

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1088939

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 #			API No. 15		
Name:			Spot Description:		
Address 1:			Sec	TwpS. R	East West
Address 2:			F6	eet from North /	South Line of Section
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section
Contact Person:			Footages Calculated from I	Nearest Outside Section C	Corner:
Phone: ()			□ NE □ NW	V □SE □SW	
CONTRACTOR: License #			GPS Location: Lat:	, Long: _	
Name:				(e.g. xx.xxxxx)	(e.gxxx.xxxxx)
Wellsite Geologist:			Datum: NAD27	NAD83 WGS84	
Purchaser:			County:		
Designate Type of Completion:			Lease Name:	W	/ell #:
	e-Entry	Workover	Field Name:		
	_		Producing Formation:		
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW □ SIGW	Elevation: Ground:	Kelly Bushing:	:
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total C	Depth:
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet
Operator:			If Alternate II completion, c	cement circulated from:	
Well Name:			feet depth to:	w/	sx cmt.
Original Comp. Date:					
Deepening Re-perf	•	NHR Conv. to SWD	Drilling Fluid Managemer	nt Plan	
☐ Plug Back	Conv. to G		(Data must be collected from the		
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	e: bbls
Dual Completion			Dewatering method used: _		
SWD			Location of fluid disposal if	hauled offsite	
☐ ENHR			1		
GSW	Permit #:		Operator Name:		
_ _			Lease Name:	License #:_	
Spud Date or Date R	eached TD	Completion Date or	Quarter Sec	TwpS. R	East _ West
Recompletion Date		Recompletion Date	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:						

Page Two



Operator Name:	perator Name: Lease Name:					Well #:		
Sec Twp	ec TwpS. R							
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.								
		tain Geophysical Data a r newer AND an image f		gs must be ema	iled to kcc-well-log	gs@kcc.ks.gov	. Digital electronic log	
Drill Stem Tests Taken (Attach Additional S		n (Top), Depth an		Sample				
Samples Sent to Geological Survey				9		Тор	Datum	
Cores Taken ☐ Yes ☐ No Electric Log Run ☐ Yes ☐ No								
List All E. Logs Run:	List All E. Logs Run:							
		CASING	RECORD Ne	w Used				
		Report all strings set-o			on, 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 / SQL	EEZE RECORD	I	1		
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Po	ercent Additives		
Perforate Protect Casing Plug Back TD								
Plug Off Zone								
Did you perform a hydraulic fracturing treatment on this well? Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No (If No, skip question 3) (If No, skip question 3)								
Shots Per Foot		N RECORD - Bridge Plug			cture, Shot, Cement			
S.13.6 Y G. 7 GG.	Specify Fo	ootage of Each Interval Perf	orated	(Ar	nount and Kind of Ma	terial Used)	Depth	
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No			
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift C	other (Explain)			
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er Bl	bls. G	ias-Oil Ratio	Gravity	
				T.O.		DE 0-11-		
DISPOSITION Vented Sold	ON OF GAS: Used on Lease	Open Hole	METHOD OF COMPLE Perf. Dually		nmingled	PRODUCTIO	ON INTERVAL:	
(If vented, Submit ACO-18.) Other (Specify)								

QUALITY WELL SERVICE, INC. Federal Tax I.D. # 481187368

5498

Home Office 324 Simpson St., Pratt, KS 67124

Todd's Cell 620-388-5422 Office / Fax 620-672-3663

Rich's Cell 620-727-3409 Brady's Cell 620-727-6964

Date 7-/3-/2 Sec. 4	Twp.	Range	1	County	State	On Location	Finish	
-0 1	Well No.	4-1	Location	on BALT	A RN 65	2E 151	= NUOTH	
Contractor PFETFER	EXP	TNIEGA	CIF	Owner 4	VTO	1,00	- JODA I	
Type Job Plu 9	T	2/ 201		To Quality We	ell Service, Inc.			
Hole Size 7 78 T.D.				You are here cementer and	by requested to rent d helper to assist own	cementing equipment oer or contractor to d	t and furnish o work as listed.	
Denth			Charge PFEIFER EXP					
Tbg. Size	Depth		= 31	Street	allaj la l			
Tool	Depth	3300	- 1 1	City	ur syrry sitt is	State		
Cement Left in Csg.	Shoe J	oint		The above wa	s done to satisfaction ar	d supervision of owner	agent or contractor.	
Meas Line	Displac	е		Cement Amo	unt Ordered 23	2 60/40 4	1/0	
	MENT			14 celloflake				
Pumptrk 6No. PAULO	BRH	0.		Common	140	Controlling to ex		
Bulktrk 7 No. 3EAN	DETHIST	Security Security		Poz. Mix	90	ncer the	and a little of	
Bulktrk No.	4 5 55	The state of the s		Gel. 8			INHO!	
Pickup No.	N			Calcium				
JOB SERVICES & REMARKS				Hulls				
Rat Hole				Salt			1	
Mouse Hole				Flowseal 5	1.50			
Centralizers		1770		Kol-Seal				
Baskets				Mud CLR 48				
D/V or Port Collar		CFL-117 or (CD110 CAF 38					
				Sand				
FIRST Plug 3	300	w.T/V,		Handling 2	38			
25545 60/	40	496. 40	18/1	Mileage /7				
ALCOHOL Management Street	is convain	Dearles Indian		II FEBRUAYA I NES	FLOAT EQUIPME	NT		
2" Plug 900	u	17/6		Guide Shoe				
25 565 60/40	4%	4 cei	//	Centralizer				
				Baskets				
3 Plug 360	W	1118		AFU Inserts				
140 5/3 60/4	0 49	6 /4 CE1	//	Float Shoe				
				Latch Down	•			
47h Plug 40	wi	TN.			District Transfer of the Control of			
10 5KS 60/40	4/0	14 Le	11					
The Market of th				Pumptrk Chai	ge Rotary Plu	o		
RAT HOLE 30,	1/19	60/40 :	4/6	Mileage		1.		
119 0011		100		347		Tax		
1 5	4					Discount		
X Signature				190		Total Charge		
////								



Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH

Truan 4-1 Job Ticket: 47760

DST#: 1

Hays KS, 67601

ATTN: Roger

Test Start: 2012.07.12 @ 16:10:00

GENERAL INFORMATION:

Formation: I,J

Interval:

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 18:24:00 Time Test Ended: 23:54:30

3214.00 ft (KB) To 3275.00 ft (KB) (TVD)

Total Depth: 3400.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair Hole Diameter:

Test Type: Conventional Straddle (Initial)

Tester: Cody Bloedorn

Unit No: 39

Capacity:

Reference Elevations:

1834.00 ft (KB)

8000.00 psig

1828.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 8017 Inside

Press@RunDepth: 3251.00 ft (KB) 89.94 psig @

Start Date: 2012.07.12 End Date: 2012.07.12 Last Calib.: 2012.07.13 Start Time: 16:10:05 End Time: 2012.07.12 @ 18:23:50 23:54:29 Time On Btm:

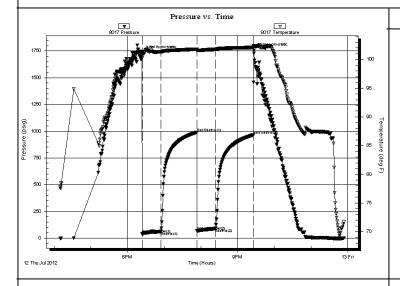
> Time Off Btm: 2012.07.12 @ 21:27:00

> > DDECCLIDE CLIMMADY

TEST COMMENT: 30 - IF- 3" Blow

60 - ISI- No blow back 30 - FF- 3" Blow

60 - FSI- Surface blow back for 8 Min. then died.



	PRESSURE SUIVIIVIAR						
е	Pressure	Temp	Annotation				
.)	(psig)	(dea F)					

rime	Time Pressure		Annotation
(Min.)	(psig)	(deg F)	
0	1731.21	101.35	Initial Hydro-static
1	40.17	100.29	Open To Flow (1)
31	62.31	101.33	Shut-In(1)
90	989.08	101.80	End Shut-In(1)
90	70.48	101.49	Open To Flow (2)
120	89.94	101.76	Shut-In(2)
183	964.46	102.11	End Shut-In(2)
184	1757.87	102.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOCWM, 5%O, 40%W, 60%M	1.68
4.00	Free Oil	0.06

Gas Rates

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

Trilobite Testing, Inc. Ref. No: 47760 Printed: 2012.07.13 @ 02:02:25



Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH

Truan 4-1

DST#: 1

Hays KS, 67601

Job Ticket: 47760

ATTN: Roger

Test Start: 2012.07.12 @ 16:10:00

GENERAL INFORMATION:

Formation: I,J

Deviated: Whipstock: No ft (KB) Test Type: Conventional Straddle (Initial) Tester: Cody Bloedorn

Time Tool Opened: 18:24:00 Time Test Ended: 23:54:30

Unit No:

Interval: 3214.00 ft (KB) To 3275.00 ft (KB) (TVD) Reference Elevations:

1834.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

1828.00 ft (CF)

7.88 inches Hole Condition: Fair Hole Diameter:

KB to GR/CF: 6.00 ft

Serial #: 8372 Press@RunDepth: Outside

psig @

3251.00 ft (KB)

Capacity: Last Calib.: 8000.00 psig

Start Date: 2012.07.12 End Date: 2012.07.12

Time On Btm:

2012.07.13

Start Time:

16:10:05

End Time:

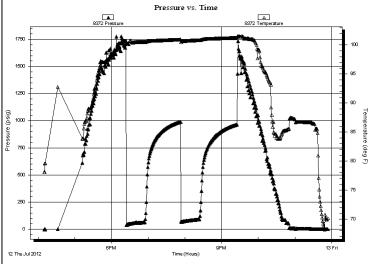
23:54:29

Time Off Btm:

TEST COMMENT: 30 - IF- 3" Blow

60 - ISI- No blow back 30 - FF- 3" Blow

60 - FSI- Surface blow back for 8 Min. then died.



FRESSURE SUMMANT	PRESSURE	SUMMARY
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•	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
Temperature (dex F)				
e (dea E)				

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOCWM, 5%O, 40%W, 60%M	1.68
4.00	Free Oil	0.06
		

Gas Rates

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

Trilobite Testing, Inc. Ref. No: 47760 Printed: 2012.07.13 @ 02:02:25



Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH

Job Ticket: 47760

Truan 4-1

Tester:

DST#: 1

1828.00 ft (CF)

Hays KS, 67601

ATTN: Roger

Test Start: 2012.07.12 @ 16:10:00

GENERAL INFORMATION:

Formation: I,J

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 18:24:00

Time Test Ended: 23:54:30

Interval: 3214.00 ft (KB) To 3275.00 ft (KB) (TVD)

Total Depth: 3400.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair Hole Diameter:

Cody Bloedorn Unit No:

Test Type: Conventional Straddle (Initial)

Reference Elevations: 1834.00 ft (KB)

> KB to GR/CF: 6.00 ft

Serial #: 8647 Below (Straddle)

Press@RunDepth: 3275.00 ft (KB) psig @ Capacity: 8000.00 psig

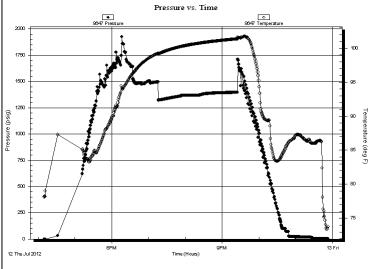
Start Date: 2012.07.12 End Date: 2012.07.12 Last Calib.: 2012.07.13

Start Time: 16:10:05 End Time: Time On Btm: 23:52:39 Time Off Btm:

TEST COMMENT: 30 - IF- 3" Blow

60 - ISI- No blow back 30 - FF- 3" Blow

60 - FSI- Surface blow back for 8 Min. then died.



PRESSURE SUMMARY						
ssure	Temp	Annotation				

	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
	, ,	" 0,	, ,	
Tem				
Temperature (deg F)				
(deg F)				

Recovery

Length (ft)	Description	Volume (bbl)
120.00	VSOCWM, 5%O, 40%W, 60%M	1.68
4.00	Free Oil	0.06
-		

Gas Rates

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

Trilobite Testing, Inc. Ref. No: 47760 Printed: 2012.07.13 @ 02:02:25



FLUID SUMMARY

Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH Hays KS, 67601 Truan 4-1

psig

Job Ticket: 47760

Serial #:

DST#:1

ATTN: Roger

Test Start: 2012.07.12 @ 16:10:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil A Pl:deg A PlMud Weight:Ib/galCushion Length:ftWater Salinity:ppm

Mud Weight: Ib/gal Cushion Length: ft Viscosity: sec/qt Cushion Volume: bbl

Water Loss: in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure:

Salinity: ppm Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	VSOCWM, 5%O, 40%W, 60%M	1.683
4.00	Free Oil	0.056

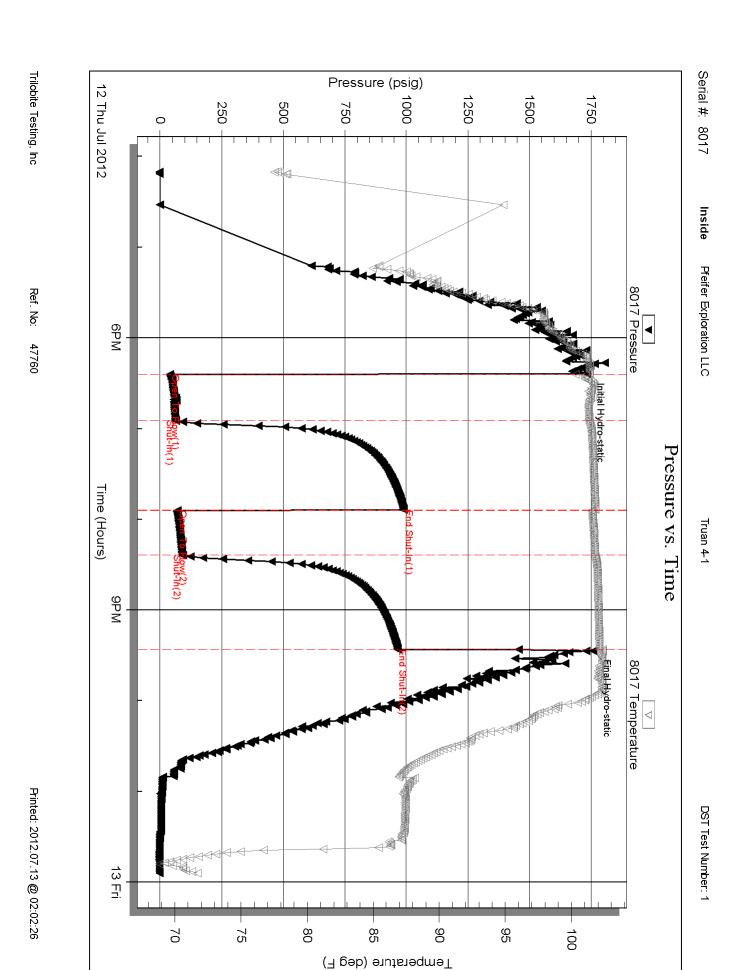
Total Length: 124.00 ft Total Volume: 1.739 bbl

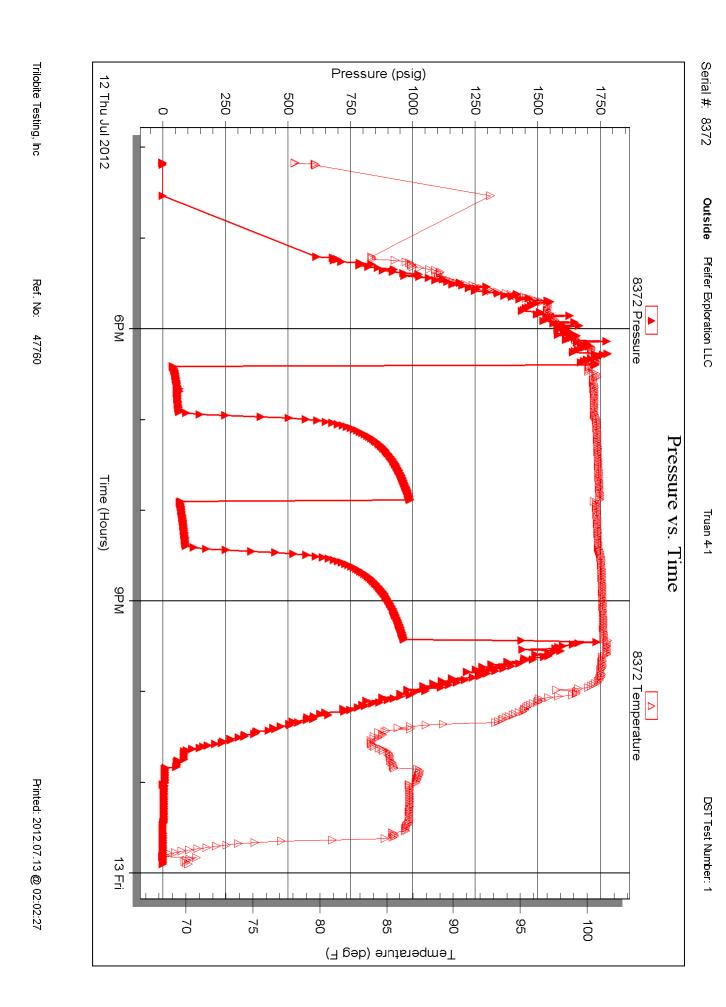
Num Fluid Samples: 0 Num Gas Bombs: 0

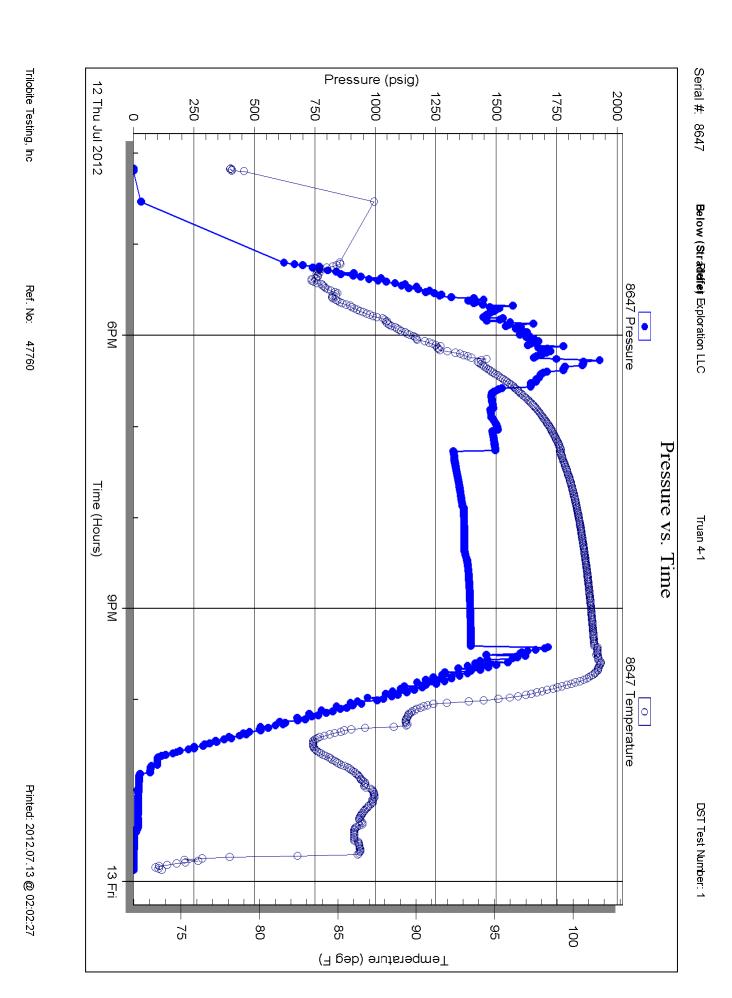
Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 47760 Printed: 2012.07.13 @ 02:02:26









Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH Hays KS, 67601 Truan 4-1 Job Ticket: 47761

DST#: 2

ATTN: Roger

Test Start: 2012.07.13 @ 04:54:00

GENERAL INFORMATION:

Formation: G

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 07:09:50 Time Test Ended: 11:11:50

Interval: 3151.00 ft (KB) To 3175.00 ft (KB) (TVD)

Total Depth: 3400.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair Hole Diameter:

Test Type: Conventional Straddle (Reset)

Tester: Cody Bloedorn

Unit No: 39

Reference Elevations:

1834.00 ft (KB)

1828.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 8017 Inside

Press@RunDepth: 3152.00 ft (KB) 23.64 psig @

Start Date: 2012.07.13 End Date: Start Time: 04:54:05 End Time:

Capacity: Last Calib.:

2012.07.13

11:11:50

8000.00 psig 2012.07.13

Time On Btm:

2012.07.13 @ 07:09:40

Time Off Btm:

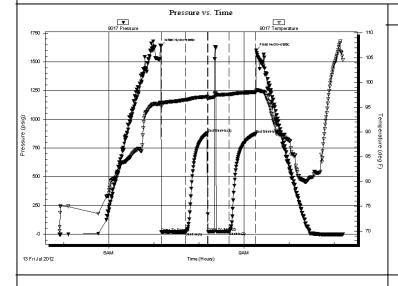
2012.07.13 @ 09:16:30

TEST COMMENT: 30 - IF- Surface blow, died in 5 Min.

30 - ISI- No blow back

30 - FF- No blow for 10 Min, flushed tool, surged and died

30 - FSI- No blow back.



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	1637.57	95.97	Initial Hydro-static
1	17.60	95.07	Open To Flow (1)
33	19.71	96.48	Shut-In(1)
62	880.01	97.11	End Shut-In(1)
63	20.12	96.85	Open To Flow (2)
91	23.64	97.59	Shut-In(2)
127	874.33	98.03	End Shut-In(2)
127	1600.90	98.39	Final Hydro-static
		1	

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud - Oil scum, 100%M	0.21
* Recovery from mu	Itiple tests	•

Gas Rates

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

Trilobite Testing, Inc. Ref. No: 47761 Printed: 2012.07.13 @ 16:09:20



Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH Hays KS, 67601

ATTN: Roger

Truan 4-1

Job Ticket: 47761

Test Start: 2012.07.13 @ 04:54:00

GENERAL INFORMATION:

Formation: G

Interval:

Test Type: Conventional Straddle (Reset) Deviated: Whipstock: No ft (KB)

Time Tool Opened: 07:09:50 Time Test Ended: 11:11:50 Tester: Cody Bloedorn

Unit No: 39

3151.00 ft (KB) To 3175.00 ft (KB) (TVD)

Reference Elevations: 1834.00 ft (KB)

1828.00 ft (CF)

DST#: 2

Total Depth: 3400.00 ft (KB) (TVD)

KB to GR/CF: 6.00 ft

Hole Diameter: 7.88 inches Hole Condition: Fair

Serial #: 8372 Outside

Press@RunDepth: 3152.00 ft (KB) 8000.00 psig psig @ Capacity:

Start Date: 2012.07.13 End Date: 2012.07.13 Last Calib.: 2012.07.13

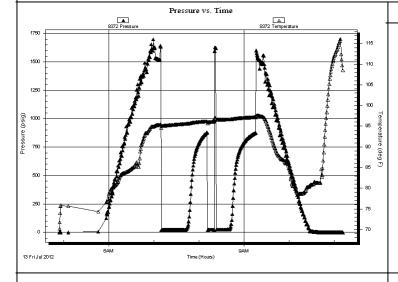
Start Time: 04:54:05 End Time: Time On Btm: 11:11:50 Time Off Btm:

TEST COMMENT: 30 - IF- Surface blow, died in 5 Min.

30 - ISI- No blow back

30 - FF- No blow for 10 Min, flushed tool, surged and died

30 - FSI- No blow back.



(Min.)	(psig)	(deg F)	, .

Pressure Temp Annotation

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud - Oil scum, 100%M	0.21
* Recovery from mul	tiple tests	

Gas Rat		
Choke (inches)	Drocoure (poig)	Coo Roto (Mof/d)

Printed: 2012.07.13 @ 16:09:21 Trilobite Testing, Inc. Ref. No: 47761



Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH Hays KS, 67601

Job Ticket: 47761

Truan 4-1

DST#: 2

ATTN: Roger

Test Start: 2012.07.13 @ 04:54:00

GENERAL INFORMATION:

Formation: G

Deviated: Whipstock: No ft (KB) Test Type: Conventional Straddle (Reset) Tester: Cody Bloedorn

Time Tool Opened: 07:09:50 Time Test Ended: 11:11:50

Unit No: 39

Interval: 3151.00 ft (KB) To 3175.00 ft (KB) (TVD) Reference Elevations:

1834.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair 1828.00 ft (CF)

KB to GR/CF: 6.00 ft

Serial #: 8647

Below (Straddle)

Press@RunDepth:

psig @

3175.00 ft (KB)

Capacity: Last Calib.: 8000.00 psig

Start Date:

2012.07.13

End Date:

2012.07.13 11:10:29

Time On Btm:

2012.07.13

Start Time:

04:54:05

End Time:

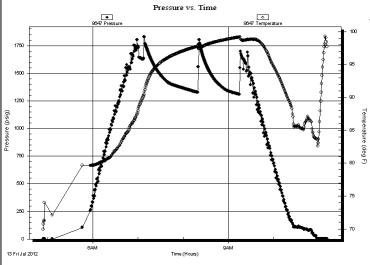
Time Off Btm:

TEST COMMENT: 30 - IF- Surface blow, died in 5 Min.

