Certificate of Authorisation of Variation

Classification: NC1

Standard Details

Title: Rail Industry Standard for Engineering Acceptance of On-Track Plant and Associated Equipment
Ref: RIS-1530-PLT **Issue No.** 5 **Date of Issue:** 7 June 2014
Clauses: 3.3.2
Function: Rail Mounted Vehicle & Plant

Variation Details

Route / Project: HQ
Delevery Unit(s) / Area(s): National

Type: Temporary Variation
Applicant: Philip Shovlin Plant Hire Ltd.
Tracker No: 30706

Summary of Variation

The extension of current Engineering Expiry Date to allow machines to stay in service till all upgrade work can be executed and certificated by AJH.

Due to difficulties encountered by AJH with the addition of air braking the EA certs have expire before the upgrade work and recertification can be conducted and the whole process is taking longer.

Action to Achieve Compliance

The machines have been subjected to a full refurbishment including the replacement of all major hoses as required, the fitting of cameras, improved LED lighting and re paint as well as the required engineering enhancements for EC certification.

We are currently waiting on AJH to develop a more reliable air braking system as the current offering has a major pull down on the travel circuit causing a lack of effort and performance.

Certificate Conditions

Geographical Scope/Equipment Involved

All machines are utilised in the Northwest of England and are operated by Shovlin Plant Hire in support of the NWR maintenance contract for Manchester DU along with Crewe, Liverpool and Preston.
The machines are also used on the NWR infrastructure for rail business in the delivery of civils and project work. Machine numbers covered by application:
99709940511-7 MA51
99709940519-0 2369
99709940516-6 2352
99709940521-6 VHD
99709940522-4 2385
99709940518-2 2368

Brief Details of Requirements

RIS-1530-PLT issue 5, clause 3.3.2 states:
The initial Engineering Acceptance Certificate shall be dated for a maximum life of seven years, at which time it is permissible for the vehicle to be re-accepted to the applicable documents current at the time of re-certification.

Action Taken & Why Not Practicable

Machines to be removed from service and quarantined until all upgrade work is completed and machines are recertificated.

Severity/Degree

Machines will have a temporary extension to current EA approval until all machines can air braking and new GKD RCI fitted and then recertificated accordingly.

The 'Applicant' is responsible for communicating the associated Action Plan to all persons affected by this authorisation.

Control of Risk During Period of Variation/Alternative Measures

All machines subjected to LOLER and 12 monthly inspections are per current approved maintenance plan.

Authorised By	Malcolm Miles - Professional Head of Plant	**Certificate Issued Date**	11 April 2017
Reviewed By	Ian Morgan - Principal Plant Engineer	**Certificate Expiry Date**	31 July 2018
Actioned By	Mike Lomas - Senior Engineer		

The 'Applicant' is responsible for communicating the associated Action Plan to all persons affected by this authorisation.

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ENGINEERING ACCEPTANCE CERTIFICATE

This certificate issued in accordance with RIS-1530-PLT Issue 3.

NAME OF CERTIFICATION BODY	ACCREDITATION CODE
Atkins Rail	NS

Vehicle Class/Description	**Road Rail Vehicle Case 988 SP2S (Type, 9B)**
Vehicle Owner	**Shovlin Ltd**
Issue Date	30th November 2012
Expiry Date	6th May 2017

Vehicle Numbers: **99709 940522-4**

FIRST OF CLASS	YES	NO
		X

Certificate number of First of Class **N/A**

Authorised by :

Signatory Name: SP Rice

Authorised Signatory:

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) ASY/RWB/ASY/006 (fixed axle).
Scrutiny of associated maintenance Plan AJH038 Issue 2.

Scope of work for this certificate;
AJ Hargreaves modification of cab to accommodate a second seated person as a passenger.
Limitation of use 4, changed to; 'Permitted number of personnel to be carried: 2 persons seated in drivers cab'.
Expiry date conforms with the requirements of RIS-1530-PLT.

Reference I/D 5113620.1525.080

Certificate Number. NS/5300/12

Deviations associated with this certificate: None

Previous Engineering Acceptance certificate number: RT/EA/0409/12

	Identification Number	Issue No.	Date
Maintenance plan Id.	SPMM0001	2	01/10/2009
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		

Limitations of Use

1. It operates on-rail in high-mode only..
2. Mirrors must be folded in for travelling.
3. Vehicle shall only operate inside possessions.
4. Permitted number of personnel to be carried: 2 persons seated in the driver's cab.
5. Working Mode: the counterweight, boom, dipper and attachments can be out of gauge, dependant on the Prolec Rated Capacity Indicator (RCI) slew settings in use.
6. When travelling the RRV is within W6a gauge and exception for the road wheels as RIS-1530-PLT.
7. For ON and OFF tracking, a site specific work plan for one of the following conditions shall be used.
8. The work plan shall be in compliance with the Shovlin Manual SPMM0001 and Network Rail Specification NR/L2/RVE/0007:-
   >Maximum track cant 100mm and/or gradient 1:29, on approved RRAP.
   OR
   >A risk assessed procedure that is specific to the on and off tracking point.
10. For recovery refer to the Shovlin Manual. Maximum speed 3mph(5km/h) to avoid damage to the RRV.
11. The vehicle shall **NOT** on or off track or work, if adjacent lines are open to traffic.
12. The vehicle shall **NOT** on or off track, travel or work on live conductor rail lines.
13. The vehicle shall **NOT** on or off track or work under live OLE, except as 14 below.
14. 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.
15. 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.
16. **Limitation to ensure stability:**
    - Controlled by Prolec 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.
17. It may work with a range of attachments through the dipper link pins or quick hitch, **see E**.
18. It is permitted to tow and/or propel rail trailers with compatible parking brake and coupling system.
    - Maximum un-braked towed/propelled weight is 21 tonnes.
    - Maximum Service Braked towed load not exceeding 46 tonnes.
    - Hydraulic supply pressure for trailer park brake release is 60 bar.

Supplementary Information

1. Vehicle is Rexquote rail-conversion of road excavator with 1.8m boom, 3.13m artic and 2.1m dipper.
2. RRV is fitted with a Prolec RCI which must be operational during all lifting duties and when used with attachments which affect machine stability (**see E**), RCI software version V2.09, and Duty Charts Case 988 CGG0232385. Lifting duties shall only be undertaken through the identified dipper lifting point. The Auxiliary Load Lifting Point maximum of 5 tonnes shall **NOT** be exceeded.

3. Manufacturer serial / chassis number: Serial No. CGG0232385, Rexquote No. 1824. Shovlin Plant No, 2385
4. Maximum travelling cant – 200mm
5. Maximum working cant – 150mm
6. Maximum on/off track cant – 100mm
7. Maximum on/off track gradient – 1:29
8. Maximum travelling gradient – 1 in 29
9. Maximum working gradient – 1 in 29
10. Maximum speeds on rail not to exceed:
    20 mph(32km/h) plain line
    5 mph(8km/h) travelling through switches and crossings
    5 mph travelling through raised check/guard rails
    10 mph towing/propelling
    3 mph emergency recovery
11. **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 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 Prolec 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 Prolec 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.
12. RCI information :
    - Manufacturer - Prolec
    - Duty chart reference, issue number and date –V2.09, and Duty Charts Case 988 CGG0232385.
13. Minimum Curve Radius: 80m

Authorised By: S. P. Rice

Name of Signatory: S P Rice