

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Recompletion Date \_\_\_\_\_ Date Reached TD \_\_\_\_\_ Completion Date or Recompletion Date \_\_\_\_\_

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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](mailto: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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	STILES 1
Doc ID	1461610

Tops

Name	Top	Datum
Anhy.	850	(+1050)
Base Anhy.	876	(+1024)
Howard	2696	(- 796)
Topeka	2735	(- 835)
King Hill	2857	(- 957)
Queen Hill	2922	(-1022)
Heebner	3010	(-1110)
Toronto	3027	(-1127)
Douglas	3039	(-1139)
Brown Lime	3096	(-1196)
Lansing	3108	(-1208)
BKC	3342	(-1442)
Arbuckle	3360	(-1460)
LTD	3440	(-1540)



GLOBAL OIL FIELD SERVICES, LLC  
 24 S. Lincoln  
 RUSSELL, KS 67665

**RECEIVED**  
 MAR 06 2019

# Invoice

Date	Invoice #
3/4/2019	0013388

Bill To
PALOMINO PETROLEUM INC 4924 SE 84TH ST NEWTON,KS 67114

P.O. No.	Terms	Project
STILES#1	Due on receipt	

Quantity	Description	Rate	Amount
255	60/40 POZMIX CEMENT	13.75	3,506.25
9	BENTONITE GEL	30.00	270.00
63.75	FLO-SEAL	2.00	127.50
264	HANDLING	1.90	501.60
	BULK MILEAGE	660.00	660.00
1	TRI-PLEX PUMP CHARGE FOR PLUG	850.00	850.00
25	LMV- ONE WAY	2.75	68.75
25	HEAVY EQUIPMENT. ONE WAY	6.50	162.50
1	DRY HOLE PLUG	62.50	62.50
	15% DISCOUNT IF PAID WITHIN 15 DAYS OF INVOICE		
	BARTON CO SALES TAX	7.50%	0.00

Thank you for your business.		<b>Total</b>	\$6,209.10
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Phone #	Fax #
785-445-3525	785-445-3526

# GLOBAL OIL FIELD SERVICES, LLC

0013388

REMIT TO 24 S. Lincoln  
Russell, KS 67665

SERVICE POINT: Russell

DATE <u>2-21-19</u>	SEC <u>7</u>	TWP. <u>16S</u>	RANGE <u>12W</u>	CALLED OUT	ON LOCATION <u>3:00 pm</u>	JOB START	JOB FINISH <u>11:30 AM</u>
LEASE <u>Stiles</u>	WELL #. <u>1</u>	LOCATION <u>3 mi S of River ks 3N East Intc</u>			COUNTY <u>Barton</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR W W Dorrings Rig #14

TYPE OF JOB Water Plug

HOLE SIZE 7 7/8 T.D.

CASING SIZE DEPTH

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS

DISPLACEMENT

EQUIPMENT

PUMP TRUCK CEMENTER Cody

# 409 HELPER Tony

BULK TRUCK

# 411 DRIVER Tom

BULK TRUCK

# DRIVER

OWNER Palomino Petroleum

CEMENT AMOUNT ORDERED 255 SKS 60 Ag 4% 60

1/2" per Feet x 500

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

REMARKS:

3340' 50 SKS

800' 50 SKS

465' 100 SKS

Center 40' wire plug

Rat 30 SKS

mouse 15 SKS

CHARGE TO: Palomino Petroleum INC

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL

Global Oil Field Services, LLC

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT

@

@

@

@

TOTAL

PRINTED NAME Joshua Shaw

SIGNATURE Joshua Shaw

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

GLOBAL OIL FIELD SERVICES, LLC

24 S. Lincoln  
RUSSELL, KS 67665

RECEIVED

FEB 19 2019

# Invoice

Date	Invoice #
2/14/2019	0013381

Bill To
PALOMINO PETROLEUM INC 4924 SE 84TH ST NEWTON,KS 67114

P.O. No.	Terms	Project
STILES#1	Due on receipt	

Quantity	Description	Rate	Amount
225	60/40 POZMIX CEMENT	13.75	3,093.75
7	CALCIUM-CHLORIDE	80.00	560.00
4	BENTONITE GEL	30.00	120.00
236	HANDLING	1.90	448.40
1	TRI-PLEX PUMP CHARGE FOR SURFACE	850.00	850.00
15	LMV- ONE WAY	2.75	41.25
15	HEAVY EQUIPMENT. ONE WAY	6.50	97.50
-3	DEDUCTION FOR RIG TIME WHILE WAITING ON CEMENT	350.00	-1,050.00
	15% DISCOUNT IF PAID WITHIN 15 DAYS OF INVOICE		0.00
	NESS CO SALES TAX	7.50%	0.00

Thank you for your business.

**Total** \$4,160.90

Phone #	Fax #
785-445-3525	785-445-3526

# GLOBAL OIL FIELD SERVICES, LLC

0013381

REMIT TO 24 S. Lincoln  
Russell, KS 67665

SERVICE POINT: Russell KS

DATE <u>2-8-19</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>7:30 PM</u>
LEASE <u>St. Luc</u>	WELL # <u>1</u>	LOCATION <u>2 West of Acaver 15 40th 2nd East</u>				COUNTY <u>Dillon</u>	STATE <u>KS</u>
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR WW Drilling Rig # 14

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D.

CASING SIZE 6 5/8 DEPTH 414'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 25'

PERFS

DISPLACEMENT

OWNER Palomino Petroleum

CEMENT AMOUNT ORDERED 2255x 60/40 3000

26001

EQUIPMENT

PUMP TRUCK # 409 CEMENTER Cody

BULK TRUCK # 411 HELPER Tony

BULK TRUCK # DRIVER Tony

BULK TRUCK # DRIVER

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

REMARKS:

Run 9' of 53 casing + L<sub>2</sub> Holed to Rig + Brake Substitution Holed to truck

2 pumps 2255x of cement + Displaced 24x bbls of H<sub>2</sub>O + shut TN.

Cement D.P. Circulated to Surface

CHARGE TO: Palomino Petroleum

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL

Global Oil Field Services, LLC

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL

PRINTED NAME Joshua Shaw

SIGNATURE Joshua Shaw

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS





# PALOMINO PETROLEUM, INC.

Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Stiles #1

API: 15-009-26253

Location: NW - SW - SE - SW of Sec. 7 16s 12W

License Number: 30742

Spud Date: 2/08/2019

Surface Coordinates: 574' FSL & 1492' FWL

Region: Barton County, KS  
Drilling Completed: 2/20/2019

Bottom Hole Same as surface coordinates

Coordinates:

Ground Elevation (ft): 1899'

K.B. Elevation (ft): 1900'

Logged Interval (ft): 2700'

Total Depth (ft): 3440'

Formation: Arbusckle Dolomite @ RTD

Type of Drilling Fluid: Chemical Drispac

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

Company: Palomino Petroleum, Inc.

Address: 4924 SE 84th St.  
Newton, KS 67114

## GEOLOGIST

Name: Eli J. Felts

Company: Gravity Oil, LLC

Address: 954 Prairie Park Road  
Wichita, KS 67218

E: ejfelts47@gmail.com, C: 316.204.5059

## Formation Tops

SAMPLE TOPS	LOG TOPS
ANHY	ANHY
BASE ANHY	BASE ANHY
HOWARD	HOWARD
TOPEKA	TOPEKA
KING HILL	KING HILL
QUEEN HILL	QUEEN HILL
HEEBNER	HEEBNER
TORONTO	TORONTO
BROWN LIME	BROWN LIME
LANSING	LANSING
B/KC	B/KC
ARBUCKLE	ARBUCKLE
RTD	LTD
848 (+1052)	850 (+1050)
874 (+1026)	876 (+1024)
2696 (-796)	2696 (-796)
2735 (-835)	2736 (-835)
2854 (-954)	2857 (-957)
2920 (-1020)	2922 (-1022)
3008 (-1108)	3010 (-1110)
3027 (-1127)	3027 (-1127)
3095 (-1195)	3096 (-1196)
3105 (-1205)	3108 (-1208)
3342 (-1442)	3342 (-1442)
3360 (-1460)	3360 (-1460)
3440 (-1540)	3440 (-1540)

## Drilling Report

2/18/19 (Fri)

Moved in WW Drilling, L.L.C. rotary tools (Rig #14). Spudded at 7:15 a.m. Set surface pipe; cement did circulate. Plug down @ 7:30 p.m.

2/09/19 (Sat)

Waiting on cement.

2/10/19 (Sun)

Drilling at 1590'.

2/11/19 (Mon)

Stuck at 2185'.

2/12/19 (Tue)

Tripping out of hole with wash over pipe at 2185'.

2/13/19 (Wed)

Tripping in hole with wash over pipe at 2185'.

2/14/19(Th)

2/13/19 (Wed)

Tripping in hole with wash over pipe at 2185'.

2/14/19(Th)

Free point last drill collar at 2185'.

2/15/19(Fri)

Free point did not go through fish, picking up wash pipe to try and wash to bottom, bottom of screw in sub plugged with clay. Replaced Bit (2 cones were very loose)

2/16/19(Sat)

Drilling at 2299'. Displaced drilling fluid w/ Mud-Co. Chemical Drispac. Geologist on location @ 5pm. 10' wet and dry samples began @ 7pm 2700'

2/17/19 (Sun)

Drilling @ 2893'. Ran DST #1

2/18/19 (Mon)

Drilling @ 3061'

2/19/19 (Tues)

DST #2. Drilling @ 3220'

2/20/19 (Wed)

Ran Logs. Decision made to straddle Arbuckle. DST #3 (MISRUN - HIT FILL)  
TIH w/ Bit to Condition Hole

2/21/19 (Thurs)

DST #4  
Plugged & Abandoned

### Drill Stem Tests

DST #1 Topoka  
Interval: 2934'-2998'  
(64') Anchor  
30-30-30-30  
IF: built to 2"  
ISI: no blowback  
FF: was dead, flushed tool, built to 1"  
FSI: no blowback  
SIP: 791-770#  
IF: 18-32#  
FF: 34-46#  
Hydrostatic: 1452-1415#  
BHT: 94 F  
CHL: NA  
RW: NA

DST #2 Lansing C-F  
Interval: 3128'-3182'  
(54') Anchor  
30-30-30-30  
IF: built to 4"  
ISI: no blowback  
FF: built to 2"  
FSI: no blowback  
SIP: 617-611#  
IF: 20-75#  
FF: 61-75#  
Hydrostatic: 1602-1574#  
BHT: 103 F  
CHL: 60,000  
RW: .434 @ 20.4 F

DST #3 Arbuckle  
(straddle test)  
Interval: 3345' - 3385'  
(40') Anchor  
(55') Tailpipe  
MISRUN - Tool slid 6' and had fill

DST #4 Arbuckle  
(straddle test)  
Interval: 3318'-3385'  
(67') Anchor  
(55') Tailpipe  
15-30-15-30  
IF: BOB 1 min 45 secs  
ISI: no blowback  
FF: BOB in 2 mins  
FSI: no blowback  
SIP: 1123-1125#  
IF: 54-417#  
FF: 404-556#  
Hydrostatic: 1580-1538#  
BHT: 107 F  
CHL: 26,000  
RW: .444 @ 39.1 F

Recovery:  
65' WCM  
(5%W) (95%M)

Recovery:  
1188' TF  
320' WCM (10%W - 90%M)  
640' WM (25%W - 75%M)  
128' MW (60%W - 40%M)  
100' MCW (90%W - 10%M)

2/8/2019

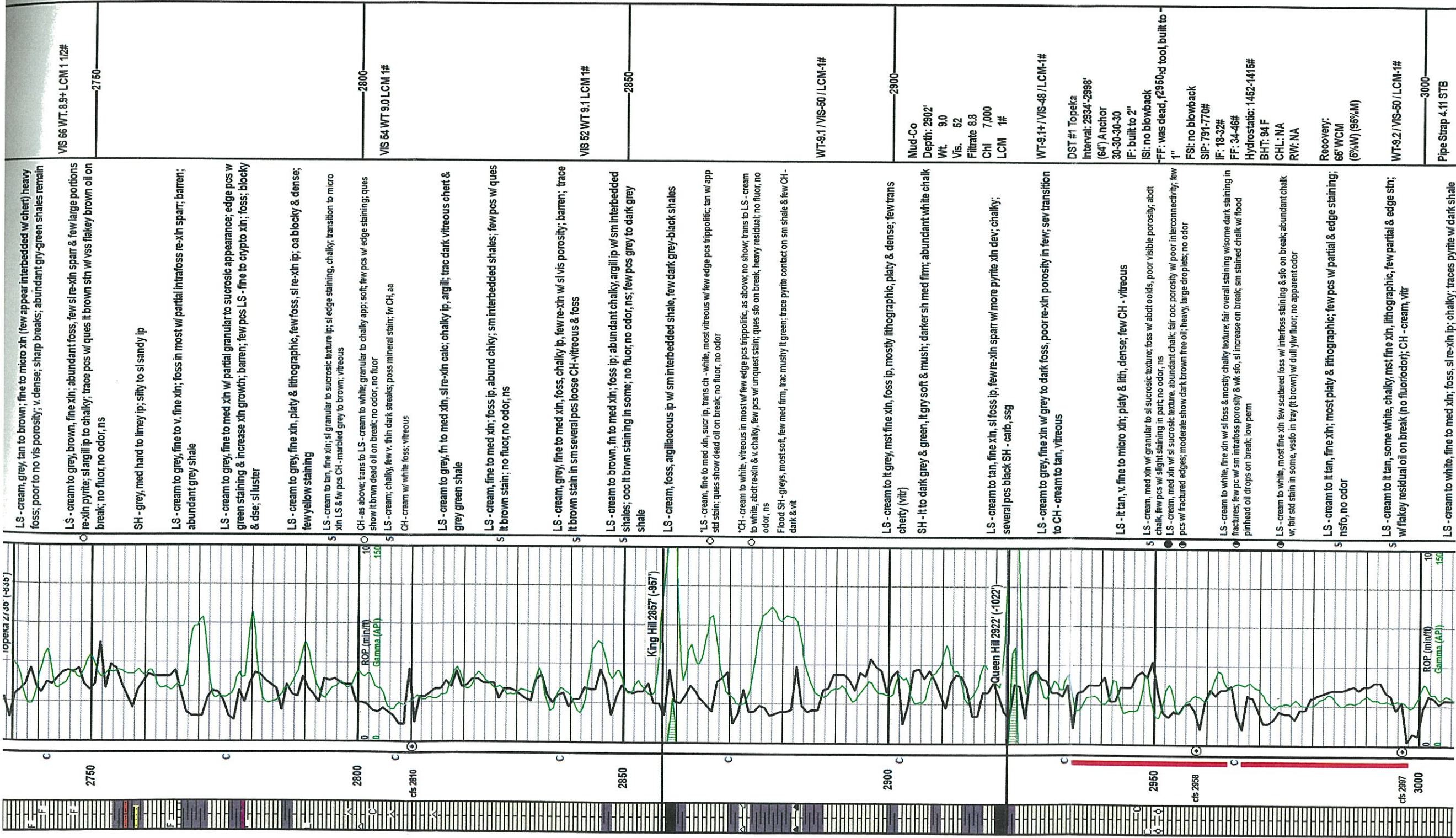
### Pipe Setting

Ran 9 jts. new 8 5/8" 20# surface pipe set at 414' and cemented with 225 sacks 60/40, 2% gel, 3% c.c. Cement did circulate. Plug down at 7:30 p.m.

**ROCK TYPES**

Anhy	Congl	Lmst tan	Shale 2	Ss
Bent	Dol	Lmst	Shale gry	Till
Brec	Gyp	Meta	Shale 1	
Cht	Igne	Mrlst	Shcol	
Clyst	Granite 2	Quartz	Shgy	
Coal	Granite	Salt	Slfst	

Lithology	MD	Rate of Penetration ROP (min/ft) Gamma (API)	Geological Descriptions	DSTs/Mud/Surveys, etc.
	2650	<p>Oil Shows</p> <p>ROP (min/ft) 0-10</p> <p>Gamma (API) 0-10</p> <p>Adjusted from Driller's pick. 840</p> <p>Anhy 850' (+1050')</p> <p>Base Anhy 876' (+1024)</p>		2550
	2600	<p>Scale Change</p> <p>ROP (min/ft) 0-10</p> <p>Gamma (API) 0-150</p>	<p>*Tops have been adjusted to ELI Wireline Logging tools &amp; samples have been lagged.</p> <p>Ran the following Open Hole Logs:</p> <ul style="list-style-type: none"> <li>&gt;CNL/CDL</li> <li>&gt;Dual Induction</li> <li>&gt;Micro-Resistivity</li> </ul>	2600 WT-8.7 / VIS-58 / LCM-1#
	2650			2650 2/16/19 (Saturday) Geologist on location @ 5pm
	2700	<p>Howard 2696' (-795')</p> <p>Topoka 2735' (-835')</p>	<p>SH - mostly grey, soft to medium; abundant mushy/sticky</p> <p>Mostly Shales, as above; few LS - cream to brown, mostly fine xln; micritic, few argillaceous w/ shale contacts ip; foss ip</p> <p>LS - cream to brown, fine to micro xln; some chert banded ip; conchoidal fractures in some; overall v dense</p> <p>LS - cream to tan, dark brown, most fine to v. fine xln; foss; partially brittle in some; few spotted stain (lt brown) poor to no vis poros; dense; few traces white chalk &amp; abundant grey-green shales (cup washes grey)</p> <p>LS - cream to grey, sm brown, mst fine to micro xln; foss ip, slr-re-xln in few (1) pc w/ vis ooc porosity; msty poor visible poros; dense &amp; blocky, fw sharp breaks; no odor; ns</p>	2700 WT-8.8 / VIS-66 / LCM-2# Start 10' Wet & Dry Samples 2700 VIS 66 WT 8.7 LCM 2#



VIS 66 WT. 8.9+ LCM 1 1I2#

2750

LS - cream, grey, tan to brown; fine to micro xin (few appear interbedded w chert) heavy foss; poor to no vis porosity; v. dense; sharp breaks; abundant gry-green shales remain  
 LS - cream to grey, brown, fine xin; abundant foss; few sl re-xin sparr & few large portions re-xin pyrite; sl argill ip to chalky; trace pcs w ques it brown stn w/ vss flakey brown oil on break; no fluor, no odor, ns  
 SH - grey, med hard to limy ip; silty to sl sandy ip

LS - cream to grey, fine to v. fine xin; foss in most w/ partial intratfoss re-xin sparr; barren; abundant grey shale

LS - cream to grey, fine to med xin w/ partial granular to sucrosic appearance; edge pcs w green staining & increase xin growth; barren; few pcs LS - fine to crypto xin; foss; blocky & dse; sl luster

LS - cream to grey, fine xin, platy & lithographic, few foss, sl re-xin ip; oa blocky & dense; few yellow staining

LS - cream to tan, fine xin; sl granular to sucrosic texture ip; sl edge staining, chalky; transition to micro xin LS & fw pcs CH - marbled grey to brown; vitreous

CH - as above; trans to LS - cream to white; granular to chalky appr; soft; few pcs w/ edge staining; ques show lt brwn dead oil on break; no odor, no fluor

LS - cream; chalky; few v. thin dark streaks; poss mineral stain; fw CH, aa  
 CH - cream w/ white foss; vitreous

ROP (min/ft)  
Gamma (API)

2800

chs 2810

LS - cream to grey, fn to med xin, sl re-xin calc; chalky ip, argill; trac dark vitreous chert & grey green shale

LS - cream, fine to med xin; foss ip, abund chky; sm interbedded shales; few pos w/ ques lt brown stain; no fluor, no odor, ns

LS - cream, grey, fine to med xin, foss, chalky ip, few re-xin w/ sl vis porosity; barren; trace lt brown stain in sm several pcs loose CH - vitreous & foss

LS - cream to brown, fn to med xin; foss ip; abundant chalky, argill ip w/ sm interbedded shales; occ lt brwn staining in some; no fluor, no odor, ns; few pcs grey to dark grey shale

LS - cream, foss, argillaceous ip w/ sm interbedded shale, few dark grey-black shales

\*LS - cream, fine to med xin, sucr ip, trans ch - white, most vitreous w/ few edge pcs trippolitic; tan w/ app std stain; ques show dead oil on break; no fluor, no odor

\*CH - cream to white, vitreous in most w/ few edge pcs trippolitic, as above; no show; trans to LS - cream to white, abdt re-xin & v. chalky, few pcs w/ unquest stain; ques sfo on break, heavy residual; no fluor, no odor, ns

Flood SH - greys, most soft, few med firm, trac musty lt green; trace pyrite contact on sm shale & few CH - dark & vit

King Hill 2857' (-957')

2850

WT-9.1 / VIS-50 / LCM-1#

2900

LS - cream to it grey, mst fine xin, foss ip, mostly lithographic, platy & dense; few trans cherty (vitr)

SH - lt to dark grey & green, lt gry soft & mush; darker sh med firm; abundant white chalk

LS - cream to tan, fine xin, sl foss ip, few re-xin sparr w/ more pyrite xin dev; chalky; several pcs black SH - carb, ssg

Queen Hill 2922' (-1022')

2900

LS - cream to grey, fine xin w/ grey to dark foss, poor re-xin porosity in few; sev transition to CH - cream to tan, vitreous

LS - lt tan, v. fine to micro xin; platy & lith, dense, few CH - vitreous

LS - cream, med xin w/ granular to sl sucrosic texture; foss w/ abdt ooids, poor visible porosity; abdt chalk, few pcs w/ slight staining in part; no odor, ns

LS - cream, med xin w/ sl sucrosic texture, abundant chalk; fair occ porosity w/ poor interconnectivity; few pcs w/ fractured edges; moderate show dark brown free oil; heavy, large droplets; no odor

LS - cream to white, fine xin w/ sl foss & mostly chalky texture; fair overall staining w/ some dark staining in fractures; few pc w/ sm intratfoss porosity & wk sfo, sl increase on break; sm stained chalk w/ flood pinhead oil drops on break; low perm

LS - cream to white, most fine xin few scattered foss w/ interfoss staining & sfo on break; abundant chalk w/ fair std stain in some, vssfo in tray (lt brown) w/ dull yw fluor; no apparent odor

LS - cream to lt tan, fine xin; most platy & lithographic; few pos w/ partial & edge staining; nsfo, no odor

LS - cream to lt tan, some white, chalky, mst fine xin, lithographic, few partial & edge stn; w/ flakey residual oil on break (no fluorodor); CH - cream, vitr

LS - cream to white, fine to med xin; foss, sl re-xin ip; chalky; traces pyrite w/ dark shale

WT-9.1+ / VIS-48 / LCM-1#

Mud-Co

Depth: 2902'

Wt. 9.0

Vis. 52

Filtrate 8.8

Chl 7,000

LCM 1#

DST #1 Topoka

Interval: 2934'-2998'

(64') Anchor

30-30-30-30

IF: built to 2"

ISI: no blowback

FF: was dead, f2950hd tool, built to 1"

FSI: no blowback

SIP: 791-770#

IF: 18-32#

FF: 34-46#

Hydrostatic: 1452-1415#

BHT: 94 F

CHL: NA

RW: NA

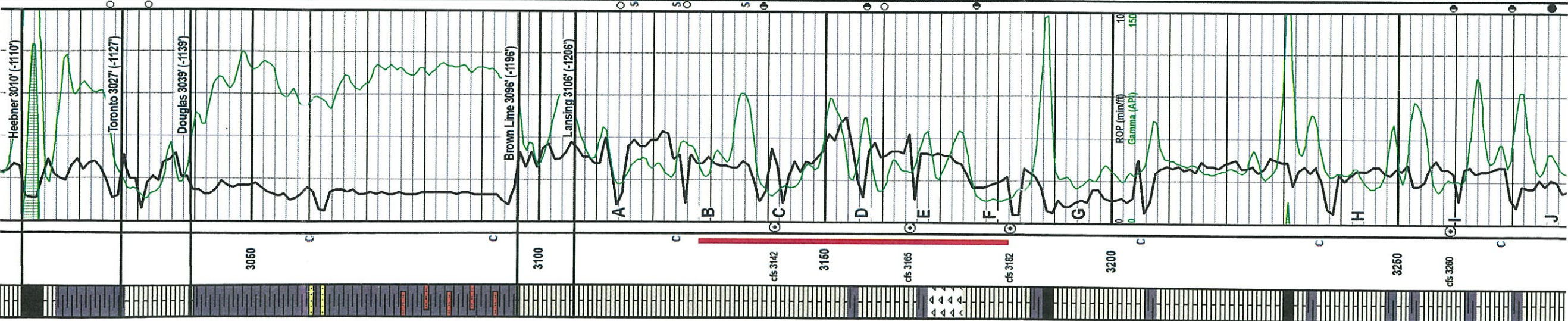
Recovery: 66% WCM

(6%W) (65%M)

