

ANNUAL SAFETY INSPECTION  
FOR  
**MOBILE CRANES**  
**Wheel / Crawler Mounted**  
**Telescoping & Non-Telescoping Booms**

29 CFR 1910.180, 1926.550  
ANSI B30.5, B30.10

CUSTOMER Delta Innovative Services

INSPECTION DATE 11/14/2017

CUSTOMER UNIT #: 13

TYPE CRANE    RT ☐    Truck Crane ☐    Commercial Truck Mtd. ☒    Crawler Crane ☐  
                  Hydraulic ☒    Conventional ☐    Telescoping ☒    Non-Telescoping ☐

CRANE MAN./MODEL Terex/ RS-60100

SERIAL NUMBER 5920901034    CRANE CAPACITY 60,000#

BOOM LENGTH 100'    Hour Meter 7883    Mileage N/A

LOCATION 508 S. 14th St. Kansas City, KS. 66105

The information provided in this report is the result of the specific testing and inspection procedures conducted by National Fleet Testing Services, Inc. contractors on the equipment and identified herein, as limited by the scope of work authorized by the customer (the "Test Results"). The Test Results reflect only the conditions of the components tested or inspected within the scope of work authorized. We have reviewed neither the maintenance records nor the actual use of the equipment before or after the date of the testing or inspection. NO ATTEMPT HAS BEEN MADE AND NO INFORMATION IS RENDERED WITH RESPECT TO ANY CONDITIONS OF THE EQUIPMENT OR ANY COMPONENT OTHER THAN AS EXPRESSLY STATED IN THE WRITTEN TEST RESULTS. SPECIFICALLY, BUT WITHOUT LIMITATIONS, NO INFORMATION, TESTING OR INSPECTION SERVICES ARE RENDERED CONCERNING EQUIPMENT DESIGN, SUITABILITY OF THE EQUIPMENT FOR ANY PARTICULAR PURPOSE OF THE FUTURE SERVICEABILITY OF THE EQUIPMENT. THE TEST RESULTS SHOULD NOT BE CONSTRUED AS STATEMENT THAT THE EQUIPMENT IS SAFE OR SERVICEABLE.

The information provided in this report is not a substitute for proper use, maintenance, modification, inspection and repair of the equipment, who shall assure safe operation of the equipment within its intended limitation. Furthermore, nothing in the Test Results should be construed as a recommendation for corrective action and National Fleet Testing Services, Inc. or any of its authorized contractors has not and will not supervise corrective action of any condition found to exist, as such in the sole responsibility of the owner/operator and it is hereby expressly excluded from the scope of the work performed by an authorized contractor of National Fleet Testing Services, Inc. The Test Results are intended solely for informational purposes of the customer and should not be utilized or relied upon by any other person.

## Aerial Personnel Lifts, Digger Derricks and Crane Equipment

## ROTATION BEARING CHECK DATA SHEET

Customer Delta Innovative Services Unit 13 Date 11/14/2017

## TOP ROTATION BEARING ATTACHMENT BOLTS:

Number Checked 100%Number Inaccessible 0

## LOWER ROTATION BEARING ATTACHMENT BOLTS:

Number Checked N/ANumber Inaccessible N/A

X Accessible Bolts

O Inaccessible Bolts

Note: An authorized contractor for National Fleet Testing Services, Inc. has checked all accessible bolts for reasonable tightness with the use of an ordinary crescent wrench or open end wrench, but not with a torque wrench nor measuring device of any kind. AT NO TIME WAS A MEASURING TOOL/TORQUE WRENCH UTILIZED FOR DETERMINING THE TORQUE OF BOLTS. It is the customer's responsibility to torque all bearing bolts in accordance with the equipment manufacturer's specifications to ensure that all bolts are properly torqued. Customer should remove any and all equipment obstructing access to bearing bolts, and torque bolts in accordance with equipment manufacturer's specification found in equipment manufacturer's service manual.

MAINTAINING PROPER TORQUE OF ALL BOLTS IS THE SOLE RESPONSIBILITY OF THE EQUIPMENT OWNER/USER AND IS NOT THE RESPONSIBILITY OF NATIONAL FLEET TESTING SERVICES, INC. OR ANY OF ITS AUTHORIZED

Inspector comments: \_\_\_\_\_

## A. GENERAL

Unit Number 13

	OK	See Notes	N/A	
1.	<u>    </u>	<u>    </u>	<u>X</u>	If the crane has a single operator station, is there a seatbelt?
2.	<u>    </u>	<u>    </u>	<u>X</u>	Do tire sizes and type match up to the load chart?
3.	<u>X</u>	<u>    </u>	<u>    </u>	Tail, Brake Turn Signal / Four-way flasher, lights operating?
4.	<u>X</u>	<u>    </u>	<u>    </u>	Headlights and Clearance Lights operating?
5.	<u>X</u>	<u>    </u>	<u>    </u>	Are all principle walk areas on the crane skid resistant?
6.	<u>    </u>	<u>    </u>	<u>X</u>	Are there handholds, railings, and steps for cab accessibility?
7.	<u>    </u>	<u>    </u>	<u>X</u>	Does the cab door latch in the open position?
8.	<u>    </u>	<u>    </u>	<u>X</u>	Is all glass in the cab of a safety type as defined in ANSI Z26.1?
9.	<u>    </u>	<u>    </u>	<u>X</u>	First Aid Kit (on job site)?
10.	<u>X</u>	<u>    </u>	<u>    </u>	Is there a 10-BC type fire extinguisher on the crane?
11.	<u>X</u>	<u>    </u>	<u>    </u>	Is the exhaust piped away from the operator?
12.	<u>    </u>	<u>    </u>	<u>X</u>	Is there an operator's manual in the cab?
13.	<u>X</u>	<u>    </u>	<u>    </u>	Are mobile crane handsignal charts posted on the crane?
14.	<u>X</u>	<u>    </u>	<u>    </u>	Are all manufacturer's caution and warning signs legible?
15.	<u>X</u>	<u>    </u>	<u>    </u>	Are there 2 electrocution hazard warning signs on the unit?
16.	<u>X</u>	<u>    </u>	<u>    </u>	Is there a complete load chart accessible to the operator?
17.	<u>    </u>	<u>    </u>	<u>X</u>	Is there a work area chart in the cab?
18.	<u>X</u>	<u>    </u>	<u>    </u>	Is there a means for checking that the crane is level?
19.	<u>X</u>	<u>    </u>	<u>    </u>	Is there a boom angle indicator readable from the operator's station?
20.	<u>X</u>	<u>    </u>	<u>    </u>	Are all controls identified?
21.	<u>X</u>	<u>    </u>	<u>    </u>	Are the controls operational?
22.	<u>X</u>	<u>    </u>	<u>    </u>	Do all controls return to neutral position when released?
23.	<u>X</u>	<u>    </u>	<u>    </u>	Are the gauges working?
24.	<u>X</u>	<u>    </u>	<u>    </u>	Is there a warning horn operable from the operator's station?
25.	<u>    </u>	<u>    </u>	<u>X</u>	Is there an audible back-up alarm on the carrier?
26.	<u>X</u>	<u>    </u>	<u>    </u>	Load Indicator (if equipped) working?
27.	<u>    </u>	<u>    </u>	<u>X</u>	Is there an upper-boom limit shut-off, and working?
28.	<u>    </u>	<u>    </u>	<u>X</u>	Are there shock absorbing boom stops?
29.	<u>    </u>	<u>    </u>	<u>X</u>	If equipped, are the drum rotation indicators working?
30.	<u>X</u>	<u>    </u>	<u>    </u>	Does the crane have an anti-2-bloc device or warning feature? (after 1-00 shall)
31.	<u>X</u>	<u>    </u>	<u>    </u>	Is the boom marked for length and readable?
32.	<u>    </u>	<u>    </u>	<u>    </u>	Other <u>                                    </u>

**B. OUTRIGGERS**

Ok	See Notes	Na		Ok	See Notes	Na	
1.	<u>X</u>	_____	Warning Signs	6.	<u>X</u>	_____	Control Valves
2.	<u>X</u>	_____	Outrigger Boxes	7.	<u>X</u>	_____	Holding Valves/Other Means
3.	<u>X</u>	_____	Beams	8.	<u>X</u>	_____	Pads and Retainers
4.	_____	<u>X</u>	Horizontal Cylinders and Hoses	9.	<u>X</u>	_____	Pins and Retainers
5.	<u>X</u>	_____	Vertical Cylinders and Hoses	10.	_____	_____	Other _____

