27 Jan 2026

# Samples Summary Report - All

| Total 'A' Evaluations: 8 | Total 'B' Evaluations: 4 | Total 'C' Evaluations: 1 | Total 'X' Evaluations: 0 |
|---|---|---|---|

| Eval | Customer | Jobsite | Model | Equipment | Compartment | Lab Number |
|---|---|---|---|---|---|---|
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | PUMP DRIVE LEFT | 22050834 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | SWING DRIVE RH FRONT | 22050831 |
| B | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | COOLANT ENGINE RIGHT | 22050737 |
| B | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | HYDRAULIC SYSTEM | 22052201 |
| B | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | PUMP DRIVE RIGHT | 22050835 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | SWING DRIVE RH REAR | 22050833 |
| B | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | FINAL DRIVE RIGHT | 22050829 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | SWING DRIVE LH FRONT | 22050830 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | COOLANT ENGINE LEFT | 22050724 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | ENGINE DIESEL LEFT | 22051209 |
| C | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | FINAL DRIVE LEFT | 22050828 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | SWING DRIVE LH REAR | 22050832 |
| A | EMECO INTERNATIONAL PTY LTD | Stanmore - South Walker | EX5600-6 | HCMKCA90C00002016:EX250 | ENGINE DIESEL RIGHT | 22111318 |

Hastings Deering
Phone: (07) 3365 9391
hastings_deering_sos_lab@hastingsdeering.com.au

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 PUMP DRIVE LEFT | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050834

All Test Results appear to be Normal. Continue Sampling at the Recommended Interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | AnalyticA | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895634

All Test Results appear to be Normal. Continue Sampling at the Recommended Interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | AnalyticA | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 74,351 | 1,155 | Y | 020825 | 120825 | 22050834 | | <1 | 19 | <1 | <1 | <1 | 4 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 3568 | | 3 | <1 | | | | | | | |
| 73684 | A | 73,684 | 488 | N | 280625 | 050725 | 21895634 | | <1 | 11 | <1 | <1 | <1 | 10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 3 | <1 | | | | | | | |
| 73196 | B | 73,196 | 446 | Y | 300525 | 100625 | 21782819 | | <1 | 27 | <1 | <1 | 16 | 27 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 3 | <1 | | | | | | | |
| 72750 | A | 72,750 | 453 | Y | 030525 | 200525 | 21692830 | | <1 | 12 | <1 | <1 | 1 | 6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 2 | <1 | | | | | | | |
| 72297 | A | 72,297 | 287 | Y | 060425 | 140425 | 21562239 | | <1 | 10 | <1 | <1 | 1 | 12 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 2 | <1 | | | | | | | |
| 72010 | A | 72,010 | 1,186 | Y | 070325 | 170325 | 21450240 | | <1 | 12 | <1 | <1 | <1 | 12 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 3 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL DYNATRANS ACX | 30 | 1759 | 5 | 1057 | 870 | <1 | 3 | <1 | <1 | 97 | | | | <1 | <1 | <0.1 | | <1 | 10 | LM-- | | 45531 | 7566 | 299 | 19 | 9 | 23/20/15 | |
| 73684 | A | TOTAL DYNATRANS ACX | 30 | 2012 | 8 | 1159 | 949 | <1 | <1 | <1 | <1 | 96 | | | | <1 | 1 | <0.1 | | <1 | 4 | LM-- | | 26479 | 3221 | 63 | 1 | 1 | 22/19/13 | |
| 73196 | B | TOTAL DYNATRANS ACX | 30 | 1555 | 6 | 961 | 808 | <1 | 1 | <1 | <1 | 86 | | | | 2 | 4 | <0.1 | | <1 | 6 | LM-- | | 110783 | 50986 | 750 | 6 | 3 | 24/23/17 | |
| 72750 | A | TOTAL DYNATRANS ACX | 30 | 1875 | 6 | 1083 | 919 | <1 | <1 | <1 | <1 | 97 | | | | 1 | <1 | <0.1 | | <1 | 8 | LM-- | | 48280 | 11487 | 343 | 7 | 3 | 23/21/16 | |
| 72297 | A | TOTAL DYNATRANS ACX | 30 | 1826 | 6 | 1063 | 879 | <1 | 1 | <1 | <1 | 97 | | | | <1 | <1 | <0.1 | | <1 | 6 | LMF- | | 47638 | 14879 | 695 | 25 | 10 | 23/21/17 | |
| 72010 | A | TOTAL DYNATRANS ACX | 30 | 1837 | 6 | 1073 | 873 | <1 | 1 | <1 | <1 | 97 | | | | <1 | 2 | <0.1 | | <1 | 8 | LM-- | | 35923 | 8361 | 228 | 1 | 1 | 22/20/15 | |

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PO BOX 1341
OSBORNE PARK, WA ,Australia 6017

Hastings Deering | CAT

EMECO INTERNATIONAL PTY LTD
Stanmore - South Walker
EX250 SWING DRIVE RH FRONT

| UNIT INFORMATION | |
|---|---|
| M/M | : HITACHI EX5600-6 |
| S/N | : HCMKCA90C00002016 |
| LOC | : Stanmore - South Walker |

| COMPONENT INFORMATION | |
|---|---|
| Make | : |
| Model | : |
| S/N | : |

SHOP JOB/SEGMENT

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050831

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable.
**Suggested action:** Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | edwawan | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895631

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 74,351 | 1,155 | Y | 020825 | 120825 | 22050831 | | <1 | 5 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | A | 73,684 | 488 | N | 280625 | 050725 | 21895631 | | <1 | 3 | <1 | <1 | <1 | 4 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | A | 73,196 | 899 | Y | 300525 | 100625 | 21782822 | | <1 | 8 | <1 | <1 | <1 | 5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72750 | A | 72,750 | | N | 030525 | 210525 | 21699521 | | <1 | <1 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72297 | A | 72,297 | 723 | Y | 060425 | 140425 | 21563933 | | <1 | 20 | <1 | <1 | 1 | 8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | A | 72,010 | 436 | N | 070325 | 170325 | 21450527 | | <1 | 17 | <1 | <1 | <1 | 8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 3 | 757 | <1 | 114 | <1 | <1 | 333 | | | | <1 | <1 | 0.2 | | <1 | 3 | L-F- | | 42027 | 5891 | 114 | 2 | 1 | 23/20/14 | |
| 73684 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 2 | <1 | <1 | 782 | <1 | 93 | <1 | <1 | 337 | | | | <1 | 1 | <0.1 | | <1 | 2 | L-F- | | 25314 | 4414 | 119 | 3 | 1 | 22/19/14 | |
| 73196 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 3 | <1 | 1 | 786 | <1 | 97 | <1 | <1 | 334 | | | | <1 | <1 | <0.1 | | <1 | 2 | LM-- | | 36155 | 11590 | 134 | 1 | 1 | 22/21/14 | |
| 72750 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 1 | <1 | 1 | 787 | <1 | 94 | <1 | <1 | 338 | | | | <1 | <1 | <0.1 | | <1 | 3 | LMF- | | 46336 | 8370 | 107 | 8 | 4 | 23/20/14 | |
| 72297 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 3 | 802 | <1 | 61 | <1 | <1 | 334 | | | | <1 | 1 | <0.1 | | <1 | 2 | L-F- | | 44125 | 25900 | 1618 | 2 | 1 | 23/22/18 | |
| 72010 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 2 | 798 | <1 | 59 | <1 | <1 | 332 | | | | <1 | 1 | <0.1 | | <1 | 5 | LM-- | | 42810 | 31935 | 5208 | 4 | <1 | 23/22/20 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 COOLANT ENGINE RIGHT | UNIT INFORMATION<br>M/M : HITACHI EX5600-6<br>S/N : HCMKCA90C00002016<br>LOC : Stanmore - South Walker | COMPONENT INFORMATION<br>Make :<br>Model :<br>S/N : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 02/08/2025 — LCN 22050737

Copper is increasing. Other test results appear acceptable. **Suggested Action:** Consider inspection for possible system aeration, check condition of radiator cap and ensure fluid levels are maintained at appropriate levels. Continue to monitor the coolant condition and resample at 500 hours to confirm normal conditions. Solution codes: LLCN = light green/yellow, clear. Precipitate code: N-N- = none. Odour code: O = OK (no adverse indications). Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Dean Beeston | ANALYSED BY | cheriew | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 28/06/2025 — LCN 21896333

Copper was slightly high, (level appears to be stable). Other test results appear acceptable. Suggested Action: Continue to monitor the coolant condition and resample at 500 hours. Precipitate codes: SGMS = slight, grey, mixed magnetic, sediment. Solution codes: DLCT = dark green, clear, trace hydrocarbons. Odour code: O = OK (no adverse indications). Sample Notes:

| PREVIOUS SAMPLE | TOOK 9 DAYS TO REACH LAB | INTERPRETED BY | Richard Hamm Ph 3365 9341 | ANALYSED BY | deepra | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | CORROSION METALS | | | | | | ADDITIVES | | | | | | | | HARDNESS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | Cu Copper | Zn Zinc | Fe Iron | Pb Lead | Sn Tin | Al Aluminium | Si Silicon | Na Sodium | K Potassium | B Boron | Mo Molybdenum | P Phosphorus | S Sulfur | | Ca Calcium | Mg Magnesium | TH Hardness as | | | |
| 74351 | B | 74351 | 3,981 | N | 020825 | 120825 | 22050737 | 7 | <1 | <1 | <1 | <1 | <1 | 89 | 1709 | 3277 | 253 | 460 | 923 | 27 | | <1 | <1 | <1 | | | |
| 73684 | B | 73684 | 3,314 | N | 280625 | 070725 | 21896333 | 6 | <1 | <1 | <1 | <1 | <1 | 91 | 1732 | 3409 | 241 | 437 | 950 | 23 | | <1 | <1 | <1 | | | |
| 73196 | B | 73196 | 2,826 | N | 300525 | 100625 | 21782931 | 6 | <1 | <1 | <1 | <1 | <1 | 88 | 1753 | 3538 | 231 | 444 | 905 | 25 | | <1 | <1 | <1 | | | |
| 72750 | B | 72750 | 2,380 | N | 030525 | 210525 | 21701632 | 8 | <1 | <1 | <1 | <1 | <1 | 90 | 1760 | 3452 | 233 | 435 | 924 | 17 | | <1 | <1 | <1 | | | |
| 72297 | B | 72297 | 1,927 | N | 060425 | 150425 | 21565840 | 9 | <1 | <1 | <1 | <1 | <1 | 98 | 1740 | 3700 | 238 | 421 | 921 | 23 | | <1 | <1 | <1 | | | |
| 72010 | C | 72010 | 1,640 | N | 070325 | 180325 | 21451040 | 16 | <1 | <1 | <1 | <1 | <1 | 99 | 1652 | 3192 | 233 | 413 | 881 | 19 | | <1 | <1 | <1 | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | ANIONS | | | | | DESC | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | COOLANT | GLY % GLYCC | EC Conductivity | pH H+ conc. | D Density | RA serve Alkali | GLO Glycolate | Cl- Chloride | NO2 Nitrite | NO3 Nitrate | SO4 Sulfate | Soln Solution | Prec Precipitate | Odour Coolant Od | TDS Total Disso | | | | | | | | |
| 74351 | B | CUMMINS : PGXL HD (Blue) | 57 | 2.96 | 8.4 | | | 508 | 17 | 1214 | 544 | 53 | LLCN | N-N- | O | | | | | | | | | |
| 73684 | B | CUMMINS : PGXL HD (Blue) | 55 | 3.19 | 8.6 | | | 444 | 19 | 1330 | 515 | 52 | DLCT | SGMS | O | | | | | | | | | |
| 73196 | B | CUMMINS : PGXL HD (Blue) | 56 | 3.08 | 8.7 | | | 326 | 20 | 1303 | 510 | 50 | DLCF | N-N- | O | | | | | | | | | |
| 72750 | B | CUMMINS : PGXL HD (Blue) | 55 | 3.16 | 8.9 | | | 304 | 13 | 1405 | 508 | <1 | LUCF | N-N- | O | | | | | | | | | |
| 72297 | B | CUMMINS : PGXL HD (Blue) | 55 | 3.22 | 9.0 | | | 164 | 11 | 1208 | 484 | 21 | LUCF | N-N- | O | | | | | | | | | |
| 72010 | C | CUMMINS : PGXL HD (Blue) | 54 | 3.13 | 8.7 | | | 289 | 33 | 1123 | 441 | 40 | LUCN | TGNS | O | | | | | | | | | |

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EMECO INTERNATIONAL PTY LTD
Stanmore - South Walker
EX250 PUMP DRIVE RIGHT

| UNIT INFORMATION | |
|---|---|
| M/M | HITACHI EX5600-6 |
| S/N | HCMKCA90C00002016 |
| LOC | Stanmore - South Walker |

| COMPONENT INFORMATION | |
|---|---|
| Make | |
| Model | |
| S/N | |

SHOP JOB/SEGMENT

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 02/08/2025 — LCN 22050835

Viscosity acceptable for oil grade indicated. Particle count is elevated in the smaller size ranges. Wear levels below the 5 micron range appear acceptable. Other test results appear acceptable. **Suggested action:** As a precaution review sampling procedure to avoid potential contamination. Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## C CORRECTIVE ACTION IS REQUIRED — DATE 28/06/2025 — LCN 21895635

Viscosity is slightly low for oil type indicated. Particle count is elevated in the larger size channels. Aluminium and silicon are elevated indicating possible dirt ingress. Suggested action: Investigate & Evaluate Compartment. Inspect filter/screens/magnetic plugs (as fitted) for abnormal debris. Check for possible dirt entry. Inspect for leaks at seals/covers/fill points/breathers that may allow contaminants to enter. Consider changing oil or kidney looping compartment to remove suspended contaminants. Review sampling procedure in the event sampling technique has influenced results. Resample at a reduced interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | B | 74,351 | 667 | Y | 020825 | 120825 | 22050835 | | 1 | 13 | <1 | <1 | 3 | 8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 3366 | | 3 | <1 | | | | | | | |
| 73684 | C | 73,684 | 488 | Y | 280625 | 050725 | 21895635 | | <1 | 16 | <1 | <1 | 9 | 20 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 3 | <1 | | | | | | | |
| 73196 | A | 73,196 | 446 | Y | 300525 | 100625 | 21782820 | | <1 | 9 | <1 | <1 | <1 | 4 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 2 | <1 | | | | | | | |
| 72750 | B | 72,750 | 453 | Y | 030525 | 210525 | 21699524 | | <1 | 24 | <1 | <1 | 13 | 24 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 3 | <1 | | | | | | | |
| 72297 | A | 72,297 | 287 | Y | 060425 | 140425 | 21562240 | | <1 | 15 | <1 | <1 | 8 | 23 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 2 | <1 | | | | | | | |
| 72010 | A | 72,010 | 1,186 | Y | 070325 | 170325 | 21450529 | | <1 | 13 | <1 | <1 | 4 | 19 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 2 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | B | TOTAL DYNATRANS ACX | 30 | 1682 | 3 | 1028 | 842 | <1 | 1 | <1 | <1 | 94 | | | | 1 | <1 | <0.1 | | <1 | 5 | L-F- | | 118460 | 44119 | 499 | 23 | 11 | 24/23/16 | |
| 73684 | C | TOTAL DYNATRANS ACX | 30 | 1655 | 6 | 1003 | 839 | <1 | <1 | <1 | <1 | 84 | | | | 1 | 2 | <0.1 | | <1 | 4 | LM-- | | 137405 | 107980 | 19910 | 18 | 5 | 24/24/21 | |
| 73196 | A | TOTAL DYNATRANS ACX | 30 | 1903 | 5 | 1118 | 915 | <1 | <1 | <1 | <1 | 97 | | | | 1 | <1 | <0.1 | | <1 | 4 | LM-- | | 34436 | 5456 | 171 | 2 | 1 | 22/20/15 | |
| 72750 | B | TOTAL DYNATRANS ACX | 30 | 1641 | 6 | 1025 | 853 | <1 | 1 | <1 | <1 | 88 | | | | 1 | 2 | <0.1 | | <1 | 7 | LMF- | | 140678 | 102331 | 9242 | 12 | 3 | 24/24/20 | |
| 72297 | A | TOTAL DYNATRANS ACX | 30 | 1818 | 6 | 1052 | 869 | <1 | <1 | <1 | <1 | 96 | | | | 1 | 2 | <0.1 | | <1 | 5 | LM-- | | 121571 | 76055 | 4308 | 27 | 7 | 24/23/19 | |
| 72010 | A | TOTAL DYNATRANS ACX | 30 | 1820 | 5 | 1069 | 908 | <1 | <1 | <1 | <1 | 96 | | | | 1 | 1 | <0.1 | | <1 | 7 | LM-- | | 71030 | 22087 | 229 | 2 | 1 | 23/22/15 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 HYDRAULIC SYSTEM | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 02/08/2025 — LCN 22052201

Viscosity is consistent with oil type indicated. Particle count is elevated in the smaller size ranges. Other test results appear acceptable.
**Suggested Action:** Advise further monitoring of this compartment. Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Calvin Wang 07 3717 2474 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 28/06/2025 — LCN 21895708

