

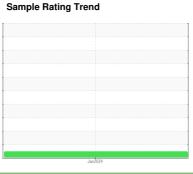
OIL ANALYSIS REPORT



CATERPILLAR 313F Hopkins 313

Hydraulic System

SAE 10W (--- LTR)





Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component(unconfirmed).

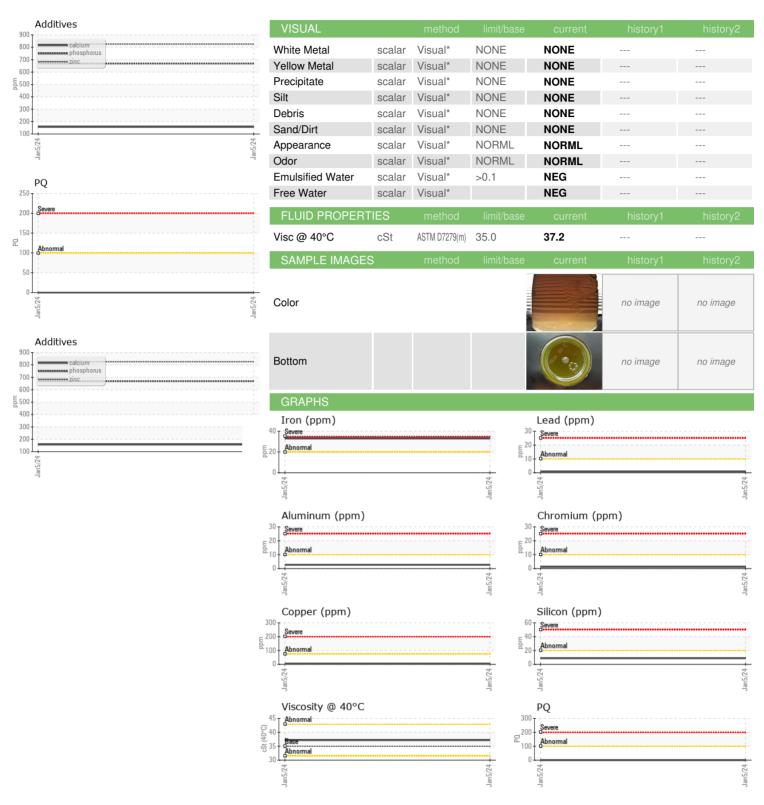
Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil.

SAMPLE INFORMATION method milibase current history1 history2							
Sample Number Client Info WC0818951			<u>, </u>		Jan 2024	,	
Sample Date Client Info 05 Jan 2024	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		WC0818951		
Dil Age	Sample Date		Client Info		05 Jan 2024		
Contained Citient Info Changed Normal Normal Normal Normal Contained Normal Normal	Machine Age	hrs	Client Info		6295		
CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		6295		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D5185(m) >20 33 Uron ppm ASTM D5185(m) >10 1 Ohromium ppm ASTM D5185(m) >10 1 Ohromium ppm ASTM D5185(m) >10 1 Okidel ppm ASTM D5185(m) >10 4 Silver ppm ASTM D5185(m) >10 3 Aluminum ppm ASTM D5185(m) >10 <1 Lead ppm ASTM D5185(m) >10 <1 Copper ppm ASTM D5185(m) >10 0 -	Oil Changed		Client Info		Changed		
Water WC Method >0.1 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 0 Iron ppm ASTM D5185(m) >20 33 Chromium ppm ASTM D5185(m) >10 -1 Nickel ppm ASTM D5185(m) 0 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) 10 3 Aluminum ppm ASTM D5185(m) >10 Aluminum ppm ASTM D5185(m) >10 Copper ppm ASTM D5185(m) >10 Copper ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 0 Iron ppm ASTM D5185(m) >20 33 Chromium ppm ASTM D5185(m) >10 1 Nickel ppm ASTM D5185(m) >10 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) >10 3 ALuminum ppm ASTM D5185(m) >10 Copper ppm ASTM D5185(m) >10 Copper ppm ASTM D5185(m) 0 Tin ppm ASTM D5185(m) 0 Antimony ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 <td colspan="2">CONTAMINATION</td> <td>method</td> <td>limit/base</td> <td>current</td> <td>history1</td> <td>history2</td>	CONTAMINATION		method	limit/base	current	history1	history2
PQ	Water		WC Method	>0.1	NEG		
	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185(m) > 1 0 1 Nickel ppm ASTM D5185(m) > 10 <1	PQ		ASTM D8184*		0		
Nickel	Iron	ppm	ASTM D5185(m)	>20	33		
Description	Chromium	ppm	ASTM D5185(m)	>10	1		
Silver	Nickel	ppm	ASTM D5185(m)	>10	<1		
Aluminum	Titanium	ppm	ASTM D5185(m)		0		
Lead	Silver	ppm	ASTM D5185(m)		0		
Copper ppm ASTM D5185(m) >75 5 Tin ppm ASTM D5185(m) >10 0 Antimony ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 3 Calcium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m)	Aluminum	ppm	ASTM D5185(m)	>10	3		
Tin	Lead	ppm	ASTM D5185(m)	>10	<1		
Antimony ppm ASTM D5185(m) 0 Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 826 Zinc ppm ASTM D5185(m) 1674 Zinc ppm ASTM D5185(m) <1	Copper	ppm	ASTM D5185(m)	>75	5		
Vanadium ppm ASTM D5185(m) 0 Beryllium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 826 Zinc ppm ASTM D5185(m) 1674 Sulfur ppm ASTM D5185(m) <1	Tin	ppm	ASTM D5185(m)	>10	0		
Beryllium	Antimony	ppm	ASTM D5185(m)		0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 3 Magnesium ppm ASTM D5185(m) 157 Calcium ppm ASTM D5185(m) 669 Phosphorus ppm ASTM D5185(m) 826 Zinc ppm ASTM D5185(m) 1674 Sulfur ppm ASTM D5185(m) <1	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 1 Barium ppm ASTM D5185(m) <1	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 1	Cadmium	ppm	ASTM D5185(m)		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 3 Calcium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 669 Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 20 9 Sodium ppm ASTM D5185(m) 1	Boron	ppm	ASTM D5185(m)		1		
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 3 Calcium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 669 Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Barium	ppm	ASTM D5185(m)		<1		
Magnesium ppm ASTM D5185(m) 3 Calcium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 669 Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		0		
Calcium ppm ASTM D5185(m) 157 Phosphorus ppm ASTM D5185(m) 669 Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0		
Phosphorus ppm ASTM D5185(m) 669 Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Magnesium	ppm	ASTM D5185(m)		3		
Zinc ppm ASTM D5185(m) 826 Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Calcium	ppm	ASTM D5185(m)		157		
Sulfur ppm ASTM D5185(m) 1674 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Phosphorus	ppm	ASTM D5185(m)		669		
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Zinc	ppm	ASTM D5185(m)		826		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Sulfur	ppm	ASTM D5185(m)		1674		
Silicon ppm ASTM D5185(m) >20 9 Sodium ppm ASTM D5185(m) 1	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 1	CONTAMINANTS	S	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>20	9		
Potassium ppm ASTM D5185(m) >20 2	Sodium	ppm	ASTM D5185(m)		1		
	Potassium	ppm	ASTM D5185(m)	>20	2		



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0818951

: 02607856

Recieved Diagnosed : 5708942

: 11 Jan 2024

Diagnostician : Kevin Marson

: 10 Jan 2024

Test Package : MOB 1 (Additional Tests: PQ) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

JD MOBILE REPAIR SERVICE

183841 GREY ROAD #9 HOLSTEIN, ON CA NOG 2A0 Contact: John Dowling dozerdoctor@hotmail.com T: (519)604-8247