



## ENGINEERING ACCEPTANCE CERTIFICATE

This certificate issued in accordance with RIS-1530-PLT Issue 4.

NAME OF CERTIFICATION BODY

ACCREDITATION CODE

NS

**Vehicle Class/Description** 

**Atkins Rail** 

Road Rail Vehicle Rexquote Case 988P (Type, 9B-1)

Vehicle Owner

Phillip Shovlin Plant Hire Ltd

**Issue Date** 

24th January 2014

**Expiry Date** 

21st January 2021

**Vehicle Numbers:** 

99709 940501-8

FIRST OF CLASS

YES NO

Certificate number of First of Class

N/A

**Authorised by:** 

Signatory Name:

Authorised Signatory:

SP Rice

## Reason for issue and Scope of Work

Previous scope of work;

Fitment of direct-acting rail wheel braking system in accordance with Allan J Hargreaves General Arrangement Drawing AJH/RWB/ASY/005 (Floating Axle) and AJH/RWB/006 (Fixed Axle). Scrutiny of associated maintenance Plan AJH038 Issue 2.

Scope of work for this certificate;

Upgrade to RIS-1530-PLT, Issue 4, December 2012.

New Limitation D12 - Rail Wheel Braking capability.

Addition of Rail Wheel Braking capability statement added to **Supplementary Information**.

Expiry date conforms to the requirements of RIS-1530-PLT.



# **ATKINS**

Deviations associated with this certificate: None

Previous Engineering Acceptance certificate number: RT/EA/0114/12

Identification NumberIssue No.DateSPMM00013January 2014

Maintenance plan title Shovlin Maintenance Plan

Maintenance plan Id. AJH038 2 02/02/2012

Maintenance plan title Type 9B Rail Wheel Brake System Operation & Maintenance

## **Special Limitations**

Maintenance plan Id.

#### A CONFIGURATION

1. Vehicle is Rexquote rail-conversion of road multi-purpose excavator with 1.80m mono boom + 3.13m artic and 2.10m dipper.

- 2. RRV is fitted with a GKD RCI which must be operational during all lifting duties and when used with attachments which affect machine stability (see E), and Duty Charts Case 988 CGG129160, dated 23-Dec-2013. Lifting duties shall only be undertaken through the identified dipper lifting point Load lifting point at dipper end, rated capacity 10 tonnes SWL, under dipper, rated capacity 5 tonnes SWL.
- 3. It may work with a range of attachments through the dipper link pins or quick hitch, see E ATTACHMENTS...
- 4. It operates on-rail in high-mode only.
- 5. Permitted number of personnel to be carried: 1 person seated in the driver's cab.

#### B ON & OFF TRACKING AND EMERGENCY RECOVERY

- 1. For on/off tracking, a site specific plan shall be used taking account of the applicable module(s) of Network Rail Infrastructure Plant Manual NR/PLANT/0200.
- For ON and OFF tracking, a site specific work plan for one of the following conditions shall be used.
  The work plan shall be in compliance with the Shovlin Manual SPMM0001 and Network Rail Specification NR/L2/RVE/0007:-
  - >Maximum track cant 150mm and/or gradient 1:25, on approved RRAP. OR
  - >A risk assessed procedure that is specific to the on and off tracking point.
- 3. For recovery refer to the Shovlin Manual. Maximum speed 3mph(5km/h) to avoid damage to the RRV.

#### C GAUGE

- Travelling mode RRV is within W6a gauge and exception for road wheels as RIS-1530-PLT. When travelling, mirrors must be folded in.
- 2. Working Mode: the counterweight, boom, dipper and attachments can be out of gauge, dependant on the GKD Rated Capacity Indicator (RCI) slew settings in use.
- 3. Maximum tail swing gauge exceedance: 600mm.
- 4. Minimum height of tail swing above rail level; 1430mm.

## D LIMITATIONS OF USE.

- 1. Vehicle shall only operate inside possessions.
- 2. The vehicle shall **NOT** on or off track or work, if adjacent lines are open to traffic.
- 3. The vehicle shall NOT on or off track, travel or work on live conductor rail lines.
- 4. The vehicle shall **NOT** on or off track or work under live OLE, except as D5 below.
- 5. It may on/off track at a level crossing or travel under live OLE when used in conjunction with a safe system of work determined and authorised in accordance with the requirements of GE/RT8024, and provided the boom/dipper is in the travel position, subject to minimum OLE wire height 4.165m.
- 6. Reverse movement in travelling mode must be controlled by ground staff. However CCTV cameras are fitted to this RRV.
- 7. Except for the cab, when the RRV is under live OLE access is **NOT** permitted onto any surfaces greater than 1.4m above rail.

Reference I/D 5128438.1525.005

Certificate Number. NS/5016/14



## **ATKINS**

- 8. For access/egress, the RRV shall only operate with the door to the cab adjacent to a cess or a line closed to all train movements or the safe system of work to be adopted takes account of adequate clearances to adjacent lines.
- 9. Maximum speeds (travel and working) on rail not to exceed:

20 mph plain line travelling

5 mph working

5 mph switches and crossings

5 mph raised check/guard rails

10mph Towing/propelling

3 mph emergency recovery

10. Limitation to ensure stability:

Controlled by GKD RCI which shall be active when the RRV is in use, except as in E1, page 3 Supplementary Information.

- Movement of boom towards backwards stability shall be at moderate/low speed.
- Permitted to lift and carry through 360 degrees operation, see Duty Charts and LOLER Certificate.
- 11. It is permitted to tow and/or propel rail trailers with compatible parking brake and coupling system.
  - Maximum un-braked towed/propelled weight is 20 tonnes.
  - Maximum Service Braked towed load not exceeding 46 tonnes.
  - Hydraulic supply pressure for trailer park brake release is 60 bar.

#### SAFETY ALERT;

- The maximum towed and/or propelled weight may have to be reduced where railhead condition for adhesion and/or the ruling gradient may affect the safe traction performance of the RRV.
- 12. The machine will brake differently to non rail wheel braking machines. Operators **MUST** familiarise themselves with the brake system before starting work. Use of Owner/Operator "In-House" test track capability (where available) is recommended see Supplementary Information, item 14.

#### **E ATTACHMENTS**

The RRV may work with attachments. Their use in Modes E1 or E2 shall comply with the following, as applicable:

- Where specified, and including all lifting accessories, the attachment shall have a current certificate of approval, test and/or thorough examination.
- The attachment shall only be used in accordance with the manufacturer's safety and operating instructions, and the safe system of work for the possession.
- Use of the attachment shall not involve exceeding the vehicle's rated capacity for lifting. Before switching **OFF** the GKD RCI, the attachment and its contents (e.g. bucket full of ballast) shall be moved through the planned range of movements to confirm that the working mode is within the vehicles lifting and stability capacity.
- Except for the quick hitch, the attachment should not be connected to the vehicle during on or off tracking, unless safe to do so.
- The attachment shall be maintained in accordance with the manufacturer's and/or other approved instructions.
- E1 The GKD RCI may be switched **OFF**, typically digging mode.
  - General earth moving buckets. Ballast profiling bucket.

NOTE: Caution must be exercised with attachments as their use may adversely affect the stability of the RRV when it is working.

- E2 The GKD Rated Capacity Indicator system (RCI) shall be switched ON for lifting mode;
  - Lifting accessories (LOLER Regulations)
  - Any attachment that is mechanically fixed or and/or powered from the RRV or which may adversely affect the stability of the RRV.
  - Any such attachment and its use shall only be with the approval of the infrastructure controller. See RIS-1530-PLT Issue 1, clause 8.4.



# **ATKINS**

### **Supplementary Information**

- 1. Manufacturer serial / chassis number: Serial No. CGG0129160, Rexquote No. 1343. Shovlin Plant No, X398.
- 2. Maximum travelling cant 200mm
- 3. Maximum working cant 150mm
- 4. Maximum on/off track cant 150mm
- 5. Maximum on/off track gradient 1:25
- 6. Maximum travelling gradient -1 in 25
- 7. Maximum working gradient 1 in 25
- 8. RCI information:
  - Manufacturer GKD
  - RCI software version 8.12
  - Serial Number 676T,
  - Duty chart reference, issue number and date Duty Charts Case 988 CGG129160, dated 23-Dec-2013.
- 9. Minimum Curve Radius: 80m
- 10. Route Availability No: No Change.
- 11. Applicable Gauge: W6a

Reference I/D 5128438.1525.005

- 12. Applicable Braking Curves: RIS-1530-PLT Clause 5.6.2.1
- 13. RRV has a Tandem Lifting Mode.
- 14. This machine is fitted with **DIRECT** rail wheel braking. It does not use the brakes applied to the road wheels acting on the tread of the rail wheel as the primary means of braking.

Authorised By:

Name of Signatory: S P Rice