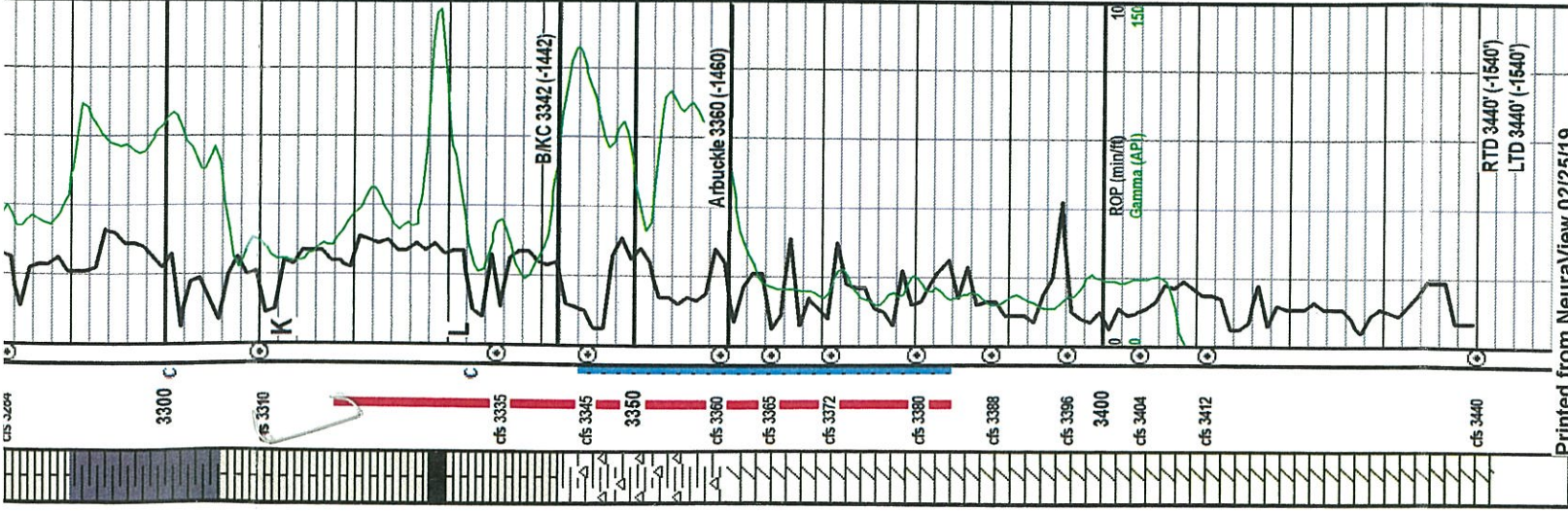
WT-9.2 / VIS-50 / LCM-1#

3000

Pipe Strap 4.11 STB



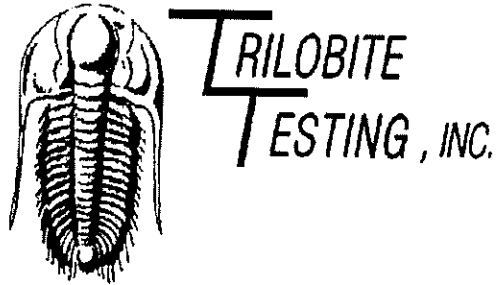
contact	SH - dark brown to black, carb; mottled shales & dense cm-brown LS & CH	*Pason depth changed by mistake while cleaning keyboard. ROP Data 2997-3021 is not accurate.
LS - cream to tan, brown, fine to med xin, foss ip; sl pp poros in some w/lt gld staining; ss clingy oil on break; no odor, no fluor or live drops; oa dense	VIS 48 WT 9.2 LCM 1#	
LS - cream to white, fine xin; few w/ pp & edge porosity, lt brown stain w/ ss clingy oil on break; trace odor; flood shales wash cup green	3050	WT-9.2+ /VIS-48 / LCM-1#
SH - varicolored; red grey green, soft & sticky, cup washes red		
SH - as above; few lt grey w/ dark micaceous specks, some soft to med firm; oa soft & gummy		
SH - mst grey & red, gummy, few loose sand grains in tray bottom		
SH - grey to green, red, gummy, some med soft to sl firm w/ sl sandy & micaceous		
SH - grey, most med soft w/ abdt black org & partial silty to sub-sandy; few gummy grey shale		
LS - tan to brown, micro xin; partial re-xin calc. ip; few foss; blocky & dense	3100	WT-9.1+ /VIS-51 / LCM-1#
LS - white, fine xin; platy & lithographic; dense; trace foss ip; no vis por, ns		
LS - white, to buff, fine xin; abdt ool & ooc porosity; trace re-xin porosity, fairly friable in most, chalky ip; 99% barren w/ some sl larry residual oil in part; sl odor; trace drop drk brown pinhead on break; overall v. poor show		DST #2 Lansing C-F Interval: 3128-3182' (54') Anchor 30-30-30-30 IF: built to 4" IS: no blowback FF: built to 2" FSI: no blowback SIP: 617-611# IF: 20-75# FF: 61-75# 3150 Hydrostatic: 1602-1574# BHT: 103 F CHL: 60,000 RW: 434 @ 20.4 F Recovery: 130' TF 70' Mud 60' WM (60%WM) (40%W)
LS - cream to white, fine xin, mostly platy & lithographic to chalky ip; few pcs ool-ool; & partial re-xin & edge porosity; mostly barren, few traces remnant black larry oil & vs pinhead show in 1 pc; chalky, oa poor show		
LS - white, fine xin, sl granular texture ip; sm ooc ~50% barren, others w/ fair saturation of dk brwn fo; ssg ip; increase show on break, dull yw floor w/ faint odor; oa fair show	cf 3142	
LS - cream to brwn, mst fine to micro xin; foss ip; blocky & dense oa; few stringers argillaceous lime & few varicolored gry-green shales	3150	
LS - cream, grey, brown, argillaceous in many w/ some interbedded shales; few LS, foss; v. dense & blocky (1-2) pcs w/ intraoolitic porosity & fso w/ increase on break (cavings?)	cf 3165	
Flood SH - lt grey & white chalk; wont wash from sample; LS - tan to brown, microxin & foss, re-xin ip, blocky & dense	cf 3182	
CH - white to lt blue; opaque to sub-translucent, vitreous, sharp & fresh w/ foss in few; few trace pcs LS - cream, highly foss w/ fair intrafoss & oom porosity; fair show fo w/ good show on break; faint cup odor; flood chalk in 45' sample w/ trace pcs aa		
95% Shales remain after DST. Few pcs LS - cream white, app v. chalky, ooc ip, soft crush	3200	WT-9.1 /VIS-52 / LCM-1#
LS - cream to white, fine xin w/ sl sucros texture ip; abdt ooc porosity w/ moderate visible connectivity; chalky on crush & barren; trans pcs LS - brown, fine to microxin & v. dense		
LS - cream, fine xin to sucrosic ip; abdt ooc-oom porosity (barren) (1) pc w/ pyrite xin dev w/ trace larry oil (solid) trans to LS - brown; v. fine to micro xin, blocky & dense	cf 3260	
LS - brown, v. fine to micro xin, trans cherty ip; foss ip; some dark to black CH - vitreous & ds		
LS - cream to brown, highly foss; chalky matrix; flood shales, lt grey mushy & dark brown, app earthy & org. soft to v. dse in few; bleeds gas		
LS - cream to grey, mst fine xin, foss ip, dense in most w/ trans crm LS - fine xin, partial suc w/ few pp edge porosity & partial re-xin, sl. Sh ip; no show, no odor		
LS - cream to brown, mst fine xin & dense; foss ip w/ sm argillaceous ls, chalky in few w/ sl dark staining in fractures; few diauc sn, no odor, ns		
LS - cream to white, fine xin, abdt chalky w/ some pp & edge porosity, partial staining in fractures; ss pp oil w/ increase on break; faint cup odor; poor to weak show oa		
LS - cream to wht, fine xin, few pcs w/ pp to sm vgy porosity & partial re-xin w/ sso; fair show on break w/ lt brown lively droplets; limited pcs; trans to LS - tan to brown, th to micro xin, dense & blocky		
LS - crm, in xin, foss ip w/ fair to good intrafoss por & re-xin; ssg w/ good show on break; scattered show free in tray; fair cup odor; oa fair to good show		
Increase in porosity w/ less chalk in matrix; increase cup odor & oa show quality		
Mud-Co	WT-9.1 /VIS-52 / LCM-1#	
Depth: 3253'		
Wt. 9.1		
Vls. 52		
Filtrate 13.6		
Chl 7,300		
LCM trace		



Printed from NeuraView 02/25/19

LS - cream to tan, brown, mst fine to micro xin ip; trace foss; oa blocky & dense; no vis porosity; trace shaley  
 LS - cream to tan, grey, fine to micro xin; blocky & dense; lithographic; trace gry-green shales  
 SH - flood grey-green shales, med soft to gummy & sticky  
 SH - grey green, med soft to gummy; sticky; washes grey; traces dark blocky shales  
 LS - crem, grey, tan to brown, fine xin, platy & lithographic; few trace foss, no vis por, trace whit chalk  
 LS - cream to tan, brown; v similar aa, platy & lithographic; trace cherty - cream to tan, vitreous & foss ip  
 LS - cream to brown, fine to micro xin, few chert, sl foss ip; trace shales; green to dark grey/black  
 LS - cream-gry, fine to med xin, dense, few foss, sl glauc staining, few grey-green shales  
 aa, increase shales, sm mottled, grey-green, maroon  
 LS - cream to grey, fine xin, sl foss w/ poor vis porosity; pp in part w/ vss (l) pc; sticky red shales wash cup red, trace SS - green, fine xin claybound  
 increase red shale, some yellow; few med hard red, mottled grey-green  
 shaley, aa, red-ylw, green-grey, some mottled; few pcs CH-yellow-orange  
 increase CH - varicolored, aa, sample washes red w/ red & whit gummy SH  
 Dol - cream white, med xin, rhombic w/ poor vis xin porosity; pyritic ip & appears to have white cherty/or chaly matrix; dense ip; no odor, fluor, ns  
 Dol - aa, lv pcs w/ green hue, shaley matrix, increase friability ip; no odor, ns  
 Dol cream to white, gry, med to crs xin in few; fair visible porosity, sm vggv ip; pyritic ip; barren, good friability in most; few clusters moderately dense; shaley ip; no show  
 Dol - cream to lt gry, fine to med xin, good visible porosity in most, few w/ white cherty to chalky matrix; few glac & pyrite; mostly good friability w/ few dense pcs; barren; no odor, ns 40' - few med to lg xin growth w/ pyrite incl, few banded & loose pyrite; no odor, fluor, no shows  
 Dol - cream lt grey, fine to med, fair vis porosity w/ white chalky matrix; gm/gry hue in some (shaley) moderately friable; decrease from sample above, barren, no odor, no fluor, no show; few pcs trans to fine xin, sub suc; blocky & dense ip; few large pyrite clusters  
 Dol - cm-gry, few buff, fine to med xin; sub-coarse ip w/ vuggy porosity; good friability in most; few w/ glauc & pyritic incl; barren; no odor, no show  
 trace pcs cherty (vis contacts) cream to varicolored; vit & shrp  
 Dol - crm-off whit, mst med to crs xin ip; foss ip w/ ooids, some ooc to vggv poros ip; gd friability in most; few dense, partial shaley & pyrite; no odor, ns  
 Dol - cream to grey, most med xin, fw coarse xin, rhomb; good friability in most pcs, few trace vuggy; few shaley ip; no odor, no fluor, ns  
 Dol - cream to off white, large clusters w/ range of xin growth, large intraxin vugs, v. good friability in most; few traces chert & pyrite; barren porosity; no odor, no fluor, no show  
 Dol - white to crm, lt gry in some, med to coarse xin w/ varying xin growth, med to large intra xin voids, excellent friability; crushes w/ v. light pressure; barren, no odor, no show  
 Dol - lt grey, mst med xin; decrease in oa xin growth range; decrease in friability, yet still good; few pcs w/ pyrite xin dev & sl lt green hue; barren  
 Dol - off white, fine to med xin, few smaller vugs in med xin pcs; moderate friability (decr) w/ some pcs sl dense; few large pyrite & partial chert contacts; no odor, no show

WT-9.1/49/LCM-1#	3300
DST #3 Arbuckle (straddle test) Interval: 3345' - 3385' (40') Anchor (55') Tailpipe MSRJUN - Tool sid 6' and had fill in bottom of hole	
WT-9.2/VIS-46/LCM-1#	
Following DST #3 TH w/Bit to condition hole. CTCH ~2 hours prior DST #4	
DST #4 Arbuckle (straddle test) Interval: 3318'-3385' (67') Anchor (55') Tailpipe 15-30-15-30 IF: BOB 1 min 45 secs ISI: no blowback FF: BOB in 2 mins FSI: no blowback SIP: 1123-1125# IF: 54-417# FF: 404-555# Hydrostatic: 1580-1538# BHT: 107 F CHL: 26,000 RW: 444 @ 39.1 F	3400
Recovery: 1188' TF 320' WCM (10%W - 90%AM) 640' WM (25%W - 75%AM) 128' MW (60%W - 40%AM) 100' MCW (90%W - 10%AM)	
Mud-Co Depth: 3440' WT: 9.1 V/S: 47 Filtrate 9.6 Chl 8.200 LCM 1#	



## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

2924 SE 84th St  
Newton KS 67114+8827

ATTN: Eli Felts

### **Stiles #1**

#### **7-16s-12w Barton,KS**

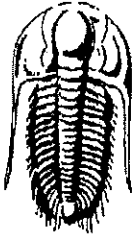
Start Date: 2019.02.17 @ 18:25:00

End Date: 2019.02.18 @ 01:42:20

Job Ticket #: 64989                      DST #: 1

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

Printed: 2019.02.22 @ 12:00:52



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

**7-16s-12w Barton,KS**

**Stiles #1**

Job Ticket: 64989      **DST#: 1**

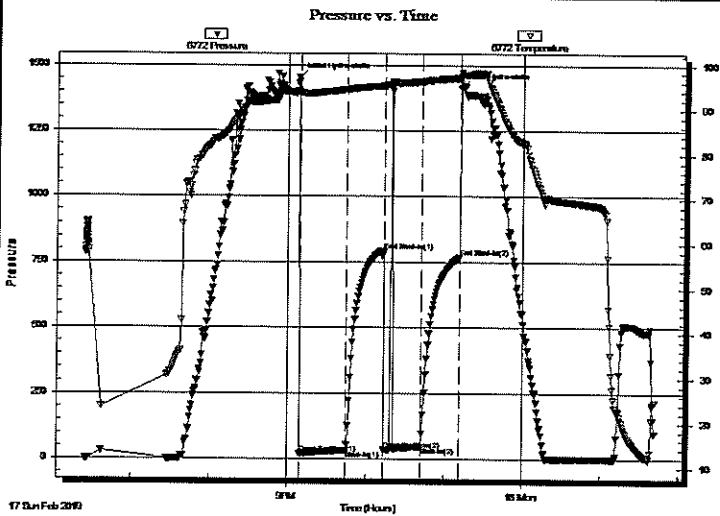
Test Start: 2019.02.17 @ 18:25:00

## GENERAL INFORMATION:

Formation: **Topeka**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 21:09:20  
 Time Test Ended: 01:42:20  
 Interval: **2934.00 ft (KB) To 2998.00 ft (KB) (TVD)**  
 Total Depth: 2998.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Benny Mulligan  
 Unit No: 66  
 Reference Elevations: 1900.00 ft (KB)  
 1889.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6772      Inside**  
 Press@RunDepth: 46.58 psig @ 2935.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2019.02.17      End Date: 2019.02.18      Last Calib.: 2019.02.18  
 Start Time: 18:25:01      End Time: 01:42:20      Time On Btm: 2019.02.17 @ 21:08:10  
 Time Off Btm: 2019.02.17 @ 23:12:10

**TEST COMMENT:** I.F.-30- Blow built to 2"  
 I.S.I.-30- No blow back  
 F.F.-30- No blow - flushed tool then it built to 1"  
 F.S.I.-30- No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1452.22	94.26	Initial Hydro-static
2	18.75	93.82	Open To Flow (1)
37	32.55	94.49	Shut-In(1)
66	791.44	95.32	End Shut-In(1)
66	34.03	94.98	Open To Flow (2)
94	46.58	96.31	Shut-In(2)
124	770.03	97.11	End Shut-In(2)
124	1415.50	97.45	Final Hydro-static

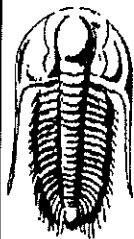
## Recovery

Length (ft)	Description	Volume (bbl)
65.00	W.C.M. 5%W 95%M	0.32

## Gas Rates

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





**TRILLOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
 2924 SE 84th St  
 New ton KS 67114+8827  
 ATTN: Eil Felts

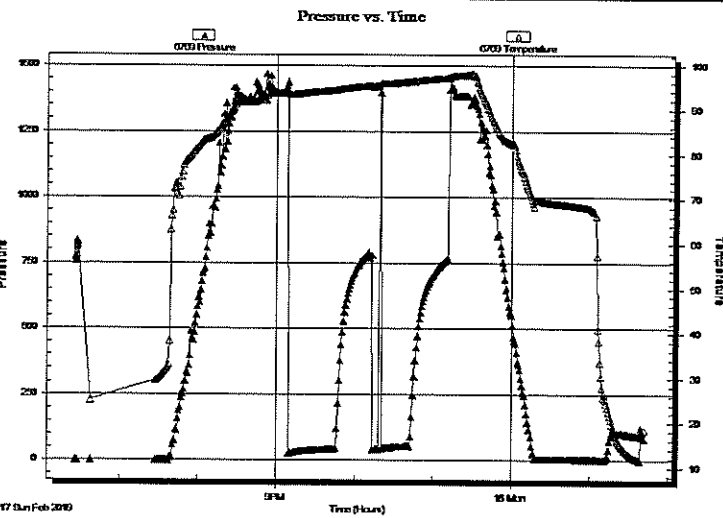
**7-16s-12w Barton, KS**  
**Stiles #1**  
 Job Ticket: 64989          DST#: 1  
 Test Start: 2019.02.17 @ 18:25:00

## GENERAL INFORMATION:

Formation: **Topeka**  
 Deviated: No Whipstock:                  ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 21:09:20                  Tester: Benny Mulligan  
 Time Test Ended: 01:42:20                  Unit No: 66  
 Interval: **2934.00 ft (KB) To 2998.00 ft (KB) (TVD)**          Reference Elevations: 1900.00 ft (KB)  
 Total Depth: 2998.00 ft (KB) (TVD)                  1889.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair                  KB to GR/CF: 11.00 ft

**Serial #: 6769          Outside**  
 Press@RunDepth:                  psig @ 2935.00 ft (KB)                  Capacity: 8000.00 psig  
 Start Date: 2019.02.17          End Date: 2019.02.18          Last Calib.: 2019.02.18  
 Start Time: 18:25:01          End Time: 01:42:20          Time On Btm:  
    Time Off Btm:

**TEST COMMENT:** I.F.-30- Blow built to 2"  
 I.S.I.-30- No blow back  
 F.F.-30- No blow - flushed tool then it built to 1"  
 F.S.I.-30- No blow back



## PRESSURE SUMMARY

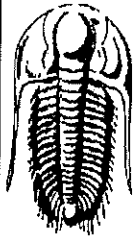
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	W.C.M. 5%W 95%M	0.32

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64989

DST#: 1

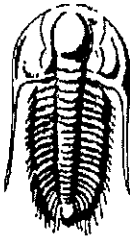
Test Start: 2019.02.17 @ 18:25:00

## Tool Information

Drill Pipe:	Length: 2822.00 ft	Diameter: 3.88 inches	Volume: 41.27 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: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 41.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	2934.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	91.00 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			2908.00	
Shut In Tool	5.00			2913.00	
Hydraulic tool	5.00			2918.00	
Jars	5.00			2923.00	
Safety Joint	2.00			2925.00	
Packer	5.00			2930.00	27.00 Bottom Of Top Packer
Packer	4.00			2934.00	
Stubb	1.00			2935.00	
Recorder	0.00	6772	Inside	2935.00	
Recorder	0.00	6769	Outside	2935.00	
Perforations	26.00			2961.00	
Change Over Sub	1.00			2962.00	
Drill Pipe	32.00			2994.00	
Change Over Sub	1.00			2995.00	
Bullnose	3.00			2998.00	64.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>91.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS  
Stiles #1  
Job Ticket: 64989      DST#: 1  
Test Start: 2019.02.17 @ 18:25:00