**C. CHASIS**Unit Number 13

Ok	See Notes	N/A		Ok	See Notes	N/A	
1.	<u>X</u>	_____	Carrier Frame / Car Body	15.	_____	<u>X</u>	Idlers, Drivers, Bogies
2.	_____	<u>X</u>	Engine and Drive Train	16.	_____	<u>X</u>	Tracks and Pins
3.	_____	<u>X</u>	Muffler Guard	17.	_____	<u>X</u>	Track Slack
4.	_____	<u>X</u>	Planetaries	18.	<u>X</u>	_____	Wear Pads and Rollers
5.	<u>X</u>	_____	Suspension & Walking Beams	19.	_____	<u>X</u>	Electrical System
6.	_____	<u>X</u>	Steering	20.	_____	<u>X</u>	Air System
7.	_____	<u>X</u>	Service and Parking Brake System	21.	<u>X</u>	_____	Exhaust System
8.	<u>X</u>	_____	Power Take-Off	22.	<u>X</u>	_____	Rotation Bearing/Bullgear-Mounting
9.	<u>X</u>	_____	Hydraulic Hoses and Fittings	23.	<u>X</u>	_____	Rotation Bearing Movement
10.	<u>X</u>	_____	Hydraulic Pumps	24.	<u>X</u>	_____	Swing Gear and Pinion
11.	<u>X</u>	_____	Hydraulic Reservoir	25.	<u>X</u>	_____	Boom Rest
12.	_____	<u>X</u>	Side Frames	26.	<u>X</u>	_____	Guards
13.	_____	<u>X</u>	Drive Sprockets and Chains	27.	<u>X</u>	_____	Lubrication
14.	_____	<u>X</u>	Chain Slack	28.	_____	_____	Other _____

**D. UPPERWORKS (Lattice Cranes)**

1.	_____	<u>X</u>	Structure and Welds	15.	_____	<u>X</u>	Brake Pedals and Latches
2.	_____	<u>X</u>	Mounting Bolts/Welds	16.	_____	<u>X</u>	Ratchet & Pawl/Dog System-Boom
3.	_____	<u>X</u>	Hook Rollers and Brackets	17.	_____	<u>X</u>	Drums
4.	_____	<u>X</u>	Load Rollers and Pads	18.	_____	<u>X</u>	House Lock
5.	_____	<u>X</u>	Engine	19.	_____	<u>X</u>	Swinger Gearcase
6.	_____	<u>X</u>	Muffler Guard	20.	_____	<u>X</u>	Boom Hinge Pins
7.	_____	<u>X</u>	Torque Converter	21.	_____	<u>X</u>	Mast/A-Frame
8.	_____	<u>X</u>	Hydraulic Pumps	22.	_____	<u>X</u>	Pins and Retainers
9.	_____	<u>X</u>	Hydraulic Motors	23.	_____	<u>X</u>	Backlegs
10.	_____	<u>X</u>	Hoses and Fittings	24.	_____	<u>X</u>	Sheaves
11.	_____	<u>X</u>	Air/Hydraulic Swivel Joints	25.	_____	<u>X</u>	Outer Bail and Sheaves
12.	_____	<u>X</u>	Draw Works Gearing	26.	_____	<u>X</u>	Guards
13.	_____	<u>X</u>	Drum Clutches	27.	_____	<u>X</u>	Lubrication
14.	_____	<u>X</u>	Drum Brakes	28.	_____	_____	Other _____

**E. COUNTERWEIGHT**

1.	_____	<u>X</u>	Mounting Bolts/Pins	3.	_____	<u>X</u>	Correct Size for Application
2.	_____	<u>X</u>	Warning Signs "Tail Swing"	4.	_____	_____	Other _____

**F. TELESCOPING BOOM INSPECTION**

- |              |       |          |                                 |              |       |       |                              |
|--------------|-------|----------|---------------------------------|--------------|-------|-------|------------------------------|
| 1. <u>X</u>  | _____ | _____    | Base section                    | 11. <u>X</u> | _____ | _____ | Sheave and rope guards       |
| 2. <u>X</u>  | _____ | _____    | Inner-mid section               | 12. <u>X</u> | _____ | _____ | Boom lift cylinders          |
| 3. <u>X</u>  | _____ | _____    | Outer-mid section               | 13. <u>X</u> | _____ | _____ | Extension cylinders          |
| 4. <u>X</u>  | _____ | _____    | Outer section                   | 14. <u>X</u> | _____ | _____ | Extension ropes and fittings |
| 5. _____     | _____ | <u>X</u> | Fly section                     | 15. <u>X</u> | _____ | _____ | Hoses and fittings           |
| 6. <u>X</u>  | _____ | _____    | Swingaway section and extension | 16. <u>X</u> | _____ | _____ | Holding devices              |
| 7. <u>X</u>  | _____ | _____    | Wear pads and guides            | 17. <u>X</u> | _____ | _____ | Hose reel                    |
| 8. _____     | _____ | <u>X</u> | Rollers                         | 18. <u>X</u> | _____ | _____ | Load rope dead end           |
| 9. <u>X</u>  | _____ | _____    | Jib and pendants                | 19. <u>X</u> | _____ | _____ | Pins and retainers           |
| 10. <u>X</u> | _____ | _____    | Boom tip sheaves and bearings   | 20. <u>X</u> | _____ | _____ | Lubrication                  |

Unit Number 13**G. CRANE FUNCTIONS**

- |             |       |          |                            |              |       |          |                               |
|-------------|-------|----------|----------------------------|--------------|-------|----------|-------------------------------|
| 1. <u>X</u> | _____ | _____    | Boom Up and Down           | 6. <u>X</u>  | _____ | _____    | Main Hoist - Hoist/Lower      |
| 2. <u>X</u> | _____ | _____    | Swing Left and Right       | 7. _____     | _____ | <u>X</u> | Auxiliary Hoist - Hoist/Lower |
| 3. _____    | _____ | <u>X</u> | Steering Left and Right    | 8. <u>X</u>  | _____ | _____    | Outrigger Beams - in/out      |
| 4. _____    | _____ | <u>X</u> | Travel Forward and Reverse | 9. <u>X</u>  | _____ | _____    | Outrigger Jacks - up/down     |
| 5. _____    | _____ | <u>X</u> | Cut Left and Right         | 10. <u>X</u> | _____ | _____    | <u>LOAD TEST</u>              |

H.	WIRE ROPE INSPECTION	BOOM HOIST	MAIN HOIST	AUXILIARY HOIST
1.	Measured Size	<u>N/A</u>	<u>5/8"</u>	<u>N/A</u>
2.	Type	<u>N/A</u>	<u>RRC</u>	<u>N/A</u>
3.	Rope Spooling	<u>N/A</u>	<u>OK</u>	<u>N/A</u>
	Number of Broken Wires			
4.	In One Strand	<u>N/A</u>	<u>NONE</u>	<u>N/A</u>
5.	In One Lay	<u>N/A</u>	<u>OK</u>	<u>N/A</u>
6.	At End Fittings	<u>N/A</u>	<u>OK</u>	<u>N/A</u>
7.	Other Damage	<u>N/A</u>	<u>OK</u>	<u>N/A</u>

Note: If rotation resistant wire rope is being used on the load hoist drums, does it meet the 5:1 safety factor? N/A

**I. LOAD BLOCK INSPECTION**

	MAIN HOIST	AUX. HOIST	OTHER
1. Manufacturer	N/A	N/A	
2. Model	N/A	N/A	
3. Capacity	N/A	N/A	
4. Serial Number	N/A	N/A	
5. Number of Sheaves	N/A	N/A	
a. For Rope Size	5/8"	N/A	
6. Hook Type	N/A	N/A	
a. Throat Opening	N/A	N/A	
7. ID Tag and Weight Markings	N/A	N/A	
8. Hook Twist	N/A	N/A	
9. Hook Stretch	N/A	N/A	
10. Hook Wear	N/A	N/A	
11. Sheaves	N/A	N/A	
12. Bearings/Bushings	OK	N/A	
13. Swivel and Thrust Bearing	OK	N/A	
14. Pins and Retainers	OK	N/A	
15. Load Rope Dead End	OK	N/A	
16. Safety Latch	OK	N/A	
17. NDE: MT <u>X</u> VT <u>X</u>			

UNIT NO. \_\_\_\_\_

**DATE** 11/14/2017

(Page 1 of 2)

[illegible]



## DISCREPANCY SUMMARY

[illegible]

- 1

- Signature / Title \_\_\_\_\_ Date \_\_\_\_\_  
Report received by \_\_\_\_\_