

Confidentiality Requested:

☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1244645

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- ☐ New Well ☐ Re-Entry ☐ Workover
- ☐ Oil ☐ WSW ☐ SWD ☐ SIOW
- ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
- ☐ OG ☐ GSW ☐ Temp. Abd.
- ☐ CM (Coal Bed Methane)
- ☐ Cathodic ☐ Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- ☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
- ☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer
- ☐ Commingled Permit #: _____
- ☐ Dual Completion Permit #: _____
- ☐ SWD Permit #: _____
- ☐ ENHR Permit #: _____
- ☐ GSW Permit #: _____

Spud Date or
Recompletion Date

Date Reached TD

Completion Date or
Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

_____ Feet from ☐ North / ☐ South Line of Section

_____ Feet from ☐ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? ☐ Yes ☐ No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

☐ Confidentiality Requested

Date: _____

☐ Confidential Release Date: _____

☐ Wireline Log Received

☐ Geologist Report Received

☐ UIC Distribution

ALT ☐ I ☐ II ☐ III Approved by: _____ Date: _____



1244645

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken (Attach Additional Sheets)	☐ Yes ☐ No	☐ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes ☐ No	Name	Top	Datum
Cores Taken	☐ Yes ☐ No			
Electric Log Run	☐ Yes ☐ No			
List All E. Logs Run:				

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

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. ☐ Commingled (Submit ACO-5) ☐ Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
--	---	--

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	Witte 1
Doc ID	1244645

Tops

Name	Top	Datum
Anhy.	844	(+1073)
Base Anhy.	871	(+1046)
Herington	1770	(+147)
Council Grove	2091	(-174)
Neva	2266	(-349)
Topeka	2890	(-973)
Heebner	3148	(-1231)
Douglas Sh.	3178	(-1261)
LKC	3242	(-1325)
Arbuckle	3576	(-1659)
LTD	3695	(-1778)



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 148295

Invoice Date: Jan 20, 2015

Page: 1

RECEIVED

FEB 02 2015

Federal Tax I.D.#: 20-8651475

Bill To:

Palomino Petroleum, Inc.
4924 SE 84th St.
Newton, KS 67114-8827

Customer ID	Field Ticket #	Payment Terms	
Palo	63615	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-01	Great Bend	Jan 20, 2015	2/19/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Witte #1		
200.00	CEMENT MATERIALS	Class A Common	17.90	3,580.00
376.00	CEMENT MATERIALS	Gel	0.50	188.00
1,242.00	CEMENT MATERIALS	Chloride	1.10	1,366.20
260.00	CEMENT MATERIALS	65/35/6% Gel Blend	19.88	5,168.80
65.00	CEMENT MATERIALS	Flo Seal	2.97	193.05
515.25	CEMENT SERVICE	Cubic Feet Charge	2.48	1,277.82
222.30	CEMENT SERVICE	Ton Mileage Charge	2.75	611.33
1.00	CEMENT SERVICE	Surface	2,058.50	2,058.50
10.00	CEMENT SERVICE	Pump Truck Mileage	7.70	77.00
10.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	44.00
1.00	EQUIPMENT SALES	8-5/8 Rubber Plug	131.00	131.00
1.00	EQUIPMENT SALES	8-5/8 AFU Insert	530.00	530.00
2.00	EQUIPMENT SALES	8-5/8 Centralizer	75.00	150.00
1.00	EQUIPMENT OPERATOR	Dustin Chambers		
1.00	EQUIPMENT OPERATOR	Ben Newell		
1.00	OPERATOR ASSISTANT	Kevin Weighous		

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 5,381.50

ONLY IF PAID ON OR BEFORE
Feb 19, 2015

Subtotal	15,375.70
Sales Tax	808.45
Total Invoice Amount	16,184.15
Payment/Credit Applied	
TOTAL	16,184.15

ALLIED OIL & GAS SERVICES, LLC 063615

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Great Bend, KS

DATE <u>1-20-15</u>	SEC. <u>25</u>	TWP. <u>19S</u>	RANGE <u>15W</u>	CALLED OUT	ON LOCATION <u>8:30</u>	JOB START <u>12:30 PM</u>	JOB FINISH <u>1:30 PM</u>
LEASE <u>Witte</u>	WELL # <u>1</u>	LOCATION <u>10th St. W to 80 Rd</u>			COUNTY <u>Donner</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>			<u>3/4 N W 1/4</u>				

CONTRACTOR Witte #6

TYPE OF JOB Surf

HOLE SIZE 12 1/4 T.D.

CASING SIZE 8 1/4 DEPTH 854

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 2.9 ft

PERFS.

DISPLACEMENT 54.39 Bbls Freshwater

OWNER

CEMENT

AMOUNT ORDERED 260 sks 65/75 1.4 gel

34 cc 1/4 P10

200 sks class A 34 cc 2.4 gel

COMMON	<u>200</u>	@	<u>17.90</u>	<u>3,580.00</u>
POZMIX		@		
GEL	<u>376</u>	@	<u>.50</u>	<u>188.00</u>
CHLORIDE	<u>1242</u>	@	<u>1.10</u>	<u>1366.20</u>
ASC		@		
	<u>260 sks 65/35+6%</u>	@	<u>19.88</u>	<u>5,168.80</u>
	<u>110 seal</u>	@	<u>2.97</u>	<u>193.05</u>
	<u>Materials Total</u>			<u>10,496.05</u>
	<u>Disc 35%</u>			<u>3,673.62</u>
		@		
		@		
	<u>Service</u>	@		
		@		
HANDLING	<u>515.25</u>	@	<u>2.48</u>	<u>1277.82</u>
MILEAGE	<u>22.23 x 10 x</u>	@	<u>2.75</u>	<u>611.33</u>

EQUIPMENT

PUMP TRUCK CEMENTER Dustin Chambers

366 HELPER Ben Newell

BULK TRUCK

609-239 DRIVER Kevin Weighous

BULK TRUCK

DRIVER

REMARKS:

Break circulation with bit mud pump ball
@ 700 ft mix 260 sks lead mix 200 sks
Puff shut down Release plug
Displace 54.39 bbls Freshwater
Lead plug @ 900 ft insert Held
Cement did circulate
plug down 11.00
Puff down

DEPTH OF JOB

PUMP TRUCK CHARGE 2658.50

EXTRA FOOTAGE @

MILEAGE Hum 10 @ 7.70 77.00

MANIFOLD @

Hum 10 @ 4.40 44.00

@

CHARGE TO: Palomino Petroleum

STREET

CITY STATE ZIP

TOTAL 4,068.65
Disc 35% 1,424.03

PLUG & FLOAT EQUIPMENT

1- 8 1/4 Rubber plug	@	<u>131.00</u>	<u>131.00</u>
1- 8 1/4 Alum insert	@	<u>530.00</u>	<u>530.00</u>
2- 8 1/4 Centralizers	@	<u>75.00</u>	<u>150.00</u>
	@		
	@		

TOTAL 811.00
Disc 35% 283.85

To: Allied Oil & Gas 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.

PRINTED NAME X Mark Bisso

SIGNATURE X Mark Bisso

Thank you!!

SALES TAX (If Any)

TOTAL CHARGES 15,375.70

35% 5,381.50

DISCOUNT IF PAID IN 30 DAYS

9,994.20



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

RECEIVED

FEB 09 2015

INVOICE

Invoice Number: 148395

Invoice Date: Jan 27, 2015

Page: 1

Federal Tax I.D.#: 20-8651475

Bill To:

Palomino Petroleum, Inc.
4924 SE 84th St.
Newton, KS 67114-8827

Customer ID	Field Ticket #	Payment Terms	
Palo	55628	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS2-03	Russell	Jan 27, 2015	2/26/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Witte #1		
220.00	CEMENT MATERIALS	Class A Common	18.92	4,162.40
55.00	CEMENT MATERIALS	Flo Seal	2.97	163.35
220.00	CEMENT SERVICE	Cubic Feet Charge	2.48	545.60
95.00	CEMENT SERVICE	Ton Mileage Charge	2.75	261.25
1.00	CEMENT SERVICE	Plug to Abandon	2,558.75	2,558.75
20.00	CEMENT SERVICE	Heavy Vehicle Mileage	7.70	154.00
10.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	44.00
1.00	EQUIPMENT SALES	8-5/8 Wooden Plug	110.00	110.00
1.00	CEMENT SUPERVISOR	Tony Pfannenstiel		
1.00	EQUIPMENT OPERATOR	Nathan Donner		
1.00	OPERATOR ASSISTANT	Tracy Jordan		

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 2,799.77

ONLY IF PAID ON OR BEFORE

Feb 26, 2015

Subtotal	7,999.35
Sales Tax	571.95
Total Invoice Amount	8,571.30
Payment/Credit Applied	
TOTAL	8,571.30

055628

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT

REMARKS:

SERVICE

Less 1247.26 TOTAL \$3563.60

PLUG & FLOAT EQUIPMENT

Lisc 38.50

TOTAL	\$110.00
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SALES TAX (If Any) _____

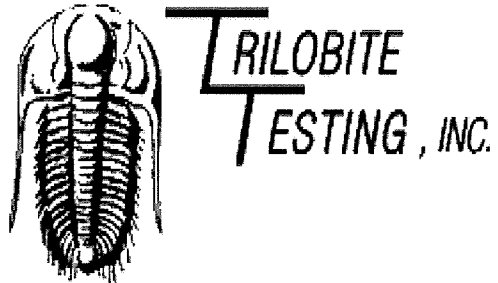
TOTAL CHARGES 7999.35

DISCOUNT 2799.77 (2310) IF PAID IN 30 DAYS

PRINTED NAME Mark Biggs

SIGNATURE Mark R. 92

Net 5199.58



DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84TH St
Newton KS 67114

ATTN: Nick Gerstner

Witte #1

25-19s-15w Barton,KS

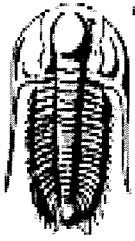
Start Date: 2015.01.22 @ 02:13:00

End Date: 2015.01.22 @ 06:30:30

Job Ticket #: 62112 DST #: 1

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

Printed: 2015.01.27 @ 16:33:10



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Palomino Petroleum

25-19s-15w Barton, KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62112

DST#: 1

ATTN: Nick Gerstner

Test Start: 2015.01.22 @ 02:13:00

GENERAL INFORMATION:

Formation: **Herrington**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:27:30

Time Test Ended: 06:30:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 59

Interval: 1743.00 ft (KB) To 1855.00 ft (KB) (TVD)

Reference Elevations: 1917.00 ft (KB)

Total Depth: 1855.00 ft (KB) (TVD)

1912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8875 Outside

Press@RunDepth: 135.21 psig @ 1850.16 ft (KB)

Capacity: 5000.00 psig

Start Date: 2015.01.22

End Date:

2015.01.22

Last Calib.: 2015.01.22

Start Time: 02:14:00

End Time:

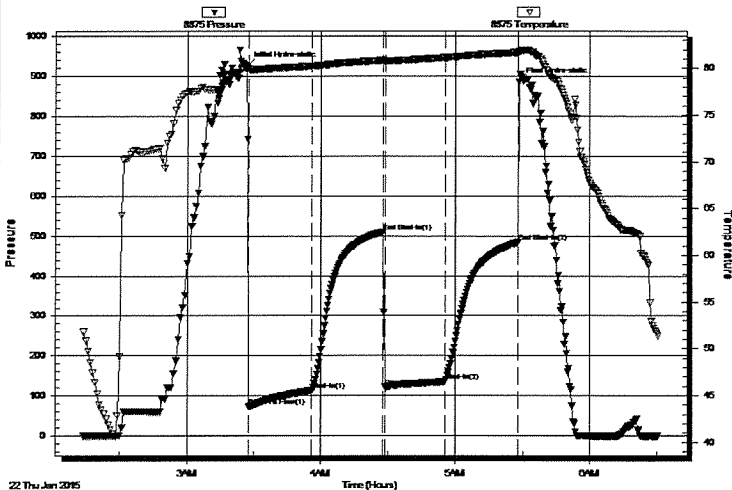
06:30:30

Time On Btm: 2015.01.22 @ 03:26:30

Time Off Btm: 2015.01.22 @ 05:28:30

TEST COMMENT: IFP 30 min. BOB in 17 min
ISI 30 min. No blow back
FFP 30 min. Fair building blow built to 6"
FSI 30 min. No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	926.49	80.06	Initial Hydro-static
1	72.36	79.89	Open To Flow (1)
30	113.70	80.24	Shut-In(1)
61	509.31	80.84	End Shut-In(1)
62	121.75	80.77	Open To Flow (2)
89	135.21	81.14	Shut-In(2)
122	484.12	81.70	End Shut-In(2)
122	885.52	81.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
78.00	Mud 100%	0.38

Gas Rates

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



Palomino Petroleum

ATTN: Nick Gerstner

Witte #1

Job Ticket: 62112

DST#: 1

Test Start: 2015.01.22 @ 02:13:00

Formation: **Herrington**

Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:27:30
Time Test Ended: 06:30:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 59

Interval: 1743.00 ft (KB) To 1855.00 ft (KB) (TVD)
Total Depth: 1855.00 ft (KB) (TVD)
Hole Diameter: 7.88 inchesHole Condition: Fair

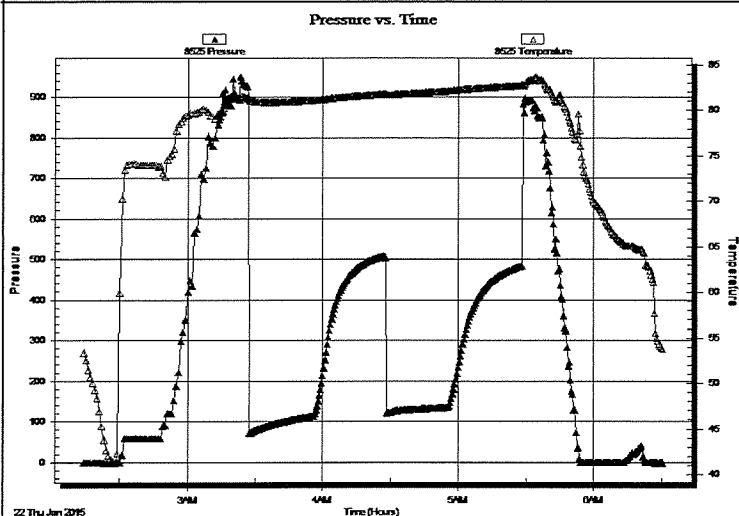
Reference Elevations: 1917.00 ft (KB)
1912.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8525 **Inside**

Press@RunDepth: psig @ 1850.16 ft (KB)
Start Date: 2015.01.22 End Date:
Start Time: 02:14:00 End Time:

Capacity:	9000.00	psig
Last Calib.:	1899.12.30	
Time On Btm:		
Time Off Btm:		

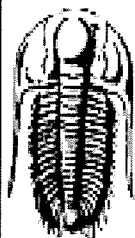
TEST COMMENT: IFP 30 min. BOB in 17 min
ISI 30 min. No blow back
FFP 30 min. Fair building blow built to 6"
FSI 30 min. No blow back



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

Length (ft)	Description	Volume (bbl)
78.00	Mud 100%	0.38

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62112

DST#: 1

ATTN: Nick Gerstner

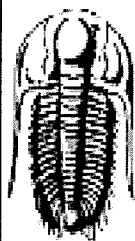
Test Start: 2015.01.22 @ 02:13:00

Tool Information

Drill Pipe:	Length:	1755.00 ft	Diameter:	3.80 inches	Volume:	24.62 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	120.41 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:	33000.00 lb
					Total Volume:	25.21 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		152.41 ft					String Weight: Initial	22000.00 lb
Depth to Top Packer:		1743.00 ft					Final	22000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		112.16 ft						
Tool Length:		132.16 ft						
Number of Packers:		2	Diameter:	6.75 inches				

Tool Comments: Shale packer ran.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			1728.00	
Hydraulic tool	5.00			1733.00	
top packer	5.00			1738.00	
Packer	5.00			1743.00	20.00 Bottom Of Top Packer
Anchor	5.00			1748.00	
Change Over Sub	0.75			1748.75	
Drill Pipe	95.66			1844.41	
Change Over Sub	0.75			1845.16	
Anchor	5.00			1850.16	
Recorder	0.00	8525	Inside	1850.16	
Recorder	0.00	8875	Outside	1850.16	
Bull Plug	5.00			1855.16	112.16 Anchor Tool
Total Tool Length:		132.16			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62112

DST#: 1

ATTN: Nick Gerstner

Test Start: 2015.01.22 @ 02:13:00

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: 26.00 sec/qt

Cushion Volume:

bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 70000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
78.00	Mud 100%	0.384

Total Length: 78.00 ft Total Volume: 0.384 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Shell packer ran

