



DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

PO Box 458
Hays, KS 67601

ATTN: Mike Bair

Veverka E #1

21-8S-19W Rooks,KS

Start Date: 2014.03.12 @ 18:49:53

End Date: 2014.03.13 @ 02:15:23

Job Ticket #: 54015 DST #: 1

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

Printed: 2014.03.17 @ 10:46:30



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54015

DST#: 1

ATTN: Mike Bair

Test Start: 2014.03.12 @ 18:49:53

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:56:53

Time Test Ended: 02:15:23

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan L

Unit No: 46

Interval: 3420.00 ft (KB) To 3491.00 ft (KB) (TVD)

Reference Elevations: 2037.00 ft (KB)

Total Depth: 3491.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8321 Inside

Press@RunDepth: 53.16 psig @ 3421.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.12

End Date:

2014.03.13

Last Calib.: 2014.03.13

Start Time: 18:49:54

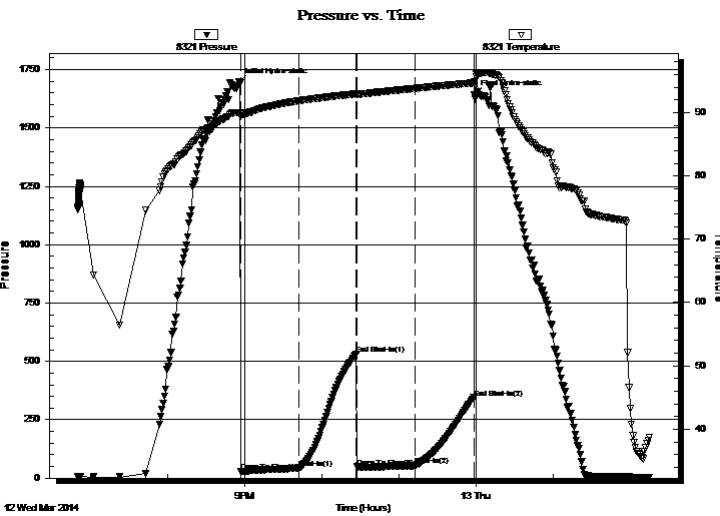
End Time:

02:15:23

Time On Btm: 2014.03.12 @ 20:55:23

Time Off Btm: 2014.03.12 @ 23:58:53

TEST COMMENT: 45- IF- Slow ly built to 6"
45- IS- No blow
45- FF- Built very slow ly to 3"
45- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.02	90.02	Initial Hydro-static
2	27.99	89.33	Open To Flow (1)
47	42.52	91.88	Shut-In(1)
92	530.54	92.97	End Shut-In(1)
92	48.33	92.89	Open To Flow (2)
138	53.16	93.84	Shut-In(2)
183	344.47	94.70	End Shut-In(2)
184	1643.90	94.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	GO, 80%O 20%G	0.20
60.00	OCM, 85%M 15%O	0.82

Gas Rates

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



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DRILL STEM TEST REPORT

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
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Veverka E #1

Job Ticket: 54015

DST#: 1

ATTN: Mike Bair

Test Start: 2014.03.12 @ 18:49:53

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:56:53

Time Test Ended: 02:15:23

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan L

Unit No: 46

Interval: 3420.00 ft (KB) To 3491.00 ft (KB) (TVD)

Reference Elevations: 2037.00 ft (KB)

Total Depth: 3491.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8372 Outside

Press@RunDepth: psig @ 3421.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.12

End Date:

2014.03.13

Last Calib.: 2014.03.13

Start Time: 18:50:17

End Time:

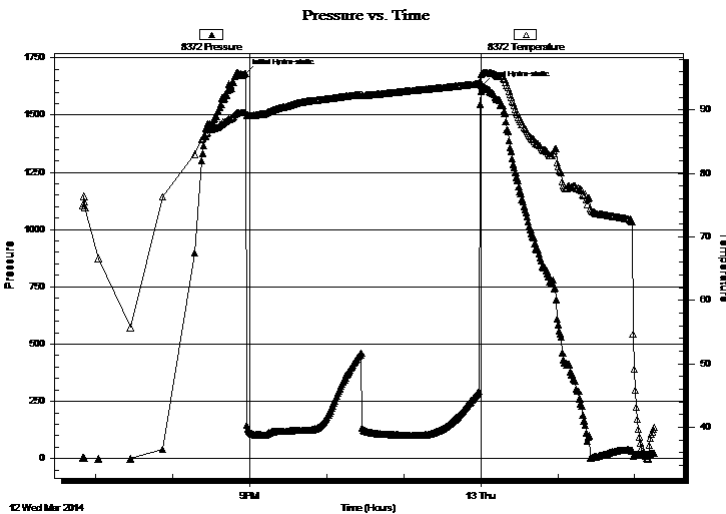
02:16:02

Time On Btm: 2014.03.12 @ 20:57:12

Time Off Btm: 2014.03.13 @ 00:00:51

TEST COMMENT: 45- IF- Slow ly built to 6"
45- IS- No blow
45- FF- Built very slow ly to 3"
45- FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1681.01	89.54	Initial Hydro-static
184	1629.97	95.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	GO, 80%O 20%G	0.20
60.00	OCM, 85%M 15%O	0.82

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54015

DST#: 1

ATTN: Mike Bair

Test Start: 2014.03.12 @ 18:49:53

Tool Information

Drill Pipe:	Length: 3423.00 ft	Diameter: 3.75 inches	Volume: 46.76 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3420.00 ft			Final	36000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	71.00 ft				
Tool Length:	98.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3394.00	
Shut In Tool	5.00			3399.00	
Hydraulic tool	5.00			3404.00	
Jars	5.00			3409.00	
Safety Joint	2.00			3411.00	
Packer	5.00			3416.00	27.00 Bottom Of Top Packer
Packer	4.00			3420.00	
Stubb	1.00			3421.00	
Recorder	0.00	8321	Inside	3421.00	
Recorder	0.00	8372	Outside	3421.00	
Perforations	3.00			3424.00	
Change Over Sub	1.00			3425.00	
Drill Pipe	62.00			3487.00	
Change Over Sub	1.00			3488.00	
Bullnose	3.00			3491.00	71.00 Bottom Packers & Anchor

Total Tool Length: 98.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54015

DST#: 1

ATTN: Mike Bair

Test Start: 2014.03.12 @ 18:49:53

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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
15.00	GO, 80%O 20%G	0.205
60.00	OCM, 85%M 15%O	0.820

Total Length: 75.00 ft Total Volume: 1.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

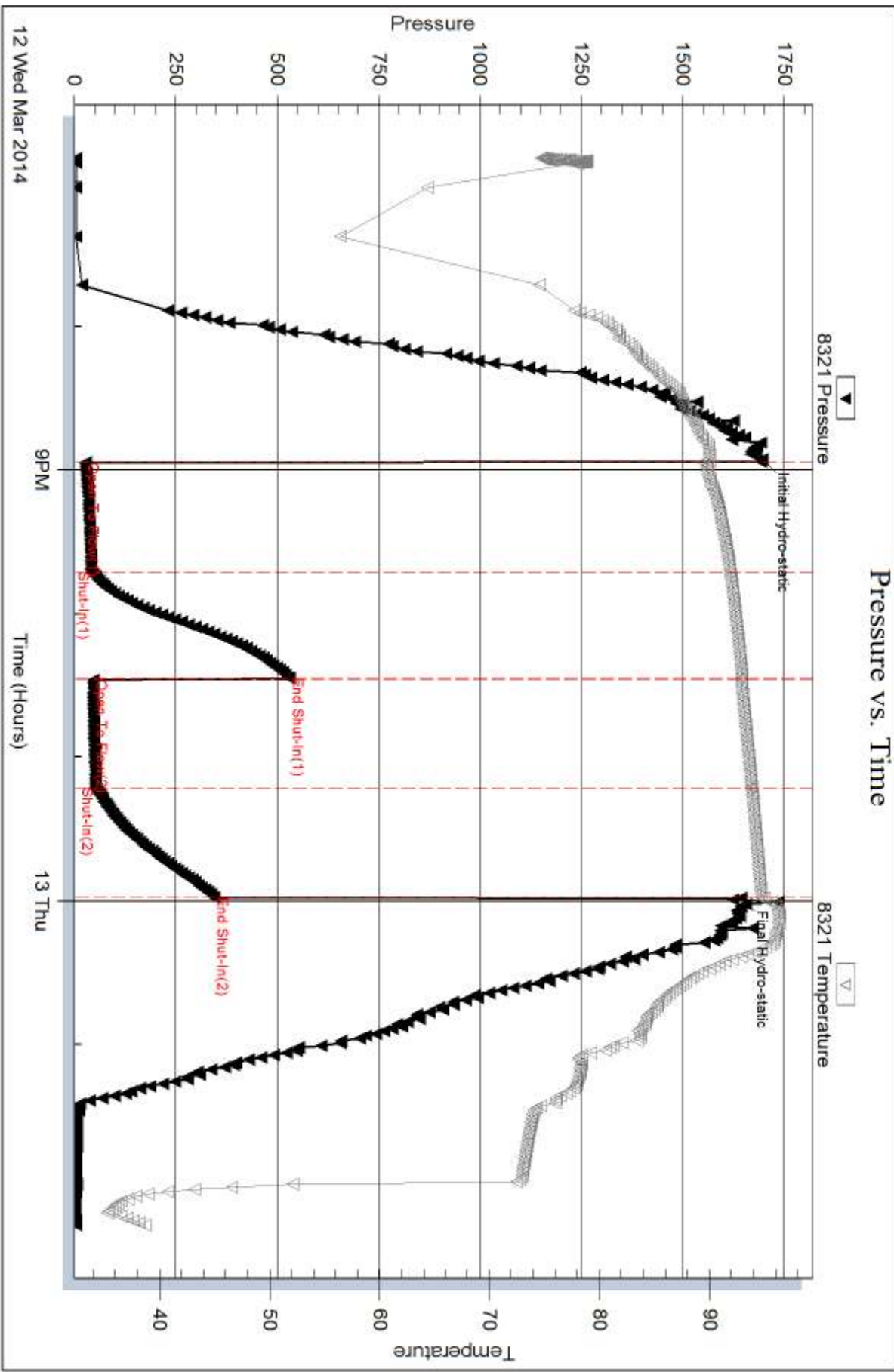
Serial #: 8321

Inside

Tengasco, Inc.

Veverka E#1

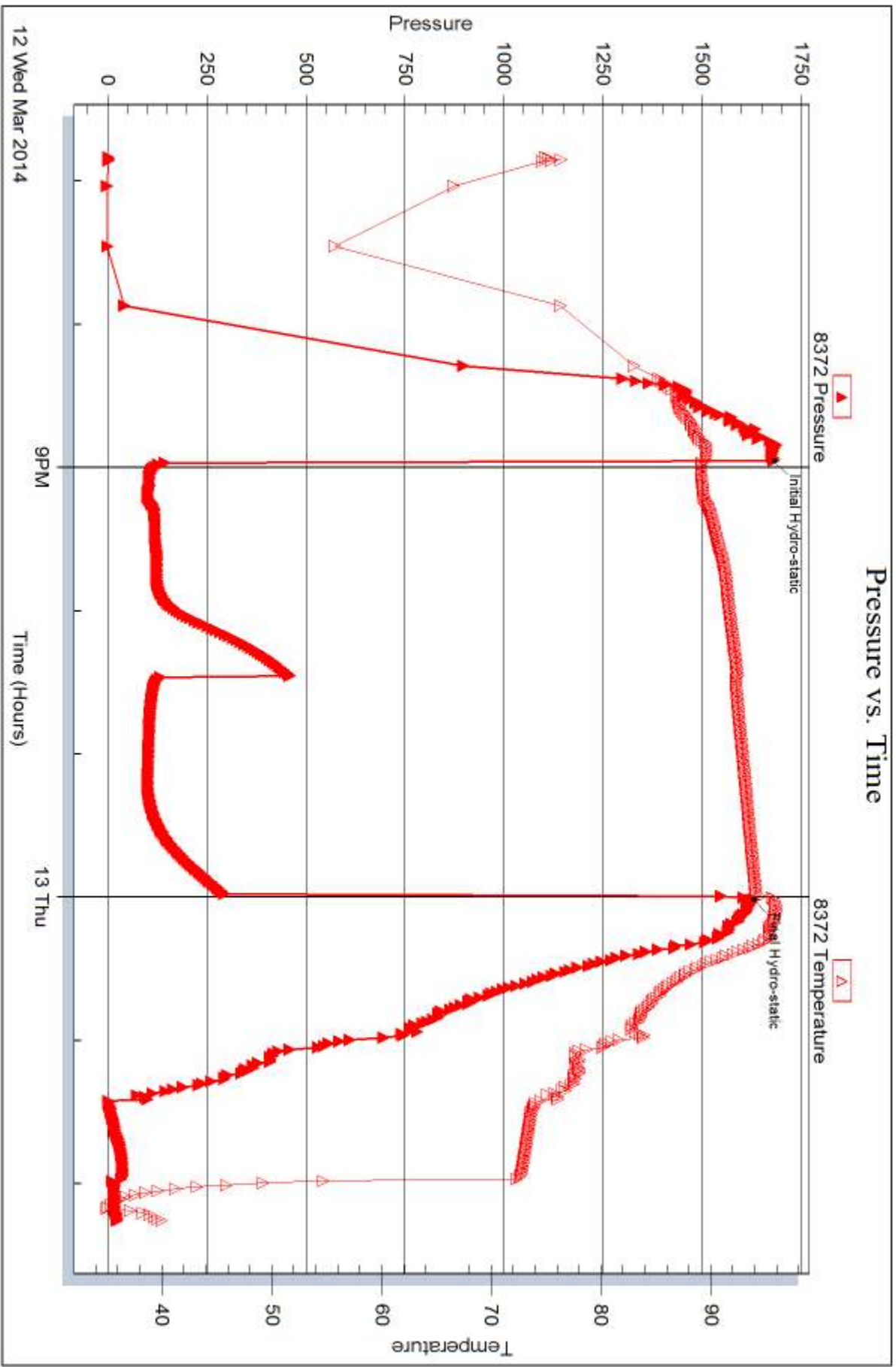
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 54015

Printed: 2014.03.17 @ 10:46:32





DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

PO Box 458
Hays, KS 67601

ATTN: Mike Bair

Veverka E #1

21-8S-19W Rooks,KS

Start Date: 2014.03.13 @ 09:48:54

End Date: 2014.03.13 @ 15:58:54

Job Ticket #: 54016 DST #: 2

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

Printed: 2014.03.17 @ 10:45:52

Tengasco, Inc. 21-8S-19W Rooks,KS Veverka E #1 DST # 2 Arbuckle 2014.03.13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54016

DST#: 2

ATTN: Mike Bair

Test Start: 2014.03.13 @ 09:48:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:58:24

Time Test Ended: 15:58:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 46

Interval: **3493.00 ft (KB) To 3501.00 ft (KB) (TVD)**

Reference Elevations: 2037.00 ft (KB)

Total Depth: 3501.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8321

Inside

Press@RunDepth: 27.72 psig @ 3494.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.13

End Date:

2014.03.13

Last Calib.:

2014.03.13

Start Time: 09:48:55

End Time:

15:58:54

Time On Btm:

