

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

800-102P (S/N G7C800) Component Hydraulic System Fluid

SHELL TELLUS T32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836633	WCI2306773	WCI2279309
Sample Date		Client Info		07 Jun 2024	18 May 2017	07 Jul 2016
Machine Age	hrs	Client Info		25	821	581
Oil Age	hrs	Client Info		0	821	0
Oil Changed		Client Info		Filtered	Not Changd	N/A
Sample Status				NORMAL	NORMAL	ATTENTION
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	<1	<1
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>20	0	0	<1
	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	<1	1	1
Tin	ppm	ASTM D5185m	>20	0	0	4
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base	current 0	history1 <1	history2 <1
Boron	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	0	<1	<1
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	0 <1	<1 <1	<1 <1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0	<1 <1 <1	<1 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0 0 47 12	<1 <1 <1 0 14 49	<1 <1 <1 <1 9 40
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 0 0 47 12 321	<1 <1 <1 0 14 49 304	<1 <1 <1 9 40 149
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48	0 <1 0 0 47 12	<1 <1 <1 0 14 49	<1 <1 <1 <1 9 40
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48 337	0 <1 0 0 47 12 321	<1 <1 <1 0 14 49 304	<1 <1 <1 9 40 149
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48 337 426	0 <1 0 0 47 12 321 262	<1 <1 <1 0 14 49 304 269	<1 <1 <1 9 40 149 140
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base	0 <1 0 47 12 321 262 745	<1 <1 <1 0 14 49 304 269 2782	<1 <1 <1 9 40 149 140 1329
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base	0 <1 0 47 12 321 262 745 current	<1 <1 <1 0 14 49 304 269 2782 history1	<1 <1 <1 9 40 149 140 1329 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15	0 <1 0 47 12 321 262 745 current <1	<1 <1 <1 0 14 49 304 269 2782 history1 2	<1 <1 <1 <1 9 40 149 140 1329 history2 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	48 337 426 2280 limit/base >15	0 <1 0 0 47 12 321 262 745 <u>current</u> <1 1	<1 <1 <1 0 14 49 304 269 2782 history1 2 <1	<1 <1 <1 9 40 149 140 1329 history2 1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15 >20	0 <1 0 47 12 321 262 745 current <1 1 0	<1 <1 <1 0 14 49 304 269 2782 history1 2 <1 0	<1 <1 <1 9 40 149 140 1329 history2 1 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE	ppm	ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15 >20 limit/base >20	0 <1 0 47 12 321 262 745 current <1 1 0	<1 <1 <1 <1 0 14 49 304 269 2782 history1 2 <1 0 history1	<1 <1 <1 <1 9 40 149 140 1329 history2 1 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	ppm	ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15 >20 limit/base >20	0 <1 0 0 47 12 321 262 745 <u>current</u> <1 1 0 <u>current</u> 365	<1 <1 <1 0 14 49 304 269 2782 history1 2 <1 0 history1 382	<1 <1 <1 <1 <1 9 40 149 140 1329 history2 1 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm	ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15 >20 limit/base >2500 >320 >80	0 <1 0 0 47 12 321 262 745 <i>current</i> <1 1 0 <i>current</i> 365 48	<1 <1 <1 0 14 49 304 269 2782 history1 2 <1 0 history1 382 112	<1 <1 <1 <1 <1 9 40 149 140 1329 history2 1 2 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm	ppm	ASTM D5185m ASTM D5185m	48 337 426 2280 limit/base >15 >20 limit/base >2500 >320 >80	0 <1 0 0 47 12 321 262 745 <i>current</i> <1 1 0 <i>current</i> 365 48 3	<1 <1 <1 <1 <0 14 49 304 269 2782 history1 2 <10 0 history1 382 112 28	<1 <1 <1 <1 <1 9 40 149 140 1329 140 1329 12 1 2 0 history2 1 2 4250 130 9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	48 337 426 2280 2280 315 >15 >20 20 20 320 >320 >320 >320 >320 >320	0 <1 0 47 12 321 262 745 current <1 1 0 current 365 48 3 1	<1 <1 <1 <1 0 14 49 304 269 2782 history1 2 <10 0 history1 382 112 28 20	<1 <1 <1 <1 <1 9 40 149 140 1329 history2 1 2 0 history2 1 2 0 history2 3

ISO 4406 (c) >18/15/13

16/13/9

Oil Cleanliness

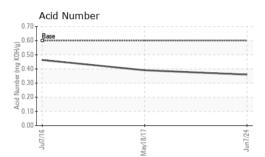
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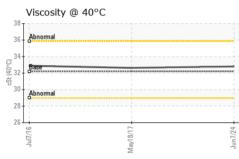
0 19/14/10

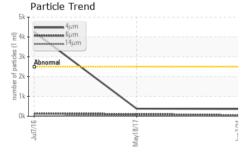


OIL ANALYSIS REPORT

Particle Tren	d	
5k Ξ 4k 4μm 6μm 14μm		
Figure 4k 6μm 19 sep size 6μm 4k Abnormal 5 μer 5 μer 6 μer 1 k		
0 2K		
0k 91/L192	LIN 18/18	Jun7/24



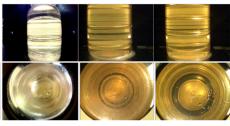




FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.6	0.36	0.391	0.463
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.21	32.8	32.63	32.89
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Color

Bottom



Ferrous Alloys Particle Count 491,520 122,880 e chi 30,72 ISO 4406:1999 Cle 20 Jun7/24 /av18/1 per 1 1,92 18 articles Non-ferrous Metals 480 16 120 14 30 12 8 2 /lav1 Viscosity @ 40°C Acid Number KOH/g) 40 1.00 Ab () 35 bu 충 30 Abnorma 25 0.00 Jun7/24 -May18/17 May18/17 7/24

TADANO MANTIS CORPORATION Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0836633 Received : 11 Jun 2024 2680 S FRONT ST Lab Number : 06206457 Tested : 13 Jun 2024 RICHLANDS, VA Unique Number : 11073918 Diagnosed : 13 Jun 2024 - Wes Davis US 24641 Test Package : IND 2 Contact: Mark McKinley Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. mark.mckinley@tadano.com T: (615)224-7110 * - 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: (615)790-6803

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Contact/Location: Mark McKinley - SPAFRA

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