm:

TEST COMMENT: IF:(30min) BOB, 2 min

ISI:(45min) Return Blow, Built to 2", Decreased to surface Blow.

FF:(30min) BOB, 4 min

FSI:(45min) Return Blow, Built to 6", Decreased to 1"



PI	RESSUR	E SUMMARY	
Pressure (psig)	Temp (deg F)	Annotation	

Recovery

Description	Volume (bbl)
Water	1.40
GO g=15% o=85%	5.33
GIP= 1200ft	0.00
	Water GO g=15% o=85%

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 47329

Printed: 2012.05.23 @ 11:07:46



Dreiling Oil Co.

PO Box 550 Hays KS 67601

ATTN: Roger Fisher

20-15s-18w Ellis, KS

Grabbe B #2

Job Ticket: 47330

DST#: 4

Test Start: 2012.05.20 @ 16:49:05

GENERAL INFORMATION:

Time Test Ended: 23:21:59

Time Tool Opened: 18:32:40

Total Depth: 3470.00 ft (KB) (TVD)

Formation:

LKC"H,I,J"

Deviated: No Whipstock:

Conventional Bottom Hole (Reset)

Test Type: Tester:

Andy Carreira

Unit No:

Reference Elevations: 2014.00 ft (KB)

2006.00 ft (CF)

KB to GR/CF:

39

8.00 ft

Interval: 3403.00 ft (KB) To 3470.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Serial #: 8372

Outside

Press@RunDepth: 107.67 psig @

3409.00 ft (KB)

End Date:

2012.05.20

Capacity:

8000.00 psig

Start Date: Start Time: 2012.05.20 16:49:05

End Time:

23:21:59

Last Calib .: Time On Btm:

2012.05.20 2012.05.20 @ 18:32:20

Time Off Btm:

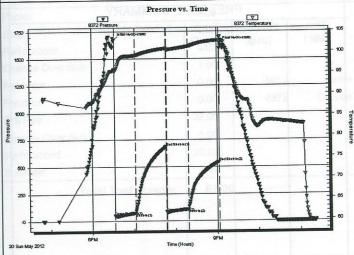
2012.05.20 @ 21:04:20

TEST COMMENT: IF:(30min) BOB, 3 min.

ISI:(45min) Slight Retutn Surface Blow, Died in 10 min.

FF:(30min) BOB, 2 min.

FSI: (45min) Return surface blow.



PRESSURE SUMMARY Annotation Temp Pressure Time (deg F) (Min.) (psig) 95.83 Initial Hydro-static 1675.82 49.91 95.26 Open To Flow (1) 1 72.51 99.14 Shut-In(1) 30 End Shut-In(1) 100.78 74 688.11 Open To Flow (2) 100.47 75 78.72 107 107.67 101.26 Shut-In(2) 544.38 102.72 End Shut-In(2) 151 103.62 Final Hydro-static 1637.33 152

Recovery

Description	Volume (bbl)
MCGO m=15% g=40% o=45%	3.36
GIP= 1100ft	0.00
	MCGO m=15% g=40% o=45%

Gas Rates

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

Trilobite Testing, Inc Ref. No: 47330

Printed: 2012.05.23 @ 11:07:09



Dreiling Oil Co.

20-15s-18w Ellis, KS

PO Box 550 Hays KS 67601 Grabbe B #2 Job Ticket: 47331

DST#:5

ATTN: Roger Fisher

Test Start: 2012.05.21 @ 15:47:05

GENERAL INFORMATION:

Formation: Arbuckle

Interval:

No Deviated:

Whipstock:

ft (KB)

Time Tool Opened: 17:32:00 Time Test Ended: 22:30:59

3541.00 ft (KB) To 3601.00 ft (KB) (TVD)

Total Depth:

3601.00 ft (KB) (TVD)

Hole Diameter:

7.88 inchesHole Condition: Poor

Test Type: Conventional Bottom Hole (Reset)

Tester:

Andy Carreira

Unit No:

Reference Elevations:

2014.00 ft (KB)

2006.00 ft (CF)

KB to GR/CF:

8.00 ft

Serial #: 8017 Press@RunDepth:

Inside

psig @

3547.00 ft (KB) End Date:

2012.05.21

Capacity:

8000.00 psig 2012.05.21

Last Calib .: Time On Btm:

Start Date: Start Time: 2012.05.21 15:47:05

End Time:

22:30:40

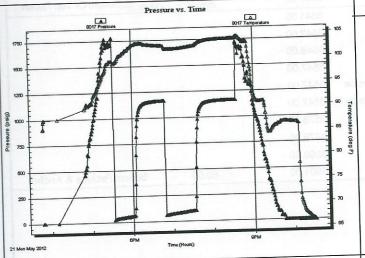
Time Off Btm:

TEST COMMENT: IF:(30min) 2" blow in 9 min, 4" in 26 min.

ISI:(45min) No Return

FF:(45min) 2" blow in 11 min, 4" in 28 min.

FSI:(60min) No Return



PRESSURE SUMMARY

١		FI	LOSSIN	L COMMING A CT	
1	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	Stoleb en crations
١			56.1		Change Over Sub
		108	00.0		rebroods
		8372	00.0		
			00.15		
			00.1		
			60 ET		
•			3.00		
			9.08	Tool Langtin:	

Recovery

Description	Volume (bbl)	
OCGM g=5% o=10% m=85%	1.26	
CO o=100%	1.40	
GIP=90ft	0.00	
	OCGM g=5% o=10% m=85% CO o=100%	

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 47331

Printed: 2012.05.23 @ 11:06:21