Client: **3557210**

COMBINE WORLD
Box 357
Allan, SK S0K0C0
ATTN: Charles E. Smith

Unit #: **NH-783**
Unit Location:
Component: **ENGINE**
Location: **REAR**
Serial #:
Make: **NEW HOLLAND**
Model: **CR9080, 12.9 LTRS IVECO**
OAS #:

Date analyzed: **11/08/22**
Work order: **22C180703**
Oil brand & grade: **UNKNOWN**
Client Ref #:

AGAT Laboratories
Equipment Reliability and Lubricants Testing Services
3650 21st Street N.E., Calgary, AB, T2E6V6
Phone:(403)299-2000 Fax:(403)299-2105

LEGEND - LC -Lower Critical | LR -Lower Reportable | UR -Upper Reportable | UC -Upper Critical | * *Ital* -Custom Limit

UNIT DATA / SPECTROGRAPHIC ANALYSIS (PPM)

Sample#	Date Sampled	Component Service	Oil Service	Oil Changed	Al Aluminum	Cr Chromium	Cu Copper	Fe Iron	Sn Tin	Pb Lead	Si Silicon	Mo Molybdenum	Ni Nickel	Ag Silver	K Potassium	Na Sodium	B Boron	Ba Barium	Ca Calcium	Mg Magnesium	Mn Manganese	P Phosphorus	Zn Zinc
New Oil					**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0	0	0	0	0	0
B526328	10/07/22	3652 hrs		N	**67 UC**	**15**	**3**	**97 UR**	**7**	**1**	**59 UR**	65	1	0	14	9	122 UR	0	1820	421	2	1210	1300

PHYSICAL PROPERTIES / ISO CLEANLINESS / OIL DEGRADATION

Sample#	Glycol	H2O	% Fuel	Viscosity 40°C	Viscosity 100°C	% Solids	KF	°C Flash Point	Micron size 4	Micron size 6	Micron size 14	ISO Code	% SOOT	abs/cm-1 OXD	abs/cm-1 NOX	abs/cm-1 COX	abs/cm-1 SO4	abs/cm-1 ZDDP	abs/cm-1 TAN	TBN	Min. RPVOT
New Oil																					
B526328	N	N		110.7	14.4															8.7	

WEAR CONTROL CHART

Sample#	0	60	120	180	240	300
B526328						256

COMMENTS

Comments:

The spectrographic analysis results were confirmed by rerun. REFER TO REVERSE FOR QUALITY CONTROL REPORT, EXPLANATION OF VARIANCE AND POSSIBLE CAUSES.

Should you wish to provide feedback to AGAT Laboratories, please access our Customer review form at www.agatlabs.com/review.htm. This input is extremely important to us because your well being and satisfaction is our number one priority.

* COMPONENT SERIAL NUMBER MUST BE GIVEN TO GENERATE HISTORY. Bold faced elements are included in Wear Control Chart.

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Unit Location:
Component: **ENGINE**
Location: **REAR**
Serial No.:
Make: **NEW HOLLAND**
Model: **CR9080, 12.9 LTRS IVECO**
OAS No.:

AGAT Laboratories

Quality Control Report

Date analyzed: **11/08/22**
Work order: **22C180703**
Oil brand & grade: **UNKNOWN**
Client Ref #:

Flagged Result	Possible Causes	Significance of Result / Recommended Action
Al - Aluminum	Aluminum may be from wear of bearings, bearing cages, blowers, bushings, camshaft intermediate, engine blocks, pistons, rotors, turbochargers, shims or washers. Aluminum is also found in paint, dirt/dust, abrasives and in some grease thickeners. A 3:1 ratio of silicon to aluminum suggests dirt contamination.	Higher than expected aluminum levels may indicate wear or contamination. Identify and evaluate the source. If the results suggest the presence of dirt/dust, check air breather, system cover, or system filter to determine the source of ingression. Consider filtering or changing the oil.
B - Boron	Boron is most commonly a coolant additive (in the form of borate). It may also be found in water inhibitors, extreme pressure additives, or grease additives.	Higher than expected boron levels generally indicate contamination. If high sodium and/or potassium levels are also present this commonly points to a coolant leak. Check for coolant leaks, seal failures, cracked heads or liners to identify and evaluate the source. Re-sample to monitor to ensure the source of contamination has been fixed.
Fe - Iron	Iron is the base element in steel and is therefore present in many lubricated components (liners, piston rings, pistons, rockers arms, cylinders, shafts, gears, valve bridges, oil pump rolling element bearings, housings and cases). Iron is also present in rust and may indicate water contamination.	Higher than expected iron levels may indicate wear or contamination. Identify and evaluate the source. Check for signs of rust, scale and corrosion. Consider filtering or changing the oil.
Si - Silicon	Silicon is most commonly due to dirt/dust. It may also be found in sealants, greases and anti-foam additives. A 3:1 ratio of silicon to aluminum suggests dirt contamination. Silicon may also be present in some steels.	Higher than expected silicon levels may indicate wear or contamination. Identify and evaluate the source. If the results suggest the presence of dirt/dust, check air breather, system cover or system filter to determine the source of ingression. Consider filtering or changing the oil.

Client: 3557210

COMBINE WORLD
Box 357

Allan, SK S0K0C0

ATTN: Charles E. Smith

Unit #: **NH-783**
Unit Location:
Component: **ENGINE**
Location: **REAR**
Serial #:
Make: **NEW HOLLAND**
Model: **CR9080, 12.9 LTRS IVECO**

Oil brand & grade: UNKNOWN
Sample #: **C-983716**
Date Sampled: 11/08/22
Date Analyzed: 11/08/22
Work order: 22C180703
Client Ref #:

AGAT Laboratories

Sample Status and Trending

Sample Score:

Your Sample Score: 9

Rankings: 0-3 Normal, 4-6 Reportable, 7-10 Critical

Normal **Reportable** **Critical**

Trend Graphs