



## DRILL STEM TEST REPORT

Prepared For: **GL Allison Oil Operations Incorporated**

15 Southeast 30 Road  
Great Bend, Kansas 67530

ATTN: Kevin Bailey

**Younkin 21-Maycee**

**21/12S/32W/Logan**

Start Date: 2013.09.28 @ 00:41:00

End Date: 2013.09.28 @ 05:51:00

Job Ticket #: 18160                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.09.28 @ 06:01:06



# DRILL STEM TEST REPORT

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**21/12S/32W/Logan**

15 Southeast 30 Road  
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**Younkin 21-Maycee**

Job Ticket: 18160

**DST#: 3**

ATTN: Kevin Bailey

Test Start: 2013.09.28 @ 00:41:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:25:30

Time Test Ended: 05:51:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/74

**Interval: 4316.00 ft (KB) To 4349.00 ft (KB) (TVD)**

Reference Elevations: 3064.00 ft (KB)

Total Depth: 4349.00 ft (KB) (TVD)

3057.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6749**

**Inside**

Press @ RunDepth: 51.55 psia @ 4345.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.09.28

End Date: 2013.09.28

Last Calib.: 2013.09.28

Start Time: 00:41:00

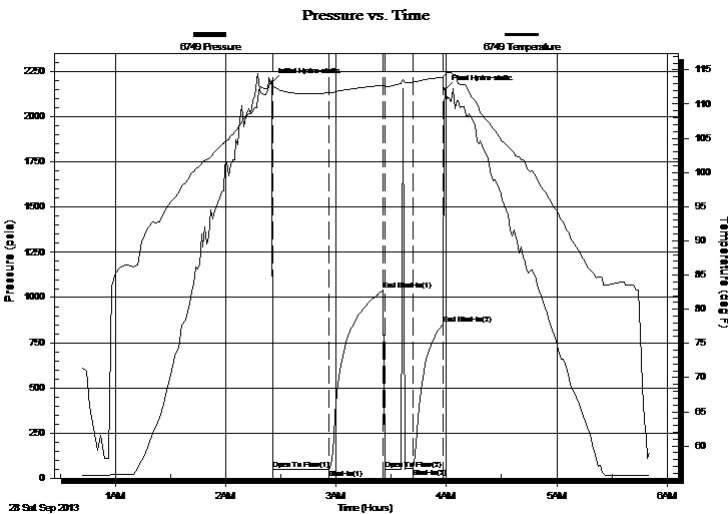
End Time: 05:51:00

Time On Btm: 2013.09.28 @ 02:25:00

Time Off Btm: 2013.09.28 @ 03:59:00

**TEST COMMENT:** 1ST Open 30 Minutes/Weak blow/Blow built to 1/2 inch  
 1ST Shut In 30 Minutes/No blow back  
 2ND Open 15 Minutes/Dead no blow/Flush tool no help  
 2ND Shut In 15 Minutes/No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2192.27	113.17	Initial Hydro-static
1	47.68	112.59	Open To Flow (1)
31	48.55	111.64	Shut-In(1)
61	1039.26	112.79	End Shut-In(1)
62	48.71	112.56	Open To Flow (2)
77	51.55	113.20	Shut-In(2)
93	854.28	113.95	End Shut-In(2)
94	2153.42	114.35	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.21

## Gas Rates

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



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Time Tool Opened: 02:25:30

Time Test Ended: 05:51:00

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Tester: Ken Swinney

Unit No: 3325 Scott City/74

**Interval: 4316.00 ft (KB) To 4349.00 ft (KB) (TVD)**

Reference Elevations: 3064.00 ft (KB)

Total Depth: 4349.00 ft (KB) (TVD)

3057.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6666 Outside**

Press @ Run Depth: 853.01 psia @ 4346.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.09.28 End Date: 2013.09.28

