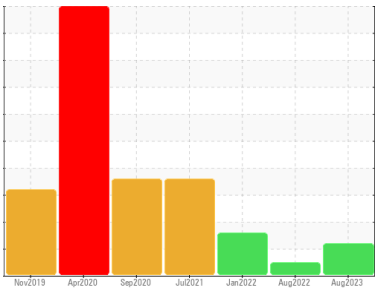
PROBLEM SUMMARY

Sample Rating Trend



VISUAL METAL

Machine Id
HPDL_B3320 HPDL_B3320_P3320
Component
Non-Drive End Pump
Fluid
ROYAL PURPLE SYNFILM GT 46 (1 QTS)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	ABNORMAL
Yellow Metal	scalar	*Visual	NONE	▲ **MODER**	NONE	▲ MODER

Customer Id: ENEJEW
Sample No.: RP0021880
Lab Number: 05924400
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 Aug 2022 Diag: Doug Bogart

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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21 Jan 2022 Diag: Jonathan Hester

VISUAL METAL

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.Moderate concentration of visible metal present. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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19 Jul 2021 Diag: Jonathan Hester

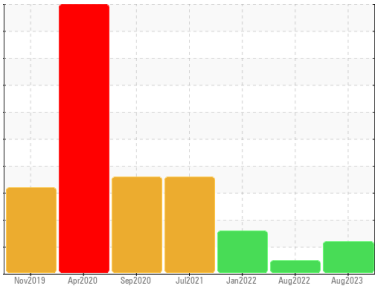
DIRT

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition.Bearing and/or bushing wear is indicated. Moderate concentration of visible dirt/debris present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL

Machine Id
HPDL_B3320 HPDL_B3320_P3320
Component
Non-Drive End Pump
Fluid
ROYAL PURPLE SYNFILM GT 46 (1 QTS)

DIAGNOSIS

Recommendation
We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
Moderate concentration of visible metal present. All component wear rates are normal.

Contamination
The water content is negligible. There is no indication of any contamination in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0021880**	RP0017605	RP0017733
Sample Date		Client Info		**11 Aug 2023**	24 Aug 2022	21 Jan 2022
Machine Age	hrs	Client Info		**9326**	6421	6421
Oil Age	hrs	Client Info		**9326**	6421	5776
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

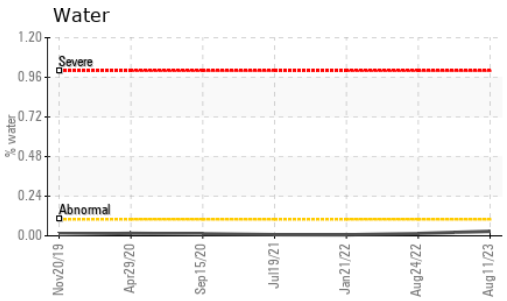
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	**10**	4	40
Chromium	ppm	ASTM D5185m	>5	**0**	0	<1
Nickel	ppm	ASTM D5185m		**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>5	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	2	1
Copper	ppm	ASTM D5185m	>15	**3**	5	4
Tin	ppm	ASTM D5185m		**0**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

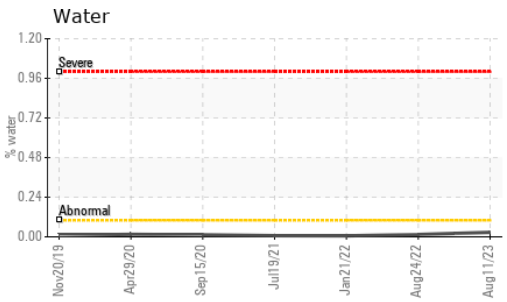
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	23
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	95	**96**	69	88
Calcium	ppm	ASTM D5185m	0	**0**	0	24
Phosphorus	ppm	ASTM D5185m	0	**2**	10	3
Zinc	ppm	ASTM D5185m	0	**0**	7	3

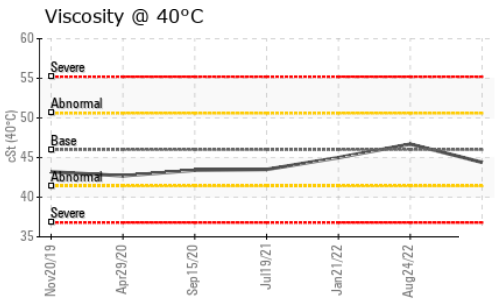
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**6**	4	12
Sodium	ppm	ASTM D5185m		**1**	0	<1
Potassium	ppm	ASTM D5185m	>20	**2**	0	0
Water	%	ASTM D6304		**0.027**	0.014	0.006
ppm Water	ppm	ASTM D6304	>.1	**273.6**	147.2	69.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.39**	0.33	0.37

OIL ANALYSIS REPORT

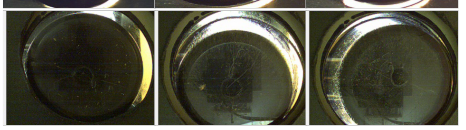




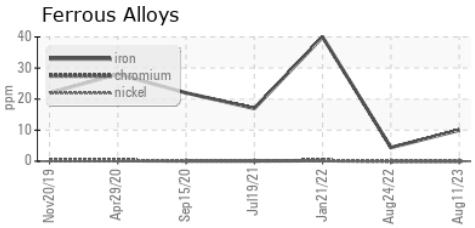


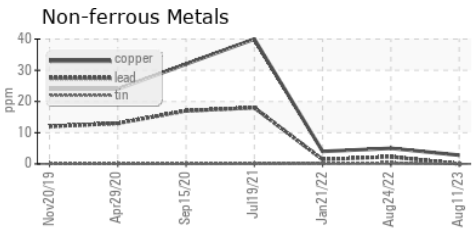
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	▲ **MODER**	NONE	▲ MODER
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual		**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

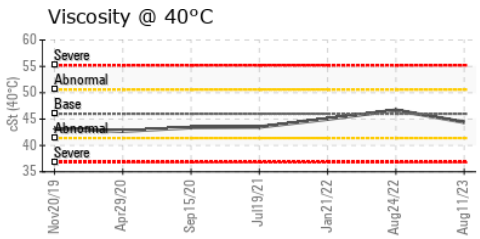
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	**44.4**	46.7	45.0

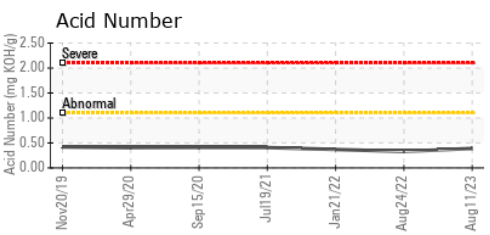
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0021880
Lab Number : 05924400
Unique Number : 10604347
Test Package : IND 2

Received : 14 Aug 2023
Diagnosed : 16 Aug 2023
Diagnostician : Angela Borella

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

ENERGY TRANSFER - HOPEDALE
46725 GIACOBBI ROAD
JEWETT, OH
US 43986
Contact: KEN VOLL

T: (330)414-2573
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Report Id: ENEJEW [WUSCAR] 05924400 (Generated: 08/16/2023 10:36:26) Rev: 1

Submitted By: LUKE SUMMERS