

# **OIL ANALYSIS REPORT**

# SMART OIL 6000 HERTZ VD002775 - WEIMAN

Component Compressor

SMARTOIL 6000 (--- GAL)

## Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## Wear

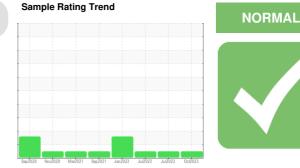
All component wear rates are normal.

## Contamination

Moderate concentration of visible dirt/debris present in the oil.

## Fluid Condition

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

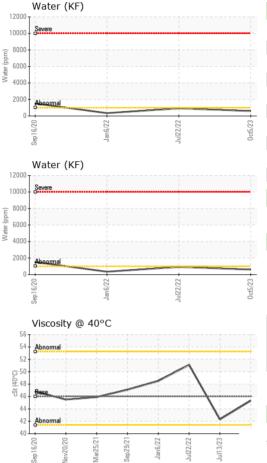


Sample NumberClient InfoUHK05978353UHK0000249UHK05603504Sample DateIClient Info05 Oct 202313 Jul 202322 Jul 2022Machine AgehrsClient Info794205025Oil AgehrsClient Info070271544Oil ChangedClient InfoNot ChangdNORMALNORMALSample StatusIImit/basecurrenthistoryhistoryVeAR METALSmethodimit/basecurrent00NickelppmASTM D5185m5001<1<1ChromiumppmASTM D5185m000<1NickelppmASTM D5185m00<1<1AluminumppmASTM D5185m00<1<1AluminumppmASTM D5185m2500<1AluminumppmASTM D5185m50<1<10LeadppmASTM D5185m50<1<10CadmiumppmASTM D5185m50<1<10NandaiumppmASTM D5185m50<1<10NameppmASTM D5185m50<1<10NameppmASTM D5185m50<1<1<1NameppmASTM D5185m50<1<1<1NoreppmASTM D5185m50<1<1<1Noreppm <th>SAMPLE INFORM</th> <th><b>IATION</b></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     7942     0     5025       Oil Age     hrs     Client Info     Not Changd     N/A     Not Changd       Sample Status     Image     Client Info     Not Changd     N/A     Not Changd       Sample Status     Image     Image     Current     history1     history2       Iron     ppm     ASTM D5185m     >50     1     <1     <1       Chromium     ppm     ASTM D5185m     >50     1     <1     <1       Nickel     ppm     ASTM D5185m     0     0     <1     <1       Aluminum     ppm     ASTM D5185m     22     1     0     0       Silver     ppm     ASTM D5185m     >25     0     0     0     1       Aluminum     ppm     ASTM D5185m     >50     <1     <1     0     1       Aluminum     ppm     ASTM D5185m     S1     <1     0     1     1       Antimony     ppm     ASTM D5185m <t< th=""><th>Sample Number</th><th></th><th>Client Info</th><th></th><th>UHK05978353</th><th>UHK0000249</th><th>UHK05603504</th></t<>	Sample Number		Client Info		UHK05978353	UHK0000249	UHK05603504
Oil Age     hrs     Client Info     0     7027     1544       Oil Changed     Client Info     Not Changd     N/A     Not Changd       Sample Status     Imathematical Client Info     NORMAL     NORMAL     NORMAL       WEAR METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     1     <1     <1       Chromium     ppm     ASTM D5185m     >50     1     <1     <1       Ohromium     ppm     ASTM D5185m     >50     1     <1     <1     <1       Nickel     ppm     ASTM D5185m     >25     0     0     <1     <1       Aluminum     ppm     ASTM D5185m     >25     0     0     <1     <1     0     <1     <1     0     <1     <1     0     <1     <1     0     <1     <1     0     <1     <1     0     <1     <1     0     <1     <1     0     1     <1	Sample Date		Client Info		05 Oct 2023	13 Jul 2023	22 Jul 2022
Oil Changed     Client Info     Not Changd     N/A     Not Changd       Sample Status     method     imit/base     current     history1     NoRMAL       WEAR METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     1     <1     <1       Chromium     ppm     ASTM D5185m     >0     0     0     <1       Nickel     ppm     ASTM D5185m     0     0     <11     0       Nickel     ppm     ASTM D5185m     0     0     <1     0       Aluminum     ppm     ASTM D5185m     >25     0     0     0       Lead     ppm     ASTM D5185m     >50     <1     0     1       Antimony     ppm     ASTM D5185m     >50     <1     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0 </th <th>Machine Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>7942</th> <th>0</th> <th>5025</th>	Machine Age	hrs	Client Info		7942	0	5025
Sample Status     method     Imit/base     current     NORMAL     NORMAL       WEAR METALS     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     1     <1     <1       Chromium     ppm     ASTM D5185m     0     0     0     <1       Nickel     ppm     ASTM D5185m     0     0     <1     0       Nickel     ppm     ASTM D5185m     0     0     <1     0       Aluminum     ppm     ASTM D5185m     >25     2     1     0     0       Lead     ppm     ASTM D5185m     >25     0     0     0     0       Copper     ppm     ASTM D5185m     >50     <1     <1     0     1       Antimony     ppm     ASTM D5185m     >15     <1     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0     0       Boron     ppm	Oil Age	hrs	Client Info		0	7027	1544
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >50     1     <1     <1       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     0     0     0     <11       Titanium     ppm     ASTM D5185m     0     0     0     <11       Aluminum     ppm     ASTM D5185m     >25     2     1     0       Lead     ppm     ASTM D5185m     >25     0     0     <11       Antimony     ppm     ASTM D5185m     >50     <1     <1     0       Tin     ppm     ASTM D5185m     >50     <1     <1     0     <1       Antimony     ppm     ASTM D5185m     >50     <1     <1     0     <1       Antimony     ppm     ASTM D5185m     0     0     0     <1       Antimony     ppm     ASTM D5185m     0	Oil Changed		Client Info		Not Changd	N/A	Not Changd
Iron     ppm     ASTM D5185m     >50     1     <1	Sample Status				NORMAL	NORMAL	NORMAL
Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     0     0     <1       Titanium     ppm     ASTM D5185m     0     0     <1       Silver     ppm     ASTM D5185m     0     0     <1       Aluminum     ppm     ASTM D5185m     >25     2     1     0       Lead     ppm     ASTM D5185m     >25     0     0     0       Copper     ppm     ASTM D5185m     >50     <1     <1     0       Tin     ppm     ASTM D5185m     >50     <1     0     <1       Antmony     ppm     ASTM D5185m     0     0     0     0       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     <1     0       Boron     ppm     ASTM D5185m     0     0     <1     0       Molybdenum     p	WEAR METALS		method	limit/base	current	history1	history2
Nickel     ppm     ASTM D5185m     0     0     <1	Iron	ppm	ASTM D5185m	>50	1	<1	<1
Titanium     ppm     ASTM D5185m     <1	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver     ppm     ASTM D5185m     0     0     <1	Nickel	ppm	ASTM D5185m		0	0	<1
Aluminum     ppm     ASTM D5185m     >25     2     1     0       Lead     ppm     ASTM D5185m     >25     0     0     0       Copper     ppm     ASTM D5185m     >50     <1     <1     0       Tin     ppm     ASTM D5185m     >15     <1     0     <1       Antimony     ppm     ASTM D5185m           Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDIT/VES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0     <1     0       Molybdenum     ppm     ASTM D5185m     2     <1     0     0       Maganese     ppm     ASTM D5185m     2     <1     0     0       Calcium     ppm     ASTM D5185m     20     1     4	Titanium	ppm	ASTM D5185m		<1	0	0
Lead     ppm     ASTM D5185m     >25     0     0     0       Copper     ppm     ASTM D5185m     >50     <1	Silver	ppm	ASTM D5185m		0	0	<1
Copper     ppm     ASTM D5185m     >50     <1	Aluminum	ppm	ASTM D5185m	>25	2	1	0
Tin     ppm     ASTM D5185m     >15     <1	Lead	ppm	ASTM D5185m	>25	0	0	0
Antimony     ppm     ASTM D5185m          Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     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     0     <1     0       Barium     ppm     ASTM D5185m     0     <1     0     <1       Molybdenum     ppm     ASTM D5185m     0     <1     0     <1       Manganese     ppm     ASTM D5185m     2     <1     0     <1       Calcium     ppm     ASTM D5185m     20     1     4     0       Phosphorus     ppm     ASTM D5185m     153     80     578       Zinc     ppm     ASTM D5185m     717     1083     542       CONTA	Copper	ppm	ASTM D5185m	>50	<1	<1	0
Vanadium     ppm     ASTM D5185m     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0         Barium     ppm     ASTM D5185m     0     0     <1	Tin	ppm	ASTM D5185m	>15	<1	0	<1
Cadmium     ppm     ASTM D5185m     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0     <1	Antimony	ppm	ASTM D5185m				
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m00<1BariumppmASTM D5185m2<10MolybdenumppmASTM D5185m0<10ManganeseppmASTM D5185m000MagnesiumppmASTM D5185m2<10CalciumppmASTM D5185m20140PhosphorusppmASTM D5185m15380578ZincppmASTM D5185m13<16SulfurppmASTM D5185m7171083542CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>2531<1SodiumppmASTM D5185m3000	Vanadium	ppm	ASTM D5185m		0	0	0
Boron     ppm     ASTM D5185m     0     0     <1	Cadmium	ppm	ASTM D5185m		0	0	0
Barium     ppm     ASTM D5185m     2     <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     0     <1	Boron	ppm	ASTM D5185m		0	0	<1
Manganese     ppm     ASTM D5185m     0     0     0       Magnesium     ppm     ASTM D5185m     2     <1     0       Calcium     ppm     ASTM D5185m     20     1     4     0       Phosphorus     ppm     ASTM D5185m     153     80     578       Zinc     ppm     ASTM D5185m     13     <1     6       Sulfur     ppm     ASTM D5185m     717     1083     542       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     3     1     <1       Sodium     ppm     ASTM D5185m     3     0     0	Barium	ppm	ASTM D5185m		2	<1	0
Magnesium     ppm     ASTM D5185m     2     <1	Molybdenum	ppm	ASTM D5185m		0	<1	0
Calcium     ppm     ASTM D5185m     20     1     4     0       Phosphorus     ppm     ASTM D5185m     153     80     578       Zinc     ppm     ASTM D5185m     13     <1	Manganese	ppm	ASTM D5185m		0	0	0
Phosphorus     ppm     ASTM D5185m     153     80     578       Zinc     ppm     ASTM D5185m     13     <1	Magnesium	ppm	ASTM D5185m		2	<1	0
Zinc     ppm     ASTM D5185m     13     <1	Calcium	ppm	ASTM D5185m	20	1	4	0
Sulfur     ppm     ASTM D5185m     717     1083     542       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m<>25     3     1     <1	Phosphorus	ppm	ASTM D5185m		153	80	578
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<>2531<1SodiumppmASTM D5185m300	Zinc	ppm	ASTM D5185m		13	<1	6
Silicon     ppm     ASTM D5185m     >25     3     1     <1	Sulfur	ppm	ASTM D5185m		717	1083	542
Sodium     ppm     ASTM D5185m     3     0     0	CONTAMINANTS		method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	3	1	<1
Potassium     ppm     ASTM D5185m     >20     0     <1	Sodium	ppm	ASTM D5185m		3	0	0
	Potassium	ppm	ASTM D5185m	>20	0	<1	0

Water	%	ASTM D6304	>0.1	0.060		0.092
ppm Water	ppm	ASTM D6304	>1000	600		920
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	ma KOH/a	ASTM D8045		0.11	0.13	0.058

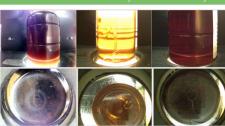


# **OIL ANALYSIS REPORT**

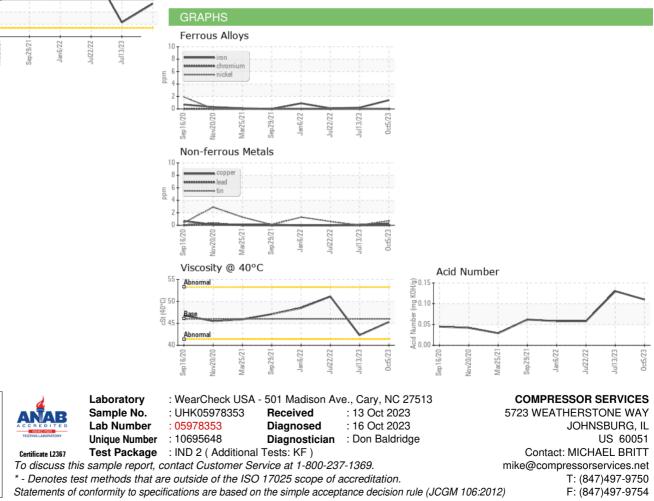


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.3	42.3	51.1
SAMPLE IMAGES	5	method	limit/base	current	history1	history2

Color



Bottom



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Contact/Location: MICHAEL BRITT - UCCOMJOH