30 - ISI- No blow back

30 - FF- No blow for 10 Min, flushed tool, surged and died

30 - FSI- No blow back.



PRESSURE SUMMARY

•	Time	Drocouro	Tomo	Annotation
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	, ,	0,	, ,	
'				
:				
,				
		1	1	l .

Recovery

Length (ft)	Description	Volume (bbl)		
15.00	Mud - Oil scum, 100%M	0.21		
* Recovery from multiple tests				

Gas Rates

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

Printed: 2012.07.13 @ 16:09:21 Trilobite Testing, Inc. Ref. No: 47761



FLUID SUMMARY

Pfeifer Exploration LLC

4-15s-15w Russell

309 W 40TH Hays KS, 67601 Truan 4-1

Job Ticket: 47761

DST#: 2

ATTN: Roger

Test Start: 2012.07.13 @ 04:54:00

Mud and Cushion Information

in³

Mud Type:Gel ChemCushion Type:Oil A Pl:deg A PlMud Weight:Ib/galCushion Length:ftWater Salinity:ppm

Mud Weight: Ib/gal Cushion Length: ft Viscosity: sec/qt Cushion Volume: bbl

Gas Cushion Type:

ohm.m Gas Cushion Pressure: psig

Salinity: ppm Filter Cake: inches

Recovery Information

Water Loss:

Resistivity:

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud - Oil scum, 100%M	0.210

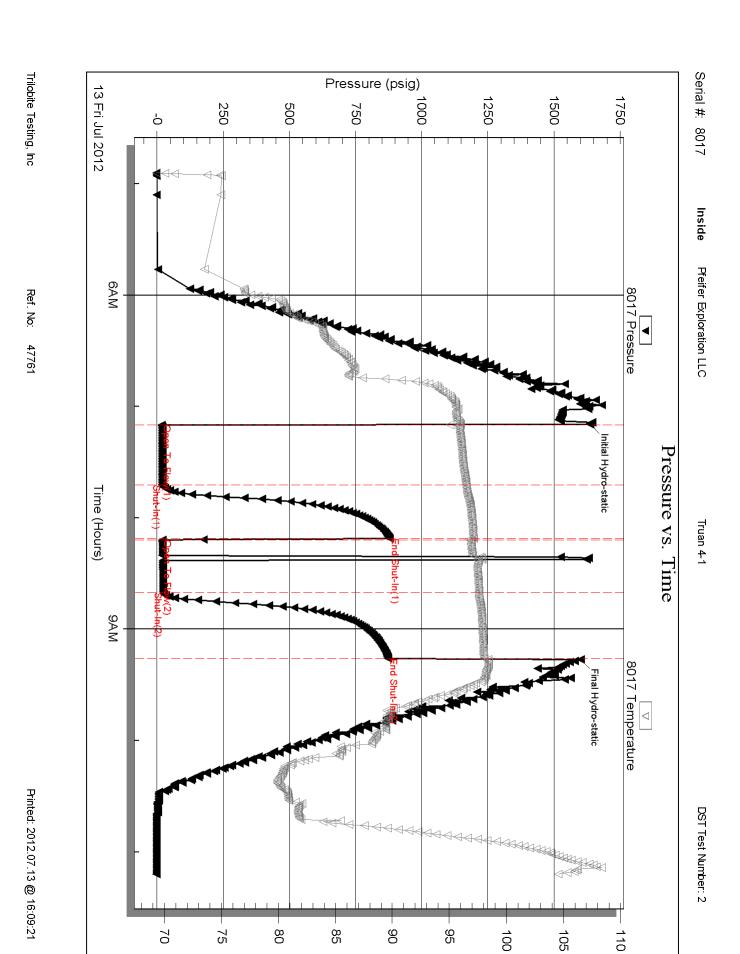
Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

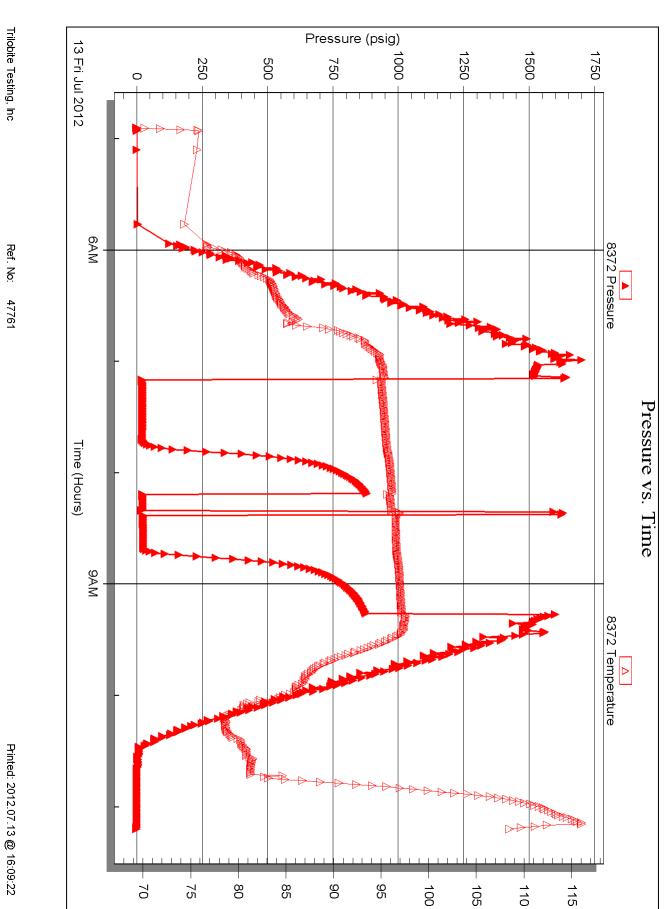
Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 47761 Printed: 2012.07.13 @ 16:09:21



Temperature (deg F)



Temperature (deg F)

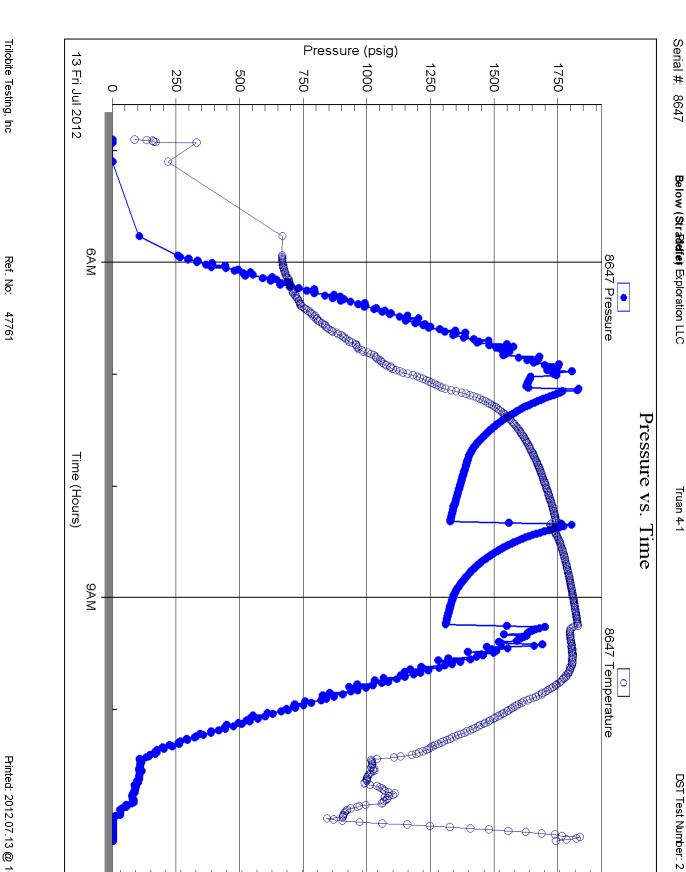
Serial #: 8372

Outside

Pfeifer Exploration LLC

Truan 4-1

DST Test Number: 2



⁺ 75

Temperature (deg F)

	REPORT 7-7-12 Spuddled 1 12 14" PDC 52 88 225' 225' 2'12 10
33.14	IFP/Ties ISIP/Ties FFP/Ties FBIP/Ties IMHR&
	8) 8)

SEOLOGIC

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DRILL STEN TESTS

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

September 25, 2012

Jacob Pfeifer Pfeifer Explorations, LLC 309 W. 40TH HAYS, KS 67601

Re: ACO1 API 15-167-23811-00-00 Truan 4-1 SW/4 Sec.04-15S-15W Russell County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Jacob Pfeifer