

OIL ANALYSIS REPORT

Sample Rating Trend





Component Propane Engine

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

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

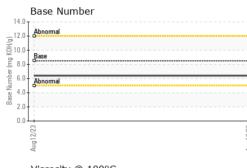
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

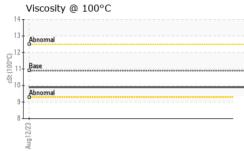
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0847879		
Sample Date		Client Info		12 Aug 2023		
Machine Age	hrs	Client Info		3548		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	12		
Chromium	ppm	ASTM D5185m	>25	<1		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>5	<1		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>25	<1		
Copper	ppm	ASTM D5185m	>35	2		
Tin	ppm	ASTM D5185m	>8	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	67		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	41		
Manganese	ppm	ASTM D5185m		1		
Magnesium	ppm	ASTM D5185m	450	427		
Calcium	ppm	ASTM D5185m	3000	1152		
Phosphorus	ppm	ASTM D5185m	1150	571		
Zinc	ppm	ASTM D5185m	1350	711		
Sulfur	ppm	ASTM D5185m	4250	2519		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	8		
Sodium	ppm	ASTM D5185m		1		
Potassium	ppm	ASTM D5185m	>20	5		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0		
Nitration	Abs/cm	*ASTM D7624	>20	6.0		
Sulfation	Abs/.1mm	*ASTM D7415	>30	13.5		
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	6.8		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.4		
			5.0			



OIL ANALYSIS REPORT

VISUAL





	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal		*Visual	NONE	NONE		
	Precipitate		*Visual	NONE	NONE		
	Silt		*Visual	NONE	NONE		
	Debris		*Visual	NONE	NONE		
	_ Sand/Dirt		*Visual	NONE	NONE		
Aug12/23	Appearance		*Visual	NORML	NORML		
Aug	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
	Free Water	scalar	*Visual		NEG		
				11 1.0			
	FLUID PROPER	HES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	10.9	9.9		
	GRAPHS						
	Ferrous Alloys						
	¹²						
	10 - iron						
	nickel						
	8						
	E 6						
	4						
	2-						
	/23			/23 -			
	Aug 12/23			Aug12/23			
				A			
	Non-ferrous Meta						
	copper						
	8 - sesses tin						
	· · · · · · · · · · · · · · · · · · ·						
	6						
	6- Ed						
	б- Ед 4-						
	6						
	4						
	2						
	2						
	2			Aug12/23			
	Viscosity @ 100°C				Base Numbe	r	
	4 2 0 czz1 guA			Aug12/23	Base Numbe	r	
	Viscosity @ 100°C			Aug12/23	.0	r	
	Viscosity @ 100°C			E2721Bmy 14	.0 Abnormal	r	
	Viscosity @ 100°C			E2721Bmy 14	.0 Abnormal	r	
	Viscosity @ 100°C			E2721Bmy 14	0 0 0 Base	r	
	Viscosity @ 100°C			E2721Bmy 14	Abnormal Base	r	
	Viscosity @ 100°C			E2721Bmy 14	Abnormal Base 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	r	
	Viscosity @ 100°C			14 152 8ae Number (ng KOH(0) 8 8 8 9 8 9 8 9 8 9 12/23	0 Abnormal Base 0 Base 0 Abnormal 0 Abnormal	r	
	Viscosity @ 100°C			14 12 (b)(10) 000 000 000 000 000 000 000 000 000 0	Abnormal Base Abnormal Abnormal	r	
	Viscosity @ 100°C			14 12 12 12 12 12 14 12 12 12 12 12 12 12 12 12 12 12 12 12	Abnormal Base Abnormal Abnormal Abnormal	r	
	Viscosity @ 100°C			14 12 (0)(0)(0) 13 14 12 12 12 12 12 12 12 12 12 12 12 12 12	Abnormal Base Abnormal Abnormal Abnormal	r	
	Viscosity @ 100°C			14 12 (b)(10) 000 000 000 000 000 000 000 000 000 0	Abnormal Base Abnormal Abnormal	r	
	Viscosity @ 100°C	C		Aug 12/23 Aug 12/23 Base Number (ng KOH(g) 6 8 9 0 01/01 0 01/01 0 01/02	Abnormal Base Abnormal Abnormal Abnormal		
Laboratory	Viscosity @ 100°C	C 501 Madiso	on Ave., Ca	EZZ[10ny EZZ[10	Abnormal Base Abnormal Abnormal Abnormal	FOR	KLIFT SELEC
Sample No.	Viscosity @ 100°C	501 Madiso Received	on Ave., Ca : 18 /	EZZII ^{DIN} EZZII ^{DIN} 14 12 (0HO) 10 10 10 10 10 10 10 10 10 10	Abnormal Base Abnormal Abnormal Abnormal		KLIFT SELEO AVE, SUITE
Sample No. Lab Number	Viscosity @ 100°C	501 Madiso Received Diagnose	on Ave., Ca : 18 / d : 21 /	EZZII Diny EZZII Diny 14 12 14 12 14 12 10 10 10 10 10 10 10 10 10 10	Abnormal Base Abnormal Abnormal Abnormal	FOR	KLIFT SELEC AVE, SUITE S DENVER, C
Sample No. Lab Number Unique Number	Viscosity @ 100°C Viscosity @ 100°C Abnomal Base EZZ 11 Base EZZ 1	501 Madiso Received	on Ave., Ca : 18 / d : 21 /	EZZII ^{DIN} EZZII ^{DIN} 14 12 (0HO) 10 10 10 10 10 10 10 10 10 10	Abnormal Base Abnormal Abnormal Abnormal	FOR 12875 E 42ND	KLIFT SELEC AVE, SUITE DENVER, C US 802
Sample No. Lab Number Unique Number Test Package	Viscosity @ 100°C Viscosity @ 100°C Viscosity @ 100°C Abnomal Base : WearCheck USA : WC0847879 : 05927966 r : 10607913 e : CONST	501 Madiso Received Diagnosed	on Ave., Ca : 18 / d : 21 / cian : Dor	EZZ10my 14 12 10H010 bu seed 2 czz10my 22Z1 10my 2023 10H2002 10H200 10H200 10	Abnormal Base Abnormal Abnormal Abnormal	FORI 12875 E 42ND Contact:	KLIFT SELEC AVE, SUITE S DENVER, C US 8023 TIM MULCAF
Sample No. Lab Number Unique Number Test Package cuss this sample report,	Viscosity @ 100°C Viscosity @ 100°C Abnomal Base EZZ 11 Base EZZ 1	501 Madiso Received Diagnose Diagnostic	on Ave., Ca : 18 / d : 21 / cian : Dor	ry, NC 2751 Aug 2023 Baldridge	Abnormal Base Abnormal Abnormal Abnormal	FORI 12875 E 42ND Contact:	KLIFT SELEC AVE, SUITE DENVER, C US 802

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Contact/Location: TIM MULCAHY - FORDEN