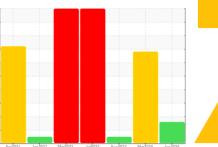


OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

TWIN_U2 TWIN_U2_P2

Drive End Pump

ROYAL PURPLE SYNFILM GT 32 (--- GAL)

DI	AG	iNC	S	S
----	----	-----	---	---

Recommendation

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Bearing and/or bushing wear is indicated.

Contamination

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

Fluid Condition

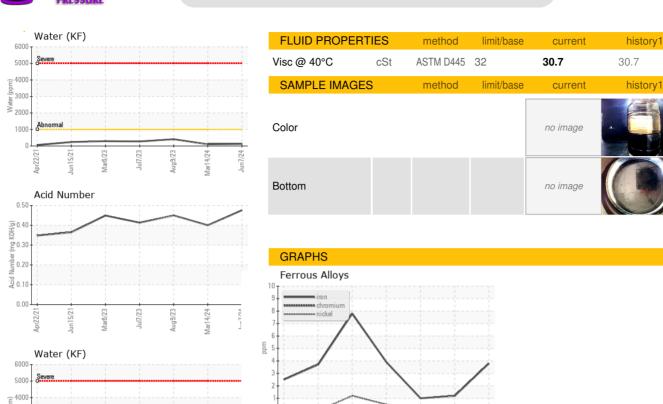
The AN level is acceptable for this fluid.

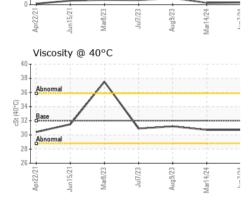
SAMPLE INFORM						
	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0032998	RP0037523	RP0027169
Sample Date		Client Info		07 Jun 2024	14 Mar 2024	09 Aug 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	SEVERE	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	4	1	1
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	2	<1	2
Lead	ppm	ASTM D5185m	>12	<u>^</u> 23	<u> </u>	6
Copper	ppm	ASTM D5185m	>30	<u> </u>	1 79	25
Tin	ppm	ASTM D5185m	>9	2	2	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		43	45	85
Calcium	ppm	ASTM D5185m		0	<1	0
Phosphorus	ppm	ASTM D5185m		<1	0	2
Zinc	ppm	ASTM D5185m		4	0	0
CONTAMINANTS	;	method	limit/base	current	history1	history2
CONTAMINANTS Silicon	ppm	method ASTM D5185m	limit/base >60	current 2		history2 <1
					history1	
Silicon	ppm	ASTM D5185m		2	history1 <1	<1
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>60 >20	2 0	history1 <1 <1	<1
Silicon Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>60 >20 >.1	2 0 <1	history1 <1 <1 <1 3	<1 1 0
Silicon Sodium Potassium Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>60 >20 >.1	2 0 <1 0.013	history1 <1 <1 <1 3 0.010	<1 1 0 0.040
Silicon Sodium Potassium Water ppm Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>60 >20 >.1 >1000	2 0 <1 0.013 130	history1 <1 <1 3 0.010 106	<1 1 0 0.040 408.6
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	>60 >20 >.1 >1000	2 0 <1 0.013 130 current	history1 <1 <1 <1 3 0.010 106 history1	<1 1 0 0.040 408.6 history2
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN)	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045	>60 >20 >.1 >1000 limit/base	2 0 <1 0.013 130 current 0.476	history1 <1 <1 3 0.010 106 history1 0.40	<1 1 0 0.040 408.6 history2 0.45
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL	ppm ppm ppm % ppm ATION mg KOH/g	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method	>60 >20 >.1 >1000 limit/base	2 0 <1 0.013 130 current 0.476	history1 <1 <1 3 0.010 106 history1 0.40 history1	<1 1 0 0.040 408.6 history2 0.45
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal	ppm ppm ppm ppm % ppm ATION mg KOH/g	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual	>60 >20 >.1 >1000 limit/base NONE	2 0 <1 0.013 130 current 0.476 current NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE	<1 1 0 0.040 408.6 history2 0.45 history2
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal	ppm ppm ppm % ppm ATION mg KOH/g scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 >1000 limit/base limit/base NONE NONE	2 0 <1 0.013 130 current 0.476 current NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm % ppm ATION mg KOH/g scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual *Visual	>60 >20 >.1 >1000 limit/base NONE NONE NONE	2 0 <1 0.013 130 current 0.476 current NONE NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE NONE	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm % ppm % ppm ATION mg KOH/g scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual *Visual *Visual *Visual	>60 >20 >.1 >1000 limit/base NONE NONE NONE NONE	2 0 <1 0.013 130 current 0.476 current NONE NONE NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE NONE NONE	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm % ppm ATION mg KOH/g scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D8045 method *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>60 >20 >.1 >1000 limit/base NONE NONE NONE NONE NONE NONE NONE	2 0 <1 0.013 130 current 0.476 current NONE NONE NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE NONE NONE NONE NONE	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE NONE NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm % ppm ATION mg KOH/g scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 >1000 limit/base NONE NONE NONE NONE NONE NONE NONE NO	2 0 <1 0.013 130 current 0.476 current NONE NONE NONE NONE	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE NONE NONE NONE NONE
Silicon Sodium Potassium Water ppm Water FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm % ppm % ppm ** **TION ** **mg KOH/g **scalar **scalar **scalar **scalar **scalar **scalar **scalar **scalar **scalar	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D8045 Method *Visual	>60 >20 >.1 >1000 limit/base NONE NONE	2 0 <1 0.013 130 current 0.476 current NONE NONE NONE NONE NONE NONE NONE NON	history1 <1 <1 3 0.010 106 history1 0.40 history1 NONE NONE	<1 1 0 0.040 408.6 history2 0.45 history2 LIGHT NONE NONE NONE NONE NONE NONE NONE NON

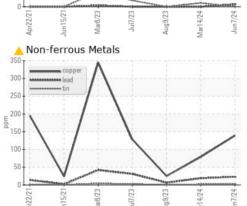


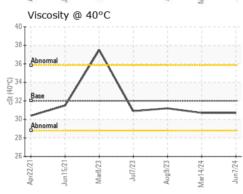
3000

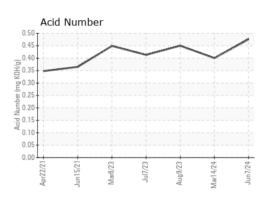
OIL ANALYSIS REPORT















Certificate 12367

Laboratory Sample No.

: RP0032998 Lab Number : 06205812

Unique Number : 11073273 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 10 Jun 2024

Tested : 18 Jun 2024 Diagnosed : 18 Jun 2024 - Jonathan Hester

144 CONCHESTER HIGHWAY ASTON, PA

ENERGY TRANSFER - TWIN OAKS

US 19014

T: (610)220-8386

Contact: QUITA MORGAN

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)

F:

history2

history2

31.2