



DRILL STEM TEST REPORT

Prepared For: **Chieftain Oil Co.Inc.**

PO Box 124
Kiowa KS 67070

ATTN: Arden Ratzlaff

Molz #21

11-35s-12w Barber KS

Start Date: 2013.09.25 @ 13:04:30

End Date: 2013.09.25 @ 21:53:15

Job Ticket #: 53537 DST #: 1

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

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TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Chieftain Oil Co. Inc.

11-35s-12w Barber KS

PO Box 124
Kiowa KS 67070

Molz #21

Job Ticket: 53537

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2013.09.25 @ 13:04:30

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:12:45

Time Test Ended: 21:53:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 4825.00 ft (KB) To 4845.00 ft (KB) (TVD)

Reference Elevations: 1400.00 ft (KB)

Total Depth: 4845.00 ft (KB) (TVD)

1387.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 13.00 ft

Serial #: 8352 Inside

Press @ Run Depth: 164.45 psig @ 4826.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.25 End Date: 2013.09.25

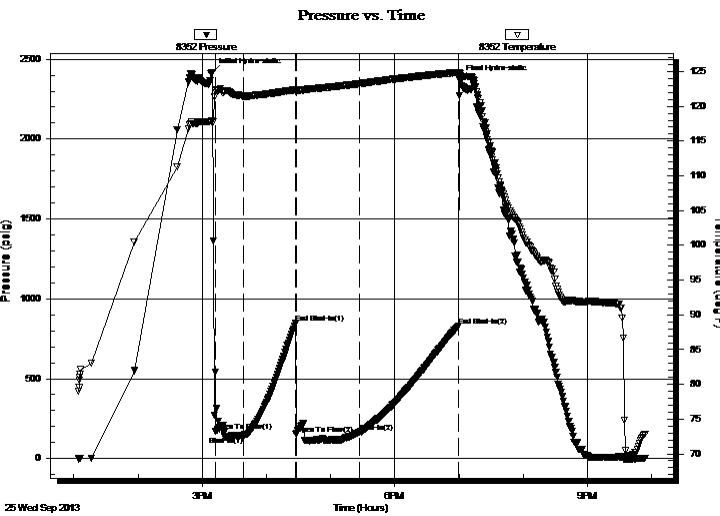
Last Calib.: 2013.09.25

Start Time: 13:04:35 End Time: 21:53:15

Time On Btm: 2013.09.25 @ 15:09:15

Time Off Btm: 2013.09.25 @ 19:00:30

TEST COMMENT: IF: Weak blow . 1/2 - 1 1/2".
IS: No blow .
FF: Weak blow . 1/2 - 2 1/2".
FS: No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2417.07	117.94	Initial Hydro-static
4	172.86	122.20	Open To Flow (1)
30	142.50	121.43	Shut-In(1)
79	846.67	122.36	End Shut-In(1)
79	150.33	122.04	Open To Flow (2)
138	164.45	123.24	Shut-In(2)
231	829.49	124.87	End Shut-In(2)
232	2372.92	124.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	Drig. mud	0.47
60.00	GM w/oil specs 13%g 87%m	0.30
0.00	Clean oil @ top of tool	0.00

Gas Rates

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



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TESTING, INC.**

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TOOL DIAGRAM

Chieftain Oil Co.Inc.

11-35s-12w Barber KS

PO Box 124
Kiowa KS 67070

Molz #21

Job Ticket: 53537

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2013.09.25 @ 13:04:30

Tool Information

Drill Pipe:	Length: 4657.00 ft	Diameter: 3.80 inches	Volume: 65.33 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 29000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 93000.00 lb
			<u>Total Volume: 66.22 bbl</u>	Tool Chased 16.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4825.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	43.00 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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C.O. Sub	1.00			4803.00	
Shut in tool	5.00			4808.00	
HMV	5.00			4813.00	
Safety Joint	3.00			4816.00	
Packer	4.00			4820.00	23.00 Bottom Of Top Packer
Packer	5.00			4825.00	
Stubb	1.00			4826.00	
Recorder	0.00	8352	Inside	4826.00	
Recorder	0.00	8370	Outside	4826.00	
Perforations	14.00			4840.00	
Bullnose	5.00			4845.00	20.00 Bottom Packers & Anchor

Total Tool Length: 43.00



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TESTING, INC.**

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FLUID SUMMARY

Chieftain Oil Co.Inc.

11-35s-12w Barber KS

PO Box 124
Kiowa KS 67070

Molz #21

Job Ticket: 53537

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2013.09.25 @ 13:04:30

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:

4600 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4600.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
95.00	Drig.mud	0.467
60.00	GM w/oil specs 13%g 87%m	0.295
0.00	Clean oil @ top of tool	0.000

Total Length: 155.00 ft

Total Volume: 0.762 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8352

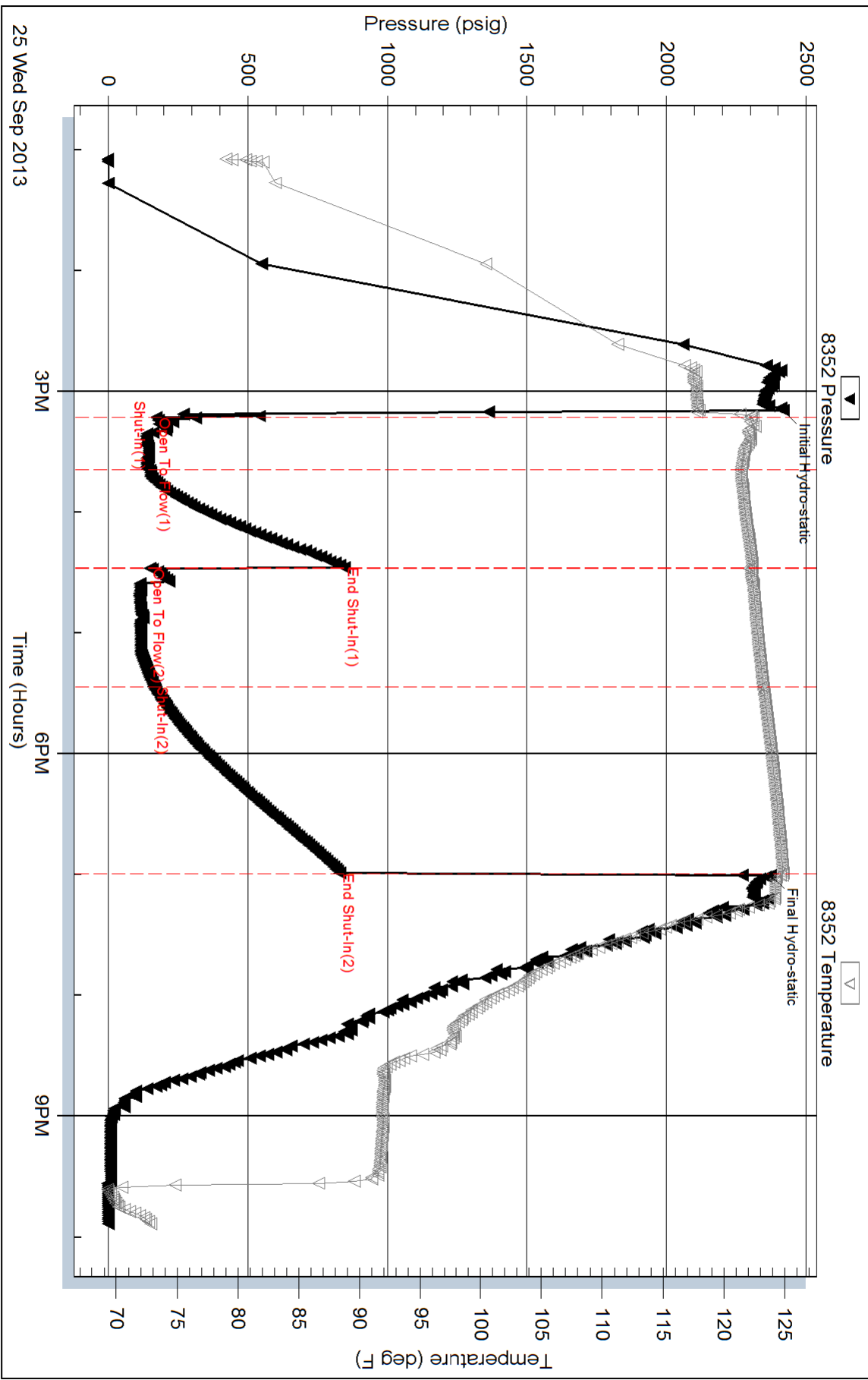
Inside

Chieftain Oil Co. Inc.

Molz #21

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 53537

Printed: 2013.10.01 @ 09:55:00

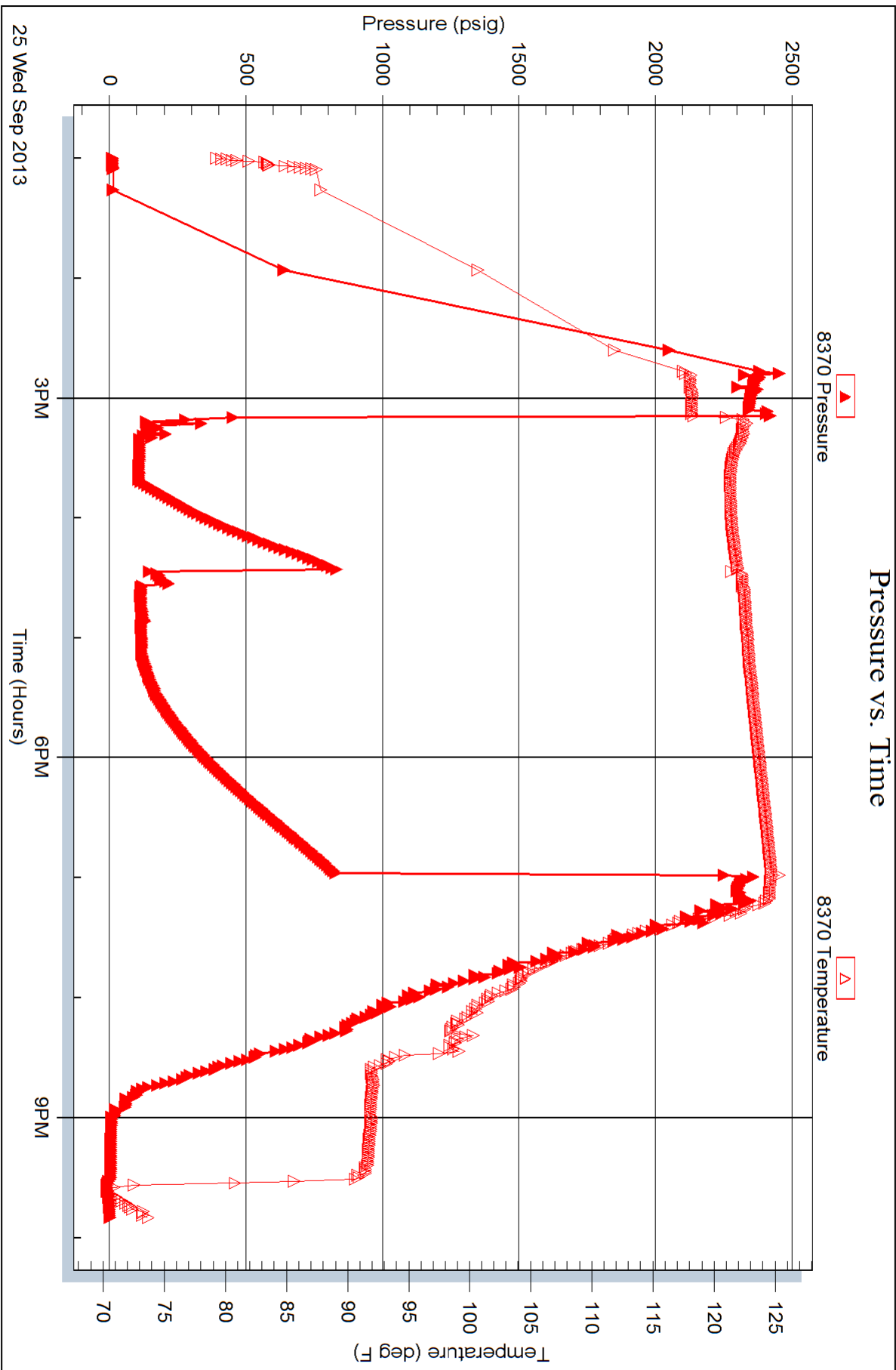
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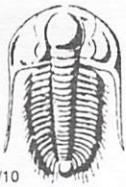
Outside

Chieftain Oil Co. Inc.

Molz #21

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52357

Well Name & No. Molz # 21 Test No. 1 Date 9-25-13
 Company CHIEFTAIN OIL Co. Inc. Elevation 1400' KB 1387 GL
 Address 101 S. 5TH ST. P.O. Box 124, Kiowa KS. 67070
 Co. Rep / Geo. ARDEN RATZLAFF Rig Fossil Drug, # 3
 Location: Sec. 11 Twp. 35S Rge. 12W Co. BARBER State Ks

Interval Tested 4825 - 4845' Zone Tested Miss.
 Anchor Length 20' Drill Pipe Run 4657' Mud Wt. 9.3
 Top Packer Depth 4820' Drill Collars Run 180' Vis 60
 Bottom Packer Depth 4825' Wt. Pipe Run 0 WL 7.8 cc
 Total Depth 4845' Chlorides 4600 ppm System LCM 3 #
 Blow Description IF: Weak blow. 1/2 - 1 1/2". ISI: No blow.

FF: Weak blow. 1/2 - 2 1/2". FSI: No blow. COMMENT: 20-25 ft. of hard fill on botm. Slid tool approx. 16 ft.

Rec	Feet of	%gas	%oil	%water	%mud
<u>95</u>	<u>Dry mud</u>				
<u>60</u>	<u>GM w/oil specs.</u>	<u>13</u>			<u>87</u>
	<u>Clear oil @ top of tool</u>				

Rec Total 155 Fluid BHT 119° Gravity N/A API RW N.C. @ 2 °F Chlorides 4600 ppm

(A) Initial Hydrostatic	<u>2417</u>	<input checked="" type="checkbox"/> Test	<u>1250</u>	T-On Location	<u>1210</u>
(B) First Initial Flow	<u>173</u>	<input type="checkbox"/> Jars		T-Started	<u>1304</u>
(C) First Final Flow	<u>143</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>1512</u>
(D) Initial Shut-In	<u>847</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>1858</u>
(E) Second Initial Flow	<u>150</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>2153</u>
(F) Second Final Flow	<u>164</u>	<input checked="" type="checkbox"/> Mileage	<u>(102)</u> 158.10	Comments	<u>Charts show some plugging during both flow periods.</u>
(G) Final Shut-In	<u>829</u>	<input type="checkbox"/> Sampler		<input type="checkbox"/> Ruined Shale Packer	
(H) Final Hydrostatic	<u>2373</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Packer	
Initial Open	<u>30</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Extra Copies	
Initial Shut-In	<u>45</u>	<input type="checkbox"/> Extra Packer		Sub Total	<u>0</u>
Final Flow	<u>60</u>	<input type="checkbox"/> Extra Recorder		Total	<u>1483.10</u>
Final Shut-In	<u>90</u>	<input type="checkbox"/> Day Standby		MP/DST Disc't	
		<input type="checkbox"/> Accessibility			
		Sub Total	<u>1483.10</u>		

Approved By Arden Ratzlaff Our Representative Gary Perotany
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