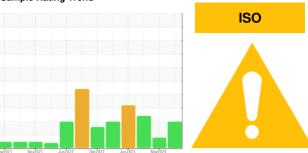


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

Truck Dump 2

Component Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- 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.

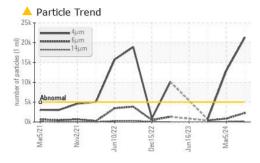
Fluid Condition

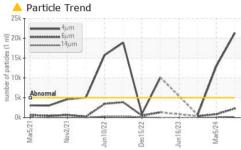
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

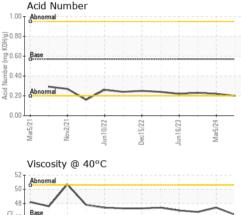
		Mar2021	Nov2021 Jun2022	Dec2022 Jun2023 M	ar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0839394	WC0814543	WC0814540
Sample Date		Client Info		16 Jul 2024	05 Mar 2024	25 Oct 2023
Machine Age	hrs	Client Info		26286	26286	60
Oil Age	hrs	Client Info		26286	26286	60
Oil Changed	0	Client Info		N/A	Filtered	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
			11 11 11		111	111
CONTAMINATION	N	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	4	3	1
Chromium	ppm	ASTM D5185m	>20	3	2	2
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	<1
Lead	ppm	ASTM D5185m	>20	5	6	5
Copper	ppm	ASTM D5185m	>20	39	37	35
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base		for the second	histow.0
		memoa	IIIIIII/Dase	current	nistory i	nisiorvz
				current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5 5	0 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 0	0 0 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 0 0	0 0 0	0 0 0
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 0 2	0 0 0 0	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200	0 0 0 0 2 78	0 0 0 0 0 0 70	0 0 0 0 0 0
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 0 2 78 255	0 0 0 0 0 0 70 243	0 0 0 0 0 0 82 262
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 ASTM D5185m	5 5 5 25 200 300 370	0 0 0 0 2 78 255 268	0 0 0 0 0 70 243 257	0 0 0 0 0 0 82 262 261
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	5 5 5 25 200 300 370 2500	0 0 0 0 2 78 255	0 0 0 0 0 0 70 243	0 0 0 0 0 82 262 261 616
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 0 2 78 255 268	0 0 0 0 0 70 243 257	0 0 0 0 0 0 82 262 261
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	0 0 0 0 2 78 255 268 727	0 0 0 0 0 70 243 257 671	0 0 0 0 0 82 262 261 616
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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 ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base	0 0 0 0 2 78 255 268 727	0 0 0 0 0 70 243 257 671 history1	0 0 0 0 0 82 262 261 616
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 0 2 78 255 268 727 current	0 0 0 0 0 70 243 257 671 history1	0 0 0 0 0 82 262 261 616 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 limit/base >15	0 0 0 0 2 78 255 268 727 current 2	0 0 0 0 0 70 243 257 671 history1 <1	0 0 0 0 0 82 262 261 616 history2
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	0 0 0 0 2 78 255 268 727 current 2 2 <1	0 0 0 0 0 70 243 257 671 history1 <1 2	0 0 0 0 0 82 262 261 616 history2
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	0 0 0 0 2 78 255 268 727 current 2 2 <1 current △ 21390	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2
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 method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 0 0 0 2 78 255 268 727 current 2 2 <1 current △ 21390 △ 2290	0 0 0 0 0 70 243 257 671 history1 <1 2 0	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2 678 370
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	0 0 0 0 2 78 255 268 727 current 2 2 <1 current △ 21390 △ 2290 △ 200	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1 ▲ 12941 848 59	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2
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	0 0 0 0 2 78 255 268 727 current 2 2 <1 current △ 21390 △ 2290	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1 12941 848	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2 678 370 63
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm 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 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 0 0 0 2 78 255 268 727 current 2 2 <1 current 1 21390 1 2290 1 200 1 54	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1 ▲ 12941 848 59 15	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2 678 370 63 21
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	0 0 0 0 2 78 255 268 727 current 2 2 <1 current ^ 21390 ^ 2290 ^ 54 1	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1 ▲ 12941 848 59 15 0	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2 678 370 63 21 3
Boron Barium 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 D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >15 >20 >1300 >1300 >140 >10 >3	0 0 0 0 2 78 255 268 727 current 2 2 <1 current △ 21390 △ 2290 △ 200 △ 54 1 0	0 0 0 0 0 70 243 257 671 history1 <1 2 0 history1 ▲ 12941 848 59 15 0 0	0 0 0 0 0 82 262 261 616 history2 1 2 0 history2 678 370 63 21 3

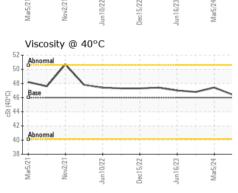


OIL ANALYSIS REPORT



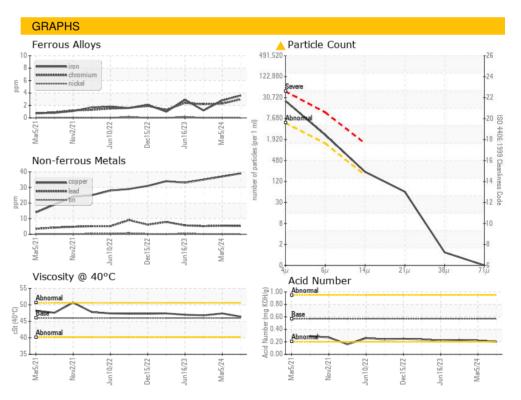






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.4	47.4	46.8
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color		
Bottom		







Certificate 12367

Laboratory Sample No. Lab Number : 06239561

: WC0839394 Unique Number : 11128395

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Test Package : IND 2

Received : 17 Jul 2024 **Tested**

: 18 Jul 2024 Diagnosed

: 19 Jul 2024 - Don Baldridge

3465 HWY 198 CARNESVILLE, GA US 30521 Contact: JOHNNY STONE johnny.stone@veolia.com

VEOLIA ENERGY - FRANKLIN

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)

T:

F: