



KANSAS CORPORATION COMMISSION 1160220
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 Date Reached TD Completion Date or
Recompletion Date 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: _____



1160220

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	Darrah, John Jay, Jr.
Well Name	Brush Creek Unit 403
Doc ID	1160220

Tops

Name	Top	Datum
Heebner	3668	-1271
Lansing	3708	-1318
Lansing 'D'	3752	-1358
Kansas City 'H'	3837	-1443
Base KC	3923	-1529
Marmaton	3978	-1584
Arbuckle	4232	-1838
RTD	4247	-1853

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 7952

Cell 785-324-1041

Date	6-20-13	Sec.	9	Twp.	9	Range	23	County	Crawham	State	KS	On Location		Finish	8:45p.m.
Lease	Brush Creek Unit							Location	Wakeeney Redline 2w 3N 1/2 E 1/4 in to						
Well No.	403							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.						
Contractor	Maffard							Charge To	Darrah Oil						
Type Job	Surface							Street							
Hole Size	12 1/4		T.D.	218		Depth	218								
Csg.	8 5/8		Depth												
Tbg. Size			Depth												
Tool			Depth												
Cement Left in Csg.	15		Shoe Joint												
Meas Line			Displace	133CL											
EQUIPMENT								Common	150						
Pumptrk	15		No.	Cement		Helper		Poz. Mix							
Bulktrk			No.	Driver		Driver		Gel.	3						
Bulktrk	8		No.	Driver		Driver		Calcium	5						
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Post Collar								Sand							
8 5/8 on bottom fast circulation.								Handling	150						
Mix 150 SK + Displace								Mileage							
Cement Circulated!								FLOAT EQUIPMENT							
								Guide Shoe							
								Centralizer							
								Baskets	8 5/8 SWAGE						
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge	Surface						
								Mileage	44						
								Tax							
								Discount							
								Total Charge							
X Signature															

Quality Oilwell

Cementing

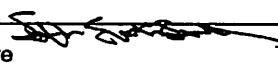
QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7959

Date	6-28-13	Sec.		Twp.		Range		County	Ceracham	State	KS	On Location		Finish	1:15 A.M.
Lease	Brush Creek Unit							Location	Wekenev 1 Redline 2W 3N 1/8E N into						
Well No.	403							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.						
Contractor	Mallard							Charge To	Darrin Q. I						
Type Job	2 Stage Bottom Stage							Street							
Hole Size	7 7/8							T.D.	42.50						
Csg.	5 1/2 14"							Depth	42.44						
Tbg. Size								City	State						
Tool	DV Tool							Depth	2108						
Cement Left in Csg.	13.41							Shoe Joint	13.41						
Meas Line								Displace	103 1/4 RL						
EQUIPMENT								Common	200						
Pumptrk	17	No.	Cement	raig				Helper							
Bulktrk		No.	Driver	Lash				Driver							
Bulktrk	14	No.	Driver	Clayton				Driver							
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt	18						
Rat Hole								Flowseal	1000						
Mouse Hole								Kol-Seal	1000#						
Centralizers	3, 6, 8, 10, 12, 13, 16, 52, 54							Mud CLR 48	500 gal						
Baskets	5, 3 52							CFL-117 or CD110 CAP	38						
D/V or Port Collar	#52 @ 2108							Sand							
5 1/2 set @ 4244. Est. Circulation								Handling	228						
Pump 500 gal mud clar + 10 RL spacer								Mileage							
Cement 5 1/2 w. th 200K Clear lines								FLOAT EQUIPMENT							
Displace Phg. Pvg lands @ 1500#								Guide Shoe							
Release Pressure Int.								Centralizer	7 Turb's 2 Regular						
Drop Bomb & Open Tool.								Baskets	2						
Circulate 4 hours								AFU inserts	DV Tool						
								Float Shoe	1						
								Latch Down	1						
								Pumptrk Charge	prod Long string						
								Mileage	44						
								Tax							
								Discount							
								Total Charge	Bottom Stage						
X 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. 7960

Date	6-28-13	Sec.		Twp.		Range		County	Graham	State	KS	On Location		Finish	6:45 a.m.		
Lease								Location				4 McKenney Redline 2 1/2 S 3 N 1/8 E N into					
Brook Creek Unit								Well No.		403							
Contractor								Mallard									
Type Job								DU Tool				Top Stage					
Hole Size								7 7/8				T.D. 4250					
Csg.								5 1/2 14"				Depth 4244					
Tbg. Size												Depth					
Tool								DU Tool				Depth 2108					
Cement Left in Csg.												Shoe Joint					
Meas Line								Displace 5 1/2 BBL									
EQUIPMENT																	
Pumptrk								17		No.		Cement		Common			
Bulktrk								13		No.		Driver		375 QMDC (400)			
Bulktrk										Driver		Poz. Mix					
Bulktrk										Driver		Gel.					
Bulktrk										Driver		Calcium					
JOB SERVICES & REMARKS																	
Remarks:								Hulls									
Rat Hole								305K									
Mouse Hole								155K									
Centralizers								Mud CLR 48									
Baskets								CFL-117 or CD110 CAF 38									
D/V or Port Collar								Sand									
Cement Rathole & Mouse hole								Handling 375									
Cement top stage with 3305K								Mileage									
Displace Plug. Plug landed @								FLOAT EQUIPMENT									
1500#. Hold. Release Pressure								Guide Shoe									
D.V.								Centralizer									
Cement Checked								Baskets									
								AFU Inserts									
								Float Shoe									
								Latch Down									
								Pumptrk Charge									
								Mileage 14									
Tax																	
Discount																	
Total Charge																	
Signature								[Signature]									

TOP
Stage



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

john jay darrah jr

9 9s 23w graham

p.o. box 2786
wichta, ks 67201

brush creek unit 403

ATTN: seth evanson

Job Ticket: 53821

DST#: 1

Test Start: 2013.06.24 @ 12:45:00

GENERAL INFORMATION:

Formation: **LKC A - F**

Deviated: No Whipstock: 2394.00 ft (KB)

Time Tool Opened: 15:10:30

Time Test Ended: 20:47:00

Test Type: Conventional Bottom Hole (Initial)

Tester: jim svaty

Unit No: 41

Interval: 3715.00 ft (KB) To 3778.00 ft (KB) (TVD)

Reference Elevations: 2394.00 ft (KB)

Total Depth: 3778.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: 113.21 psig @ 3742.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.24

End Date:

2013.06.24

Last Calib.:

2013.06.24

Start Time: 12:45:01

End Time:

20:46:50

Time On Btm:

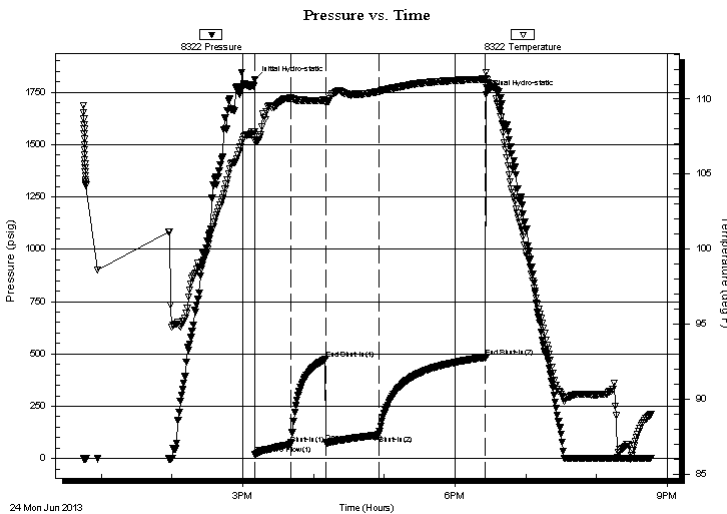
2013.06.24 @ 15:10:20

Time Off Btm:

2013.06.24 @ 18:26:10

TEST COMMENT: 30-IFP- Surface Blow Building to 5 3/4in.
30-ISIP- No Blow
45-FFP-Surface Blow Building to 4 3/4in
90-FSIP-No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1808.79	107.80	Initial Hydro-static
1	19.11	107.23	Open To Flow (1)
31	67.17	110.07	Shut-In(1)
60	475.33	109.91	End Shut-In(1)
61	77.69	109.76	Open To Flow (2)
105	113.21	110.50	Shut-In(2)
196	484.10	111.34	End Shut-In(2)
196	1740.43	111.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	WOCM 10%w 20%o 70%m	0.10
120.00	OWCM 5%o 35%w 60%m	0.59
60.00	OWCM 5%o 45%w 50%m	0.30
0.00	60 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

john jay darrah jr

9 9s 23w graham

p.o. box 2786
wichita, ks 67201

brush creek unit 403

Job Ticket: 53821

DST#: 1

ATTN: seth evanson

Test Start: 2013.06.24 @ 12:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

32000 ppm

Viscosity: sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
20.00	WOCM 10%w 20%o 70%m	0.098
120.00	OWCM 5%o 35%w 60%m	0.590
60.00	OWCM 5%o 45%w 50%m	0.295
0.00	60 GIP	0.000

Total Length: 200.00 ft

Total Volume: 0.983 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

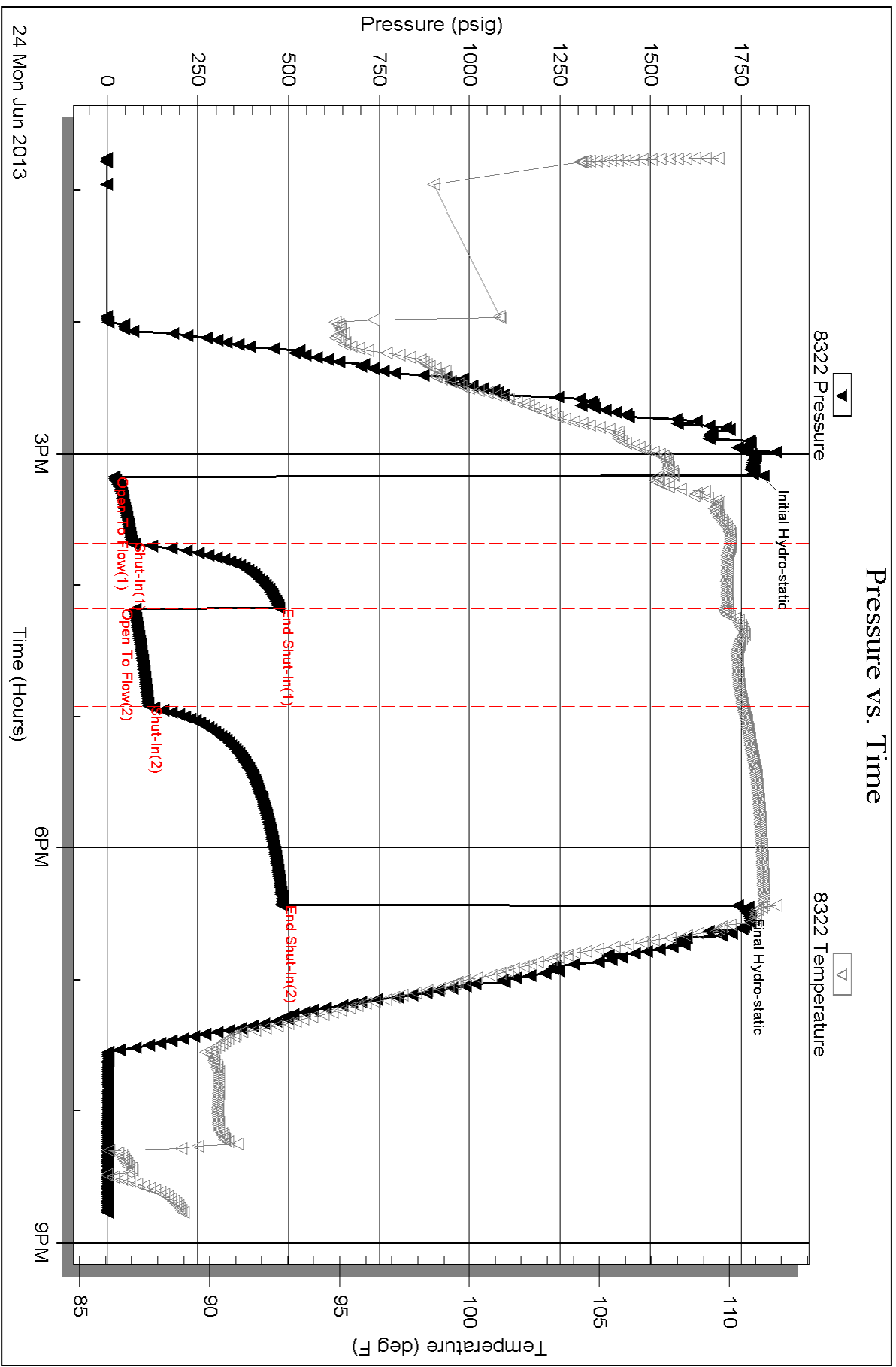
Recovery Comments: .175 @ 86

Serial #: 8322

Outside John Jay Darrah Jr

brush creek unit 403

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

john jay darrah jr

9 9s 23w graham

p.o. box 2786
wichta, ks 67201

brush creek unit 403

ATTN: seth evanson

Job Ticket: 53822

DST#: 2

Test Start: 2013.06.25 @ 13:50:00

GENERAL INFORMATION:

Formation: **LKC " G - K "**

Deviated: No Whipstock: 2394.00 ft (KB)

Time Tool Opened: 16:36:30

Time Test Ended: 23:55:00

Test Type: Conventional Bottom Hole (Reset)

Tester: jim svaty

Unit No: 41

Interval: 3758.00 ft (KB) To 3925.00 ft (KB) (TVD)

Reference Elevations: 2394.00 ft (KB)

Total Depth: 3925.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: 574.55 psig @ 3760.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.25

End Date:

2013.06.25

Last Calib.:

2013.06.26

Start Time: 13:50:01

End Time:

23:54:40

Time On Btm:

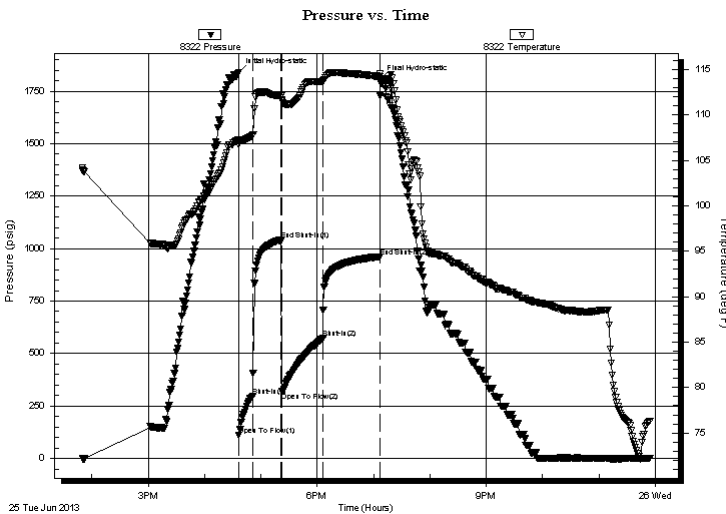
2013.06.25 @ 16:36:10

Time Off Btm:

2013.06.25 @ 19:06:50

TEST COMMENT: 15-IFP- BOB in 1min. 45sec.
30-ISIP- BOB in 16min.
45-FFP- BOB in 1min. 45sec.
60-FSIP- BOB in 8min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.61	107.18	Initial Hydro-static
1	111.46	106.72	Open To Flow (1)
16	297.94	107.72	Shut-In(1)
46	1039.55	112.07	End Shut-In(1)
46	317.67	111.53	Open To Flow (2)
90	574.55	113.65	Shut-In(2)
151	961.88	114.23	End Shut-In(2)
151	1804.62	114.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
688.00	GMCO 20%m 30%g 50%o	6.93
188.00	GMCO 10%m 45%g 45%o	2.64
563.00	GMCO 10%m 20%g 70%o	7.90
62.00	GMCO 30%g 30%m 40%o	0.87
79.00	GOCM 10%g 20%o 70%m	1.11
0.00	1060 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

john jay darrah jr

9 9s 23w graham

p.o. box 2786
wichita, ks 67201

brush creek unit 403

Job Ticket: 53822

DST#: 2

ATTN: seth evanson

Test Start: 2013.06.25 @ 13:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
688.00	GMCO 20% <i>m</i> 30% <i>g</i> 50% <i>o</i>	6.927
188.00	GMCO 10% <i>m</i> 45% <i>g</i> 45% <i>o</i>	2.637
563.00	GMCO 10% <i>m</i> 20% <i>g</i> 70% <i>o</i>	7.897
62.00	GMCO 30% <i>g</i> 30% <i>m</i> 40% <i>o</i>	0.870
79.00	GOCM 10% <i>g</i> 20% <i>o</i> 70% <i>m</i>	1.108
0.00	1060 GIP	0.000

Total Length: 1580.00 ft

Total Volume: 19.439 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8322

Outside john jay darrah jr

brush creek unit 403

DST Test Number: 2

Pressure vs. Time

