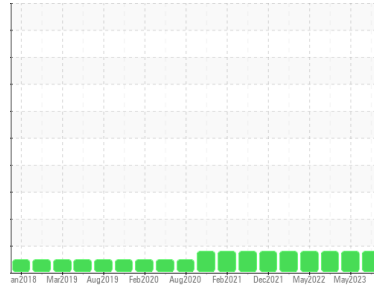




PROBLEM SUMMARY

Sample Rating Trend



Machine Id
ZSK70
 Component
Gearbox
 Fluid
ESSO SPARTAN EP 320 (--- GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display


RECOMMENDATION

We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status			MARGINAL	MARGINAL	MARGINAL
Titanium	ppm	ASTM D5185(m)	▲ 20	▲ 24	▲ 13

Customer Id: WEDBRA
Sample No.: WC0817283
Lab Number: 02578913
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS

05 May 2023 Diag: Kevin Marson

WEAR



[view report](#)



21 Feb 2023 Diag: Kevin Marson

WEAR



We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Titanium ppm levels are marginal. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



09 May 2022 Diag: Kevin Marson

WEAR



We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Titanium ppm levels are marginal. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

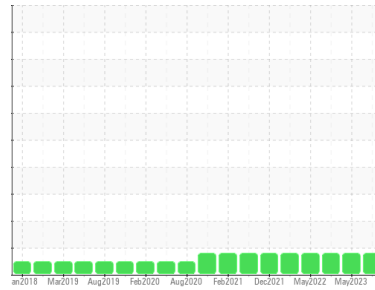
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
ZSK70

Component

Gearbox

Fluid

ESSO SPARTAN EP 320 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

▲ Wear

Titanium ppm levels are marginal. All other component wear rates are normal.

Contamination

There is no indication of any contamination 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		WC0817283	WC0766386	WC
Sample Date	Client Info		27 Aug 2023	05 May 2023	21 Feb 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			MARGINAL	MARGINAL	MARGINAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m) >200	22	19	17
Chromium	ppm	ASTM D5185(m) >15	<1	0	0
Nickel	ppm	ASTM D5185(m) >15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	▲ 20	▲ 24	▲ 13
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >25	<1	<1	<1
Lead	ppm	ASTM D5185(m) >100	0	0	0
Copper	ppm	ASTM D5185(m) >200	<1	<1	2
Tin	ppm	ASTM D5185(m) >25	0	0	0
Antimony	ppm	ASTM D5185(m) >5	0	<1	0
Vanadium	ppm	ASTM D5185(m)	<1	<1	<1
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) .4	7	7	8
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<1	0	<1
Manganese	ppm	ASTM D5185(m)	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	1	<1	0
Calcium	ppm	ASTM D5185(m) 0	6	4	4
Phosphorus	ppm	ASTM D5185(m) 250	240	256	287
Zinc	ppm	ASTM D5185(m) 0	12	10	10
Sulfur	ppm	ASTM D5185(m)	10561	11073	10030
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

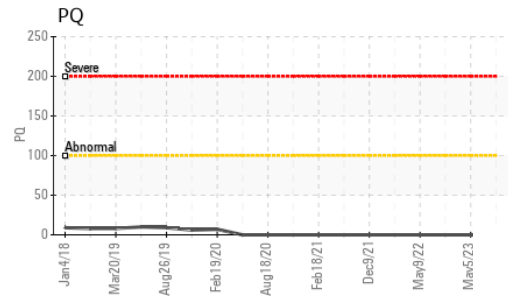
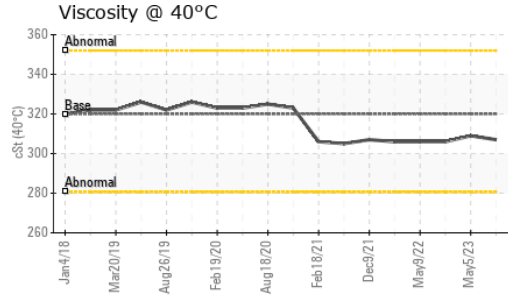
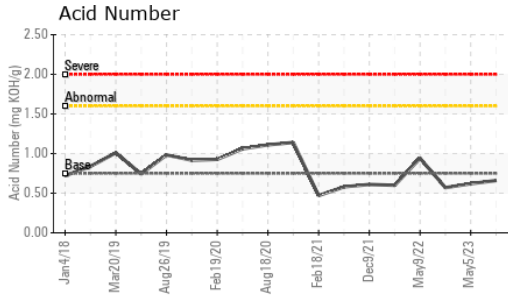
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	3	2	3
Sodium	ppm	ASTM D5185(m)	<1	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.75	0.66	0.62	0.57



