



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1212533  
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: \_\_\_\_\_

1212533

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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Messenger Petroleum, Inc.
Well Name	LEROY 1
Doc ID	1212533

Tops

Name	Top	Datum
Indian Cave	2385	-690
Heebner	3331	-1636
Lansing	3543	-1848
Swope	3903	-2208
Miss	4194	-2499
Kinderhook	4286	-2591
Viola	4466	-2771
LTD	4506	-2811

# 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. 3921

Date	6-4-10	Sec.	15	Twp.	27	Range	9	County	Kingman	State	Ks	On Location		Finish	8.45	
Lease	LERO-?	Well No.	A1		Location		SAE ZENON BLDG W									
Contractor	STEEZ IAS 14				Owner				TO ST LEO RD 1/2 mi W into							
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.		225		Charge To		MESSENGER							
Csg.	3 5/8 23"		Depth		222		Street									
Tbg. Size			Depth				City		State							
Tool			Depth				City		State							
Cement Left in Csg.	15		Shoe Joint		15		The above was done to satisfaction and supervision of owner agent or contractor.									
Meas Line			Displace		13.3 Bbls		Cement Amount Ordered		2.25 cu 60/40 Poz							
<b>EQUIPMENT</b>												2 1/2 GAL 3 1/2 CC 1/4" CP.				
Pumptrk	5	No.	Cementer	JOHN		4		Common		13.5						
Bulktrk	3	No.	Driver	KEVIN		0		Poz. Mix		90						
Bulktrk	PV	No.	Driver	ROBBY		6		Gel.		4						
<b>JOB SERVICES &amp; REMARKS</b>												Calcium		7		
Remarks:													Hulls			
Rat Hole													Salt			
Mouse Hole													Flowseal		56	
Centralizers													Kol-Seal			
Baskets													Mud CLR 48			
D/V or Port Collar													CFL-117 or CD110 CAF 38			
Run 5 #1's	3 5/8 23"		SET @		222		Sand									
Next Pump	225 cu 60/40 Poz		2 1/2 Gal		3 1/2 CC 1/4" CP.		Handling		236							
14.7 #1 GAL	1.25 #13						Mileage		.08 PER SQ PER M. 1.12							
<b>SHUT DOWN</b>												<b>FLOAT EQUIPMENT</b>				
RELEASE PLUG												Guide Shoe				
DISP 13.3 Bbls total												Centralizer				
Close valves on Csg 200'												Baskets				
Good CELL thru JOB												AFU Inserts				
CJCC CAT TO PIT												Float Shoe				
Thank												Latch Down				
TODD												1 Warner Plug				
Signature: <i>Todd S. Salvey</i>												Pumptrk Charge		SURFACE		
												Mileage		35		
												Tax				
												Discount				
												Total Charge				

PLEASE CALL RIANS  
Pratt



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET

1718 02093 A

15-295-9W

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB 6-14-10	DISTRICT Pratt, Kansas	NEW WELL <input checked="" type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO.:		
CUSTOMER Messenger Petroleum, Inc.		LEASE Le Roy				WELL NO. 1			
ADDRESS		COUNTY Kingman		STATE Kansas					
CITY		SERVICE CREW C. Mossich, M. Mattal, M. Nall, E. Masquez							
AUTHORIZED BY		JOB TYPE: C.N.W. - Two Stage Long String M. McGraw							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE 6-14-10	AM PM	TIME 8:30
19,866	5	19,826-19,860	5			ARRIVED AT JOB		AM PM	11:00
19,903-19,905	1					START OPERATION		AM PM	4:15
19,959-20,920	4					FINISH OPERATION		AM PM	9:15
						RELEASED	6-14-10	AM PM	9:45
						MILES FROM STATION TO WELL	30		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP 105	AA 2 Cement	sk	25	\$	425 00
CP 105	AA 2 Cement	sk	190	\$	3,230 00
CP 105	AA 2 Cement	sk	110	\$	1,870 00
CP 105	AA 2 Cement	sk	50	\$	850 00
CC 102	Cell flake	Lb	94	\$	347 80
CC 111	Salt (Fine)	Lb	1,894	\$	947 00
CC 115	Gas Blok	Lb	266	\$	1,369 90
CC 129	FLA-322	Lb	177	\$	1,327 50
CF 401	Two Stage Cementing Tool, 5 1/2"	ea	1	\$	6,100 00
CF 601	Latch Down Plug and Baffle, 5 1/2"	ea	1	\$	850 00
CF 1251	AutoFill Float Shoe, 5 1/2"	ea	1	\$	360 00
CF 1651	Turbolizer, 5 1/2"	ea	8	\$	880 00
CF 1901	Basket, 5 1/2"	ea	1	\$	290 00
CF 2002	Rotating Scratchers	ea	24	\$	1,200 00
CC 151	Mud Flush	Gal	1,000	\$	860 00

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL

KC

SERVICE REPRESENTATIVE	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:
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(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

# BASIC

energy services, L.P.

Page # 1 of 2

## TREATMENT REPORT

Customer Messenger Petroleum, Inc.	Lease No.	Date 6-14-10
Lease Le Roy	Well # 1	
Field Order # 2093	Station Pratt, Kansas	Casing 5 1/2 15.5 lb
Type Job C.N.W. 2 Stage Long string	Depth 4,488 ft	County Kingman
	Formation	State Kansas
		Legal Description 15-215-9W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5 1/2 15.5 lb/ft	Tubing Size 4 1/2 11.3 lb/ft	Shots/Ft 375	Cement 50 sacks of above mi	Acid AA-2 w/	Pre Rad 25 lb/lst	RATE 1.5817	PRESS A-322	ISIP 1085 psig
Depth 4,488 ft	Depth	From	To	Gas	Rad 6.25 Gal	Max 3.37	Cell Flake	5 Min.
Volume 106.8 Bbl	Volume	From	To	Rad 6.25 Gal	Fluo	Min 1.37	CU.F.F./S	10 Min.
Max Press 1500 PSI	Max Press	From	To	Fluo		Avg		15 Min.
Well Connection 2 1/2 S.W. 11	Annulus Vol. 11	From	To	Flush Fresh Water and		HHP Used 3000 psi	Annulus Pressure 1100 psi	
Plug Depth 110 ft	Packer Depth	From	To			Gas Volume 1000 gal	Total Load	

