

# TRUCK & WATER WAGON

## I. GENERAL:

This standard is intended to provide specifications for the procurement of a Caterpillar Model 740 Articulated Truck in combination with an American Global Manufacturing Inc. AGM 11,000 U.S. Gallon capacity water wagon that meets specific area operational requirements and weight limitations for the St. Johns River Power Park site. This Water Wagon shall be utilized for controlling the various fugitive dusts within the plant to meet EPA requirements.

## II. DESCRIPTIONS FOR CATERPILLAR 740 ARTICULATED TRUCK

The following shall be provided:

### II.1. ENGINE

The Cat C15 engine shall meet or exceed all EPA Tier 3/EU Stage IIIa emission specifications for the U.S through 2010.

- II.1.1. Engine Model: Cat C15 ACERT
- II.1.2. Gross Power: 457 hp
- II.1.3. Net Power: 436hp
- II.1.4. Bore: 5.4in
- II.1.5. Stroke: 6.75in
- II.1.6. Displacement: 926in<sup>3</sup>

### II.2. WEIGHTS

- II.2.1. Rated Payload: 46 tons

### II.3. TRANSMISSION

The transmission shall be able to obtain all of the following speeds fully loaded with 11,000 gals of water:

- II.3.1. Forward 1: 5.5 mph
- II.3.2. Forward 2: 7.52 mph
- II.3.3. Forward 3: 10.2 mph
- II.3.4. Forward 4: 13.7 mph
- II.3.5. Forward 5: 18.58 mph
- II.3.6. Forward 6: 25.06 mph
- II.3.7. Forward 7: 33.99 mph
- II.3.8. Reverse 1: 5.19 mph
- II.3.9. Reverse 2: 7.21 mph

## III. SOUND LEVELS

III.1. The operator sound exposure Leq (equivalent sound pressure level) in the cab shall meet or exceed ANSI/SAE J1166 OCT 98 levels.

III.2. Maximum Allowable Interior Cab Sound Level: 79 dB (A) with doors and windows closed.

**IV. OPERATING WEIGHTS**

- IV.1. Front Axle-Empty: All weights will be determined upon delivery of the Machine.
- IV.2. Rear Axles-Empty:
- IV.3. Total Machine Weight-Empty:
- IV.4. Front Axle-Loaded:
- IV.5. Rear Axles-Loaded:
- IV.6. Total Machine Weight-Loaded:

**V. SERVICE REFIL CAPACITIES**

- V.1. Fuel Tank: 148 gal
- V.2. Cooling System: 21.1 gal
- V.3. Hydraulic System: 61.6 gal
- V.4. Engine Crankcase: 10 gal
- V.5. Transmission: 19 gal
- V.6. Final Drives/Differential: 21 gal
- V.7. Output Transfer Gear Box: 5.6 gal

**VI. BRAKE SPECIFICATION**

Multi-plate, oil immersed brakes shall be fitted to both front and center axles

**VII. STANDARD EQUIPMENT**

The following standard equipment shall be provided for the 740 Articulated Truck at no additional cost:

- VII.1. Cab Air conditioning with R134A Refrigerant
- VII.2. Adjustable cab Air Vents
- VII.3. Auto Shift Seven-speed forward and two-speed reverse transmission
- VII.4. Back up alarm
- VII.5. Body, Adapted for exhaust heat
- VII.6. Caterpillar C15 engine with ACERT Technology
- VII.7. Differentials, standard with clutched cross-axle differential locks for all axles
- VII.8. Electrical System: 24 volt, 5A 24 to 12-volt converter
- VII.9. Engine compression brake
- VII.10. Ether Starting aid
- VII.11. Glass windows, laminated and tinted, front
- VII.12. Glass windows, toughened and tinted, sides and rear
- VII.13. Guards: rear window and radiator, crankcase and axle

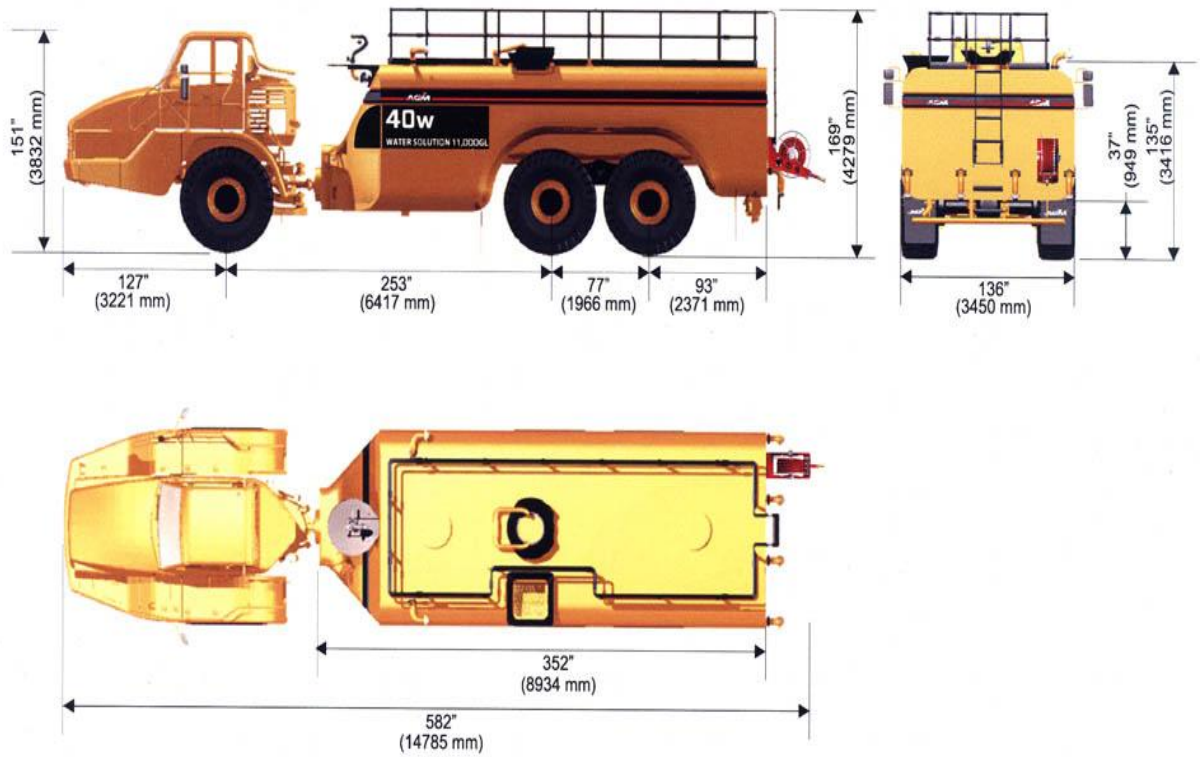
- VII.14. Four headlights with dimmer switch
- VII.15. Heater and defroster with four-speed fan
- VII.16. Electric horn
- VII.17. Lights: cab interior, front, side, rear, two reversing/working lights, two stop/tail lights
- VII.18. Left and right main and auxiliary mirrors
- VII.19. Body mounted mud flaps
- VII.20. Enclosed Oil-cooled brakes
- VII.21. ROPS/FOPS cab with full instrumentation, Including: Instrument cluster display module with the following indicator lamps: left turn, secondary steering, primary steering loss, front and rear brake temp (735/740 and 740 Ejector only), brake oil pressure, action lamp, transmission fault, park brake, charging system status, differential lock, body not in float, right turn, spare, high beam, transmission hold, machine filter warning, retarder, retarder up shift warning-Gauges: engine oil pressure, engine coolant temperature, torque converter oil temperature, fuel tank level gauge Meters; service hour meter, speedometer, tachometer
- VII.22. Fully adjustable Operator air suspension seat
- VII.23. Padded companion/trainer seat
- VII.24. Two retractable seatbelts
- VII.25. Secondary steering
- VII.26. S-O-S sampling valves
- VII.27. Electric, Remote Starting receptacle
- VII.28. Storage- tow cup holders, flask receptacle, under seat storage, door pocket
- VII.29. Behind seat storage, coat hook
- VII.30. Sun visor
- VII.31. Three-axle, six wheel drive
- VII.32. Tilt and telescopic steering wheel
- VII.33. 29.5R25, radial tires
- VII.34. Front and rear Tow Pins
- VII.35. Vandalism protection: lockable caps for fuel tank hydraulic oil tank and radiator
- VII.36. Tinted side opening windows
- VII.37. Two speed, intermittent Windshield wiper and washer (Front)
- VII.38. Two speed, windshield wiper and washer (Rear)

### **VIII. OPTIONAL EQUIPMENT**

The following equipment shall be provided as an option for the 740 Articulated Truck & Water Tank:

- VIII.1. Autolube installation for automatic greasing of bearings
- VIII.2. Sound Suppression spectator

- VIII.3. Stainless Steel Front Bumper mounted Water Cannon-offset for maximum driver visibility with in-cab joystick controls
- VIII.4. 100 PSI, 1,000 GPM High performance water pump, equipped with a stainless steel pump shaft and impeller
- VIII.5. Loading suction hose and foot valve
- VIII.6. 4 ea. Hydraulically operated stainless steel spray heads at the rear of the tank with individual in cab controls
- VIII.7. 2 ea. Hydraulically operated stainless steel spray heads mounted on top of the front corners of the tank for side spray capability
- VIII.8. 2 ea. Front bumper mounted stainless steel spray heads
- VIII.9. Interior of tank shall have two applications of epoxy coating
- VIII.10. Interior piping shall be high density poly ethylene (HDPE) pipe with stainless steel connectors
- VIII.11. Rear hose reel with 50 ft. of 1 1/2" diameter hose
- VIII.12. Power gravity bar at rear of unit in cab controls
- VIII.13. Back-up Alarm
- VIII.14. Offset fill port on left side of tank for easy alignment and self loading
- VIII.15. Collapsible Safety Railings on top of tank with kick plates that meet Mine Safety Standards
- VIII.16. Access ladder to top of tank
- VIII.17. LED-type tail and side marker lights
- VIII.18. Rotating Beacon



TM

**THIS PAGE INTENTIONALLY LEFT BLANK**