

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

MANITOU NO UNIT PC0075951

Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm. 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

The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The condition of the oil is acceptable for the time in service.

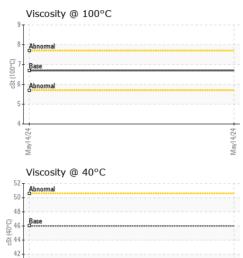
SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Client Info I4 May 2024 Sample Date Client Info 2786 Oil Age hrs Client Info 0 Oil Changed Client Info 0 Sample Status Client Info 0 CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185(m) >20 5 Wear WC Method >0 Nickel ppm ASTM 05185(m) >0 Silver ppm ASTM 05185(m) >20							
Sample Date Client Info 14 May 2024 Machine Age hrs Client Info 2786 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status Imit/base current history1 history2 Water WC Method >0.05 NEG VEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05185(m) >20 5 Nickel ppm ASTM 05185(m) >20 0 Nickel ppm ASTM 05185(m) >20 0 Aluminum ppm ASTM 05185(m) >20 0 Aluminum ppm ASTM 05185(m) >20 0 Copper ppm A	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
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Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status Client Info N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185(m) >20 c1 Chromium ppm ASTM 05185(m) >20 0 Nickel ppm ASTM 05185(m) >20 0 Aluminum ppm ASTM 05185(m) >20 0 Lead ppm ASTM 05185(m) >20 0 Antimony ppm ASTM 05185(m) >20 0 Vanadium </td <td>Sample Date</td> <td></td> <td>Client Info</td> <td></td> <td>14 May 2024</td> <td></td> <td></td>	Sample Date		Client Info		14 May 2024		
Oli Changed Client Info N/A Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05/85(m) >20 5 Nickel ppm ASTM 05/85(m) >20 1 Nickel ppm ASTM 05/85(m) >20 1 Silver ppm ASTM 05/85(m) >20 0 Lead ppm ASTM 05/85(m) >20 0 Tin ppm ASTM 05/85(m) >20 0 Antimony ppm ASTM 05/85(m) >20 0 Cadmium	Machine Age	hrs	Client Info		2786		
Sample Status NoRMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 5 Chromium ppm ASTM D5185(m) >20 0 Nickel ppm ASTM D5185(m) 20 4 Silver ppm ASTM D5185(m) 20 4 Aluminum ppm ASTM D5185(m) 20 4 Copper ppm ASTM D5185(m) 20 4 Antimony ppm ASTM D5185(m) 20 4 Cadmium ppm ASTM D5185(m) 20	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 5 Nickel ppm ASTM D5185(m) >20 <1	Oil Changed		Client Info		N/A		
Water WC Method >0.05 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >20 5 Ohromium ppm ASTM D5185(m) >20 <1	Sample Status				NORMAL		
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Chromium ppm ASTM D5185(m) >20 <1	WEAR META	LS	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185(m) >20 0 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) >20 <1	Iron	ppm	ASTM D5185(m)	>20	5		
Nickel ppm ASTM D5185(m) >20 0 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) >20 <1	Chromium	ppm	ASTM D5185(m)	>20	<1		
Number ppm ASTM D5185(m) 0 Aluminum ppm ASTM D5185(m) >20 <1	Nickel		ASTM D5185(m)	>20	0		
Aluminum ppm ASTM D5185(m) >20 <1 Lead ppm ASTM D5185(m) >20 0 Copper ppm ASTM D5185(m) >20 0 Tin ppm ASTM D5185(m) >20 0 Antimony ppm ASTM D5185(m) >20 0 Vanadium ppm ASTM D5185(m) 0 Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 5 0 Magnaese ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 200 222 Phosphorus ppm AS	Titanium	ppm	ASTM D5185(m)		0		
Lead ppm ASTM D5185(m) >20 of Copper ppm ASTM D5185(m) >20 <1	Silver	ppm	ASTM D5185(m)		0		
Copper ppm ASTM D5185(m) >20 <1 Tin ppm ASTM D5185(m) >20 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 ADDITTIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 5 0 Molybdenum ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 25 35 Magnesium ppm ASTM D5185(m) 200 222 Phosphorus ppm ASTM D5185(m) 300 232 </td <td>Aluminum</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>>20</td> <td><1</td> <td></td> <td></td>	Aluminum	ppm	ASTM D5185(m)	>20	<1		
Tin ppm ASTM D5185(m) >20 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) 5 <1	Lead	ppm	ASTM D5185(m)	>20	0		
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Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 5 <1 Barium ppm ASTM D5185(m) 5 0 Molybdenum ppm ASTM D5185(m) 5 0 Manganese ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 20 22 Magnesium ppm ASTM D5185(m) 200 232 Magnesium ppm ASTM D5185(m) 300 232 Phosphorus ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 5 <1	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 5 <1 Barium ppm ASTM D5185(m) 5 0 Molybdenum ppm ASTM D5185(m) 5 0 Manganese ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 25 35 Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185	Cadmium	ppm	ASTM D5185(m)		0		
Barium ppm ASTM D5185(m) 5 0 Molybdenum ppm ASTM D5185(m) 5 0 Manganese ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 25 35 Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 Solicon ppm ASTM D5185(m) >15 0 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm <td>ADDITIVES</td> <td></td> <td>method</td> <td>limit/base</td> <td>current</td> <td>history1</td> <td>history2</td>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 5 0 Manganese ppm ASTM D5185(m) 5 0 Magnesium ppm ASTM D5185(m) 25 35 Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <-1	Boron	ppm	ASTM D5185(m)	5	<1		
Manganese ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 25 35 Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Barium	ppm	ASTM D5185(m)	5	0		
Magnesium ppm ASTM D5185(m) 25 35 Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)	5	0		
Calcium ppm ASTM D5185(m) 200 22 Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Manganese	ppm	ASTM D5185(m)		0		
Phosphorus ppm ASTM D5185(m) 300 232 Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Magnesium	ppm	ASTM D5185(m)	25	35		
Zinc ppm ASTM D5185(m) 370 285 Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) 2500 3368 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Calcium	ppm	ASTM D5185(m)	200	22		
Sulfur ppm ASTM D5185(m) 2500 3368 Lithium ppm ASTM D5185(m) <	Phosphorus	ppm	ASTM D5185(m)	300	232		
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Zinc	ppm	ASTM D5185(m)	370	285		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Sulfur	ppm	ASTM D5185(m)	2500	3368		
Silicon ppm ASTM D5185(m) >15 0 Sodium ppm ASTM D5185(m) <1	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) <1	CONTAMINAI	NTS	method	limit/base	current	history1	history2
Sodium ppm ASTM D5185(m) <1	Silicon	ppm	ASTM D5185(m)	>15	0		
	Sodium		. ,		-		
	Potassium		()	>20	<1		



40 Abnormal

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OIL ANALYSIS REPORT



°C	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	VLITE		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
May14/24	Appearance	scalar	Visual*	NORML	NORML		
Ma	Odor	scalar	Visual*	NORML	NORML		
С	Emulsified Water	scalar	Visual*	>0.05	NEG		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPE		method	limit/base	current	history1	history2
-	Visc @ 40°C	cSt	ASTM D7279(m)	46	39.2		
	Visc @ 100°C	cSt	ASTM D7279(m)	6.7	6.7		
	Viscosity Index (VI)	Scale	ASTM D2270*	97	126		
24	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
May 4/24	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Iron (ppm)			10	Lead (ppm)		
	Severe			E S	Saura		
	Abnormal				Abnormal		
	sy14/24			May14/24 .	May14/24 .		May14/24
	M			M			Ma
	Aluminum (ppm)			10	Chromium (p	pm)	
	§ 50 - Abnormal			udd 5) - Severe Abnormal		
				2	0 L 📜 🚽		
	May14/2			May14/2	May14/24		May14/2
	Copper (ppm)			10	Silicon (ppm)		
	§ 50 - Severe			<u>6</u> 9	Saura		
	Abnormal				Abnormal		
	May14/24			May14/24	May14/24		May 14/24
	Viscosity @ 40°C				Additives		
	G G G 4 40			40 E m	calcium		
	20 40 20				D - BREERERERERERERERERERERERERERERERERERER		
	May14/24			May14/24 -	May14/24		May14/24 -
Accredited Unique Number	: MOB 1 (Additional Te contact Customer Servi of accreditation, (m) mo	Recei Teste Diagr sts: KV1 ce at 1-8 ethod mo	ived : 15 id : 16 nosed : 17 00, VI) 800-268-213 indified, (e) te	May 2024 May 2024 May 2024 - Kev sted at exter	3203 (rin Marson nal Iab.	CHEM. CHARLE Contact: Se	E LAFOND INC S - LEONARD MIRABEL, QC CA J7N 2Y7 ervice Manager enelafond.com T: F:

Report Id: JREMIR [WCAMIS] 02635691 (Generated: 05/17/2024 09:00:50) Rev: 1

> Contact/Location: Service Manager - JREMIR Page 2 of 2