Viscosity appears consistent with trend. Particle count is elevated. Other test results appear acceptable. Suggested Action: Inspect the used oil filters for abnormal debris. Inspect for leaks at seals/covers/fill points/breathers that may allow contaminants to enter. Review sampling procedure in the event sampling technique has influenced results. Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Calvin Wang 07 3717 2474 | ANALYSED BY | samlines | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC e Patch Co |
| 74351 | B | 74,351 | 3,527 | N | 020825 | 120825 | 22052201 | | 1 | 8 | <1 | <1 | 1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1127 | | 5 | <1 | | | | | | | |
| 73684 | B | 73,684 | 2,860 | N | 280625 | 050725 | 21895708 | | 1 | 6 | <1 | <1 | 1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 5 | <1 | | | | | | | |
| 72750 | B | 72,750 | 1,926 | N | 030525 | 200525 | 21692803 | | 1 | 4 | <1 | <1 | 1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72536 | B | 72,536 | 1,712 | N | 190425 | 010525 | 21620905 | | <1 | 4 | <1 | <1 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72297 | C | 72,297 | 1,473 | N | 060425 | 140425 | 21562202 | | <1 | 4 | <1 | <1 | 1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | B | 72,010 | 1,186 | N | 070325 | 170325 | 21450411 | | 1 | 5 | <1 | <1 | 1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | B | TOTAL AZOLLA ZS | 68 | 43 | <1 | 334 | 325 | <1 | <1 | <1 | <1 | 53 | | | | <1 | <1 | <0.1 | | <1 | <1 | N--- | | 40154 | 487 | 25 | 1 | <1 | 23/16/12 | |
| 73684 | B | TOTAL AZOLLA ZS | 68 | 46 | <1 | 358 | 314 | <1 | 1 | <1 | <1 | 51 | | | | <1 | 2 | <0.1 | | <1 | 3 | LMF- | | 27251 | 3739 | 383 | 18 | 8 | 22/19/16 | |
| 72750 | B | TOTAL AZOLLA ZS | 68 | 48 | <1 | 389 | 335 | <1 | <1 | <1 | <1 | 48 | | | | <1 | <1 | <0.1 | | <1 | <1 | L-F- | | 25847 | 505 | 20 | 2 | 1 | 22/16/11 | |
| 72536 | B | TOTAL AZOLLA ZS | 68 | 48 | <1 | 396 | 329 | <1 | <1 | <1 | <1 | 48 | | | | <1 | <1 | <0.1 | | <1 | <1 | L-F- | | 11611 | 1412 | 72 | 4 | 2 | 21/18/13 | |
| 72297 | C | TOTAL AZOLLA ZS | 68 | 51 | <1 | 380 | 323 | <1 | <1 | <1 | <1 | 49 | | | | <1 | <1 | <0.1 | | <1 | 73 | MMF- | | 47101 | 11853 | 1203 | 101 | 44 | 23/21/17 | |
| 72010 | B | TOTAL AZOLLA ZS | 68 | 54 | <1 | 368 | 321 | <1 | <1 | <1 | <1 | 51 | | | | <1 | 1 | <0.1 | | <1 | 6 | LM-- | | 52719 | 13398 | 503 | 6 | 2 | 23/21/16 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 FINAL DRIVE RIGHT | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 02/08/2025 — LCN 22050829

Viscosity acceptable for oil grade indicated. Particle count is elevated. Wear levels below the 5 micron range appear acceptable. Other test results appear acceptable. **Suggested action:** As a precaution review sampling procedure to avoid potential contamination. Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## B CORRECTIVE ACTION MAY BE REQUIRED — DATE 28/06/2025 — LCN 21895629

Viscosity acceptable for oil grade indicated. Particle count is elevated in the larger size channels. Wear levels below the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Inspect the magnetic plug for abnormal debris. Review sampling procedure in the event sampling technique has influenced results. Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | B | 49,061 | 2,054 | Y | 020825 | 120825 | 22050829 | | <1 | 79 | <1 | <1 | 2 | 11 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | B | 48,394 | 1,387 | N | 280625 | 050725 | 21895629 | | <1 | 55 | <1 | <1 | 2 | 10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | B | 47,906 | 899 | N | 300525 | 100625 | 21782816 | | <1 | 44 | <1 | <1 | <1 | 9 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72297 | B | 47,007 | 723 | Y | 060425 | 140425 | 21562237 | | 2 | 430 | 3 | <1 | 35 | 171 | <1 | <1 | 4 | <1 | 2 | <1 | <1 | | | 5 | <1 | | | | | | | |
| 72010 | C | 46,720 | 436 | N | 070325 | 170325 | 21450528 | | 2 | 303 | 2 | <1 | 32 | 142 | <1 | <1 | 3 | <1 | 2 | <1 | <1 | | | 5 | <1 | | | | | | | |
| 71574 | B | 46,284 | 750 | Y | 020225 | 060225 | 21306936 | | <1 | 158 | 1 | <1 | 18 | 83 | <1 | <1 | 2 | <1 | 1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 5 | 780 | <1 | 110 | <1 | <1 | 329 | | | | <1 | <1 | <0.1 | | <1 | 93 | HM-- | | 57490 | 47268 | 13666 | 236 | 58 | 23/23/21 | |
| 73684 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 3 | 782 | <1 | 94 | <1 | <1 | 333 | | | | <1 | 2 | <0.1 | | <1 | 81 | MMF- | | 60247 | 47638 | 13729 | 196 | 55 | 23/23/21 | |
| 73196 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 3 | <1 | 3 | 766 | <1 | 105 | <1 | <1 | 332 | | | | <1 | <1 | <0.1 | | <1 | 50 | MM-- | | 56551 | 44536 | 13001 | 209 | 62 | 23/23/21 | |
| 72297 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 8 | 6 | 4 | 773 | <1 | 65 | 1 | <1 | 331 | | | | 5 | 7 | <0.1 | | <1 | 28 | LMF- | | 66686 | 55085 | 19151 | 222 | 69 | 23/23/21 | |
| 72010 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 6 | 5 | 1 | 792 | <1 | 67 | <1 | <1 | 328 | | | | 4 | 6 | <0.1 | | <1 | 209 | HMF- | | 62998 | 53915 | 17297 | 45 | 6 | 23/23/21 | |
| 71574 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 6 | 4 | 3 | 802 | <1 | 68 | <1 | <1 | 332 | | | | 3 | 4 | <0.1 | | <1 | 125 | HMF- | | 69413 | 56484 | 15416 | 121 | 21 | 23/23/21 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 SWING DRIVE LH FRONT | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050830

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable.
**Suggested action:** Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895630

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 26,777 | 1,155 | Y | 020825 | 120825 | 22050830 | | <1 | 16 | <1 | <1 | <1 | 6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | A | 26,110 | 488 | N | 280625 | 050725 | 21895630 | | <1 | 12 | <1 | <1 | <1 | 6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | A | 25,622 | 899 | Y | 300525 | 100625 | 21782821 | | <1 | 14 | <1 | <1 | <1 | 6 | <1 | <1 | <1 | <1 | <1 | 1 | <1 | | | 6 | <1 | | | | | | | |
| 72750 | A | 25,176 | | N | 030525 | 210525 | 21699520 | | <1 | <1 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 5 | <1 | | | | | | | |
| 72297 | A | 24,723 | 723 | Y | 060425 | 140425 | 21563932 | | <1 | 32 | <1 | <1 | 2 | 13 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | A | 24,436 | 436 | N | 070325 | 170325 | 21450337 | | <1 | 25 | <1 | <1 | <1 | 11 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 4 | 771 | <1 | 115 | <1 | <1 | 330 | | | | <1 | <1 | <0.1 | | <1 | 7 | N--- | | 48749 | 13229 | 212 | 2 | 1 | 23/21/15 | |
| 73684 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 2 | 789 | <1 | 91 | <1 | <1 | 333 | | | | <1 | <1 | <0.1 | | <1 | 4 | LM-- | | 31991 | 10217 | 262 | 3 | 1 | 22/21/15 | |
| 73196 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 3 | 774 | <1 | 106 | <1 | <1 | 332 | | | | <1 | <1 | <0.1 | | <1 | 6 | LM-- | | 36869 | 8904 | 140 | 1 | <1 | 22/20/14 | |
| 72750 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 10 | <1 | 4 | 651 | <1 | 63 | <1 | <1 | 334 | | | | <1 | <1 | <0.1 | | <1 | 4 | LMF- | | 30133 | 3530 | 94 | 3 | 1 | 22/19/14 | |
| 72297 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 8 | <1 | 5 | 798 | <1 | 82 | <1 | <1 | 331 | | | | <1 | 1 | <0.1 | | <1 | 8 | LM-- | | 45624 | 14572 | 181 | 2 | 1 | 23/21/15 | |
| 72010 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 7 | 1 | 4 | 773 | <1 | 91 | <1 | <1 | 332 | | | | <1 | 1 | <0.1 | | <1 | 12 | LM-- | | 51655 | 18216 | 280 | 1 | 1 | 23/21/15 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 SWING DRIVE RH REAR | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050833

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable.
**Suggested action:** Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | edwawan | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895633

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC e Patch Co |
| 74351 | A | 26,777 | 1,155 | Y | 020825 | 120825 | 22050833 | | <1 | 17 | <1 | <1 | 1 | 8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | A | 26,110 | 488 | N | 280625 | 050725 | 21895633 | | <1 | 10 | <1 | <1 | 1 | 6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | B | 25,622 | 899 | Y | 300525 | 100625 | 21782818 | | <1 | 45 | <1 | <1 | 8 | 28 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72750 | A | 25,176 | 453 | N | 030525 | 210525 | 21699523 | | <1 | 6 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72297 | A | 24,723 | 723 | Y | 060425 | 140425 | 21562238 | | <1 | 28 | <1 | <1 | 3 | 14 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | B | 24,436 | 436 | N | 070325 | 170325 | 21450239 | | <1 | 17 | <1 | <1 | 1 | 10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 2 | 744 | <1 | 116 | <1 | <1 | 332 | | | | <1 | <1 | 0.2 | | <1 | 8 | L-F- | | 48306 | 17287 | 234 | 4 | 2 | 23/21/15 | |
| 73684 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 3 | <1 | <1 | 785 | <1 | 88 | <1 | <1 | 334 | | | | <1 | <1 | <0.1 | | <1 | 6 | LM-- | | 44633 | 10038 | 145 | 3 | 2 | 23/21/14 | |
| 73196 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 2 | 763 | <1 | 95 | <1 | <1 | 334 | | | | 2 | 2 | <0.1 | | <1 | 16 | LM-- | | 56136 | 39593 | 6723 | 14 | 3 | 23/22/20 | |
| 72750 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 2 | <1 | 3 | 789 | <1 | 67 | <1 | <1 | 335 | | | | <1 | <1 | <0.1 | | <1 | 4 | LMF- | | 43318 | 15176 | 317 | 5 | 3 | 23/21/15 | |
| 72297 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | <1 | 4 | 770 | <1 | 62 | <1 | <1 | 326 | | | | <1 | 1 | <0.1 | | <1 | 8 | LM-- | | 60030 | 41228 | 3875 | 9 | 3 | 23/23/19 | |
| 72010 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 5 | 1 | 4 | 759 | <1 | 39 | <1 | <1 | 333 | | | | <1 | 1 | <0.1 | | <1 | 7 | LM-- | | 52154 | 39267 | 7750 | 12 | 1 | 23/22/20 | |

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| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 COOLANT ENGINE LEFT | UNIT INFORMATION<br>M/M : HITACHI EX5600-6<br>S/N : HCMKCA90C00002016<br>LOC : Stanmore - South Walker | COMPONENT INFORMATION<br>Make :<br>Model :<br>S/N : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050724

All test results appeared to be acceptable. **Suggested Action:** Continue sampling at the recommended interval. Solution codes: LUCE = light green/blue, clear, foam/oil. Precipitate code: N-N- = none. Odour code: O = OK (no adverse indications). Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Dean Beeston | ANALYSED BY | cheriew | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21896324

All test results appeared to be acceptable. Suggested Action: Continue sampling at the recommended interval. Precipitate code: N-N- = none. Solution codes: LUCT = light green/blue, clear, trace hydrocarbons. Odour code: O = OK (no adverse indications). Sample Notes:

| PREVIOUS SAMPLE | TOOK 9 DAYS TO REACH LAB | INTERPRETED BY | Richard Hamm Ph 3365 9341 | ANALYSED BY | deepra | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | CORROSION METALS | | | | | | ADDITIVES | | | | | | | HARDNESS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | Cu Copper | Zn Zinc | Fe Iron | Pb Lead | Sn Tin | Al Aluminium | Si Silicon | Na Sodium | K Potassium | B Boron | Mo Molybdenum | P Phosphorus | S Sulfur | Ca Calcium | Mg Magnesium | TH Hardness as | | | |
| 74351 | A | 74351 | 15,922 | N | 020825 | 120825 | 22050724 | 1 | <1 | <1 | <1 | <1 | <1 | 84 | 1586 | 3393 | 253 | 448 | 934 | 20 | <1 | <1 | <1 | | | |
| 73684 | A | 73684 | 15,255 | N | 280625 | 070725 | 21896324 | 1 | <1 | <1 | <1 | <1 | <1 | 100 | 1635 | 3367 | 249 | 440 | 975 | 17 | <1 | <1 | <1 | | | |
| 73196 | A | 73196 | 14,767 | N | 300525 | 100625 | 21782932 | 2 | <1 | <1 | <1 | <1 | <1 | 84 | 1670 | 3615 | 233 | 437 | 936 | 23 | <1 | <1 | <1 | | | |
| 72750 | A | 72750 | 14,321 | N | 030525 | 210525 | 21701631 | 2 | <1 | <1 | <1 | <1 | <1 | 90 | 1730 | 3628 | 242 | 446 | 988 | 18 | <1 | <1 | <1 | | | |
| 72297 | A | 72297 | 13,868 | N | 060425 | 150425 | 21565839 | 1 | <1 | <1 | <1 | <1 | <1 | 89 | 1690 | 3867 | 242 | 425 | 960 | 25 | <1 | <1 | <1 | | | |
| 72010 | A | 72010 | 13,581 | N | 070325 | 180325 | 21451638 | 3 | <1 | <1 | <1 | <1 | <1 | 95 | 1580 | 3375 | 244 | 416 | 952 | 19 | <1 | <1 | <1 | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | ANIONS | | | | | DESC | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | COOLANT | GLY % GLYCC | EC Conductivity | pH H+ conc. | D Density | RA serve Alkali | GLO Glycolate | Cl- Chloride | NO2 Nitrite | NO3 Nitrate | SO4 Sulfate | Soln Solution | Prec Precipitate | Odour Coolant Od | TDS Total Disso | | | | | | | | |
| 74351 | A | CUMMINS : PGXL HD (Blue) | 57 | 2.74 | 8.7 | | | 300 | 13 | 1206 | 487 | 32 | LUCF | N-N- | O | | | | | | | | | |
| 73684 | A | CUMMINS : PGXL HD (Blue) | 57 | 2.95 | 9.1 | | | 186 | <1 | 1227 | 445 | 22 | LUCT | N-N- | O | | | | | | | | | |
| 73196 | A | CUMMINS : PGXL HD (Blue) | 57 | 2.92 | 8.6 | | | 293 | 13 | 1254 | 508 | 42 | DLCF | N-N- | O | | | | | | | | | |
| 72750 | A | CUMMINS : PGXL HD (Blue) | 57 | 2.98 | 8.8 | | | 275 | 9 | 1273 | 464 | <1 | LLCF | N-N- | O | | | | | | | | | |
| 72297 | A | CUMMINS : PGXL HD (Blue) | 56 | 3.06 | 8.8 | | | 220 | 7 | 1221 | 495 | 16 | LLCM | N-N- | O | | | | | | | | | |
| 72010 | A | CUMMINS : PGXL HD (Blue) | 57 | 2.97 | 9.0 | | | 223 | 26 | 1101 | 403 | 15 | DUCF | N-N- | O | | | | | | | | | |

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Hastings Deering CAT

| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 ENGINE DIESEL LEFT | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :CUMMINS<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22051209

All Test Results appear to be Normal. Continue Sampling at the Recommended Interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | AnalyticA | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895920

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 8 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | samlines | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 55,699 | 667 | Y | 020825 | 120825 | 22051209 | | <1 | 2 | <1 | 2 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 3438 | 4 | 9 | <1 | 15 | | | | | | |
| 73684 | A | 55,032 | 488 | Y | 280625 | 060725 | 21895920 | | 1 | 7 | <1 | 3 | <1 | 4 | <1 | <1 | <1 | <1 | 2 | <1 | <1 | | 11 | 11 | <1 | 21 | | | | | | |
| 73538 | A | 54,886 | 342 | N | 160625 | 230625 | 21837028 | | <1 | 3 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 7 | 10 | <1 | 19 | | | | | | |
| 73196 | A | 54,544 | 446 | Y | 300525 | 100625 | 21784403 | | <1 | 4 | <1 | 2 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 10 | 11 | <1 | 21 | | | | | | |
| 72999 | A | 54,347 | 702 | N | 190525 | 060625 | 21772323 | | <1 | 2 | <1 | <1 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 5 | 9 | <1 | 20 | | | | | | |
| 72750 | A | 54,098 | 453 | Y | 030525 | 200525 | 21699732 | | <1 | 3 | <1 | 1 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 9 | 10 | <1 | 18 | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2122 | 6 | 877 | 801 | <1 | 2 | <1 | <1 | 113 | 14.7 | 134 | <2.0 | 2 | <1 | 0.1 | | <1 | 3 | N--B | | | | | | | | |
| 73684 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2436 | 7 | 991 | 868 | <1 | 1 | <1 | <1 | 115 | 15.0 | 136 | <2.0 | 2 | 2 | <0.1 | | <1 | 3 | N--B | | | | | | | | |
| 73538 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2315 | 6 | 938 | 835 | <1 | 2 | <1 | <1 | 113 | 14.5 | 132 | <2.0 | <1 | 4 | <0.1 | | <1 | 4 | L-FB | | | | | | | | |
| 73196 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2326 | 6 | 946 | 832 | <1 | 1 | <1 | <1 | 107 | 14.0 | 131 | <2.0 | <1 | <1 | <0.1 | | <1 | 2 | L-FB | | | | | | | | |
| 72999 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2145 | 5 | 884 | 798 | <1 | 1 | <1 | <1 | 99 | 13.4 | 134 | 2.5 | 2 | 1 | 0.1 | | <1 | 4 | N--B | | | | | | | | |
| 72750 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2295 | 5 | 911 | 801 | <1 | 1 | <1 | <1 | 112 | 14.2 | 128 | <2.0 | <1 | 2 | 0.1 | | <1 | 1 | L-FB | | | | | | | | |

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EMECO INTERNATIONAL PTY LTD
Stanmore - South Walker
EX250 FINAL DRIVE LEFT

| UNIT INFORMATION | |
|---|---|
| M/M | : HITACHI EX5600-6 |
| S/N | : HCMKCA90C00002016 |
| LOC | : Stanmore - South Walker |

| COMPONENT INFORMATION | |
|---|---|
| Make | : |
| Model | : |
| S/N | : |

SHOP JOB/SEGMENT

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## C CORRECTIVE ACTION IS REQUIRED — DATE 02/08/2025 — LCN 22050828

Viscosity acceptable for oil grade indicated. PQ index (Ferrous debris) is high. Particle count is elevated. Wear levels below the 5 micron range appear acceptable. **Suggested action: Investigate & Evaluate Compartment.** As a precaution review sampling procedure to avoid potential contamination. Resample following assessment to confirm normal conditions. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## C CORRECTIVE ACTION IS REQUIRED — DATE 28/06/2025 — LCN 21895628

Viscosity acceptable for oil grade indicated. High amount of magnetic metal was observed. PQ index (Ferrous debris) is high. Particle count is elevated in the larger size channels. Wear levels below the 5 micron range appear acceptable. Suggested action: Investigate & Evaluate Compartment. Inspect the magnetic plug for debris. Some metallic fuzz is normal. Chips and flakes are abnormal. Consider changing oil or kidney looping compartment to remove suspended contaminants. Inspect for leaks at seals/covers/fill points/breathers that may allow contaminants to enter. Review sampling procedure in the event sampling technique has influenced results. Resample at a reduced interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | C | 74,351 | 2,054 | Y | 020825 | 120825 | 22050828 | | 2 | 141 | 1 | <1 | 3 | 20 | <1 | <1 | 1 | <1 | 2 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | C | 73,684 | 1,387 | | 280625 | 050725 | 21895628 | | 1 | 95 | 1 | <1 | 3 | 16 | <1 | <1 | 1 | <1 | 2 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | C | 73,196 | 899 | N | 300525 | 100625 | 21782815 | | <1 | 74 | 1 | <1 | 1 | 12 | <1 | <1 | 1 | <1 | 1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72297 | C | 72,297 | 723 | Y | 060425 | 140425 | 21562236 | | 3 | 556 | 4 | <1 | 75 | 304 | <1 | <1 | 5 | <1 | 5 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | C | 72,010 | 436 | N | 070325 | 170325 | 21450630 | | 2 | 381 | 3 | <1 | 50 | 198 | <1 | <1 | 4 | <1 | 3 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 71574 | B | 71,574 | 750 | Y | 020225 | 060225 | 21306924 | | 1 | 199 | 1 | <1 | 24 | 107 | <1 | <1 | 2 | <1 | 2 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 29 | <1 | 5 | 786 | <1 | 109 | 4 | <1 | 334 | | | | 3 | <1 | <0.1 | | <1 | 341 | HM-- | | 57904 | 50305 | 20885 | 599 | 140 | 23/23/22 | |
| 73684 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 26 | <1 | 2 | 789 | <1 | 94 | 5 | <1 | 331 | | | | 2 | 2 | <0.1 | | <1 | 164 | HM-- | | 59955 | 50337 | 20540 | 530 | 129 | 23/23/22 | |
| 73196 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 23 | <1 | 2 | 752 | <1 | 107 | 4 | <1 | 334 | | | | 3 | <1 | <0.1 | | <1 | 146 | HM-- | | 57504 | 47846 | 18979 | 529 | 139 | 23/23/21 | |
| 72297 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 19 | 10 | 5 | 786 | <1 | 35 | 4 | <1 | 332 | | | | 10 | 18 | 0.2 | | <1 | 221 | HM-- | | 55388 | 48622 | 25952 | 1570 | 379 | 23/23/22 | |
| 72010 | C | TOTAL TRAXIUM AXLE 8 | 85W140 | 13 | 7 | 3 | 838 | <1 | 49 | 3 | <1 | 330 | | | | 7 | 12 | <0.1 | | <1 | 223 | HMF- | | | | | | | | |
| 71574 | B | TOTAL TRAXIUM AXLE 8 | 85W140 | 7 | 4 | 2 | 756 | <1 | 73 | 1 | <1 | 325 | | | | 4 | 6 | <0.1 | | <1 | 142 | HMF- | | 71462 | 58035 | 14225 | 69 | 15 | 23/23/21 | |

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Hastings Deering | CAT

| EMECO INTERNATIONAL PTY LTD<br>Stanmore - South Walker<br>EX250 SWING DRIVE LH REAR | UNIT INFORMATION<br>**M/M** : HITACHI EX5600-6<br>**S/N** : HCMKCA90C00002016<br>**LOC** : Stanmore - South Walker | COMPONENT INFORMATION<br>**Make** :<br>**Model** :<br>**S/N** : | SHOP JOB/SEGMENT |
|---|---|---|---|

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 02/08/2025 — LCN 22050832

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable.
**Suggested action:** Continue sampling at the recommended interval. Sample Notes: Normal - Interval: 4000

| CURRENT SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Chris Renshaw Ph 3365 9685 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## A NO ACTION REQUIRED — DATE 28/06/2025 — LCN 21895632

Viscosity acceptable for oil grade indicated. Wear levels in the 5 micron range appear acceptable. Other test results appear acceptable. Suggested action: Continue sampling at the recommended interval. Sample Notes:

| PREVIOUS SAMPLE | TOOK 7 DAYS TO REACH LAB | INTERPRETED BY | Anthony Marshall | ANALYSED BY | isaacsh | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 74,351 | 1,155 | Y | 020825 | 120825 | 22050832 | | <1 | 7 | <1 | <1 | <1 | 4 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | >20000 | | 6 | <1 | | | | | | | |
| 73684 | A | 73,684 | 488 | N | 280625 | 050725 | 21895632 | | <1 | 4 | <1 | <1 | <1 | 4 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 73196 | A | 73,196 | 899 | Y | 300525 | 100625 | 21782817 | | <1 | 9 | <1 | <1 | <1 | 5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72750 | A | 72,750 | 453 | N | 030525 | 210525 | 21699522 | | <1 | <1 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 5 | <1 | | | | | | | |
| 72297 | A | 72,297 | 723 | Y | 060425 | 140425 | 21563934 | | <1 | 23 | <1 | <1 | <1 | 10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |
| 72010 | A | 72,010 | 436 | N | 070325 | 170325 | 21450629 | | <1 | 19 | <1 | <1 | <1 | 9 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | | 6 | <1 | | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 3 | 760 | <1 | 115 | <1 | <1 | 335 | | | | <1 | <1 | <0.1 | | <1 | 4 | N--- | | 44584 | 6656 | 112 | 2 | 1 | 23/20/14 | |
| 73684 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 2 | 782 | <1 | 89 | <1 | <1 | 333 | | | | <1 | 1 | <0.1 | | <1 | 1 | N--- | | 28152 | 4713 | 125 | 4 | 2 | 22/19/14 | |
| 73196 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 3 | <1 | 2 | 753 | <1 | 102 | <1 | <1 | 335 | | | | <1 | <1 | <0.1 | | <1 | 3 | LM-- | | 27834 | 9282 | 317 | 5 | 2 | 22/20/15 | |
| 72750 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 8 | <1 | 2 | 652 | <1 | 61 | <1 | <1 | 335 | | | | <1 | <1 | <0.1 | | <1 | 2 | LMF- | | 28801 | 3176 | 92 | 4 | 1 | 22/19/14 | |
| 72297 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 3 | 805 | <1 | 66 | <1 | <1 | 334 | | | | <1 | <1 | <0.1 | | <1 | 3 | L-F- | | 42627 | 21663 | 1006 | 6 | 3 | 23/22/17 | |
| 72010 | A | TOTAL TRAXIUM AXLE 8 | 85W140 | 4 | <1 | 4 | 839 | <1 | 68 | <1 | <1 | 334 | | | | <1 | <1 | <0.1 | | <1 | 5 | LMF- | | 44671 | 22349 | 867 | 2 | <1 | 23/22/17 | |

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**Hastings Deering** CAT

EMECO INTERNATIONAL PTY LTD
Stanmore - South Walker
EX250 ENGINE DIESEL RIGHT

| UNIT INFORMATION | |
|---|---|
| **M/M** | : HITACHI EX5600-6 |
| **S/N** | : HCMKCA90C00002016 |
| **LOC** | : Stanmore - South Walker |

| COMPONENT INFORMATION | |
|---|---|
| **Make** | :CUMMINS |
| **Model** | : |
| **S/N** | :3321658 |

SHOP JOB/SEGMENT

**Condition Monitoring Centre**

Express Post Satchels can be recycled. Please return any unused satchels.

## A NO ACTION REQUIRED — DATE 14/08/2025 — LCN 22111318

Viscosity is consistent with oil type indicated. Wear levels below the 5 micron range appear acceptable. Other tests appear acceptable.
**Suggested action:** Continue sampling at the recommended interval. Sample Notes: Re-sample Priority 1 - ENGINE RH - High PQ/Resample AMTI0348730

| CURRENT SAMPLE | TOOK 13 DAYS TO REACH LAB | INTERPRETED BY | Thorsten Thiele | ANALYSED BY | cameronm | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

## X IMMEDIATE CORRECTIVE ACTION IS REQUIRED — DATE 02/08/2025 — LCN 22052113

Viscosity is consistent with oil type indicated. PQ index (Ferrous debris) is EXTREMELY HIGH. Suggested action: Investigate & Evaluate Compartment. Inspect the used oil filters for abnormal debris. Review sampling procedure in the event sampling technique has influenced results. Further investigative measures or repairs may be required. Resample following assessment/repair. Sample Notes: Normal - Interval: 4000

| PREVIOUS SAMPLE | TOOK 10 DAYS TO REACH LAB | INTERPRETED BY | Calvin Wang 07 3717 2474 | ANALYSED BY | sianf | MAINTENANCE | |
|---|---|---|---|---|---|---|---|

| IDENT | | SAMPLE INFORMATION | | | | | | | ELEMENTAL ANALYSIS | | | | | | | | | | | | | | FTIR ANALYSIS | | | | MISC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | CMU | FMU | C | SAMPLE DATE | LAB DATE | LCN | OIL ADD | Cu Copper | Fe Iron | Cr Chromium | Pb Lead | Al Aluminium | Si Silicon | Sn Tin | Ni Nickel | Mn Manganes | V Vanadium | Ti Titanium | Ag Silver | Sb Antimony | S Sulfur | UST Soot | UOXI Oxidation | UNIT Nitration | USUL Sulfation | AN Acid # | TAN Total Acid # | TBN Base # | COL Colour | RULER Life % | MPC Patch Co |
| 74351 | A | 39,440 | -34,911 | N | 140825 | 270825 | 22111318 | | <1 | 2 | <1 | <1 | 1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 3723 | 2 | 8 | <1 | 16 | | | | | | |
| 74351 | X | 39,440 | 667 | Y | 020825 | 120825 | 22052113 | | <1 | 5 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 3674 | 13 | 10 | <1 | 19 | | | | | | |
| 73684 | A | 38,773 | 488 | Y | 280625 | 060725 | 21895916 | | <1 | 4 | <1 | <1 | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 9 | 9 | <1 | 19 | | | | | | |
| 73537 | A | 38,626 | 341 | N | 160625 | 230625 | 21837030 | | <1 | 2 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 6 | 9 | <1 | 18 | | | | | | |
| 73196 | A | 38,285 | 446 | Y | 300525 | 100625 | 21784404 | | <1 | 3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 10 | 9 | <1 | 19 | | | | | | |
| 72999 | A | 38,088 | 702 | N | 190525 | 060625 | 21770115 | | <1 | 1 | <1 | <1 | <1 | 2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | | 4 | 8 | <1 | 18 | | | | | | |

| IDENT | | FLUID CHARACTERISTICS | | | | | | | | | | | | | PHYSICAL TESTING | | | | | | | | | PARTICLE ANALYSIS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMU | E | OIL BRAND | OIL GRADE | Ca Calcium | Mg Magnesiu | Zn Zinc | P Phosphor | Mo Molybdenun | B Boron | Ba Barium | Cd Cadmium | V40 Vis. 40C | V100 Vis. 100C | VI Vis. Index | F Fuel % | Na Sodium | K Potassium | WAT Water | WKF Water PPM | Li Lithium | PQ PQ Index | DEP Deposits | RPVOT ure Vessel | PC4 >4 µm | PC6 >6 µm | PC14 >14 µm | PC38 >38 µm | PC50 >50 µm | ISO ISO 4406 | ISO4407 ISO 4407 |
| 74351 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2034 | 7 | 848 | 787 | <1 | 2 | <1 | <1 | 114 | 14.8 | 133 | <2.0 | 3 | 1 | 0.1 | | <1 | 6 | L-FB | | | | | | | | |
| 74351 | X | TOTAL RUBIA WORKS 40 | 15W40 | 2296 | 7 | 921 | 817 | <1 | 2 | <1 | <1 | 113 | 14.6 | 132 | <2.0 | 3 | 1 | <0.1 | | <1 | 174 | LM-B | | | | | | | | |
| 73684 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2303 | 6 | 930 | 827 | <1 | 1 | <1 | <1 | 111 | 14.7 | 137 | <2.0 | 1 | 2 | <0.1 | | <1 | 3 | LM-B | | | | | | | | |
| 73537 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2229 | 5 | 909 | 814 | <1 | 1 | <1 | <1 | 111 | 14.4 | 132 | <2.0 | <1 | 3 | <0.1 | | <1 | 4 | N--B | | | | | | | | |
| 73196 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2319 | 5 | 936 | 831 | <1 | 1 | <1 | <1 | 112 | 14.5 | 132 | <2.0 | <1 | <1 | <0.1 | | <1 | 1 | N--B | | | | | | | | |
| 72999 | A | TOTAL RUBIA WORKS 40 | 15W40 | 2195 | 5 | 879 | 813 | <1 | 2 | <1 | <1 | 113 | 14.4 | 129 | <2.0 | <1 | <1 | 0.1 | | <1 | 3 | N--B | | | | | | | | |

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