

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Industrial Park 1-19
Doc ID	1281105

Tops

Name	Top	Datum
Anhydrite	2147	+623
B Anhydrite	2178	+592
Heebner	3954	-1184
Lansing	3994	-1224
Stark Sh	4268	-1498
Marmaton	4386	-1616
Pawnee	4461	-1691
Ft. Scott	4514	-1744
L. Cher Sh	4538	-1768

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Industrial Park 1-19
Doc ID	1281105

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	20	265	Class A	165	2% gel, 3% CC, 1/4#/sk flocele

SERVICE LOCATIONS		WELL/PROJECT NO.		LEASE		COUNTY/PARISH		STATE		CITY		DATE		OWNER	
1. <u>NESS CITY, KS</u>		<u>1-9</u>		<u>INDUSTRIAL PARK</u>		<u>LANE</u>		<u>KS.</u>		<u>WIGHTON, KS</u>		<u>27 NOV 15</u>			
2.		TICKET TYPE ☐ SERVICE ☒ SALES		CONTRACTOR <u>HD DRILLING #163</u>		RIG NAME/NO.		SHIPPED VIA		DELIVERED TO		ORDER NO.			
3.		WELL TYPE		WELL CATEGORY		JOB PURPOSE				WELL PERMIT NO.		WELL LOCATION			
4.		<u>OIL</u>		<u>DEVELOPMENT</u>		<u>8 5/8 SURFACE</u>						<u>1E, 1/4S, W/4S/W LUTZ</u>			
REFERRAL LOCATION		INVOICE INSTRUCTIONS													

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
525					MILEAGE #115	30	mi			5 ⁰⁰ / ₁₀₀	150 ⁰⁰ / ₁₀₀
576S					Pump CHARGE	1	100			800 ⁰⁰ / ₁₀₀	800 ⁰⁰ / ₁₀₀
276					FLOCELE	45	lbs			2 ²⁵ / ₁₀₀	101 ²⁵ / ₁₀₀
278					CALCIUM CHLORIDE	7	bx			40 ⁰⁰ / ₁₀₀	280 ⁰⁰ / ₁₀₀
279					GEL	3	bx			25 ⁰⁰ / ₁₀₀	75 ⁰⁰ / ₁₀₀
325					STANDARD CEMENT	165	bx			12 ²⁵ / ₁₀₀	2021 ²⁵ / ₁₀₀
581					CEMENT SERVICE CHARGE	165	bx			1 ⁵⁰ / ₁₀₀	247 ⁵⁰ / ₁₀₀
582					MINIMUM DRAHAGE	16205	lbs	24307	mm	250 ⁰⁰ / ₁₀₀	250 ⁰⁰ / ₁₀₀

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO
START OF WORK OR DELIVERY OF GOODS

X

DATE SIGNED	27 NOV 15	TIME SIGNED	1700	☐ A.M.
				☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN- DECIDED	DIS- AGREE	PAGE TOTAL	
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?					3925 ⁰²
WE UNDERSTOOD AND MET YOUR NEEDS?					
OUR SERVICE WAS PERFORMED WITHOUT DELAY?					
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				L ^{the} TAX 7.5%	185 81
ARE YOU SATISFIED WITH OUR SERVICE?	☐ YES ☐ NO			TOTAL	4110 81
☐ CUSTOMER DID NOT WISH TO RESPOND					

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR	<i>[Signature]</i>	APPROVAL
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Thank You!

SWIFT Services, Inc.

DATE 27 NOV 15 PAGE NO. 1

TICKET NO. 29089

[illegible]



DRILL STEM TEST REPORT

Prepared For: **Larson Engineering , Inc**

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

19-18s-28w Lane,KS

Industrial Park #1-19

Start Date: 2015.12.04 @ 16:40:32

End Date: 2015.12.04 @ 22:05:32

Job Ticket #: 48268 DST #: 1

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

Printed: 2015.12.07 @ 10:42:53



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering, Inc

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Industrial Park #1-19

19-18s-28w Lane, KS

Job Ticket: 48268

DST#: 1

Test Start: 2015.12.04 @ 16:40:32

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:50:47

Time Test Ended: 22:05:32

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane McBride

Unit No: 84

Interval: 4341.00 ft (KB) To 4455.00 ft (KB) (TVD)

Reference Elevations: 2770.00 ft (KB)

Total Depth: 4455.00 ft (KB) (TVD)

2761.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 9120 Outside

Press@RunDepth: 26.68 psig @ 4342.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.12.04

End Date:

2015.12.04

Last Calib.: 2015.12.04

Start Time: 16:40:32

End Time:

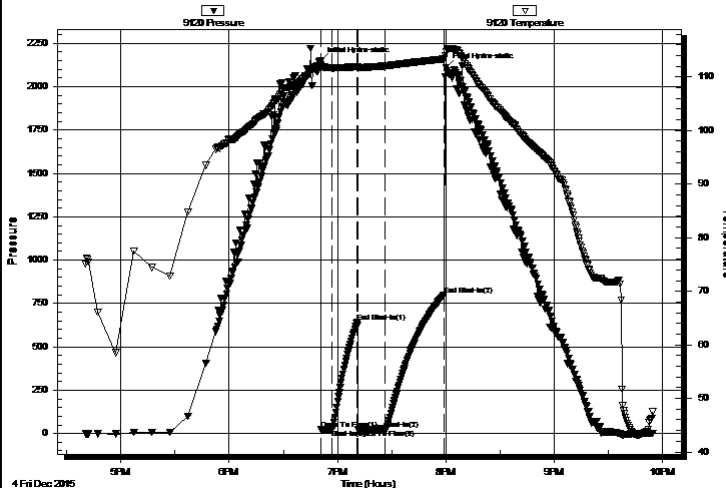
21:54:32

Time On Btm: 2015.12.04 @ 18:50:32

Time Off Btm: 2015.12.04 @ 20:00:02

TEST COMMENT: 1/2" blow
No return
Surface blow in 4 min.
No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2147.97	112.25	Initial Hydro-static
1	21.22	111.57	Open To Flow (1)
7	22.03	111.70	Shut-In(1)
21	641.80	111.91	End Shut-In(1)
21	23.59	111.68	Open To Flow (2)
36	26.68	112.08	Shut-In(2)
69	796.56	113.36	End Shut-In(2)
70	2108.59	114.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.02

Gas Rates

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

DRILL STEM TEST REPORT

Larson Engineering, Inc

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Industrial Park #1-19

19-18s-28w Lane, KS

Job Ticket: 48268

DST#: 1

Test Start: 2015.12.04 @ 16:40:32

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:50:47

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Tester: Shane McBride

Unit No: 84

Interval: 4341.00 ft (KB) To 4455.00 ft (KB) (TVD)

Reference Elevations: 2770.00 ft (KB)

Total Depth: 4455.00 ft (KB) (TVD)

2761.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8938 Inside

Press@RunDepth: psig @ 4342.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.12.04

End Date:

2015.12.04

Last Calib.:

2015.12.04

Start Time: 16:41:03

End Time:

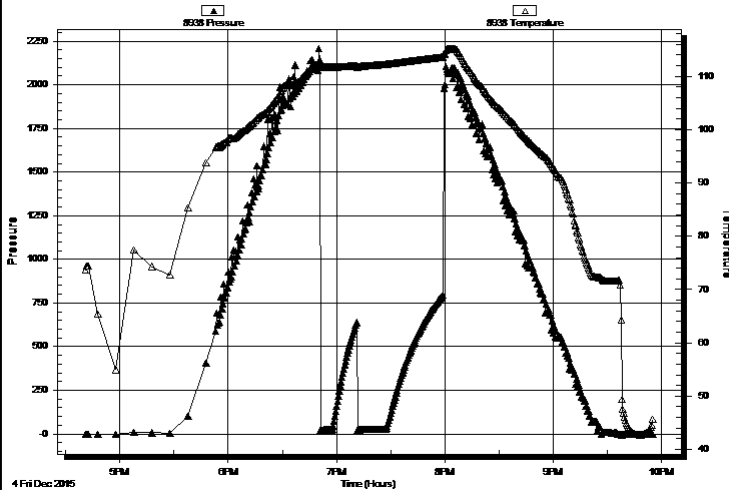
21:55:03

Time On Btm:

Time Off Btm:

TEST COMMENT: 1/2" blow
No return
Surface blow in 4 min.
No return

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.02

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering , Inc

Industrial Park #1-19

562 W. State Rd 4
Olmitz, KS 67564

19-18s-28w Lane,KS

Job Ticket: 48268

DST#: 1

ATTN: Vern Schrag

Test Start: 2015.12.04 @ 16:40:32

Tool Information

Drill Pipe:	Length:	4203.00 ft	Diameter:	3.80 inches	Volume:	58.96 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	124.00 ft	Diameter:	2.25 inches	Volume:	0.61 bbl	Weight to Pull Loose:	70000.00 lb
					Total Volume:	59.57 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		14.00 ft					String Weight: Initial	52000.00 lb
Depth to Top Packer:		4341.00 ft					Final	52000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		114.00 ft						
Tool Length:		142.00 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		4314.00	
Shut In Tool	5.00		4319.00	
Hydraulic tool	5.00		4324.00	
Jars	5.00		4329.00	
Safety Joint	3.00		4332.00	
Packer	5.00		4337.00	28.00 Bottom Of Top Packer
Packer	4.00		4341.00	
Stubb	1.00		4342.00	
Recorder	0.00	9120 Outside	4342.00	
Recorder	0.00	8938 Inside	4342.00	
Perforations	12.00		4354.00	
Change Over Sub	1.00		4355.00	
Drill Pipe	94.00		4449.00	
Change Over Sub	1.00		4450.00	
Bullnose	5.00		4455.00	114.00 Bottom Packers & Anchor

Total Tool Length: 142.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering , Inc

Industrial Park #1-19

562 W. State Rd 4
Olmitz, KS 67564

19-18s-28w Lane,KS

Job Ticket: 48268

DST#: 1

ATTN: Vern Schrag

Test Start: 2015.12.04 @ 16:40:32

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

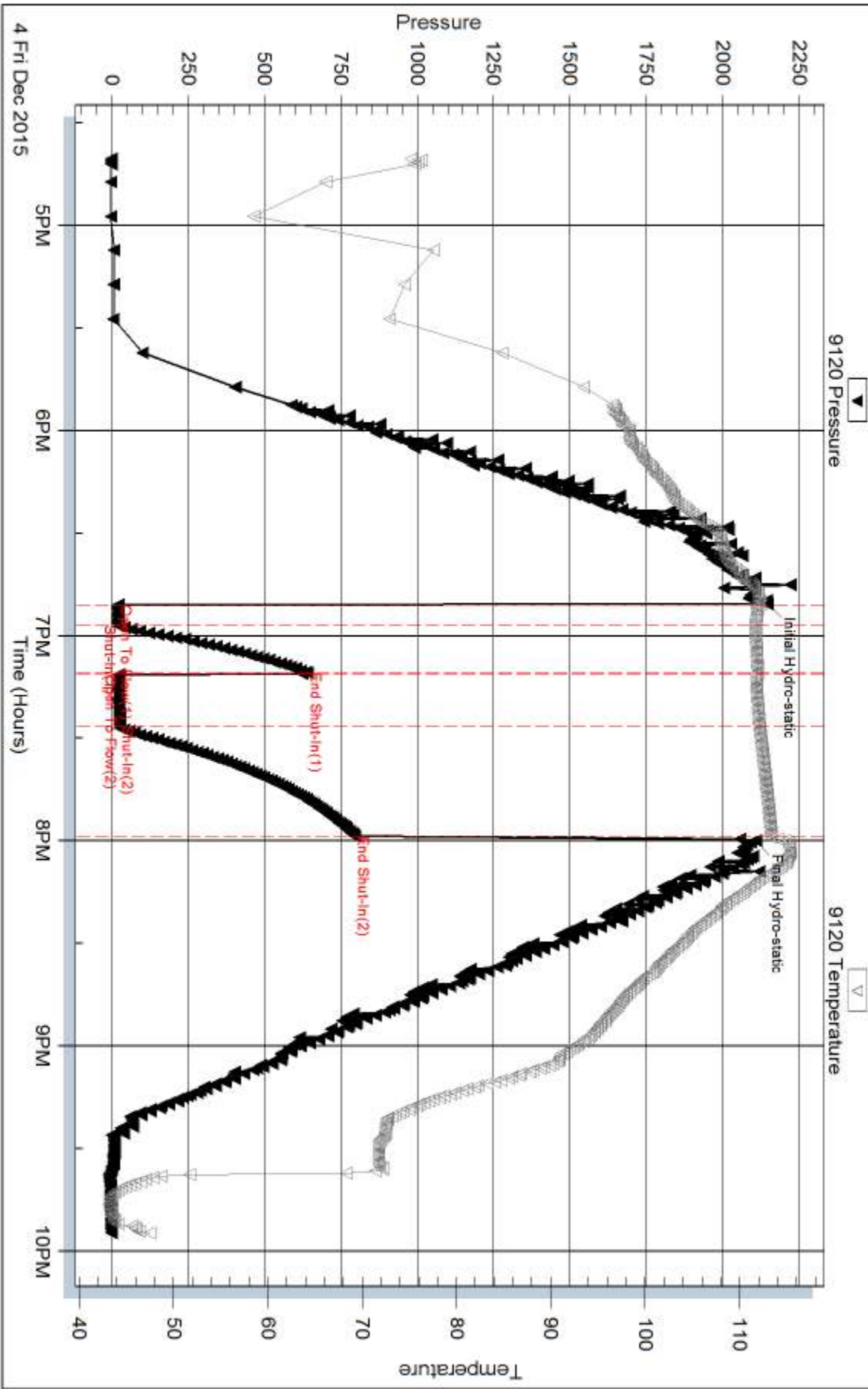
Serial #: 9120

Outside Larson Engineering, Inc

19-18s-28w Lane, KS

DST Test Number: 1

Pressure vs. Time



Serial #: 8938

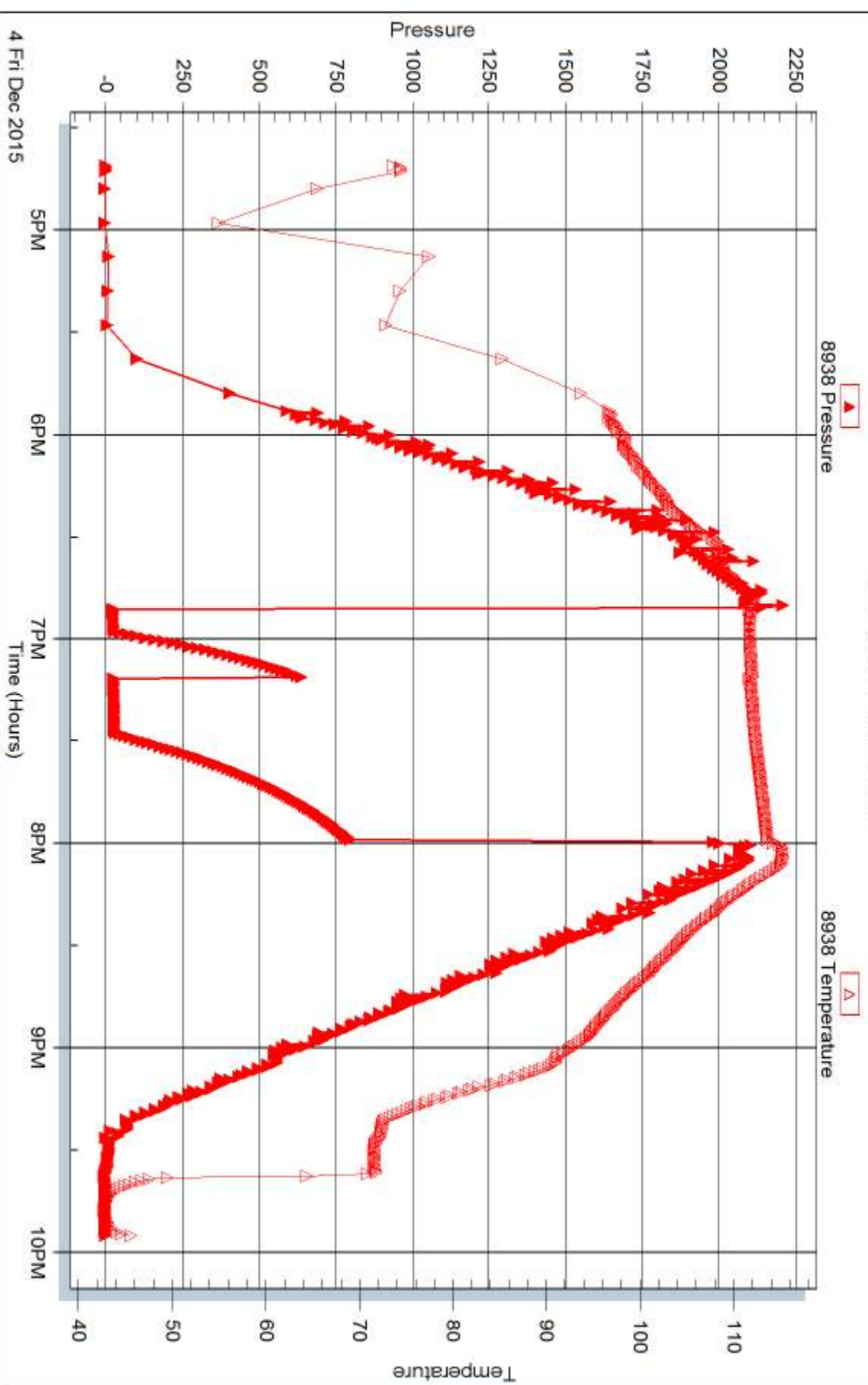
Inside

Larson Engineering, Inc

19-18s-28w Lane, KS

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Larson Engineering , Inc**

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

19-18s-28w Lane,KS

Industrial Park #1-19

Start Date: 2015.12.05 @ 16:46:06

End Date: 2015.12.05 @ 22:10:21

Job Ticket #: 48269 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2015.12.07 @ 10:44:25



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering, Inc

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Industrial Park #1-19

19-18s-28w Lane, KS

Job Ticket: 48269

DST#: 2

Test Start: 2015.12.05 @ 16:46:06

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:55:06

Time Test Ended: 22:10:21

Test Type: Conventional Bottom Hole (Reset)

Tester: Shane McBride

Unit No: 84

Interval: 4482.00 ft (KB) To 4596.00 ft (KB) (TVD)

Reference Elevations: 2770.00 ft (KB)

Total Depth: 4596.00 ft (KB) (TVD)

2761.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 9120 Outside

Press@RunDepth: 22.78 psig @ 4483.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.12.05

End Date:

2015.12.05

Last Calib.: 2015.12.05

Start Time: 16:46:06

End Time:

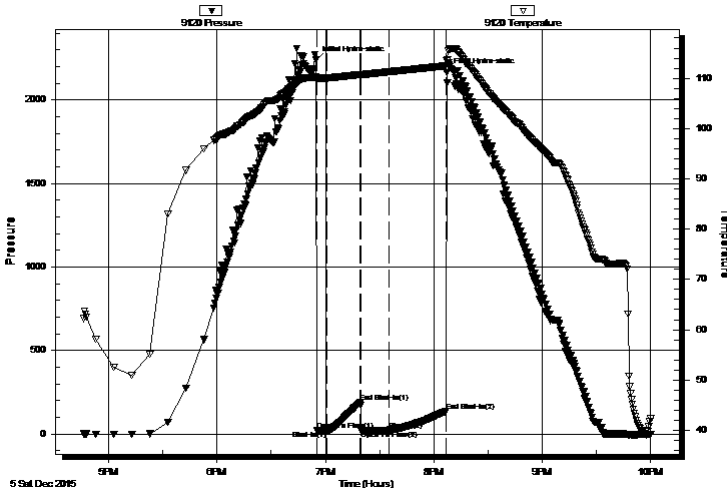
22:00:21

Time On Btm: 2015.12.05 @ 18:54:36

Time Off Btm: 2015.12.05 @ 20:07:06

TEST COMMENT: 1/4" blow
No return
No blow
No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2237.93	110.27	Initial Hydro-static
1	21.51	109.65	Open To Flow (1)
7	21.54	110.03	Shut-In(1)
25	189.34	110.74	End Shut-In(1)
26	22.33	110.70	Open To Flow (2)
41	22.78	111.29	Shut-In(2)
72	135.49	112.47	End Shut-In(2)
73	2163.04	113.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100% m	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Larson Engineering, Inc

562 W. State Rd 4
Olmitz, KS 67564

ATTN: Vern Schrag

Industrial Park #1-19

19-18s-28w Lane, KS

Job Ticket: 48269

DST#: 2

Test Start: 2015.12.05 @ 16:46:06

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:55:06

Time Test Ended: 22:10:21

Test Type: Conventional Bottom Hole (Reset)

Tester: Shane McBride

Unit No: 84

Interval: 4482.00 ft (KB) To 4596.00 ft (KB) (TVD)

Reference Elevations: 2770.00 ft (KB)

Total Depth: 4596.00 ft (KB) (TVD)

2761.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8938 Inside

Press@RunDepth: psig @ 4483.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.12.05

End Date:

2015.12.05

Last Calib.:

2015.12.05

Start Time: 16:45:58

End Time:

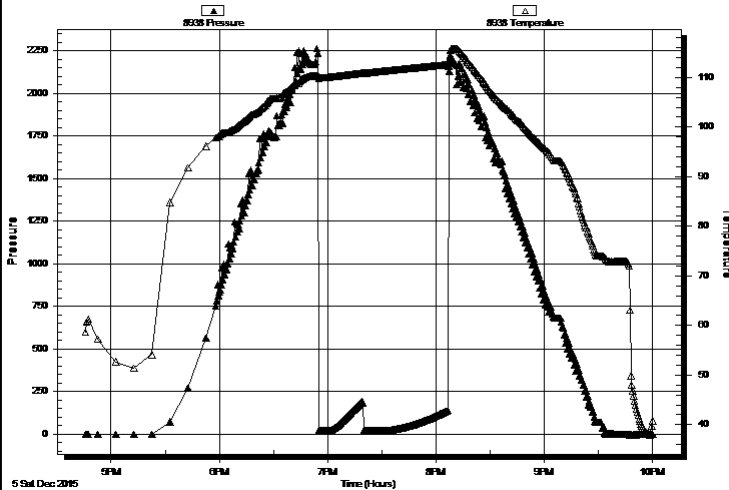
22:00:13

Time On Btm:

Time Off Btm:

TEST COMMENT: 1/4" blow
No return
No blow
No return

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
1.00	mud 100% m	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Engineering , Inc

Industrial Park #1-19

562 W. State Rd 4
Olmitz, KS 67564

19-18s-28w Lane,KS

Job Ticket: 48269

DST#: 2

ATTN: Vern Schrag

Test Start: 2015.12.05 @ 16:46:06

Tool Information

Drill Pipe:	Length:	4357.00 ft	Diameter:	3.80 inches	Volume:	61.12 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	124.00 ft	Diameter:	2.25 inches	Volume:	0.61 bbl	Weight to Pull Loose:	75000.00 lb
					Total Volume:	61.73 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		27.00 ft					String Weight: Initial	54000.00 lb
Depth to Top Packer:		4482.00 ft					Final	54000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		114.00 ft						
Tool Length:		142.00 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			4455.00	
Shut In Tool	5.00			4460.00	
Hydraulic tool	5.00			4465.00	
Jars	5.00			4470.00	
Safety Joint	3.00			4473.00	
Packer	5.00			4478.00	28.00 Bottom Of Top Packer
Packer	4.00			4482.00	
Stubb	1.00			4483.00	
Recorder	0.00	9120	Outside	4483.00	
Recorder	0.00	8938	Inside	4483.00	
Perforations	12.00			4495.00	
Change Over Sub	1.00			4496.00	
Drill Pipe	94.00			4590.00	
Change Over Sub	1.00			4591.00	
Bullnose	5.00			4596.00	114.00 Bottom Packers & Anchor

Total Tool Length: 142.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering , Inc

Industrial Park #1-19

562 W. State Rd 4
Olmitz, KS 67564

19-18s-28w Lane,KS

Job Ticket: 48269

DST#: 2

ATTN: Vern Schrag

Test Start: 2015.12.05 @ 16:46:06

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft

Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

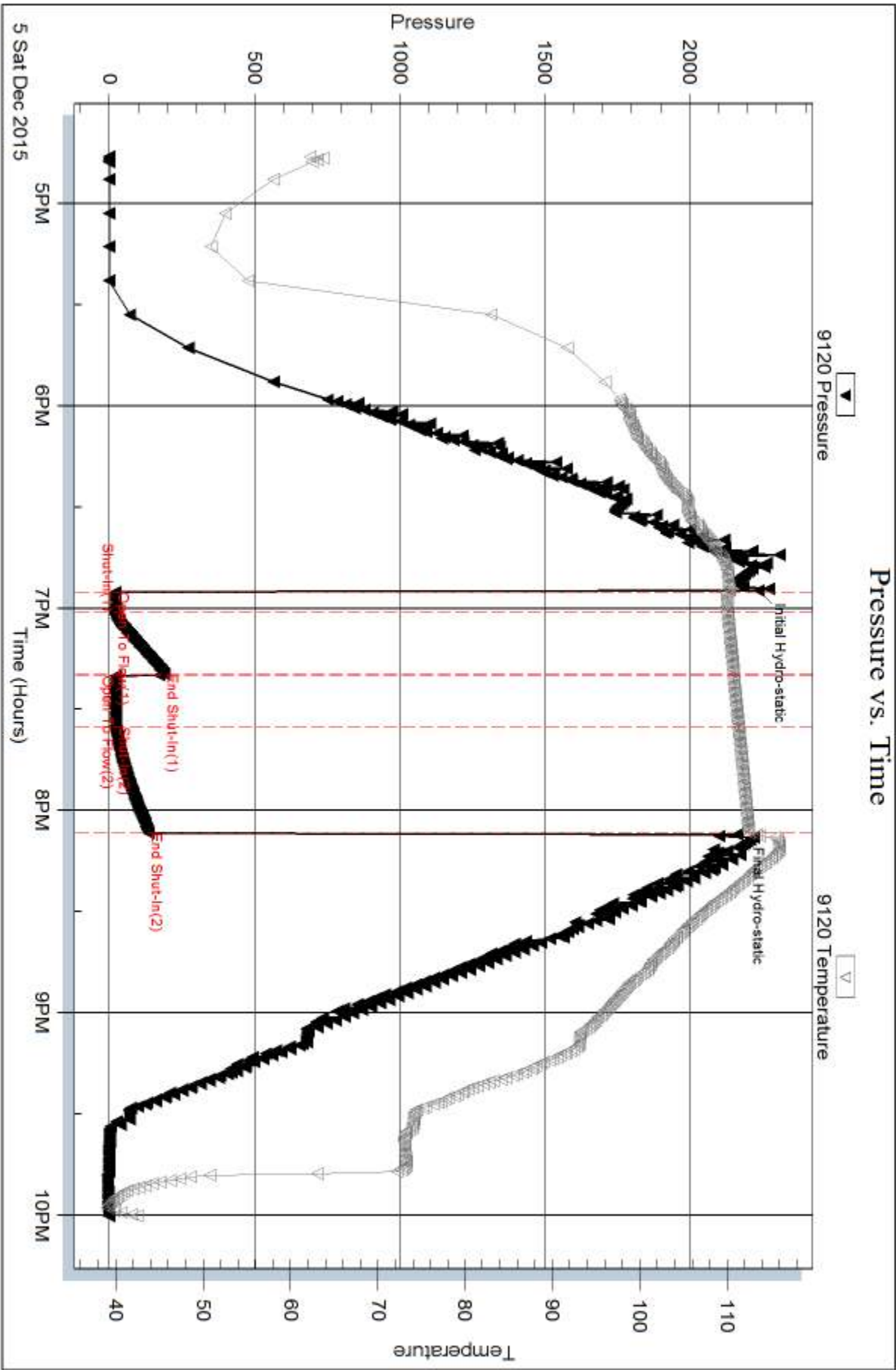
Recovery Comments:

Serial #: 9120

Outside Larson Engineering, Inc

19-18s-28w Lane, KS

DST Test Number: 2



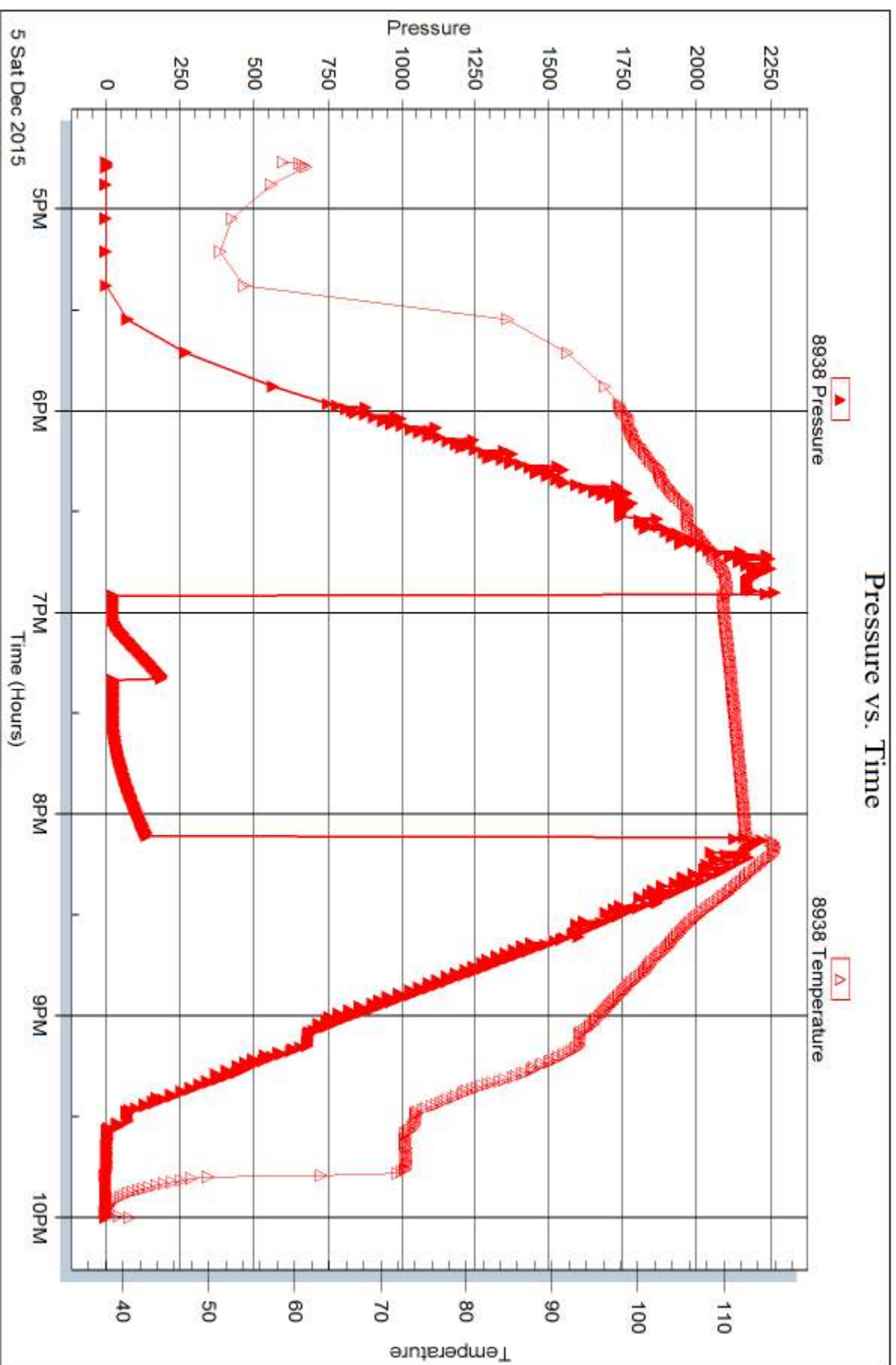
Serial #: 8938

Inside

Larson Engineering, Inc

19-18s-28w Lane, KS

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48268

Well Name & No. Industrial Park #1-19 Test No. #1 Date 12/4/15
 Company Larson Engineering Inc. Elevation 2776 KB 2761 GL
 Address 562 W. State Rd 4 Okemite, KS
 Co. Rep / Geo. Vern Schrag Rig H.D. #3
 Location: Sec. 19 Twp. 18S Rge. 28W Co. Lane State KS

Interval Tested 4341 4455 Zone Tested Marmaton
 Anchor Length 114 Drill Pipe Run 4203 Mud Wt. 9.1
 Top Packer Depth 4336 Drill Collars Run 124' Vis 51
 Bottom Packer Depth 4341 Wt. Pipe Run --- WL 6.8
 Total Depth 4455 Chlorides 2600 ppm System LCM #3

Blow Description 1/2" in blow
No return
Surface blow on 4 min
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</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 Total 5' BHT 115° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 2147
 (B) First Initial Flow 21
 (C) First Final Flow 22
 (D) Initial Shut-In 641
 (E) Second Initial Flow 23
 (F) Second Final Flow 26
 (G) Final Shut-In 796
 (H) Final Hydrostatic 2108

☒ Test 1150
☒ Jars 250
☒ Safety Joint 75
☒ Circ Sub N/C
☐ Hourly Standby ---
☒ Mileage 49 RT
☐ Sampler ---
☐ Straddle ---
☐ Shale Packer ---
☐ Extra Packer ---
☐ Extra Recorder ---
☐ Day Standby ---
☐ Accessibility ---
 Sub Total 1524

T-On Location 15:30
 T-Started 16:40
 T-Open 18:51
 T-Pulled 19:56
 T-Out 22:05
 Comments ---

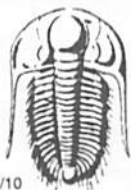
Initial Open 5
 Initial Shut-In 15
 Final Flow 15
 Final Shut-In 30

☐ Ruined Shale Packer ---
☐ Ruined Packer ---
☐ Extra Copies ---
 Sub Total 0
 Total 1524

Approved By Vern Schrag

Our Representative [Signature]

Triobite 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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48269

Well Name & No. Industrial Park #1-19 Test No. #2 Date 12/5/15
Company Hurston Engineering Inc Elevation 2770 KB 2761 GL
Address 562 W. State Rd 48 Olathe, KS
Co. Rep / Geo. Vern Schrey Rig H.D. #3
Location: Sec. 19 Twp. 18.5 Rge. 28W Co. lane State KS

Interval Tested 3482 4596 Zone Tested Cherokee
Anchor Length 114 Drill Pipe Run 4357 Mud Wt. 9.2
Top Packer Depth 4477 Drill Collars Run 124 Vis 6.2
Bottom Packer Depth 4482 Wt. Pipe Run --- WL 6.4
Total Depth 4596 Chlorides 3400 ppm System LCM #2

Blow Description 1/4" in. blow

No return
No blow
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>1'</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 Total 1' BHT 115° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 2237
(B) First Initial Flow 21
(C) First Final Flow 21
(D) Initial Shut-In 189
(E) Second Initial Flow 22
(F) Second Final Flow 22
(G) Final Shut-In 135
(H) Final Hydrostatic 2163

☒ Test 1150
☒ Jars 250
☒ Safety Joint 75
☒ Circ Sub N/C
☐ Hourly Standby ---
☒ Mileage 49.15
☐ Sampler ---
☐ Straddle ---
☐ Shale Packer ---
☐ Extra Packer ---
☐ Extra Recorder ---
☐ Day Standby ---
☐ Accessibility ---

T-On Location 16:30
T-Started 16:43
T-Open 18:55
T-Pulled 20:00
T-Out 22:10

Comments ---

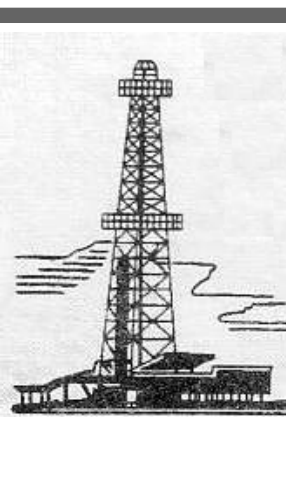
☐ Ruined Shale Packer ---
☐ Ruined Packer ---
☐ Extra Copies ---
Sub Total 0
Total 1524

Initial Open 5
Initial Shut-In 15
Final Flow 15
Final Shut-In 30

Approved By Vern Schrey

Our Representative [Signature]

TriLOBITE TESTING INC. shall not be liable for damaged or 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.



WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



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

Well Name: **INDUSTRIAL PARK #1-19**
Location: **NW SW NE SEC. 19-18S-28W**
Licence Number: **API: 15-101-22575**
Spud Date: **November 27, 2015**
Surface Coordinates: **936' FNL & 1163' FEL**

Region: **Lane Co., KS**
Drilling Completed: **December 6, 2015**

Bottom Hole Coordinates:
Ground Elevation (ft): **2761'**
Logged Interval (ft): **3800'**
Formation: **D&A, Conglomerate**
Type of Drilling Fluid: **Chemical Premix (Displaced)**

K.B. Elevation (ft): **2770'**
Total Depth (ft): **4650'**

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

OPERATOR:

Company: **Larson Engineering Inc.**
Address: **562 West State Road 4**
Olmits, KS 67564-8561

DRILLING CONTRACTOR:

H. D. Drilling, LLC, Rig #3 (Co. Tools)

DP 4.5" XH (16.6#); DC 6-1/4" x 2-3/8" x 556', Kelly 40.30', Tool Joint 5.5" ; Bit: JZ-HA20Q, 7-7/8", standard jets 15-15-15; rpm 80, WOB 35k; Kelly Bushing 9' above ground level; LeWayne "Lew" Tresner (tool pusher).

CASING:

Ran 6 jts new 8-5/8" 20# R3 STC 8rd csg. Tallied 253.29', set @ 265' KB.

CIRCULATION SYSTEM:

Continental EMSCO D-300, duplex, 6 x 14, 60-62 spm, Chemical, premix, earth pits, Mud-Co/Service Mud, Inc.; Jason Whiting.

OPEN HOLE LOGS:

DN (PE), DI (SP), ML, No Sonic; 5" detail LTD-3600; 2" DI to suface casing; Weatherford Open Hole Services, Oklahoma City, OK, LTD 4646', RTD 4650'.

DRILL STEM TEST #1:

Pleasanton thru Marmaton: Interval: 4341-4455 (114'); Blow: weak 1/2" IFP, no RB, surf. blow died in 4 min. FFP, no RB; Times: 5-15-15-30; Recovery: 5' mud, no show; Pressures: HP: 2142-2108, SIP: 641-796, FP: 21-22, 23-26; BHT: 115 deg. F; Trilobite Testing, Inc., Scott City, KS, Shane McBride.

DRILL STEM TEST #2:

Myrick Station thru Cherokee Sand: Interval: 4482-4596 (114'); Blow: weak 1/4" IFP, no RB, no blow at second open; Times: 5-15-15-30; Recovery: 1' mud, no show; Pressures: HP: 2237-2163, SIP: 189-135, FP: 21-21, 22-22; BHT: 115 deg. F; Trilobite Testing, Inc., Scott City, KS, Shane McBride.

REMARKS:

It was determined that this well should be plugged and abandoned.

