

OIL ANALYSIS REPORT

Area [23256] Komatsu Swing Drive

SHELL ROTELLA T 15W40 (14 QTS)

Sample Rating Trend

VISCOSITY

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

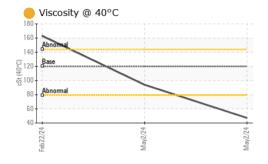
Fluid Condition

The oil viscosity is lower than normal. Confirm oil type.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0923423	WC0923423	WC0836166
Sample Date		Client Info		02 May 2024	02 May 2024	22 Feb 2024
Machine Age	hrs	Client Info		7304	7304	6585
Oil Age	hrs	Client Info		1000	1000	1000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>400	365	77	25
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	<1	2
_ead	ppm	ASTM D5185m	>50	0	0	<1
Copper	ppm	ASTM D5185m	>200	4	2	1
Γin	ppm	ASTM D5185m	>10	0	0	1
/anadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	99	0	25
Barium	ppm	ASTM D5185m	0.0	1	6	0
Nolybdenum	ppm	ASTM D5185m	1.2	1	<1	7
Manganese	ppm	ASTM D5185m		4	1	<1
Magnesium	ppm	ASTM D5185m	24	22	11	30
Calcium	ppm	ASTM D5185m	2292	2423	4024	3624
Phosphorus		ASTM D5185m	1064	1037	843	909
поорногао	nnm		1001			
7inc	ppm	ASTM D5185m	1160		970	1105
-	ppm ppm	ASTM D5185m ASTM D5185m	1160 4996	1141 4468	970 5789	1105 7849
-	ppm ppm			1141		
Gulfur CONTAMINANTS	ppm	ASTM D5185m	4996 limit/base	1141 4468	5789	7849
Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m	4996 limit/base	1141 4468 current 41	5789 history1	7849 history2 20
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m method	4996 limit/base	1141 4468 current	5789 history1	7849 history2
Sulfur CONTAMINANTS Silicon Sodium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	4996 limit/base >50	1141 4468 current 41	5789 history1 15 2	7849 history2 20 0
Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	4996 limit/base >50 >20	1141 4468 current 41 7 0	5789 history1 15 2 1	7849 history2 20 0 2
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	4996 limit/base >50 >20 limit/base	1141 4468 current 41 7 0	5789 history1 15 2 1 history1	7849 history2 20 0 2 history2
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	4996 limit/base >50 >20 limit/base NONE	1141 4468 current 41 7 0 current NONE	5789 history1 15 2 1 history1 NONE	7849 history2 20 0 2 history2 NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	4996 limit/base >50 >20 limit/base NONE NONE	1141 4468 current 41 7 0 current NONE	5789 history1 15 2 1 history1 NONE NONE	7849 history2 20 0 2 history2 NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Vellow Metal Precipitate Silt	ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m wethod *Visual *Visual *Visual *Visual	4996 limit/base >50 >20 limit/base NONE NONE NONE NONE	1141 4468 current 41 7 0 current NONE NONE NONE	history1 15 2 1 history1 NONE NONE NONE NONE	7849 history2 20 0 2 history2 NONE NONE NONE MODER
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	4996 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE	1141 4468 current 41 7 0 current NONE NONE NONE NONE LIGHT	5789 history1 15 2 1 history1 NONE NONE NONE NONE NONE NONE NONE	7849 history2 20 0 2 history2 NONE NONE NONE NONE NONE NONE
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	4996 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	1141 4468 current 41 7 0 current NONE NONE NONE NONE LIGHT NONE	5789 history1 15 2 1 history1 NONE NONE NONE NONE NONE NONE NONE NON	7849 history2 20 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON
CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Vellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual	4996 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NO	1141 4468 current 41 7 0 current NONE NONE NONE NONE NONE NONE LIGHT NONE NORML	history1 15 2 1 history1 NONE NONE NONE NONE NONE NONE NONE NO	7849 history2 20 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON
Gulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	4996 limit/base >50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	1141 4468 current 41 7 0 current NONE NONE NONE NONE LIGHT NONE	5789 history1 15 2 1 history1 NONE NONE NONE NONE NONE NONE NONE NON	7849 history2 20 0 2 history2 NONE NONE NONE NONE NONE NONE NONE NON

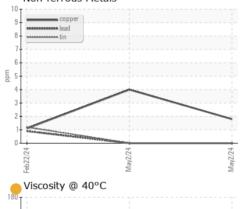


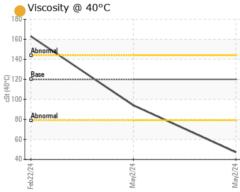
OIL ANALYSIS REPORT



FLUID PROPER	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	120.	47.14	94.0	163
SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						

Ferrous Alloys 400 350 250 틆 200 150 100 Non-ferrous Metals









Certificate 12367

Laboratory

Sample No. : WC0923423 Lab Number : 06207227 Unique Number : 11074688 Test Package : CONST

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

Received Tested Diagnosed

: 11 Jun 2024 : 14 Jun 2024

: 18 Jun 2024 - Jonathan Hester

MANHATTAN ROAD AND BRIDGE 5601 S 122ND E AVE TULSA, OK

US 74146 Contact: JAMES STEELMON james.steelmon@manhattanrb.com

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)

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