Customer Representative John Messick	Station Manager David Scott	Treater Clarence R. Messick				
Service Units 19,866	19,903	19,905	19,826	19,860	19,959	20,920
Driver Names Messick	Mall	M. McGraw	Masquez	Mall		

Time AM	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
11:00					Cement and Float Equipment on location.
11:30					Starting Drilling start to run Auto Fill Float shoe, Shoe Joint with Latch Down Baffle screw into collar and a total of 106 Joints new 15.5 lb/ft 5 1/2 casing. A Bachel was installed above collar. 15 Turbolizers were installed on Collars #1, 2, 7, 8, 9, 14, 26 and 27. A D.V. Tool was installed on top of collar #44 or at 2,733 feet down from surface. 12:00 PM Trks on location and hold safety meeting.
1:40					Casing in well. Rotate and circulate for 1 hour.
4:15	300			6	Start Fresh Water Pro-Flush.
	300		10	6	Start mud Flush.
	300		22	5	Start Fresh water spacer.
	350		27	5	Start 25 sacks scavenger cement.
	400		36	5	Start mixing 190 sacks AA 2 cement.
	-0-		82		Stop pumping. Unscrew swedge. Insert Latch down Plug into casing. Reinstall swedge. Wash pipe.
4:37	100			6.5	Start Fresh Water Displacement.
			46	5	Start Drilling mud Displacement.
			75	5	Start to lift cement.
4:50	800		106		Plug down.
	1750				Pressure up.
					Release pressure Float shoe held.
5:00					Remove swedge and release opening down for D.V. Tool.

Customer Messenger Petroleum, Inc.	Lease No. Le Roy	Date 6-14-10
Lease Le Roy	Well #	
Field Order # 2093	Station Pratt, Kansas	Casing
Type Job C.N.W. - Two Stage Long String	Depth	County Kingman
	Formation	State Kansas
		Legal Description 15-295-9W

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager	Treater
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Service Units									
Driver Names									

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
5:12	1200				Open D.V. Tool.
					Pump drilling mud remaining on pump truck
5:20					Hook up well to mud pump to circulate for 3 hours
					Wash up pump truck
					Start Fresh water
8:20	8:20				Stop circulating. Remove surge and install plug container with closing plug in it.
8:27	300			6-1	Start Fresh water Pre-Flush
				6	Start mud flush
				5	Start Fresh water spacer
					Start mixing 25 sacks Bentonite
8:33	300			5	Start mixing 110 sacks AA 2 cement
					Stop pumping. Shut in well. Wash pump and lines. Release closing plug. Open well.
8:44	100			6	Start Fresh water Displacement
			52	5	Start to lift cement
8:56	600		6.5		Plug down
	1200				Pressure up and close D.V. Tool
					Release pressure. D.V. Tool held.
	0		7.5	3	Plug Rat and Marston holes
					Wash up pump truck
9:45					Job Complete



## DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum, Inc.**

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**15-29s-9w Kingman KS**

**LeRoy #1**

Start Date: 2010.06.07 @ 16:06:00

End Date: 2010.06.07 @ 22:42:20

Job Ticket #: 36960                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.02 @ 12:49:03

Messenger Petroleum, Inc.      LeRoy #1      15-29s-9w Kingman KS      DST # 2      STOTLER      2010.06.07





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36960

**DST#: 2**

Test Start: 2010.06.07 @ 16:06:00

## GENERAL INFORMATION:

Formation: **STOTLER**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:42:30

Time Test Ended: 22:42:20

Test Type: Conventional Straddle (Initial)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 2590.00 ft (KB) To 2605.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 2635.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8648**

**Inside**

Press@RunDepth: 122.83 psig @ 2597.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.07

End Date: 2010.06.07

Last Calib.: 2010.06.07

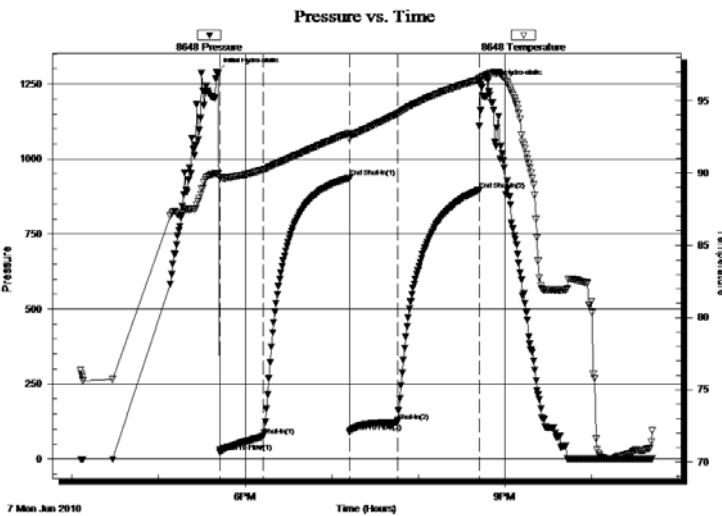
Start Time: 16:06:05

End Time: 22:42:20

Time On Btm: 2010.06.07 @ 17:40:30

Time Off Btm: 2010.06.07 @ 20:43:20

**TEST COMMENT:** IF: Strong blow, BOB 25 seconds, No GTS.  
 ISI: Bled off, weak blowback @ .5", blowback died.  
 FF: Fair blow, BOB 30 minutes. No GTS.  
 FSI: Bled off, no blowback.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1287.61	89.97	Initial Hydro-static
2	22.31	89.69	Open To Flow(1)
33	74.29	90.22	Shut-In(1)
92	936.42	92.75	End Shut-In(1)
92	89.00	92.35	Open To Flow(2)
125	122.83	94.08	Shut-In(2)
182	896.04	96.45	End Shut-In(2)
183	1247.21	96.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume(bbl)
130.00	Salt Water 100%w	0.64
110.00	WCM 10%w 90%m	0.72
0.00	120' +/- GIP	0.00
0.00	62,500 ppm chlorides	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**LeRoy #1**

**15-29s-9w Kingman KS**

Job Ticket: 36960

**DST#: 2**

Test Start: 2010.06.07 @ 16:06:00

## GENERAL INFORMATION:

Formation: **STOTLER**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:42:30

Time Test Ended: 22:42:20

Test Type: Conventional Straddle (Initial)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 2590.00 ft (KB) To 2605.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 2635.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8655** Outside

Press@RunDepth: psig @ 2597.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.07 End Date: 2010.06.07

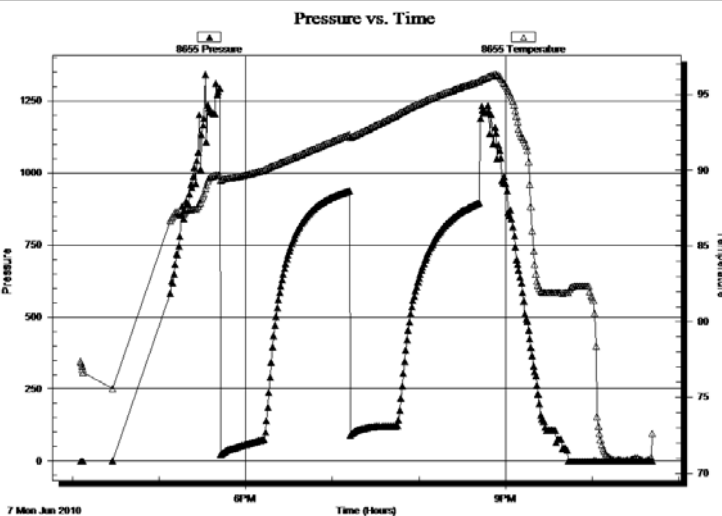
Last Calib.: 2010.06.07

Start Time: 16:05:35 End Time: 22:42:20

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Strong blow, BOB 25 seconds, No GTS.  
ISI: Bled off, weak blowback @ .5", blowback died.  
FF: Fair blow, BOB 30 minutes. No GTS.  
FSI: Bled off, no blowback.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume(bbl)
130.00	Salt Water 100%w	0.64
110.00	WCM 10%w 90%m	0.72
0.00	120' +/- GIP	0.00
0.00	62,500 ppm chlorides	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**LeRoy #1**

**15-29s-9w Kingman KS**

Job Ticket: 36960

**DST#: 2**

Test Start: 2010.06.07 @ 16:06:00

### GENERAL INFORMATION:

Formation: **STOTLER**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:42:30

Time Test Ended: 22:42:20

Test Type: Conventional Straddle (Initial)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 2590.00 ft (KB) To 2605.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 2635.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 6799 Below (Straddle)**

Press@RunDepth: psig @ 2630.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.07 End Date: 2010.06.07

Last Calib.: 2010.06.07

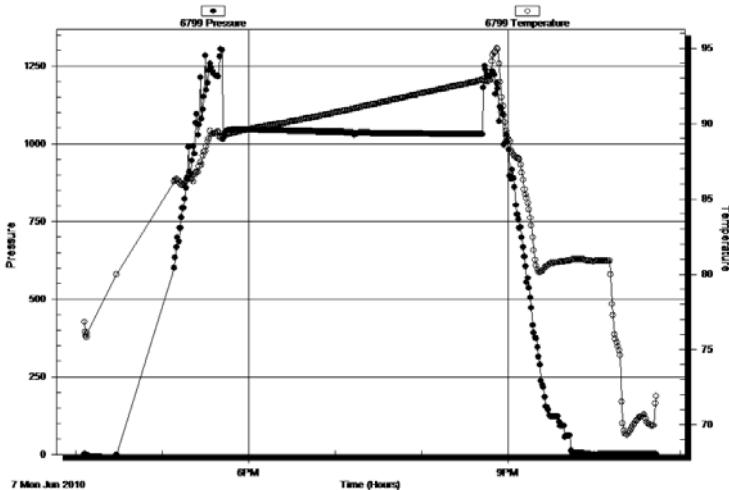
Start Time: 16:06:05 End Time: 22:43:20

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Strong blow, BOB 25 seconds, No GTS.  
ISI: Bled off, weak blowback @ .5", blowback died.  
FF: Fair blow, BOB 30 minutes. No GTS.  
FSI: Bled off, no blowback.

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume(bbl)
130.00	Salt Water 100%w	0.64
110.00	WCM 10%w 90%m	0.72
0.00	120' +/- GIP	0.00
0.00	62,500 ppm chlorides	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36960

**DST#: 2**

ATTN: Jon Messenger

Test Start: 2010.06.07 @ 16:06:00

## Tool Information

Drill Pipe:	Length: 2356.00 ft	Diameter: 3.80 inches	Volume: 33.05 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 34.13 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	57000.00 lb
Depth to Top Packer:	2590.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	2605.00 ft				
Interval between Packers:	15.00 ft				
Tool Length:	73.00 ft				
Number of Packers:	3	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2567.00	
Hydraulic tool	5.00			2572.00	
Jars	5.00			2577.00	
Safety Joint	3.00			2580.00	
Packer	5.00			2585.00	28.00 Bottom Of Top Packer
Packer	5.00			2590.00	
Stubb	1.00			2591.00	
Perforations	6.00			2597.00	
Recorder	0.00	8648	Inside	2597.00	
Recorder	0.00	8655	Outside	2597.00	
Perforations	5.00			2602.00	
Blank Off Sub	3.00			2605.00	15.00 Tool Interval
Packer	3.00			2608.00	
Perforations	22.00			2630.00	
Recorder	0.00	6799	Below	2630.00	
Bullnose	5.00			2635.00	30.00 Bottom Packers & Anchor Tool

**Total Tool Length: 73.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36960

**DST#: 2**

ATTN: Jon Messenger

Test Start: 2010.06.07 @ 16:06:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

62500 ppm

Viscosity: 28.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 156000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
130.00	Salt Water 100%w	0.639
110.00	WCM 10%w 90%m	0.723
0.00	120' +/- GIP	0.000
0.00	62,500 ppm chlorides	0.000

Total Length: 240.00 ft      Total Volume: 1.362 bbl

Num Fluid Samples: 0

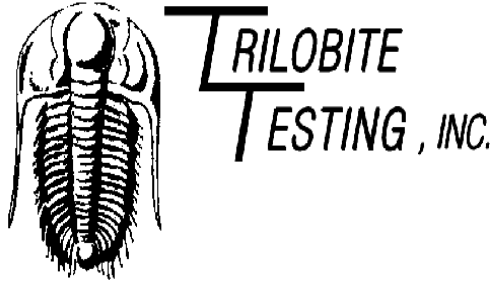
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .115 @ 73.6 = 62500 chlorides



## DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum, Inc.**

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**15-29s-9w Kingman KS**

**LeRoy #1**

Start Date: 2010.06.13 @ 01:30:00

End Date: 2010.06.13 @ 10:05:40

Job Ticket #: 36964                      DST #: 6

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.02 @ 12:50:31



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36964

**DST#: 6**

Test Start: 2010.06.13 @ 01:30:00

## GENERAL INFORMATION:

Formation: **VIOLA**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:13:30

Time Test Ended: 10:05:40

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 4464.00 ft (KB) To 4470.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 4470.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8648**

**Inside**

Press@RunDepth: 1367.52 psig @ 4465.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.13

End Date: 2010.06.13

Last Calib.: 2010.06.13

Start Time: 01:30:05

End Time: 10:05:39

Time On Btm: 2010.06.13 @ 04:12:30

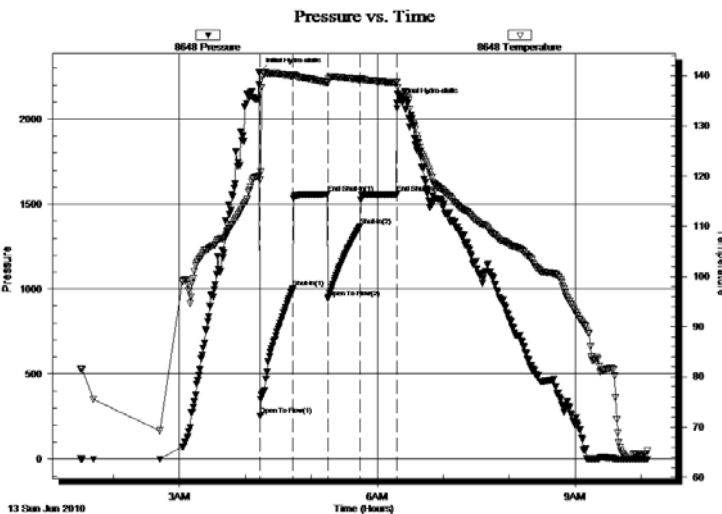
Time Off Btm: 2010.06.13 @ 06:17:50

**TEST COMMENT:** IF: Strong blow, BOB in 45 seconds. GTS 28 min (TSTM).

ISI: Bled off, 5 min, strong blow at BOB.

FF: Strong blow, BOB in 30 seconds.

FSI: Bled off, 10 minutes, strong blowback at BOB.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2273.44	120.01	Initial Hydro-static
1	253.72	119.32	Open To Flow(1)
31	1003.41	139.98	Shut-In(1)
63	1559.64	138.67	End Shut-In(1)
63	945.35	138.55	Open To Flow(2)
92	1367.52	139.23	Shut-In(2)
125	1558.81	138.62	End Shut-In(2)
126	2095.17	138.66	Final Hydro-static

## Recovery

Length (ft)	Description	Volume(bbl)
2555.00	Salt Water 100%w	33.84
580.00	Gassy Clean Oil	8.14
65.00	HGCW&OCM 25%g 5%w 15%o 55%m	0.91
0.00	Gas in A.F.F.P.	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36964

**DST#: 6**

Test Start: 2010.06.13 @ 01:30:00

## GENERAL INFORMATION:

Formation: **VIOLA**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:13:30

Time Test Ended: 10:05:40

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 4464.00 ft (KB) To 4470.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 4470.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 6799** Inside

Press@RunDepth: psig @ 4465.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.13

End Date: 2010.06.13

Last Calib.: 2010.06.13

Start Time: 01:29:55

End Time: 10:06:40

Time On Btm:

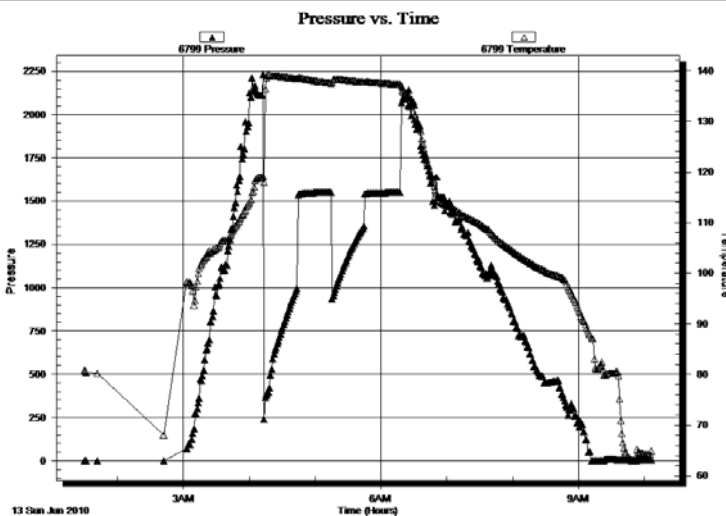
Time Off Btm:

**TEST COMMENT:** IF: Strong blow, BOB in 45 seconds. GTS 28 min (TSTM).

ISI: Bled off, 5 min, strong blow at BOB.

FF: Strong blow, BOB in 30 seconds.

FSI: Bled off, 10 minutes, strong blowback at BOB.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume(bbl)
2555.00	Salt Water 100%w	33.84
580.00	Gassy Clean Oil	8.14
65.00	HGCW&OCM 25%g 5%w 15%o 55%m	0.91
0.00	Gas in A.F.F.P.	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36964

**DST#: 6**

ATTN: Jon Messenger

Test Start: 2010.06.13 @ 01:30:00

## Tool Information

Drill Pipe:	Length: 4238.00 ft	Diameter: 3.80 inches	Volume: 59.45 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose:	90000.00 lb
			<u>Total Volume: 60.53 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4464.00 ft			Final	84000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	6.00 ft				
Tool Length:	34.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4441.00	
Hydraulic tool	5.00			4446.00	
Jars	5.00			4451.00	
Safety Joint	3.00			4454.00	
Packer	5.00			4459.00	28.00 Bottom Of Top Packer
Packer	5.00			4464.00	
Stubb	1.00			4465.00	
Recorder	0.00	8648	Inside	4465.00	
Recorder	0.00	6799	Inside	4465.00	
Bullnose	5.00			4470.00	6.00 Bottom Packers & Anchor Tool

**Total Tool Length: 34.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36964

**DST#: 6**

ATTN: Jon Messenger

Test Start: 2010.06.13 @ 01:30:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

77000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
2555.00	Salt Water 100%w	33.836
580.00	Gassy Clean Oil	8.136
65.00	HGCW&OCM 25%g 5%w 15%o 55%m	0.912
0.00	Gas in A.F.F.P.	0.000

Total Length: 3200.00 ft      Total Volume: 42.884 bbl

Num Fluid Samples: 0

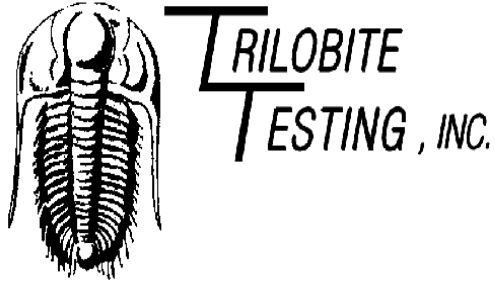
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .104 @ 67F = 77000 ppm chlorides



## DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum, Inc.**

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**15-29s-9w Kingman KS**

**LeRoy #1**

Start Date: 2010.06.11 @ 23:56:00

End Date: 2010.06.12 @ 07:17:00

Job Ticket #: 36963                      DST #: 5

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.02 @ 12:50:10



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36963

**DST#: 5**

Test Start: 2010.06.11 @ 23:56:00

## GENERAL INFORMATION:

Formation: **MISSISSIPPIAN**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:41:30

Time Test Ended: 07:17:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 4197.00 ft (KB) To 4208.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 4208.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8648**

**Inside**

Press@RunDepth: 83.00 psig @ 4203.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.11

End Date:

2010.06.12

Last Calib.:

2010.06.12

Start Time: 23:56:05

End Time:

07:16:59

Time On Btm:

2010.06.12 @ 01:39:40

Time Off Btm:

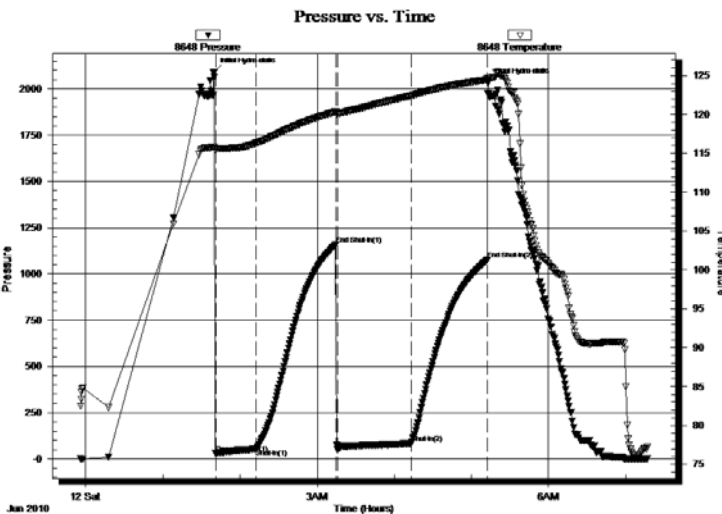
2010.06.12 @ 05:12:50

**TEST COMMENT:** IF: Fair blow, BOB in 1 minute.

ISI: Bled off, blowback @ 5".

FF: Fair blow, BOB in 30 seconds.

FSI: Bled off, blowback @ 2".



