

Machine Id  
**D/S EM5 EXTRUDER**  
 Component  
**Gearbox**  
 Fluid  
**ESSO SPARTAN EP 150 (38 LTR)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All 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			<b>AW0004030</b>	AW0003991	AW0003875
Sample Date	Client Info			<b>24 Sep 2023</b>	13 Aug 2022	06 Aug 2021
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>24</b>	12	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

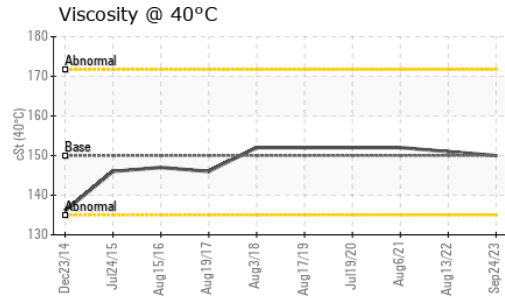
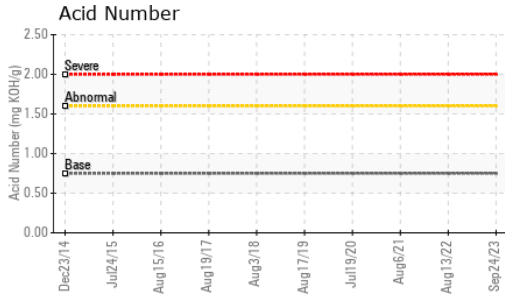
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		<b>0</b>	---	---
Iron	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	<1	3
Chromium	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>100	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>200	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.0	<b>57</b>	62	25
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185(m)	0.8	<b>3</b>	2	9
Phosphorus	ppm	ASTM D5185(m)	250	<b>259</b>	281	345
Zinc	ppm	ASTM D5185(m)	1.0	<b>5</b>	4	4
Sulfur	ppm	ASTM D5185(m)	5133	<b>6156</b>	6044	14496
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>29</b>	29	▲ 270
Sodium	ppm	ASTM D5185(m)		<b>1</b>	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.75	<b>0.49</b>	---	---

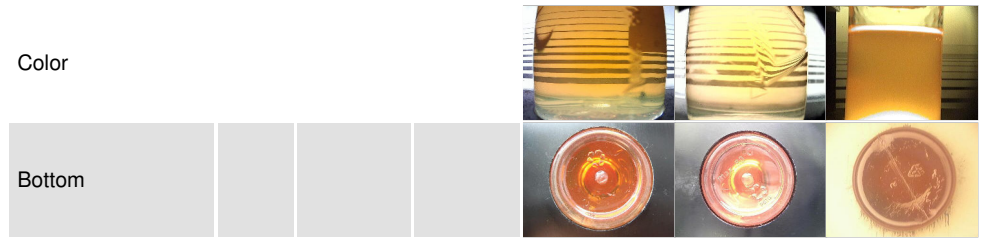
# OIL ANALYSIS REPORT



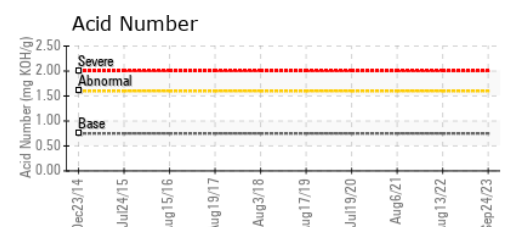
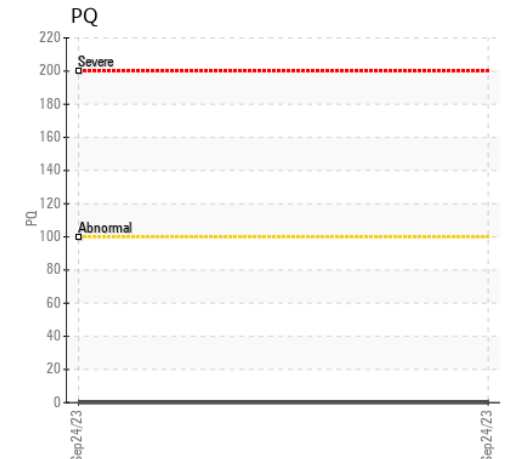
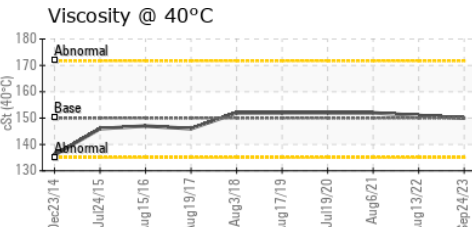
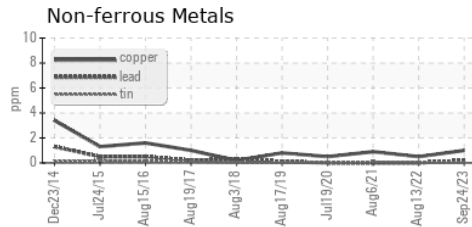
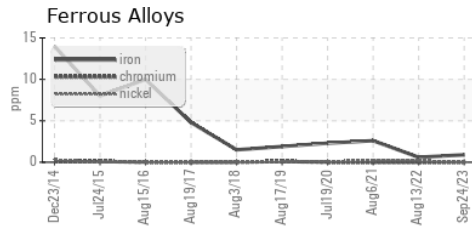
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	▲ HAZY
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)	150	151	152

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : AW0004030 **Received** : 05 Oct 2023  
**Lab Number** : 02587308 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656374 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**SHAWFLEX INC.**  
 25 BETHRIDGE ROAD  
 TORONTO, ON  
 CA M9W 1M7  
 Contact: Robert Fuller  
 rfuller@shawflex.shawcor.com  
 T: (416)743-7111  
 F: (416)743-5060

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.