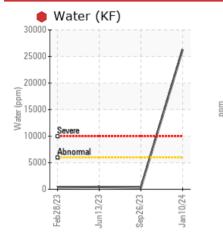
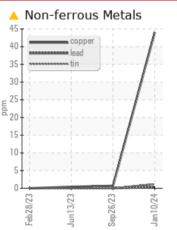


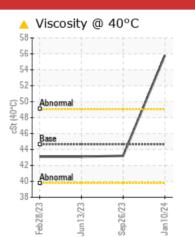
Machine Id 1701130001

Component **Air Compressor** Fluic **ULTRACHEM PALEXTRA 44 (--- GAL)**

COMPONENT CONDITION SUMMARY

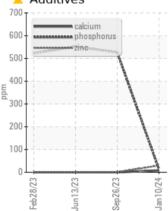






Sample Rating Trend

Additives



RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We advise an early resample to confirm this situation.

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	NORMAL	NORMAL	
Copper	ppm	ASTM D5185m	>40	<u> </u>	<1	<1	
Water	%	ASTM D6304	>0.6	e 2.63	0.033	0.043	
ppm Water	ppm	ASTM D6304	>6000	e 26300	333.9	436.2	

Customer Id: AMEITT Sample No.: USP0005238 Lab Number: 06058100 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

WATER

RECOMMENDED	ACTIONS			
Action	Status	Date	Done By	Description
Change Fluid			?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter			?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample			?	We advise an early resample to confirm this situation.

HISTORICAL DIAGNOSIS



26 Sep 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

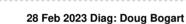


view report

13 Jun 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



NORMAL



Resample at the next service interval to monitor. Please specify the brand and viscosity of the oil on your next sample.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 1701130001

Component Air Compressor Fluid ULTRACHEM PALEXTRA 44 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We advise an early resample to confirm this situation.

🔺 Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is a high concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

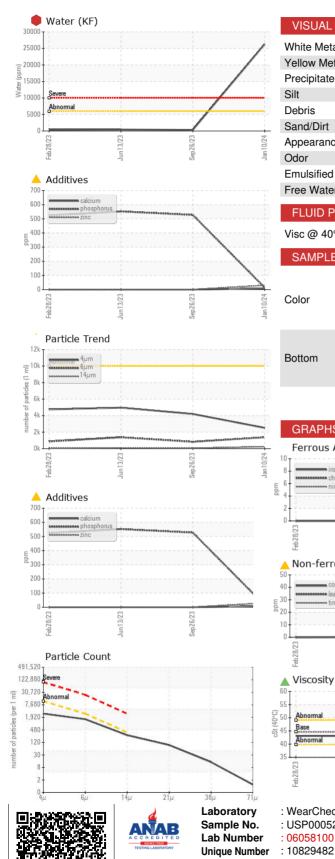
Fluid Condition

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

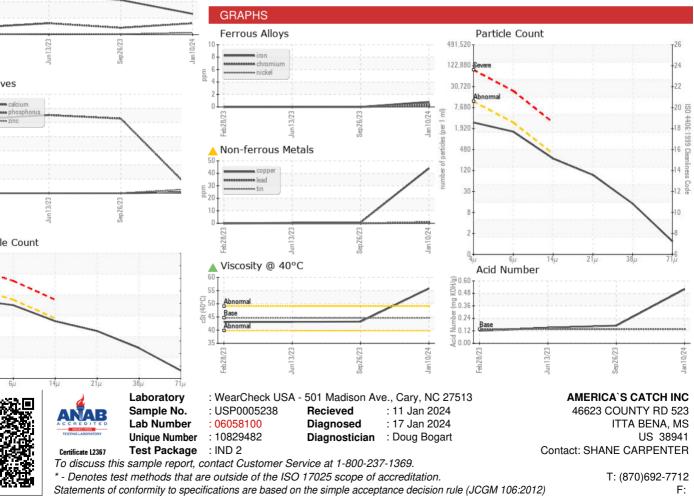
Sample NumberClient InfoUSP0005238USP0001828USP244534Sample DateClient Info10 Jan 202426 Sep 202313 Jun 2023Machine AgehrsClient Info000Ol AgehrsClient InfoN/AN/AN/ASample StatusClient InfoN/AN/AN/AN/AMEAR METALSmethodMrXASEVERENORMALNORMALVerantic MarcinappmASTM 051858>50<100ChromiumppmASTM 051858>44<100NickelppmASTM 051858>10<100SilverppmASTM 051858>10200CopperppmASTM 051858>50100CopperppmASTM 051858>50100CadmiumppmASTM 051858>50100ADDITIVESmethodmithodsadd414<1<<1MaganesppmASTM 0518580600MaganesppmASTM 0518580.4600MaganesppmASTM 0518580.4600MaganesppmASTM 0518580.4600MandanppmASTM 0518580.4600MandanppmASTM 0518580.4600MaganesppmASTM	SAMPLE INFORM	IATION	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 Imit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Tranium ppm ASTM D5185m >4 <1 0 0 Silver ppm ASTM D5185m >0 0 0 0 Copper ppm ASTM D5185m >20 1 0 0 Cadmium ppm ASTM D5185m >5 1 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 ASTM D5185m 0.3 4 334 0 0 0 C	Sample Number		Client Info		USP0005238	USP0001852	USP244534
Machine Age hrs Client Info 0 0 0 0 Oil Aga hrs Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status n nethod imit/base current history1 history2 Iron ppm ASTM D5185m >50< <1 0 0 Nickel ppm ASTM D5185m >44 <1 0 0 Titanium ppm ASTM D5185m >44 <1 0 0 Silver ppm ASTM D5185m >0 0 0 0 Cadmium ppm ASTM D5185m >20 <1 0 0 Cadmium ppm ASTM D5185m >5 1 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 AsTM D5185m 0.3 A 334 0 0	•		Client Info		10 Jan 2024	26 Sep 2023	13 Jun 2023
Oil Changed Sample Status Client Info N/A N/A N/A N/A WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >4 <1 0 0 Chromium ppm ASTM D5185m >4 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Juminum ppm ASTM D5185m >4 <1 0 0 Auminum ppm ASTM D5185m >20 <1 0 0 Lead ppm ASTM D5185m >20 <1 0 0 Vanadium ppm ASTM D5185m >5 1 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 AstM D5185m 0.3 41 0 0 0 0 Magnese ppm ASTM D5185m 0.3 41 527 <	Machine Age	hrs	Client Info		0		0
Sample Status nethod Imit/base current NORMAL NORMAL WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 Auminum ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >20 <1 0 0 Cadmium ppm ASTM D5185m >5 1 0 0 Adminum ppm ASTM D5185m >4 4 1 ref Copper ppm ASTM D5185m 0 6 0 0 Adminum ppm ASTM D5185m 0 6 0	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 0 0 Chromium ppm ASTM D5185m >4 <1 0 0 Nickel ppm ASTM D5185m >4 <1 0 0 Silver ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >10 2 0 0 Copper ppm ASTM D5185m >20 <1 0 0 Cadmium ppm ASTM D5185m >20 <1 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 Manganese ppm ASTM D5185m <3 34 0 0 Maganeses ppm ASTM D5185m 0 30 0	Oil Changed		Client Info		N/A	N/A	N/A
Iron ppm ASTM D5185m >50 <1	Sample Status				SEVERE	NORMAL	NORMAL
Chromium ppm ASTM D5185m >4 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >4 <1	Iron	ppm	ASTM D5185m	>50	<1	0	0
Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>4	<1	0	0
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >20 <1 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 6 0 0 Magnesium ppm ASTM D5185m 0.3 <1 0 0 Magnesium ppm ASTM D5185m 0.3 <1 <1 0 0 Calcium ppm ASTM D5185m 0.3 <14 527 552 2 Zinc ppm ASTM D5185m 1237	Nickel	ppm	ASTM D5185m	>4	<1	0	0
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 0 Lead ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >20 <1 0 0 Vanadium ppm ASTM D5185m >20 <1 0 0 Vanadium ppm ASTM D5185m <1 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 <1 0 0 Maganese ppm ASTM D5185m 0.3 <1 0 0 Maganesium ppm ASTM D5185m 0.4 6 0 0 0 Calcium ppm ASTM D5185m 0.4 6 0 0 0 Sulfor ppm ASTM D5185m 0.4	Titanium	ppm	ASTM D5185m		<1	<1	0
Lead ppm ASTM D5185m >20 <1	Silver		ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >40 44 <1	Aluminum	ppm	ASTM D5185m	>10	2	0	0
Copper ppm ASTM D5185m >40 44 <1	Lead		ASTM D5185m	>20	<1	0	0
Tin ppm ASTM D5185m >5 1 0 0 Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 6 0 0 Barium ppm ASTM D5185m 0.3 4 334 0 0 Manganese ppm ASTM D5185m 0.3 <1 <1 0 Manganesum ppm ASTM D5185m 0.4 6 0 0 Phosphorus ppm ASTM D5185m 0.4 6 0 0 Sulfur ppm ASTM D5185m 0.4 30 0 0 Sulfur ppm ASTM D5185m 1237 ✓ 425 515 685 CONTAMINANTS method limit/base current history1 <th>Copper</th> <th></th> <th>ASTM D5185m</th> <th>>40</th> <th><u> </u></th> <th><1</th> <th><1</th>	Copper		ASTM D5185m	>40	<u> </u>	<1	<1
Vanadium ppm ASTM D5185m <1		ppm	ASTM D5185m	>5	1	0	0
Cadmium ppm ASTM D5185m <1	Vanadium		ASTM D5185m		<1	0	0
Boron ppm ASTM D5185m 0 6 0 0 Barium ppm ASTM D5185m 0.3 334 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 0 Manganese ppm ASTM D5185m 0.3 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.4 6 0 0 0 Calcium ppm ASTM D5185m 0 8 0 0 0 Phosphorus ppm ASTM D5185m 689 14 527 552 Zinc ppm ASTM D5185m 1237 425 515 685 CONTAMINANTS method Imit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1 <1 Sodium ppm ASTM D5185m >20 9 0 1 Water pdd ASTM D50	Cadmium		ASTM D5185m		<1	0	0
Barium ppm ASTM D5185m 0.3 ▲ 334 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 0 Maganese ppm ASTM D5185m 0.3 <1 <1 0 0 Magnesium ppm ASTM D5185m 0.4 6 0 0 0 Calcium ppm ASTM D5185m 0.4 6 0 0 0 Phosphorus ppm ASTM D5185m 0.4 6 0 0 0 Sulfur ppm ASTM D5185m 0.4 30 0 0 0 Sulfur ppm ASTM D5185m 1237 425 515 685 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1 0 Potassium ppm ASTM D5185m >20 9 0 1 Water </th <th>ADDITIVES</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0. <1	Boron	ppm	ASTM D5185m	0	6	0	0
Manganese ppm ASTM D5185m 0.3 <1	Barium		ASTM D5185m	0.3	3 34	0	0
Manganese ppm ASTM D5185m 0.3 <1	Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Calcium ppm ASTM D5185m 0 8 0 0 Phosphorus ppm ASTM D5185m 689 14 527 552 Zinc ppm ASTM D5185m 0 30 0 0 Sulfur ppm ASTM D5185m 1237 ▲ 425 515 685 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1 <1 Sodium ppm ASTM D5185m >20 9 0 1 Vater % ASTM D5185m >20 9 0 1 Water % ASTM D6304 >0.6 2.63 0.033 0.043 ppm Water ppm ASTM D6304 >0.0 26300 333.9 436.2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >200 137		ppm	ASTM D5185m	0.3	<1	<1	0
Phosphorus ppm ASTM D5185m 689 ▲ 14 527 552 Zinc ppm ASTM D5185m 0 ▲ 30 0 0 Sulfur ppm ASTM D5185m 1237 ▲ 425 515 685 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1	Magnesium	ppm	ASTM D5185m	0.4	6	0	0
Zinc ppm ASTM D5185m 0 ▲ 30 0 0 0 Sulfur ppm ASTM D5185m 1237 ▲ 425 515 685 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1	Calcium	ppm	ASTM D5185m	0	8	0	0
Sulfur ppm ASTM D5185m 1237 ▲ 425 515 685 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1 <1 Sodium ppm ASTM D5185m >20 9 0 1 Potassium ppm ASTM D5185m >20 9 0 1 Water % ASTM D6304 >0.6 2.63 0.033 0.043 ppm Water ppm ASTM D7647 >10000 2514 4198 4963 Particles >4µm ASTM D7647 >2500 1370 826 1374 Particles >6µm ASTM D7647 >320 233 57 98 Particles >14µm ASTM D7647 >320 233 57 98 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >20 12 1 2	Phosphorus	ppm	ASTM D5185m	689	1 4	527	552
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 7 <1 <1 Sodium ppm ASTM D5185m >20 9 0 1 Potassium ppm ASTM D5185m >20 9 0 1 Water % ASTM D6304 >0.6 2.63 0.033 0.043 ppm Water ppm ASTM D6304 >6000 26300 333.9 436.2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >20 12 1 <	Zinc	ppm	ASTM D5185m	0	a 30	0	0
Silicon ppm ASTM D5185m >25 7 <1	Sulfur	ppm	ASTM D5185m	1237	425	515	685
Sodium ppm ASTM D5185m 72 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 9 0 1 Water % ASTM D6304 >0.6 2.63 0.033 0.043 ppm Water ppm ASTM D6304 >6000 26300 333.9 436.2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >14µm ASTM D7647 >20 12 1 2 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1	Silicon	ppm	ASTM D5185m	>25	7	<1	<1
Water % ASTM D6304 >0.6 2.63 0.033 0.043 ppm Water ppm ASTM D6304 >6000 26300 333.9 436.2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m			<1	0
ppm Water ppm ASTM D6304 >6000 26300 333.9 436.2 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2							
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >6µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2		%					
Particles >4µm ASTM D7647 >10000 2514 4198 4963 Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14	ppm Water	ppm	ASTM D6304	>6000	e 26300	333.9	436.2
Particles >6µm ASTM D7647 >2500 1370 826 1374 Particles >14µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >38µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >320 233 57 98 Particles >21µm ASTM D7647 >80 79 18 24 Particles >38µm ASTM D7647 >20 12 1 2 Particles >71µm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14							
Particles >21μm ASTM D7647 >80 79 18 24 Particles >38μm ASTM D7647 >20 12 1 2 Particles >37μm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2				>2500			
Particles >38μm ASTM D7647 >20 12 1 2 Particles >71μm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2				>320			98
Particles >71μm ASTM D7647 >4 1 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2				>80		18	
Oil Cleanliness ISO 4406 (c) >20/18/15 19/18/15 19/17/13 19/18/14 FLUID DEGRADATION method limit/base current history1 history2				>20	12	1	2
FLUID DEGRADATION method limit/base current history1 history2	-		ASTM D7647	>4	1		
	Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/18/15	19/17/13	19/18/14
Acid Number (AN) mg KOH/g ASTM D8045 0.135 0.52 0.17 0.15	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.135	0.52	0.17	0.15



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	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	NONE	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	>0.6	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	44.62	▲ 55.79	43.2	43.1
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color				an Palatek	· Q.	
Bottom						



Contact/Location: SHANE CARPENTER - AMEITT