#### KOLAR Document ID: 1461645

Confident	tiality Request	ed:
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 #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled         Permit #:           Dual Completion         Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR         Permit #:	
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date	County: Permit #:

#### AFFIDAVIT

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

#### Submitted Electronically

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II III Approved by: Date:

#### KOLAR Document ID: 1461645

Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

**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 Sh	acate)	Y	′es 🗌 No		Log Formation (Top), Depth and Datum			Sample	
Samples Sent to Geolo			⁄es 🗌 No	1	Name	Э		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:		□ Y □ Y	Yes ☐ No Yes ☐ No Yes ☐ No						
		Rep	CASING ort all strings set-c		] Ne	w Used rmediate, productio	on. etc.		
Purpose of String	Size Hole Drilled	Siz	ze Casing et (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
[			ADDITIONAL	CEMENTING /	SQU	EEZE RECORD			
Purpose: Depth Top Botto Purpose: Depth Top Botto		Туре	e of Cement	# Sacks Use	d		Type and	Percent Additives	
Protect Casing Plug Back TD Plug Off Zone									
<ol> <li>Did you perform a hydra</li> <li>Does the volume of the</li> <li>Was the hydraulic fracture</li> </ol>	total base fluid of the	hydraulic fr	acturing treatment		-	☐ Yes ns? ☐ Yes ☐ Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Date of first Production/Inj Injection:	jection or Resumed Pr	oduction/	Producing Meth	iod:		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas Mcf Water Bbls. Gas-Oil Ratio				Gravity		
DISPOSITIO	N OF GAS:		METHOD OF			TION:		PRODUCTION INTERVAL: Top Bottom	
Vented Sold (If vented, Subn	Used on Lease		Open Hole Perf.		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		Тор	Bollom	
Shots Per Perforation Perforatio Foot Top Bottom			Bridge Plug Type	Bridge Plug Set At		Acid,		ementing Squeezend of Material Used)	
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	BIG SPENDER 1
Doc ID	1461645

Tops

Name	Тор	Datum
Anhy.	1590	(+ 716)
Base Anhy.	1624	(+ 682)
Heebner	3704	(-1398)
Lansing	3746	(-1440)
ВКС	4045	(-1739)
Marmaton	4089	(-1783)
Pawnee	4160	(-1854)
Ft. Scott	4243	(-1937)
Cherokee Sh.	4266	(-1960)
Miss.	4335	(-2029)
LTD	4447	(-2141)

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	BIG SPENDER 1
Doc ID	1461645

#### Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	24	223	Common	2% gel, 3% c.c.

RECEIVED MAR 0.6 2013

Invoice

Date	Invoice #
3/4/2019	0013387

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

\*

24 S. Lincoln

RUSSELL, KS 67665

				P.O. No.	Terms		Project
				BIG SPENDER#1	Due on receipt		
Quantity			Description	lll	Rate		Amount
250	60/40 POZN	IX CEMENT				13.75	3,437.5
	BENTONIT	E GEL				30.00	270.0
	FLO-SEAL					2.00	125.0
259	HANDLING					1.90	492.1
	BULK MILI	EAGE				950.00	950.0
1	TRI-PI FX F	PUMP CHARGE FOR	PLUG			850.00	850.0
		UIPMENT. ONE WA				6.50	292.5
45	LMV-ONE	WAY	1			2.75	123.7
45	LIVIV-ONL	WAI				2.15	125.7
1	DRY HOLE	PLUG				62.50	62.5
	15% DISCO	UNT IF PAID WITHI	N 15 DAYS OF IN	VOICE			0.0
		O SALES TAX				7.50%	0.0
			1				
ık you for yoı	ır business.				Tatal		
Ph	ione #	Fax #			Total		\$6,603.3
705	445-3525	785-445-3526					

	S. Linco Issell, KS		in a superior and the s	SE Station (1914) Television	ERVICE POINT:	Russell	1/5
DATE 2-20-19	SEC.	TWP	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE Big Sponder	WELL #.	la gilis citare	LOCATION & A	Vesser inte PD		COUNTY	STATE
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		In-				@	
UMP TRUCK CEN	MENTER	Tody	ebus articleonen Hille	ordaned and OUSTO	an elektroniska nam 1693	@	IEAD IG INCHTAGNAM
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ULK TRUCK						@	
	VER To	m	s aries to leadbase a k	a frent of this Contrait	vitro bellisede oaw	@	SPEARS CHADGE
ULK TRUCK			beza	ton tool REMAINTELLS.	valberebra si nomini	@	te to vaw nowe by:
DRJ	VER					@	
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						GIOS Shall be D	Von done by

24 S. Lincoln RUSSELL KS 67665

RUSSELL, KS 67665

\*: <sub>1</sub>, ···

RECEIVED

FEB 19 2019

### Invoice

Date	Invoice #
2/14/2019	0013384

Bill To PALOMINO PETROLEUM INC

.

4924 SE 84TH ST NEWTON,KS 67114

				P.O. No.		Terms	Ι	Project
				BIG SPENDER#1	Dı	ie on receipt		
Quantity		**************************************	Description			Rate		Amount
5 CA 3 BE 168 HA BU 1 TR 45 HE 45 LM 159	EAVY EQUI IV- ONE WA	ILORIDE GE MP CHARGE FOR S PMENT. ONE WAY AY VT IF PAID WITHIN		ICE			16.50 80.00 30.00 1.90 500.00 850.00 6.50 2.75 7.50%	2,640.0 400.0 90.0 319.2 500.0 850.0 292.5 123.7 0.0 0.0
ank you for your bu Phone		Fax #	]			Total		\$5,215.4
785-445-3		785-445-3526						

24 S. Lincoln **REMIT TO** SERVICE POINT: Russell, KS 67665 TWP. JOB FINISH SEC. CALLED OUT ON LOCATION JOB START RANGE DATE 2-13-COUNTY STATE LEASE BIG 50 WELL # LOCATION 341 OLD OR NEW (CIRCLE ONE) 1 South Easy respondent CONTRACTOR WW Drill OWNER TYPE OF JOB SUITE HOLE SIZE T.D. CEMENT CASING SIZE DEPTH AMOUNT ORDERED TUBING SIZE DEPTH DRILL PIPE DEPTH TOOL DEPTH PRES. MAX MINIMUM COMMON (a) MEAS. LINE SHOE JOINT POZMIX\_ a CEMENT LEFT IN CSG. 24 GEL @ PERFS CHLORIDE @ DISPLACEMENT ASC\_\_\_ @ EQUIPMENT (a) @ PUMP TRUCK CEMENTER @ # 0 HELPER @ BULK TRUCK @, \_ # 410 DRIVER @\_\_ BULK TRUCK @ DRIVER @ HANDLING @ MILEAGE TOTAL **REMARKS**: SERVICE DEPTH OF JOB PUMP TRUCK CHARGE. EXTRA FOOTAGE\_ @ MILEAGE \_ @ MANIFOLD. a, a @ CHARGE TO: TOTAL STREET -CITY \_ STATE -7IP

#### 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.

PRINTED NAME SIGNATURE

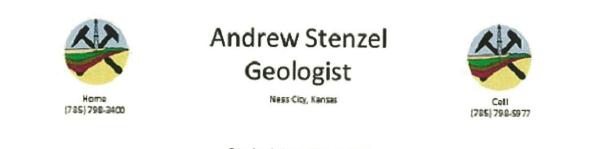
#### PLUG & FLOAT EQUIPMENT

a filling Plane and address will			
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SALES TAX (If Any)	anuz, ek ikent		ing munorit

TOTAL CHARGES

DISCOUNT

IF PAID IN 30 DAYS



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

Well Name:Big Spender #1<br/>API:API:15-135-26045-00-00<br/>Location:Location:SW-SW-SW Sec. 15-18S-24W (Ness County)License Number:30742<br/>Spud Date:Spud Date:2/13/19Surface Coordinates:789' FSL & 439'FWL

Bottom Hole Coordinates: Ground Elevation (ft): 2296 Logged Interval (ft): 3500 To: TD Formation: MISSISSIPPI Type of Drilling Fluid: Mud-Co Chemical

K.B. Elevation (ft): 2306 Total Depth (ft): 4450

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: Andrew Stenzel Company: Petroleum Geologist Address: 501 S. Franklin Ness City, KS 67560

**Drilling Report** 

DAILY DRILLING REPORT: 2/13/19 MIRU, ran surface casing 2/14/19 Drilling @ 1090' 2/15/19 Drilling @ 2609' 2/16/19 Bit trip @ 3496' 2/17/19 Drilling @ 3870' 2/18/19 Drilling @ 4260', DST #1 2/19/19 Drilling @ 4308', DST #2 2/20/19 Circulating @ 4450', ran electric logs 2/21/19 Plugged & Abandoned

#### RIG: WW Drilling, Rig #22

Services

MUD: MUDCO LOGS: Gemini Wireline; CNDL, PE, ML, DIL

#### Casing Record

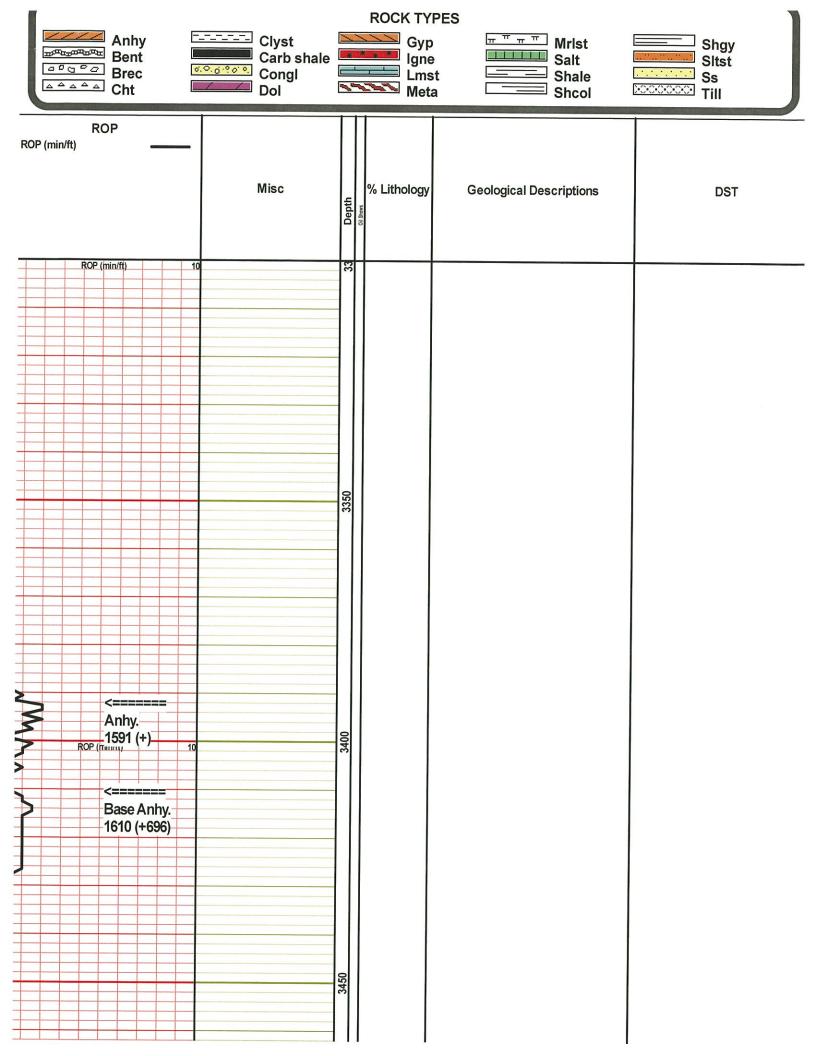
SURFACE Casing: Ran 5 jts new 8 5/8", 24# casing @ 223'

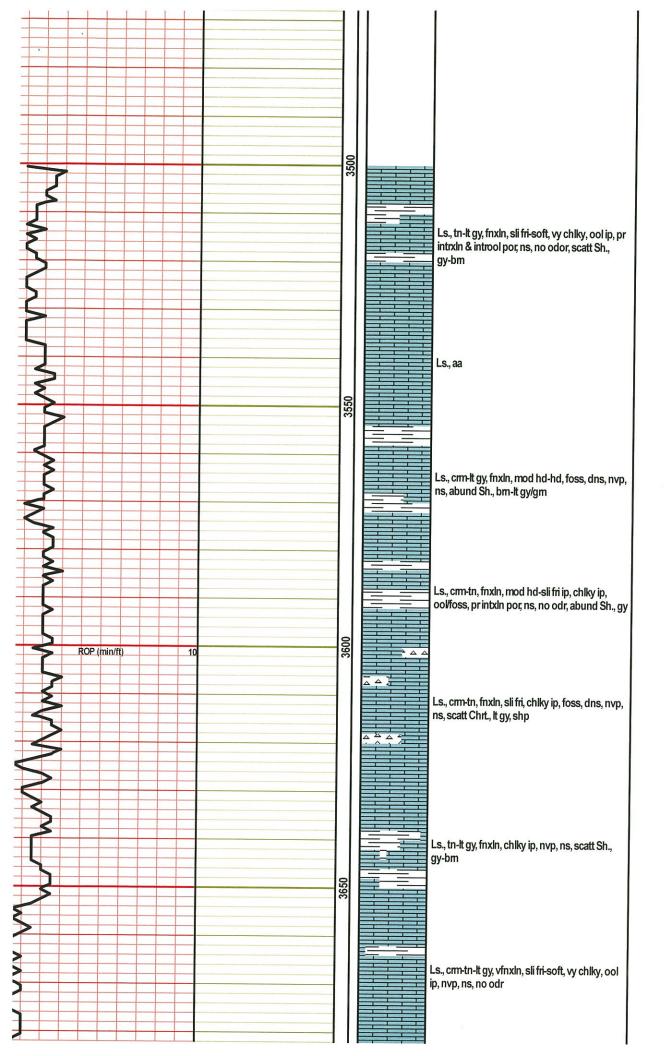
**PRODUCTION Casing: None** 

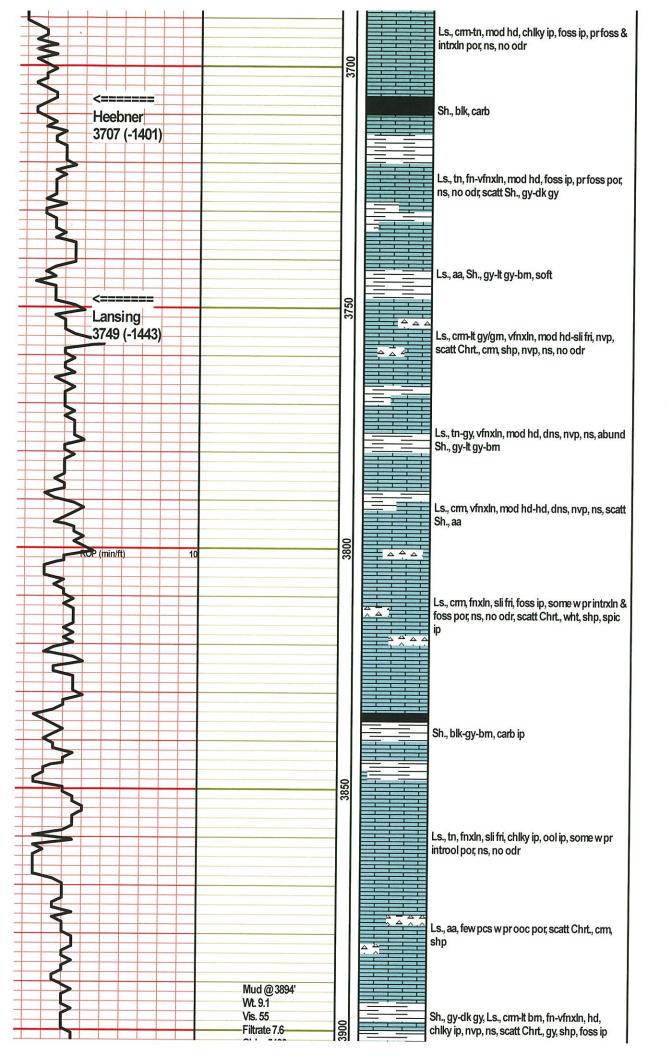
	Format	ion Tops	
Sample T	ops	LogTop	s
Anhy.	1591 (+715)	Anhy.	1590 (+716)
Base Anhy.	1610 (+696)	Base Anhy.	1624 (+682)
Heebner	3707 (-1401)	Heebner	3704 (-1398)
Lansing	3749 (-1443)	Lansing	3746 (-1440)
BKC	4049 (-1743)	вкс	4045 (-1739)
Marmaton	4096 (-1790)	Marmaton	4089 (-1783)
Pawnee	4159 (-1853)	Pawnee	4160 (-1854)
Ft. Scott	4244 (-1938)	Ft. Scott	4243 (-1937)
Cher. Sh.	4267 (-1961)	Cher. Sh.	4266 (-1960)
Miss.	4351 (-2045)	Miss.	4335 (-2029)
RTD	4450 (-2144)	LTD	4447 (-2141)

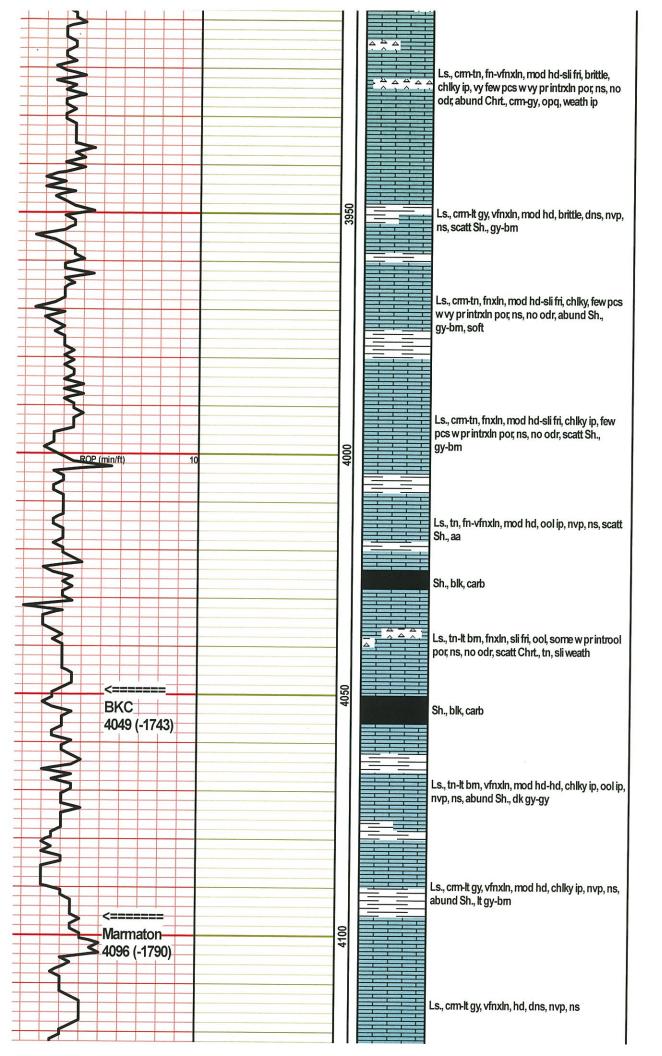
RILOBITE	DRILL STEM TE	ST REP	ORT				
N.2****	Palomino Petroleum		15-1	8s-24v	Ness,KS		
ESTING , INC	4924 SE 84th St New ton, KS 67114		_	Spend			
	ATTN: Andrew Stenzel			Ficket: 6 Start: 2	5154 019.02.18 @ 1	DST 15:50:03	
GENERAL INFORMATION:	<u>1944-144 - , , , , , , , , , , , , , , , , , ,</u>						
Formation: Ft Scott Deviated: No Whipstock: Time Tool Opened: 19:38:33 Time Test Ended: 00:43:03	ft (KB)		Test Teste Unit N	¥:	Conventional   Brandon Turle 79		Hole (Initial)
Interval:4237.00 ft (KB) To428Total Depth:4280.00 ft (KB) (TVHole Diameter:7.88 inchesHole	D)		Refer		evations: lo GR/CF:	2296.0	00 ft(KB) 00 ft(CF) 00 ft
Serial #: 8166       Outside         Press@RunDepth:       70.07 psig         Start Date:       2019.02.18         Start Time:       15:50:08         TEST COMMENT:       IF: 1/2" blow built IS: 1/2"         FF: Surface blow FS: No return.	End Date: End Time: to 4"	2019.02.19 00:43:03	Capacity: Last Calib. Time On B Time Off B	im :	20 2019.02.18 @ 2019.02.18 @	019.02.1 19:36:3	33
Риземанс ик Та			PRE	ESSUF		RY	
See Change Chang		Time (Min.) 0 2 33 61 62 92 132 132 133	2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	102.46 102.30 104.05 103.78 105.39 107.76	End Shut-In(	static v (1) 1) v (2) 2)	
Recovery				Gas	Rates		
Length (ft) Description 116.00 w.cm.5%w.95%m	Volume (bbs) 1,63			Choła (in	votes) Presoure (	paig}	Gas Rato (Mc6d)
	1						

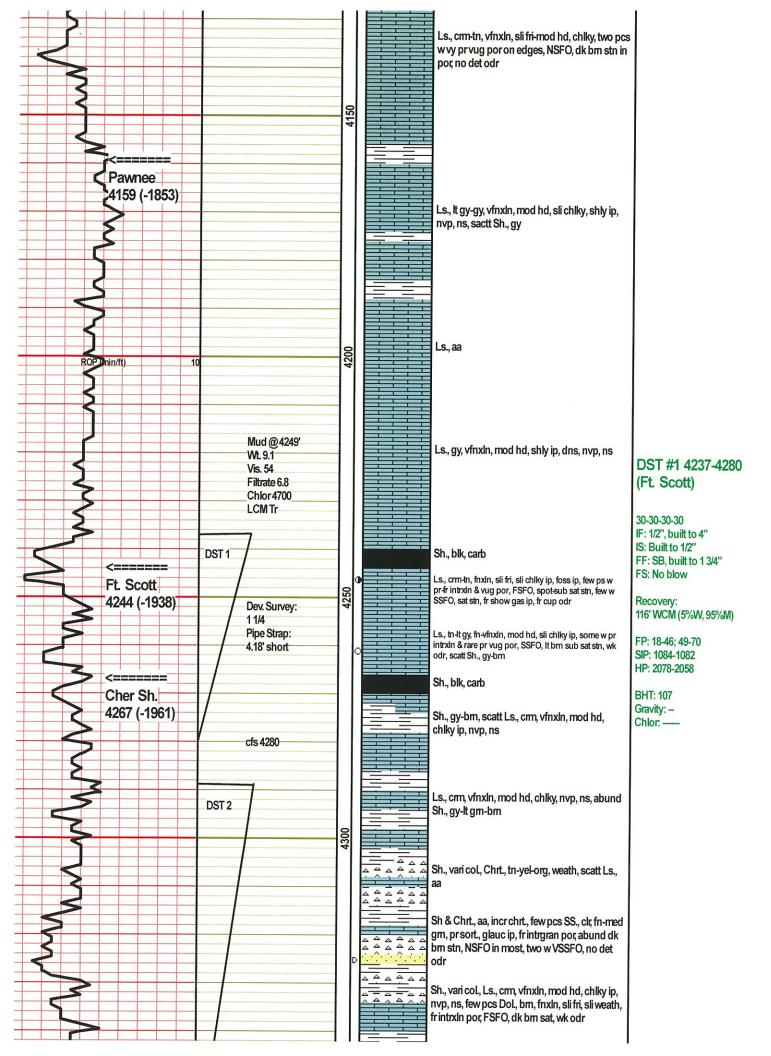
RILOBITE	DRILL STEM TE				
TESTING, INC	Palomino Petroleum		15	-18s-24\	w Ness,KS
	4924 SE 84th St Newton, KS 67114			g Spen	
	ATTN: Andrew Stenzel			o Ticket: 6 st Start: 2	019.02.19 @ 14:07:01
GENERAL INFORMATION:					
Formation: Miss Deviated: No Whipstock: fime Tool Opened: 16:37:31 fime Test Ended: 22:58:01	ft (KB)		Tes	st Type: ster: t No:	Conventional Bottom Hole (Reset) Brandon Turley 79
nterval: 4289.00 ft (KB) To 43 fotal Depth: 4364.00 ft (KB) (The fole Diameter: 7.88 inchesHow			Ref	etence B	2296.00 fl (CF)
				KB	to GR/CF: 10.00 ft
Serial #: 8166 Outside Press@RunDepth: 395.14 psig Start Date: 2019.02.19 Start Time: 14:07:06 TEST COMMENT: IF: BOB in 6 min. IS: No return. FF: BOB in 10 mi FS: No return.	End Date: End Time: 32 <sup>*</sup>	2019.02.19 22:58:01	Capacity Last Call Time On Time Off	b.: Bim	8000.00 psig 2019.02.19 2019.02.19 @ 16:37:01 2019.02.19 @ 19:41:01
Рилинс ук Т		<u> </u>	PI	RESSUE	RE SUMMARY
		Time (Min.) 0 1 31 61 62 120 183 184	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92 2106.24	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61	Annotation Initial Hydro-static Open To Flow (1) Shut-In(1) End Shut-In(1) Open To Flow (2) Shut-In(2)
Recovery					s Rates
Length (#)         Description           315.00         mcw 95%w 5%m	Volume (bb2) 2,61			Chola (ii	nches) Pressure (psig) Gas Rate (Mct/d)
252.00 w cm 40% w 60% m	1.24				
283.00 w cm oil spots 10% y 90%					











<pre> Miss. </pre>		435(	sat-sat stn, gd odr, scatt Sh., gy-bm	(1111551551ppian) 30-30-60-60
4351 (-2045)	cfs 4364		Dol., aa, some dns w nvp, some chlky, rest w fr intrxln & rare pr vug por, FSFO, dk bm sub sat stn, fr odr	IF: BOB in 6 min, built to 32'' IS: no blow FF: BOB in 10 min, built to 44 3/4'' FS: No blow
Z	Mud @4364' Wt. 9.2 Vis. 53 Filtrate 8.0 Chlor 5700		Dol, tn, fnxln, mod hd, some w nvp, printrxln porin most, few pcs w SSFO, bm spot stn, wk odr, abund Sh., gy	Recovery: 283' WCM w oil spots (10%W, 90%M) 252' WCM (40%W, 60%M) 315' MCW (95%W, 5%M)
	LCM1#		Dol., crm-tn, fnxln, sli fri, chlky ip, fr intrxln por, ns, no odr, scatt Chrt., clr, broken/weath ip, ns	850' TF FP: 44-211; 216-395 SIP: 1131-1136
ROP (min/ft) 10		4400 4400		HP: 2095-2106 BHT: 117 Gravity: – Chlor: 25000
			Dol. & Chrt., aa	
	Mud @ 4450' Wt. 9.4 Vis. 50 Filtrate 10.8 Chlor 6700 LCM Tr cfs 4450	4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450 4450	Chrt., wht-clr, broken ip, Dol., tn, fnxln, sli fri, fr intrxln por, ns	
RTD 4450 (-2144)		4		



#### DRILL STEM TEST REPORT

Prepared For:

( .....

Palomino Petroleum

4924 SE 84th St Newton, KS 67114

ATTN: Andrew Stenzel

#### **Big Spender #1**

#### 15-18s-24w Ness,KS

 Start Date:
 2019.02.18 @ 15:50:03

 End Date:
 2019.02.19 @ 00:43:03

 Job Ticket #:
 65154
 DST #: 1

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

Printed: 2019.02.20 @ 14:33:59

RILOBITE	Palomino Petroleum		15	-18s-24w	v Ness, ł	(S	
ESTING , INC	4324 OE 0411 Ot			g Spend	-		
	New ton, KS 67114		Job	Ticket: 6	5154	DS.	<b>[</b> #: 1
	ATTN: Andrew Stenzel		Tes	st Start: 20	019.02.18	@ 15:50:0	03
GENERAL INFORMATION:							
Formation: Ft Scott Deviated: No Whipstock: Time Tool Opened: 19:38:33 Time Test Ended: 00:43:03	ft (KB)		Tes	ster:	Conventio Brandon 79		ı Hole (Initial)
Interval:         4237.00 ft (KB) To         42           Total Depth:         4280.00 ft (KB) (T∨	/D)		Ref	ference El		2296	.00 ft (KB) .00 ft (CF)
Hole Diameter: 7.88 inches Hole	Condition: Good			KB	to GR/CF:	10	.00 ft
Serial #:         8166         Outside           Press@RunDepth:         70.07 psig         0           Start Date:         2019.02.18         0           Start Time:         15:50:08         0	<ul> <li>4238.00 ft (KB)</li> <li>End Date:</li> <li>End Time:</li> </ul>	2019.02.19 00:43:03	Capacity Last Cali Time On Time Off	ib.: Btm:		8000 2019.02 8 @ 19:36 8 @ 21:49	:33
TEST COMMENT: IF: 1/2" blow built IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"		P	RESSUF	RE SUM	MARY	
IS: 1/2" FF: Surface blow FS: No return. Pressure vs. TS	built to 1 3/4"						·····
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	Time (Min.)	Pressure (psig)	RESSUF Temp (deg F)	RE SUM		
IS: 1/2" FF: Surface blow FS: No return. Pressure vs. TS MOREN	built to 1 3/4"	(Min.) 0	Pressure (psig) 2078.47	Temp (deg F) 101.63	Annota Initial Hy	ation dro-static	
IS: 1/2" FF: Surface blow FS: No return. Pressure vs. TS	built to 1 3/4"	(Min.)	Pressure (psig) 2078.47 18.69	Temp (deg F) 101.63 102.46	Annota Initial Hy Open To	ation dro-static o Flow (1)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61	Pressure (psig) 2078.47 18.69 46.53 1084.38	Temp (deg F) 101.63 102.46 102.30 104.05	Annota Initial Hy Open To Shut-In( End Shu	ation dro-static 5 Flow (1) 1) t-In(1)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80	Temp (deg F) 101.63 102.46 102.30 104.05 103.78	Annota Initial Hy Open To Shut-In( End Shu Open To	ation dro-static Flow (1) 1) t-ln(1) Flow (2)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61	Pressure (psig) 2078.47 18.69 46.53 1084.38	Temp (deg F) 101.63 102.46 102.30 104.05	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In(	ation dro-static Flow (1) 1) t-ln(1) Flow (2) 2)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In(	ation dro-static Flow (1) 1) t-In(1) Flow (2) 2) t-In(2)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shut Shut-In( End Shu Final Hyd	ation dro-static Flow (1) 1) t-In(1) Flow (2) 2) t-In(2)	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hyd	ation dro-static b Flow (1) 1) t-In(1) b Flow (2) 2) t-In(2) dro-static	
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hyd	ation dro-static Flow (1) 1) t-In(1) Flow (2) 2) t-In(2)	Gas Rate (Mcf/d)
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hyd	ation dro-static b Flow (1) 1) t-In(1) b Flow (2) 2) t-In(2) dro-static	Gas Rate (Mcf/d)
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hyd	ation dro-static b Flow (1) 1) t-In(1) b Flow (2) 2) t-In(2) dro-static	Gas Rate (Mcf/d)
IS: 1/2" FF: Surface blow FS: No return.	built to 1 3/4"	(Min.) 0 2 33 61 62 92 132	Pressure (psig) 2078.47 18.69 46.53 1084.38 49.80 70.07 1082.22	Temp (deg F) 101.63 102.46 102.30 104.05 103.78 105.39 107.76 108.40	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hyd	ation dro-static b Flow (1) 1) t-In(1) b Flow (2) 2) t-In(2) dro-static	Gas Rate (Mcf/d)

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RILOBITE	DRILL STEM T			w Ness,K	<u>م</u>
ESTING , INC					
	4924 SE 84th St New ton, KS 67114		Big Sper Job Ticket:		DST#:1
	ATTN: Andrew Stenzel			2019.02.18	
GENERAL INFORMATION:					
Formation:Ft ScottDeviated:NoWhipstock:Time Tool Opened:19:38:33Time Test Ended:00:43:03	ft (KB)		Test Type: Tester: Unít No:	Conventior Brandon T 79	nal Bottom Hole (Initial) iurley
Interval: 4237.00 ft (KB) To 4 Total Depth: 4280.00 ft (KB) (T Hole Diameter: 7.88 inchesHo	· · · · ·		Reference KI	Elevations: B to GR/CF:	2306.00 ft (KB) 2296.00 ft (CF) 10.00 ft
Serial #: 6651 Inside					<u></u>
Press@RunDepth: psig Start Date: 2019.02.18 Start Time: 15:51:04	<ul> <li>4238.00 ft (KB)</li> <li>End Date:</li> <li>End Time;</li> </ul>	2019.02.19 00:43:59	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 psig 2019.02.19
IS: 1/2" FF: Surface blov FS: No return.	w built to 1 3/4"				
IS: 1/2" FF: Surface blov					
IS: 1/2" FF: Surface blov	W built to 1 3/4"	ma Time (Min.)	PRESSU Pressure Temp (psig) (deg F		
FF: Surface blox FS: No return.	W built to 1 3/4"	(Min.)	Pressure Temp	Annotat	
IS: 1/2" FF: Surface blox FS: No return.	W built to 1 3/4"	(Min.)	Pressure Temp	Annotat	
IS: 1/2" FF: Surface blox FS: No return.	w built to 1 3/4"	(Min.)	Pressure Temp (psig) (deg F	Annotat	
IS: 1/2" FF: Surface blox FS: No return.	w built to 1 3/4"	(Min.)	Pressure Temp (psig) (deg F	Annotat ) as Rates	

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RILOBI		Palomin	o Petroleur	n			1	5-18s-24w N	Jace KS	2
ESTI	ING , INC									
			E 84th St n, KS 67114	1			E	Big Spender	r #1	
		14044 (01	, 10 07 11	T			J	ob Ticket: 651	54	DST#:1
		ATTN:	Andrew S	stenzel			Т	est Start: 2019	9.02.18 @	2) 15:50:03
Tool Information								· · · · · · · · · · · · · · · · · · ·		
Drill Pipe: Length:	4114.00 ft	Diameter:	2.25	inches Vo	olume:	20.23 b	bl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe: Length:	0.00 ft	Diameter:	0.00	inches Vo	olume:	0.00 b	bl	Weight set o	n Packer:	: 25000.00 lb
Drill Collar: Length:	116.00 ft	Diameter:	3.80	inches Vo		1.63 b	bl	Weight to Pul	I Loose:	75000.00 lb
Drill Pipe Above KB:	20.00 ft			Total Vo	olume:	21.86 b	bl	Tool Chased		0.00 ft
•	4237.00 ft							String Weigh		60000.00 lb
Depth to Bottom Packer:	ft								Final	60000.00 lb
Interval between Packers:	43.00 ft									
Tool Length:	70.00 ft									
Number of Packers:	2	Diameter:	6.75	inches						
T = - 1 ()										
Tool Description	Len		Serial No	. Positi	ion	Depth (ft)	Accur	n. Lengths		
Tool Comments: Tool Description Stubb	Len	n <b>gth (ft)</b> 1.00	Serial No	. Positi	ion		Accur	n. Lengths		
Tool Description	Len		Serial No	. Positi	ion	Depth (ft) 4211.00 4216.00	Accur	n. Lengths		
Tool Description	Len	1.00	Serial No	. Positi	ion	4211.00	Accu	n. Lengths		
Tool Description Stubb Shut In Tool	Len	1.00 5.00	Serial No	. Positi	ion	4211.00 4216.00	Accu	n. Lengths		
Tool Description Stubb Shut In Tool Hydraulic tool	Len	1.00 5.00 5.00	Serial No	. Positi	ion	4211.00 4216.00 4221.00	Accur	n. Lengths		
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint	Len	1.00 5.00 5.00 5.00	Serial No	. Positi	ion	4211.00 4216.00 4221.00 4226.00	Accur	n. Lengths 27.00		Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer	Len	1.00 5.00 5.00 5.00 2.00	Serial No	. Positi	ion	4211.00 4216.00 4221.00 4226.00 4228.00	Accu			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	Len	1.00 5.00 5.00 5.00 2.00 5.00	Serial No	. Positi	ion	4211.00 4216.00 4221.00 4226.00 4228.00 4233.00	Accur			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	Len	1.00 5.00 5.00 2.00 5.00 4.00	Serial No 6651		side	4211.00 4216.00 4221.00 4226.00 4228.00 4228.00 4233.00 4237.00	Accu			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder	Len	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 0.00			side	4211.00 4216.00 4221.00 4226.00 4228.00 4233.00 4237.00 4238.00	Асси			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Perforations	Len	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00	6651	Ins	side	4211.00 4216.00 4221.00 4226.00 4228.00 4233.00 4237.00 4238.00 4238.00 4238.00 4238.00	Accur			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub		1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00	6651	Ins	side	4211.00 4216.00 4221.00 4226.00 4228.00 4233.00 4238.00 4238.00 4238.00 4238.00 4243.00	Accu			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub Drill Pipe		1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00 31.00	6651	Ins	side	4211.00 4216.00 4226.00 4228.00 4233.00 4233.00 4238.00 4238.00 4238.00 4238.00 4242.00 4242.00 4243.00	Accu			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub Drill Pipe Change Over Sub		1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00 31.00 1.00	6651	Ins	side	4211.00 4216.00 4226.00 4228.00 4228.00 4233.00 4238.00 4238.00 4238.00 4238.00 4242.00 4242.00 4243.00 4275.00	Accur			Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Recorder Change Over Sub Drill Pipe Change Over Sub Bulinose		1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00 31.00	6651	Ins	side	4211.00 4216.00 4226.00 4228.00 4233.00 4233.00 4238.00 4238.00 4238.00 4238.00 4242.00 4242.00	Accu		Bot	Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub Drill Pipe Change Over Sub		1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00 31.00 1.00	6651	Ins	side	4211.00 4216.00 4226.00 4228.00 4228.00 4233.00 4238.00 4238.00 4238.00 4238.00 4242.00 4242.00 4243.00 4275.00	Accu	27.00	Bot	

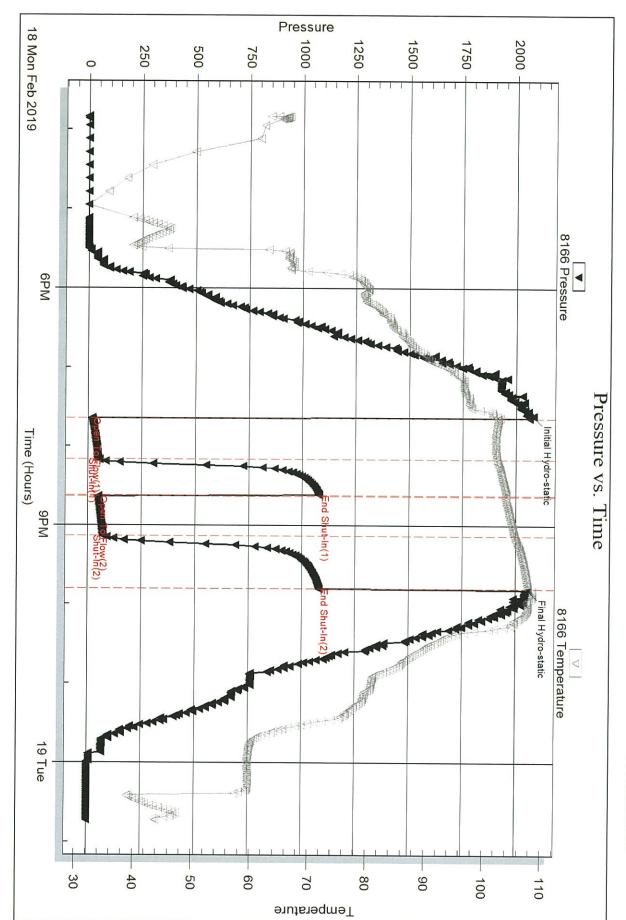
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RILOE		DRI	LL STI	EM TEST F	REPOR			FLUID	SUMMA
		Palomin	o Petroleun	n		15-18s-24	w Ness,KS	\$	
ESI	TNG , INC	4924 SF	E84th St			Big Sper	dor #1		
			i, KS 67114	ł		Job Ticket:		DOTH	
		A						DST#:	1
		ATTN:	Andrew S	itenzel		Test Start:	2019.02.18 @	0 15:50:03	
Mud and Cushion Inf	ormation								
Mud Type: Gel Chem			Cus	shion Type:			Oil A PI;		0 deg AF
Mud Weight: 9.00 l	-		Cus	shion Length:		ft	Water Salini	ity:	0 ppm
√iscosity: 54.00 s			Cus	shion Volume:		bbl			••
Nater Loss: 6.80 i				s Cushion Type:					
•	ohm.m		Gas	s Cushion Pressure	ł	psig			
Salinity: 4700.00 ; Filter Cake: 1.00 i	ppm inches								
					· · · · · · · · · · · · · · · · · · ·				
Recovery Informatior	1		Re	covery Table					
	Length			Description		Volume	7		
	ft			Description		bbl			
	1.	16.00	w cm 5%w	95%m		1.62	7		
Tot	tal Length:	116.0	00 ft -	Total Volume:	1.627 bbl				
Nita	m Fluid Sample			Num One Develop	~	O and a bar	L,		
1.161		#S.U		Num Gas Bomos:	U	Serial #			
				Num Gas Bombs: Laboratory Location	0	Serial #	••		
Lai	boratory Name	<b>)</b> :		Laboratory Location	-	Seriai #	•		
Lai		<b>)</b> :			-	Serial #	•.		
Lai	boratory Name	<b>)</b> :			-	Serial #			
Lai	boratory Name	<b>)</b> :			-	Serial #			
Lai	boratory Name	<b>)</b> :			-	Seriai #			
Lai	boratory Name	<b>)</b> :			-	Seriai #	• •		
Lai	boratory Name	<b>)</b> :			-	Seliai #			×
Lai	boratory Name	<b>)</b> :			-	Seliai #	• •		
Lai	boratory Name	<b>)</b> :			-	Seriai #			
Lai	boratory Name	<b>)</b> :			-	Seriai #	•		
Lai	boratory Name	<b>)</b> :			-	Seriai #	•		
Lai	boratory Name	<b>)</b> :			-	Seriai #	• •		
Lai	boratory Name	<b>)</b> :			-	Seriai #	• •		
Lai	boratory Name	<b>)</b> :			-	Serial #	• •		
Lai	boratory Name	<b>)</b> :			-	Serial #	•		
Lai	boratory Name	<b>)</b> :			-	Seriai #	•		
Lai	boratory Name	<b>)</b> :			-	Seriai #	•		
Lai	boratory Name	<b>)</b> :			-	Seriai #	·		
Lai	boratory Name	<b>)</b> :			-	Seliai #	•		
Lai	boratory Name	<b>)</b> :			-	Seliai #	·		
Lai	boratory Name	<b>)</b> :			-	Serial #	·		
Lai	boratory Name	<b>)</b> :			-	Serial #	·		
Lai	boratory Name	<b>)</b> :			-	Serial #	·		
Lai	boratory Name	<b>)</b> :			-	Seliai #	·		
Lai	boratory Name	<b>)</b> :			-	Seliai #	·		
Lai	boratory Name	<b>)</b> :			-	Seliai #	·		•
Lai	boratory Name	<b>)</b> :			-	Serial #	·		•
Lai	boratory Name	<b>)</b> :			-	Seliai #	·		•

Printed: 2019.02.20 @ 14:34:00

Ref. No: 65154





Big Spender #1

DST Test Number: 1

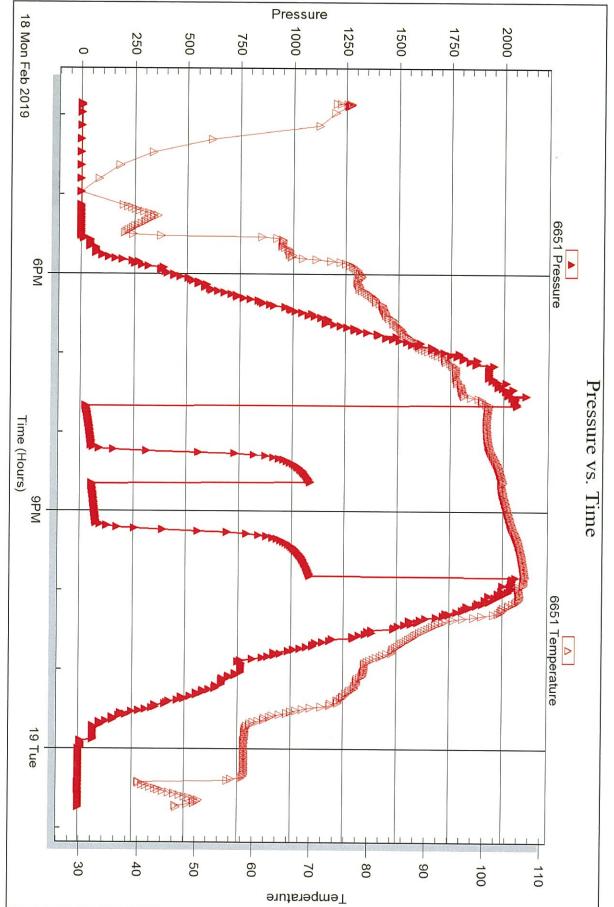
Serial #: 8166 Outside Palomino Petroleum

Printed: 2019.02.20 @ 14:34:00

Ref. No: 65154

Trilobite Testing, Inc





Palomino Petroleum

Serial #: 6651

Inside

Big Spender #1

DST Test Number: 1



#### DRILL STEM TEST REPORT

Prepared For:

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Palomino Petroleum

4924 SE 84th St Newton, KS 67114

ATTN: Andrew Stenzel

#### Big Spender #1

#### 15-18s-24w Ness,KS

 Start Date:
 2019.02.19 @ 14:07:01

 End Date:
 2019.02.19 @ 22:58:01

 Job Ticket #:
 65155
 DST #:
 2

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

Printed: 2019.02.20 @ 14:33:16

RILOBITE	Palomino Petroleum		15	-18s-24v	v Ness,	KS	
ESTING , INC	4924 SE 84th St New ton, KS 67114			<b>g Spenc</b> Ticket: 6		Der	<b>[#:2</b>
	ATTN: Andrew Stenzel					لحت 14:07:0 @ 9	
GENERAL INFORMATION:							
Formation: <b>Miss</b> Deviated: No Whipstock: Time Tool Opened: 16:37:31 Time Test Ended: 22:58:01	ft (KB)		Tes	ter:	Conventi Brandon 79		Hole (Reset)
nterval:         4289.00 ft (KB) To         430           Total Depth:         4364.00 ft (KB) (TV         100           Hole Diameter:         7.88 inches Hole         100	· · · ·		Ref	erence El	evations: to GR/CF:	2296	.00 ft (KB) .00 ft (CF)
				<u>кв</u>		10	.00 ft
Serial #:         8166         Outside           Press@RunDepth:         395.14 psig         ()           Start Date:         2019.02.19         ()           Start Time:         14:07:06         ()	<ul> <li>4290.00 ft (KB)</li> <li>End Date:</li> <li>End Time:</li> </ul>	2019.02.19 22:58:01	Capacity Last Call Time On Time Off	b.: Btm:		8000 2019.02 19 @ 16:37 19 @ 19:41	:01
EST COMMENT: IF: BOB in 6 min. 3 IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. TE	. 44 3/4"						
IS: No return. FF: BOB in 10 min FS: No return.	a. 44 3/4" cac st00 [☉] st00 Torporare	Time		RESSUF			
IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. The	1. 44 3/4"	(IVIn.)	Pressure (psig)	Temp (deg F)	Annot	ation	
IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. The STOPHENUM	1. 44 3/4" aac <u>\$900 Tomportuno</u>	(Min.) 0 1	Pressure (psig) 2093.39 44.20	Temp (deg F) 96.21 95.59	Annota Initial Hy Open To	ation dro-static o Flow (1)	
IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. The STOTMARY	1. 44 3/4"	(Min.) 0 1	Pressure (psig) 2093.39	Temp (deg F) 96.21 95.59 109.95	Annota Initial Hy Open To Shut-In(	ation dro-static o Flow (1) 1)	
IS: No return. FF: BOB in 10 min FS: No return.	A. 44 3/4"	(Min.) 0 1 31 61	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44	Temp (deg F) 96.21 95.59 109.95 112.35 112.06	Annota Initial Hy Open To Shut-In( End Shu Open To	ation dro-static 5 Flow (1) 1) it-In(1) 5 Flow (2)	
IS: No return. FF: BOB in 10 min FS: No return.	A. 44 3/4"	(Min.) 0 1 31 61	Pressure (psig) 2093.39 44.20 211.59 1131.00	Temp (deg F) 96.21 95.59 109.95 112.35 112.06	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In(	ation dro-static b Flow (1) 1) it-In(1) b Flow (2) 2)	
IS: No return. FF: BOB in 10 min FS: No return.	A. 44 3/4"	(Min.) 0 1 31 61 62 120	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu	ation dro-static b Flow (1) 1) it-In(1) b Flow (2) 2)	
IS: No return. FF: BOB in 10 min FS: No return.	A. 44 3/4"	(Min.) 0 1 31 61 62 120 183	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61 117.78	Annota Initial Hy Open To Shut-In( End Shu Shut-In( End Shu Final Hy	ation dro-static b Flow (1) 1) tt-In(1) b Flow (2) 2) tt-In(2)	
IS: No return. FF: BOB in 10 min FS: No return.	A. 44 3/4"	(Min.) 0 1 31 61 62 120 183	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61 117.78	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hy Shut-In( Shut-In( End Shu Final Hy	ation dro-static b Flow (1) 1) tt-In(1) b Flow (2) 2) tt-In(2)	Gas Rate (Mcl/d)
IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. The second second sec	A. 44 3/4"	(Min.) 0 1 31 61 62 120 183	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61 117.78 Gas	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hy Shut-In( Shut-In( End Shu Final Hy	ation dro-static o Flow (1) 1) (t-In(1) o Flow (2) 2) tt-In(2) dro-static	Gas Rate (Mcl/d)
IS: No return. FF: BOB in 10 min FS: No return. Pressure vs. Tre	A 44 3/4"	(Min.) 0 1 31 61 62 120 183	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61 117.78 Gas	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hy Shut-In( Shut-In( End Shu Final Hy	ation dro-static o Flow (1) 1) (t-In(1) o Flow (2) 2) tt-In(2) dro-static	Gas Rate (Mcl/d)
FF: BOB in 10 min FS: No return.	A 44 3/4"	(Min.) 0 1 31 61 62 120 183	Pressure (psig) 2093.39 44.20 211.59 1131.00 216.44 395.14 1136.92	Temp (deg F) 96.21 95.59 109.95 112.35 112.06 120.18 117.61 117.78 Gas	Annota Initial Hy Open To Shut-In( End Shu Open To Shut-In( End Shu Final Hy Shut-In( Shut-In( End Shu Final Hy	ation dro-static o Flow (1) 1) (t-In(1) o Flow (2) 2) tt-In(2) dro-static	Gas Rate (Mcl/d)

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RILOBITE	Palomino Petroleum		15-18s-24	w Ness,K	S	
ESTING , INC	4924 SE 84th St New ton, KS 67114		Big Sper			
	ATTN: Andrew Stenzel		Job Ticket: Test Start:	2019.02.19	DST#:: @ 14:07:01	2
GENERAL INFORMATION:	<u>, , , , , , , , , , , , , , , , , , , </u>					
Formation: <b>Miss</b> Deviated: No Whipstock: Time Tool Opened: 16:37:31 Time Test Ended: 22:58:01	ft (KB)		Test Type: Tester: Unit No:	Convention Brandon T 79	nal Bottom Hol 'urley	e (Reset)
Interval:4289.00 ft (KB) To436Total Depth:4364.00 ft (KB) (TV)Hole Diameter:7.88 inches Hole	D)		Reference KI	Elevations: B to GR/CF:	2306.00 2296.00 10.00	ft (CF)
Serial #: 6651 Inside					_	
Press@RunDepth: psig @ Start Date: 2019.02.19 Start Time: 14:07:51	4290.00 ft (KB) End Date: End Time:	2019.02.19 22:58:46	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 2019.02.19	psig
TEST COMMENT: IF: BOB in 6 min. 3 IS: No return. FF: BOB in 10 min. FS: No return.	44 3/4"					
IS: No return. FF: BOB in 10 min.						
IS: No return. FF: BOB in 10 min.	. 44 3/4" ac 0091 Torponter 110	Time (Min.)				
IS: No return. FF: BOB in 10 min. FS: No return.	ac <u>copy Toppake</u> <b>50</b>		PRESSU Pressure Temp	Annotat		
IS: No return. FF: BOB in 10 min. FS: No return.	. 44 3/4" RC COUT TOPPONAN COUT TOPPONAN TO TO TO TO TO TO TO TO TO TO TO TO TO	(Min.)	PRESSU Pressure Temp	Annotat		
IS: No return. FF: BOB in 10 min. FS: No return.	. 44 3/4"	(Min.)	PRESSU Pressure Temp (psig) (deg F	Annotat )		
IS: No return. FF: BOB in 10 min. FS: No return. Pressoure vs. Time continues conti	. 44 3/4"	(Min.)	PRESSU Pressure Temp (psig) (deg F	Annotat	tion	Rate (Mcl/d)
IS: No return. FF: BOB in 10 min. FS: No return. Pressnure vs. Tim too Pressnure vs. Ti	. 44 3/4"	(Min.)	PRESSU Pressure Temp (psig) (deg F	Annotat	tion	Rate (Mcf/d)
IS: No return. FF: BOB in 10 min. FS: No return. Pressoure vs. Time continues conti	. 44 3/4"	(Min.)	PRESSU Pressure Temp (psig) (deg F	Annotat	tion	Rate (Mcf/d)

Trilobite Testing, Inc

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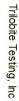
RILOE	SITE				- •		- • •		· · · · · · · · · · · · · · · · · · ·	TOOL DIAGR
			io Petroleui	m				15-18s-24w N	less,KS	5
	<b>FING</b> , INC	4524 0	E 84th St n, KS 67114	4				Big Spender	· #1	
			1, 100111	-				Job Ticket: 6515	55	DST#:2
		ATTN:	Andrew S	Stenzel				Test Start: 2019	9.02.19 @	2 14:07:01
Tool Information		-								
Drill Pipe: Length:	4177.00 ft	Diameter:	2.25	inches	Volume:	20.54	bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe: Length:		Diameter:			Volume:			Weight set or	Packer	
Drill Collar: Length:	116.00 ft	Diameter:	3.80	inches	Volume;	1.63		Weight to Pull		
	04 00 A			Total	Volume:			Tool Chased		0.00 ft
Drill Pipe Above KB: Depth to Top Pockor:	31.00 ft							String Weight	t: Initial	60000.00 lb
Depth to Top Packer: Depth to Bottom Packer:	4289.00 ft ft								Final	65000.00 lb
Interval between Packers:	75.00 ft									
Tool Length:	102.00 ft									
Number of Packers:	2	Diameter:	6 75	inches						
		Dian a cor.	0.10	1101163						
	Lei	nath (ft)	Serial No	). Pos	sition	Depth (fi	f) Ac	cum lengths		
Tool Description	Lei		Serial No	). Pos	sition	Depth (fr		cum. Lengths		
Tool Description	Lei	1.00	Serial No	). Pos	sition	4263.00		cum. Lengths		
Tool Description Stubb Shut In Tool	Lei	1.00 5.00	Serial No	). Pos	sition	4263.00 4268.00		cum. Lengths		
Tool Description Stubb Shut In Tool Hydraulic tool	Lei	1.00 5.00 5.00	Serial No	o. Pos	sition	4263.00 4268.00 4273.00		cum. Lengths		
<b>Tool Description</b> Stubb Shut In Tool Hydraulic tool Jars	Lei	1.00 5.00 5.00 5.00 5.00	Serial No	o. Pos	sition	4263.00 4268.00 4273.00 4278.00		cum. Lengths		
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint	Lei	1.00 5.00 5.00	Serial No	o. Pos	sition	4263.00 4268.00 4273.00 4278.00 4280.00				Bottom Of Top Doolo
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer	Lei	1.00 5.00 5.00 5.00 5.00 2.00	Serial No	). Pos	sition	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00		cum. Lengths 27.00		Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer	Lei	1.00 5.00 5.00 5.00 2.00 5.00	Serial No	). Pos	sition	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	Lei	1.00 5.00 5.00 2.00 5.00 4.00	Serial No 6651		sition	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder	Lei	1.00 5.00 5.00 5.00 2.00 5.00 4.00 1.00				4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00 4290.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder	Lei	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00	6651		Inside	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00 4289.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Perforations	Lei	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 0.00	6651		Inside	4263.00 4268.00 4273.00 4278.00 4280.00 4289.00 4289.00 4290.00 4290.00 4290.00 4290.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub	Lei	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00	6651		Inside	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00 4290.00 4290.00 4290.00 4294.00 4295.00				Bottom Of Top Packe
Tool Comments: Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Recorder Perforations Change Over Sub Drill Pipe Change Over Sub	Lei	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00	6651		Inside	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00 4290.00 4290.00 4290.00 4290.00 4295.00 4358.00				Bottom Of Top Packe
Tool Description Stubb Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder Perforations Change Over Sub Drill Pipe	Lei	1.00 5.00 5.00 2.00 5.00 4.00 1.00 0.00 4.00 1.00 63.00	6651		Inside	4263.00 4268.00 4273.00 4278.00 4280.00 4285.00 4289.00 4290.00 4290.00 4290.00 4294.00 4295.00			Bot	Bottom Of Top Packe

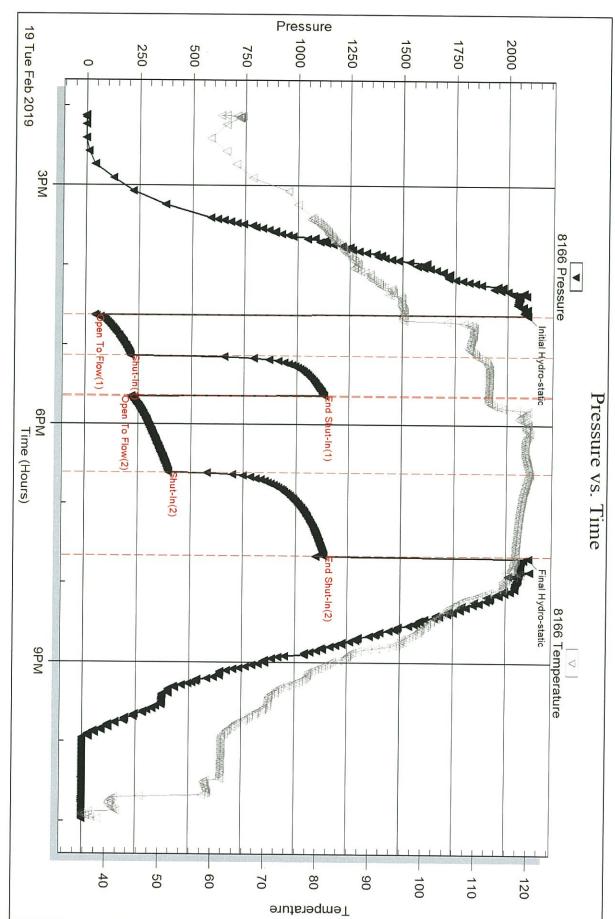
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	<b>T</b> RILOBITE	DR	ILL STEM TEST REPOR	RT		FLUID SUMMA
		Palomi	no Petroleum	15-18s-24	w Ness,KS	
ESTING , INC		4924 \$	SE 84th St	Big Sper	Big Spender #1           Job Ticket: 65155         DST#:2           Test Start: 2019.02.19 @ 14:07:01	
		New to	on, KS 67114			
		ATTN:	Andrew Stenzel	Test Start:		
Mud and Cu	shion Information					
	el Chem		Cushion Type:		Oil API:	0 deg Al
Mud Weight:	9.00 lb/gal		Cushion Length:	ft	Water Salinity:	25000 ppm
Viscosity: Water Loss:	53.00 sec/qt		Cushion Volume:	bbl		
Resistivity:	7.99 in³ 0.00 ohm.m		Gas Cushion Type:			
Salinity: Filter Cake:	5700.00 ppm 1.00 inches		Gas Cushion Pressure:	psig		
Recovery In	formation				. <u>,,,,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	· · · ·		Recovery Table			
	Length ft	n	Description	Volume bbl		
		315.00	mcw 95%w 5%m	2.60	6	
		252.00	w cm 40%w 60%m	1.23		
		283.00	w cm oil spots 10%w 90%m	1.39	2	
	Total Length:	850	.00 ft Total Volume: 5.237 bl	bl		
	Num Fluid Sample	es: 0	Num Gas Bombs: 0	Serial #	ŧ	
	Laboratory Name	e:	Laboratory Location:			
	Recovery Comm					

Printed: 2019.02.20 @ 14:33:17

Ref. No: 65155





Serial #: 8166 c

Outside Palomino Petroleum

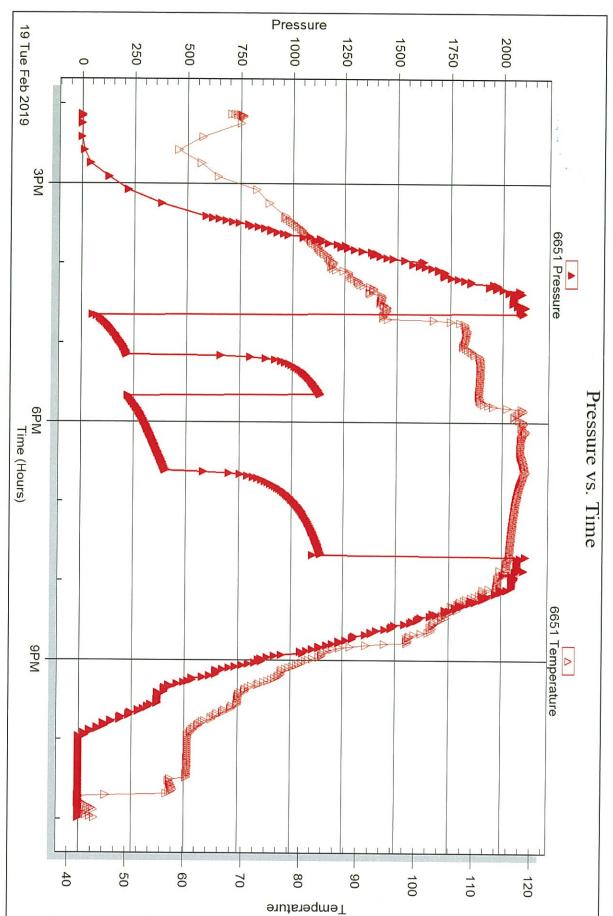
Big Spender #1

DST Test Number: 2

Printed: 2019.02.20 @ 14:33:17

Ref. No: 65155

Trilobite Testing, Inc



Big Spender #1

Serial #: 6651

Inside

Palomino Petroleum

DST Test Number: 2

RILOBITE		Test Ticket
ESTING IN	C. vay ∙ Hays, Kansas 67601	NO. 65154
Company $Parlomino$ Address $49245E843$ Co. Rep / Geo.Andrew 543Location: Sec.15 Twp 183Interval Tested $4237$ Anchor Length $4237$ Top Packer Depth $4237$ Bottom Packer Depth $4280$ Blow Description $IF: 1/2 blo$ $I5: 1/2 in ct$	$\frac{e_{1}2e_{1}}{Rge. 24} Rig_{Co. N}$ $\frac{80}{Zone Tested Ft. 3}$ $\frac{80}{Zone Tested Ft. 3}$ $\frac{7111}{Pipe Run 4/14}$ $\frac{716}{Vt. Pipe Run 116}$ $\frac{716}{Vt. Pipe Run 6}$ $\frac{7700}{Vt. Pipe Run 6}$ $\frac{7700}{Vt. Pipe Run 6}$	$\frac{KS}{WW} = \frac{6}{8}$ $\frac{KS}{KS}$ $\frac{KS}{$
Feet of         Wcm           Rec         Feet of           Rec         Feet of           Rec         Feet of           Rec         Feet of	%gas %gas %gas	%oit     5     %water     9.5     %much       %oil     %water     %much       %oil     %water     %much       %oil     %water     %much
Rec       Feet of         Rec Total       116       BHT       107         (A) Initial Hydrostatic       2098         (B) First Initial Flow       18         (C) First Final Flow       46         (D) Initial Shut-In       1084         (E) Second Initial Flow       49         (F) Second Final Flow       20         (G) Final Shut-In       1082         (H) Final Hydrostatic       2058         Initial Open       30         Final Flow       30         Final Flow       30         Final Flow       30		T-On Location       15:00         T-Started       15:50         T-Open       19:38         T-Pulled       21:38         T-Out       00:45         Comments

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. 6

4/10	<b>RILOBITE</b> <b>ESTING</b> INC. 1515 Commerce Parkway		<b>Test Ti</b> e NO. 6	<b>cket</b> 5155
Company Por/a Address 42		Elevation the St Newton enzel Rig_ RgeCo	KS 67/14 WW #2. Ness	<u>2296</u> GL
Interval Tested 42				
Anchor Length		Drill Pipe Run 4/77		11. 9.2
Top Packer Depth	- 0	Drill Collars Run 116		53
Bottom Packer Depth_		Wt. Pipe Run		8.0
Total Depth	4364	Chlorides 5700	ppm System LCM _	
	IF. BOB in 6	min, 3211		
	5) No retur	n.		
	F. Bob in 10 No return,	min, 44314.		
~ ~ ~	the second se			
	Feet of WCM oil	ha	11	%water 90 %mud
21/	Feet of Mar WC.	%gas	%oil 70	%water 60 %mud
	Feet of meh	%gas	%oil 90	%water 5 %mud
	Feet of	%gas	%oil	%water %mud
	Feet of	%gas		%water %mud
	<u>50</u> внт <u>117</u> 2093 -	1000	8 @ 40 F Chlori	des 25,000 ppm
(A) Initial Hydrostatic	1111	Test 1300	T-On Location	
(B) First Initial Flow	. /	Jars 250	T-Started	14:07
(C) First Final Flow	211	Safety Joint 75	T-Open	16:38
(D) Initial Shut-In		Circ Sub	T-Pulled	7:50
(E) Second Initial Flow		Hourly Standby		3:04
(F) Second Final Flow	395 -	Mileage 116-4 2 232	2 Comments	s 2/20 14:00
(G) Final Shut-In	1136	Sampler	The second se	
(H) Final Hydrostatic	2106	G Straddle		
-		Shale Packer		ale Packer
Initial Open		C Extra Packer		cker
Initial Shut-In	30	Extra Recorder		es
Final Flow	60	Day Standby		
Final Shut-In	60	Accessibility		
r		Sub Total 1857		:1
Approved By		Our Representati	ive	6

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