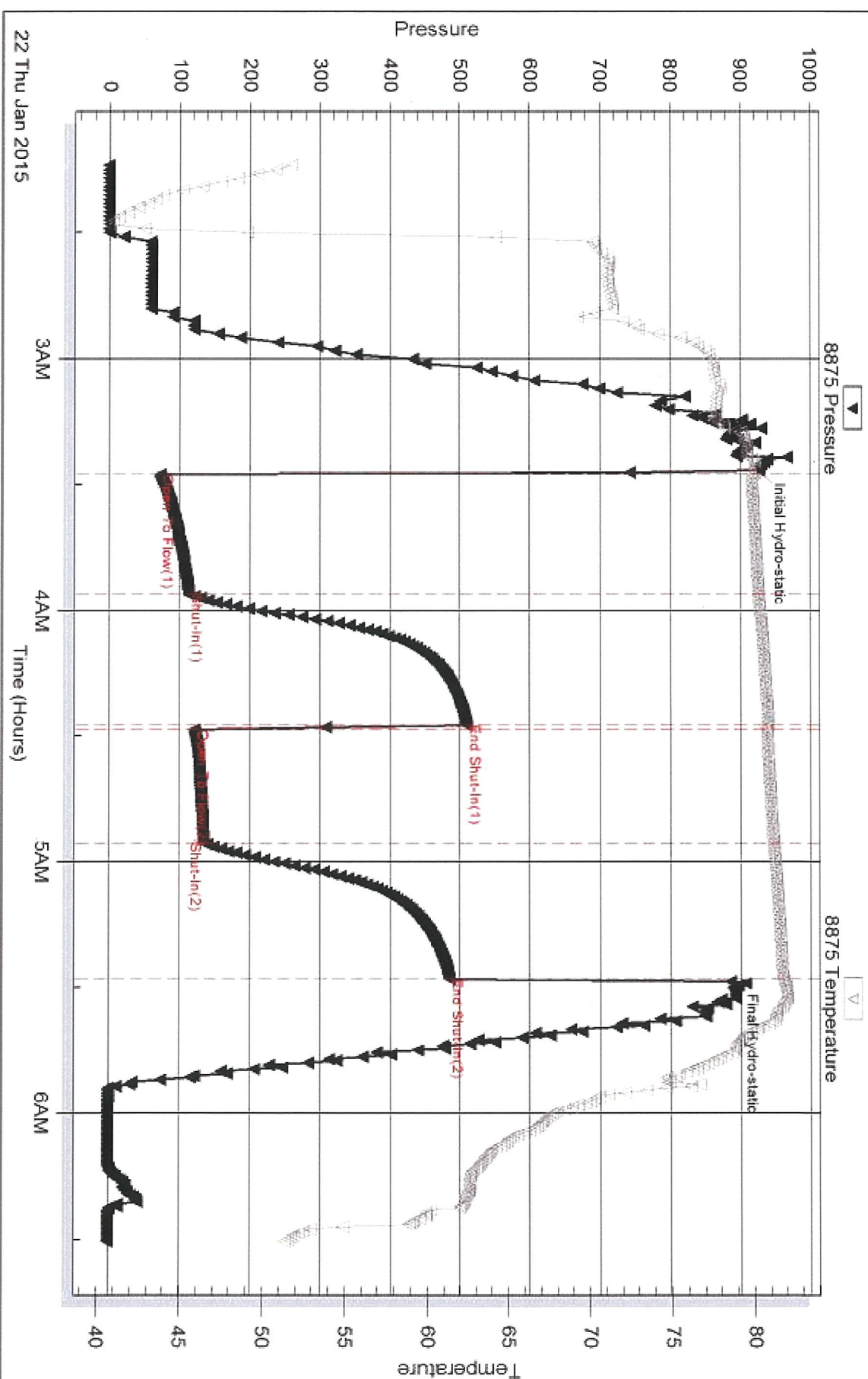
Serial #: 8875

Outside Palomino Petroleum

Write #1

DST Test Number: 1

Pressure vs. Time



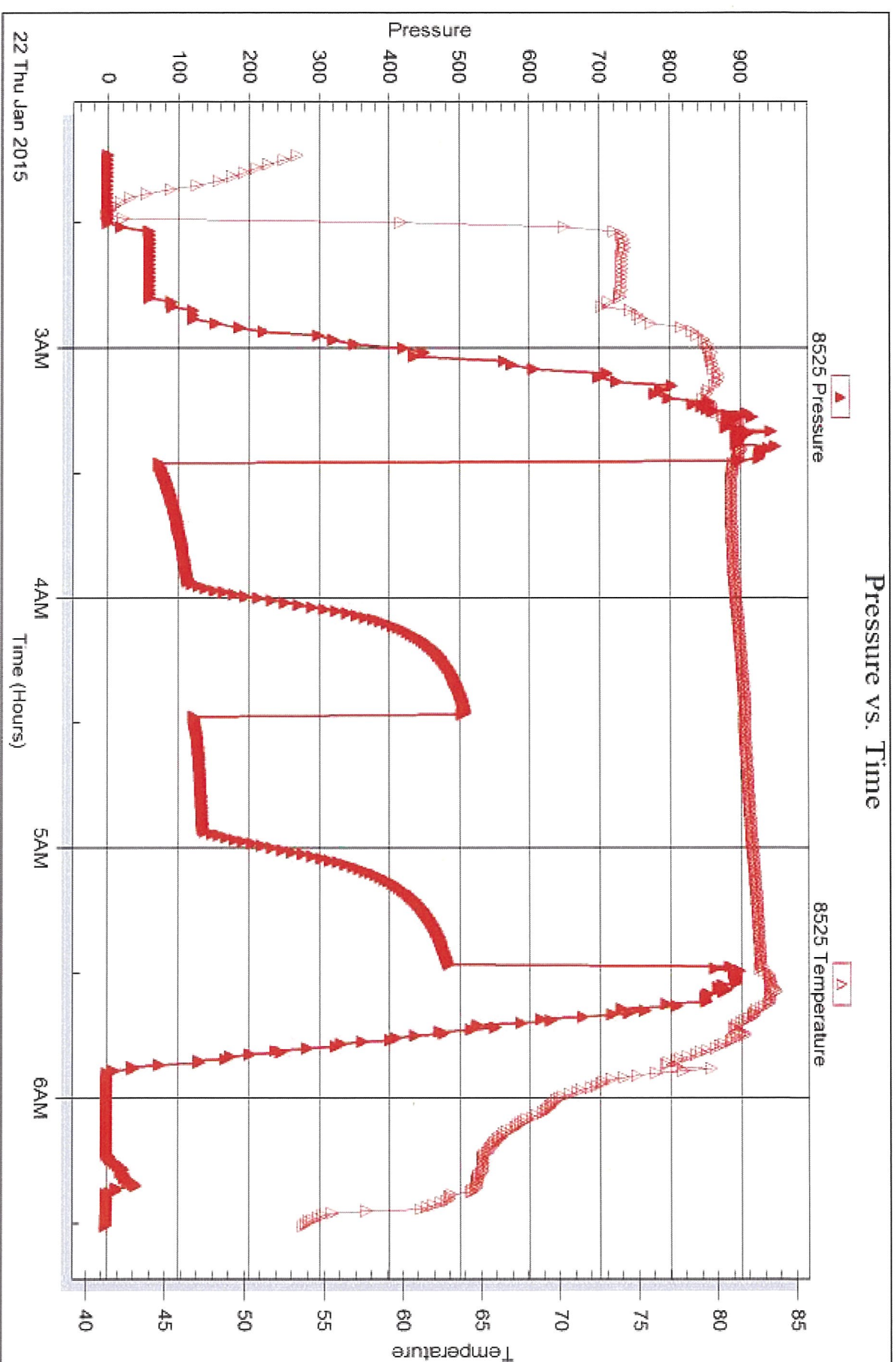
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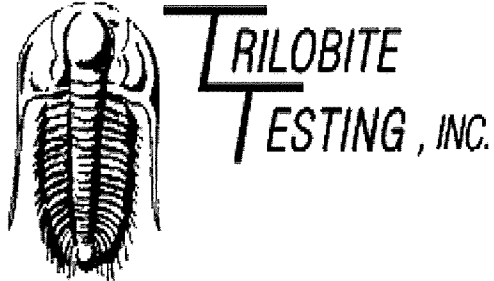
Inside

Palomino Petroleum

Write #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84TH St
Newton KS 67114

ATTN: Nick Gerstner

Witte #1

25-19s-15w Barton,KS

Start Date: 2015.01.24 @ 12:43:00

End Date: 2015.01.24 @ 17:15:00

Job Ticket #: 62113 DST #: 2

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

Printed: 2015.01.27 @ 16:32:49



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62113

DST#: 2

ATTN: Nick Gerstner

Test Start: 2015.01.24 @ 12:43:00

GENERAL INFORMATION:

Formation: **LKC A - B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:55:00

Time Test Ended: 17:15:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 59

Interval: 3237.00 ft (KB) To 3267.00 ft (KB) (TVD)

Total Depth: 3267.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1917.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8875 Outside

Press@RunDepth: 52.47 psig @ 3262.00 ft (KB)

Start Date: 2015.01.24

End Date:

2015.01.24

Start Time: 12:44:00

End Time:

17:15:00

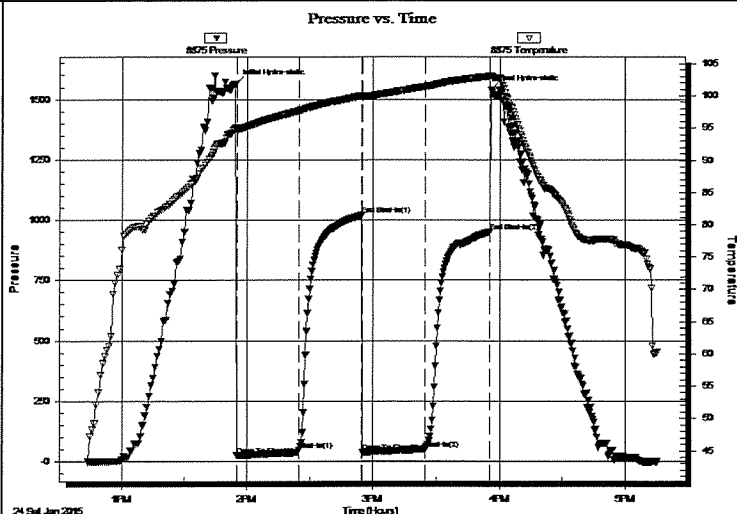
Capacity: 5000.00 psig

Last Calib.: 2015.01.24

Time On Btm: 2015.01.24 @ 13:54:30

Time Off Btm: 2015.01.24 @ 15:56:00

TEST COMMENT: IFP 30 min Weak building blow built to 2"
ISI 30 min No blow back
FFP 30 min Weak building blow built to 1"
FSI 30 min No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1563.81	95.04	Initial Hydro-static
1	25.53	94.76	Open To Flow (1)
31	46.62	97.69	Shut-In(1)
60	1019.19	99.97	End Shut-In(1)
61	39.15	99.78	Open To Flow (2)
91	52.47	101.43	Shut-In(2)
121	951.62	103.08	End Shut-In(2)
122	1540.19	103.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.10

Gas Rates

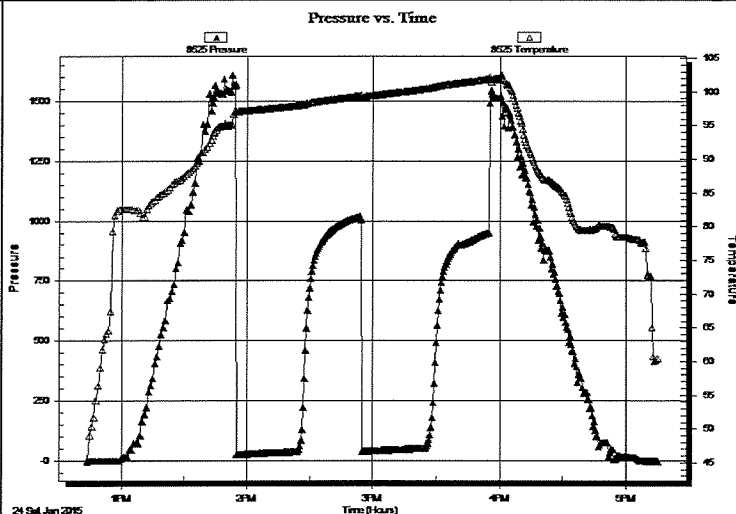
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Test Start: 2015.01.24 @ 12:43:00

KB to GR/CF: 5.00 ft

TEST COMMENT: IFP 30 min Weak building blow built to 2"
ISI 30 min No blow back
FFP 30 min Weak building blow built to 1"
FSI 30 min No blow back



Annotation

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.10

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62113

DST#: 2

ATTN: Nick Gerstner

Test Start: 2015.01.24 @ 12:43:00

Tool Information

Drill Pipe:	Length: 3118.00 ft	Diameter: 3.80 inches	Volume: 43.74 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 120.41 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	43000.00 lb
		Total Volume:	44.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.41 ft			String Weight: Initial	32000.00 lb
Depth to Top Packer:	3237.00 ft			Final	32000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	50.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3222.00	
Hydraulic tool	5.00			3227.00	
Top Packer	5.00			3232.00	
Packer	5.00			3237.00	20.00 Bottom Of Top Packer
Anchor	25.00			3262.00	
Recorder	0.00	8525	Inside	3262.00	
Recorder	0.00	8875	Outside	3262.00	
Bull Plug	5.00			3267.00	30.00 Anchor Tool
Total Tool Length:		50.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

25-19s-15w Barton, KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62113

DST#: 2

ATTN: Nick Gerstner

Test Start: 2015.01.24 @ 12:43:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.77 in³

Resistivity: ohm.m

Salinity: 5500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

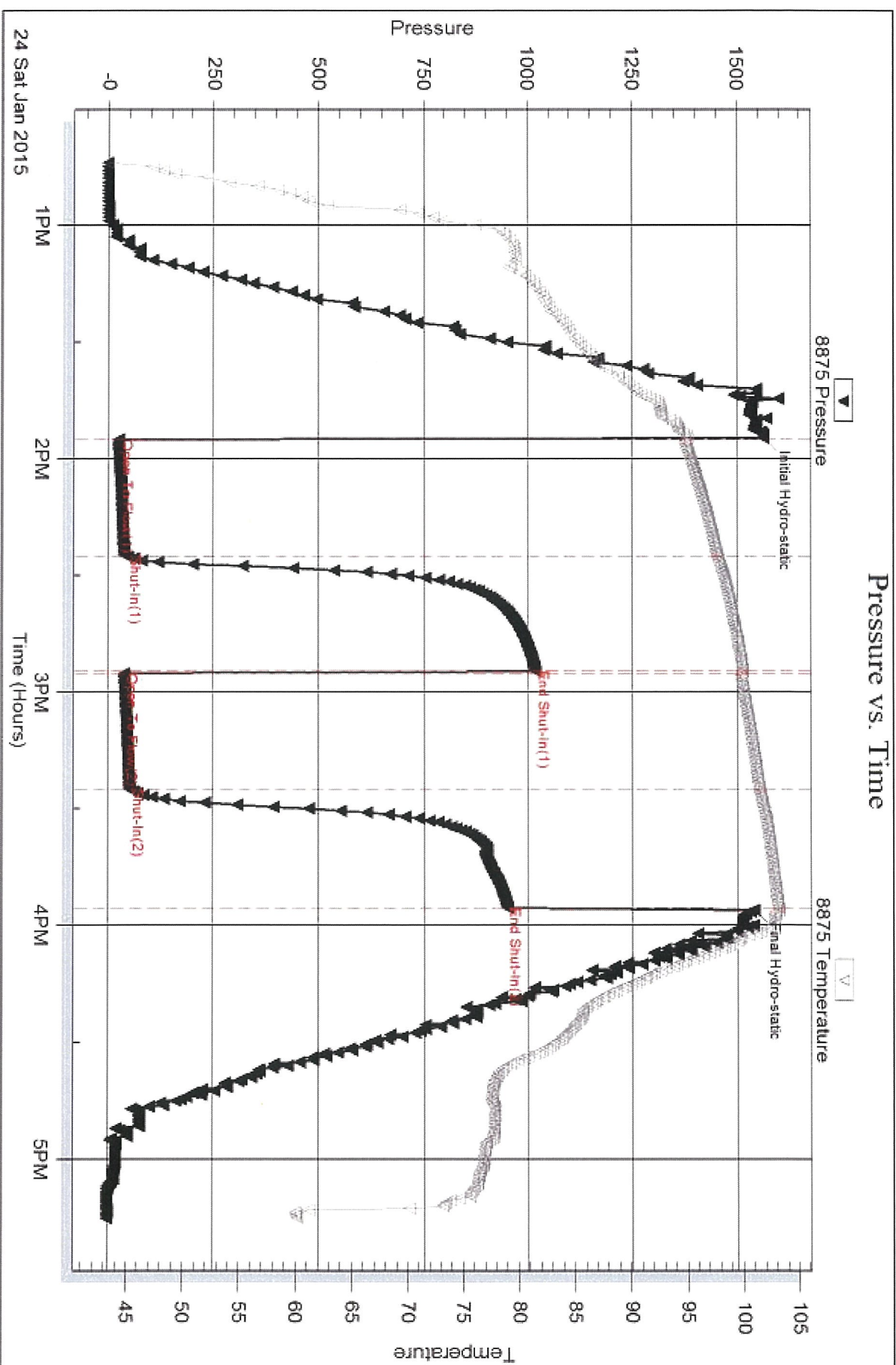
Serial #: 8875

Outside

Palomino Petroleum

Write #1

DST Test Number: 2



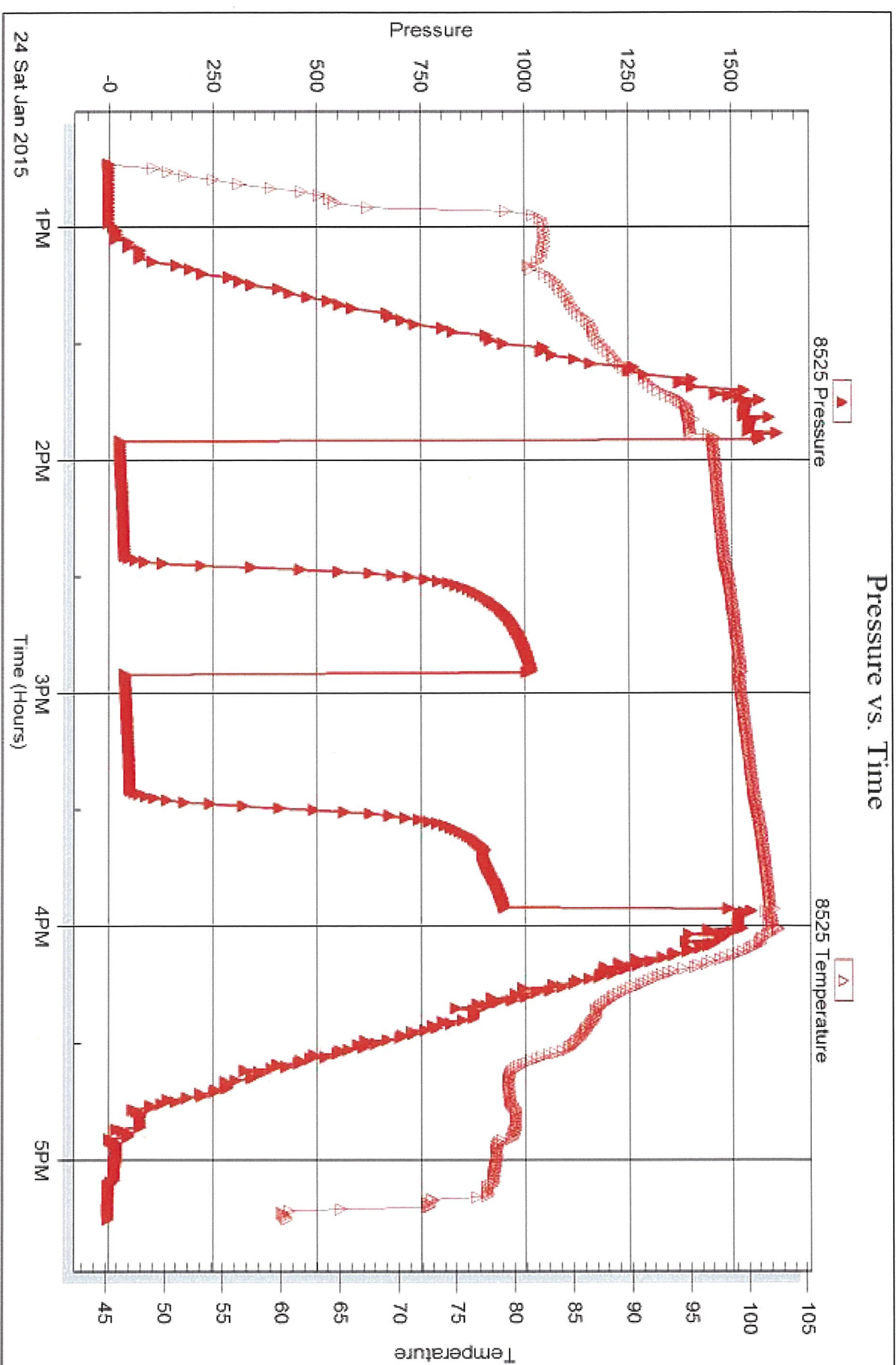
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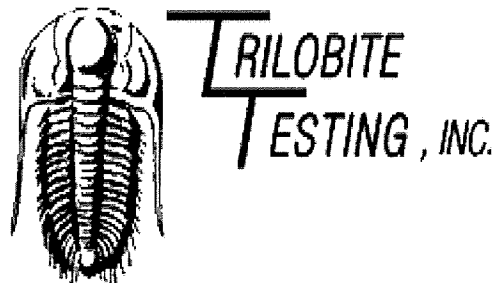
Inside

Palomino Petroleum

Write #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84TH St
Newton KS 67114

ATTN: Nick Gerstner

Witte #1

25-19s-15w Barton,KS

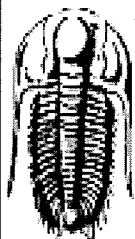
Start Date: 2015.01.25 @ 01:58:00

End Date: 2015.01.25 @ 07:30:30

Job Ticket #: 62114 DST #: 3

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

Printed: 2015.01.27 @ 16:32:18



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Palomino Petroleum

25-19s-15w Barton, KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62114

DST#: 3

ATTN: Nick Gerstner

Test Start: 2015.01.25 @ 01:58:00

GENERAL INFORMATION:

Formation: **LKC C - G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:40:30

Time Test Ended: 07:30:30

Interval: **3237.00 ft (KB) To 3310.00 ft (KB) (TVD)**

Total Depth: 3310.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 59

Reference Elevations: 1917.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8525

Inside

Press@RunDepth: 122.51 psig @ 3305.98 ft (KB)

Start Date: 2015.01.25

End Date:

2015.01.25

Start Time: 01:59:00

End Time:

07:30:30

Capacity: 5000.00 psig

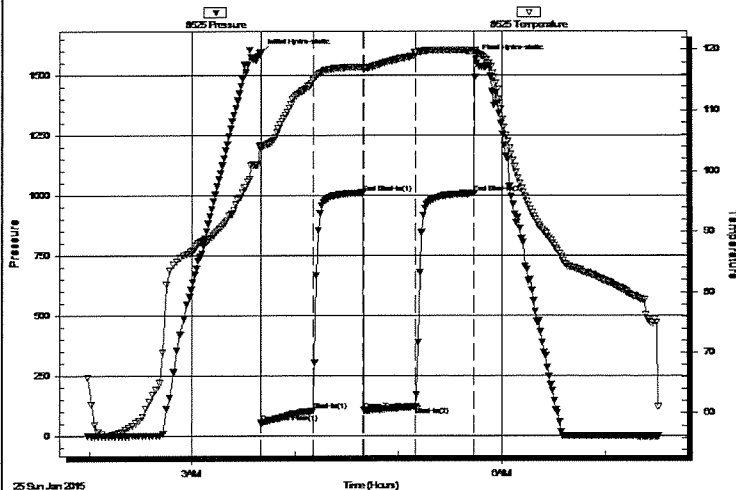
Last Calib.: 2015.01.25

Time On Btm: 2015.01.25 @ 03:40:00

Time Off Btm: 2015.01.25 @ 05:45:00

TEST COMMENT: IFP 30 min Weak blow built to 4"
ISI 30 min No blow blow back.
FFP 30 min Weak building blow built to 3"
FSI 30 min No blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1594.77	104.15	Initial Hydro-static
1	52.98	103.91	Open To Flow (1)
31	104.64	114.93	Shut-In(1)
60	1011.73	117.14	End Shut-In(1)
60	106.57	116.89	Open To Flow (2)
90	122.51	119.49	Shut-In(2)
124	1009.18	119.82	End Shut-In(2)
125	1568.04	119.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
73.00	Very lightly oil spotted mud 100% mud	0.36

Gas Rates

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

ATTN: Nick Gerstner

Witte #1

Job Ticket: 62114

DST#: 3

Test Start: 2015.01.25 @ 01:58:00

Formation: LKC C - G

Formation: LKC C - G

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:40:30

Time Test Ended: 07:30:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Elis

Unit No: 59

Interval: 3237.00 ft (KB) To 3310.00 ft (KB) (TVD)

Total Depth: 3310.00 ft (KB) (TVD)

Hole Diameter: 7.88 inchesHole Condition: Fair

Reference Elevations: 1917.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8875 Outside

Press@RunDepth: psig @ 3305.98 ft (KB)

Start Date: 2015.01.25

End Date:

2015.01.25

Start Time: 01:59:00

End Time:

07:31:00

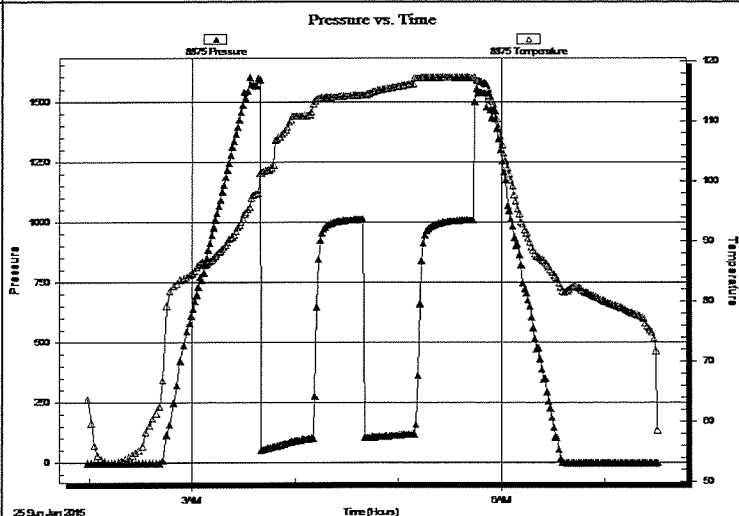
Capacity: 5000.00 psia

Last Calib.: 2015.01.25

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP 30 min Weak blow built to 4"
ISI 30 min No blow blow back.
FFP 30 min Weak building blow built to 3"
FSI 30 min No blow back.

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

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
73.00	Very lightly oil spotted mud 100% mud	0.36

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62114

DST#: 3

ATTN: Nick Gerstner

Test Start: 2015.01.25 @ 01:58:00

Tool Information

Drill Pipe:	Length: 3112.00 ft	Diameter: 3.80 inches	Volume: 43.65 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.41 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 38000.00 lb
		Total Volume:	44.24 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.41 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3237.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.98 ft			
Tool Length:	93.98 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale packer ran.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3222.00	
Hydraulic tool	5.00			3227.00	
Top Packer	5.00			3232.00	
Packer	5.00			3237.00	20.00 Bottom Of Top Packer
Anchor	10.00			3247.00	
Change Over Sub	0.75			3247.75	
Drill Pipe	31.48			3279.23	
Change Over Sub	0.75			3279.98	
Anchor	26.00			3305.98	
Recorder	0.00	8525	Inside	3305.98	
Recorder	0.00	8875	Outside	3305.98	
Bull Plug	5.00			3310.98	73.98 Anchor Tool

Total Tool Length: 93.98



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

25-19s-15w Barton, KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62114

DST#: 3

ATTN: Nick Gerstner

Test Start: 2015.01.25 @ 01:58:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.78 in³

Resistivity: ohm.m

Salinity: 5500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
73.00	Very lightly oil spotted mud 100% mud	0.359

Total Length: 73.00 ft

Total Volume: 0.359 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

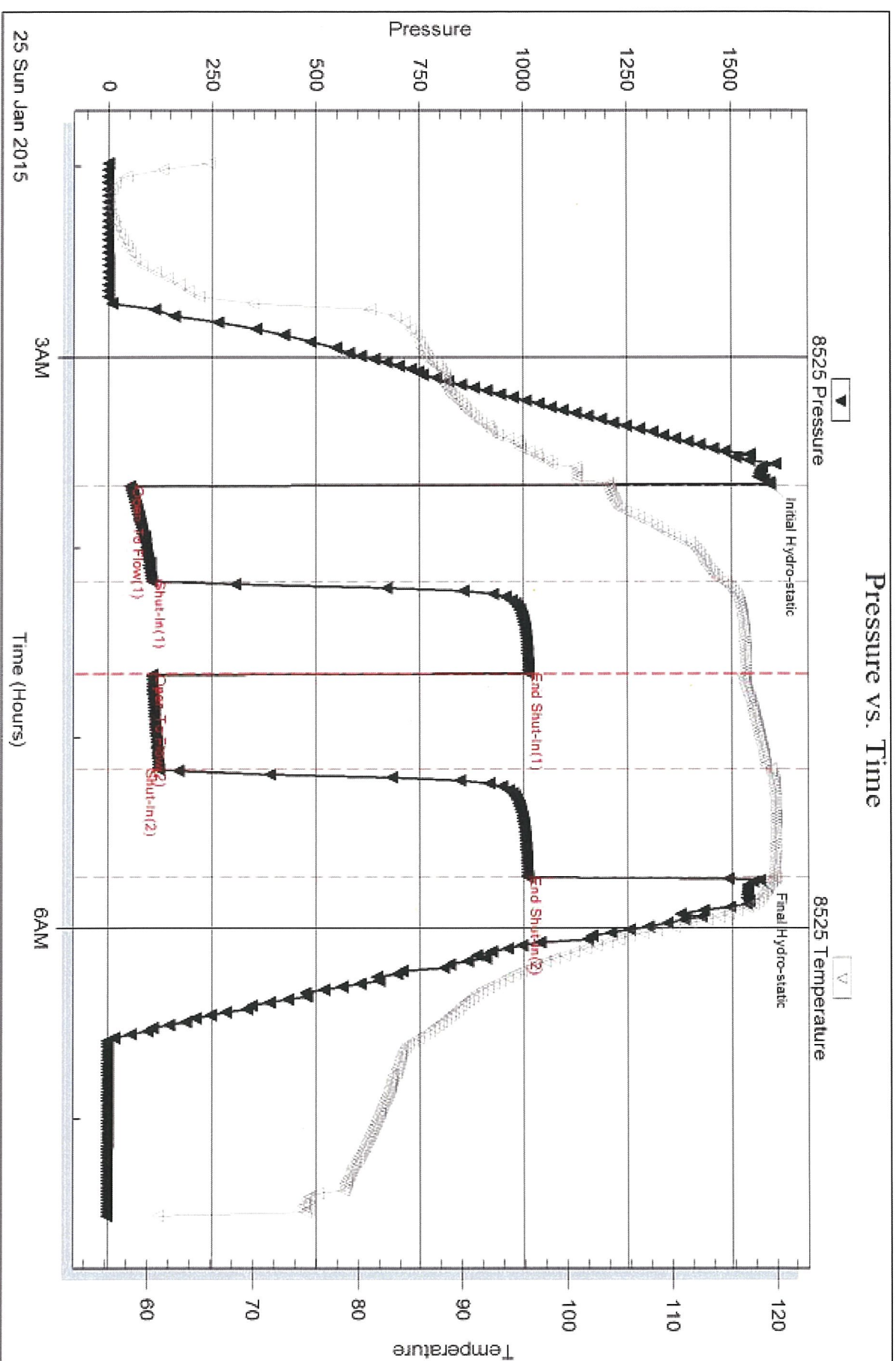
Serial #: 8525

Inside

Palomino Petroleum

Write #1

DST Test Number: 3

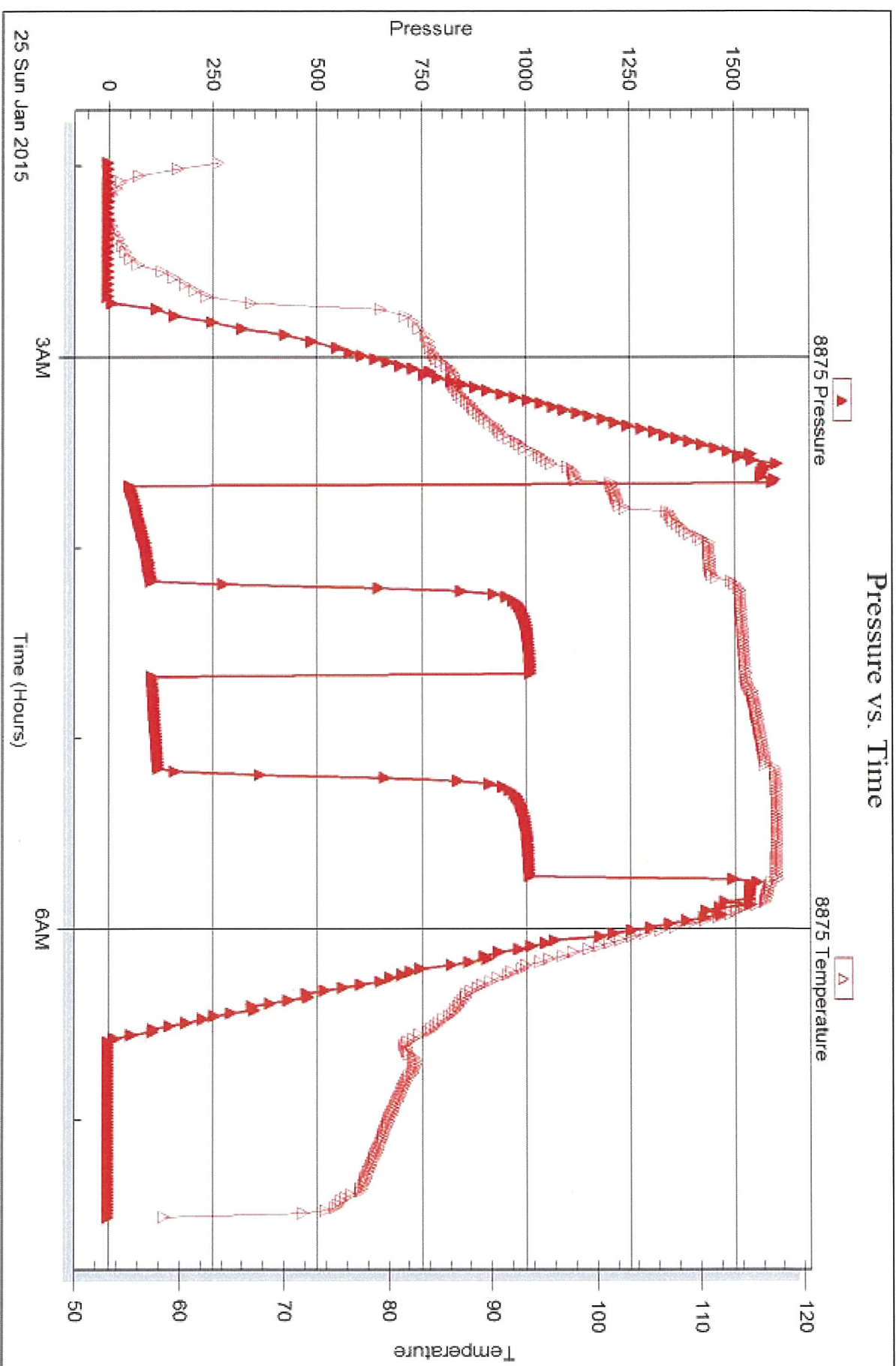


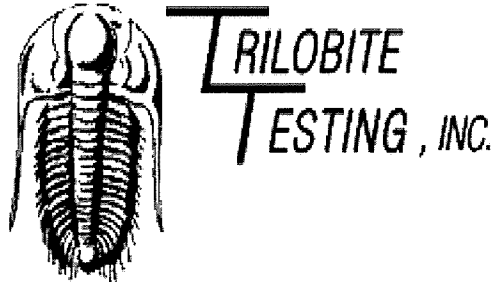
Serial #: 8875

Outside Palomino Petroleum

Write #1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84TH St
Newton KS 67114

ATTN: Nick Gerstner

Witte #1

25-19s-15w Barton,KS

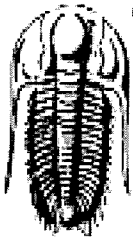
Start Date: 2015.01.25 @ 01:34:00

End Date: 2015.01.25 @ 06:11:30

Job Ticket #: 62115 DST #: 4

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

Printed: 2015.01.27 @ 16:31:50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palomino Petroleum

4924 SE 84TH St
New ton KS 67114

ATTN: Nick Gerstner

25-19s-15w Barton,KS

Witte #1

Job Ticket: 62115

DST#: 4

Test Start: 2015.01.25 @ 01:34:00

GENERAL INFORMATION:

Formation: **LKC G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:01:30

Time Test Ended: 06:11:30

Interval: **3307.00 ft (KB) To 3326.00 ft (KB) (TVD)**

Total Depth: 3326.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 59

Reference Elevations: 1917.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8525 Inside

Press@RunDepth: 297.73 psig @ 3321.00 ft (KB)

Start Date: 2015.01.25

End Date:

2015.01.25

Start Time: 01:35:00

End Time:

06:11:30

Capacity: 5000.00 psig

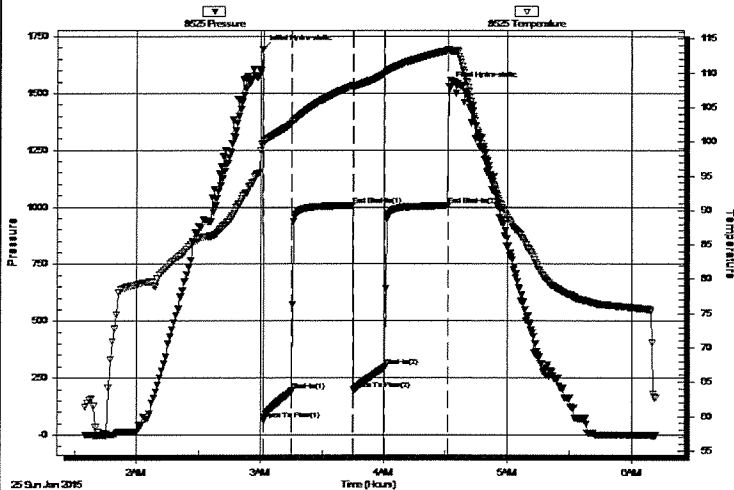
Last Calib.: 2015.01.25

Time On Btm: 2015.01.25 @ 03:01:00

Time Off Btm: 2015.01.25 @ 04:31:30

TEST COMMENT: IFP 15 min BOB in 3 min.
ISI 30 min No blow back
FFP 15 min BOB in 3 min.
FSI 30 min No blow back

Pressure vs. Time



PRESSURE SUMMARY

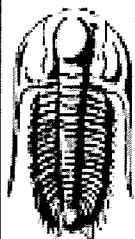
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.73	99.74	Initial Hydro-static
1	65.04	99.76	Open To Flow (1)
14	192.21	102.67	Shut-In(1)
44	1008.00	108.20	End Shut-In(1)
45	199.39	107.97	Open To Flow (2)
60	297.73	109.96	Shut-In(2)
90	1006.84	113.27	End Shut-In(2)
91	1530.57	113.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	Muddy water 5%Mud 95%Water	0.31
572.00	Water 100%	7.50
0.00	113ft. gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62115

DST#: 4

ATTN: Nick Gerstner

Test Start: 2015.01.25 @ 01:34:00

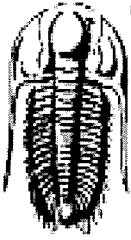
Tool Information

Drill Pipe:	Length: 3188.00 ft	Diameter: 3.80 inches	Volume: 44.72 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.41 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 38000.00 lb
		Total Volume:	45.31 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.41 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3307.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale packer ran.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3292.00	
Hydraulic tool	5.00			3297.00	
Top Packer	5.00			3302.00	
Packer	5.00			3307.00	20.00 Bottom Of Top Packer
Anchor	14.00			3321.00	
Recorder	0.00	8525	Inside	3321.00	
Recorder	0.00	8875	Outside	3321.00	
Bull Plug	5.00			3326.00	19.00 Anchor Tool

Total Tool Length: 39.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62115

DST#: 4

ATTN: Nick Gerstner

Test Start: 2015.01.25 @ 01:34:00

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 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	Muddy water 5%Mud 95%Water	0.310
572.00	Water 100%	7.501
0.00	113ft. gas in pipe	0.000

Total Length: 635.00 ft

Total Volume: 7.811 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

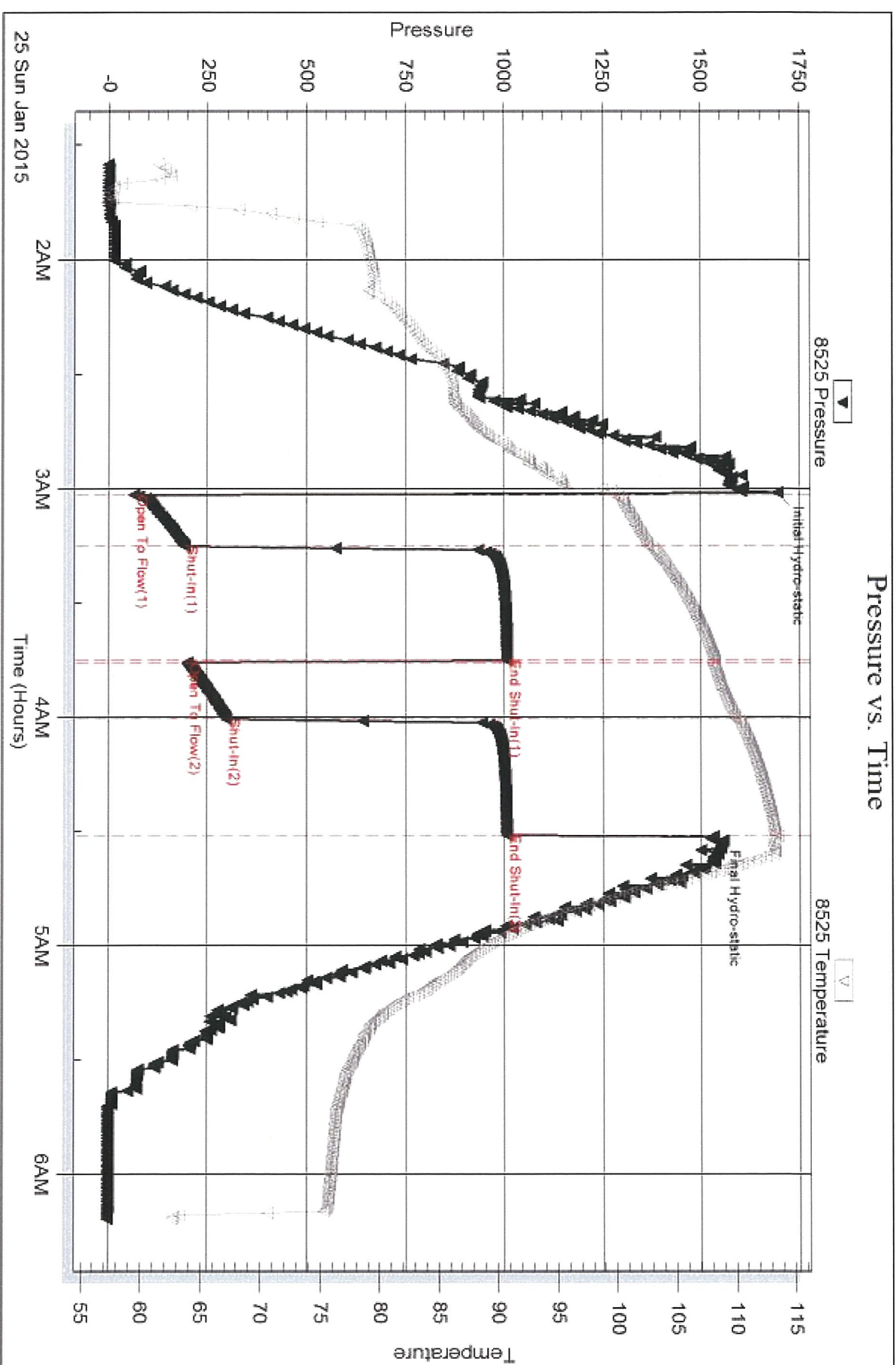
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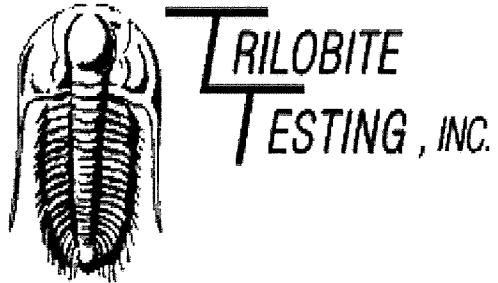
Inside

Palomino Petroleum

Witte #1

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84TH St
Newton KS 67114

ATTN: Nick Gerstner

Witte #1

25-19s-15w Barton,KS

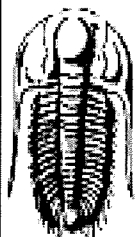
Start Date: 2015.01.26 @ 07:00:00

End Date: 2015.01.26 @ 11:57:30

Job Ticket #: 62116 DST #: 5

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

Printed: 2015.01.27 @ 16:31:05



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Palomino Petroleum

4924 SE 84TH St
New ton KS 67114

ATTN: Nick Gerstner

25-19s-15w Barton,KS

Witte #1

Job Ticket: 62116

DST#: 5

Test Start: 2015.01.26 @ 07:00:00

GENERAL INFORMATION:

Formation: **LKC H - K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:26:00

Time Test Ended: 11:57:30

Interval: 2269.00 ft (KB) To 3470.00 ft (KB) (TVD)

Total Depth: 3470.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 59

Reference Elevations: 1917.00 ft (KB)

1912.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8525 Inside

Press@RunDepth: 117.76 psig @ 3465.78 ft (KB)

Start Date: 2015.01.26

End Date:

2015.01.26

Start Time: 07:01:00

End Time:

11:57:30

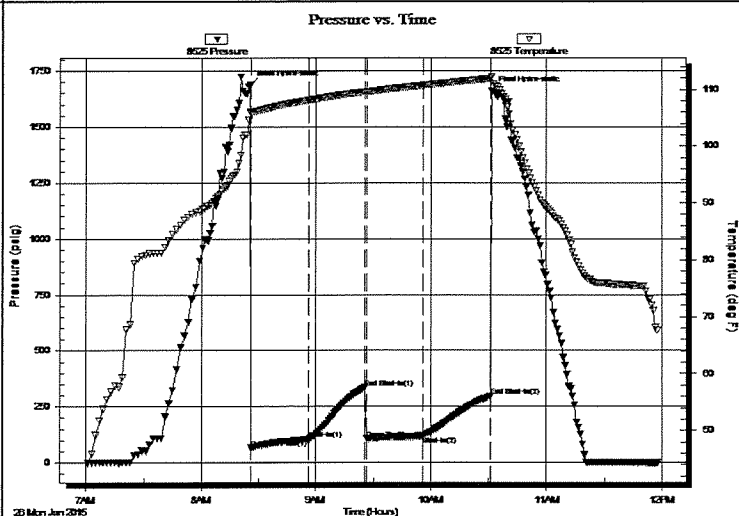
Capacity: 5000.00 psig

Last Calib.: 2015.01.26

Time On Btm: 2015.01.26 @ 08:25:30

Time Off Btm: 2015.01.26 @ 10:31:30

TEST COMMENT: IFP 30 min Weak building blow built to 3"
ISI 30 min No blow back
FFP 30 min Weak building blow built to 3"
FSI 30 min No blow back



PRESSURE SUMMARY

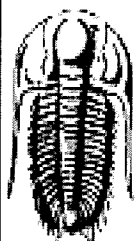
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.40	106.06	Initial Hydro-static
1	65.32	105.80	Open To Flow (1)
31	102.61	108.09	Shut-In(1)
60	333.94	109.56	End Shut-In(1)
61	105.35	109.54	Open To Flow (2)
91	117.76	110.69	Shut-In(2)
126	296.55	111.87	End Shut-In(2)
126	1661.93	112.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
134.00	Oil cut mud 25% Oil 75% Mud	0.78

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62116

DST#: 5

ATTN: Nick Gerstner

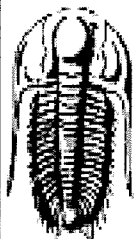
Test Start: 2015.01.26 @ 07:00:00

Tool Information

Drill Pipe:	Length: 3244.00 ft	Diameter: 3.80 inches	Volume: 45.50 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 120.41 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	55000.00 lb
		Total Volume:	46.09 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.41 ft			String Weight: Initial	34000.00 lb
Depth to Top Packer:	3369.00 ft			Final	34000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	101.78 ft				
Tool Length:	121.78 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments: Shell Packer Ran

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3354.00	
Hydraulic tool	5.00			3359.00	
Top Packer	5.00			3364.00	
Packer	5.00			3369.00	20.00 Bottom Of Top Packer
Anchor	6.00			3375.00	
Change Over Sub	0.75			3375.75	
Drill Pipe	62.28			3438.03	
Change Over Sub	0.75			3438.78	
Anchor	27.00			3465.78	
Recorder	0.00	8525	Inside	3465.78	
Recorder	0.00	8875	Outside	3465.78	
Bull Plug	5.00			3470.78	101.78 Anchor Tool
Total Tool Length:		121.78			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

25-19s-15w Barton,KS

4924 SE 84TH St
New ton KS 67114

Witte #1

Job Ticket: 62116

DST#: 5

ATTN: Nick Gerstner

Test Start: 2015.01.26 @ 07:00:00

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 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
134.00	Oil cut mud 25%Oil 75%Mud	0.783

Total Length: 134.00 ft Total Volume: 0.783 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Shale packer ran.

Serial #: 8525

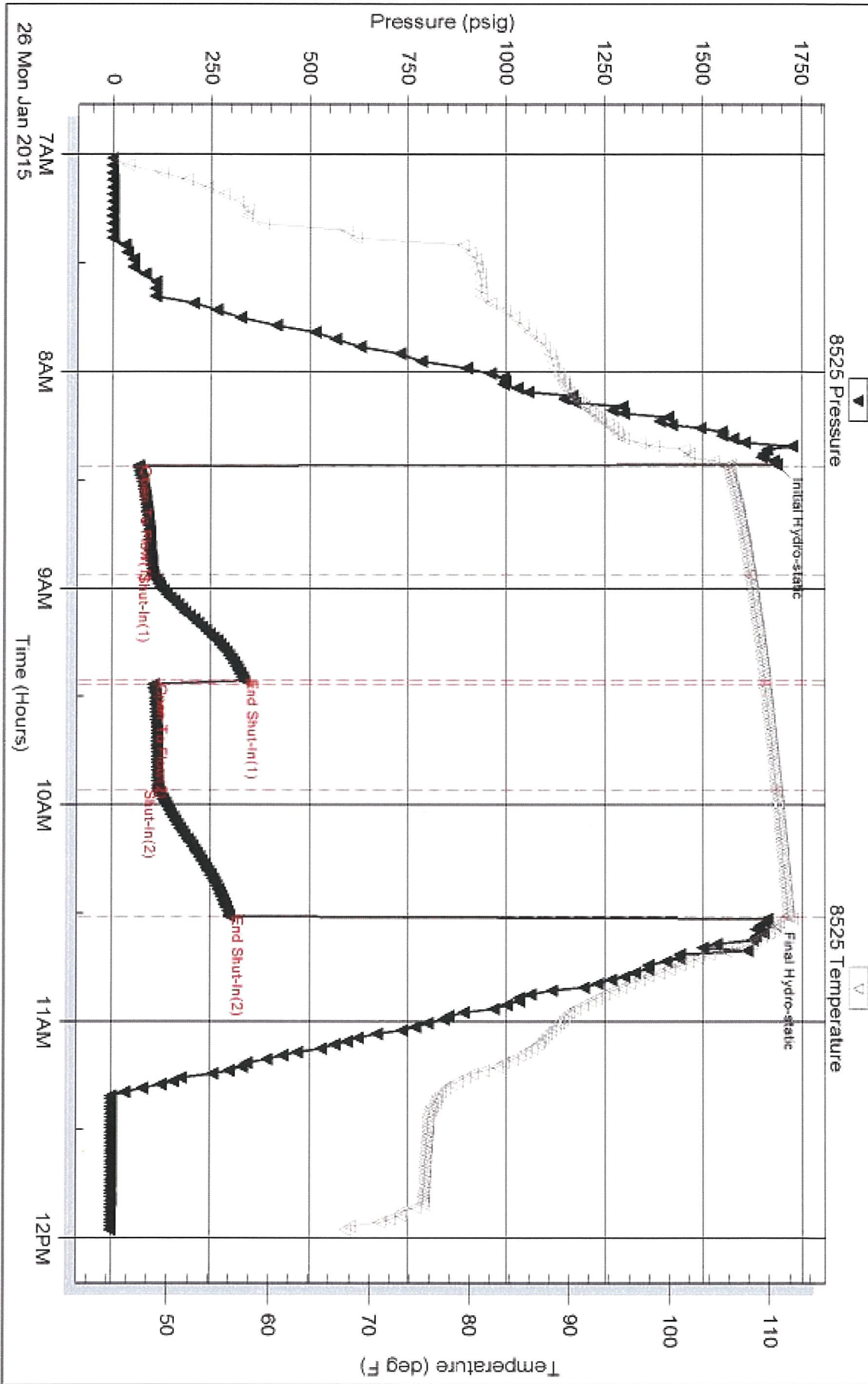
Inside

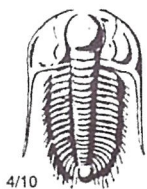
Palomino Petroleum

Write #1

DST Test Number: 5

Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62112

Well Name & No.	Witte #1	Test No.	1	Date	1-22-15
Company	Palomino Petroleum	Elevation	1912	KB	1917 GL
Address	4924 SE 84th St Newton KS 67114				
Co. Rep / Geo.	Nick Gerstner	Rig	WMO Rig 46		
Location: Sec.	25	Twp.	19	Rge.	15
Co.	Barton	State	KS		

Interval Tested	1743-1855	Zone Tested	Herrington		
Anchor Length	112	Drill Pipe Run		Mud Wt.	9.4
Top Packer Depth	1738	Drill Collars Run	120.41	Vis	26
Bottom Packer Depth	1743	Wt. Pipe Run	22,000	WL	
Total Depth	1855	Chlorides	70,000	ppm System	LCM

Blow Description 1st open - Fair building blow built to BOB in 17 min.
1st shut-in - No blow back
2nd open - Fair building blow built to 6 inches
2nd shut-in - No blow back

Rec	78	Feet of	mud	%gas	%oil	%water	100	%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 78 BHT Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic	926	☐ Test	1050	T-On Location	12:00pm
(B) First Initial Flow	72	☐ Jars		T-Started	2:13am
(C) First Final Flow	113	☐ Safety Joint		T-Open	3:27am
(D) Initial Shut-In	509	☐ Circ Sub		T-Pulled	5:27am
(E) Second Initial Flow	121	☐ Hourly Standby		T-Out	6:30
(F) Second Final Flow	135	☒ Mileage	20 20	Comments	
(G) Final Shut-In	484	☐ Sampler			
(H) Final Hydrostatic	9005	☐ Straddle			

Initial Open	30	☒ Shale Packer	250	☐ Ruined Shale Packer	
Initial Shut-In	30	☐ Extra Packer		☐ Ruined Packer	
Final Flow	30	☐ Extra Recorder		☐ Extra Copies	
Final Shut-In	30	☐ Day Standby		Sub Total	0
		☐ Accessibility		Total	1320
		Sub Total	1320	MP/DST Disc't	

Approved By _____ Our Representative Dustin Ellis
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Well Name & No. Witte #1 Test No. 2 Date 1-24-15
 Company Palomino Petroleum Elevation 1912 KB 1917 GL
 Address 4924 SE 84th St Newton KS 67114
 Co. Rep / Geo. Nicholas Gerstner Rig WW Drilling Co
 Location: Sec. 25 Twp. 19s Rge. 15w Co. Barton State KS

Interval Tested 3237-3267 Zone Tested Lansing A-B
 Anchor Length 30 Drill Pipe Run 3118 Mud Wt. 9.1
 Top Packer Depth 3232 Drill Collars Run 120.41 Vis 48
 Bottom Packer Depth 3237 Wt. Pipe Run 32,000 WL 8.8
 Total Depth 3267 Chlorides 5,500 ppm System LCM 0

Blow Description 1st open - weak building blow built to 2 inches.

1st shut in - No blow back

2nd open - weak building blow built to 1 inch.

2nd shut in - No blow back.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>mud</u>			<u>100</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	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1563

(B) First Initial Flow 25

(C) First Final Flow 46

(D) Initial Shut-In 1019

(E) Second Initial Flow 39

(F) Second Final Flow 52

(G) Final Shut-In 951

(H) Final Hydrostatic 1540

☐ Test 1050

☐ Jars _____

☐ Safety Joint _____

☐ Circ Sub _____

☐ Hourly Standby _____

☒ Mileage 20 20

☐ Sampler _____

☐ Straddle _____

☒ Shale Packer 250

☐ Extra Packer _____

☐ Extra Recorder _____

☐ Day Standby 2d 5.75h

☐ Accessibility _____

Sub Total 1320

T-On Location 12:15pm

T-Started 12:43pm *

T-Open 1:54p

T-Pulled 354

T-Out 5:15pm

Comments Thanks!

☐ Ruined Shale Packer _____

☐ Ruined Packer _____

☐ Extra Copies _____

Sub Total 991.67

Total 2311.67

MP/DST Disc't _____

Initial Open 30

Initial Shut-In 30

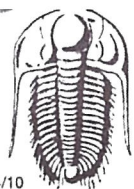
Final Flow 30

Final Shut-In 30

Approved By _____

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62114

Well Name & No. Witte #1 Test No. 3 Date 1-25-15
 Company Palomino Petroleum Elevation 1912 KB 1917 GL
 Address 4924 SE 84th St Newton KS 67 67114
 Co. Rep / Geo. Nicholas Gerstner Rig WWD Drilling Rig #6
 Location: Sec. 25 Twp. 19S Rge. 15W Co. Barton State KS

Interval Tested 3237 - 3310 Zone Tested Lansing E.D.E.F.G.
 Anchor Length 73 Drill Pipe Run 3112 Mud Wt. 9.1
 Top Packer Depth 3232 Drill Collars Run 120,41 Vis 48
 Bottom Packer Depth 3237 Wt. Pipe Run 32000 WL 8.8
 Total Depth 3310 Chlorides 5500 ppm System LCM 0

Blow Description 1st open - weak building blow built to 4 inches.
1st shut in - No blow back.

2nd open - weak building blow built to 3 inches.

2nd shut in - No blow back.

Rec	Feet of	%gas	%oil	%water	%mud
<u>73</u>	<u>very lightly oil spread mud</u>			<u>100</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 73 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1554

(B) First Initial Flow 52

(C) First Final Flow 104

(D) Initial Shut-In 101

(E) Second Initial Flow 106

(F) Second Final Flow 122

(G) Final Shut-In 1009

(H) Final Hydrostatic 1568

☐ Test 1050

☐ Jars _____

☐ Safety Joint _____

☐ Circ Sub _____

☐ Hourly Standby _____

☒ Mileage 20 20

☐ Sampler _____

☐ Straddle _____

☒ Shale Packer 250

☐ Extra Packer _____

☐ Extra Recorder _____

☐ Day Standby _____

☐ Accessibility _____

Sub Total 1320

T-On Location 1:30am

T-Started 1:58am

T-Open 3:40am

T-Pulled 5:40am

T-Out 7:40am

Comments Thanks!

☐ Ruined Shale Packer _____

☐ Ruined Packer _____

☐ Extra Copies _____

Sub Total 0

Total 1320

MP/DST Disc't _____

Initial Open 30

Initial Shut-In 30

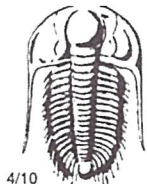
Final Flow 30

Final Shut-In 30

Approved By _____

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62115

Well Name & No. Witte #1 Test No. 4 Date 1-25-15
 Company Palomino Petroleum Elevation 1912 KB 1917 GL
 Address H924 SE 84th St Newton KS 67114
 Co. Rep / Geo. Nicholas Gerstner Rig www Drilling Rig 6
 Location: Sec. 25 Twp. 19S Rge. 15W Co. Barton State KS

Interval Tested 3307-3326 Zone Tested consing G
 Anchor Length 19 Drill Pipe Run 3189 Mud Wt. 9.1
 Top Packer Depth 3302 Drill Collars Run 120.41 Vis 52
 Bottom Packer Depth 3307 Wt. Pipe Run 34200 WL 8.8
 Total Depth 3326 Chlorides 6000 ppm System LCM 0

Blow Description 1st open - BOB in 3 min

1st shut in - No blow back

2nd open - BOB in 3 min

2nd shut in - No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>63</u>	<u>muddy water</u>		<u>95</u>	<u>5</u>	
<u>572</u>	<u>water</u>		<u>100</u>		

Rec Total 635 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1693

(B) First Initial Flow 65

(C) First Final Flow 192

(D) Initial Shut-In 1008

(E) Second Initial Flow 199

(F) Second Final Flow 297

(G) Final Shut-In 1006

(H) Final Hydrostatic 1530

☐ Test 1050

☐ Jars _____

☐ Safety Joint _____

☐ Circ Sub _____

☐ Hourly Standby _____

☒ Mileage 20 20

☐ Sampler _____

☐ Straddle _____

☒ Shale Packer 250

☐ Extra Packer _____

☐ Extra Recorder _____

☐ Day Standby _____

☐ Accessibility _____

Sub Total 1320

T-On Location 1:00pm

T-Started 1:34pm

T-Open 2:57pm

T-Pulled 4:27pm

T-Out _____

Comments 113 gas in

pipe

☐ Ruined Shale Packer _____

☐ Ruined Packer _____

☐ Extra Copies _____

Sub Total 0

Total 1320

MP/DST Disc't _____

Initial Open 15

Initial Shut-In 30

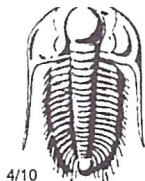
Final Flow 15

Final Shut-In 30

Approved By _____

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62116

Well Name & No. Witte #1 Test No. 5 Date 1-28-15
 Company Palomino Petroleum Elevation 1912 KB 1917 GL
 Address 4924 SE 84th St Newton KS 67114
 Co. Rep / Geo. Nicholas Gerstner Rig new Drilling Rig 6
 Location: Sec. 25 Twp. 19S Rge. 15W Co. Barton State KS

Interval Tested 3369 - 3470 Zone Tested hansing HJJK
 Anchor Length 101 Drill Pipe Run 3244 Mud Wt. 9.1
 Top Packer Depth 3364 Drill Collars Run 120.41 Vis 32
 Bottom Packer Depth 3369 Wt. Pipe Run 34000 WL 8.8
 Total Depth 3470 Chlorides 6000 ppm System LCM 0

Blow Description 1st open - Weak building blow built to 3 inches.
1st shut in - No blow back.
2nd open - Weak building blow built to 3 inches.
2nd shut in - No blow back.

Rec	Feet of	%gas	%oil	%water	%mud
<u>134</u>	<u>oil cut mud</u>	<u>25</u>		<u>75</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 134 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1686
 (B) First Initial Flow 65
 (C) First Final Flow 102
 (D) Initial Shut-In 333
 (E) Second Initial Flow 105
 (F) Second Final Flow 147
 (G) Final Shut-In 296
 (H) Final Hydrostatic 1661

☐ Test 1050
☐ Jars _____
☐ Safety Joint _____
☐ Circ Sub _____
☐ Hourly Standby _____
☒ Mileage 20 20
☐ Sampler _____
☐ Straddle _____
☒ Shale Packer 250
☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____
 Sub Total 1320

T-On Location _____
 T-Started 7:00 am
 T-Open 8:22 am
 T-Pulled 10:22 am
 T-Out 12:00 pm
 Comments Thank!
☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
 Sub Total 0
 Total 1320
 MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Approved By _____

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