Last Calib.: 2013.09.28

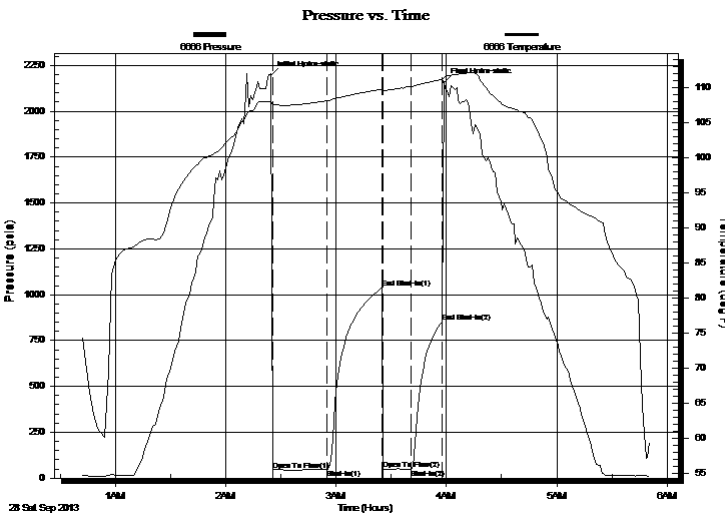
Start Time: 00:41:00 End Time: 05:50:30

Time On Btm: 2013.09.28 @ 02:24:30

Time Off Btm: 2013.09.28 @ 03:58:30

**TEST COMMENT:** 1ST Open 30 Minutes/Weak blow/Blow built to 1/2 inch  
 1ST Shut In 30 Minutes/No blow back  
 2ND Open 15 Minutes/Dead no blow/Flush tool no help  
 2ND Shut In 15 Minutes/No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2194.47	108.01	Initial Hydro-static
1	45.60	107.58	Open To Flow (1)
31	45.74	108.07	Shut-In(1)
61	1038.38	109.74	End Shut-In(1)
61	46.72	109.47	Open To Flow (2)
76	49.88	110.09	Shut-In(2)
93	853.01	111.07	End Shut-In(2)
94	2157.05	111.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.21

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

GL Allison Oil Operations Incorporated

**21/12S/32W/Logan**

15 Southeast 30 Road  
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Job Ticket: 18160

**DST#: 3**

ATTN: Kevin Bailey

Test Start: 2013.09.28 @ 00:41:00

## Tool Information

Drill Pipe:	Length: 4313.00 ft	Diameter: 3.80 inches	Volume: 60.50 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 60.50 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	4316.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	60.00 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			4294.00	
Hydraulic Tool	5.00			4299.00	
Jars	5.00			4304.00	
Safety Joint	2.00			4306.00	
Packer	5.00			4311.00	27.00 Bottom Of Top Packer
Packer	5.00			4316.00	
Anchor	28.00			4344.00	
Recorder	1.00	6749	Inside	4345.00	
Recorder	1.00	6666	Outside	4346.00	
Bullnose	3.00			4349.00	33.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>60.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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Job Ticket: 18160

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ATTN: Kevin Bailey

Test Start: 2013.09.28 @ 00:41:00

### 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud 100%	0.210

Total Length: 15.00 ft      Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

