

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id **FSP136529** Component **Diesel Engine** Fluid

EXXON 15W40 (--- QTS)

### DIAGNOSIS

# Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

# Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

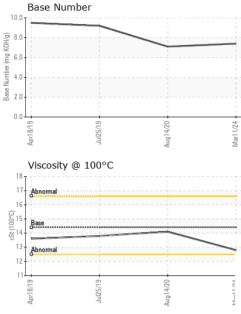
Apr2019 Jur2019 Aug2020 Mar2024								
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		WC0903270	WC0478153	WC0357794		
Sample Date		Client Info		11 Mar 2024	14 Aug 2020	25 Jul 2019		
Machine Age	mls	Client Info		285823	154335	110208		
Oil Age	mls	Client Info		0	0	0		
Oil Changed		Client Info		Changed	Changed	Changed		
Sample Status				NORMAL	NORMAL	NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2		
Fuel		WC Method	>5	<1.0	<1.0	<1.0		
Water		WC Method	>0.2	NEG	NEG	NEG		
Glycol		WC Method		NEG	NEG	NEG		
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>100	24	27	18		
Chromium	ppm	ASTM D5185m	>20	1	<1	<1		
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1		
Titanium	ppm	ASTM D5185m		<1	0	0		
Silver	ppm	ASTM D5185m	>3	0	<1	<1		
Aluminum	ppm	ASTM D5185m	>20	6	8	6		
Lead	ppm	ASTM D5185m	>40	<1	<1	0		
Copper	ppm	ASTM D5185m	>330	3	4	3		
Гin	ppm	ASTM D5185m	>15	<1	<1	<1		
Antimony	ppm	ASTM D5185m			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		3	3	50		
Barium	ppm	ASTM D5185m		<1	0	0		
Molybdenum	ppm	ASTM D5185m		82	3	59		
Vanganese	ppm	ASTM D5185m		<1	<1	<1		
Magnesium	ppm	ASTM D5185m		945	35	403		
Calcium	ppm	ASTM D5185m		1143	2393	1807		
Phosphorus	ppm	ASTM D5185m		1016	877	975		
Zinc	ppm	ASTM D5185m		1234	978	1093		
Sulfur	ppm	ASTM D5185m		3052	3793	3534		
CONTAMINANTS		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	6	9	6		
Sodium	ppm	ASTM D5185m		5	5	2		
Potassium	ppm	ASTM D5185m	>20	2	9	6		
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.8	0.8	0.5		
	Abs/cm	*ASTM D7624	>20	10.8	10.2	8.5		
	ADS/CIT							
Nitration Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	22.4	20		
Nitration	Abs/.1mm	*ASTM D7415 method	>30 limit/base	21.9 current	22.4 history1	20 history2		
Nitration Sulfation	Abs/.1mm							

Contact/Location: CRAIG EVANS - FREORL



# **OIL ANALYSIS REPORT**

VISUAL



<u> </u>	White Metal Yellow Metal Precipitate	scalar *Visi scalar *Visi scalar *Visi	ual NONE ual NONE	NONE NONE NONE	NONE NONE NONE	NONE NONE NONE	
	Silt	scalar *Visi		NONE	NONE	NONE	
	Debris	scalar *Visi		NONE	NONE	NONE	
	Sand/Dirt	scalar *Visi		NONE	NONE	NONE	
Aug 14/20	Appearance	scalar *Visi		NORML	NORML	NORML	
Au	0001	scalar *Visi		NORML	NORML	NORML	
	Emulsified Water			NEG	NEG	NEG	
,	Free Water	scalar *Visi		NEG	NEG	NEG	
	FLUID PROPE Visc @ 100°C		thod limit/base	current 12.8	history1 14.1	history2 13.8	
	GRAPHS			12.0	17.1	10.0	
	Ferrous Alloys						
	30 iron	-					
Aug14/20	25 - annonen chromium						
Au	20						
	톮 15-						
	10						
	5						
			24				
	Apr18/19	Aug14/20	Mar11/24				
	Non-ferrous Me	4	2				
	<sup>10</sup> I						
	8 - copper						
	otin						
	6-						
	ud 4-						
	2 -						
		**************************************	Total Sheeman States				
	Apr18/19	Aug14/20	Mar11/24				
	Apri	Aug	Mari				
	Viscosity @ 100	)°C		Base Number			
	17- Abnormal		10				
	16 -		(B/H)	.0			
	© 15			.0-			
	(2) 15 00 73 14		nber (				
	12		(D) HOA	.0			
	Abnormal		2	.0 -			
	11		0	0			
	Apr18/19	4/20			4/20 -		
	Apr18/19 Jul25/19	Aug14/20	Mar11/24	Apr18/19 Jul25/19	Aug14/20		
Sar Lab	No. : WC0903270   > Number : 06133920   que Number : 10953385	Received Tested				FRESHPOIN 8801 EXCHANGE DRV ORLANDO, F US 3280 Contact: CRAIG EVAN	
	t Package : FLEET				Confact	RAIG EVAN	

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

Contact/Location: CRAIG EVANS - FREORL

F: