Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1221632

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 # 30604
Name: Raydon Exploration, Inc.
Address 1: 1601 NW EXPRESSWAY, STE 1300
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73118 + 1462
Contact Person: Jake Slaten
Phone: (620) 624-0156
CONTRACTOR: License # 34127
Name: Tomcat Drilling LLC
Wellsite Geologist: Ed Grieves
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 #:

7/27/2014	8/13/2014	8/18/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-175-22222-00-00
Spot Description:
S2 - NE - NW - SW Sec. 34 Twp. 33 S. R. 31 ☐ East ☑ West
2284 Feet from ☐ North / ☑ South Line of Section
990 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)*, Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Seward
Lease Name: Davies Well #: 1-34
Field Name:
Producing Formation: N/A
Elevation: Ground: 2729 Kelly Bushing: 2738
Total Vertical Depth: 6100 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1604 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: 5200 ppm Fluid volume: 6956 bbls
Dewatering method used: Evaporated
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: 09/05/2014
☑ **Confidential Release Date:** 09/04/2016
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/05/2014

[redacted]
1221632

Operator Name: Raydon Exploration, Inc. Lease Name: Davies Well #: 1-34

Sec. 34 Twp. 33 S. R. 31 ☐ East ☑ West County: Seward

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	24	1604	A-Con/Prem Plus	550	3%CC,1/4#Poly,2%WCA-1

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	-			
	-			

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 *(Amount and Kind of Material Used)*	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

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:
_____
_____

Form	ACO1 - Well Completion
Operator	Raydon Exploration, Inc.
Well Name	Davies 1-34
Doc ID	1221632

All Electric Logs Run

Array Compensated True Resistivity Log
Borehole Compensated Sonic Array Log
Microlog
Spectral Density Dual Spaced Neutron Log

Form	ACO1 - Well Completion
Operator	Raydon Exploration, Inc.
Well Name	Davies 1-34
Doc ID	1221632

Tops

Name	Top	Datum
Base Heebner	4333	-1595
Toronto	4344	-1606
Lansing	4468	-1730
Kansas City	4968	-2230
Marmaton	5129	-2391
Pawnee	5259	-2514
Ft Scott	5300	-2562
Cherokee	5390	-2592
Morrow	5654	-2916
Chester	5749	-3011
St Genevieve	6019	-3281
St Louis	6100	-3362

Form	ACO1 - Well Completion
Operator	Raydon Exploration, Inc.
Well Name	Davies 1-34
Doc ID	1221632

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1604	A-Con/Prem Plus	550	3%CC,1/4 #Poly,2% WCA-1

Core Laboratories
Petroleum Engineers

Core Analysis Laboratory

Company: Mobil Producing Texas & New Mexico Inc.
Well: Ward Estate #1
Field: Wildcat
County: Ward
State: Texas

Elevation: 2700 KB
Formation: Devonian
Date: 11-14-78
Drilling Fluid: Brine
Location: Sec. 1, Blk. 1, Twp. 1, Ward County, Texas

Core Type: Conventional
Bit Size: 7 7/8"
Core Diameter: 4"
Preservation: Frozen

Analysis: Conventional
Porosity: Helium
Permeability: Air
Fluids: Dean Stark
Grain Density: Calculated

Remarks: Core Recovery Analysis

Core Analysis Results

Sample Number	Depth Feet	Porosity %	Permeability Horizontal Air MD	Permeability Vertical Air MD	Fluid Saturation % Oil	Fluid Saturation % Water	Grain Density Gm/Cc	Description
1	9777.0	2.4	0.0	0.0	0.0	0.0	2.71	Dolomite, gray, vf-f xln, sucrosic, tr vug porosity, tr dead oil stain, tr fracture porosity, tr pyrite, tr anhydrite, tr chert, tr calcite, tr bitumen, tr fossil fragments, tr dolomite rhombs

TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

12/08

Gas Volume Report

Raydon Exploration, Inc. — Operator

Davies #1-34 — Well Name and No.

5 — DST No.

First open — Second open

Min.	Ins. of Water PSIG	Orifice Size	CF/D	Min.	Ins. of Water PSIG	Orifice Size	Book MCF/D	ATMS
				5	2	.125	3.92	6.138
				10	5	.125	6.39	7.261
				20	7	.125	7.70	8.010
				30	9	.125	8.89	8.758
				40	11	.125	10.0	9.507
				50	13	.125	11.0	10.255
				60	14	.125	11.6	10.630

Remarks:

TRILOBITE TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56559

Well Name & No. Davies #1-34 | Test No. 4 | Date 8-11-14
Company Raydon Exploration, Inc. | Elevation 2738 | KB 2729 | GL
Address 1601 SW Expressway Ste 1300 - Oklahoma City, OK 73118
Co. Rep / Geo. Ed Grieves | Rig Tomcat #4
Location: Sec. 34 | Twp. 33-S | Rge. 31-W | Co. Seward | State KS

Interval Tested 6095-6131 | Zone Tested St. Louis
Anchor Length 36' | Drill Pipe Run 5859 | Mud Wt. 9.0
Top Packer Depth 6091 | Drill Collars Run 240 | Vis 58
Bottom Packer Depth 6095 | Wt. Pipe Run 0 | WL 8.0
Total Depth 6131 | Chlorides 1700 ppm System | LCM #8

Blow Description IF: Weak surface Blow - Died in 17 min.
ISI: No Return
FF: No Blow
FSI: No Return

	Feet of	%gas	%oil	%water	%mud
Rec					
Rec					
Rec 10	mud oil specs in tool			100	
Rec					
Rec					

Rec Total 10 | BHT 137 | Gravity — | API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2949	☒ Test 1450	T-On Location 11:00	
(B) First Initial Flow 18	☒ Jars 250	T-Started 11:13	
(C) First Final Flow 22	☒ Safety Joint 75	T-Open 15:27	
(D) Initial Shut-In 86	☒ Circ Sub	T-Pulled 19:27	
(E) Second Initial Flow 22	☒ Hourly Standby 17 hrs Stdby	T-Out 22:23	
(F) Second Final Flow 24	☒ Mileage last test 8-6-14 @ 17:56 170.50	Comments	
(G) Final Shut-In 54	☐ Sampler 110 R-T		
(H) Final Hydrostatic 2786	☐ Straddle	☐ Ruined Shale Packer	
	☒ Shale Packer 250	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total 3000	
Final Flow 30	☒ Day Standby 4d 18h 3 days stdby	Total 5245.50	
Final Shut-In 120	☒ Accessibility No steps from 150 to 1K	MP/DST Disc't	
	Sub Total 2245.50		

Approved By [signature] Our Representative [signature]

Trilobite Testing Inc. shall not be liable for damages of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56560

Well Name & No. Davies #1-34 | Test No. 5 | Date 8-12-14
Company Raydon Exploration, Inc. | Elevation 2738 | KB 2729 | GL
Address 1601 SW Expressway Ste 1300 - Oklahoma City, OK 73118
Co. Rep / Geo. Ed Grieves | Rig Tomcat #4
Location: Sec. 34 | Twp. 33-S | Rge. 31-W | Co. Seward | State KS

Interval Tested 6133-6150 | Zone Tested St. Louis
Anchor Length 17' | Drill Pipe Run 5891' | Mud Wt. 9.0
Top Packer Depth 6129 | Drill Collars Run 240 | Vis 49
Bottom Packer Depth 6133 | Wt. Pipe Run 0 | WL 8.4
Total Depth 6150 | Chlorides 3,500 ppm System | LCM #10 Dropped pill 30 bbls

Blow Description IF: B.o.b. in 25 seconds - G.T.S. in 24 min.
ISI: Bled off in 3½ min - Weak surface Blowback after 3 min. Shut-in - Surface Blowback throughout shut-in
FF: B.o.b. in 10 Seconds - G.T.S - Gauged Gas - check Gas Rates
FSI: Bled off in 10 min - Surface Blowback aft r 2 min. Shut-in - Built to 1 in. of Blowback

	Feet of	%gas	%oil	%water	%mud
Rec 60	O+GCM	20	15		65
Rec 60	O+GCM	25	20		55
Rec 60	OCM+G	55	15		30
Rec 60	OCGW	18	2	80	
Rec					

Rec Total 240 | BHT 141 | Gravity — | API RW .090 @ 75.6 °F Chlorides 81,000 ppm

(A) Initial Hydrostatic 2953	☒ Test 1450	T-On Location 11:40	
(B) First Initial Flow 26	☒ Jars 250	T-Started 11:55	
(C) First Final Flow 49	☒ Safety Joint 75	T-Open 14:37	
(D) Initial Shut-In 1860	☒ Circ Sub	T-Pulled 19:07	
(E) Second Initial Flow 35	☐ Hourly Standby	T-Out 22:33	
(F) Second Final Flow 106	☒ Mileage 170.50	Comments	
(G) Final Shut-In 1808	☐ Sampler		
(H) Final Hydrostatic 2886	☐ Straddle	☒ Ruined Shale Packer 350	
	☒ Shale Packer 250	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total 350	
Final Flow 60	☐ Day Standby	Total 2595.50	
Final Shut-In 120	☒ Accessibility No steps to 150	MP/DST Disc't	
	Sub Total 2245.50		

Approved By [signature] Our Representative [signature]

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TRILOBITE TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601
4/10

Test Ticket

NO. 56557

Well Name & No. Davies #1-34 Test No. 2 Date 8-4-14
Company Raydon Exploration Inc Elevation _____ KB _____ GL
Address 16001 NW Expressway St. 1300 - Oklahoma City, OK 73118
Co. Rep / Geo. Ed Grieves Rig Tomcat #4
Location: Sec. 34 Twp. 33-S Rge. 31-W Co. Seward State KS

Interval Tested 5123-5134 Zone Tested Marmaton
Anchor Length 11' Drill Pipe Run 4886 Mud Wt. 9.0
Top Packer Depth 5119 Drill Collars Run 240' Vis 54
Bottom Packer Depth 5123 Wt. Pipe Run Ø WL 5.2
Total Depth 5134 Chlorides 2400 ppm System LCM #4

Blow Description IF: Surface Blow - Built to 2½ in. of Blow
ISI: Bled off in 1 Min. - No Return
FF: No Blow
FSI: No Return

Rec 60	Feet of MCW	%gas	%oil	75 %water	25 %mud
Rec 60	Feet of GCM	4 %gas	%oil	%water	96 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 120 BHT 127 Gravity — API RW .130 @ 76 °F Chlorides 60,000 ppm

(A) Initial Hydrostatic 2455	☒ Test 1350	T-On Location 23:00	
(B) First Initial Flow 19	☒ Jars 250	T-Started 23:17	
(C) First Final Flow 37	☒ Safety Joint 75	T-Open 02:41	
(D) Initial Shut-In 1500	☒ Circ Sub N/C	T-Pulled 07:11	
(E) Second Initial Flow 45	☒ Hourly Standby N/C	T-Out 09:40	
(F) Second Final Flow 64	☒ Mileage 110 RIT 170.50	Comments	
(G) Final Shut-In 1517	☐ Sampler		
(H) Final Hydrostatic 2403	☐ Straddle	☐ Ruined Shale Packer	
	☒ Shale Packer	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total 0	
Final Flow 60	☐ Day Standby 150	Total 1995.50	
Final Shut-In 120	☒ Accessibility No Steps to Rig floor	MP/DST Disc't	
	Sub Total 1995.50		

Approved By [signature] Our Representative [signature]

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TRILOBITE TESTING INC.
1515 Commerce Parkway • Hays, Kansas 67601
4/10

Test Ticket

NO. 56558

Well Name & No. Davies #1-34 Test No. 3 Date 8-6-14
Company Raydon Exploration Inc Elevation 2738 KB 2729 GL
Address 16001 NW Expressway Ste. 1300 Oklahoma City, OK 73118
Co. Rep / Geo. Ed Grieves Rig Tomcat #4
Location: Sec. 34 Twp. 33-S Rge. 31-W Co. Seward State KS

Interval Tested 5200-5225 Zone Tested Marmaton
Anchor Length 25' Drill Pipe Run 4953' Mud Wt. 9.1
Top Packer Depth 5196 Drill Collars Run 240 Vis 56
Bottom Packer Depth 5200 Wt. Pipe Run Ø WL 8.0
Total Depth 5225 Chlorides 2200 ppm System LCM #4

Blow Description IF: Bob in 3½ min.
ISI: Bled off in 3 min - No Return
FF: Blow Immediately - B.o.b. in 3½ min.
FSI: Bled off in 2 min - No Return

Rec 10	Feet of OCM	%gas 5	%oil	%water	95 %mud
Rec 60	Feet of GCOCM	5 %gas	10 %oil	%water	85 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of GIP = 1330	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 126 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2515	☒ Test 1350	T-On Location 07:17	
(B) First Initial Flow 17	☒ Jars 250	T-Started 07:37	
(C) First Final Flow 26	☒ Safety Joint 75	T-Open 10:53	
(D) Initial Shut-In 774	☒ Circ Sub N/C	T-Pulled 15:23	
(E) Second Initial Flow 22	☐ Hourly Standby	T-Out 17:56	
(F) Second Final Flow 42	☒ Mileage 110 RIT 170.50	Comments	
(G) Final Shut-In 823	☐ Sampler		
(H) Final Hydrostatic 2458	☐ Straddle	☐ Ruined Shale Packer	
	☒ Shale Packer 250	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total 0	
Final Flow 60	☐ Day Standby	Total 2245.50	
Final Shut-In 120	☒ Accessibility No steps to Rig floor 150	MP/DST Disc't	
	Sub Total 2245.50		

Approved By [signature] Our Representative [signature] CCM

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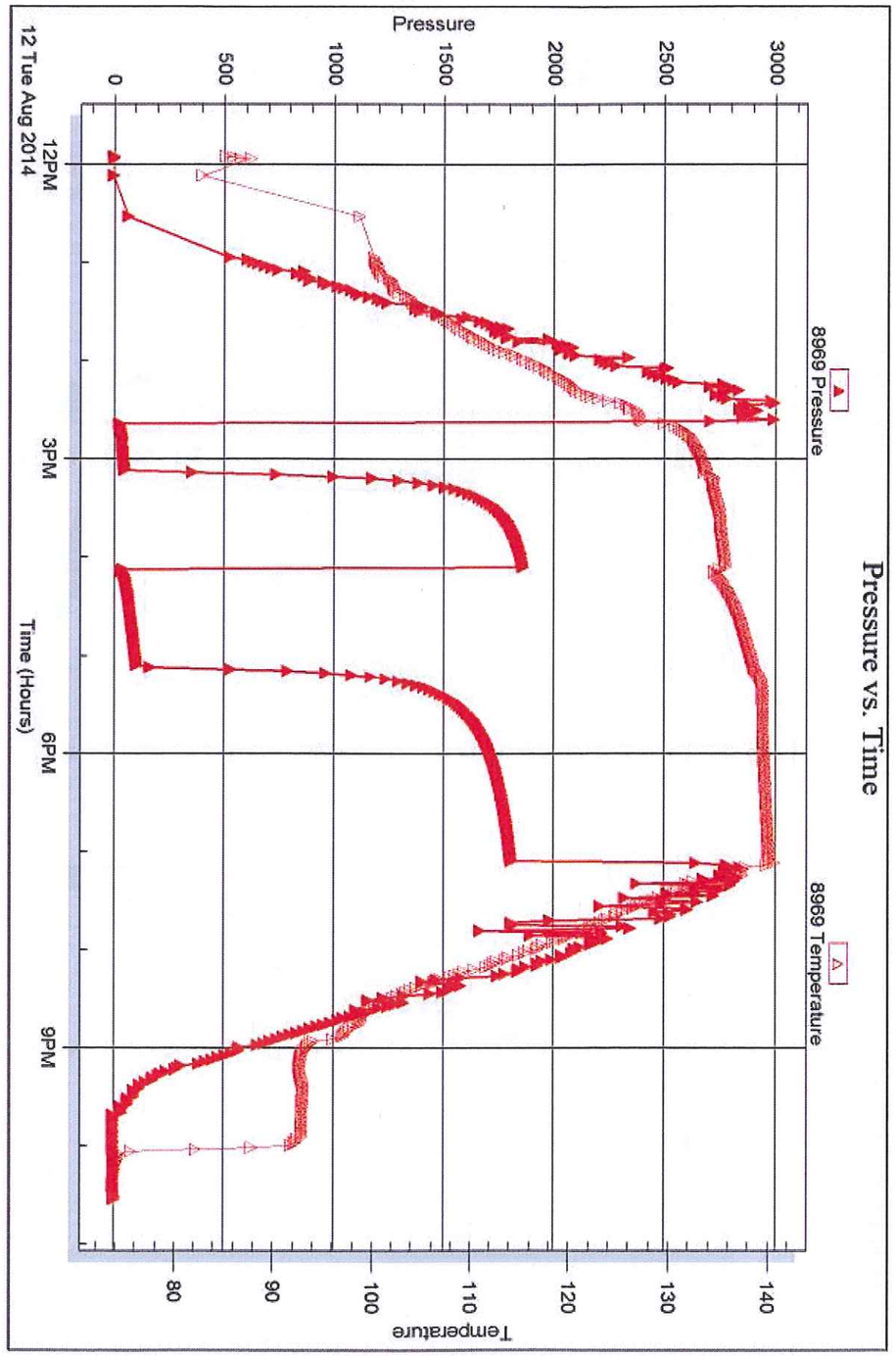

Trilobite Testing, Inc Ref. No: 56560 Printed: 2014.08.14 @ 14:38:37

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 56556

Well Name & No. Davies #1-34 Test No. 1 Date 8-3-14

Company Raydon Exploration, Inc Elevation 2738 KB 2729 GL

Address 1601 NW Expressway Ste. 1300 - Oklahoma City, OK 73118

Co. Rep / Geo. Ed Grieves Rig Tomcat #4

Location: Sec. 34 Twp. 33-S Rge. 31-W Co. Seward State KS

Interval Tested 5012-5085 Zone Tested Kansas City

Anchor Length 73' Drill Pipe Run 4764' Mud Wt. 9.0

Top Packer Depth 5008 Drill Collars Run 240' Vis 60

Bottom Packer Depth 5012 Wt. Pipe Run 0 WL 7.2

Total Depth 5085 Chlorides 2,000 ppm System LCM #4

Blow Description IF: B.O.B. in 24 min - Smelled Gassy - Weak GTS Gas To surface (Did light gas)
ISI: Bled off in 1½ min - No Return
FF: Surface Blow - Built to 5½ in. - Died back to surface blow - Smelled Gassy - Weak GTS
FSI: Bled off 1½ - No Return

Rec 618	Feet of mcw	%gas	%oil	98	%water	2	%mud
Rec	Feet of GTS	%gas	%oil		%water		%mud
Rec	Feet of	%gas	%oil		%water		%mud
Rec	Feet of	%gas	%oil		%water		%mud
Rec	Feet of	%gas	%oil		%water		%mud

Rec Total 618 BHT 127 Gravity — API RW .165 @ 70 °F Chlorides 46,000 ppm

(A) Initial Hydrostatic	2415	☒ Test	1350	T-On Location	21:04
(B) First Initial Flow	24	☒ Jars	250	T-Started	21:59
(C) First Final Flow	174	☒ Safety Joint	75	T-Open	02:08
(D) Initial Shut-In	1514	☒ Circ Sub	N/C	T-Pulled	06:38
(E) Second Initial Flow	180	☒ Hourly Standby	1 hr Over allotted .5-50	T-Out	09:30
(F) Second Final Flow	306	☒ Mileage	110 - RT time 170.50	Comments	Did light on IF
(G) Final Shut-In	1514	☐ Sampler			
(H) Final Hydrostatic	2300	☐ Straddle		☐ Ruined Shale Packer	
		☒ Shale Packer		☐ Ruined Packer	
Initial Open	30	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	60	☐ Extra Recorder		Sub Total	0
Final Flow	60	☐ Day Standby	150	Total	2045.50
Final Shut-In	120	☒ Accessibility	No Steps Floor to walk	MP/DST Disc't	
		Sub Total	To Rig Floor 2045.50		

Approved By [signature] Our Representative [signature]

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DRILL STEM TEST REPORT

GAS RATES

TRILOBITE TESTING, INC.

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56560 **DST#: 5**

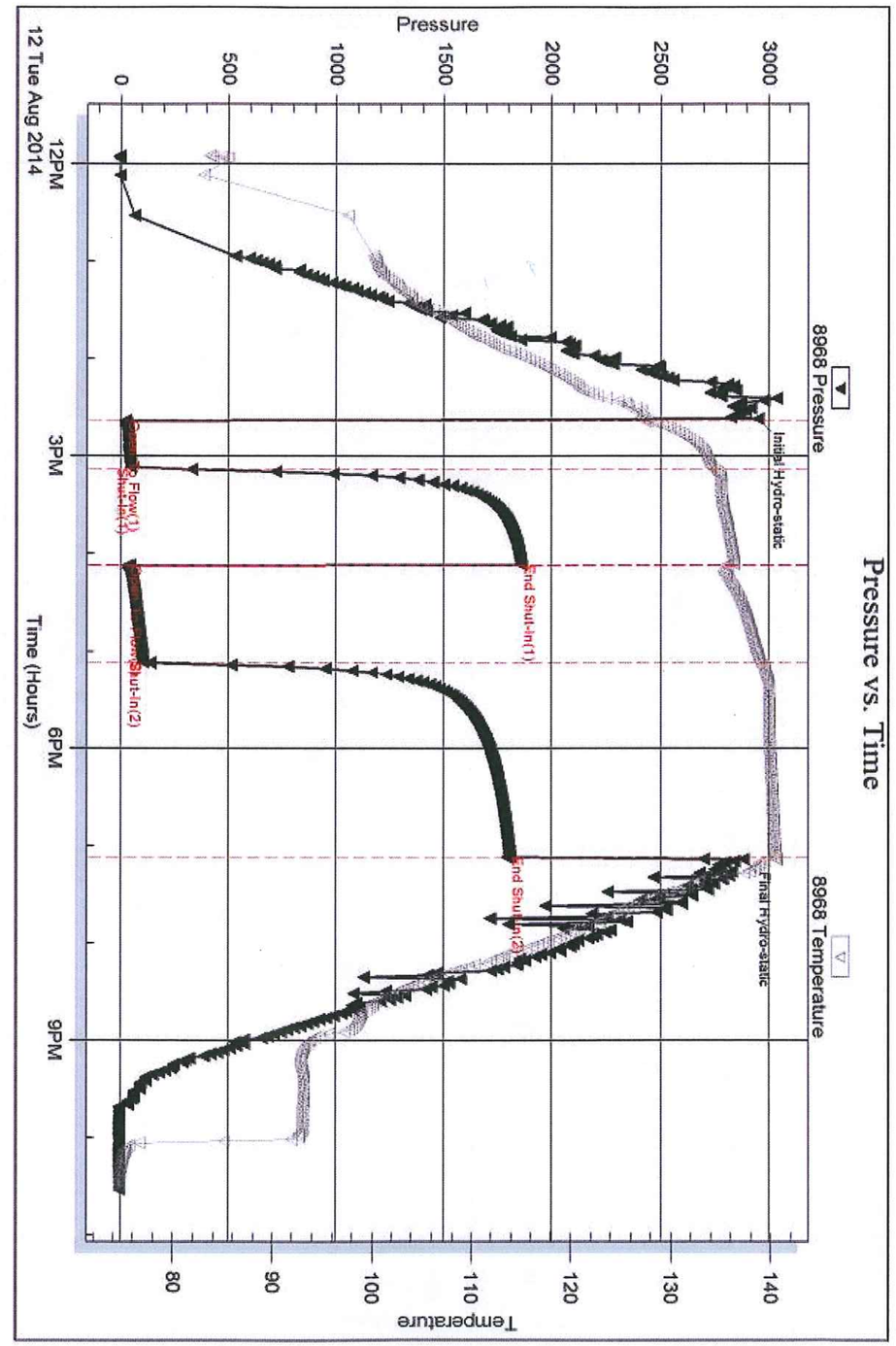
Test Start: 2014.08.12 @ 11:55:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	5	0.13	2.00	6.14
2	10	0.13	5.00	7.26
2	20	0.13	7.00	8.01
2	30	0.13	9.00	8.76
2	40	0.13	11.00	9.51
2	50	0.13	13.00	10.26
2	60	0.13	14.00	10.63



DRILL STEM TEST REPORT

TOOL DIAGRAM

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56560 **DST#: 5**

Test Start: 2014.08.12 @ 11:55:00

Tool Information

Drill Pipe:	Length:	5891.00 ft	Diameter:	3.80 inches	Volume:	82.64 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	240.00 ft	Diameter:	2.25 inches	Volume:	1.18 bbl	
					Total Volume:	83.82 bbl	

Tool Weight:	2500.00 lb
Weight set on Packer:	28000.00 lb
Weight to Pull Loose:	10000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	92000.00 lb
Final	94000.00 lb

Drill Pipe Above KB:	25.00 ft
Depth to Top Packer:	6133.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	17.00 ft
Tool Length:	44.00 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			6107.00		
Shut In Tool	5.00			6112.00		
Hydraulic tool	5.00			6117.00		
Jars	5.00			6122.00		
Safety Joint	2.00			6124.00		
Packer	5.00			6129.00	27.00	Bottom Of Top Packer
Packer	4.00			6133.00		
Stubb	1.00			6134.00		
Recorder	0.00	8969	Inside	6134.00		
Recorder	0.00	8968	Outside	6134.00		
Perforations	13.00			6147.00		
Bullnose	3.00			6150.00	17.00	Bottom Packers & Anchor
Total Tool Length:	**44.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56560 **DST#: 5**

Test Start: 2014.08.12 @ 11:55:00

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:	81000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.36 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Ocgw 2o 18g 80w	0.295
60.00	Ocm & g 15o 30m 55g	0.295
60.00	O& Gcm 20o 25g 55m	0.295
60.00	O& Gcm 15o 20g 65m	0.295
0.00	GTS	0.000

Total Length: 240.00 ft Total Volume: 1.180 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56560 **DST#: 5**

Test Start: 2014.08.12 @ 11:55:00

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:38:00
Time Test Ended: 22:33:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

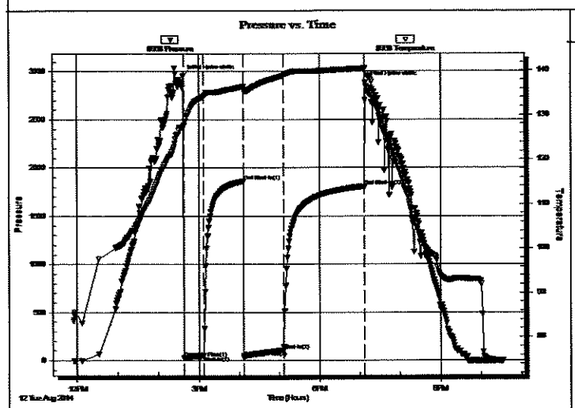
Interval: 6133.00 ft (KB) To 6150.00 ft (KB) (TVD)
Total Depth: 6150.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8968 **Outside**

Press@RunDepth:	106.08 psig @	6134.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.12	End Date:	2014.08.12	Last Calib.:	2014.08.12
Start Time:	11:55:05	End Time:	22:33:00	Time On Btm:	2014.08.12 @ 14:37:00
				Time Off Btm:	2014.08.12 @ 19:08:30

TEST COMMENT: IF: B.o.b. in 25 seconds-G.T.S. in 24 min.
ISI: Bled off in 3 1/2 min.-Weak surface blow back after 3 min. shut-in-Surface blow back throughout shut-in
FF: B.o.b. in 10 seconds-G.T.S.- Gauged gas-Check Gas rates
FSI: Bled off in 10 min.- Surface blow back after 2 min. shut-in-Built to1 in of Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2953.05	127.28	Initial Hydro-static
1	25.64	127.38	Open To Flow (1)
31	48.94	134.11	Shut-In(1)
90	1860.34	136.36	End Shut-In(1)
91	34.92	135.74	Open To Flow (2)
150	106.08	138.89	Shut-In(2)
270	1807.77	140.47	End Shut-In(2)
272	2885.84	140.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Ocgw 2o 18g 80w	0.30
60.00	Ocm & g 15o 30m 55g	0.30
60.00	O& Gcm 20o 25g 55m	0.30
60.00	O& Gcm 15o 20g 65m	0.30
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.00	6.14
Last Gas Rate	0.13	14.00	10.63
Max. Gas Rate	0.13	14.00	10.63

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56560 **DST#: 5**

Test Start: 2014.08.12 @ 11:55:00

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:38:00
Time Test Ended: 22:33:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

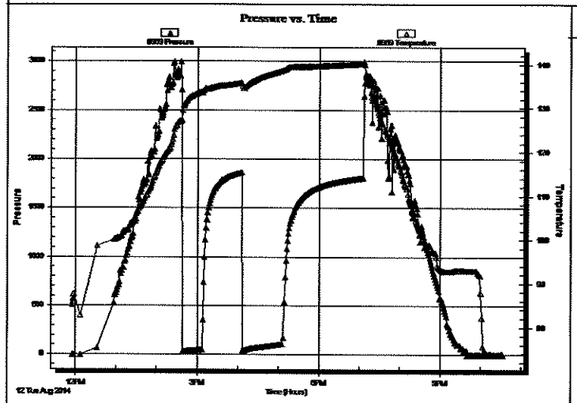
Interval: 6133.00 ft (KB) To 6150.00 ft (KB) (TVD)
Total Depth: 6150.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8969 **Inside**

Press@RunDepth:	psig @	6134.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.12	End Date:	2014.08.12	Last Calib.:	2014.08.12
Start Time:	11:55:05	End Time:	22:33:00	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: B.o.b. in 25 seconds-G.T.S. in 24 min.
ISI: Bled off in 3 1/2 min.-Weak surface blow back after 3 min. shut-in-Surface blow back throughout shut-in
FF: B.o.b. in 10 seconds-G.T.S.- Gauged gas-Check Gas rates
FSI: Bled off in 10 min.- Surface blow back after 2 min. shut-in-Built to1 in of Blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Ocgw 2o 18g 80w	0.30
60.00	Ocm & g 15o 30m 55g	0.30
60.00	O& Gcm 20o 25g 55m	0.30
60.00	O& Gcm 15o 20g 65m	0.30
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.00	6.14
Last Gas Rate	0.13	14.00	10.63
Max. Gas Rate	0.13	14.00	10.63

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Raydon Exploration, Inc.**

1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118

ATTN: Ed Grieves

Davies #1-34

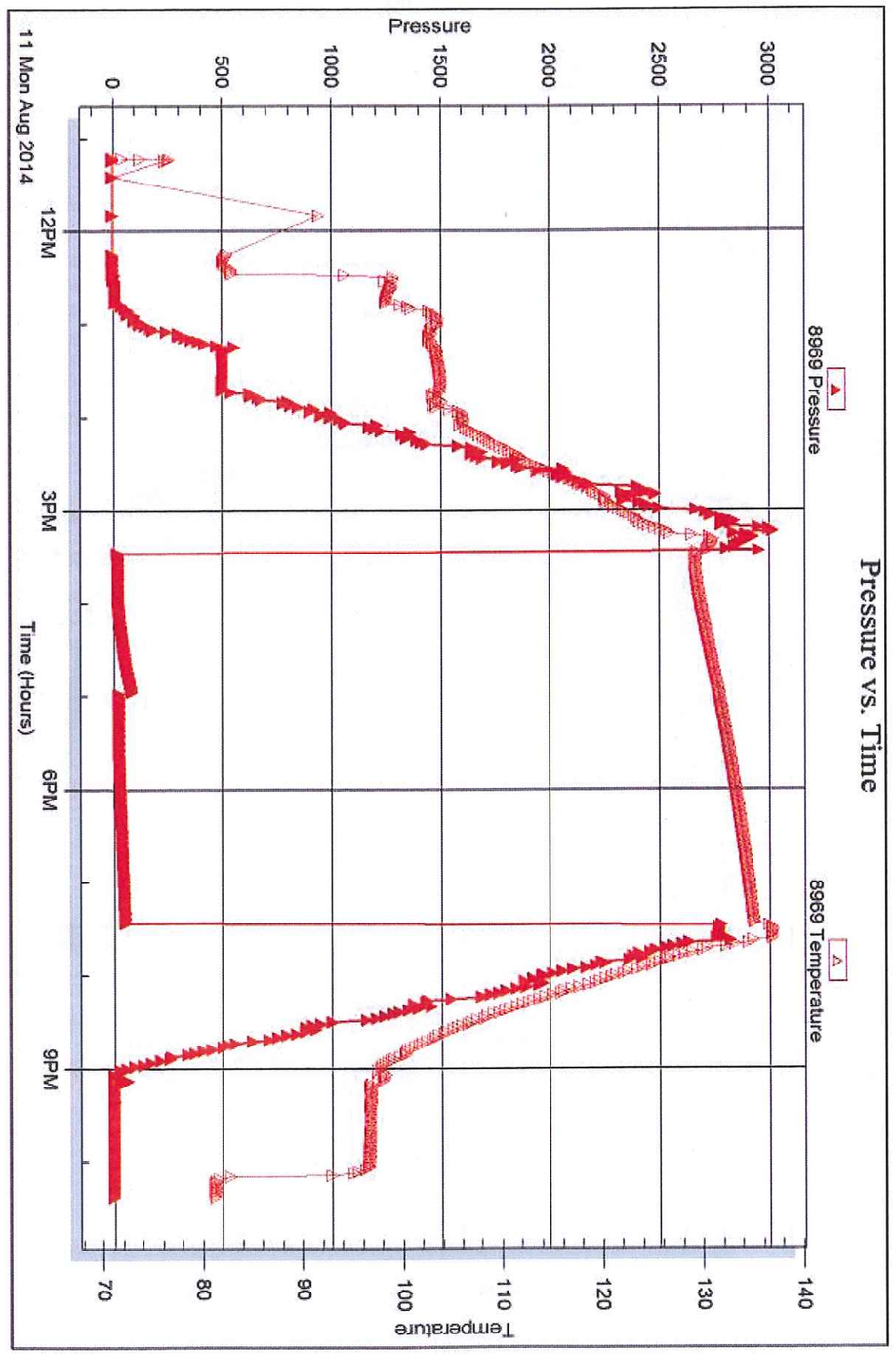
34-33s-31w Seward,KS

Start Date: 2014.08.12 @ 11:55:00
End Date: 2014.08.12 @ 22:33:00
Job Ticket #: 56560 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.14 @ 14:38:36

Pressure vs. Time



DRILL STEM TEST REPORT

FLUID SUMMARY

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56559 **DST#: 4**

Test Start: 2014.08.11 @ 11:13:00

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:	ppm
Viscosity:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.94 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

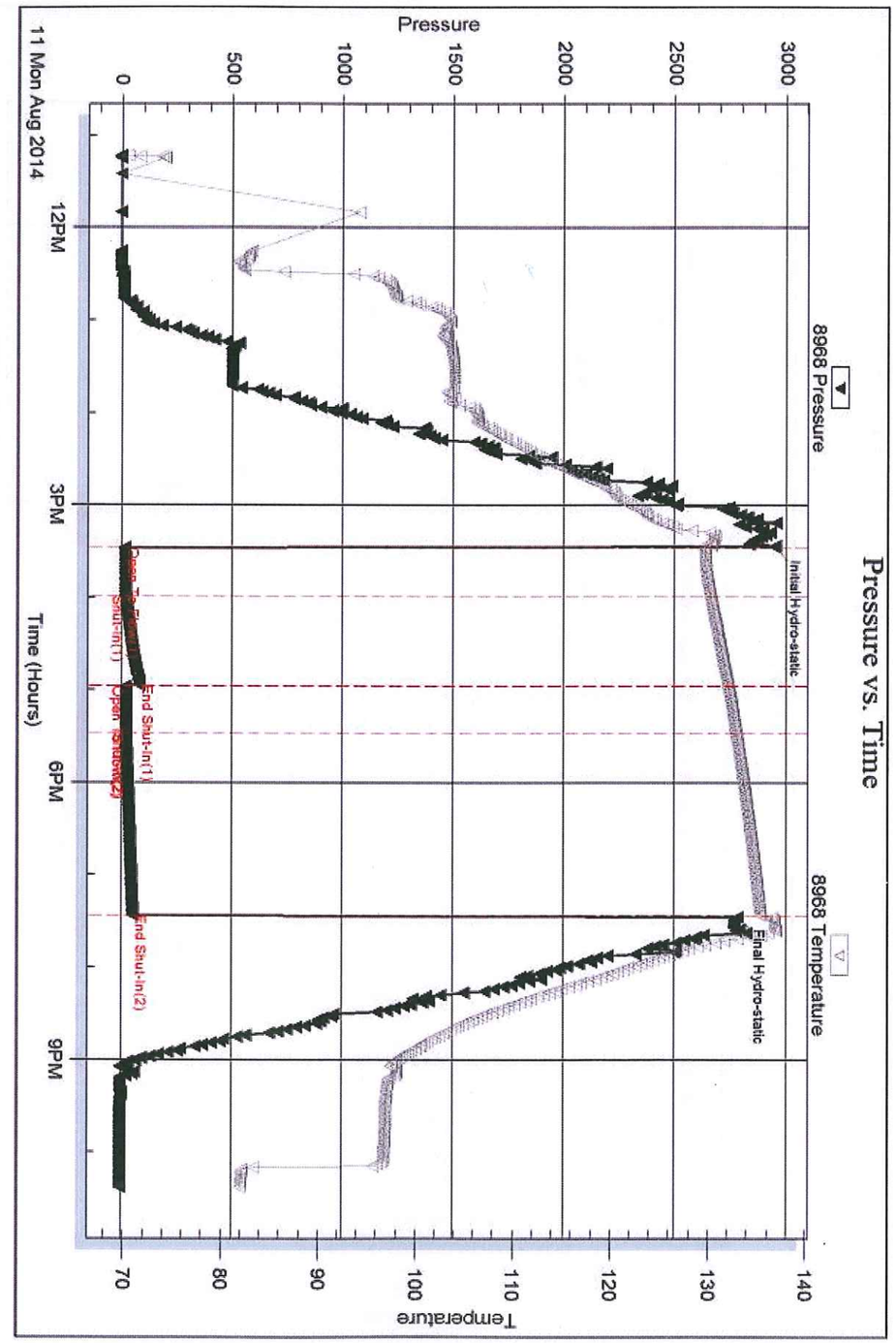
Length ft	Description	Volume bbl
10.00	Mud 100m Oil specs in tool	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Trilobite Testing, Inc Ref. No: 56559 Printed: 2014.08.14 @ 14:39:33

Serial #: 8968 Outside Raydon Exploration, Inc. Davies #1-34 DST Test Number: 4



DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56559 **DST#: 4**

Test Start: 2014.08.11 @ 11:13:00

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:27:15
Time Test Ended: 22:23:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

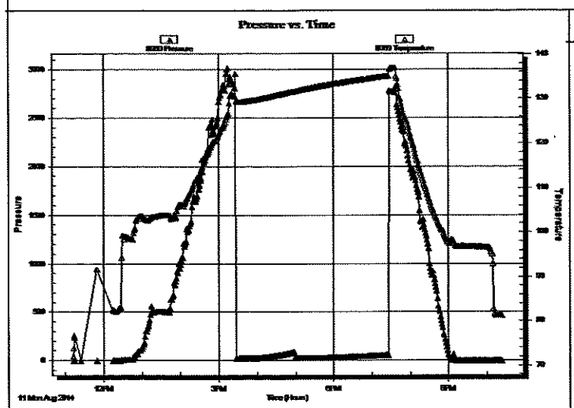
Interval: 6095.00 ft (KB) To 6131.00 ft (KB) (TVD)
Total Depth: 6131.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8969 **Inside**
Press@RunDepth: psig @ 6098.00 ft (KB)
Start Date: 2014.08.11 End Date: 2014.08.11
Start Time: 11:13:05 End Time: 22:23:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.11
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Weak surface Blow-Died in 17 min.
ISI: No return
FF: No blow
FSI: No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100m Oil specs in tool	0.05

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT — TOOL DIAGRAM

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56559 **DST#: 4**

Test Start: 2014.08.11 @ 11:13:00

Tool Information

Drill Pipe:	Length:	5859.00 ft	Diameter:	3.80 inches	Volume:	82.19 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length:	240.00 ft	Diameter:	2.25 inches	Volume:	1.18 bbl	Weight to Pull Loose:	10000.00 lb
					Total Volume:	83.37 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		31.00 ft					String Weight: Initial	90000.00 lb
Depth to Top Packer:		6095.00 ft					Final	90000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		36.00 ft						
Tool Length:		63.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			6069.00		
Shut In Tool	5.00			6074.00		
Hydraulic tool	5.00			6079.00		
Jars	5.00			6084.00		
Safety Joint	2.00			6086.00		
Packer	5.00			6091.00	27.00	Bottom Of Top Packer
Packer	4.00			6095.00		
Stubb	1.00			6096.00		
Perforations	2.00			6098.00		
Recorder	0.00	8969	Inside	6098.00		
Recorder	0.00	8968	Outside	6098.00		
Perforations	30.00			6128.00		
Bullnose	3.00			6131.00	36.00	Bottom Packers & Anchor
Total Tool Length:	**63.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Raydon Exploration, Inc.**

1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118

ATTN: Ed Grieves

Davies #1-34

34-33s-31w Seward,KS

Start Date: 2014.08.11 @ 11:13:00
End Date: 2014.08.11 @ 22:23:00
Job Ticket #: 56559 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.14 @ 14:39:32

Raydon Exploration, Inc. 34-33s-31w Seward,KS Davies #1-34 DST # 4 St. Louis 2014.08.11

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56559 **DST#: 4**

Test Start: 2014.08.11 @ 11:13:00

GENERAL INFORMATION:

Formation: **St. Louis**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:27:15
Time Test Ended: 22:23:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

Interval: 6095.00 ft (KB) To 6131.00 ft (KB) (TVD)
Total Depth: 6131.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

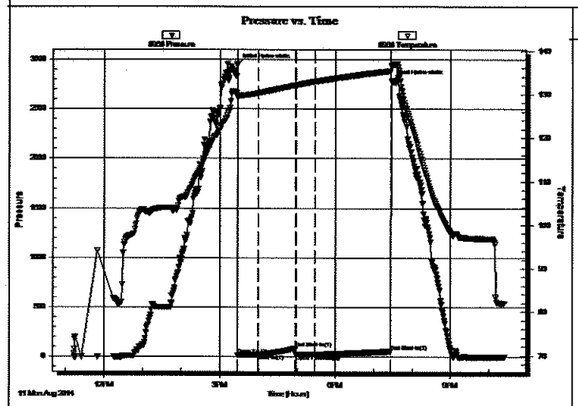
Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8968 **Outside**

Press@RunDepth: 23.77 psig @ 6098.00 ft (KB)
Start Date: 2014.08.11 End Date: 2014.08.11
Start Time: 11:13:05 End Time: 22:23:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.11
Time On Btm: 2014.08.11 @ 15:26:45
Time Off Btm: 2014.08.11 @ 19:27:00

TEST COMMENT: IF: Weak surface Blow-Died in 17 min.
ISI: No return
FF: No blow
FSI: No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2948.95	130.31	Initial Hydro-static
1	18.17	129.19	Open To Flow (1)
33	21.60	130.25	Shut-In(1)
91	85.75	132.08	End Shut-In(1)
91	22.46	132.03	Open To Flow (2)
122	23.77	132.90	Shut-In(2)
240	54.25	135.40	End Shut-In(2)
241	2785.82	136.66	Final Hydro-static

Recovery

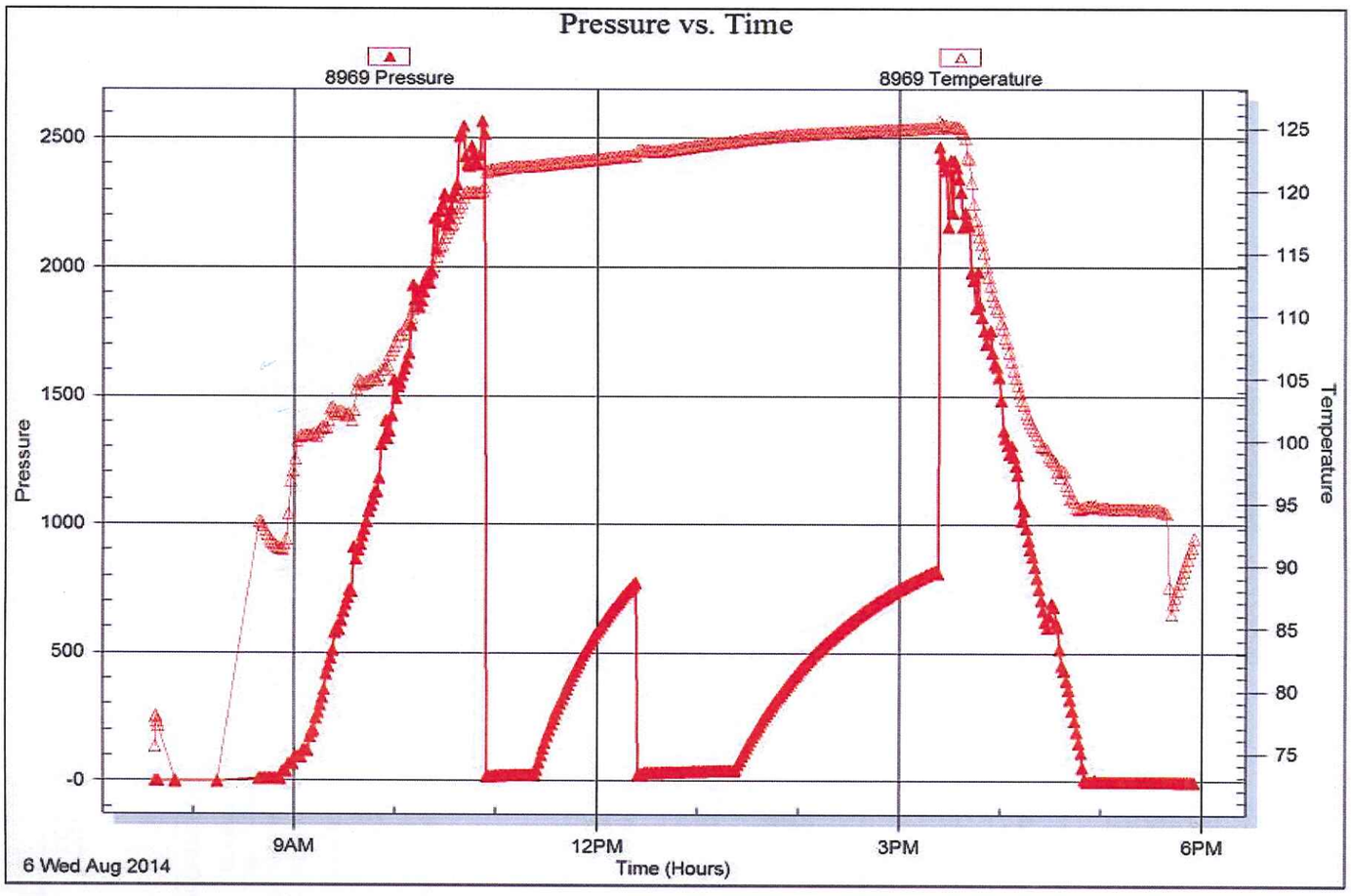
Length (ft)	Description	Volume (bbl)
10.00	Mud 100m Oil specs in tool	0.05

* Recovery from multiple tests

Gas Rates

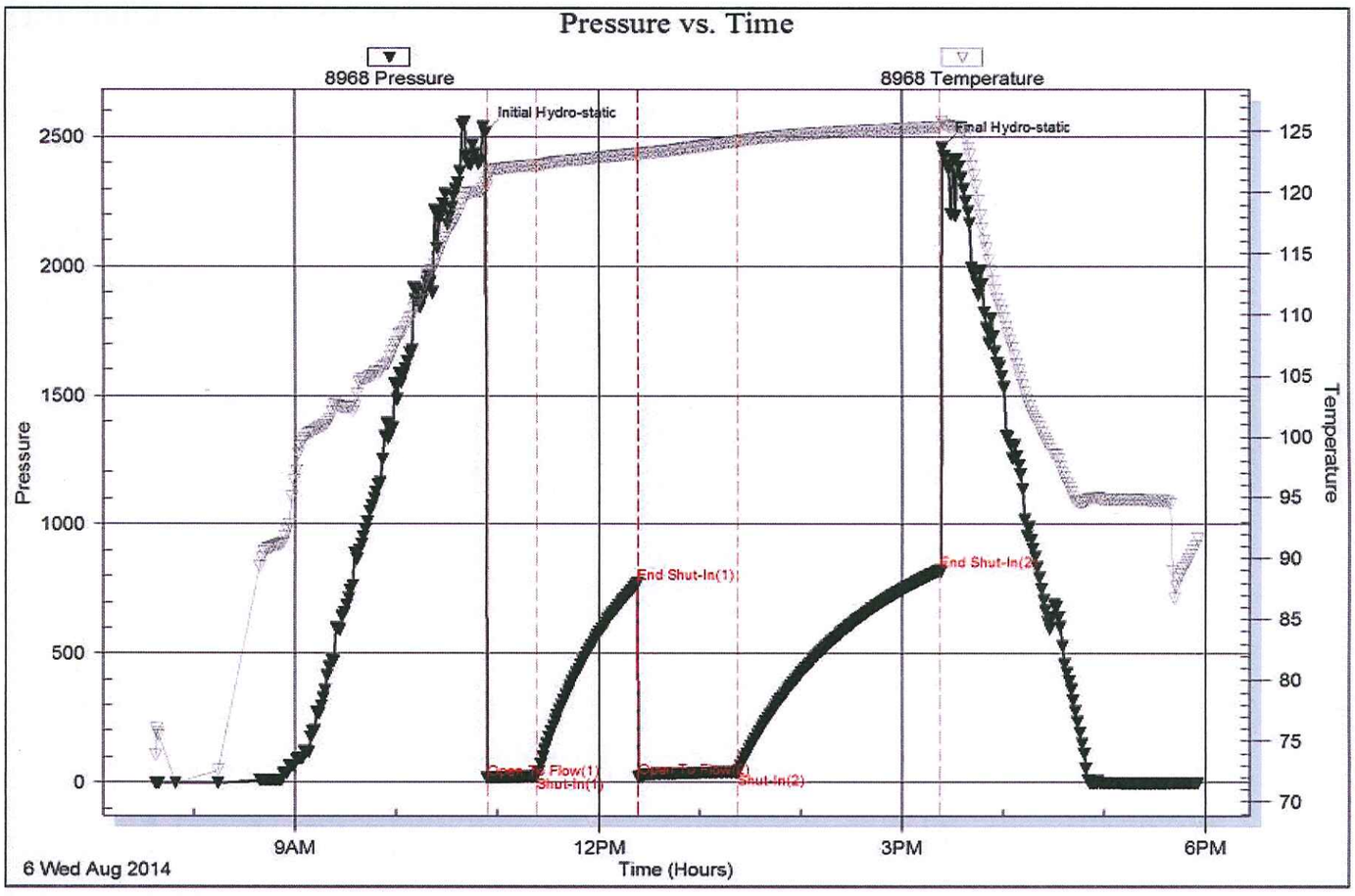
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 8969 **Inside** Raydon Exploration, Inc. Davies #1-34 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 56558 Printed: 2014.08.14 @ 14:39:59

Serial #: 8968 **Outside** Raydon Exploration, Inc. Davies #1-34 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 56558 Printed: 2014.08.14 @ 14:39:59

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56558 **DST#: 3**

Test Start: 2014.08.06 @ 07:37:00

Tool Information

Drill Pipe:	Length:	4953.00 ft	Diameter:	3.80 inches	Volume:	69.48 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	240.00 ft	Diameter:	2.25 inches	Volume:	1.18 bbl	
					Total Volume:	70.66 bbl	

Tool Weight:	2500.00 lb
Weight set on Packer:	28000.00 lb
Weight to Pull Loose:	10000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	80000.00 lb
Final	82000.00 lb

Drill Pipe Above KB:	20.00 ft		
Depth to Top Packer:	5200.00 ft		
Depth to Bottom Packer:	ft		
Interval between Packers:	25.00 ft		
Tool Length:	52.00 ft		
Number of Packers:	2	Diameter:	6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5174.00		
Shut In Tool	5.00			5179.00		
Hydraulic tool	5.00			5184.00		
Jars	5.00			5189.00		
Safety Joint	2.00			5191.00		
Packer	5.00			5196.00	27.00	Bottom Of Top Packer
Packer	4.00			5200.00		
Stubb	1.00			5201.00		
Perforations	1.00			5202.00		
Recorder	0.00	8969	Inside	5202.00		
Recorder	0.00	8968	Outside	5202.00		
Perforations	20.00			5222.00		
Bullnose	3.00			5225.00	25.00	Bottom Packers & Anchor
Total Tool Length:	**52.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56558 **DST#: 3**

Test Start: 2014.08.06 @ 07:37:00

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:	ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.91 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2200.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Ocm 5o 95m	0.049
60.00	G & Ocm 5g 10o 85m	0.295
0.00	GIP=1330	0.000

Total Length: 70.00 ft Total Volume: 0.344 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56558 **DST#: 3**

Test Start: 2014.08.06 @ 07:37:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:53:30
Time Test Ended: 17:56:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

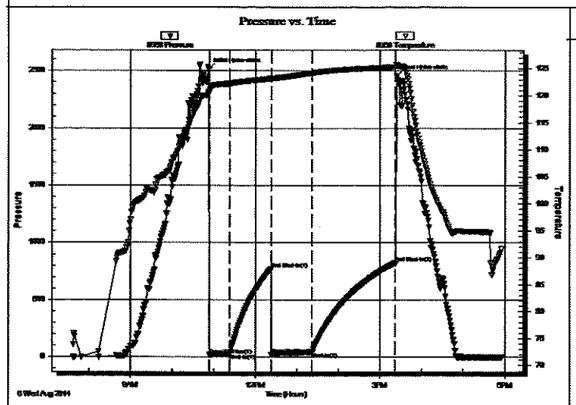
Interval: 5200.00 ft (KB) To 5225.00 ft (KB) (TVD)
Total Depth: 5225.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8968 **Outside**

Press@RunDepth:	41.64 psig @	5202.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.06	End Date:	2014.08.06	Last Calib.:	2014.08.06
Start Time:	07:37:05	End Time:	17:56:00	Time On Btm:	2014.08.06 @ 10:52:45
				Time Off Btm:	2014.08.06 @ 15:24:00

TEST COMMENT: IF: B.o.b. in 3 1/2 min.
ISI: Bled off in 3 min.- No return
FF: 6 in. Immediately- B.o.b. in 3 1/2 min.
FSI: Bled off in 3 min.- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2515.30	120.76	Initial Hydro-static
1	17.00	120.54	Open To Flow (1)
31	25.68	122.22	Shut-In(1)
90	773.51	123.18	End Shut-In(1)
91	21.58	122.92	Open To Flow (2)
150	41.64	124.18	Shut-In(2)
270	822.59	125.35	End Shut-In(2)
272	2457.63	125.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Ocm 5o 95m	0.05
60.00	G & Ocm 5g 10o 85m	0.30
0.00	GIP=1330	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56558 **DST#: 3**

Test Start: 2014.08.06 @ 07:37:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:53:30
Time Test Ended: 17:56:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

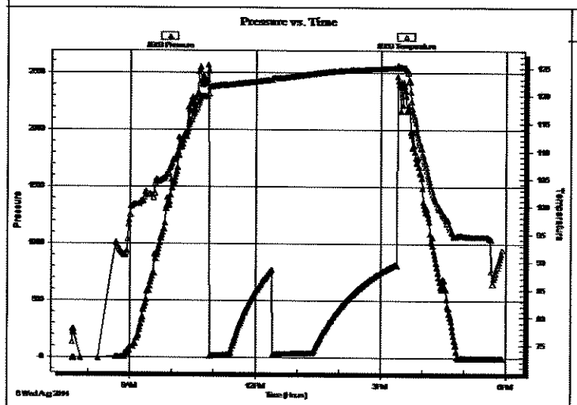
Interval: 5200.00 ft (KB) To 5225.00 ft (KB) (TVD)
Total Depth: 5225.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8969 **Inside**

Press@RunDepth:	psig @	5202.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.06	End Date:	2014.08.06	Last Calib.:	2014.08.06
Start Time:	07:37:05	End Time:	17:56:00	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: B.o.b. in 3 1/2 min.
ISI: Bled off in 3 min.- No return
FF: 6 in. Immediately- B.o.b. in 3 1/2 min.
FSI: Bled off in 3 min.- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Ocm 5o 95m	0.05
60.00	G & Ocm 5g 10o 85m	0.30
0.00	GIP=1330	0.00

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Raydon Exploration, Inc.**

1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118

ATTN: Ed Grieves

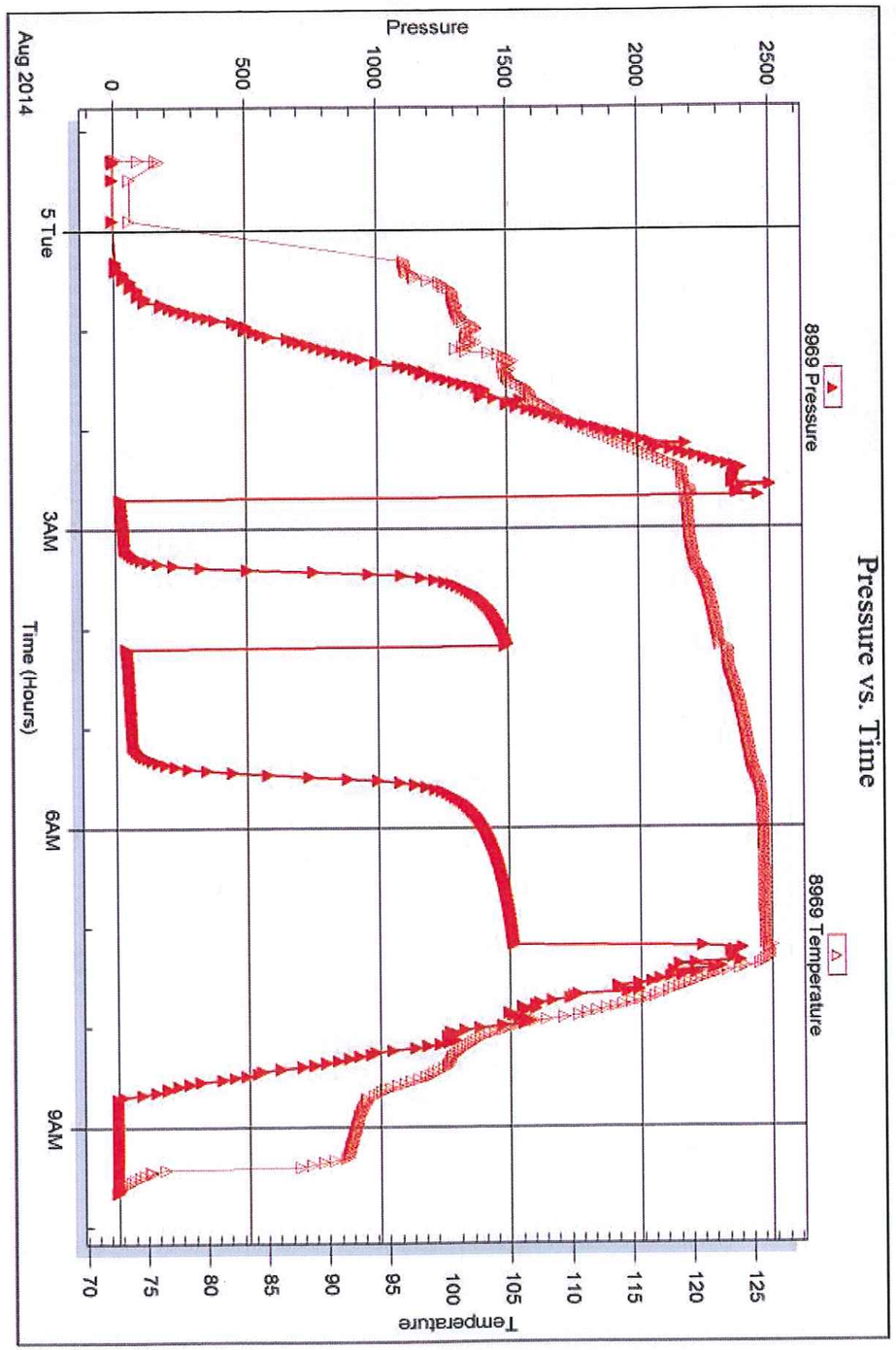
Davies #1-34

34-33s-31w Seward,KS

Start Date: 2014.08.06 @ 07:37:00
End Date: 2014.08.06 @ 17:56:00
Job Ticket #: 56558 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.14 @ 14:39:58



DRILL STEM TEST REPORT

FLUID SUMMARY

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56557 **DST#: 2**

Test Start: 2014.08.04 @ 23:17:00

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:	60000 ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.16 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mcw 25m 75w	0.295
60.00	Gcm 4g 96m	0.295

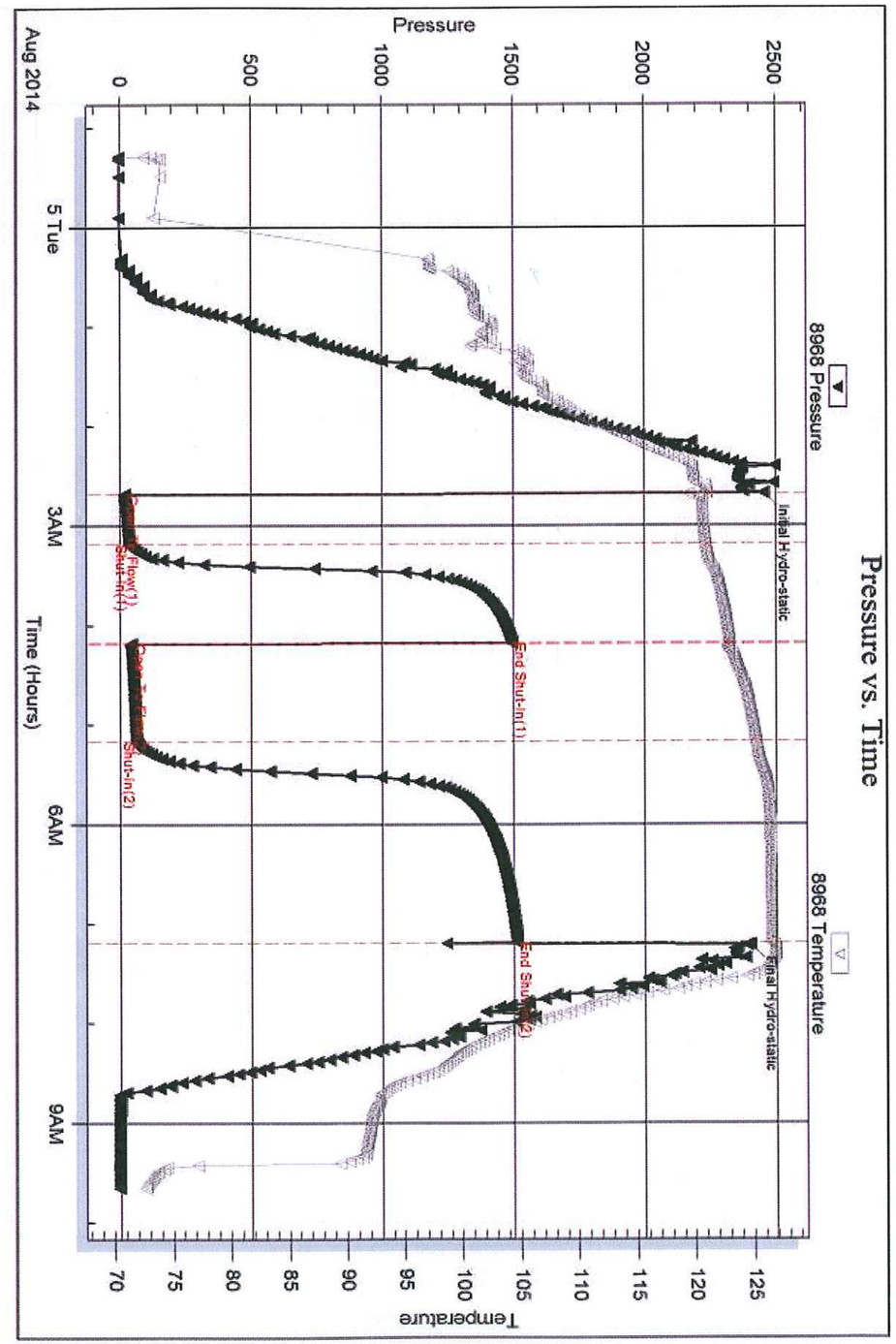
Total Length: 120.00 ft Total Volume: 0.590 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW .130 @ 76=60,000

Pressure vs. Time



DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56557 **DST#: 2**

Test Start: 2014.08.04 @ 23:17:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:40:30
Time Test Ended: 09:40:00

Interval: 5123.00 ft (KB) To 5134.00 ft (KB) (TVD)
Total Depth: 5134.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

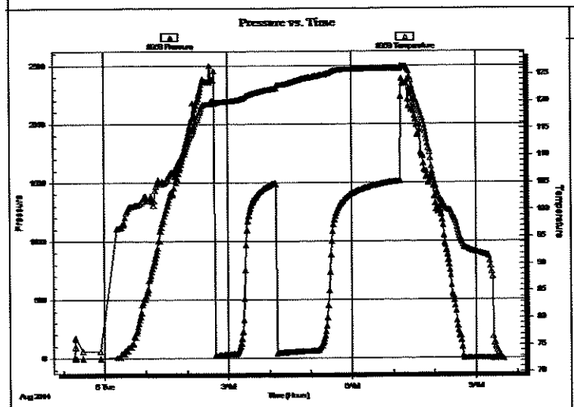
Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8969 **Inside**

Press@RunDepth:	psig @	5124.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.04	End Date:	2014.08.05	Last Calib.:	2014.08.05
Start Time:	23:17:05	End Time:	09:40:00	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: Surface blow - Built to 2 1/2"
ISI: Bled off in 1 min.- No return
FF: No blow
FSI: No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mcw 25m 75w	0.30
60.00	Gcm 4g 96m	0.30

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT — TOOL DIAGRAM

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56557 **DST#: 2**

Test Start: 2014.08.04 @ 23:17:00

Tool Information

Drill Pipe:	Length:	4886.00 ft	Diameter:	3.80 inches	Volume:	68.54 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	240.00 ft	Diameter:	2.25 inches	Volume:	1.18 bbl	
					Total Volume:	69.72 bbl	

Drill Pipe Above KB:	30.00 ft
Depth to Top Packer:	5123.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	11.00 ft
Tool Length:	38.00 ft
Number of Packers:	2
Diameter:	6.75 inches
Tool Comments:	

Tool Weight:		2500.00 lb
Weight set on Packer:		28000.00 lb
Weight to Pull Loose:		10000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	80000.00 lb
	Final	80000.00 lb

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5097.00		
Shut In Tool	5.00			5102.00		
Hydraulic tool	5.00			5107.00		
Jars	5.00			5112.00		
Safety Joint	2.00			5114.00		
Packer	5.00			5119.00	27.00	Bottom Of Top Packer
Packer	4.00			5123.00		
Stubb	1.00			5124.00		
Recorder	0.00	8969	Inside	5124.00		
Recorder	0.00	8968	Outside	5124.00		
Perforations	7.00			5131.00		
Bullnose	3.00			5134.00	11.00	Bottom Packers & Anchor
Total Tool Length:	**38.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Raydon Exploration, Inc.**

1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118

ATTN: Ed Grieves

Davies #1-34

34-33s-31w Seward,KS

Start Date: 2014.08.04 @ 23:17:00
End Date: 2014.08.05 @ 09:40:00
Job Ticket #: 56557 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.14 @ 14:40:30

Raydon Exploration, Inc. 34-33s-31w Seward,KS Davies #1-34 DST # 2 Marmaton 2014.08.04

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56557 **DST#: 2**

Test Start: 2014.08.04 @ 23:17:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:40:30
Time Test Ended: 09:40:00

Interval: 5123.00 ft (KB) To 5134.00 ft (KB) (TVD)
Total Depth: 5134.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

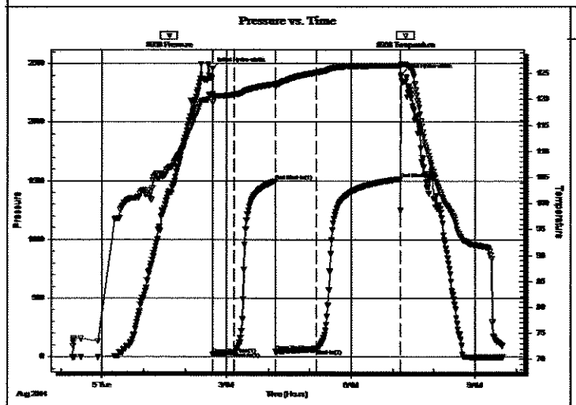
Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III
Unit No: 67

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8968 **Outside**

Press@RunDepth:	64.25 psig @	5124.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.04	End Date:	2014.08.05	Last Calib.:	2014.08.05
Start Time:	23:17:05	End Time:	09:40:00	Time On Btm:	2014.08.05 @ 02:40:15
				Time Off Btm:	2014.08.05 @ 07:12:30

TEST COMMENT:
IF: Surface blow - Built to 2 1/2"
ISI: Bled off in 1 min.- No return
FF: No blow
FSI: No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2455.34	121.02	Initial Hydro-static
1	19.16	119.44	Open To Flow (1)
31	37.03	120.85	Shut-In(1)
90	1499.56	122.92	End Shut-In(1)
91	45.22	122.46	Open To Flow (2)
150	64.25	125.14	Shut-In(2)
271	1516.51	126.47	End Shut-In(2)
273	2402.92	126.73	Final Hydro-static

Recovery

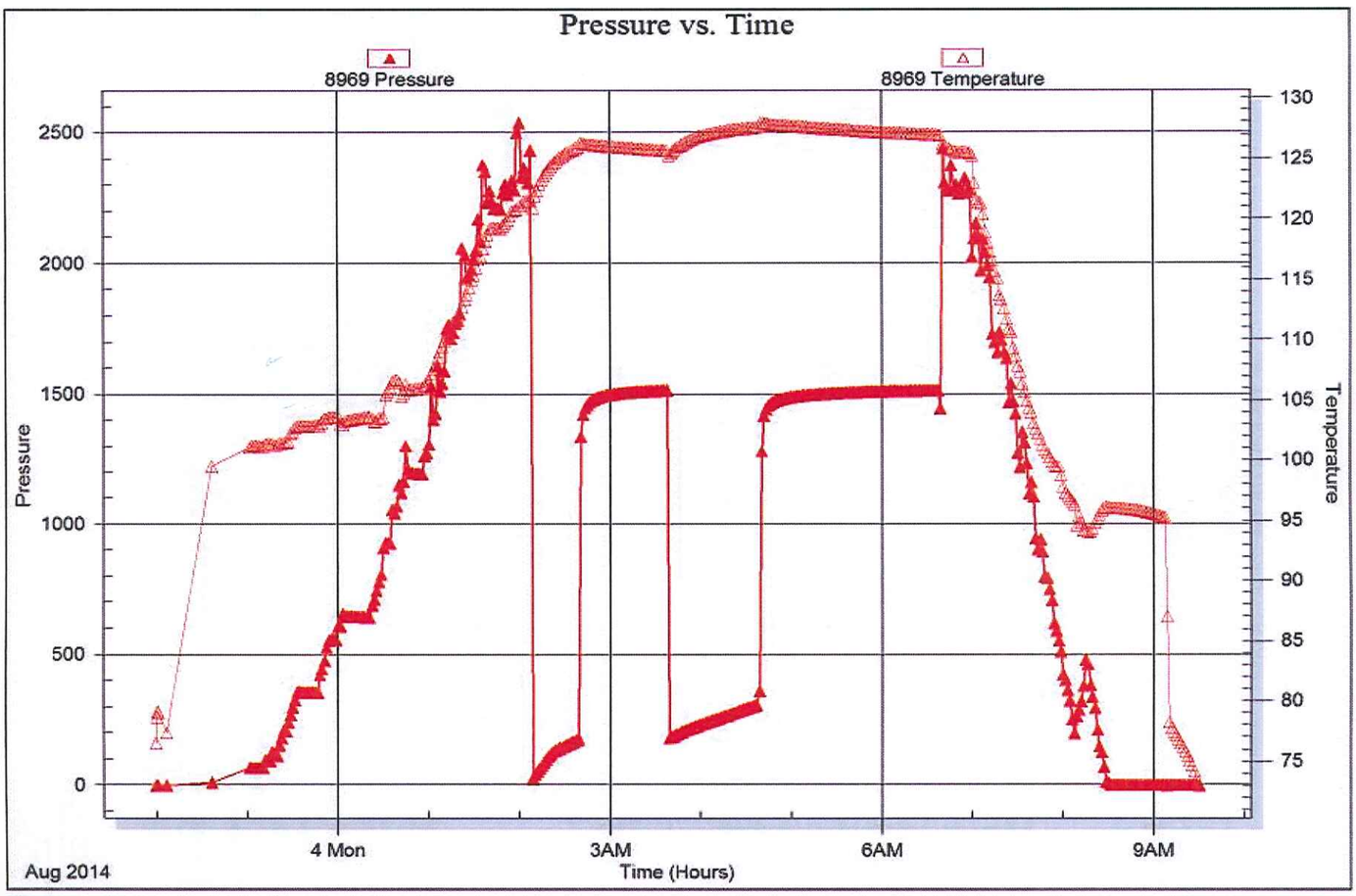
Length (ft)	Description	Volume (bbl)
60.00	Mcw 25m 75w	0.30
60.00	Gcm 4g 96m	0.30

* Recovery from multiple tests

Gas Rates

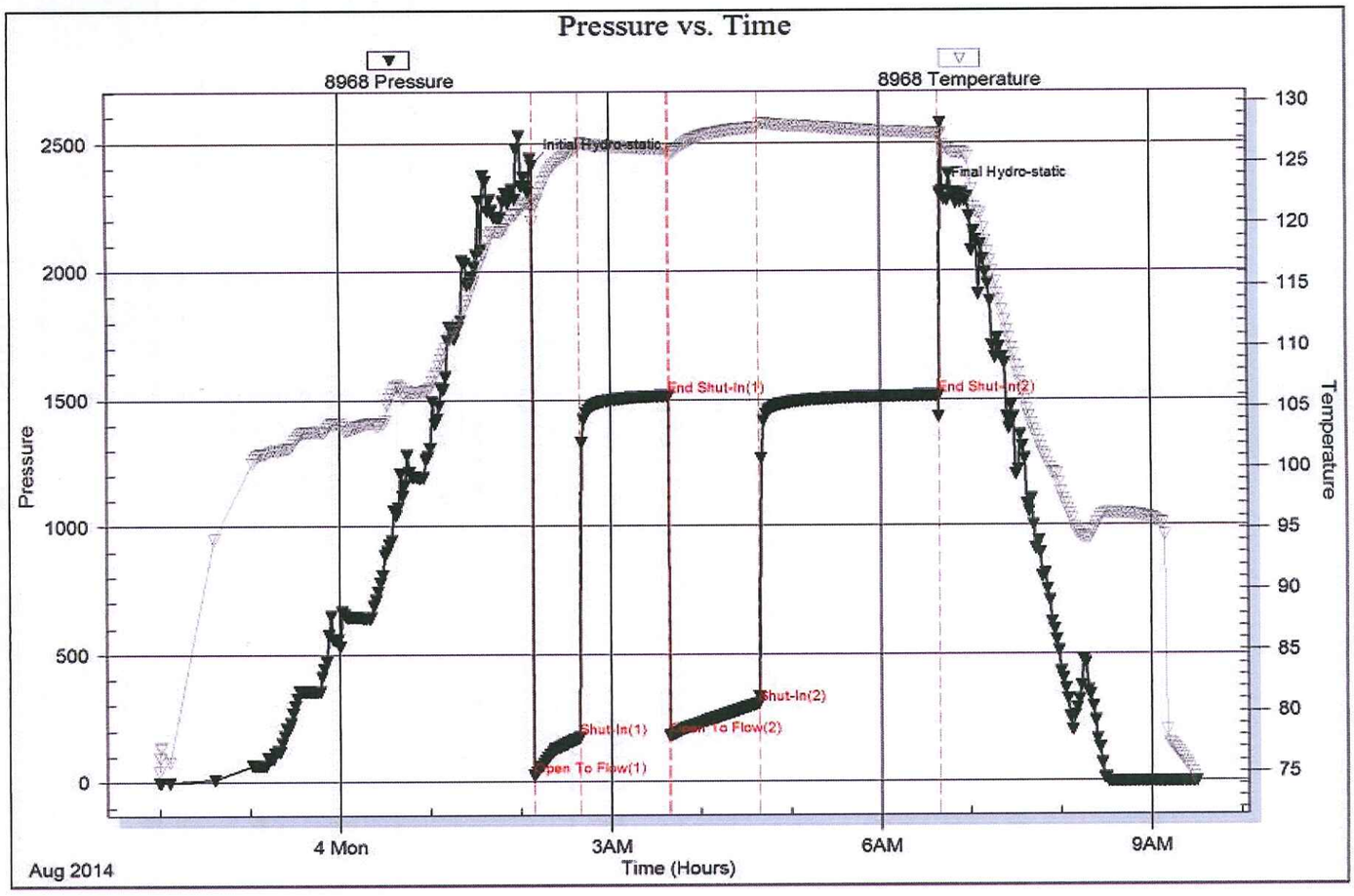
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 8969 **Inside** Raydon Exploration, Inc. Davies #1-34 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 56556 Printed: 2014.08.14 @ 14:40:56

Serial #: 8968 **Outside** Raydon Exploration, Inc. Davies #1-34 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 56556 Printed: 2014.08.14 @ 14:40:56

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56556 **DST#: 1**

Test Start: 2014.08.03 @ 21:59:00

Tool Information

Drill Pipe:	Length:	4764.00 ft	Diameter:	3.80 inches	Volume:	66.83 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length:	240.00 ft	Diameter:	2.25 inches	Volume:	1.18 bbl	Weight to Pull Loose:	10000.00 lb
					Total Volume:	68.01 bbl	Tool Chased	0.00 ft
							String Weight: Initial	80000.00 lb
							Final	86000.00 lb

Drill Pipe Above KB:	19.00 ft
Depth to Top Packer:	5012.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	73.00 ft
Tool Length:	100.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4986.00		
Shut In Tool	5.00			4991.00		
Hydraulic tool	5.00			4996.00		
Jars	5.00			5001.00		
Safety Joint	2.00			5003.00		
Packer	5.00			5008.00	27.00	Bottom Of Top Packer
Packer	4.00			5012.00		
Stubb	1.00			5013.00		
Perforations	1.00			5014.00		
Recorder	0.00	8969	Inside	5014.00		
Recorder	0.00	8968	Outside	5014.00		
Perforations	35.00			5049.00		
Change Over Sub	1.00			5050.00		
Drill Pipe	31.00			5081.00		
Change Over Sub	1.00			5082.00		
Bullnose	3.00			5085.00	73.00	Bottom Packers & Anchor
Total Tool Length:	**100.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56556 **DST#: 1**

Test Start: 2014.08.03 @ 21:59:00

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:	46000 ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.13 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
618.00	Mcw 2m 98w	6.483
0.00	GTS	0.000

Total Length: 618.00 ft Total Volume: 6.483 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56556 **DST#: 1**

Test Start: 2014.08.03 @ 21:59:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:08:30
Time Test Ended: 09:30:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Cornelio Landa III
Unit No: 67

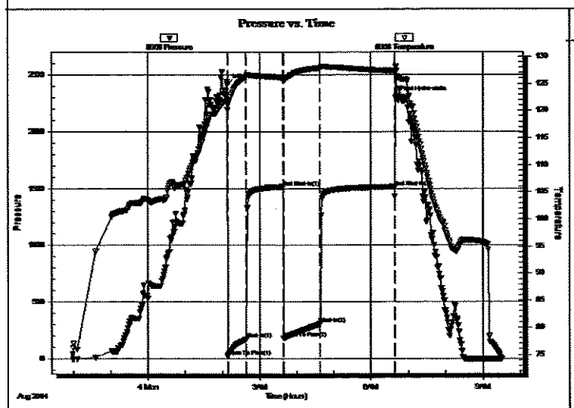
Interval: 5012.00 ft (KB) To 5085.00 ft (KB) (TVD)
Total Depth: 5085.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8968 **Outside**

Press@RunDepth:	306.27 psig @	5014.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.03	End Date:	2014.08.04	Last Calib.:	2014.08.04
Start Time:	21:59:05	End Time:	09:30:00	Time On Btm:	2014.08.04 @ 02:08:15
				Time Off Btm:	2014.08.04 @ 06:40:00

TEST COMMENT: IF: B.o.b. in 24 min.- Weak G.T.S.
ISI: Bled off in 1 1/2 min.- No return
FF: Surface blow after 3 min. open- Weak G.T.S.-Built to 5 1/2"- Died back to surface blow
FSI: Bled off in 1 1/2 min.- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2414.86	121.87	Initial Hydro-static
1	23.61	120.20	Open To Flow (1)
31	174.06	126.26	Shut-In(1)
90	1513.86	126.12	End Shut-In(1)
91	179.53	125.56	Open To Flow (2)
151	306.27	127.88	Shut-In(2)
271	1513.57	127.33	End Shut-In(2)
272	2300.02	127.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
618.00	Mcw 2m 98w	6.48
0.00	GTS	0.00

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raydon Exploration, Inc.
1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118
ATTN: Ed Grieves

34-33s-31w Seward,KS

Davies #1-34

Job Ticket: 56556 **DST#: 1**

Test Start: 2014.08.03 @ 21:59:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:08:30
Time Test Ended: 09:30:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Cornelio Landa III
Unit No: 67

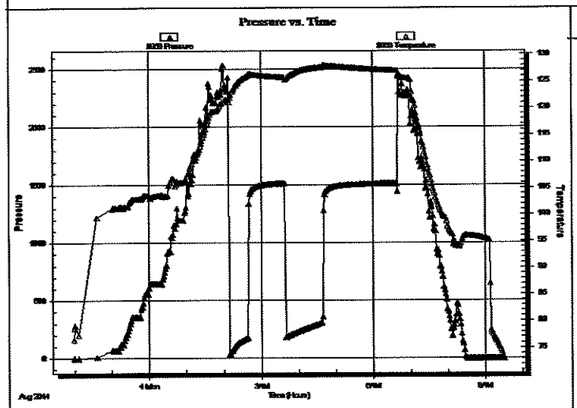
Interval: 5012.00 ft (KB) To 5085.00 ft (KB) (TVD)
Total Depth: 5085.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2738.00 ft (KB)
2729.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8969 **Inside**

Press@RunDepth:	psig @	5014.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2014.08.03	End Date:	2014.08.04	Last Calib.:	2014.08.04
Start Time:	21:59:05	End Time:	09:30:00	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF: B.o.b. in 24 min.- Weak G.T.S.
ISI: Bled off in 1 1/2 min.- No return
FF: Surface blow after 3 min. open- Weak G.T.S.-Built to 5 1/2"- Died back to surface blow
FSI: Bled off in 1 1/2 min.- No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
618.00	Mcw 2m 98w	6.48
0.00	GTS	0.00

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Raydon Exploration, Inc.**

1601 SW Expressway
Ste. #1300
Oklahoma City, OK 73118

ATTN: Ed Grieves

Davies #1-34

34-33s-31w Seward,KS

Start Date: 2014.08.03 @ 21:59:00

End Date: 2014.08.04 @ 09:30:00

Job Ticket #: 56556 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.14 @ 14:40:55

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: Raydon Exploration		Lease No.	Date: 7-28-14
Lease: Davies		Well #: 1-34	Service Receipt: 5967
Casing: 8 5/8	Depth: 1604	County: Seward	State: KS
Job Type: 242 Surface	Formation	Legal Description: 34-33-31	

Pipe Data		Perforating Data		Cement Data
Casing size: 8 5/8	Tubing Size	Shots/Ft		Lead 400 sk A-Con
Depth: 1604	~~Depth~~ 55-42	From	To	2.95 Ft³/sk
Volume: 99.5 bbls	Volume	From	To	18.1 Gal/sk 11.4#
Max Press: 1500	Max Press	From	To	Tail in 150 sk Class C
Well Connection: 8 5/8	Annulus Vol.	From	To	1.34 Ft³/sk
Plug Depth: 1562	Packer Depth	From	To	6.3 Gal/sk 14.8#

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1730					Arrive On Location
1735					Safety Meeting - Rig Up
1900					Rig Running Casing
2010					Circulate w/ Rig
2040					Hook Up To BES
2045	2000		1.0	1.0	Pressure Test
2050	400		210	5.6	Pump Lead cmt @ 11.4#
2120	300		36	5	Pump Tail cmt @ 14.8#
2135					Drop Plug - Wash Up
2140	600		90	5	Displace
2210	800		9	2	Slow Down
2215	1300		.5	.1	Land Plug Float Held
					Job Complete
					Cement To Surface
					Thanks For Using Basic Energy Services

Service Units	78938	70897-19570	30463-19566	33071-19584		
Driver Names	Izzy	Sam	Norma	Roger		

Customer Representative

Station Manager

Izzy Chavez
Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: Laydon Exploration		Lease No.	Date: 8/14/01
Lease: Davies 1		Well #: 1-34	Service Receipt
Casing	Depth	County: Seward	State: KS
Job Type: PTA	Formation	Legal Description: 34/33/31	

Pipe Data		Perforating Data		Cement Data
Casing size	Tubing Size	Shots/Ft		Lead 170sks 60/40 @ 13.5 Poz
Depth	Depth	From	To	
Volume	Volume	From	To	1.50 ft³ 7.50 gal
Max Press	Max Press	From	To	Tail in
Well Connection	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
16:15					On location
16:30					Start laying Down
18:30					Safety Mtg / spot in
18:40					Rig Up
19:15	160		5BBL	5BPM	Pump Water Ahead
19:17	150		13.35BBL	4.9	Start Cement Plug #1 @ 1630 ft
19:22					Washup
19:25			19.41BBL		Displace w/Rig Pump 52 stk per min 2½ Min
19:30					Start Pulling
20:20	160		13.35 BBL	5BPM	Start Cement Plug #2 @ 660 ft
20:24	160		5.9 BBL	5BPM	Start Displacement
20:30					Laydown Remaining Pipe - 60 ft
21:45					Laydown Rathole
23:45	0		5.34 BBL	2BPM	Plug Surface 60' to Surface
23:54	0		8.01 BBL	2BPM	Plug Rat #1
00:00	0		5.34 BBL	2BPM	Plug Mouse
					Cement to Surface
					Job Complete

Service Units	86543	38111/19919	19877/19883			
Driver Names	Tommy Marcellus	Chad Hinz	Norman Powers			

Fred Crest
Customer Representative

Jerry Bennett
Station Manager

Tommy Marcellus
Cementer

Taylor Printing, Inc.