

WEAR CONTAMINATION FLUID CONDITION **NORMAL SEVERE NORMAL**

5C07

CHEVROLET SILVERADO TVK6812

Component

Diesel Engine							
DIESEL ENGINE OIL SAE 30 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		ARI0006833	ARI0006856	ARI0006886
	Sample Date		Client Info		03 Feb 2024	27 Oct 2023	22 Aug 2023
	Machine Age	mls	Client Info		18865	15523	11769
	Oil Age	mls	Client Info		3342	3754	989
	Filter Age	mls	Client Info		3342	3754	989
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				SEVERE	SEVERE	SEVERE
WEAR	Iron	ppm	ASTM D5185m	>100	13	27	34
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m	>4	0	<1	0
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>3	0	<1	0
	Aluminum	ppm	ASTM D5185m	>20	5	3	3
	Lead	ppm	ASTM D5185m	>40	<1	2	1
	Copper	ppm	ASTM D5185m	>330	1	6	16
	Tin	ppm	ASTM D5185m	>15	1	1	2
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	0:1:		ACTM DE10E	05		44	4.5
CONTAMINATION	Silicon	ppm	ASTM D5185m		8	11	15
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium Fuel	ppm o/	ASTM D5185m ASTM D3524		2 8.6	4 • 10.6	5 8.1
	Water	%	WC Method		NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	0.4	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.4	10.0
	Sulfation	Abs/.1mm	*ASTM D7415		20.7	23.7	22.8
	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	>75	<1	0	<1
	Boron	ppm	ASTM D5185m		54	180	247
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185m		0	4	0
	Molybdenum	ppm	ASTM D5185m		82	84	78
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	82	256	384
	Calcium	ppm	ASTM D5185m	3000	1790	1407	1363
	Phosphorus	ppm	ASTM D5185m	1150	855	928	944
	Zinc	ppm	ASTM D5185m	1350	1033	1060	1202
	Sulfur	ppm	ASTM D5185m	4250	3037	3251	3536
	Oxidation	Abs/.1mm	*ASTM D7414		18.0	21.9	18.8
	Base Number (BN)				5.7	5.9	6.3
	Vice @ 100°C	~C+	ACTM DAGE	10.0	44.4	11 0	11 0

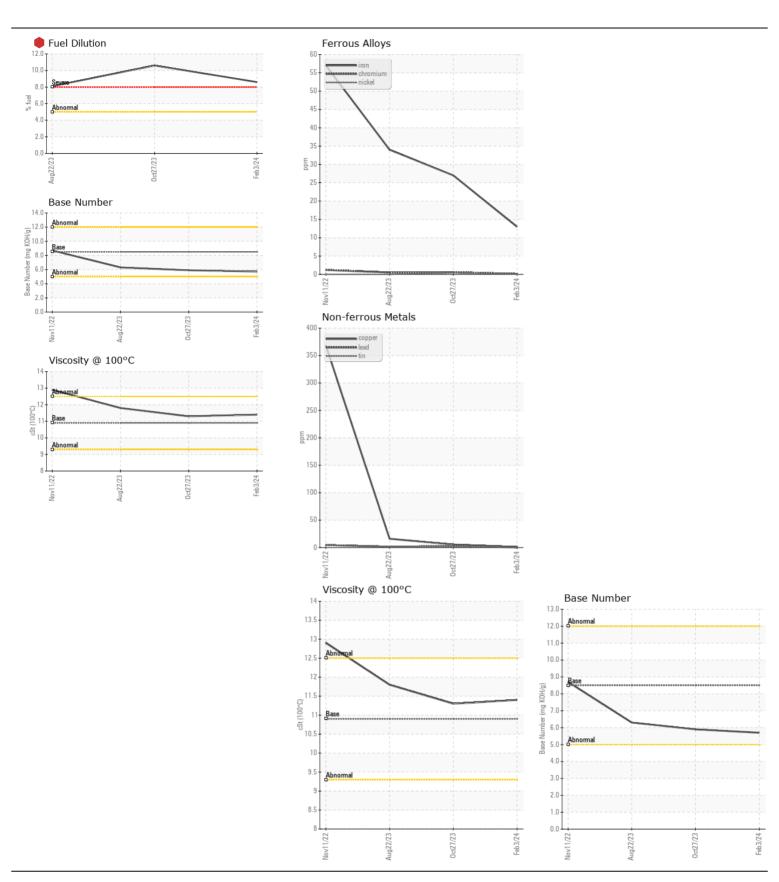
Visc @ 100°C cSt

11.3

11.4

ASTM D445 10.9

11.8







Laboratory Sample No.

: ARI0006833 Lab Number : 06083017

Tested Unique Number : 10870462 Diagnosed Test Package : CONST (Additional Tests: PercentFuel, TBN)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Feb 2024 : 08 Feb 2024

: 08 Feb 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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