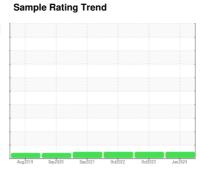


OIL ANALYSIS REPORT

ULTRACHEM 630 [1670516] L5-ML-BMA-DOS-VACP - PFNONWOVENS

Vacuum Pump





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

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

Sample Number							
Sample Date	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 7 9 10 Chromium ppm ASTM D5185m >20 0 0 0 Chromium ppm ASTM D5185m >20 0 0 0 Chromium ppm ASTM D5185m >20 0 0 0 Lead ppm ASTM D5185m >20 0 1 <1	Sample Number		Client Info		UCH06205609	UCH06049032	UCH05676300
Oil Age	Sample Date		Client Info		30 Jan 2024	30 Oct 2023	11 Oct 2022
Oil Changed Sample Status Client Info N/A N/A <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th>0</th><th>0</th></t<>	Machine Age	hrs	Client Info		0	0	0
NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		0	0	0
CONTAMINATION method limit/base current history1 history2 Water WC Method >.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 7 9 10 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >20 <1 1 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 1 <1 Tin ppm ASTM D5185m >20 0 <1 <1 Cadadum ppm ASTM D5185m 0 0 0 0 </td <td>Oil Changed</td> <td></td> <td>Client Info</td> <td></td> <th>N/A</th> <td>N/A</td> <td>N/A</td>	Oil Changed		Client Info		N/A	N/A	N/A
Water WC Method >.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 7 9 10 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >20 <1	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 7 9 10 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m 20 <1 1 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 1 <1 Lead ppm ASTM D5185m >20 0 1 <1 Lead ppm ASTM D5185m >20 0 1 <1 Lead ppm ASTM D5185m >20 0 1 <1 Copper ppm ASTM D5185m >20 0 0 0	CONTAMINATIC	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>.1	NEG	NEG	NEG
Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >20 <1 1 <1 Aluminum ppm ASTM D5185m >20 <1 1 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 1 <1 Tin ppm ASTM D5185m >20 0 <1 0 Antimony ppm ASTM D5185m Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0.1 4 2 0	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >20 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >20 <1	Iron	ppm	ASTM D5185m	>20	7	9	10
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >20 <1	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >20 <1 1 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 1 <1 Tin ppm ASTM D5185m >20 0 <1 0 Antimony ppm ASTM D5185m >20 0 <1 0 Antimony ppm ASTM D5185m Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0.1 4 2 0 Boron ppm ASTM D5185m 0.1 4 2 0	Nickel	ppm	ASTM D5185m	>20	0	0	0
Aluminum ppm ASTM D5185m >20 <1 1 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 1 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >20 0 1 <1 Tin ppm ASTM D5185m >20 0 <1	Aluminum	ppm	ASTM D5185m	>20	<1	1	<1
Tin ppm ASTM D5185m >20	Lead	ppm	ASTM D5185m	>20	0	0	0
Antimony ppm ASTM D5185m	Copper	ppm	ASTM D5185m	>20	0	1	<1
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4.1 <1 <1 <1 Barium ppm ASTM D5185m 0.1 4 2 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0.7 <1 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 <1 <1 Calcium ppm ASTM D5185m 0 2 2 0 0 Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current <th< td=""><td>Tin</td><td>ppm</td><td>ASTM D5185m</td><td>>20</td><th>0</th><td><1</td><td>0</td></th<>	Tin	ppm	ASTM D5185m	>20	0	<1	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4.1 <1	Antimony	ppm	ASTM D5185m				
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4.1 <1		ppm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 4.1 <1	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0.1 4 2 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0.7 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0.7 <1 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 <1 Calcium ppm ASTM D5185m 0 2 2 0 Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1	Boron	ppm	ASTM D5185m	4.1	<1	<1	<1
Manganese ppm ASTM D5185m 0.7 <1 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 <1 Calcium ppm ASTM D5185m 0 2 2 2 0 Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1	Barium	ppm	ASTM D5185m	0.1	4	2	0
Magnesium ppm ASTM D5185m 0 <1 <1 <1 Calcium ppm ASTM D5185m 0 2 2 0 Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1	Molybdenum	ppm	ASTM D5185m	0	0	0	0
Calcium ppm ASTM D5185m 0 2 2 0 Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 2 Sodium ppm ASTM D5185m >20 2 0 1 Potassium ppm ASTM D5185m >20 2 0 1	Manganese	ppm	ASTM D5185m	0.7	<1	<1	<1
Phosphorus ppm ASTM D5185m 1600 1155 1036 854 Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 2 Sodium ppm ASTM D5185m 1 2 0 0 Potassium ppm ASTM D5185m >20 2 0 1	Magnesium	ppm	ASTM D5185m	0	<1	<1	<1
Zinc ppm ASTM D5185m 0 10 0 2 Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Calcium	ppm	ASTM D5185m	0	2	2	0
Sulfur ppm ASTM D5185m 354 2354 1693 899 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Phosphorus	ppm	ASTM D5185m	1600	1155	1036	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Zinc	ppm	ASTM D5185m		10		_
Silicon ppm ASTM D5185m >15 <1	Sulfur	ppm	ASTM D5185m	354	2354	1693	899
Sodium ppm ASTM D5185m 1 2 0 Potassium ppm ASTM D5185m 20 2 0 1	CONTAMINANTS	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 0 1	Silicon	ppm	ASTM D5185m	>15	<1	<1	2
	Sodium	ppm	ASTM D5185m		1	2	0
FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	2	0	1
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2

Acid Number (AN)

mg KOH/g ASTM D8045 0.102

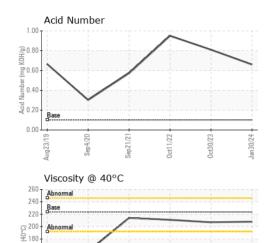
0.81

0.66

0.95



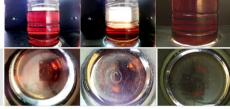
OIL ANALYSIS REPORT



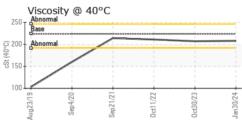
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	223.7	208	207	211
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
			,			

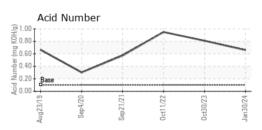
Bottom

Color



Ferrous Alloys Non-ferrous Metals









Certificate 12367

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Lab Number : 06205609 Unique Number : 11073070

Test Package : IND 2

: UCH06205609

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 10 Jun 2024 : 13 Jun 2024

: 13 Jun 2024 - Sean Felton

CORROSION PRODUCTS & EQUIPMENT 940 POINTVIEW AVE

EPHRATA, PA US 17522

Contact: RYAN HUNGARTER rhungarter@corrosion-products.com T: (717)961-1998

* - 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)