## 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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	W.C.M. 5%W 95%M	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

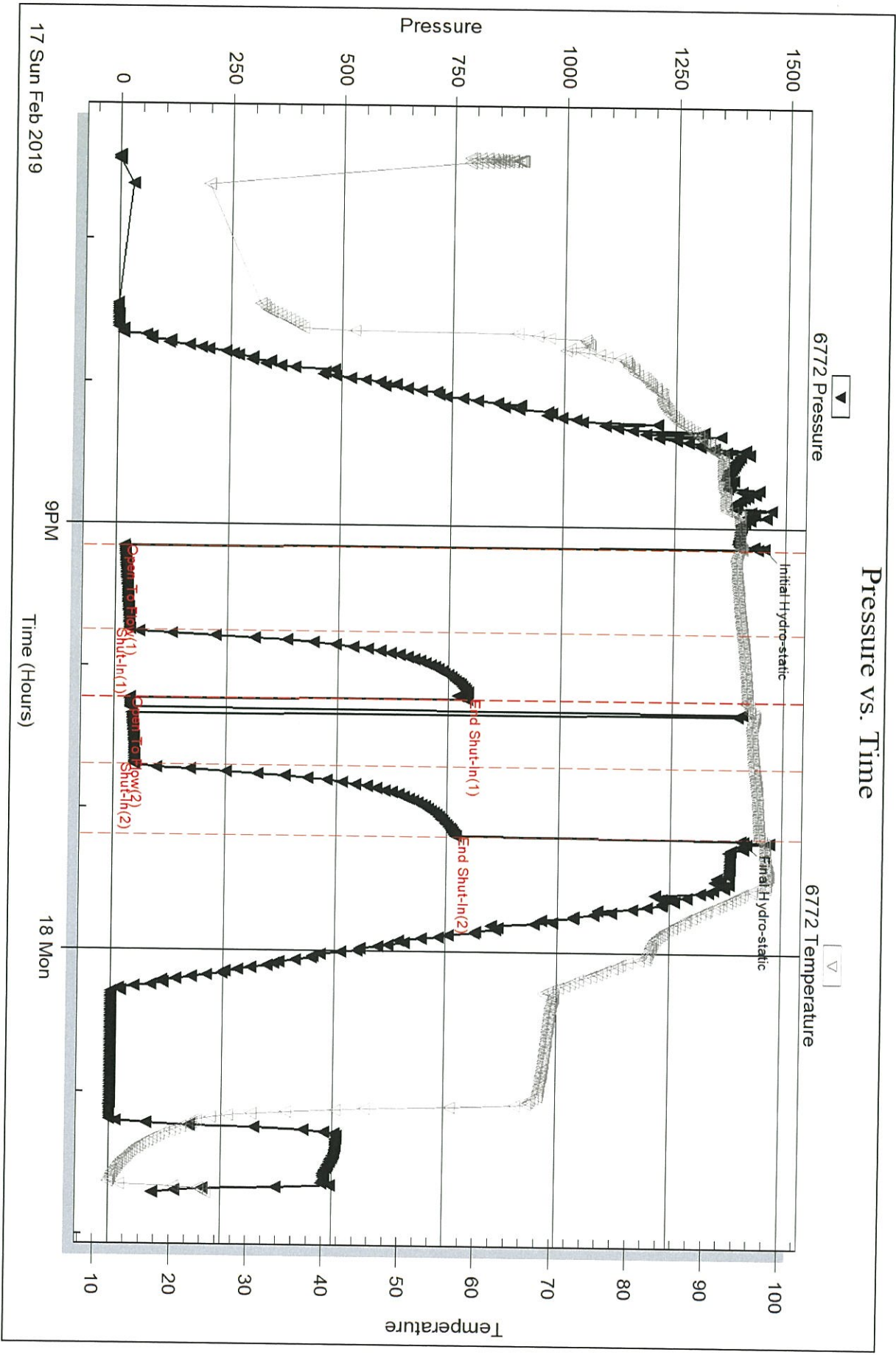
Serial #: 6772

Inside

Palomino Petroleum Inc

Stiles #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 64989

Printed: 2019.02.22 @ 12:00:53

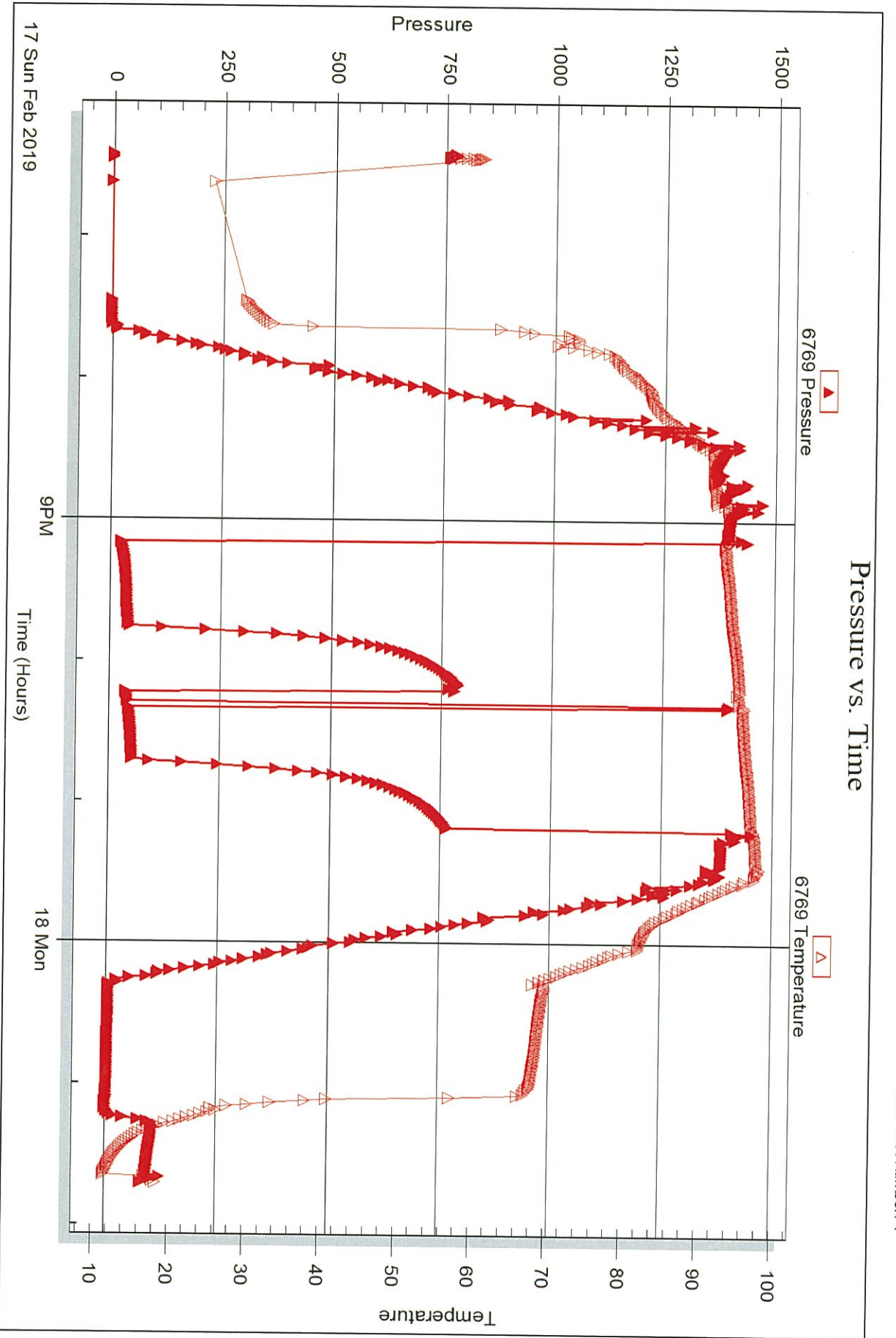
Serial #: 6769

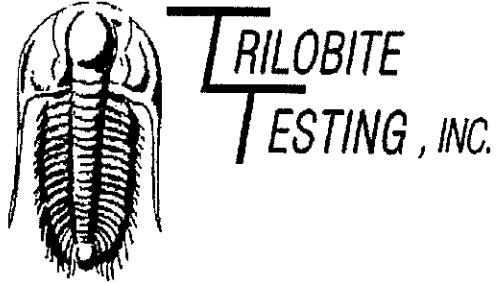
Outside

Palomino Petroleum Inc

Stiles #1

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

2924 SE 84th St  
Newton KS 67114+8827

ATTN: Eli Felts

### **Stiles #1**

#### **7-16s-12w Barton,KS**

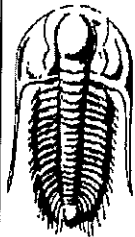
Start Date: 2019.02.18 @ 18:31:00

End Date: 2019.02.19 @ 01:31:00

Job Ticket #: 64990                      DST #: 2

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

Printed: 2019.02.22 @ 12:00:29



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
 2924 SE 84th St  
 Newton KS 67114+8827  
 ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64990

DST#: 2

Test Start: 2019.02.18 @ 18:31:00

## GENERAL INFORMATION:

Formation: **LKC C - F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:48:00

Time Test Ended: 01:31:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Benny Mulligan

Unit No: 66

Interval: **3128.00 ft (KB) To 3182.00 ft (KB) (TVD)**

Total Depth: 3128.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1900.00 ft (KB)

1889.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: **6772**

Inside

Press@RunDepth: 75.98 psig @ 3129.00 ft (KB)

Start Date: 2019.02.18

End Date:

2019.02.19

Start Time: 18:31:01

End Time:

01:31:00

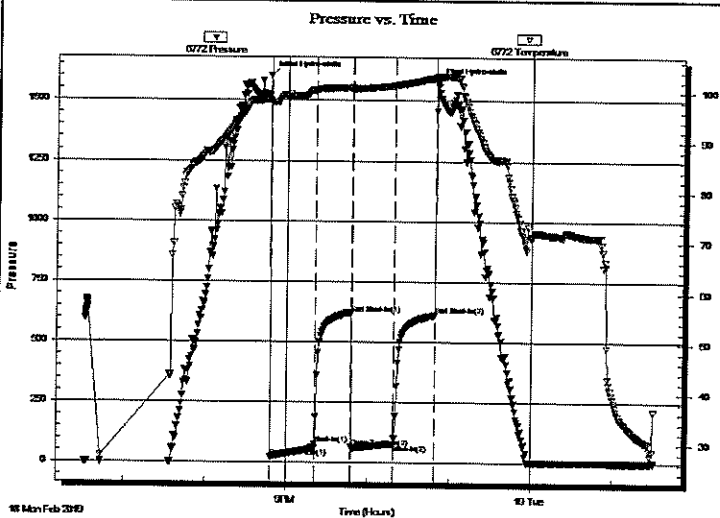
Capacity: 8000.00 psig

Last Calib.: 2019.02.19

Time On Btm: 2019.02.18 @ 20:47:10

Time Off Btm: 2019.02.18 @ 22:50:00

TEST COMMENT: I.F.-30- Blow built to 4"  
 I.S.I.-30- No blow back  
 F.F.-30- Blow built to 2"  
 F.S.I.-30- No blow back



## PRESSURE SUMMARY

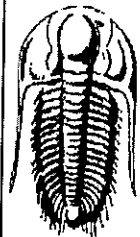
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1602.05	98.36	Initial Hydro-static
1	20.73	97.82	Open To Flow (1)
34	75.04	100.21	Shut-In(1)
60	617.85	100.79	End Shut-In(1)
61	61.59	100.65	Open To Flow (2)
92	75.98	101.23	Shut-In(2)
122	611.61	102.96	End Shut-In(2)
123	1574.88	102.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	WM 40%W 60%M	0.30
70.00	Mud 100%M	0.47

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

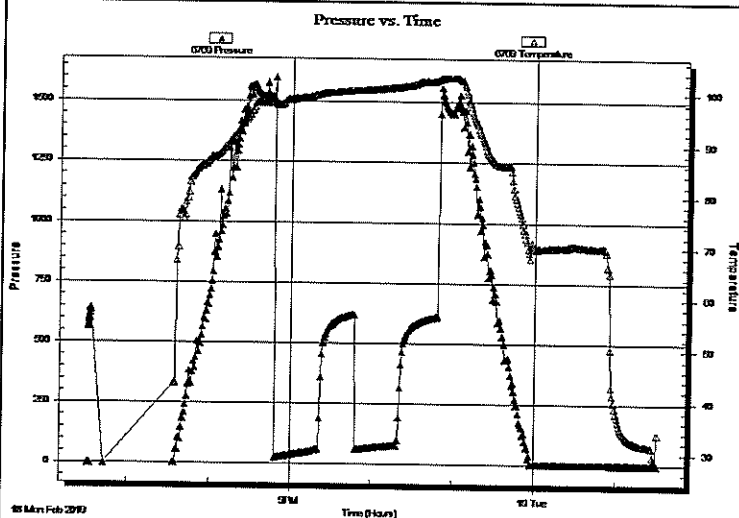
7-16s-12w Barton,KS  
**Stiles #1**  
Job Ticket: 64990 **DST#: 2**  
Test Start: 2019.02.18 @ 18:31:00

### GENERAL INFORMATION:

Formation: **LKC C - F**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 20:48:00  
Time Test Ended: 01:31:00  
Interval: **3128.00 ft (KB) To 3182.00 ft (KB) (TVD)**  
Total Depth: 3128.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Benny Mulligan  
Unit No: 66  
Reference Elevations: 1900.00 ft (KB)  
1889.00 ft (CF)  
KB to GR/CF: 11.00 ft

**Serial #: 6769 Outside**  
Press@RunDepth: psig @ 3129.00 ft (KB)  
Start Date: 2019.02.18 End Date: 2019.02.19 Capacity: 8000.00 psig  
Start Time: 18:31:01 End Time: 01:31:00 Last Calib.: 2019.02.19  
Time On Btm:  
Time Off Btm:

TEST COMMENT: I.F.-30- Blow built to 4"  
I.S.I.-30- No blow back  
F.F.-30- Blow built to 2"  
F.S.I.-30- No blow back



### PRESSURE SUMMARY

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

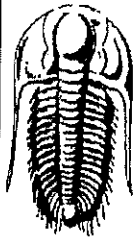
### Recovery

Length (ft)	Description	Volume (bbl)
60.00	WM 40%W 60%M	0.30
70.00	Mud 100%M	0.47

### Gas Rates

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





**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64990

DST#: 2

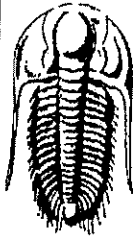
Test Start: 2019.02.18 @ 18:31:00

## Tool Information

Drill Pipe:	Length: 3015.00 ft	Diameter: 3.88 inches	Volume: 44.09 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: 25000.00 lb
Drill Collar:	Length: 117.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 44.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3128.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	81.00 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			3102.00	
Shut In Tool	5.00			3107.00	
Hydraulic tool	5.00			3112.00	
Jars	5.00			3117.00	
Safety Joint	2.00			3119.00	
Packer	5.00			3124.00	27.00 Bottom Of Top Packer
Packer	4.00			3128.00	
Stubb	1.00			3129.00	
Recorder	0.00	6772	Inside	3129.00	
Recorder	0.00	6769	Outside	3129.00	
Perforations	16.00			3145.00	
Change Over Sub	1.00			3146.00	
Drill Pipe	32.00			3178.00	
Change Over Sub	1.00			3179.00	
Bullnose	3.00			3182.00	54.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>81.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eii Felts

7-16s-12w Barton,KS  
Stiles #1  
Job Ticket: 64990      DST#: 2  
Test Start: 2019.02.18 @ 18:31:00

## 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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7100.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	WM 40%W 60%M	0.295
70.00	Mud 100%M	0.470

Total Length: 130.00 ft      Total Volume: 0.765 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: .434@20.4 RW

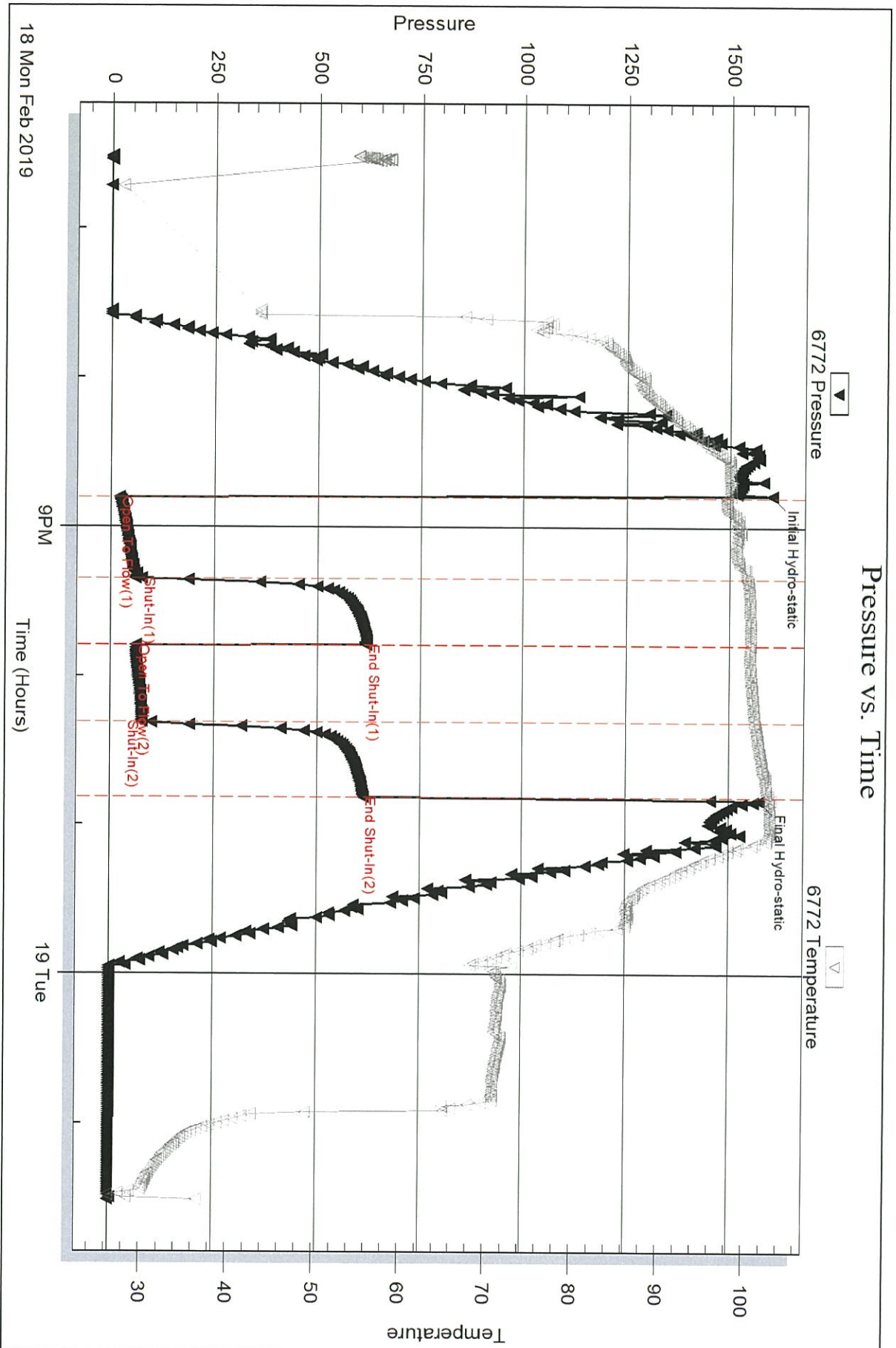
Serial #: 6772

Inside

Palomino Petroleum Inc

Stiles #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 64990

Printed: 2019.02.22 @ 12:00:30

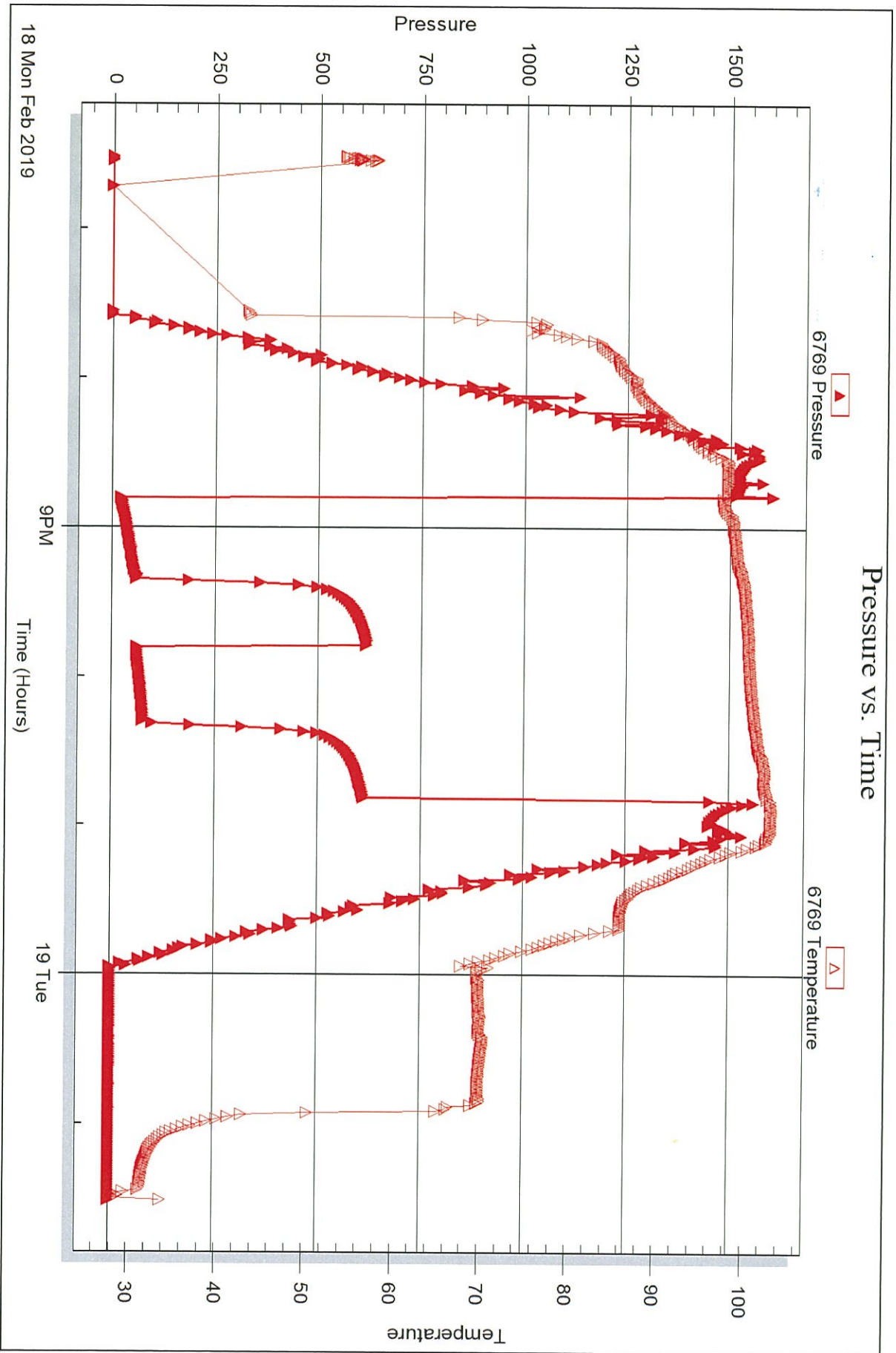
Serial #: 6769

Outside

Palomino Petroleum Inc

Stiles #1

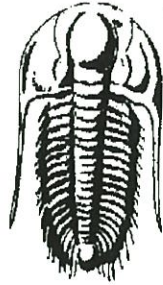
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 64990

Printed: 2019.02.22 @ 12:00:30



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

2924 SE 84th St  
Newton KS 67114+8827

ATTN: Eli Felts

### **Stiles #1**

#### **7-16s-12w Barton,KS**

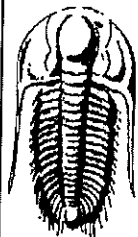
Start Date: 2019.02.20 @ 15:16:01

End Date: 2019.02.20 @ 21:22:20

Job Ticket #: 64991                      DST #: 3

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

Printed: 2019.02.22 @ 11:59:43



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64991                      DST#: 3  
Test Start: 2019.02.20 @ 15:16:01

### GENERAL INFORMATION:

Formation:         **Arbuckle**  
Deviated:         No     Whipstock:             ft (KB)  
Time Tool Opened:  
Time Test Ended: 21:22:20

Test Type:   Conventional Straddle (Initial)  
Tester:       Benny Mulligan  
Unit No:       66

Interval:       **3345.00 ft (KB) To 3385.00 ft (KB) (TVD)**  
Total Depth:     3440.00 ft (KB) (TVD)  
Hole Diameter:   7.88 inches   Hole Condition:

Reference Elevations:     1900.00 ft (KB)  
   1889.00 ft (CF)  
KB to GR/CF:                 11.00 ft

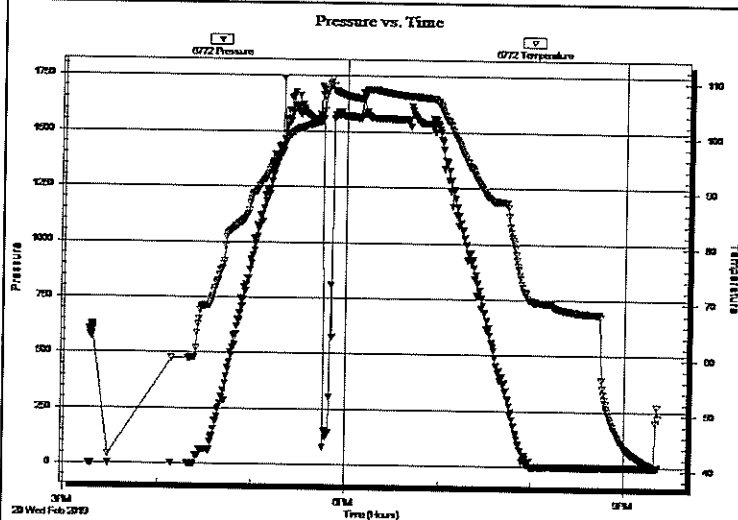
Serial #: **6772**

Outside

Press@RunDepth:             psig @   3345.36 ft (KB)  
Start Date:                   2019.02.20         End Date:                   2019.02.20  
Start Time:                   15:16:01            End Time:                   21:22:20

Capacity:                    8000.00 psig  
Last Calib.:                  2019.02.21  
Time On Btm:  
Time Off Btm:

TEST COMMENT: Packer failed - slid 6 ft - fill on bottom



### PRESSURE SUMMARY

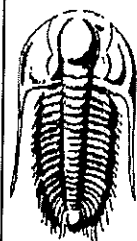
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)

### Gas Rates

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



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Palomino Petroleum Inc  
 2924 SE 84th St  
 Newton KS 67114+8827  
 ATTN: Eli Felts

7-16s-12w Barton, KS

Stiles #1

Job Ticket: 64991

DST#: 3

Test Start: 2019.02.20 @ 15:16:01

### GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: **No Whipstock** ft (KB)  
 Time Tool Opened:  
 Time Test Ended: 21:22:20

Test Type: Conventional Straddle (Initial)  
 Tester: Benny Mulligan  
 Unit No: 66

Interval: 3345.00 ft (KB) To 3385.00 ft (KB) (TVD)  
 Total Depth: 3440.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 1900.00 ft (KB)  
 1889.00 ft (CF)  
 KB to GR/CF: 11.00 ft

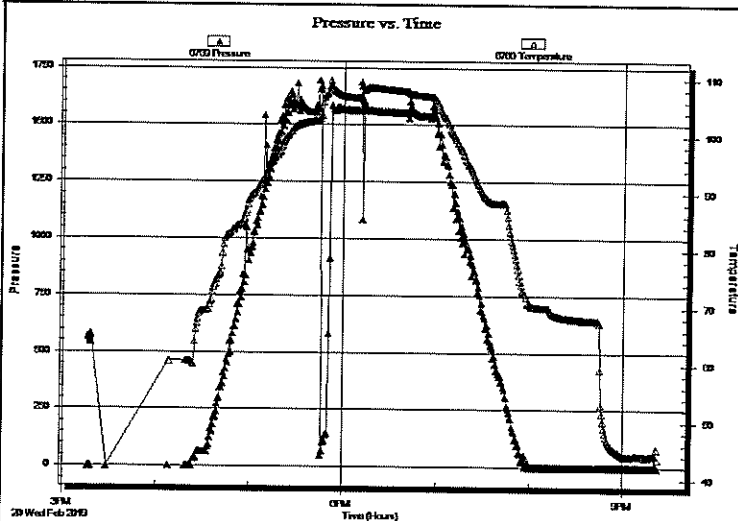
Serial #: 6769

Outside

Press@RunDepth: psig @ 3345.36 ft (KB)  
 Start Date: 2019.02.20 End Date: 2019.02.20  
 Start Time: 15:16:01 End Time: 21:22:40

Capacity: 8000.00 psig  
 Last Calib.: 2019.02.21  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Packer failed - slid 6 ft - fill on bottom



### PRESSURE SUMMARY

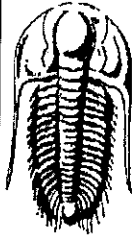
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
 2924 SE 84th St  
 Newton KS 67114+8827  
 ATTN: Eli Felts

7-16s-12w Barton, KS

Stiles #1

Job Ticket: 64991

DST#: 3

Test Start: 2019.02.20 @ 15:16:01

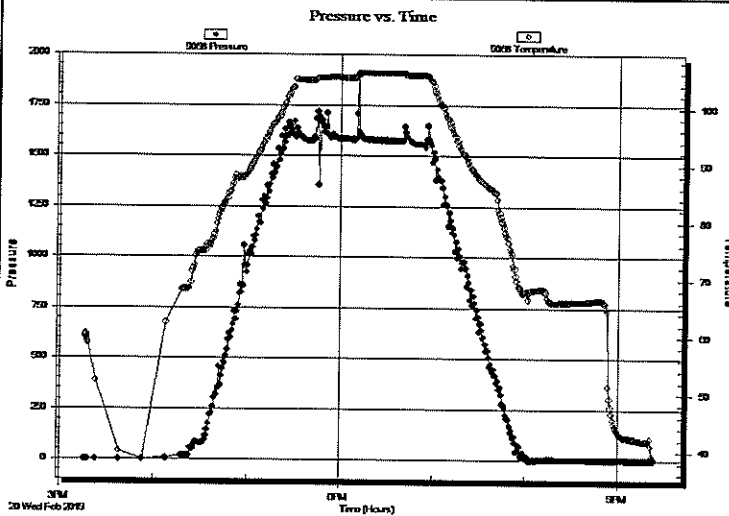
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened:  
 Time Test Ended: 21:22:20  
 Interval: **3345.00 ft (KB) To 3385.00 ft (KB) (TVD)**  
 Total Depth: 3440.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition:  
 Test Type: Conventional Straddle (Initial)  
 Tester: Benny Mulligan  
 Unit No: 66  
 Reference Elevations: 1900.00 ft (KB)  
 1889.00 ft (CF)  
 KB to GR/CF: 11.00 ft

## Serial #: 9058

Press@RunDepth: psig @ 3386.36 ft (KB)  
 Start Date: 2019.02.20 End Date: 2019.02.20 Capacity: 8000.00 psig  
 Start Time: 15:16:05 End Time: 21:22:44 Last Calib.: 2019.02.21  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Packer failed - slid 6 ft - fill on bottom



## · PRESSURE SUMMARY

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

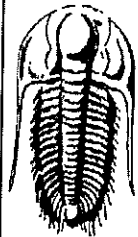
## Recovery

Length (ft)	Description	Volume (bbl)

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64991

DST#: 3

Test Start: 2019.02.20 @ 15:16:01

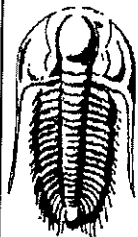
## Tool Information

Drill Pipe:	Length: 3227.00 ft	Diameter: 3.88 inches	Volume: 47.19 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: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 47.76 bbl</u>	Tool Chased 6.00 ft
Drill Pipe Above KB:	15.03 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3345.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	3440.36 ft			
Interval between Packers:	95.36 ft			
Tool Length:	112.39 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3328.97	
Shut In Tool	5.00			3333.97	
Hydraulic tool	5.00			3338.97	
Jars	2.05			3341.02	
Safety Joint	0.78			3341.80	
Packer	1.78			3343.58	17.03 Bottom Of Top Packer
Packer	1.42			3345.00	
Stubb	0.36			3345.36	
Recorder	0.00	6772	Outside	3345.36	
Recorder	0.00	6769	Outside	3345.36	
Drill Pipe	32.00			3377.36	
Perforations	1.00			3378.36	
Change Over Sub	1.00			3379.36	
Blank Off Sub	1.00			3380.36	
Packer - Shale	5.00			3385.36	
Stubb	1.00			3386.36	
Recorder	0.00	9058		3386.36	
Perforations	17.00			3403.36	
Change Over Sub	1.00			3404.36	
Drill Pipe	32.00		Below	3436.36	
Change Over Sub	1.00			3437.36	
Bullnose	3.00			3440.36	95.36 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>112.39</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS  
Stiles #1  
Job Ticket: 64991      DST#: 3  
Test Start: 2019.02.20 @ 15:16:01

## 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: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8200.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl

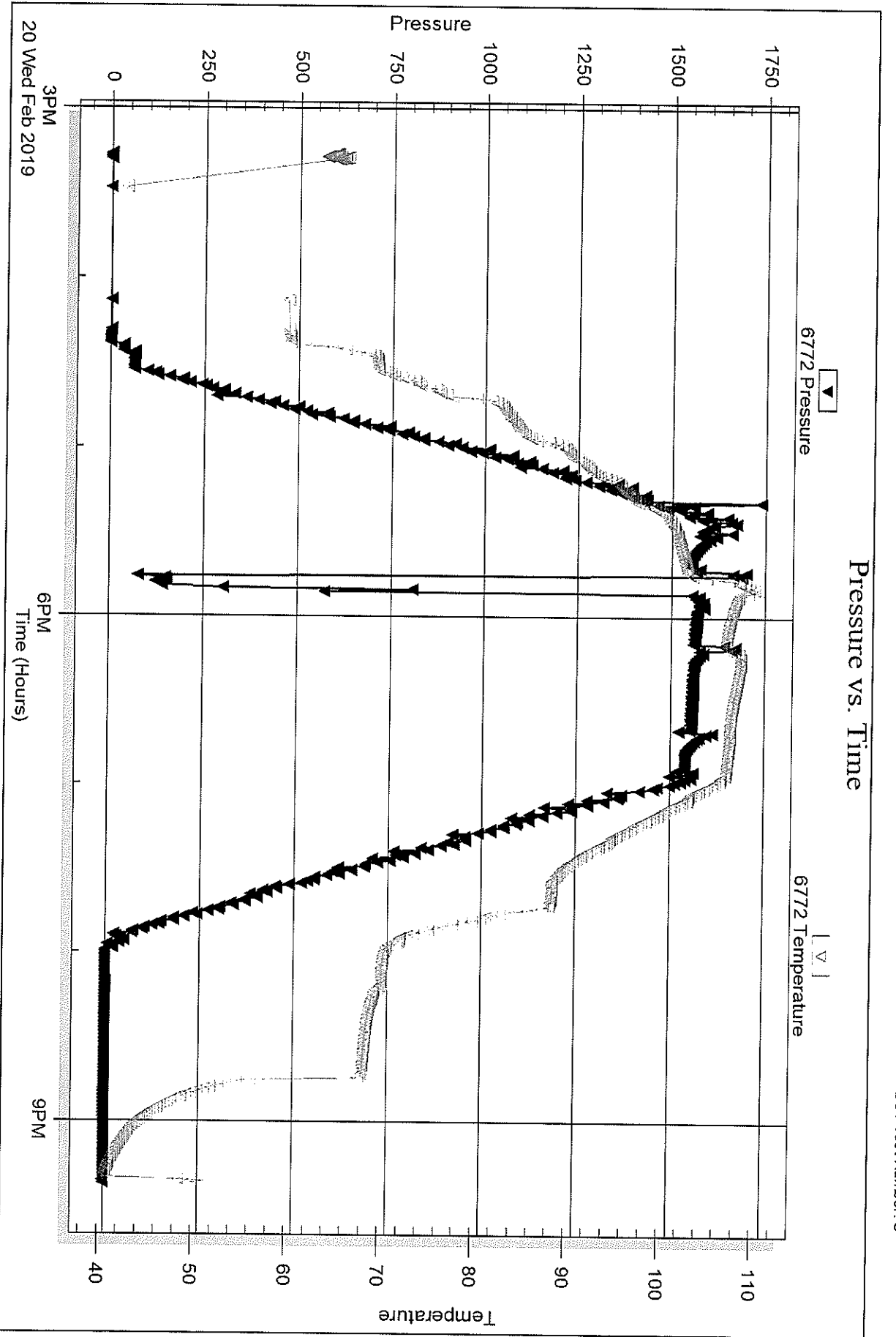
Total Length:                      ft      Total Volume:                      bbl  
 Num Fluid Samples: 0                      Num Gas Bombs: 0                      Serial #:  
 Laboratory Name:                      Laboratory Location:  
 Recovery Comments:

Serial #: 6772

Outside Palomino Petroleum Inc

Stiles #1

DST Test Number: 3

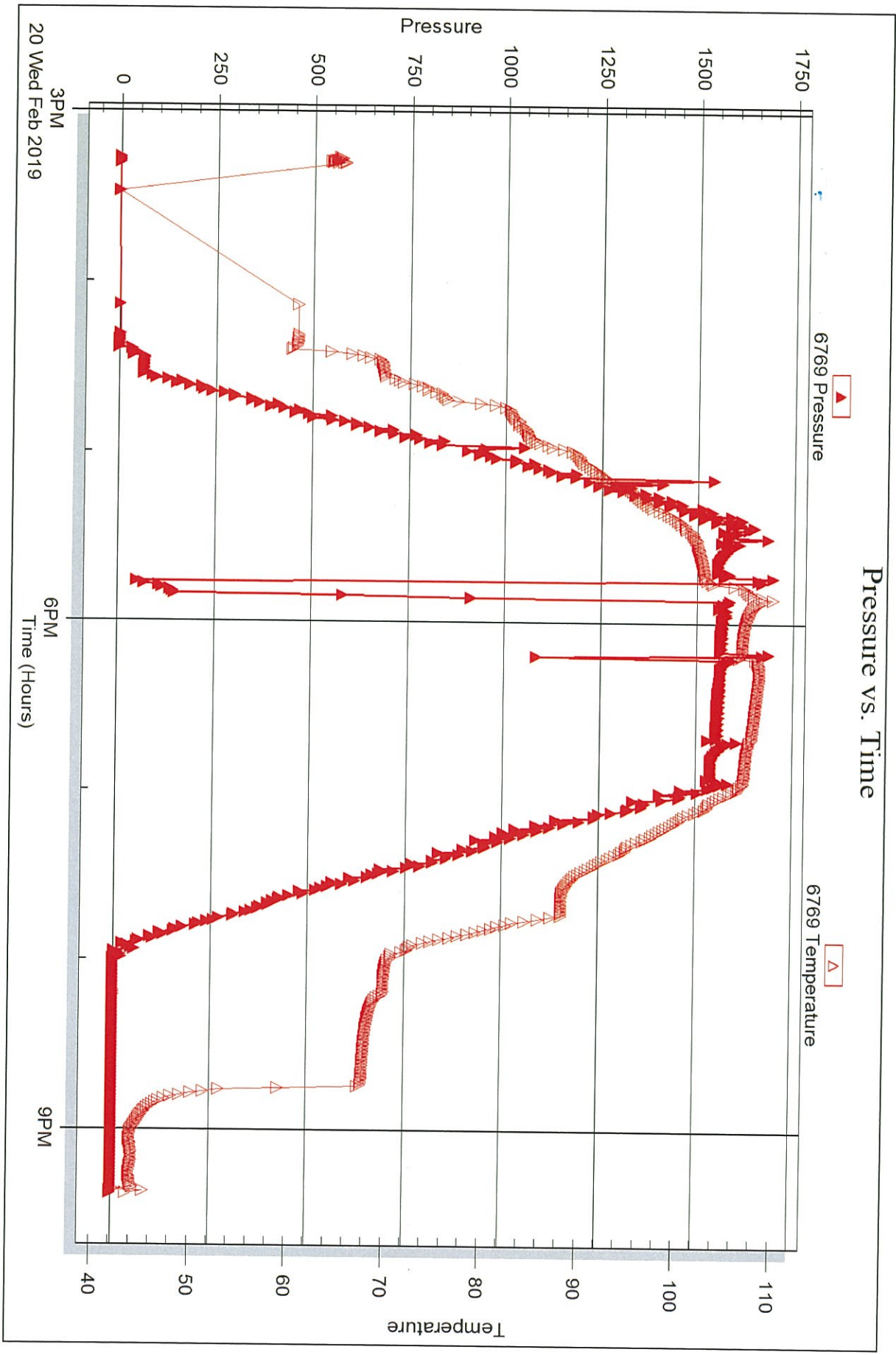


Serial #: 6769

Outside Palomino Petroleum Inc

Stiles #1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 64991

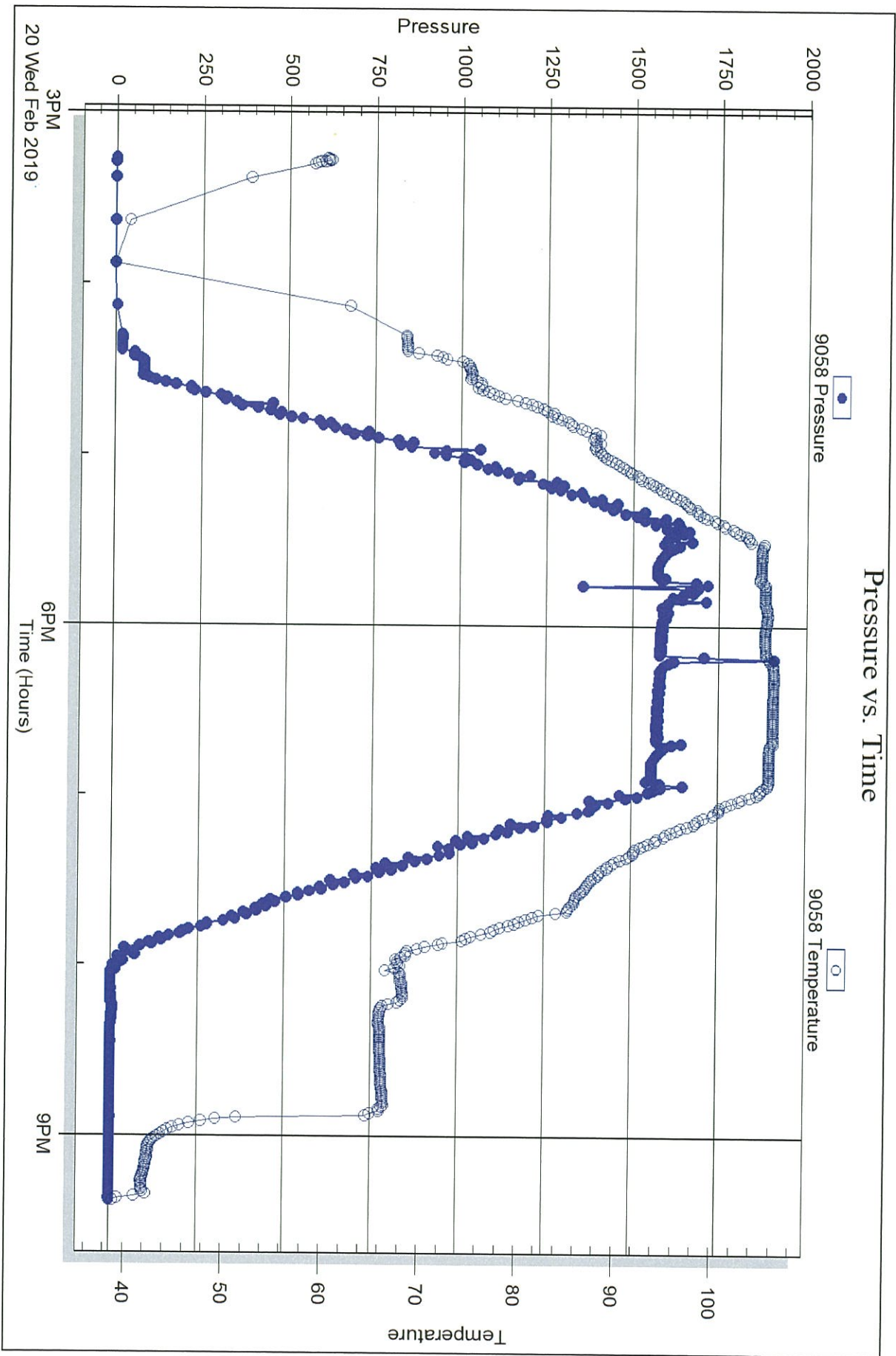
Printed: 2019.02.22 @ 11:59:44

Serial #: 9058

Palomino Petroleum Inc

Stiles #1

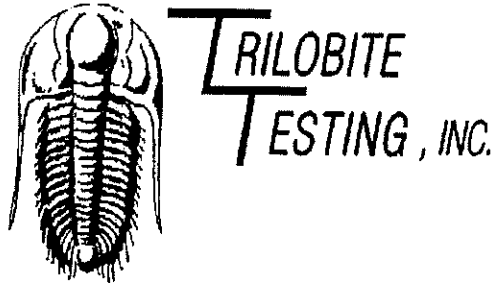
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 64991