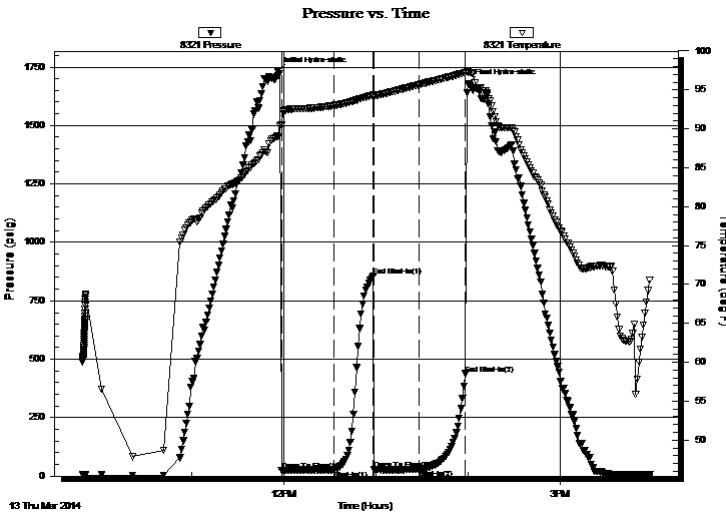
2014.03.13 @ 11:55:54

Time Off Btm:

2014.03.13 @ 13:59:54

TEST COMMENT: 30- IF- Surface blow built to 1/4"
30- IS- No blow
30- FF- Very weak surface blow
30- FSI- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1732.07	89.03	Initial Hydro-static
3	23.97	90.48	Open To Flow (1)
37	26.15	93.00	Shut-In(1)
63	856.24	94.36	End Shut-In(1)
63	28.54	94.17	Open To Flow (2)
92	27.72	95.66	Shut-In(2)
123	438.06	97.26	End Shut-In(2)
124	1680.24	97.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SOMW, 5%O 50%W 45%M	0.14

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54016

DST#: 2

ATTN: Mike Bair

Test Start: 2014.03.13 @ 09:48:54

Tool Information

Drill Pipe:	Length: 3485.00 ft	Diameter: 3.75 inches	Volume: 47.61 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 40000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3493.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	35.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3467.00	
Shut In Tool	5.00			3472.00	
Hydraulic tool	5.00			3477.00	
Jars	5.00			3482.00	
Safety Joint	2.00			3484.00	
Packer	5.00			3489.00	27.00 Bottom Of Top Packer
Packer	4.00			3493.00	
Stubb	1.00			3494.00	
Recorder	0.00	8321	Inside	3494.00	
Recorder	0.00	8372	Outside	3494.00	
Perforations	4.00			3498.00	
Bullnose	3.00			3501.00	8.00 Bottom Packers & Anchor

Total Tool Length: 35.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

21-8S-19W Rooks,KS

PO Box 458
Hays, KS 67601

Veverka E #1

Job Ticket: 54016

DST#: 2

ATTN: Mike Bair

Test Start: 2014.03.13 @ 09:48:54

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:

30000 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	SOMW, 5%O 50%W 45%M	0.137

Total Length: 10.00 ft Total Volume: 0.137 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

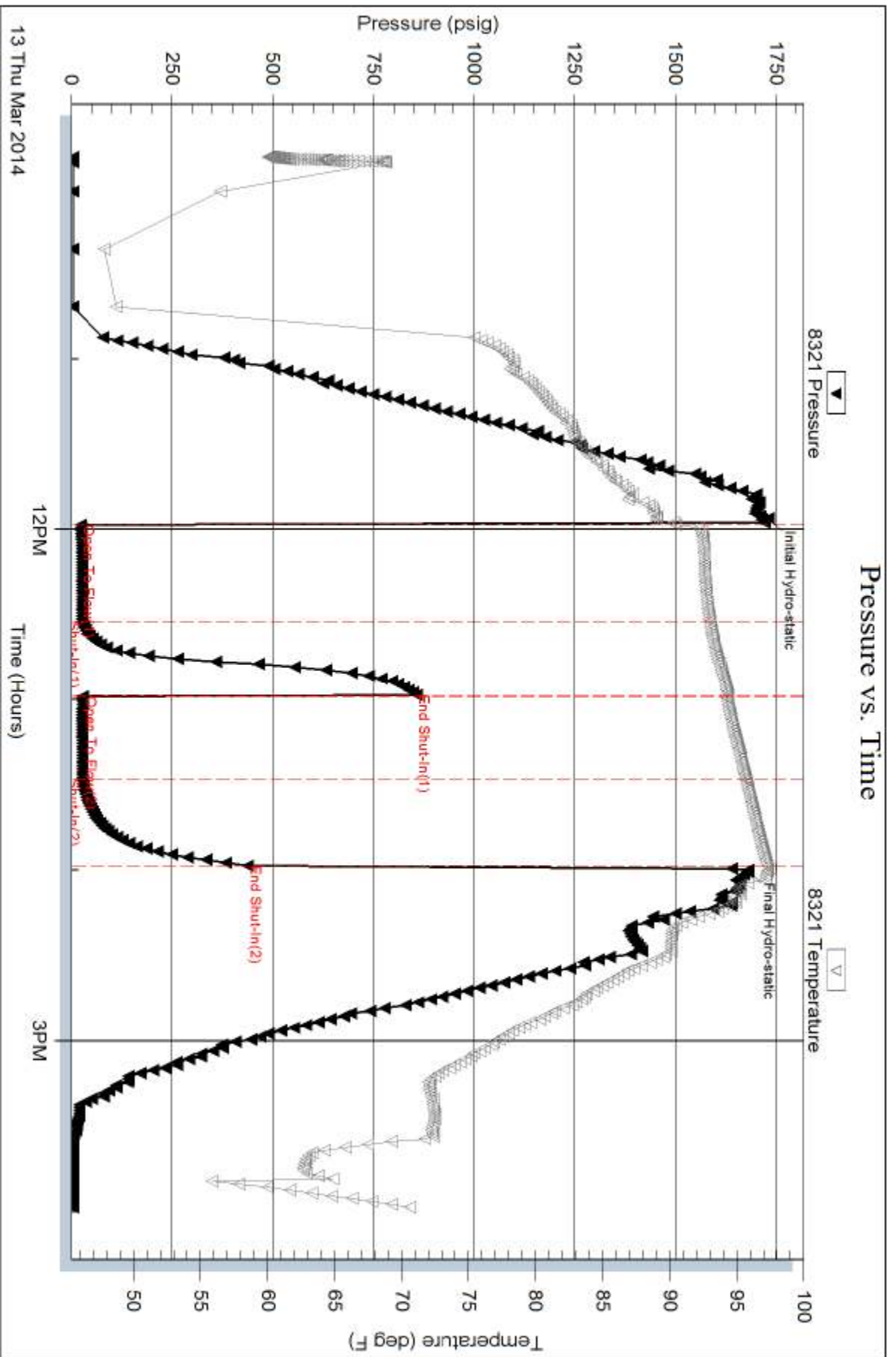
Serial #: 8321

Inside

Tengasco, Inc.

Veverka E#1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54016

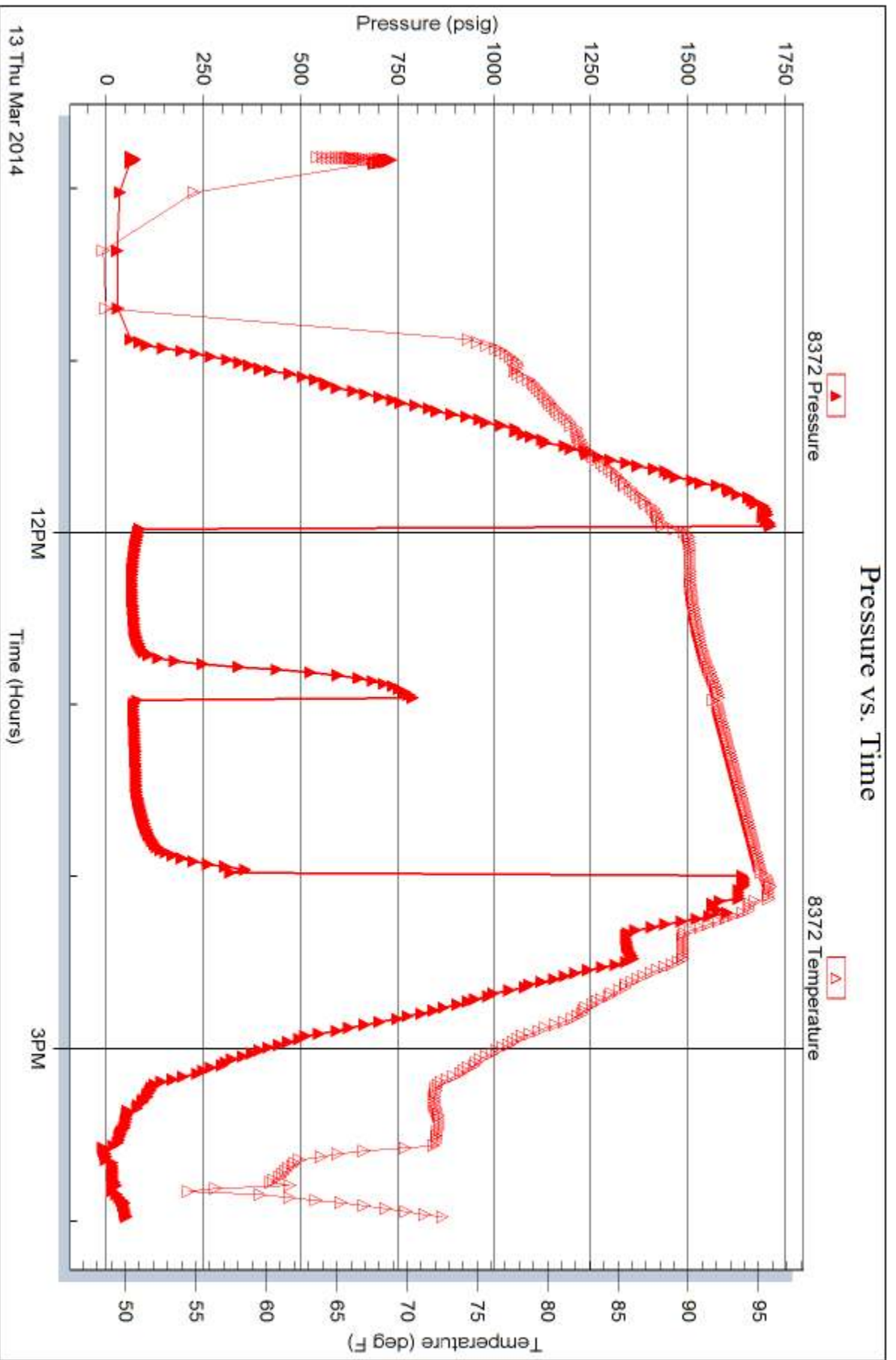
Printed: 2014.03.17 @ 10:45:54

Serial #: 8372

Outside Tengasco, Inc.

Veverka E#1

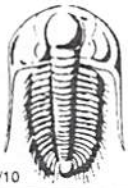
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54016

Printed: 2014.03.17 @ 10:45:54



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54015

Well Name & No. Verenka E-1 Test No. 1 Date 3/12/14
 Company Tengasco, Inc. Elevation 2037 KB 2030 GL
 Address 1327 Noose Rd. PO Box 458 Hays, KS 67601
 Co. Rep / Geo. Mike Bair Rig American Eagle 3
 Location: Sec. 21 Twp. 8S Rge. 19W Co. Rooks State KS

Interval Tested 3420-3491 Zone Tested Arbuckle
 Anchor Length 71' Drill Pipe Run 3423 Mud Wt. 8.9
 Top Packer Depth 3415 Drill Collars Run Vis 65
 Bottom Packer Depth 3420 Wt. Pipe Run WL 6.4
 Total Depth 3491 Chlorides 2,400 ppm System LCM 2#

Blow Description IF - slowly built to 6"
ISI - No blow
PF - Built very slowly to 3"
FSI - No blow

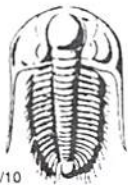
Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>60</u>	<u>20</u>	<u>80</u>		
<u>60</u>	<u>OCM</u>		<u>15</u>		<u>85</u>

Rec Total 75' BHT 95° Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic <u>1696</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1843</u>
(B) First Initial Flow <u>28</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1850</u>
(C) First Final Flow <u>43</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2057</u>
(D) Initial Shut-In <u>531</u>	<input type="checkbox"/> Circ Sub <u> </u>	T-Pulled <u>2057 2357</u>
(E) Second Initial Flow <u>48</u>	<input type="checkbox"/> Hourly Standby <u> </u>	T-Out <u>0215</u>
(F) Second Final Flow <u>53</u>	<input checked="" type="checkbox"/> Mileage <u>92 RT</u> 142.60	Comments <u> </u>
(G) Final Shut-In <u>344</u>	<input type="checkbox"/> Sampler <u> </u>	<input type="checkbox"/> Ruined Shale Packer <u> </u>
(H) Final Hydrostatic <u>1644</u>	<input type="checkbox"/> Straddle <u> </u>	<input type="checkbox"/> Ruined Packer <u> </u>
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer <u> </u>	<input type="checkbox"/> Extra Copies <u> </u>
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer <u> </u>	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder <u> </u>	Total <u>1617.60</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby <u> </u>	MP/DST Disc't <u> </u>
	<input type="checkbox"/> Accessibility <u> </u>	
	Sub Total <u>1617.60</u>	

Approved By Our Representative Brannan L

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54016

Well Name & No. Veverka E-1 Test No. 2 Date 3/13/14
 Company Tengasco, Inc. Elevation 2037 KB 2030 GL
 Address 1329 Moose Rd. PO Box 458 Hays, KS 67601
 Co. Rep / Geo. Mike Bair Rig American Eagle 3
 Location: Sec. 21 Twp. 8S Rge. 19W Co. Rooks State KS

Interval Tested 3493-2501 Zone Tested Arbuckle
 Anchor Length 8' Drill Pipe Run 3485 Mud Wt. 8.9
 Top Packer Depth 2488 Drill Collars Run --- Vis 65
 Bottom Packer Depth 3493 Wt. Pipe Run --- WL 6.4
 Total Depth 3501 Chlorides 2400 ppm System LCM 2#

Blow Description IF - Very weak surface blow built to 1/4"
ISI - No blow
FF - Very weak surface blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>SOMW</u>		<u>5</u>	<u>50</u>	<u>45</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 97° Gravity --- API RW .25 @ 61 °F Chlorides 30000 ppm
 (A) Initial Hydrostatic 1732 Test 1150 T-On Location 0943
 (B) First Initial Flow 24 Jars 250 T-Started 0949
 (C) First Final Flow 26 Safety Joint 75 T-Open 1158
 (D) Initial Shut-In 856 Circ Sub _____ T-Pulled 1358
 (E) Second Initial Flow 29 Hourly Standby _____ T-Out 1558
 (F) Second Final Flow 28 Mileage 92 RT 285.20 Comments Loaded tools
 (G) Final Shut-In 438 Sampler _____ 3/14 @ 0700
 (H) Final Hydrostatic 1680 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1760.20
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1760.20

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

Approved By _____ Our Representative Brannan L

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.