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|  | | **Condition Monitoring Rotating**  **Equipment** | | | | | | | | | | | **Date: /04/2021** |
| **WO#** |
| Check by: Rodin / Fitia | | **Thickener Hydraulic Power Pack CM. Check Sheet** | | | | | | | | | | | **Visual [ X ]**  **Vibration [ X ]** |
| Review by: | | **Equipment Tag # : 31 - TM -** | | | | | | | | | | |
| **Safety** | | | | | | | | | | | | | |
| Check for missing or damage equipment ID. Tags: | | | | | | | | | | | | | |
| Check on general housekeeping around equipment: | | | | | | | | | | | | | |
| Check general cleanness of equipment: | | | | | | | | | | | | | |
| Check and ensure equipment coupling Guard are properly secured: | | | | | | | | | | | | | |
| Check the integrity of equipment grounding cables and ensure they are connected: | | | | | | | | | | | | | |
| Check and ensure that all hand rail and grating are properly secured around equipment: | | | | | | | | | | | | | |
| **Comments:** | | | | | | | | | | | | | |
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| **General Rake Operating Condition** | | | | | | | | | | | | | |
| **Check rake drive system and record the following data.** | | | | | | | | | | | | | |
| Check and record drive hydraulic supply oil pressure. | | | | |  | | | | | | | | |
| Check and record rake torque pressure. | | | | |  | | | | | | | | |
| Check and record rake lift pressure at constant elevation.  *CCD1, 2 & 3100 thickener (lift pressure=9-10mpa.)* | | | | |  | | | | | | | | |
| Check and record rake lift pressure while lifting.  *CCD3, 4, 6, 7 thickener (lift pressure=9-12mpa.)* | | | | |  | | | | | | | | |
| Check and record rake lift pressure while lowering.  *CCD1, 2 & 3100 thickener (lift pressure=9-10mpa.)* | | | | |  | | | | | | | | |
| Check and record Thickener rake position | | | | |  | | | | | | | | |
| Check and record Thickener rake torque | | | | |  | | | | | | | | |
| Check and record Thickener rake speed | | | | |  | | | | | | | | |
| **Reservoir** | | | | | | | | | | | | | |
| **Check hydraulic oil reservoir and record the following data.** | | | | | | | | | | | | | |
| Check hydraulic oil reservoir for oil leaks. | | | | | OK |  | Not OK | |  |  | | | |
| Check hydraulic oil reservoir for condensate built up. | | | | | OK |  | Not OK | |  |  | | | |
| Check hydraulic oil for contamination. (*dirty/milky*) | | | | | OK |  | Not OK | |  |  | | | |
| Check instrument and fittings on panel for oil leaks. | | | | | OK |  | Not OK | |  |  | | | |
| Check reservoir breather condition. | | | | | OK |  | Not OK | |  |  | | | |
| Check delta pressure across filter *( < 300 Kpa)* | | | | |  | | | | | | | | |
| Check color indicator on filter. | **Green ok** | |  | **Yellow dirty** | | |  | **Red bypass** | | |  |  | |
| Check and record temperature of PRV **1.** | | | | |  | | | | | | | | |
| Check and record temperature of PRV **2.** | | | | |  | | | | | | | | |
| Check and record temperature of PRV **3.** | | | | |  | | | | | | | | |
| **Comments:** | | | | | | | | | | | | | |
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| **Hydraulic Drive Unit** | | | | | |
| **Check motor and record the following data;** | | | | | |
| Listen for any unusual sound from motor. | OK |  | Not ok |  |  |
| Check motor hold down bolts for looseness. | OK |  | Not ok |  |  |
| Check equipment adaptor base plate for looseness. | Ok |  | Not ok |  |  |
| Check motor for looseness of cooling fan guard. | OK |  | Not ok |  |  |
| Check motor for restriction of cooling air intake. | OK |  | Not ok |  |  |
| Check motor cooling fan for looseness. | OK |  | Not ok |  |  |
| Check motor cooling for dirt built up or damage. | OK |  | Not ok |  |  |
| Check motor cooling fins for dirt built up in vanes. | OK |  | Not ok |  |  |
| Check motor terminal box for looseness or missing bolts. | OK |  | Not ok |  |  |
| Check motor for any grease or oil leaks. | OK |  | Not ok |  |  |
| Check motor lube fitting integrity. | OK |  | Not ok |  |  |
| Check and record motor OB. Vibration (Max. vibration 7.2 mm/sec) | | |  | | |
| Check and record motor IB. Vibration (Max. vibration 7.2 mm/sec) | | |  | | |
| Check and record motor OB. Temperature (Max. temperature 76°C) | | |  | | |
| Check and record motor IB. Temperature (Max. temperature 76°C) | | |  | | |
| Check and record motor body temperature. | | |  | | |
| **Hydraulic oil supply Pump** | | | | | |
| **Check Pump and record the following data;** | | | | | |

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| Listen for any abnormal noise coming from pump. | Ok |  | Not ok |  |  |
| Listen for any cavitation like sound coming from pump | Ok |  | Not ok |  |  |
| Check pump mounting adaptor base for loose hold down bolts | Ok |  | Not ok |  |  |
| Check pumps suction line fittings leak. | Ok |  | Not ok |  |  |
| Check pumps discharge line fittings and hose for leak. | Ok |  | Not ok |  |  |
| Check pump for casing leaks. | Ok |  | Not ok |  |  |
| Check all flexible hose supply lines for chafe and cracks. | Ok |  | Not ok |  |  |
| Check and record pump IB. Vibration (Max. vibration 7.2 mm/sec) | |  | | | |
| Check and record pump IB. Temperature (Max. temperature 76°C) | |  | | | |
| Check and record pump body temperature. | |  | | | |
| **Comments:** | | | | | |
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| **Motor M2 (Rake lift supply oil Pump Motor M2)** | | | | | | |
| **Check motor and record the following data;** | | | | | | |
| Listen for any unusual sound from motor. | OK |  | | Not ok |  |  |
| Check motor hold down bolts for looseness. | OK |  | | Not ok |  |  |
| Check equipment adaptor base plate for looseness. | Ok |  | | Not ok |  |  |
| Check motor for looseness of cooling fan guard. | OK |  | | Not ok |  |  |
| Check motor for restriction of cooling air intake. | OK |  | | Not ok |  |  |
| Check motor cooling fan for looseness. | OK |  | | Not ok |  |  |
| Check motor cooling for dirt built up or damage. | OK |  | | Not ok |  |  |
| Check motor cooling fins for dirt built up in vanes. | OK |  | | Not ok |  |  |
| Check motor terminal box for looseness or missing bolts. | OK |  | | Not ok |  |  |
| Check motor for any grease or oil leaks. | OK |  | | Not ok |  |  |
| Check motor lube fitting integrity. | OK |  | | Not ok |  |  |
| Check and record motor OB. Vibration (Max. vibration 7.2 mm/sec) | | | |  | | |
| Check and record motor IB. Vibration (Max. vibration 7.2 mm/sec) | | | |  | | |
| Check and record motor OB. Temperature (Max. temperature 76°C) | | | |  | | |
| Check and record motor IB. Temperature (Max. temperature 76°C) | | | |  | | |
| Check and record motor body temperature. | | | |  | | |
| **Comments:** | | | | | | |
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| **Motor Hydraulic system cooling fan (33-FN-10)** | | | | | | |
| **Check motor and record the following data;** | | | | | | |
| Listen for any unusual sound from motor. | OK |  | | Not ok |  |  |
| Check motor hold down bolts for looseness. | OK |  | | Not ok |  |  |
| Check equipment adaptor base plate for looseness. | OK |  | | Not ok |  |  |
| Check motor for looseness of cooling fan guard. | OK |  | | Not ok |  |  |
| Check motor for restriction of cooling air intake. | OK |  | | Not ok |  |  |
| Check motor cooling fan for looseness. | OK |  | | Not ok |  |  |
| Check motor cooling for dirt built up or damage. | OK |  | | Not ok |  |  |
| Check motor cooling fins for dirt built up in vanes. | OK |  | | Not ok |  |  |
| Check motor terminal box for looseness or missing bolts. | OK |  | | Not ok |  |  |
| Check motor for any grease or oil leaks. | OK |  | | Not ok |  |  |
| Check motor lube fitting integrity. | OK |  | | Not ok |  |  |
| Check and record motor OB. Vibration (Max. vibration 7.2 mm/sec) | | |  | | | |
| Check and record motor IB. Vibration (Max. vibration 7.2 mm/sec) | | |  | | | |
| Check and record motor body temperature. | | |  | | | |
| Check and record motor OB. Temperature (Max. temperature 76°C) | | |  | | | |
| Check and record motor IB. Temperature (Max. temperature 76°C) | | |  | | | |
| Check and record motor body temperature. | | |  | | | |
| **Comments:** | | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox ( Hydraulic Motor1 : *drive on right side*)** | | | | | | |
| **Check Planetary Gear Reducer and record the following data;** | | | | | | |
| Listen for any unusual sound coming from motor. | OK |  | | Not ok |  |  |
| Check motor adaptor base loose hold down bolts. | OK |  | | Not ok |  |  |
| Check for excessive pulsation of the casing drain hose. | OK |  | | Not ok |  |  |
| Check motor casing for seal leaks. | OK |  | | Not ok |  |  |
| Check hydraulic supply line fittings for leaks. | OK |  | | Not ok |  |  |
| Check all flexible hose supply lines for chafe and cracks. | OK |  | | Not ok |  |  |
| Check and ensure hose have sufficient length. | OK |  | | Not ok |  |  |
| Check and record temperature of hydraulic motor (normal 50-55°C) | |  | | | | |
| Check and record hydraulic pressure | |  | | | | |
| Check and record hydraulic pressure | |  | | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | |  | | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok |  | | Not ok |  |  |
| Check gearbox adaptor base for loose hold down bolts. | Ok |  | | Not ok |  |  |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok |  | | Not ok |  |  |
| Check gearbox for casing oil seal leaks. | Ok |  | | Not ok |  |  |
| Check gearbox lube oil fitting integrity. | Ok |  | | Not ok |  |  |
| Check gearbox breather integrity. | Ok |  | | Not ok |  |  |
| Check gearbox lube oil for contamination. | Ok |  | | Not ok |  |  |
| Check gearbox lube oil level. | Ok |  | | Not ok |  |  |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | | |  |  |  |
| Check and record gearbox max. temperature (*Normal temperature 40-55°C*) | | | |  |  |  |

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| ***Planetary Gearbox (secondary stage) D1.*** | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok |  | Not ok |  |  |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok |  | Not ok |  |  |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox for casing oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox lube oil fitting integrity. | Ok |  | Not ok |  |  |
| Check gearbox breather integrity. | Ok |  | Not ok |  |  |
| Check gearbox lube oil for contamination. | Ok |  | Not ok |  |  |
| Check gearbox lube oil level. | Ok |  | Not ok |  |  |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  | | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) | | |  | | |
| **Comments:** | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox (Hydraulic Motor2 *on left side of hydraulic motor 1*)** | | | | | | | |
| **Check motor/gear reducer and record the following data;** | | | | | | | |
| Listen for any unusual sound coming from motor. | OK |  | Not ok | |  | |  |
| Check motor adaptor base loose hold down bolts. | OK |  | Not ok | |  | |  |
| Check for excessive pulsation of the casing drain hose. | OK |  | Not ok | |  | |  |
| Check motor casing for seal leaks. | OK |  | Not ok | |  | |  |
| Check hydraulic supply line fittings for leaks. | OK |  | Not ok | |  | |  |
| Check all flexible hose supply lines for chafe and cracks. | OK |  | Not ok | |  | |  |
| Check and ensure hose have sufficient length. | OK |  | Not ok | |  | |  |
| Check and record temperature of hydraulic motor (normal 50-55°C) | |  | | | | | |
| Check and record hydraulic pressure inlet | |  | | | | | |
| Check and record hydraulic pressure outlet | |  | | | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | |  | | | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok |  | Not ok |  | |  | |
| Check gearbox adaptor base for loose hold down bolts. | Ok |  | Not ok |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok |  | Not ok |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok |  | Not ok |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok |  | Not ok |  | |  | |
| Check gearbox breather integrity. | Ok |  | Not ok |  | |  | |
| Check gearbox lube oil for contamination. | Ok |  | Not ok |  | |  | |
| Check gearbox lube oil level. | Ok |  | Not ok |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  |  | |  | |
| Check and record gearbox max. temperature (*Normal temperature 40-55°C*) | | |  |  | |  | |

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| ***Planetary Gearbox (secondary stage) D1.*** | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok |  | Not ok |  |  |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok |  | Not ok |  |  |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox for casing oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox lube oil fitting integrity. | Ok |  | Not ok |  |  |
| Check gearbox breather integrity. | Ok |  | Not ok |  |  |
| Check gearbox lube oil for contamination. | Ok |  | Not ok |  |  |
| Check gearbox lube oil level. | Ok |  | Not ok |  |  |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  | | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) | | |  | | |
| **Comments:** | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox (Hydraulic Motor3 *on left side of hydraulic motor 2*)** | | | | | |
| **Check motor/gear reducer and record the following data;** | | | | | |
| Listen for any unusual sound coming from motor. | OK |  | Not ok |  |  |
| Check motor adaptor base loose hold down bolts. | OK |  | Not ok |  |  |
| Check for excessive pulsation of the casing drain hose. | OK |  | Not ok |  |  |
| Check motor casing for seal leaks. | OK |  | Not ok |  |  |
| Check hydraulic supply line fittings for leaks. | OK |  | Not ok |  |  |
| Check all flexible hose supply lines for chafe and cracks. | OK |  | Not ok |  |  |
| Check and ensure hose have sufficient length. | OK |  | Not ok |  |  |
| Check and record temperature of hydraulic motor (normal 50-55°C) | |  | | | |
| Check and record hydraulic pressure inlet | |  | | | |
| Check and record hydraulic pressure outlet | |  | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | |  | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok |  | Not ok |  |  |
| Check gearbox adaptor base for loose hold down bolts. | Ok |  | Not ok |  |  |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox for casing oil seal leaks. | Ok |  | Not ok |  |  |
| Check gearbox lube oil fitting integrity. | Ok |  | Not ok |  |  |
| Check gearbox breather integrity. | Ok |  | Not ok |  |  |
| Check gearbox lube oil for contamination. | Ok |  | Not ok |  |  |
| Check gearbox lube oil level. | Ok |  | Not ok |  |  |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  |  |  |
| Check and record gearbox max. temperature (*Normal temperature 40-55°C*) | | |  |  |  |

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| ***Planetary Gearbox (secondary stage*)** | | | | | | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec*.) | | | | |  | | | | | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) | | | | |  | | | | | |
| **Comments:** | | | | | | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox (Hydraulic Motor4 *on left side of hydraulic motor3*)** | | | | | | | | | | |
| **Check motor/gear reducer and record the following data;** | | | | | | | | | | |
| Listen for any unusual sound coming from motor. | OK | |  | | Not ok | |  | |  | |
| Check motor adaptor base loose hold down bolts. | OK | |  | | Not ok | |  | |  | |
| Check for excessive pulsation of the casing drain hose. | OK | |  | | Not ok | |  | |  | |
| Check motor casing for seal leaks. | OK | |  | | Not ok | |  | |  | |
| Check hydraulic supply line fittings for leaks. | OK | |  | | Not ok | |  | |  | |
| Check all flexible hose supply lines for chafe and cracks. | OK | |  | | Not ok | |  | |  | |
| Check and ensure hose have sufficient length. | OK | |  | | Not ok | |  | |  | |
| Check and record temperature of hydraulic motor (normal 50-55°C) | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | | |  | | | | | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox adaptor base for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* |  | |  | |  | |  | |  | |
| Check and record gearbox max. temp (*Normal temperature 40-55°C*) |  | |  | |  | |  | |  | |
| **Comments:** | | | | | | | | | | |
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| ***Planetary Gearbox (secondary stage*)** | | | | | | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec*.) |  | |  | |  | |  | |  | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) |  | |  | |  | |  | |  | |
| **Comments:** | | | | | | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox (Hydraulic Motor5 *on left side of hydraulic motor4*)** | | | | | | | | | | |
| **Check motor/gear reducer and record the following data;** |  | |  | |  | |  | |  | |
| Listen for any unusual sound coming from motor. | OK | |  | | Not ok | |  | |  | |
| Check motor adaptor base loose hold down bolts. | OK | |  | | Not ok | |  | |  | |
| Check for excessive pulsation of the casing drain hose. | OK | |  | | Not ok | |  | |  | |
| Check motor casing for seal leaks. | OK | |  | | Not ok | |  | |  | |
| Check hydraulic supply line fittings for leaks. | OK | |  | | Not ok | |  | |  | |
| Check all flexible hose supply lines for chafe and cracks. | OK | |  | | Not ok | |  | |  | |
| Check and ensure hose have sufficient length. | OK | |  | | Not ok | |  | |  | |
| Check and record temperature of hydraulic motor (normal 50-55°C) | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | | |  | | | | | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox adaptor base for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  | | | | | | | |
| Check and record gearbox max. temp (*Normal temperature 40-55°C*) | | |  | | | | | | | |
| **Comments:** | | | | | | | | | | |
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| ***Planetary Gearbox (secondary stage*)** | | | | | | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec*.) | | |  | | | | | | | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) | | |  | | | | | | | |
| **Comments:** | | | | | | | | | | |
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| **Rotary Hydraulic Drive Motor and Gearbox (Hydraulic Motor6 *on left side of hydraulic motor5*)** | | | | | | | | | | |
| **Check motor/gear reducer and record the following data;** |  | |  | |  | |  | |  | |
| Listen for any unusual sound coming from motor. | OK | |  | | Not ok | |  | |  | |
| Check motor adaptor base loose hold down bolts. | OK | |  | | Not ok | |  | |  | |
| Check for excessive pulsation of the casing drain hose. | OK | |  | | Not ok | |  | |  | |
| Check motor casing for seal leaks. | OK | |  | | Not ok | |  | |  | |
| Check hydraulic supply line fittings for leaks. | OK | |  | | Not ok | |  | |  | |
| Check all flexible hose supply lines for chafe and cracks. | OK | |  | | Not ok | |  | |  | |
| Check and ensure hose have sufficient length. | OK | |  | | Not ok | |  | |  | |
| Check and record temperature of hydraulic motor (normal 50-55°C) | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check and record hydraulic pressure | | |  | | | | | | | |
| Check for case drain temperature to determine extent of leakage.  (*High temperature=greater leakage*) | | |  | | | | | | | |
| ***Planetary Gear Reducer (Primary)*** | | | | | | | | | | |
| Listen for any abnormal noise coming from primary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox adaptor base for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec.)* | | |  | | | | | | | |
| Check and record gearbox max. temp (*Normal temperature 40-55°C*) | | |  | | | | | | | |
| **Comments:** | | | | | | | | | | |
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| ***Planetary Gearbox (secondary stage*)** | | | | | | | | | | |
| Listen for any abnormal noise coming from secondary gearbox. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox to bull gear housing for loose hold down bolts. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox bearings retainer cap for oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox for casing oil seal leaks. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil fitting integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox breather integrity. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil for contamination. | Ok | |  | | Not ok | |  | |  | |
| Check gearbox lube oil level. | Ok | |  | | Not ok | |  | |  | |
| Check and record gearbox max. Vibration (*Max. vibration 7.2mm/sec*.) | | |  | | | | | | | |
| Check and record gearbox max. temperature (*Max. temperature 30-35°C*) | | |  | | | | | | | |
| **Comments:** | | | | | | | | | | |
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| **Rake Lift mechanism** | | | | | | | | | | |
| **Check Rake Lift mechanism and record the following data;** | | | | | | | | | | |
| Visually inspect rams for loose flange hold down bolts | Ok | |  | | Not ok | |  | |  | |
| Visually inspect rams mounting flange cracks. | Ok | |  | | Not ok | |  | |  | |
| Visually inspect rams for scratch and corrosion. | Ok | |  | | Not ok | |  | |  | |
| Check hydraulic cylinder for leakage around rams. | Ok | |  | | Not ok | |  | |  | |
| Check lubrication on sliding track of lift device. | Ok | |  | | Not ok | |  | |  | |
| Check sliding track guides for excessive uneven wear. | Ok | |  | | Not ok | |  | |  | |
| Check connection fitting for leaks to lifting cylinder. | Ok | |  | | Not ok | |  | |  | |
| Check flexible hose and piping for chafing and cracks. | Ok | |  | | Not ok | |  | |  | |
| Check limit switch for looseness. | Ok | |  | | Not ok | |  | |  | |
| Inspect operating of rake*.(Striker plate should either between or at the position of the limit switch-the closer the rake to the upper limit switch the poorer the operating condition of the rake)* | Ok | |  | | Not ok | |  | |  | |
| **Comments:** | | | | | | | | | | |
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| **Automatic Grease Lubrication Unit.** | | | | | | | | | | |
| **Check Lubrication Unit and record the following data;** | | | | | | | | | | |
| Check for air leaks on lube control system. | | Ok | |  | | Not ok | |  | |  |
| Check the integrity of all grease supply piping and flexible hose. | | Ok | |  | | Not ok | |  | |  |
| Check air pressure gauge condition at unit inlet. | | Ok | |  | | Not ok | |  | |  |
| Check water separator condition. | | Ok | |  | | Not ok | |  | |  |
| Check air lubricator condition | | Ok | |  | | Not ok | |  | |  |
| Check air regulator/pressure gauge condition for grease feeder. | | Ok | |  | | Not ok | |  | |  |
| Check the operation of grease block. | | Ok | |  | | Not ok | |  | |  |
| Check all hose and grease nozzle fastener for looseness. | | Ok | |  | | Not ok | |  | |  |
| Check and ensure that grease is spreading on bull gear. | | Ok | |  | | Not ok | |  | |  |
| Check and record all three pinion temperature. | |  | | | | | | | | |
| **Comments:** | | | | | | | | | | |
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