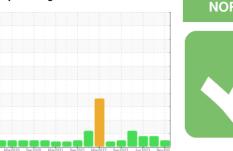


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



CWAY_U2120 CWAY_U2120_P2120

Drive End Pump

ROYAL PURPLE SYNFILM GT 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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			lep2019 Mar2	020 Sep2020 Mar2021	Sep2021 Mar2022 Sep2022 Jun	2023 Nov202	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method Imitibase current history1 history2 Iron ppm ASTM D5185m 775 0 0 <1 Chromium ppm ASTM D5185m >5 0 0 0 Nickel ppm ASTM D5185m 5 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 0 Aluminum ppm ASTM D5185m >6 0 0 0 0 Copper ppm ASTM D5185m >15 0 0 2 2 Tin ppm ASTM D5185m <1 1 5 <t< td=""><td>Sample Number</td><td></td><td>Client Info</td><td></td><th>RP0026144</th><td>RP0034013</td><td>RP0026141</td></t<>	Sample Number		Client Info		RP0026144	RP0034013	RP0026141
Oil Changed hrs Client Info N/A N/A N/A N/A Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 history2 Iron ppm ASTM DS185m >5 0 0 <1 Chromium ppm ASTM DS185m >5 0 0 0 Nickel ppm ASTM DS185m 0 0 0 0 Silver ppm ASTM DS185m 0 0 0 0 Silver ppm ASTM DS185m >5 0 0 0 Aluminum ppm ASTM DS185m >5 0 0 0 Lead ppm ASTM DS185m >10 0 0 0 Copper ppm ASTM DS185m >10 0 0 2 Tin ppm ASTM DS185m 2 0 0 0	Sample Date		Client Info		15 Nov 2023	25 Sep 2023	27 Jun 2023
Oil Changed hrs Client Info N/A N/A N/A N/A Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 history2 Iron ppm ASTM DS185m >5 0 0 <1 Chromium ppm ASTM DS185m >5 0 0 0 Nickel ppm ASTM DS185m 0 0 0 0 Silver ppm ASTM DS185m 0 0 0 0 Silver ppm ASTM DS185m >5 0 0 0 Aluminum ppm ASTM DS185m >5 0 0 0 Lead ppm ASTM DS185m >10 0 0 0 Copper ppm ASTM DS185m >10 0 0 2 Tin ppm ASTM DS185m 2 0 0 0	•	hrs	Client Info		0		0
Oil Changed Status Client Info N/A N/A N/A AN/A ABNORMAL ABNORMAL		hrs	Client Info		0	0	0
Sample Status method limit base current history1 history2 Iron ppm ASTM D5185m >75 0 0 <1	-		Client Info			N/A	N/A
Iron	-				NORMAL	ABNORMAL	ABNORMAL
Chromium ppm ASTM D5185m >5 0 0 0 Nickel ppm ASTM D5185m 1 2 2 Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >10 0 0 0 Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >10 0 0 2 Tin ppm ASTM D5185m 2 3 4 4 Cadmium ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Manganese ppm	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>75	0	0	<1
Titanium	Chromium	ppm	ASTM D5185m	>5	0	0	0
Silver	Nickel	ppm	ASTM D5185m		1	2	2
Alluminum	Titanium	ppm	ASTM D5185m		0	0	0
Aluminum	Silver	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >15 0 0 2 Tin ppm ASTM D5185m <1 1 5 Vanadium ppm ASTM D5185m 2 3 4 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 <1 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Aluminum	ppm	ASTM D5185m	>5	0	0	<1
Copper ppm ASTM D5185m >15 0 0 2 Tin ppm ASTM D5185m <1	Lead		ASTM D5185m	>10	0	0	0
Tin ppm ASTM D5185m <1 1 5 Vanadium ppm ASTM D5185m 2 3 4 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganesium ppm ASTM D5185m 0 0 0 <1 Magnesium ppm ASTM D5185m <1 1 <1 <1 Phosphorus ppm ASTM D5185m <1 1 <1 <1 Phosphorus ppm ASTM D5185m <4 1 0 Zinc ppm ASTM D5185m <20 <1 0 <1 <1 <1	Copper		ASTM D5185m	>15	0	0	2
Vanadium ppm ASTM D5185m 2 3 4 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m <1 <1 0 <1 Magnesium ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	• •				<1	1	5
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 <1	Vanadium					3	
Boron					0	0	0
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 0 <1 Magnesium ppm ASTM D5185m <1 <1 0 Calcium ppm ASTM D5185m <1 1 <1 0 Phosphorus ppm ASTM D5185m 4 1 0 0 Zinc ppm ASTM D5185m 4 1 0 0 Zinc ppm ASTM D5185m >20 0 <1 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 <1 0 Sodium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1 0.009 0.03 0.02	Boron	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m 0 0 <1 Magnesium ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m <1 <1 0 Calcium ppm ASTM D5185m <1	Molybdenum	ppm	ASTM D5185m		0	0	0
Calcium ppm ASTM D5185m <1 1 <1 Phosphorus ppm ASTM D5185m 4 1 0 Zinc ppm ASTM D5185m 0 <1	Manganese	ppm	ASTM D5185m		0	0	<1
Phosphorus ppm ASTM D5185m 4 1 0 Zinc ppm ASTM D5185m 0 <1 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 <1 0 Sodium ppm ASTM D5185m >20 <1 <1 <1 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1 0.009 0.003 0.002 Ppm Water ppm ASTM D6304 >.0 0.0	Magnesium	ppm	ASTM D5185m		<1	<1	0
Zinc ppm ASTM D5185m 0 <1 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 <1	Calcium	ppm	ASTM D5185m		<1	1	<1
Zinc ppm ASTM D5185m 0 <1 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 <1	Phosphorus	ppm	ASTM D5185m		4	1	0
Silicon ppm ASTM D5185m >20 0 <1 0 Sodium ppm ASTM D5185m <1 <1 <1 <1 Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >.1000 91 38.0 16.8 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE HEAVY <	Zinc	ppm	ASTM D5185m		0	<1	0
Sodium ppm ASTM D5185m <1 <1 <1 Potassium ppm ASTM D5185m >20 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 0 0 Water % ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >1000 91 38.0 16.8 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE	Silicon	ppm	ASTM D5185m	>20	0	<1	0
Water % ASTM D6304 >.1 0.009 0.003 0.002 ppm Water ppm ASTM D6304 >1000 91 38.0 16.8 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE HEAVY Debris scalar *Visual NONE NON	Sodium	ppm	ASTM D5185m		<1	<1	<1
ppm Water ppm ASTM D6304 >1000 91 38.0 16.8 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Potassium	ppm	ASTM D5185m	>20	<1	0	0
FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	Water	%	ASTM D6304	>.1	0.009	0.003	0.002
Acid Number (AN) mg KOH/g ASTM D8045 0.111 0.137 0.15 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE AHEAVY Debris scalar *Visual NONE LIGHT MODER NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	ppm Water	ppm	ASTM D6304	>1000	91	38.0	16.8
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE HEAVY Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE LIGHT MODER NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Acid Number (AN)	mg KOH/g	ASTM D8045		0.111	0.137	0.15
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONE→ HEAVYDebrisscalar*VisualNONELIGHT→ MODERNONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORML	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE → HEAVY Debris scalar *Visual NONE LIGHT → MODER NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML							
Silt scalar *Visual NONE NONE NONE HEAVY Debris scalar *Visual NONE LIGHT MODER NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debrisscalar*VisualNONELIGHT▲ MODERNONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Precipitate	scalar		NONE		NONE	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Silt	scalar	*Visual	NONE	NONE	NONE	▲ HEAVY
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Debris	scalar	*Visual	NONE	LIGHT	▲ MODER	NONE
Odor scalar *Visual NORML NORML NORML NORML	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water scalar *Visual >.1 NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>.1	NEG	NEG	NEG

scalar *Visual

IbmittecBy: NATHANECOLMES

NEG



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number**

: RP0026144

: 06016495 : 10755639 Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 24 Nov 2023 Diagnosed : 28 Nov 2023 : Jonathan Hester Diagnostician

ENERGY TRANSFER - WAYNE

4410 TREADWELL WAYNE, MI US 48184

Contact: SCOTT VERHELLE

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) T: (313)580-0267

F: