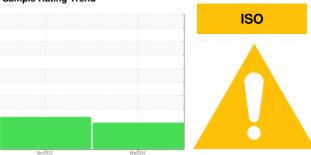


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

NISSEI IMM297-T13

Hydraulic System

MOBIL DTE 10 EXCEL 46 (95 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

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

			Nov2022	Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0894328	WC0670515	
Sample Date		Client Info		25 Mar 2024	01 Nov 2022	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Not Changd	
Sample Status				ABNORMAL	ABNORMAL	
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	3	4	
Chromium	ppm	ASTM D5185m	>20	2	2	
Nickel	ppm	ASTM D5185m	>20	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	0	0	
Lead	ppm	ASTM D5185m	>20	0	0	
Copper	ppm	ASTM D5185m	>20	9	<u>^</u> 22	
Tin	ppm	ASTM D5185m	>20	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		0	<1	
	ppm	ASTM D5185m ASTM D5185m		0	<1 0	
Molybdenum	ppm			-		
Molybdenum Manganese	ppm	ASTM D5185m		0	0	
Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m		0	0 <1	
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	0 <1 <1	
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 101	0 <1 <1 97 389	
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 101 415	0 <1 <1 97	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 101 415 5	0 <1 <1 97 389 18	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 101 415 5 1961	0 <1 <1 97 389 18 2000	
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 method		0 0 0 101 415 5 1961 current	0 <1 <1 97 389 18 2000 history1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	>15	0 0 0 101 415 5 1961 current	0 <1 <1 <97 389 18 2000 history1 <1	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 0 101 415 5 1961 current <1	0 <1 <1 97 389 18 2000 history1 <1	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15 >20	0 0 0 101 415 5 1961 current <1 0	0 <1 <1 <1 97 389 18 2000 history1 <1 1 0	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15 >20 limit/base	0 0 0 101 415 5 1961 current <1 0	0 <1 <1 <1 97 389 18 2000 history1 <1 0 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	>15 >20 limit/base >5000	0 0 0 101 415 5 1961 current <1 0 current 97344	0 <1 <1 <1 97 389 18 2000 history1 <1 0 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	>15 >20 limit/base >5000 >1300 >160	0 0 0 101 415 5 1961 current <1 0 0 current ▲ 97344 ▲ 9598	0	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	0 0 0 101 415 5 1961 current <1 0 0 current △ 97344 △ 9598 △ 402	0	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40	0 0 0 101 415 5 1961 current <1 0 0 current 97344 9598 402 104	0 <1 <1 <1 97 389 18 2000 history1 <1 1 0 history1 ▲ 122116 ▲ 42235 279 50	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	0 0 0 101 415 5 1961 current <1 0 0 current 97344 9598 402 104 1	0 <1 <1 <1 97 389 18 2000 history1 <1 1 0 history1 ▲ 122116 ▲ 42235 ○ 279 50 2	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10 >3	0 0 0 101 415 5 1961 current <1 0 0 current △ 97344 △ 9598 △ 402 △ 104 1	0 <1 <1 <1 97 389 18 2000 history1 <1 1 0 history1 ▲ 122116 ▲ 42235 ○ 279 50 2 0	history2 history2

Acid Number (AN)

mg KOH/g ASTM D8045

0.079

0.08

Report Id: SUMSCO [WUSCAR] 06148607 (Generated: 04/17/2024 14:26:53) Rev: 1

Contact/Location: BILLY CARDER - SUMSCO



OIL ANALYSIS REPORT







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0894328 Lab Number : 06148607 Unique Number : 10978685

Received Tested

: 15 Apr 2024 : 16 Apr 2024 Diagnosed

: 17 Apr 2024 - Don Baldridge

Test Package : IND 2 Certificate 12367 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)

Sumitomo Electric Wiring Systems

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US 42164 Contact: BILLY CARDER

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F: (270)237-9476 Contact/Location: BILLY CARDER - SUMSCO