

Machine Id **2-286** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number	0.0101	Client Info	anning r tigri	WC0926259		
	Sample Date		Client Info		12 Apr 2024		
	Machine Age	hrs	Client Info		771		
	Oil Age	hrs	Client Info		771		
	Filter Age	hrs	Client Info		771		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m		38		
	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>4	1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		14		
	Lead	ppm	ASTM D5185m		3		
	Copper	ppm	ASTM D5185m		241		
	Tin	ppm	ASTM D5185m	>15	5		
	Vanadium	ppm	ASTM D5185m	NONE	<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	9		
	Potassium	ppm	ASTM D5185m		39		
	Fuel	%	ASTM D3524		0.1		
	Water	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	9.0		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
					_		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		7		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		42		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m	100	39		
	Manganese	ppm	ASTM D5185m	450	2		
	Magnesium	ppm	ASTM D5185m		468		
	Calcium	ppm	ASTM D5185m		1704		
	Phosphorus	ppm	ASTM D5185m		633 725		
	Zinc	ppm	ASTM D5185m		735		
	Sulfur	ppm	ASTM D5185m	4250	1946		

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5

23.7

8.2

9.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 ALASKA WEST EXPRESS Sample No. Received 1095 SANDURI STREET : WC0926259 : 16 Apr 2024 Lab Number : 06151003 Tested : 22 Apr 2024 FAIRBANKS, AK : 22 Apr 2024 - Sean Felton US 99701 Unique Number : 10981081 Diagnosed Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel) Contact: TOM DOUTHIT Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tdouthit@lynden.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (907)452-4355 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (907)328-1956

Contact/Location: TOM DOUTHIT - ALAFAI Page 2 of 2