

OIL ANALYSIS REPORT

Area (16052Z) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136A61337

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

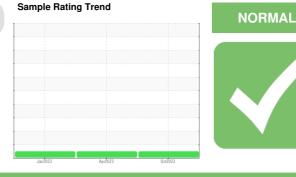
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0107377	PCA0092817	PCA0090903
Sample Date		Client Info		12 Oct 2023	19 Apr 2023	30 Jan 2023
Machine Age	mls	Client Info		394383	337514	309304
Oil Age	mls	Client Info		50000	0	30000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	19	10	21
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	7	2	6
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	4	3	7
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	2	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	62	63	63
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	954	914	856
Calcium	ppm	ASTM D5185m	1050	1085	1083	1073
Phosphorus	ppm	ASTM D5185m	995	1058	997	913
Zinc	ppm	ASTM D5185m	1180	1281	1266	1124
Sulfur	ppm	ASTM D5185m	2600	2597	2945	2382
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	8	3	4
Sodium	ppm	ASTM D5185m		1	<1	0
Potassium	ppm	ASTM D5185m	>20	4	4	7
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1	0.5	1
Nitration	Abs/cm	*ASTM D7624	>20	9.6	7.7	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	17.8	22.5
FLUID DEGRAD)ATION	method	limit/base	current	history1	history2

Oxidation

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896

18.0

5.2

14.9

6.7

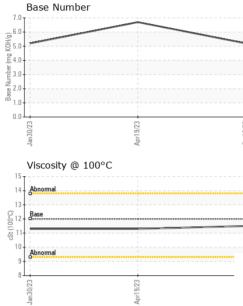
19.3

5.2



OIL ANALYSIS REPORT

VISUAL



White Metal			NONE	NONE		NONE
Vallau Matel	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
						NORML
						NORML
			>0.2			NEG
				NEG	NEG	NEG
					history1	history2
	cSt	ASTM D445	12.00	11.5	11.3	11.3
²⁵						
iron						
20 - nickel			-			
15						
10						
5-						
	Www					
23	/23		/23			
Jan 30	Apr19,		0ct12			
2						
¹⁰ T						
nonsecono lead						
8 - tin						
6-						
4	1					
2-						
23	23		53			
an 30,	Apr19,		Det12/			
,			0			
¹⁵ L:				Base Number		
14 - Abnormal				6.0	\sim	
13			P/HO	5.0		
12 - Base				4.0		
			mber	3.0-		
10-			Se Nu	2.0		
Abnormal 9	1			1.0		
8				0.0		
	Apr19/23 -		0ct12/23 -	Jan30/23	Apr1 9/23 -	
Jan 30/23	-				6	
	Appearance Odor Emulsified Water Free Water FLUID PROPE Visc @ 100°C GRAPHS Ferrous Alloys Competition Non-ferrous Metal Copper Liscosity @ 100°C	Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar FLUID PROPERTIES Visc @ 100°C cSt GRAPHS Ferrous Alloys Comper- Non-ferrous Metals Viscosity @ 100°C Viscosity @ 100°C	Appearance scalar *Visual Odor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual FLUID PROPERTIES method Visc @ 100°C cSt ASTM D445 GRAPHS Ferrous Alloys Terrous Metals Non-ferrous Metals 0 0 0 0 0 0 0 0 0 0 0 0 0	Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.2 Free Water scalar *Visual FLUID PROPERTIES method limit/bas Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys Non-ferrous Metals Non-ferrous Metals	Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG Free Water scalar *Visual NORML NORML Visual NORML NEG NOR NOR NORMC	Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG Free Water scalar *Visual NEG NEG Free Water scalar *Visual NEG NEG FLUID PROPERTIES method limit/base current history1 Visc @ 100°C cSt ASTM D445 12.00 11.5 11.3 GRAPHS Ferrous Alloys Ferrous Alloys Viscosity @ 100°C Viscosity @ 100°C State of the state of