

OIL ANALYSIS REPORT

Sample Rating Trend ISO

Machine Id **TOTE 120**

New (Unused) Oil

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

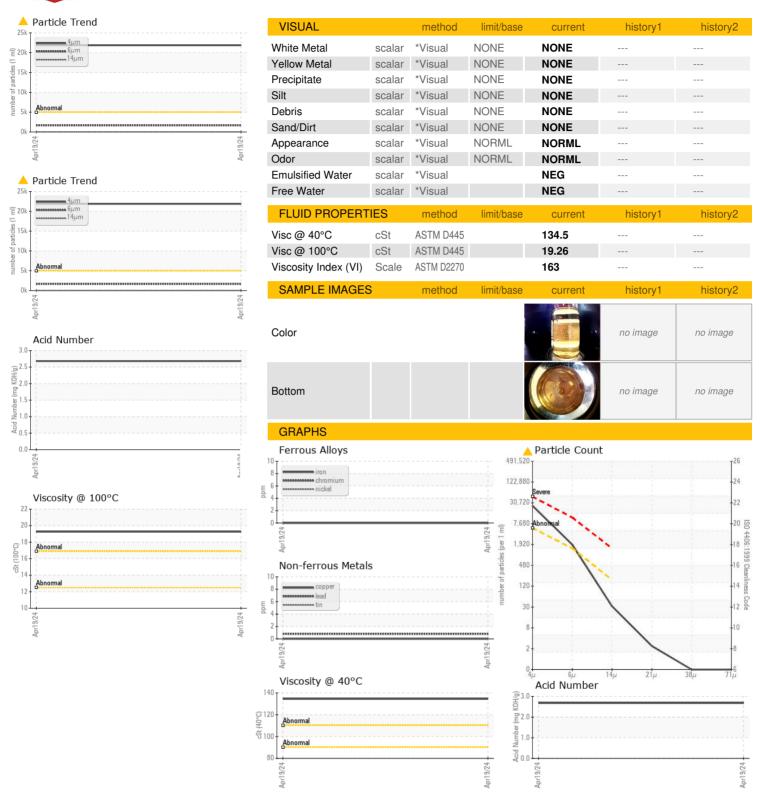
Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Iron	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0	Sample Number		Client Info		TLC0001674		
Oil Age hrs Client Info N/A Oil Changed Client Info N/A Sample Status method limit/base current history1 h Iron ppm ASTM D5185m >5 0 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 0 Aluminum ppm ASTM D5185m >5 0 Aluminum ppm ASTM D5185m >5 0 Lead ppm ASTM D5185m >5 0 Copper ppm ASTM D5185m >5 0 Cadmium ppm ASTM D5185m 0	Sample Date		Client Info		19 Apr 2024		
Cilient Info	Machine Age	hrs	Client Info		0		
Sample Status method limit/base current history1 h Iron ppm ASTM D5185m >5 0 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 0 ALuminum ppm ASTM D5185m >5 <1	Oil Age	hrs	Client Info		0		
WEAR METALS method limit/base current history1 h Iron ppm ASTM D5185m >5 0 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m >5 0 Aluminum ppm ASTM D5185m >5 0 Lead ppm ASTM D5185m >5 <1	Oil Changed		Client Info		N/A		
Cohromium	Sample Status				ABNORMAL		
Chromium	WEAR METALS		method	limit/base	current	history1	history
Nickel ppm ASTM D5185m >5 0 Silver ppm ASTM D5185m 0	Iron	ppm	ASTM D5185m	>5	0		
Description	Chromium	ppm	ASTM D5185m	>5	0		
Saliver	Nickel	ppm	ASTM D5185m	>5	0		
Aluminum ppm ASTM D5185m >5 <1	Titanium	ppm	ASTM D5185m		0		
Lead ppm ASTM D5185m >5 <1 Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 In Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 3 Molybdenum ppm ASTM D5185m 3 Magnesium ppm ASTM D5185m 5 Magnesium ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 9065 Sulfur ppm ASTM D5185m 9065 <td>Silver</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>5</td> <td>0</td> <td></td> <td></td>	Silver	ppm	ASTM D5185m	>5	0		
Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m <1	Aluminum		ASTM D5185m	>5	<1		
Copper ppm ASTM D5185m >5 0 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m <1	Lead	ppm	ASTM D5185m	>5	<1		
ASTM D5185m STM D5185m	Copper		ASTM D5185m	>5	0		
Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 h Boron ppm ASTM D5185m 113 Barium ppm ASTM D5185m <1 Molybdenum ppm ASTM D5185m 3 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 5 Calcium ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 9065 Zinc ppm ASTM D5185m 9065 Zinc ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 <th< td=""><td></td><td></td><td></td><td>>5</td><td>0</td><td></td><td></td></th<>				>5	0		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 h Boron ppm ASTM D5185m 113 Barium ppm ASTM D5185m 3 Molybdenum ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 5 Magnesium ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 9065 Zinc ppm ASTM D5185m 9065 Sulfur ppm ASTM D5185m >15 1 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 <td< td=""><td>Vanadium</td><td></td><td></td><td></td><td><1</td><td></td><td></td></td<>	Vanadium				<1		
Boron ppm ASTM D5185m 113	Cadmium				0		
Barium	ADDITIVES		method	limit/base	current	history1	history
Molybdenum ppm ASTM D5185m 3 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 5 Calcium ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 94 Zinc ppm ASTM D5185m 50 Zinc ppm ASTM D5185m 50 Sulfur ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 1 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 1 Potassium ppm ASTM D5185m	Boron	ppm	ASTM D5185m		113		
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 5 Phosphorus ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 887 Zinc ppm ASTM D5185m 50 Sulfur ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 1 Sodium ppm ASTM D5185m >20 3 Potassium ppm ASTM D5185m >20 3 Water % ASTM D5185m >20 3 Particles >4µm ASTM D5185m >20 3 Particles >6µm ASTM D7647 </td <td>Barium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td><1</td> <td></td> <td></td>	Barium	ppm	ASTM D5185m		<1		
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Calcium ppm ASTM D5185m 94 Phosphorus ppm ASTM D5185m 887 Zinc ppm ASTM D5185m 50 Sulfur ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >15 1 Sodium ppm ASTM D5185m >20 3 Potassium ppm ASTM D5185m >20 3 Water % ASTM D6304 NEG FLUID CLEANLINESS method limit/base current history1 h Particles >4μm ASTM D7647 >5000 21871 Particles >6μm ASTM D7647 >1300 1669 Particles >21μm A	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 887 Sulfur ppm ASTM D5185m 50 Sulfur ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 h Silicon ppm ASTM D5185m >1 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 3 Water % ASTM D5185m >20 3 FLUID CLEANLINESS method limit/base current history1 h Particles >4µm ASTM D7647 >5000 21871 Particles >6µm ASTM D7647 >160 28 Particles >21µm ASTM D7647 >40 2 Particles >71µm ASTM D7647	Magnesium	ppm	ASTM D5185m		5		
Zinc ppm ASTM D5185m 50 Sulfur ppm ASTM D5185m 9065 CONTAMINANTS method limit/base current history1 his	Calcium	ppm	ASTM D5185m		94		
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Silicon ppm ASTM D5185m >15 1 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 3 Water % ASTM D6304 NEG FLUID CLEANLINESS method limit/base current history1 h Particles >4µm ASTM D7647 >5000 ▲ 21871 Particles >6µm ASTM D7647 >1300 ● 1669 Particles >14µm ASTM D7647 >160 28 Particles >21µm ASTM D7647 >40 2 Particles >38µm ASTM D7647 >10 0 Particles >71µm ASTM D7647 >3 0 FLUID DEGRADATION method limit/base current history1 h	Sulfur		ASTM D5185m		9065		
Sodium ppm ASTM D5185m 0	CONTAMINANTS	S	method	limit/base	current	history1	history
Potassium ppm ASTM D5185m >20 3 Water % ASTM D6304 NEG FLUID CLEANLINESS method limit/base current history1 h Particles >4μm ASTM D7647 >5000 21871 Particles >6μm ASTM D7647 >1300 1669 Particles >14μm ASTM D7647 >40 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Particles >71μm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Silicon	ppm	ASTM D5185m	>15	1		
Water % ASTM D6304 NEG FLUID CLEANLINESS method limit/base current history1 h Particles >4μm ASTM D7647 >5000 21871 Particles >6μm ASTM D7647 >1300 1669 Particles >14μm ASTM D7647 >160 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Particles >71μm ASTM D7647 >3 <td>Sodium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>0</td> <td></td> <td></td>	Sodium	ppm	ASTM D5185m		0		
FLUID CLEANLINESS method limit/base current history1 h Particles >4μm ASTM D7647 >5000 ▲ 21871 Particles >6μm ASTM D7647 >1300 1669 Particles >14μm ASTM D7647 >160 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Particles >71μm ASTM D7647	Potassium	ppm	ASTM D5185m	>20	3		
Particles >4μm ASTM D7647 >5000 ▲ 21871 Particles >6μm ASTM D7647 >1300 1669 Particles >14μm ASTM D7647 >160 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Water	%	ASTM D6304		NEG		
Particles >6μm ASTM D7647 >1300 1669 Particles >14μm ASTM D7647 >160 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Particles >71μm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	FLUID CLEANLIN	NESS	method	limit/base	current	history1	history
Particles >14μm ASTM D7647 >160 28 Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Dil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >4μm		ASTM D7647	>5000	<u> </u>		
Particles >21μm ASTM D7647 >40 2 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >6µm		ASTM D7647	>1300	1669		
Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >14μm		ASTM D7647	>160	28		
Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >21µm		ASTM D7647	>40	2		
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >38µm		ASTM D7647	>10	0		
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/18/12 FLUID DEGRADATION method limit/base current history1 h	Particles >71µm		ASTM D7647	>3	0		
•				>19/17/14	<u>^</u> 22/18/12		
Acid Number (AN) ma KOH/a ASTM D80/45	FLUID DEGRADA	ATION	method	limit/base	current	history1	history
ACIG INGINOTING TO THE DOUTS 2.00	Acid Number (AN)	mg KOH/g	ASTM D8045		2.68		



OIL ANALYSIS REPORT





Certificate 12367

Report Id: SUPATLGA [WUSCAR] 06198113 (Generated: 06/06/2024 07:23:21) Rev: 1

Laboratory Sample No.

: TLC0001674 Lab Number : 06198113 Unique Number : 11060236

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

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 03 Jun 2024 **Tested** : 05 Jun 2024 Diagnosed

: 05 Jun 2024 - Jonathan Hester Test Package: PLANT (Additional Tests: FT-IR, ICP-NewOil, KV100, VI)

ATLANTA, GA US 30354 Contact: MICHAEL JACKSON mjackson@supplypro1.com T: (470)991-1693

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: MICHAEL JACKSON - SUPATLGA

SUPPLY PRO

115 EMPIRE WAY