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2087.56	115.83	Initial Hydro-static
2	27.08	115.39	Open To Flow(1)
33	52.06	116.28	Shut-In(1)
95	1157.73	120.35	End Shut-In(1)
96	48.25	120.13	Open To Flow(2)
154	83.00	122.41	Shut-In(2)
213	1075.93	124.47	End Shut-In(2)
214	2031.80	124.65	Final Hydro-static

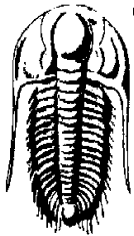
## Recovery

Length (ft)	Description	Volume(bbl)
60.00	Gssy MOW 25%g 20%m 25%o 30%w	0.30
80.00	Vry Gssy MCOw 45%g 10%m 20%o 25%w	0.39
50.00	SOMCW 5%o 10%m 85%w	0.25
0.00	2370' GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36963

**DST#: 5**

Test Start: 2010.06.11 @ 23:56:00

## GENERAL INFORMATION:

Formation: **MISSISSIPPIAN**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:41:30

Time Test Ended: 07:17:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 4197.00 ft (KB) To 4208.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 4208.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 6799** Inside

Press@RunDepth: psig @ 4203.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.11

End Date:

2010.06.12

Last Calib.:

2010.06.12

Start Time: 23:56:05

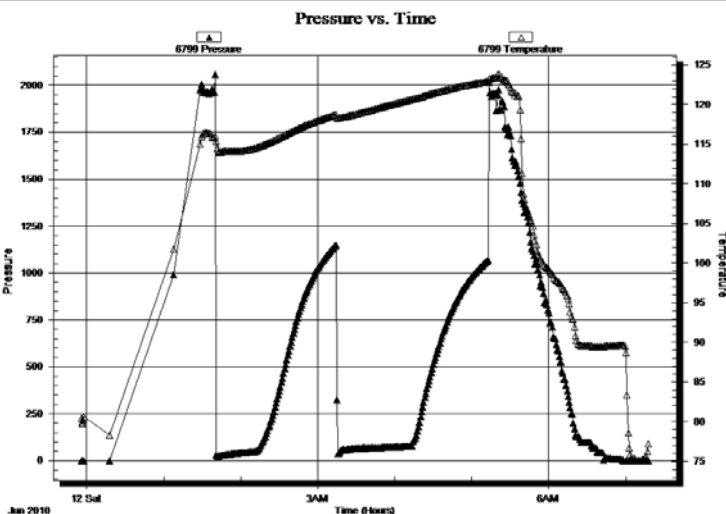
End Time:

07:17:50

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Fair blow, BOB in 1 minute.  
ISI: Bled off, blowback @ 5".  
FF: Fair blow, BOB in 30 seconds.  
FSI: Bled off, blowback @ 2".



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume(bbl)
60.00	Gssy MOW 25%g 20%m 25%o 30%w	0.30
80.00	Vry Gssy MCOw 45%g 10%m 20%o 25%	0.39
50.00	SOMCW 5%o 10%m 85%w	0.25
0.00	2370' GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36963

**DST#: 5**

ATTN: Jon Messenger

Test Start: 2010.06.11 @ 23:56:00

## Tool Information

Drill Pipe:	Length: 3982.00 ft	Diameter: 3.80 inches	Volume: 55.86 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 56.94 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	4197.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	11.00 ft				
Tool Length:	39.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4174.00	
Hydraulic tool	5.00			4179.00	
Jars	5.00			4184.00	
Safety Joint	3.00			4187.00	
Packer	5.00			4192.00	28.00 Bottom Of Top Packer
Packer	5.00			4197.00	
Stubb	1.00			4198.00	
Perforations	5.00			4203.00	
Recorder	0.00	8648	Inside	4203.00	
Recorder	0.00	6799	Inside	4203.00	
Bullnose	5.00			4208.00	11.00 Bottom Packers & Anchor Tool

**Total Tool Length: 39.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36963

**DST#: 5**

ATTN: Jon Messenger

Test Start: 2010.06.11 @ 23:56:00

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

80000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbbl
60.00	Gssy MOW 25%g 20%m 25%o 30%w	0.295
80.00	Vry Gssy MCOw 45%g 10%m 20%o 25%w	0.393
50.00	SOMCW 5%o 10%m 85%w	0.246
0.00	2370' GIP	0.000

Total Length: 190.00 ft      Total Volume: 0.934 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .09 @ 76F = 80000 ppm chlorides



## DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum, Inc.**

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**15-29s-9w Kingman KS**

**LeRoy #1**

Start Date: 2010.06.10 @ 21:17:00

End Date: 2010.06.11 @ 04:08:50

Job Ticket #: 36962                      DST #: 4

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.02 @ 12:49:48

Messenger Petroleum, Inc.  
LeRoy #1  
15-29s-9w Kingman KS  
DST # 4  
HERTHA  
2010.06.10





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36962

**DST#: 4**

Test Start: 2010.06.10 @ 21:17:00

## GENERAL INFORMATION:

Formation: **HERTHA**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:57:30

Time Test Ended: 04:08:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 3940.00 ft (KB) To 3949.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 3949.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8648**

**Inside**

Press@RunDepth: 109.14 psig @ 3944.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.10

End Date:

2010.06.11

Last Calib.:

2010.06.11

Start Time: 21:17:05

End Time:

04:08:50

Time On Btm:

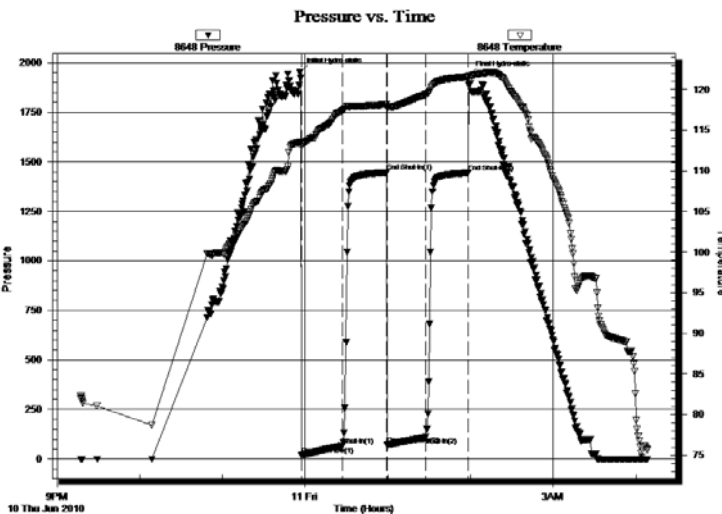
2010.06.10 @ 23:56:20

Time Off Btm:

2010.06.11 @ 01:58:40

**TEST COMMENT:** IF: Weak blow, built to 4.5".  
ISI: No blowback.  
FF: Weak blow, built to 2.5".  
FSI: No blowback.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1949.94	113.47	Initial Hydro-static
2	18.20	112.94	Open To Flow(1)
31	66.29	117.39	Shut-In(1)
63	1446.08	118.16	End Shut-In(1)
63	70.02	117.76	Open To Flow(2)
92	109.14	119.39	Shut-In(2)
123	1444.10	121.58	End Shut-In(2)
123	1933.78	121.71	Final Hydro-static

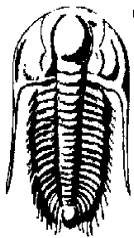
## Recovery

Length (ft)	Description	Volume(bbl)
190.00	SMCW 10%w 90%w	0.93
0.00	72,000 ppm chlorides	0.00
0.00	No GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36962

**DST#: 4**

Test Start: 2010.06.10 @ 21:17:00

**GENERAL INFORMATION:**

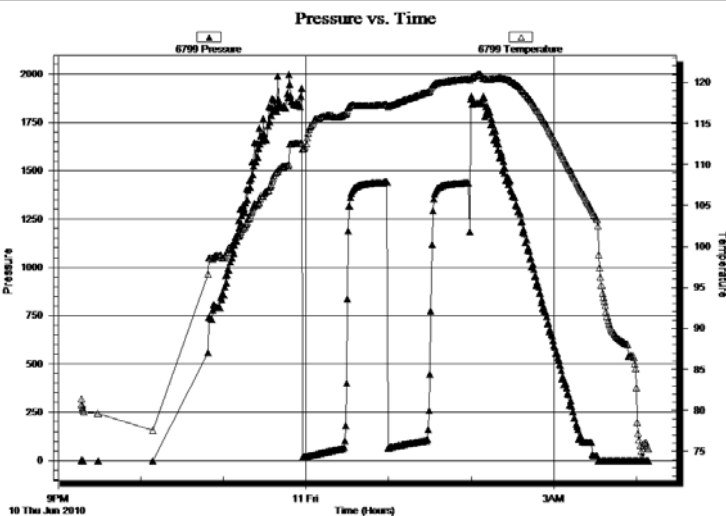
Formation: **HERTHA**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 23:57:30  
 Tester: Jake Fahrenbruch  
 Time Test Ended: 04:08:50  
 Unit No: 43  
 Interval: **3940.00 ft (KB) To 3949.00 ft (KB) (TVD)**  
 Reference Elevations: 1695.00 ft (KB)  
 Total Depth: 3949.00 ft (KB) (TVD) 1686.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

**Serial #: 6799**

Outside

Press@RunDepth: psig @ 3944.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.06.10 End Date: 2010.06.11 Last Calib.: 2010.06.11  
 Start Time: 21:16:55 End Time: 04:09:19 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** IF: Weak blow, built to 4.5".  
 ISI: No blowback.  
 FF: Weak blow, built to 2.5".  
 FSI: No blowback.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

Length (ft)	Description	Volume(bbl)
190.00	SMCW 10%w 90%w	0.93
0.00	72,000 ppm chlorides	0.00
0.00	No GIP	0.00

\* Recovery from multiple tests

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36962

**DST#: 4**

ATTN: Jon Messenger

Test Start: 2010.06.10 @ 21:17:00

## Tool Information

Drill Pipe:	Length: 3733.00 ft	Diameter: 3.80 inches	Volume: 52.36 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 53.44 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial	69000.00 lb
Depth to Top Packer:	3940.00 ft			Final	69000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	9.00 ft				
Tool Length:	29.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3925.00	
Hydraulic tool	5.00			3930.00	
Packer	5.00			3935.00	20.00 Bottom Of Top Packer
Packer	5.00			3940.00	
Stubb	1.00			3941.00	
Perforations	3.00			3944.00	
Recorder	0.00	8648	Inside	3944.00	
Recorder	0.00	6799	Outside	3944.00	
Bullnose	5.00			3949.00	9.00 Bottom Packers & Anchor Tool

**Total Tool Length: 29.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36962

**DST#: 4**

ATTN: Jon Messenger

Test Start: 2010.06.10 @ 21:17:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

72000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
190.00	SMCW 10%m 90%w	0.934
0.00	72,000 ppm chlorides	0.000
0.00	No GIP	0.000

Total Length: 190.00 ft      Total Volume: 0.934 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .10 @ 75F = 72000 ppm chlorides



## DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum, Inc.**

525 S. Main  
Kingman, KS 67068

ATTN: Jon Messenger

**15-29s-9w Kingman KS**

**LeRoy #1**

Start Date: 2010.06.10 @ 07:14:00

End Date: 2010.06.10 @ 13:58:20

Job Ticket #: 36961                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.07.02 @ 12:49:27



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36961

**DST#: 3**

Test Start: 2010.06.10 @ 07:14:00

## GENERAL INFORMATION:

Formation: **DENNIS & SWOPE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:11:40

Time Test Ended: 13:58:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

**Interval: 3870.00 ft (KB) To 3914.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 3914.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8648**

**Inside**

Press@RunDepth: 319.75 psig @ 3875.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.10

End Date: 2010.06.10

Last Calib.: 2010.06.10

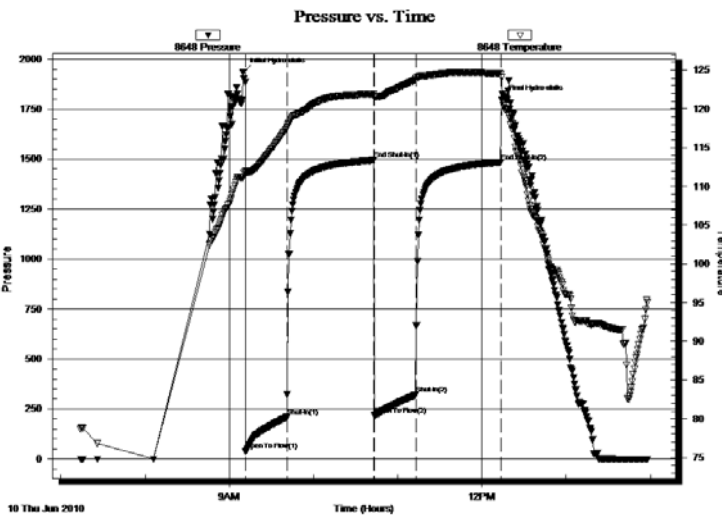
Start Time: 07:14:05

End Time: 13:58:20

Time On Btm: 2010.06.10 @ 09:10:10

Time Off Btm: 2010.06.10 @ 12:14:00

**TEST COMMENT:** IF: Fair blow, built to BOB in 9 minutes.  
 ISI: Bled off, weak surface blowback died after 40 minutes.  
 FF: Fair blow, built to BOB in 16 minutes.  
 FSI: Bled off, no blowback.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1932.56	111.21	Initial Hydro-static
2	38.96	111.61	Open To Flow(1)
31	210.35	117.50	Shut-In(1)
93	1494.49	121.89	End Shut-In(1)
93	216.20	121.51	Open To Flow(2)
123	319.75	123.78	Shut-In(2)
184	1484.87	124.53	End Shut-In(2)
184	1795.15	124.05	Final Hydro-static

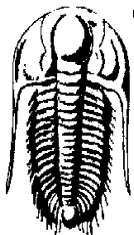
## Recovery

Length (ft)	Description	Volume(bbl)
580.00	Salt Water 100%w	6.13
40.00	MCW 15%m 85%w	0.56
0.00	118,000 ppm chlorides	0.00
0.00	scum of oil on top of fluid	0.00
0.00	60' GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

ATTN: Jon Messenger

Job Ticket: 36961

**DST#: 3**

Test Start: 2010.06.10 @ 07:14:00

### GENERAL INFORMATION:

Formation: **DENNIS & SWOPE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:11:40

Time Test Ended: 13:58:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Jake Fahrenbruch

Unit No: 43

Interval: **3870.00 ft (KB) To 3914.00 ft (KB) (TVD)**

Reference Elevations: 1695.00 ft (KB)

Total Depth: 3914.00 ft (KB) (TVD)

1686.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 6799** Inside

Press@RunDepth: psig @ 3875.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.10

End Date: 2010.06.10

Last Calib.: 2010.06.10

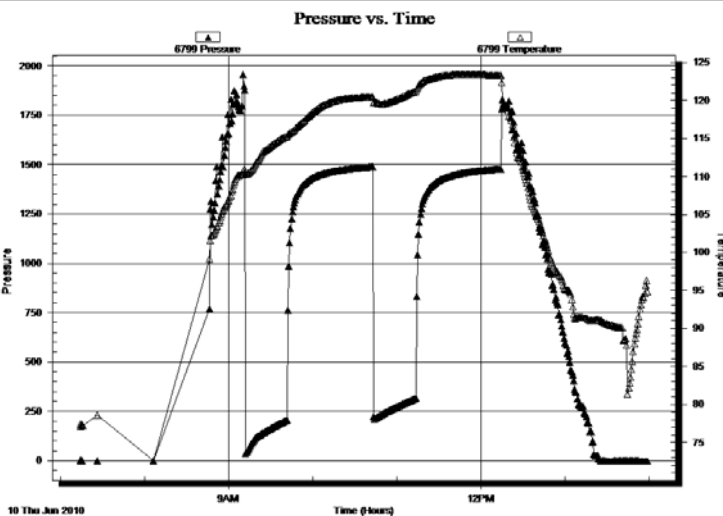
Start Time: 07:14:05

End Time: 13:58:59

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Fair blow, built to BOB in 9 minutes.  
ISI: Bled off, weak surface blowback died after 40 minutes.  
FF: Fair blow, built to BOB in 16 minutes.  
FSI: Bled off, no blowback.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume(bbl)
580.00	Salt Water 100%w	6.13
40.00	MCW 15%w 85%w	0.56
0.00	118,000 ppm chlorides	0.00
0.00	scum of oil on top of fluid	0.00
0.00	60' GIP	0.00

\* Recovery from multiple tests

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36961

**DST#: 3**

ATTN: Jon Messenger

Test Start: 2010.06.10 @ 07:14:00

## Tool Information

Drill Pipe:	Length: 3640.00 ft	Diameter: 3.80 inches	Volume: 51.06 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 220.00 ft	Diameter: 2.25 inches	Volume: 1.08 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 52.14 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	67000.00 lb
Depth to Top Packer:	3870.00 ft			Final	70000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 ft				
Tool Length:	64.00 ft				
Number of Packers:	3	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3855.00	
Hydraulic tool	5.00			3860.00	
Packer	5.00			3865.00	20.00 Bottom Of Top Packer
Packer	5.00			3870.00	
Stubb	1.00			3871.00	
Perforations	4.00			3875.00	
Recorder	0.00	8648	Inside	3875.00	
Recorder	0.00	6799	Inside	3875.00	
Blank Spacing	34.00			3909.00	
Bullnose	5.00			3914.00	44.00 Bottom Packers & Anchor Tool

**Total Tool Length: 64.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Messenger Petroleum, Inc.

**LeRoy #1**

525 S. Main  
Kingman, KS 67068

**15-29s-9w Kingman KS**

Job Ticket: 36961

**DST#: 3**

ATTN: Jon Messenger

Test Start: 2010.06.10 @ 07:14:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

118000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
580.00	Salt Water 100%w	6.132
40.00	MCW 15%w 85%w	0.561
0.00	118,000 ppm chlorides	0.000
0.00	scum of oil on top of fluid	0.000
0.00	60' GIP	0.000

Total Length: 620.00 ft      Total Volume: 6.693 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .055@ 89F = 118000 chlorides