



## DRILL STEM TEST REPORT

Prepared For: **Bear Petroleum**

PO Box 438  
Haysville, KS 67060

ATTN: Rod Anderson

### **States #1**

#### **10-22S-20W Pawnee,KS**

Start Date: 2018.06.19 @ 22:42:28

End Date: 2018.06.20 @ 07:30:30

Job Ticket #: 63978                      DST #: 1

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

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**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bear Petroleum

**10-22S-20W Pawnee, KS**

PO Box 438  
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**States #1**

Job Ticket: 63978

**DST#: 1**

ATTN: Rod Anderson

Test Start: 2018.06.19 @ 22:42:28

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:34:30

Time Test Ended: 07:30:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

**Interval: 4390.00 ft (KB) To 4403.00 ft (KB) (TVD)**

Reference Elevations: 2173.00 ft (KB)

Total Depth: 4403.00 ft (KB) (TVD)

2167.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 6.00 ft

**Serial #: 8875**

**Inside**

Press@RunDepth: 232.46 psig @ 4391.00 ft (KB)

Capacity: psig

Start Date: 2018.06.19

End Date:

2018.06.20

Last Calib.:

2018.06.20

Start Time: 22:42:29

End Time:

07:30:30

Time On Btm:

2018.06.20 @ 01:30:45

Time Off Btm:

2018.06.20 @ 05:20:15

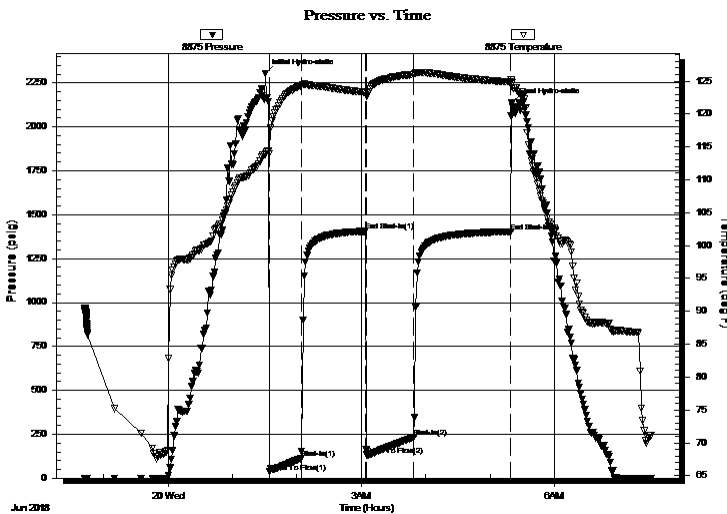
**TEST COMMENT:** IF: Fair Blow , BOB in 12 minutes, Built to 22 1/2"

IS: No Blow Back

FF: Fair Blow , BOB in 17 minutes, Built to 27 1/2"

FS: No Blow Back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2304.92	113.87	Initial Hydro-static
4	35.74	113.99	Open To Flow (1)
34	113.54	124.33	Shut-In(1)
94	1405.93	123.28	End Shut-In(1)
95	132.33	122.72	Open To Flow (2)
139	232.46	126.04	Shut-In(2)
229	1403.68	124.86	End Shut-In(2)
230	2136.84	124.71	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
252.00	Water	3.53
63.00	MCW 10%M 90%W	0.88
15.00	SOMCW 2%O 30%M 68%W	0.21

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





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**TOOL DIAGRAM**

Bear Petroleum

**10-22S-20W Pawnee,KS**

PO Box 438  
Haysville, KS 67060

**States #1**

Job Ticket: 63978

**DST#: 1**

ATTN: Rod Anderson

Test Start: 2018.06.19 @ 22:42:28

## Tool Information

Drill Pipe:	Length: 4372.00 ft	Diameter: 3.80 inches	Volume: 61.33 bbl	Tool Weight: 2100.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 61.33 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4390.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on Bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4369.00	
Hydraulic tool	5.00			4374.00	
Jars	5.00			4379.00	
Safety Joint	2.00			4381.00	
Packer	5.00			4386.00	26.00 Bottom Of Top Packer
Packer	4.00			4390.00	
Stubb	1.00			4391.00	
Recorder	0.00	8875	Inside	4391.00	
Recorder	0.00	6749	Outside	4391.00	
Perforations	9.00			4400.00	
Bullnose	3.00			4403.00	13.00 Bottom Packers & Anchor

**Total Tool Length: 39.00**



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## FLUID SUMMARY

Bear Petroleum

**10-22S-20W Pawnee,KS**

PO Box 438  
Haysville, KS 67060

**States #1**

Job Ticket: 63978

**DST#: 1**

ATTN: Rod Anderson

Test Start: 2018.06.19 @ 22:42:28

### 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:

67000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 0.02 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
252.00	Water	3.535
63.00	MCW 10%M 90%W	0.884
15.00	SOMCW 2%O 30%M 68%W	0.210

Total Length: 330.00 ft      Total Volume: 4.629 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .1 @ 80degrees

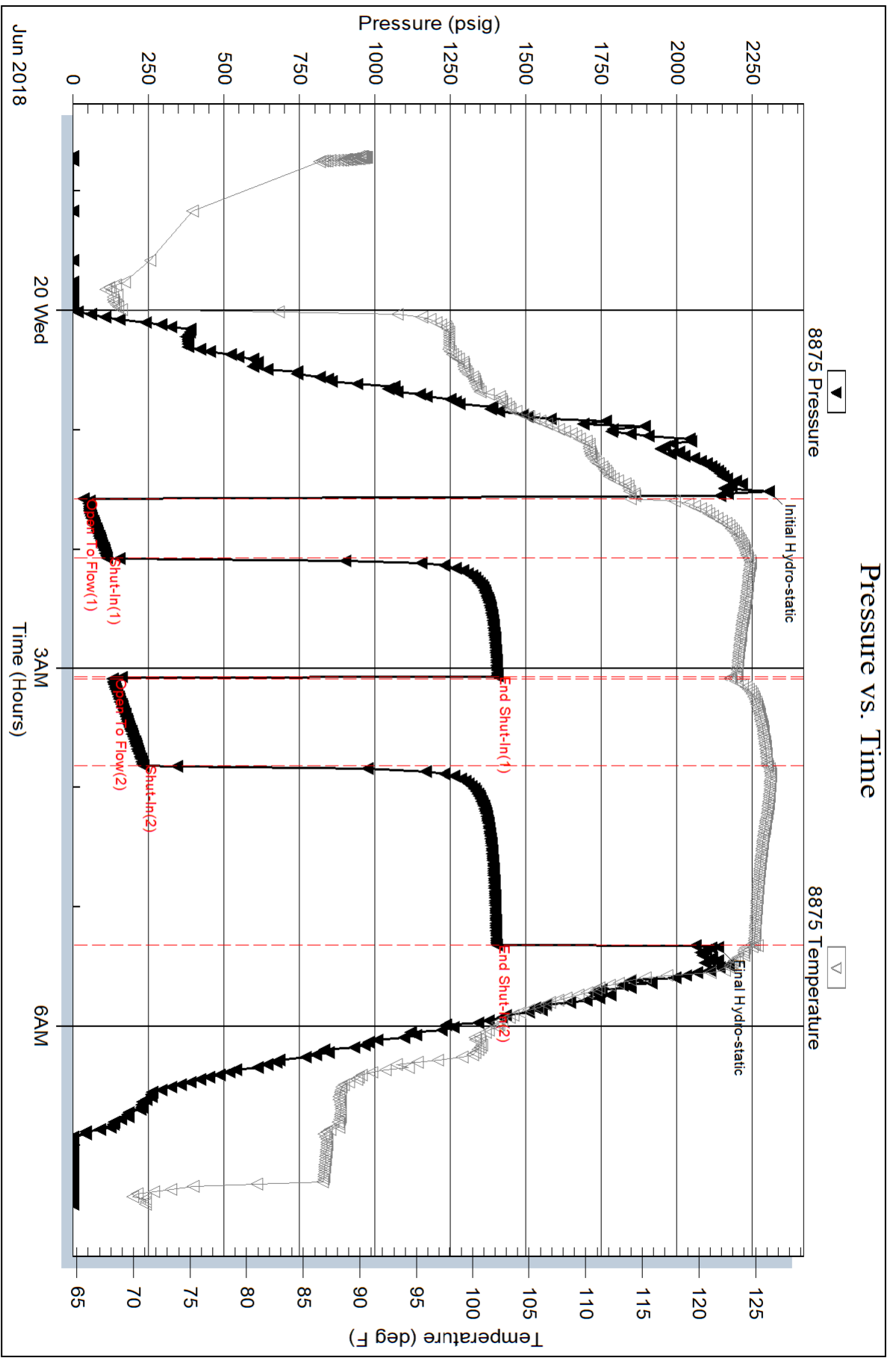
Serial #: 8875

Inside

Bear Petroleum

States #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 63978

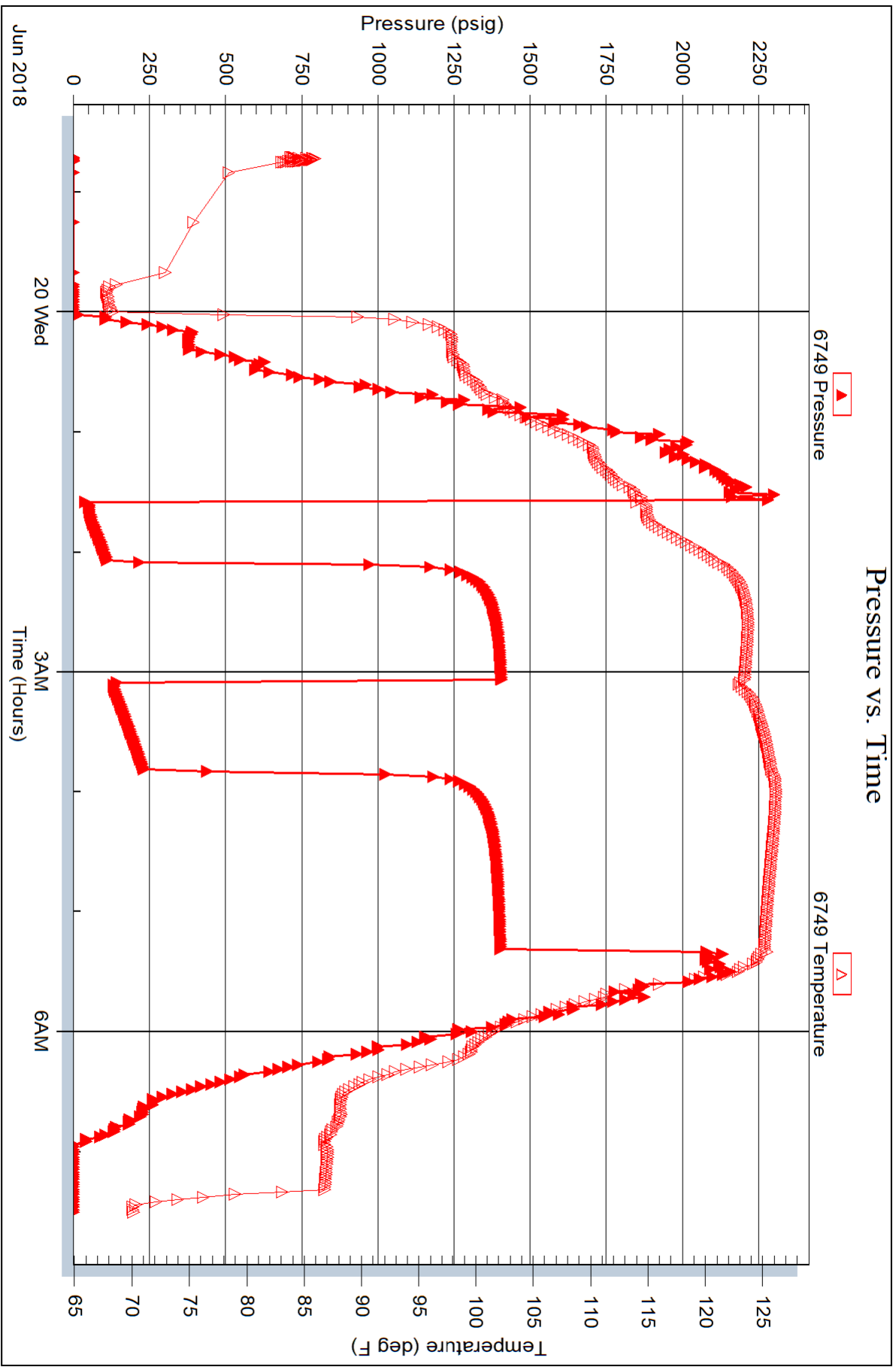
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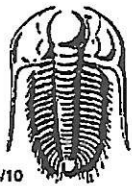
Serial #: 6749

Outside Bear Petroleum

States #1

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 63978

Well Name & No. States 1 Test No. 1 Date 06/19/18  
 Company Bear Petroleum Elevation 2173 KB 2167 GL  
 Address PO BOX 438 Haysville, KS 67060  
 Co. Rep / Geo. Rod Anderson Rig Royal 1  
 Location: Sec. 10 Twp 22S Rge. 20W Co. Pawnee State KS

Interval Tested 4390 - 4403 Zone Tested Mississippi  
 Anchor Length 13 Drill Pipe Run 4372 Mud Wt. 9.3  
 Top Packer Depth 4385 Drill Collars Run 0 Vis 53  
 Bottom Packer Depth 4390 Wt. Pipe Run 0 WL 8.8  
 Total Depth 4403 Chlorides 3500 ppm System LCM 1

Blow Description IF: Fair Blow, BOB in 12 minutes, Built to 22 1/2 inches  
ISI: NO Blow Back  
FF: Fair Blow, BOB in 17 minutes, Built to 27 1/2 inches  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>SOMCW</u>	<u>2</u>	<u>68</u>	<u>30</u>	<u></u>
<u>63</u>	<u>MCW</u>	<u></u>	<u>90</u>	<u>10</u>	<u></u>
<u>252</u>	<u>Water</u>	<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>
<u>330</u>	<u>BHT 125</u>	<u>Gravity N/C</u>	<u>API RW 1 @ 80 °F</u>	<u>Chlorides 67000</u>	<u>ppm</u>

(A) Initial Hydrostatic	<u>2305</u>
(B) First Initial Flow	<u>36</u>
(C) First Final Flow	<u>113</u>
(D) Initial Shut-In	<u>1406</u>
(E) Second Initial Flow	<u>132</u>
(F) Second Final Flow	<u>232</u>
(G) Final Shut-In	<u>1404</u>
(H) Final Hydrostatic	<u>2137</u>
Initial Open	<u>30</u>
Initial Shut-In	<u>60</u>
Final Flow	<u>45</u>
Final Shut-In	<u>90</u>

- Test 1150
- Jars 250
- Safety Joint 75
- Circ Sub
- Hourly Standby
- Mileage 160 94rt
- Sampler
- Straddle
- Shale Packer 250
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1819

T-On Location 2100  
 T-Started 22:42  
 T-Open 01:34  
 T-Pulled 05:19  
 T-Out 07:30  
 Comments \_\_\_\_\_  
 \_\_\_\_\_  
 Ruined Shale Packer  
 Ruined Packer  
 Extra Copies  
 Sub Total 0  
 Total 1819  
 MP/DST Disc't \_\_\_\_\_

Approved By Rod Anderson

Our Representative \_\_\_\_\_

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