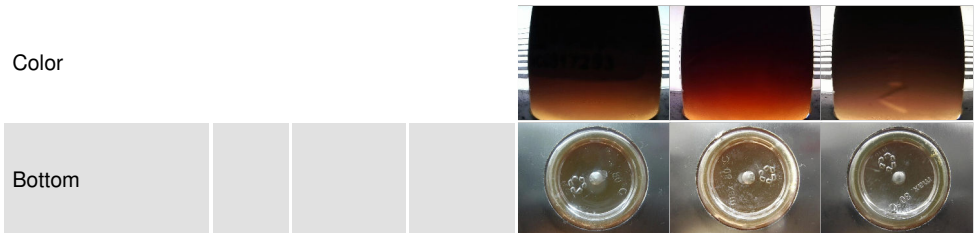
OIL ANALYSIS REPORT



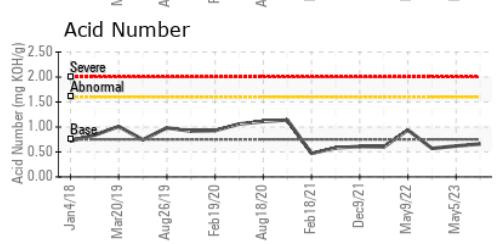
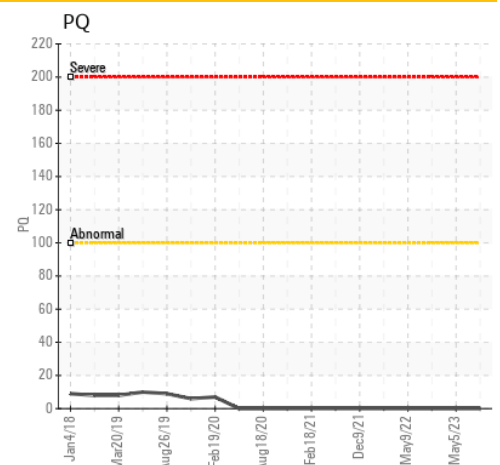
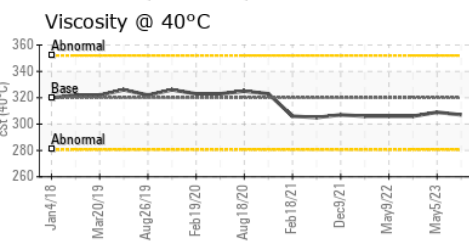
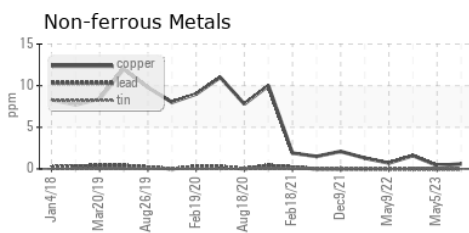
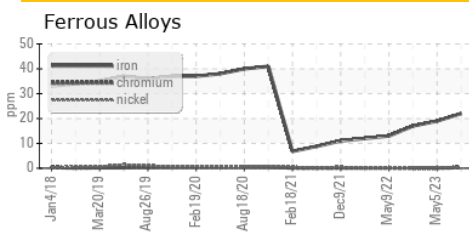
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	307	309

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0817283 **Received** : 28 Aug 2023
Lab Number : 02578913 **Diagnosed** : 29 Aug 2023
Unique Number : 5631973 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

INGENIA POLYMERS
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 BRANTFORD, ON
 CA N3T 5M8
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 T:
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.