

# **OIL ANALYSIS REPORT**

Sample Rating Trend



# NISSEI A-08 (S/N A26G041)

**Hydraulic System** 

**AW HYDRAULIC OIL ISO 46 (238 GAL)** 

## **DIAGNOSIS**

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

The copper level is abnormal. All other component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### **Fluid Condition**

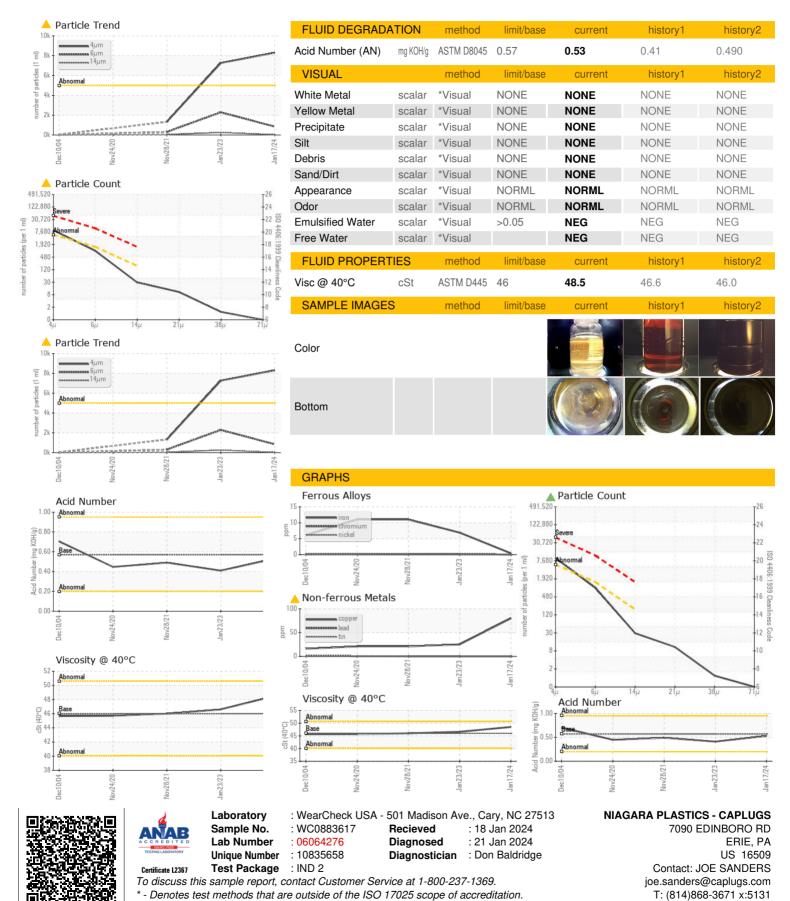
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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	Dec2004	Nov2020 No	v2021 Jan2023	Jan2024
NFORMATION	method	limit/base	current	history
her	Client Info	,	WC0883617	WC076847

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0883617	WC0768471	WC0631215
Sample Date		Client Info		17 Jan 2024	23 Jan 2023	28 Nov 2021
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
CONTAMINATION	V	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	<1	7	11
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	▲ 80	<u>▲</u> 25	21
Tin	ppm	ASTM D5185m	>20	<1	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm					
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	5	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5 5	0 0	0 2	0
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 5	0 0 0	0 2 <1	0 0 <1
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 0 <1	0 2 <1 0	0 0 0 <1 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25	0 0 0 <1 1	0 2 <1 0 8	0 0 <1 <1 7
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200	0 0 0 <1 1 30	0 2 <1 0 8 58	0 0 <1 <1 7 83
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300	0 0 0 <1 1 30 496	0 2 <1 0 8 58 382	0 0 <1 <1 7 83 398
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370	0 0 0 <1 1 30 496 639	0 2 <1 0 8 58 382 482	0 0 <1 <1 7 83 398 477
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base	0 0 0 <1 1 30 496 639 1614	0 2 <1 0 8 58 382 482 1638	0 0 <1 <1 7 83 398 477 1727
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 0 <1 1 30 496 639 1614	0 2 <1 0 8 58 382 482 1638 history1 2 0	0 0 <1 <1 7 83 398 477 1727 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 0 <1 1 30 496 639 1614 current	0 2 <1 0 8 58 382 482 1638 history1 2	0 0 <1 <1 7 83 398 477 1727 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 Iimit/base >15	0 0 0 <1 1 30 496 639 1614 current <1	0 2 <1 0 8 58 382 482 1638 history1 2 0	0 0 <1 <1 7 83 398 477 1727 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 0 <1 1 30 496 639 1614 current <1 <1	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1	0 0 -(1 -(1) 7 83 398 477 1727 history2 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	0 0 0 <1 1 30 496 639 1614 current <1 <1 0	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1 history1	0 0 -1 -1 -7 -83 -398 -477 -1727 -history2 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	0 0 0 <1 1 30 496 639 1614  current <1 0 current	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1 history1  1	0 0 <1 <1 7 83 398 477 1727 history2 0 0 history2 1325
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	0 0 0 41 1 30 496 639 1614  current <1 <1 0 current  \$\text{8296} 845	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1 history1  ↑ 7263 ↑ 2290	0 0 <1 <1 7 83 398 477 1727 history2 0 0 history2 1325 307
Boron Barium 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 ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	0 0 0 41 1 30 496 639 1614 current <1 <1 0 current  \$296 845 26	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1 history1  ↑ 7263 ↑ 2290 ↑ 252	0 0 <1 <1 7 83 398 477 1727 history2 0 0 0 history2 1325 307 39
Boron Barium 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 ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 0 0 <1 1 30 496 639 1614 current <1 <1 0 current ▲ 8296 845 26 9	0 2 <1 0 8 58 382 482 1638 history1 2 0 <1 history1  ↑ 7263 ↑ 2290 ↑ 252 ↑ 88	0 0 0 <1 <1 7 83 398 477 1727 history2 0 0 0 0 history2 1325 307 39



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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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