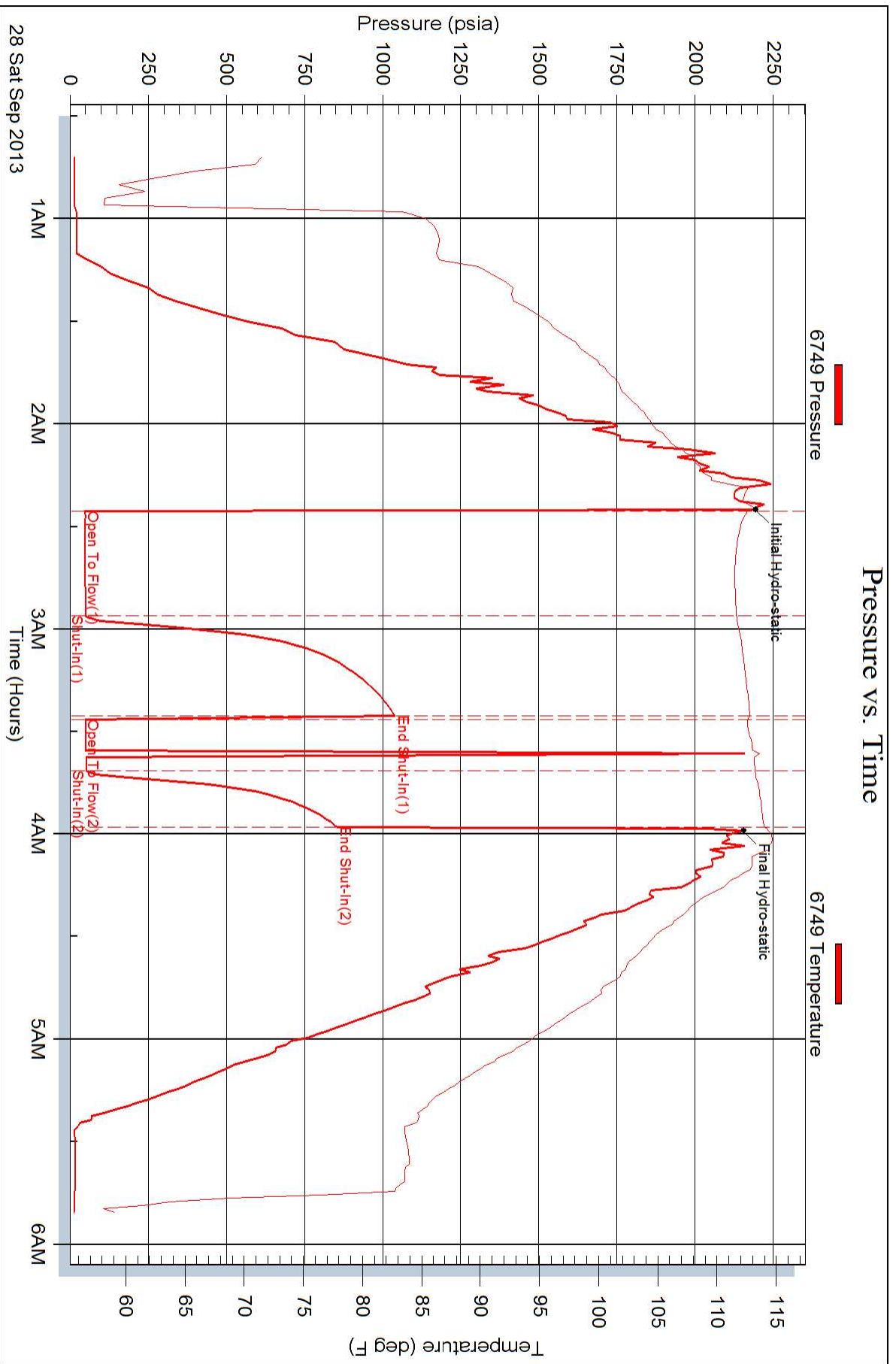
Inside

GL Allison Oil Operations Incorporated

Younkin 21-Maycee

DST Test Number: 3

### Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 18160

Printed: 2013.09.28 @ 06:01:06

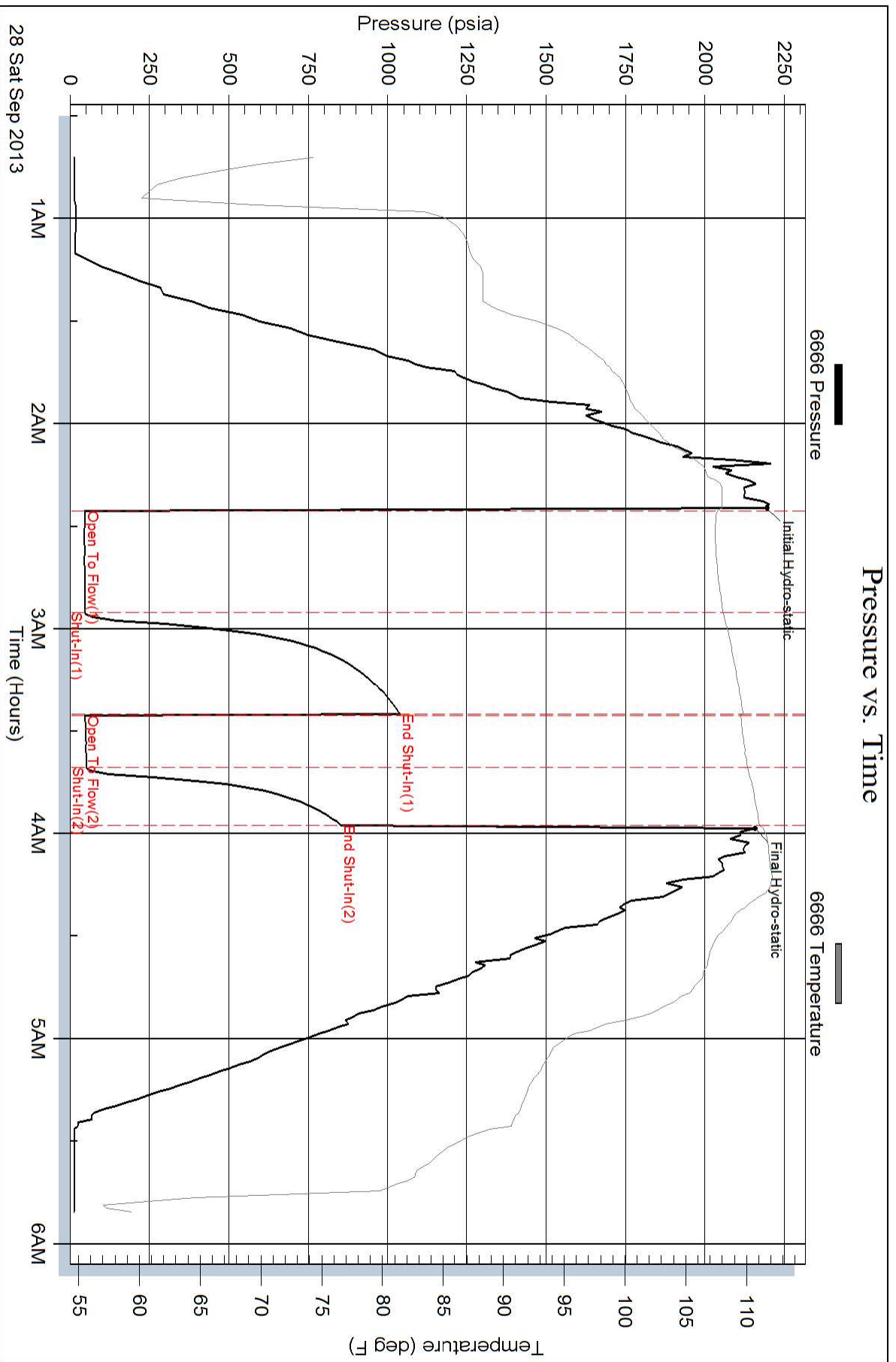
Serial #: 6666

Outside GL Allison Oil Operations Incorporated

Younkin 21-Maycee

DST Test Number: 3

### Pressure vs. Time



Superior Testers Enterprises LLC

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