

OIL ANALYSIS REPORT

Sample Rating Trend



SPARTAN 25074

Component Rear Diesel Engine

Fluid DIESEL ENGINE OIL SAE 15W40 (23 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

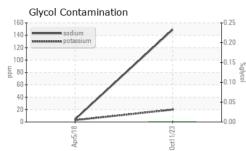
The condition of the oil is acceptable for the time in service.

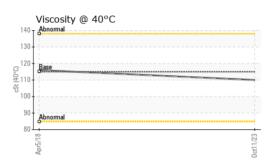
			Apr2018	0ct2023		
SAMPLE INFORM	/ ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0075226	AP105604	
Sample Date		Client Info		11 Oct 2023	05 Apr 2018	
Machine Age	kms	Client Info		0	17536	
Oil Age	kms	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
WEAR METALS	S	method	limit/base	current	history1	history2
				56	73	
Iron	ppm	ASTM D5185(m)	>75			
Chromium	ppm	ASTM D5185(m)		2	2	
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>2	<1	<1	
Aluminum	ppm	ASTM D5185(m)	>15	5	6	
Lead	ppm	ASTM D5185(m)	>25	<1	11	
Copper	ppm	ASTM D5185(m)	>100	4	375	
Tin	ppm	ASTM D5185(m)	>4	0	<1	
Antimony	ppm	ASTM D5185(m)		0	2	
Vanadium	ppm	ASTM D5185(m)		0	<1	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	4	19	
Barium	ppm	ASTM D5185(m)	10	<1	<1	
Molybdenum	ppm	ASTM D5185(m)	100	65	11	
Manganese	ppm	ASTM D5185(m)		<1	2	
Magnesium	ppm	ASTM D5185(m)	450	950	130	
Calcium	ppm	ASTM D5185(m)	3000	1048	2293	
Phosphorus	ppm	ASTM D5185(m)	1150	948	945	
Zinc	ppm	ASTM D5185(m)	1350	1167	1237	
Sulfur	ppm	ASTM D5185(m)	4250	2335	2772	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	24	13	
Shicon		ASTM D5185(m)		149	4	
Sodium		ASTIVI DSTOS(III)	>100			
Sodium	ppm	ACTM DE10E(m)	> 20	20		
Potassium	ppm	ASTM D5185(m) ASTM D7922*	>20	20	3 NEG	
Potassium Glycol		ASTM D7922*		0.0	NEG	
Potassium Glycol INFRA-RED	ppm %	ASTM D7922*	limit/base	0.0 current	NEG history1	
Potassium Glycol INFRA-RED Soot %	ppm %	ASTM D7922* method ASTM D7844*	limit/base >6	0.0 current 1.5	NEG history1 1.3	
Potassium Glycol INFRA-RED	ppm %	ASTM D7922*	limit/base	0.0 current	NEG history1 1.3 13.1	 history2
Potassium Glycol INFRA-RED Soot %	ppm %	ASTM D7922* method ASTM D7844*	limit/base >6	0.0 current 1.5	NEG history1 1.3	 history2

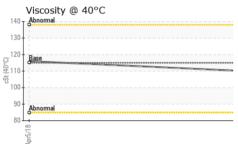


OIL ANALYSIS REPORT

FLUID DEGRADATION method







I LOID DEGLIAE		methou	mmi basc	Guirchi	Thistory	matoryz
Dxidation	Abs/.1mm	ASTM D7414*	>25	39.4	26.6	
VISUAL		method	limit/base	current	history1	history2
hite Metal	scalar	Visual*	NONE	NONE		
ellow Metal	scalar	Visual*	NONE	NONE		
recipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
ppearance	scalar	Visual*	NORML	NORML		
)dor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Free Water		Visual*	>0.2	NEG	NEG	
	scalar					
FLUID PROPE		method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)	115	110	116	
/isc @ 100°C	cSt	ASTM D7279(m)	14.4	15.0	15.4	
iscosity Index (VI)	Scale	ASTM D2270*	126	141	139	
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe			60			
Abnormal			40			
			^{Ed} _20	Abnormal		
18			23+	19		
Apr5/18			0ct11/23	Apr5/18		
Aluminum (ppm)				Chromium (p	nm)	
Severe			15			
			10	Severe		
Abnormal				Abnormal		
			5	- 0		
00						
Apr5/18			0ct11/23	Apr5/18		
			00			
Copper (ppm)			60	Silicon (ppm)		
				Severe		
Severe			40 E	Abnormal		
Abnormal			20			
			0			
15/18			~	Apr5/18 -		
Apr5/1			0ct11/2	Api		
Viscosity @ 100°C				Soot %		
Abnormal			8.0	Severe		
			6.0 2 ⁸	- Abnormal		
Abnormal			* 54.0	•		
Abnormal			2.0			
			0.0			
			0ct11/23	Apr5/1		
Apr5/18			Ŧ	L.		

