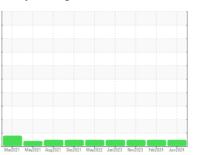


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

BUCK_U2320 BUCK_U2320_P2320

Non-Drive End Pump

ROYAL PURPLE SYNFILM GT 46 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

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

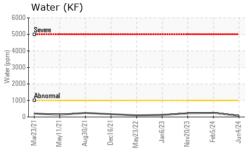
Fluid Condition

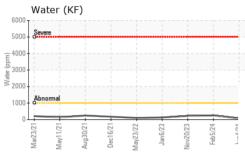
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

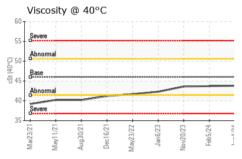
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Change of Cliff Info N/A N/A N/A N/A Sample Status Image of Client Info N/A N/A N/A N/A Visual Status Image of Client Info N/A N/A N/A N/A Visual Status Image of Client Info N/A			Mar2021 Ma	y2021 Aug2021 Dec2021	May2022 Jan2023 Nov2023 Feb2	1024 Jun2024		
Sample Date	SAMPLE INFORM	//ATION	method	limit/base	current	history1	history2	
Machine Age hrs Client Info 0 0 0 0 0 0 0 0 0	Sample Number		Client Info		RP0012634	RP0031915	RP0031965	
Oil Changed hrs Client Info N/A N/A N/A N/A Sample Status method limil/base current history1 history2 Iron ppm ASTM D5185m >90 10 8 7 Chromium ppm ASTM D5185m >5 0 <1	Sample Date		Client Info		04 Jun 2024	05 Feb 2024	20 Nov 2023	
Oil Changed Client Info N/A N/A N/A NORMAL NORMAL NORMAL NORMAL NORMAL	Machine Age	hrs	Client Info		0	0	0	
NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		0	0	0	
VEAR METALS	Oil Changed		Client Info		N/A	N/A	N/A	
Tron	Sample Status				NORMAL	NORMAL	NORMAL	
Chromium ppm ASTM D5185m >5 0 <1	WEAR METALS		method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>90	10	8	7	
Titanium	Chromium	ppm	ASTM D5185m	>5	0	<1	0	
Silver	Nickel	ppm	ASTM D5185m	>5	0	0	<1	
Aluminum	Titanium	ppm	ASTM D5185m	>3	0	0	0	
Lead	Silver	ppm	ASTM D5185m	>3	0	0	0	
Copper	Aluminum	ppm	ASTM D5185m	>7	0	0	<1	
Tin	Lead	ppm	ASTM D5185m	>12	4	3	5	
Tin	Copper	ppm	ASTM D5185m	>30	15	12	11	
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 95 58 59 70 Calcium ppm ASTM D5185m 0 3 2 1 Phosphorus ppm ASTM D5185m 0 1 <1 4 Zinc ppm ASTM D5185m 0 10 2 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 1 <1 2 Sodium ppm ASTM D5185m 20 2 0 1	Tin	ppm	ASTM D5185m	>9	<1	0	<1	
Boron	Vanadium	ppm	ASTM D5185m		0	0	0	
Boron	Cadmium	ppm	ASTM D5185m		0	0	0	
Barium	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m	0	0	0	0	
Manganese ppm ASTM D5185m <1	Barium	ppm	ASTM D5185m	0	<1	0	0	
Magnesium ppm ASTM D5185m 95 58 59 70 Calcium ppm ASTM D5185m 0 3 2 1 Phosphorus ppm ASTM D5185m 0 1 <1 4 Zinc ppm ASTM D5185m 0 10 2 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1 Potassium ppm ASTM D5185m >20 2 0 1 Water % ASTM D6185m >20 2 0 0 <th>Molybdenum</th> <th>ppm</th> <th>ASTM D5185m</th> <th>0</th> <th>0</th> <th>0</th> <th>0</th>	Molybdenum	ppm	ASTM D5185m	0	0	0	0	
Calcium ppm ASTM D5185m 0 3 2 1 Phosphorus ppm ASTM D5185m 0 1 <1 4 Zinc ppm ASTM D5185m 0 10 2 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1 Volume ppm ASTM D5185m >20 2 0 1 Water ppm ASTM D6304 >.1 0.007 0.024 0.022 FLUID DEGRADATION method limit/base current history1 history2 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg K0Hg ASTM D8045 0.35 0.31 0.5 <td cols<="" th=""><th>Manganese</th><th>ppm</th><th>ASTM D5185m</th><th></th><th><1</th><th>0</th><th><1</th></td>	<th>Manganese</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th><1</th> <th>0</th> <th><1</th>	Manganese	ppm	ASTM D5185m		<1	0	<1
Phosphorus ppm ASTM D5185m 0 1 <1	Magnesium	ppm	ASTM D5185m	95	58	59	70	
Zinc ppm ASTM D5185m 0 10 2 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 1 <1	Calcium	ppm	ASTM D5185m	0	3	2	1	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 1 <1 2 Sodium ppm ASTM D5185m 2 <1 0 Potassium ppm ASTM D6304 >.1 0.007 0.024 0.022 Water % ASTM D6304 >.1 0.007 0.024 0.022 ppm Water ppm ASTM D6304 >.1000 72 250 227 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 VISUAL method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 VISUAL method limit/base current history1 history2 White Metal scal	Phosphorus	ppm	ASTM D5185m	0	1	<1	4	
Silicon ppm ASTM D5185m >60 1 <1	<th>Zinc</th> <th>ppm</th> <th>ASTM D5185m</th> <th>0</th> <th>10</th> <th>2</th> <th>0</th>	Zinc	ppm	ASTM D5185m	0	10	2	0
Sodium ppm ASTM D5185m 2 <1	CONTAMINANTS	;	method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 2 0 1 Water % ASTM D6304 >.1 0.0007 0.024 0.022 ppm Water ppm ASTM D6304 >.1000 72 250 227 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual	Silicon	ppm	ASTM D5185m	>60	1	<1	2	
Water % ASTM D6304 >.1 0.007 0.024 0.022 ppm Water ppm ASTM D6304 >1000 72 250 227 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 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 Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG NEG	Sodium	ppm	ASTM D5185m		2	<1	0	
ppm WaterppmASTM D6304>100072250227FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.350.310.5VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG	Potassium	ppm	ASTM D5185m	>20	2	0	1	
FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 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 Debris scalar *Visual NONE NONE NONE NONE NONE 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 >.1 NEG NEG	Water	%	ASTM D6304	>.1	0.007	0.024	0.022	
Acid Number (AN) mg KOH/g ASTM D8045 0.35 0.31 0.5 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 Debris scalar *Visual NONE NONE NONE NONE 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 >.1 NEG NEG	ppm Water	ppm	ASTM D6304	>1000	72	250	227	
White Metal scalar *Visual NONE 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 NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG	FLUID DEGRADA	ATION	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 NONE NONE NONE 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 >.1 NONE NORE NORML	Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.31	0.5	
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	VISUAL		method	limit/base	current	history1	history2	
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE 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 >.1 NEG NEG NEG	White Metal	scalar	*Visual	NONE		NONE	NONE	
Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE 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 >.1 NEG NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	•	scalar	*Visual	NONE	NONE	NONE	NONE	
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Emulsified Water scalar *Visual >.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
0.1 10.15 454441110015	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
Free Water scalar *Visual NEG Submitted By: ADAM HIGHMEL	Emulsified Water	scalar	*Visual	>.1	NEG			
	Free Water	scalar	*Visual		NEG	Submitted By: A	ADAMIFMWEL	



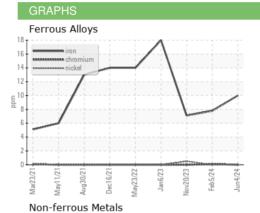
OIL ANALYSIS REPORT

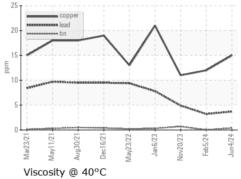


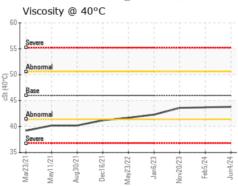


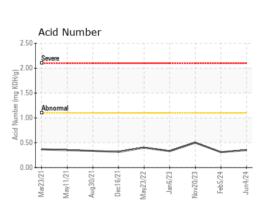
















Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RP0012634 Lab Number : 06205593

Unique Number : 11073054

Received : 10 Jun 2024 **Tested** Diagnosed

: 13 Jun 2024 : 13 Jun 2024 - Angela Borella

ENERGY TRANSFER - BUCKS MT. EYRE AND DOLINGTON ROAD

WAKEFIELD, PA US 18940 Contact: QUITA MORGAN

Test Package : IND 2 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.

T: (610)220-8386

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: ENEWAK [WUSCAR] 06205593 (Generated: 06/14/2024 03:36:23) Rev: 1

Submitted By: ADAM HUMMEL

F: