

OIL ANALYSIS REPORT



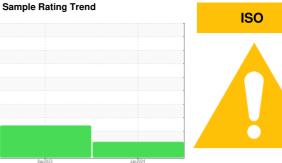


CATERPILLAR 775F HAUL TRUCK 6151 (S/N DLS00524)

Component

Center Right Hydraulic System

TULCO LUBSOIL SUPER HYDRAULIC HZ 46 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter 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 a high amount of silt (particulates < 14 microns in size) present in the oil.

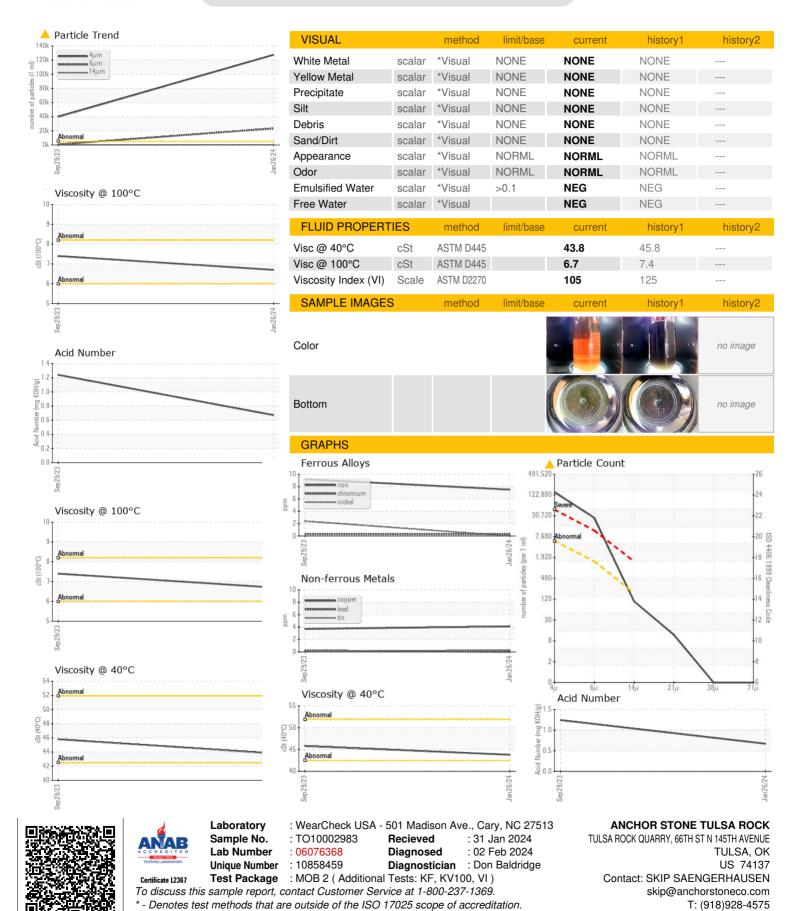
Fluid Condition

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

YDRAULIC HZ 46 (GAL)		Sep 2023	Jan 2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		TO10002983	TO10002738	
Sample Date		Client Info		26 Jan 2024	29 Sep 2023	
Machine Age	hrs	Client Info		1073	542	
Oil Age	hrs	Client Info		1073	542	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>26	8	9	
Chromium	ppm	ASTM D5185m	>5	<1	<1	
Nickel	ppm	ASTM D5185m	>10	0	2	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>11	3	0	
Lead	ppm	ASTM D5185m	>10	0	<1	
Copper	ppm	ASTM D5185m	>31	4	4	
Tin	ppm	ASTM D5185m	>10	<1	0	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	15	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		<1	4	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m		8	67	
Calcium	ppm	ASTM D5185m		166	2564	
Phosphorus	ppm	ASTM D5185m		689	866	
Zinc	ppm	ASTM D5185m		840	1109	
Sulfur	ppm	ASTM D5185m		1541	3805	
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>21	7	4 6	
Sodium	ppm	ASTM D5185m		<1	4	
Potassium	ppm	ASTM D5185m	>20	2	<1	
Water	%	ASTM D6304	>0.1	NEG	NEG	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647	>5000	<u> </u>	△ 39713	
Particles >6µm		ASTM D7647	>1300	<u>^</u> 23365	664	
Particles >14μm		ASTM D7647	>160	92	18	
Particles >21µm		ASTM D7647		10	6	
Particles >38μm		ASTM D7647	>10	0	1	
Particles >71μm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>4</u> 24/22/14	<u>22/17/11</u>	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.67	1.24	



OIL ANALYSIS REPORT



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

F: