

Machine Id  
**DSTS**  
 Component  
**Lube System**  
 Fluid  
**MOBIL SPARTAN EP 320 (2500 GAL)**

**DIAGNOSIS**

**Recommendation**

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

**Wear**

All component wear rates are normal.

**Contamination**

There is a high amount of particulates 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>ST38472</b>	ST43199	ST43807
Sample Date	Client Info			<b>17 Jun 2024</b>	04 Mar 2024	14 Dec 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>0</b>	3	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

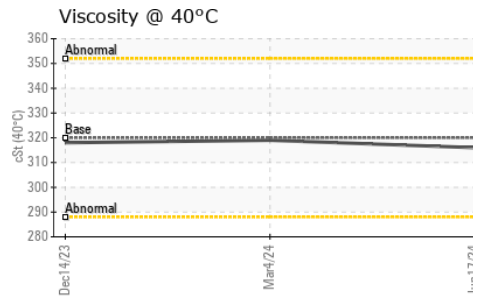
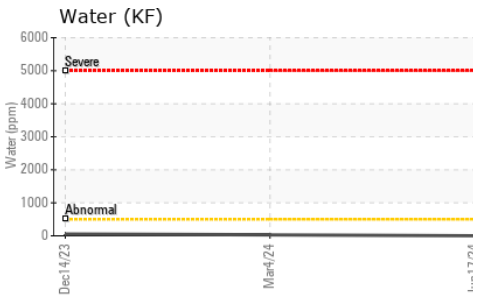
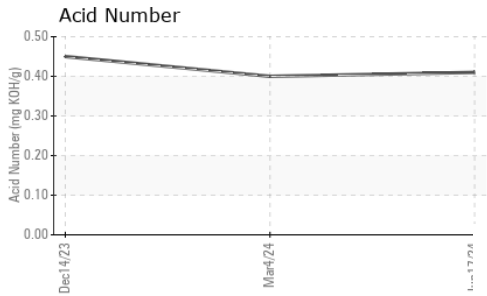
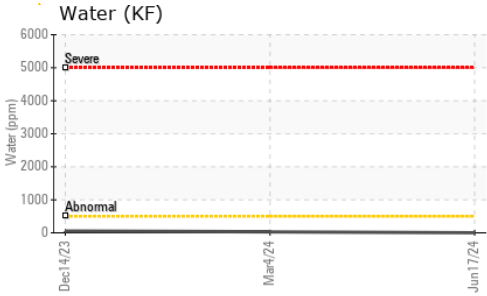
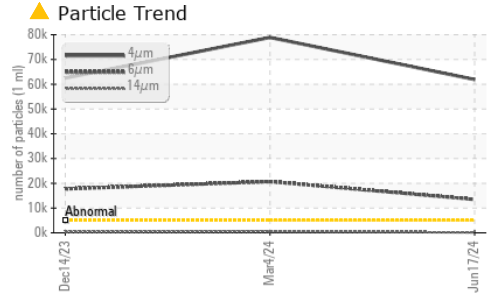
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>6</b>	7	20
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	5	0
Calcium	ppm	ASTM D5185m		<b>0</b>	10	6
Phosphorus	ppm	ASTM D5185m		<b>169</b>	164	157
Zinc	ppm	ASTM D5185m		<b>2</b>	6	6
Sulfur	ppm	ASTM D5185m		<b>10907</b>	8177	8375

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>2</b>	▲ 23	3
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.00</b>	0.003	0.005
ppm Water	ppm	ASTM D6304	>500	<b>0</b>	31	54

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ <b>61895</b>	▲ 78902	▲ 62492
Particles >6µm		ASTM D7647	>1300	▲ <b>13462</b>	▲ 20693	▲ 17730
Particles >14µm		ASTM D7647	>160	▲ <b>159</b>	▲ 499	▲ 322
Particles >21µm		ASTM D7647	>40	<b>10</b>	▲ 80	30
Particles >38µm		ASTM D7647	>10	<b>0</b>	4	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	2	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ <b>23/21/14</b>	▲ 23/22/16	▲ 23/21/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.41</b>	0.40	0.45

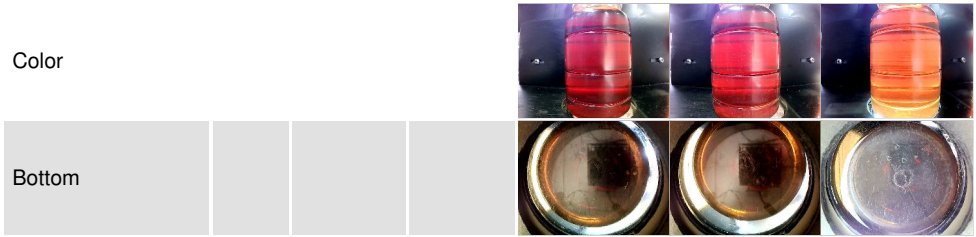
# OIL ANALYSIS REPORT



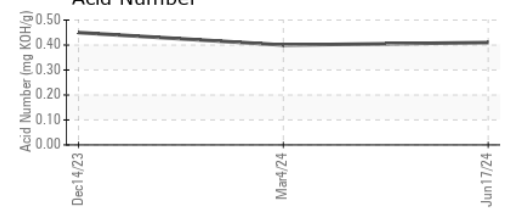
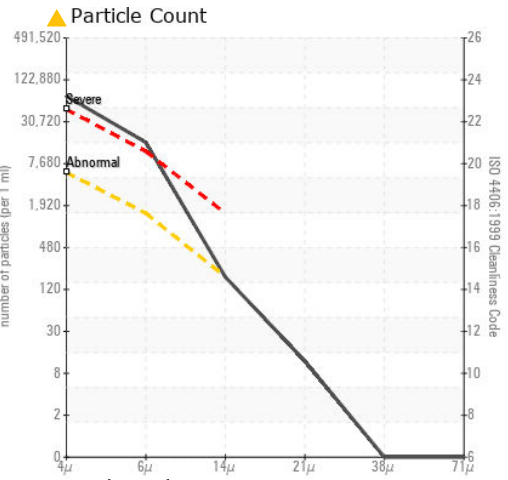
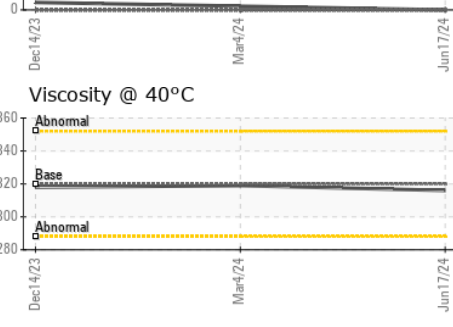
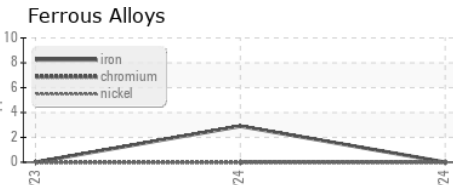
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 320	316	319	318

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST38472 **Received** : 26 Jun 2024  
**Lab Number** : 06221253 **Tested** : 27 Jun 2024  
**Unique Number** : 11099450 **Diagnosed** : 27 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF )

**SSAB STEEL**  
 12400 HWY 43 NORTH  
 AXIS, AL 36505  
 Contact: JON HUNN  
 jon.hunn@ssab.com  
 T: (251)662-4409  
 F: (251)662-4784

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