Printed: 2019.02.22 @ 11:59:45



## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

2924 SE 84th St  
Newton KS 67114+8827

ATTN: Eli Felts

### **Stiles #1**

### **7-16s-12w Barton,KS**

Start Date: 2019.02.21 @ 03:17:00

End Date: 2019.02.21 @ 11:19:30

Job Ticket #: 64992                      DST #: 4

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

Printed: 2019.02.22 @ 11:56:28



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

7-16s-12w Barton,KS

Stiles #1

Job Ticket: 64992

DST#: 4

Test Start: 2019.02.21 @ 03:17:00

## GENERAL INFORMATION:

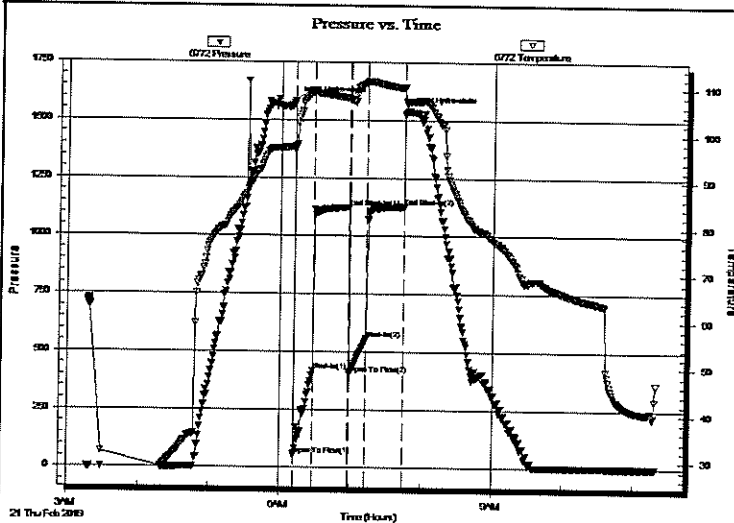
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 06:12:20  
 Time Test Ended: 11:19:30  
 Interval: **3318.00 ft (KB) To 3385.00 ft (KB) (TVD)**  
 Total Depth: 3440.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Initial)  
 Tester: Benny Mulligan  
 Unit No: 66  
 Reference Elevations: 1900.00 ft (KB)  
 1889.00 ft (CF)  
 KB to GR/CF: 11.00 ft

Serial #: 6772

Inside

Press@RunDepth: 556.75 psig @ 3325.00 ft (KB)  
 Start Date: 2019.02.21 End Date: 2019.02.21 Capacity: 8000.00 psig  
 Start Time: 03:17:01 End Time: 11:19:30 Last Calib.: 2019.02.21  
 Time On Btm: 2019.02.21 @ 06:12:00  
 Time Off Btm: 2019.02.21 @ 07:46:50

TEST COMMENT: I.F.-15-BOB 1 min 45 sec total build of 107"  
 I.S.I.-30- Weak blow back that died  
 F.F.-15- BOB 2 mins total build of 64"  
 F.S.I.-30-no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1580.45	97.49	Initial Hydro-static
1	54.09	97.19	Open To Flow (1)
17	417.20	109.20	Shut-In(1)
47	1123.01	107.91	End Shut-In(1)
47	404.65	107.70	Open To Flow (2)
62	556.75	111.26	Shut-In(2)
92	1125.27	110.02	End Shut-In(2)
95	1538.04	106.86	Final Hydro-static

## Recovery

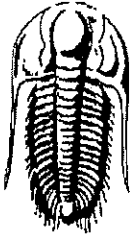
Length (ft)	Description	Volume (bbl)
100.00	M.C.W. 10%M 90%W	0.49
128.00	M.W. 40%M 60%W	1.72
640.00	W.M. 25%W 75%M	9.36
320.00	W.C.M. 10%W 90%M	4.68

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

**7-16s-12w Barton,KS**

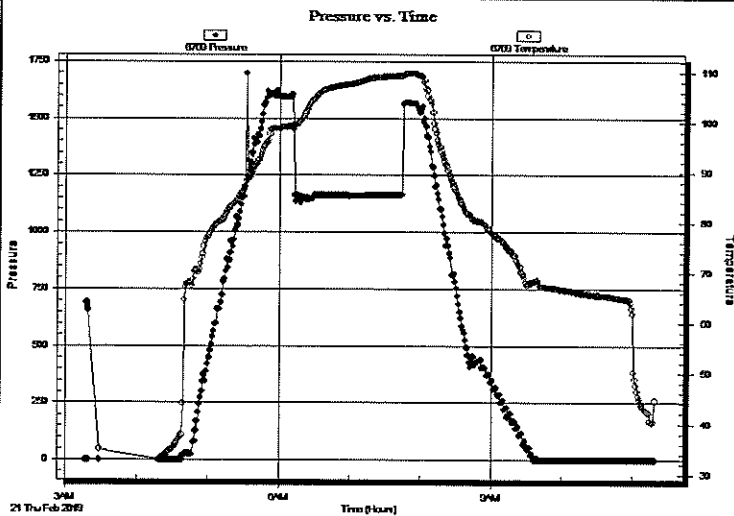
**Stiles #1**  
Job Ticket: 64992      DST#: 4  
Test Start: 2019.02.21 @ 03:17:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 06:12:20  
Time Test Ended: 11:19:30  
Test Type: Conventional Straddle (Initial)  
Tester: Benny Mulligan  
Unit No: 66  
Interval: **3318.00 ft (KB) To 3385.00 ft (KB) (TVD)**  
Reference Elevations: 1900.00 ft (KB)  
Total Depth: 3440.00 ft (KB) (TVD)      1889.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GRVCF: 11.00 ft

**Serial #: 6769      Below (Straddle)**  
Press@RunDepth:      psig @ 3400.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2019.02.21      End Date: 2019.02.21      Last Calib.: 2019.02.21  
Start Time: 03:17:01      End Time: 11:19:30      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** I.F.-15-BOB 1 min 45 sec total build of 107"  
I.S.I.-30- Weak blow back that died  
F.F-15- BOB 2 mins total build of 64"  
F.S.I.-30-no blow back



## PRESSURE SUMMARY

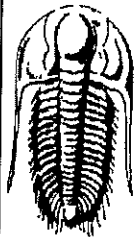
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
100.00	M.C.W. 10%M 90%W	0.49
128.00	M.W. 40%M 60%W	1.72
640.00	W.M. 25%W 75%M	9.36
320.00	W.C.M. 10%W 90%M	4.68

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

**7-16s-12w Barton,KS**

**Stiles #1**

Job Ticket: 64992

**DST#: 4**

Test Start: 2019.02.21 @ 03:17:00

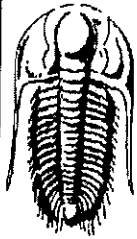
## Tool Information

Drill Pipe:	Length: 3205.00 ft	Diameter: 3.88 inches	Volume: 46.87 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: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 47.44 bbl</u>	Tool Chased 6.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3318.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	3441.00 ft			
Interval between Packers:	123.00 ft			
Tool Length:	152.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3290.00	
Shut In Tool	5.00			3295.00	
Hydraulic tool	5.00			3300.00	
Jars	5.00			3305.00	
Safety Joint	4.00			3309.00	
Packer	5.00			3314.00	29.00 Bottom Of Top Packer
Packer	4.00			3318.00	
Stubb	1.00			3319.00	
Perforations	5.00			3324.00	
Change Over Sub	1.00			3325.00	
Recorder	0.00	6772	Inside	3325.00	
Recorder	0.00	9058	Outside	3325.00	
Drill Pipe	32.00			3357.00	
Change Over Sub	1.00			3358.00	
Perforations	23.00			3381.00	
Blank Off Sub	1.00			3382.00	
Packer - Shale	4.00			3386.00	
Stubb	1.00			3387.00	
Perforations	12.00			3399.00	
Change Over Sub	1.00			3400.00	
Recorder	0.00	6769	Below	3400.00	
Drill Pipe	32.00			3432.00	
Change Over Sub	1.00			3433.00	
Perforations	5.00			3438.00	
Bullnose	3.00			3441.00	123.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>152.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Palomino Petroleum Inc  
2924 SE 84th St  
New ton KS 67114+8827  
ATTN: Eli Felts

**7-16s-12w Barton,KS**  
**Stiles #1**  
Job Ticket: 64992      **DST#: 4**  
Test Start: 2019.02.21 @ 03:17:00

## Mud and Cushion Information

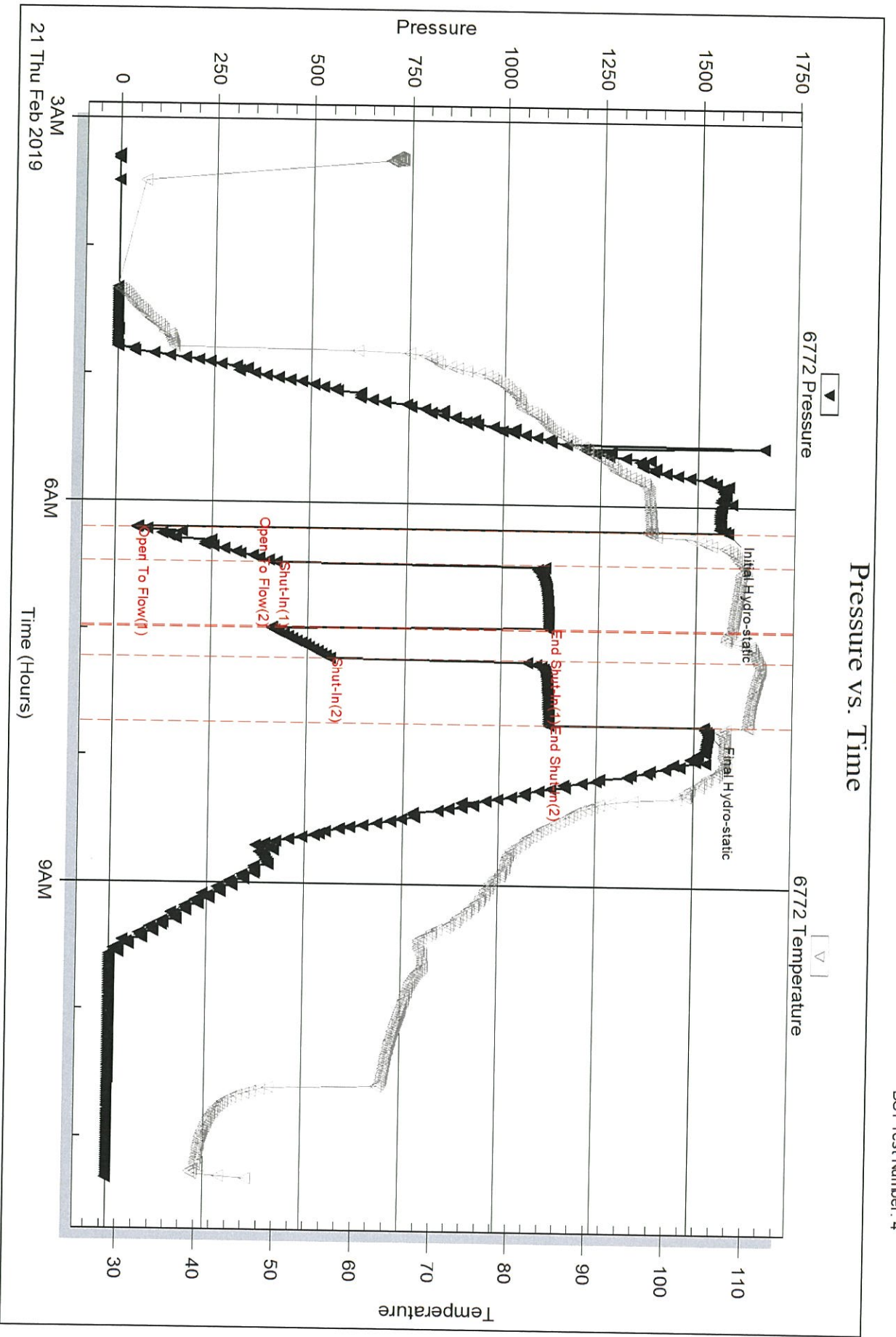
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	26000 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8200.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	M.C.W. 10%M 90%W	0.492
128.00	M.W. 40%M 60%W	1.717
640.00	W.M. 25%W 75%M	9.359
320.00	W.C.M. 10%W 90%M	4.680

Total Length: 1188.00 ft      Total Volume: 16.248 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: .444@39.1

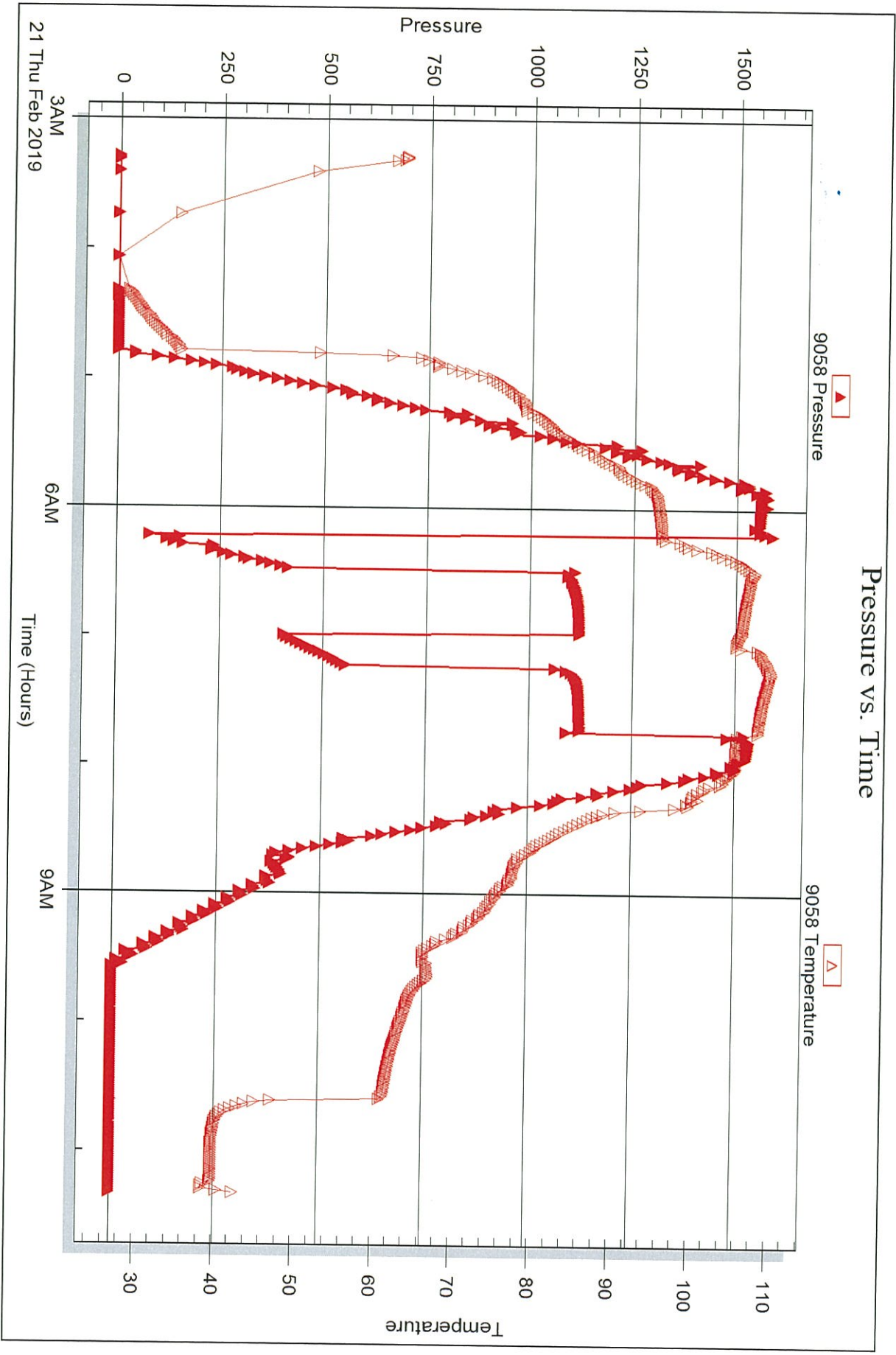


Serial #: 9058

Outside Palomino Petroleum Inc

Stiles #1

DST Test Number: 4

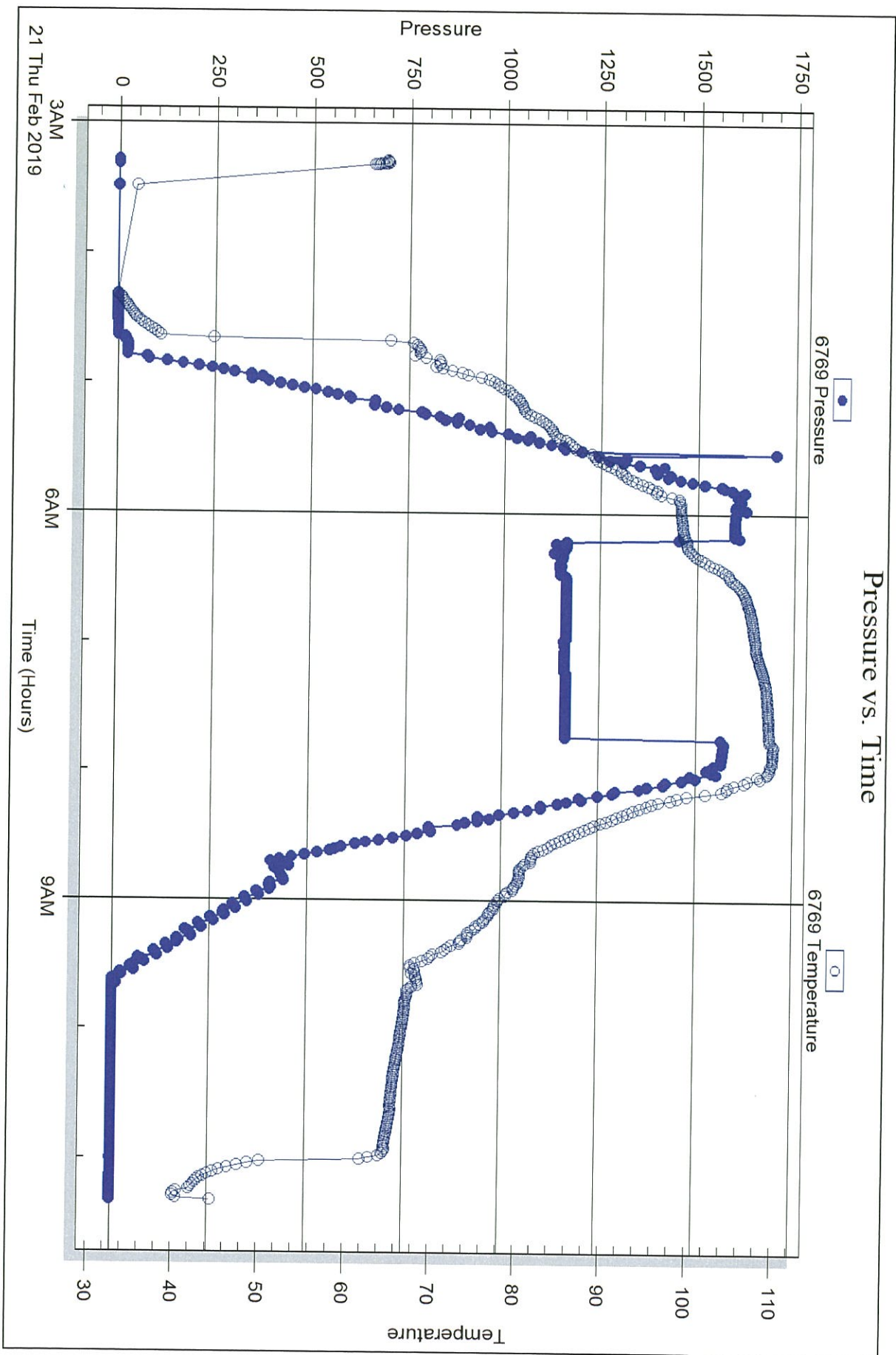


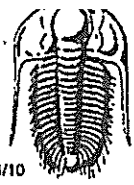
Serial #: 6769

Below (Straterra) Petroleum Inc

Sites #1

DST Test Number: 4





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64989

Well Name & No. Stiles #1 Test No. 1 Date 2-17-2019  
 Company Palomino Petroleum Inc Elevation 1900' KB 1889' GL  
 Address 2924 SE 84th ct Newton KS 67114+8827  
 Co. Rep / Geo. Eli Felts Rig WW14  
 Location: Sec. 7 Twp 16S Rge. 12W Co. Barton State KS

Interval Tested 2934-2998 Zone Tested Tapeku  
 Anchor Length 64' Drill Pipe Run ~~2822~~ Mud Wt. 9.0  
 Top Packer Depth 2929 Drill Collars Run 117 Vis 52  
 Bottom Packer Depth 2934 Wt. Pipe Run --- WL 8.8  
 Total Depth 2998 Chlorides 7000 ppm System LCM ~~1#~~ /#

Blow Description IF-total build 2"  
FSI-no blow back  
FF-was dead flushed tool and built to 1"  
FSI-no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>W.C.M.</u>			<u>5</u>	<u>95</u>
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 65' BHT 940 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1492  Test 1200 T-On Location 5:15  
 (B) First Initial Flow 18  Jars 250 T-Started 6:25  
 (C) First Final Flow 32  Safety Joint 75 T-Open 9:10  
 (D) Initial Shut-In 791  Circ Sub \_\_\_\_\_ T-Pulled 11:10  
 (E) Second Initial Flow 34  Hourly Standby \_\_\_\_\_ T-Out 1:43  
 (F) Second Final Flow 46  Mileage 50 RT 50 Comments flushed tool on  
 (G) Final Shut-In 770  Sampler \_\_\_\_\_ 2nd open  
 (H) Final Hydrostatic 1415  Straddle \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  EM Tool \_\_\_\_\_  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Final Shut-In 30  Day Standby \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Sub Total 0  Accessibility \_\_\_\_\_ Total 1575  
 Sub Total 1575 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Benny Mulligan  
 Trilobite Testing Inc. shall not be liable for damaged 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. 64990

Well Name & No. Stiles #1 Test No. 2 Date 2-18-2019  
 Company Palomino Petroleum Inc Elevation 1900 KB 1889 GL  
 Address 2924 SE 84th st Newton KS 67114+8827  
 Co. Rep / Geo. Eli Felts Rig mw14  
 Location: Sec. 7 Twp 16s Rge. 12w Co. Barton State KS

Interval Tested 3128-3182 Zone Tested Lansing C-F  
 Anchor Length 54' Drill Pipe Run 3065 Mud Wt. 9.1  
 Top Packer Depth 3123 Drill Collars Run 117 Vis 51  
 Bottom Packer Depth 3128 Wt. Pipe Run \_\_\_\_\_ WL 10.4  
 Total Depth 3182 Chlorides 7100 ppm System LCM 1

Blow Description IF - built to 4"  
ISI - no blow back  
FF - built to 2"  
FST - no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>Mud</u>			<u>100</u>	
<u>60</u>	<u>W.M.</u>		<u>40</u>	<u>60</u>	
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____

Rec Total 130' BHT 103 Gravity \_\_\_\_\_ API RW 434 @ 20.4 °F Chlorides 60,000 ppm

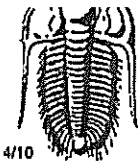
(A) Initial Hydrostatic 1602  Test 1200 T-On Location 6:00  
 (B) First Initial Flow 20  Jars 250 T-Started 6:31  
 (C) First Final Flow 75  Safety Joint 75 T-Open 8:48  
 (D) Initial Shut-In 617  Circ Sub \_\_\_\_\_ T-Pulled 10:48  
 (E) Second Initial Flow 61  Hourly Standby \_\_\_\_\_ T-Out 1:31  
 (F) Second Final Flow 79  Mileage 50 RT 50 Comments \_\_\_\_\_  
 (G) Final Shut-In 611  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1574  Straddle \_\_\_\_\_

Shale Packer \_\_\_\_\_  EM Tool \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Day Standby \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Accessibility \_\_\_\_\_ Sub Total 0  
 Sub Total 1575 Total 1575 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Benny Mulligan

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64991

Well Name & No. Stiles #1 Test No. 3 Date 2-20-2019  
 Company Palomino Petroleum Inc Elevation 1900 KB 1889 GL  
 Address 2924 SE 84th St Newton KS 67114 +8827  
 Co. Rep / Geo. Eli felts Rig nw 14  
 Location: Sec. 7 Twp 16S Rge. 12w Co. Barton State KS

Interval Tested 3345-3385 Zone Tested Arbuckle  
 Anchor Length 40' Drill Pipe Run 3227 Mud Wt. 9.1  
 Top Packer Depth 3340 Drill Collars Run 116 Vis 4.7  
 Bottom Packer Depth 3345 Wt. Pipe Run — WL 9.6  
 Total Depth 3440 Chlorides 8,200 ppm System LCM 1#

Blow Description IF  
IST  
FF  
FST  
~~FF~~  
~~FST~~  
Packer fail

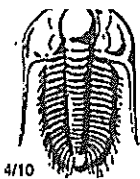
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total \_\_\_\_\_ BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic _____	<input checked="" type="checkbox"/> Test <u>950</u>	T-On Location <u>2:05</u>
(B) First Initial Flow _____	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>3:16</u>
(C) First Final Flow _____	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open _____
(D) Initial Shut-In _____	<input type="checkbox"/> Circ Sub _____	T-Pulled _____
(E) Second Initial Flow _____	<input type="checkbox"/> Hourly Standby _____	T-Out <u>9:24</u>
(F) Second Final Flow _____	<input checked="" type="checkbox"/> Mileage <u>SO RT 50</u>	Comments <u>Slid 6ft and had fill in bottom of the hole</u>
(G) Final Shut-In _____	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> EM Tool _____
(H) Final Hydrostatic _____	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open _____	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In _____	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow _____	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In _____	<input type="checkbox"/> Day Standby _____	Total <u>2175</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2175</u>	

Approved By \_\_\_\_\_ Our Representative Benny Mulligan

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64992

Well Name & No. Stiles #1 Test No. 4 Date 2-21-2019  
 Company Palomino Petroleum Inc Elevation 1900 KB 1889 GL  
 Address 2924 SE 84th St Newton KS 67114+8827  
 Co. Rep / Geo. Eli Felts Rig WW14  
 Location: Sec. 7 Twp 16s Rge. 12w Co. Barton State KS

Interval Tested 3318-3385 Zone Tested Arbuckle  
 Anchor Length 67 Drill Pipe Run ~~3205~~ 3205 Mud Wt. 9.1  
 Top Packer Depth 3313 Drill Collars Run 116 Vis 47  
 Bottom Packer Depth 3318 Wt. Pipe Run --- WL 9.6  
 Total Depth 3440 Chlorides 8,200 ppm System LCM 1#

Blow Description ±f-BOB 1min 45sec total build of 107"  
FSI-weak blow back that died  
FF-BOB 2mins total build of 64"  
FSI- no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>320</u>	<u>W.C.M.</u>		<u>10</u>	<u>90</u>	
<u>640</u>	<u>W.M.</u>		<u>25</u>	<u>75</u>	
<u>128</u>	<u>M.W.</u>		<u>60</u>	<u>40</u>	
<u>100</u>	<u>M.C.W.</u>		<u>90</u>	<u>10</u>	
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1188' BHT 106.9 Gravity \_\_\_\_\_ API RW .444 @ 39.1 °F Chlorides 26,000 ppm

(A) Initial Hydrostatic 1580  Test 1200 T-On Location 1:40  
 (B) First Initial Flow 54  Jars 250 T-Started 3:17  
 (C) First Final Flow 417  Safety Joint 75 T-Open 6:12  
 (D) Initial Shut-In 1125  Circ Sub \_\_\_\_\_ T-Pulled 7:45  
 (E) Second Initial Flow 404  Hourly Standby \_\_\_\_\_ T-Out 11:15  
 (F) Second Final Flow 556  Mileage 50RT 50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1125  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1538  Straddle 600  EM Tool \_\_\_\_\_  
 Shale Packer 250  Ruined Shale Packer \_\_\_\_\_

Initial Open 15  Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 15  Day Standby \_\_\_\_\_ Sub Total 0  
 Final Shut-In 30  Accessibility \_\_\_\_\_ Total 2425  
 Sub Total 2425 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Benny Mulligan

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