

## Machine Id **TOYOTA 8464005** Component **Diesel Engine** Fluid **MOBIL DELVAC 1300 SUPER15W40 (--- GAL)**

······································					~~~~~		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		RPL0021054	RPL0013425	RPL0012401
We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		22 May 2024	26 Jul 2023	29 Apr 2023
	Machine Age	mls	Client Info		180608	167646	155186
Service interval to monitor.	Oil Age	mls	Client Info		15964	3002	155186
	Filter Age	mls	Client Info		15964	3002	155186
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	0
	Sample Status				ABNORMAL	ABNORMAL	0
WEAR	Iron	ppm	ASTM D5185m		40	8	23
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2	<1	<1
	Nickel	ppm	ASTM D5185m	>4	<1	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	5	0	3
	Lead	ppm	ASTM D5185m	>40	17	1	6
	Copper	ppm	ASTM D5185m	>330	5	1	4
	Tin	ppm	ASTM D5185m	>15	2	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		7	4	7
There is a moderate amount of fuel present in the oil.	Potassium	ppm	ASTM D5185m		5	1	2
	Fuel	%	ASTM D3524	>5	<b>4</b> .9	<b>▲</b> 6.0	<b>▲</b> 5.7
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		1.2	0.3	0.8
	Nitration	Abs/cm	*ASTM D7624	>20	17.9	9.5	14.2
	Sulfation	Abs/.1mm	*ASTM D7415		30.5	19.5	25.5
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		5	1	2
	Boron	ppm	ASTM D5185m	0	2	0	3
The BN result indicates that there is suitable alkalinity remaining in the oil.	Barium	ppm	ASTM D5185m		0	2	2
	Molybdenum	ppm	ASTM D5185m		68	61	59
	Manganese	ppm	ASTM D5185m	-	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	0	1047	934	938
	Calcium	ppm	ASTM D5185m	-	1186	1129	1189
	Phosphorus	ppm	ASTM D5185m		1132	1060	973
	Zinc	ppm	ASTM D5185m		1395	1272	1186
	Sulfur	ppm	ASTM D5185m		3412	3358	2965
	Oxidation		*ASTM D310311	>25	35.2	18.3	27.5
	Data Number (DN)			~	55.2	10.0	21.5

Base Number (BN) mg KOH/g ASTM D2896 9.4

ASTM D445 14

Visc @ 100°C cSt

8.5

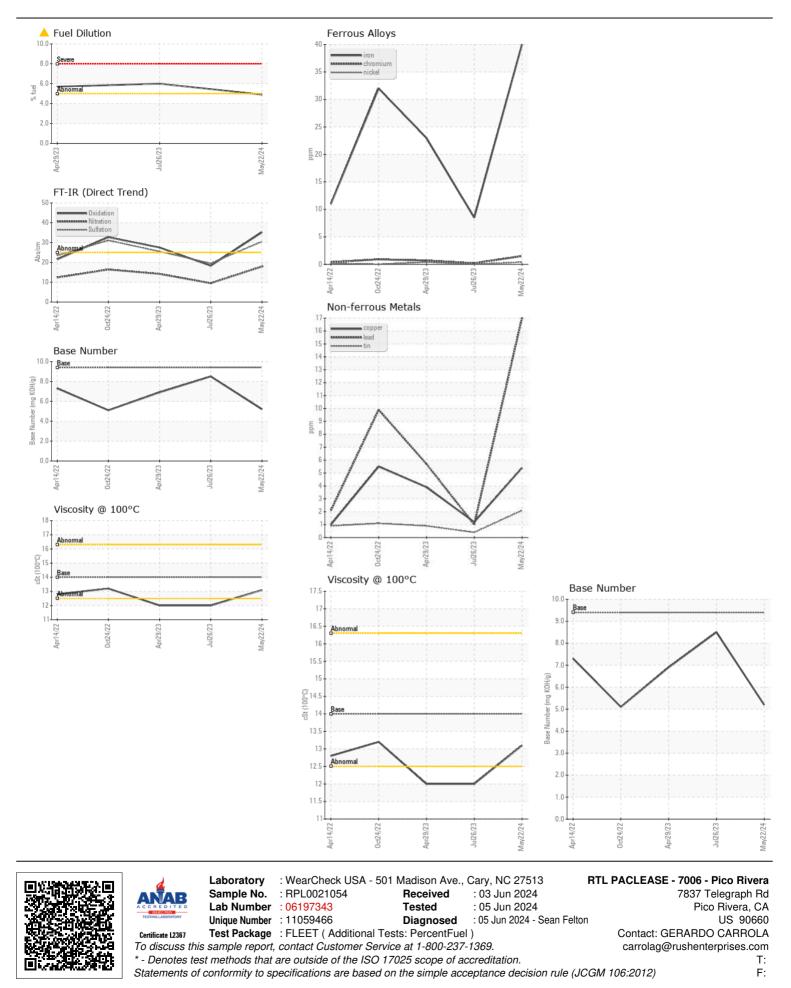
12.0

6.9

**12.0** 

5.2

13.1



Submitted By: TECHNICIAN ACCOUNT Page 2 of 2