



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
GMC 145517
 Component
Gasoline Engine
 Fluid
TRC PRO-SPEC SYNTHETIC 0W20 (8 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

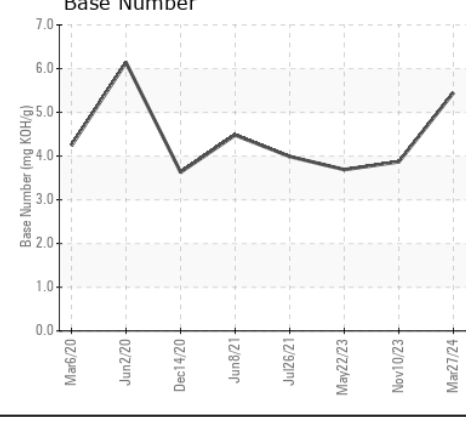
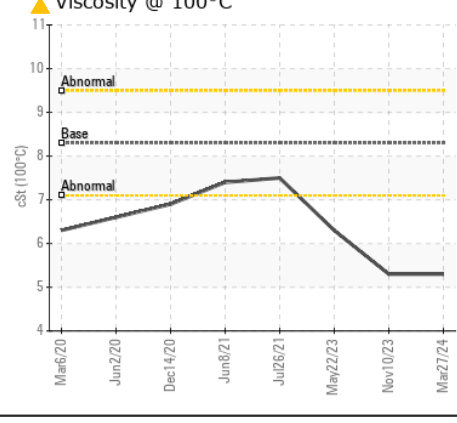
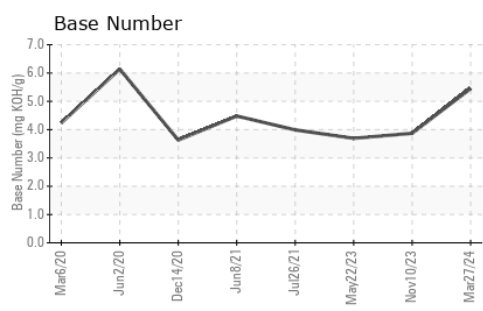
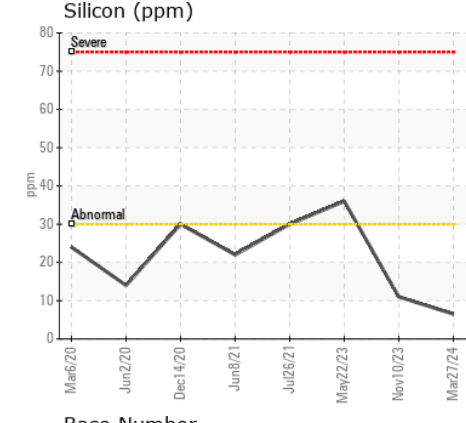
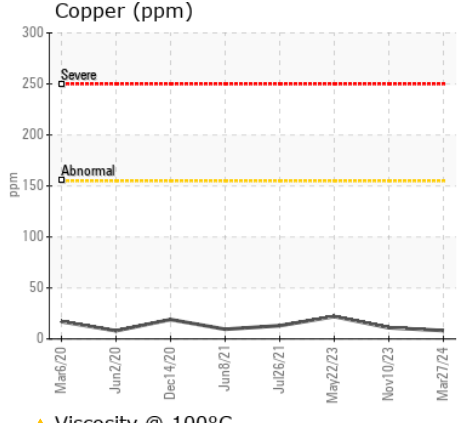
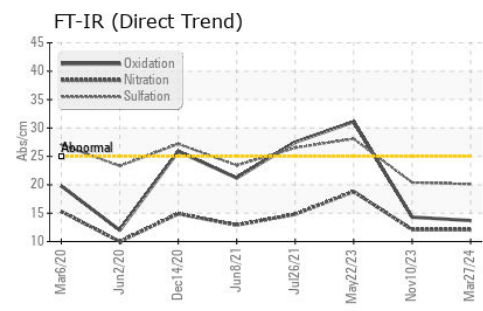
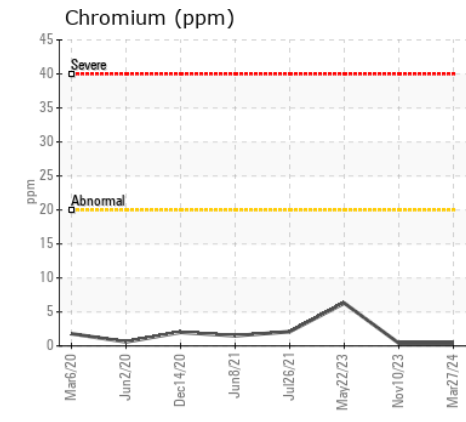
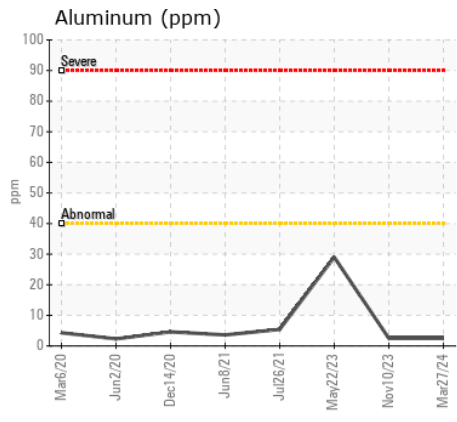
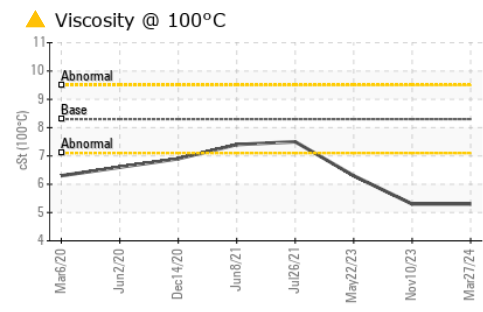
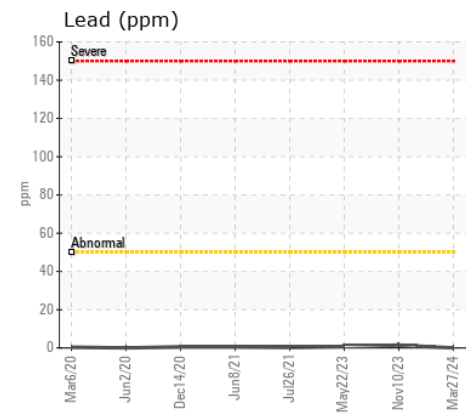
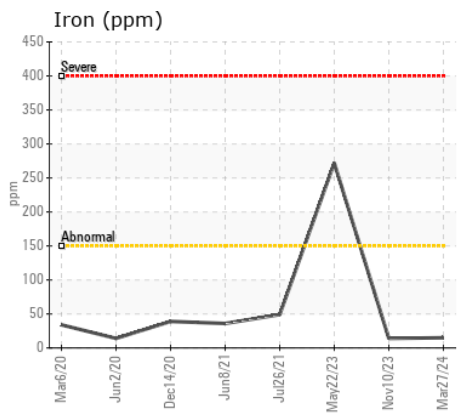
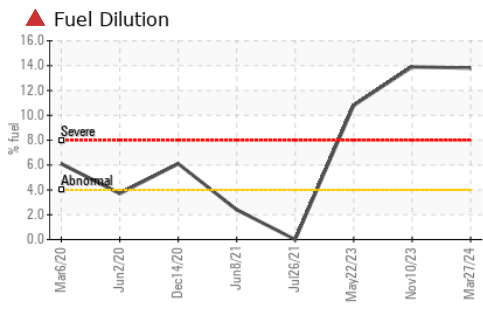
CONTAMINATION

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02627285	TR02597080	TR02560571
Sample Date		Client Info		27 Mar 2024	10 Nov 2023	22 May 2023
Machine Age	kms	Client Info		149165	142905	129363
Oil Age	kms	Client Info		19802	13542	25503
Filter Age	kms	Client Info		19802	13542	25503
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>150	15	14	▲ 272
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	6
Nickel	ppm	ASTM D5185(m)	>5	0	0	1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>40	2	2	● 29
Lead	ppm	ASTM D5185(m)	>50	0	2	<1
Copper	ppm	ASTM D5185(m)	>155	8	11	22
Tin	ppm	ASTM D5185(m)	>10	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Silicon	ppm	ASTM D5185(m)	>30	6	11	▲ 36
Potassium	ppm	ASTM D5185(m)	>20	<1	0	7
Fuel	%	ASTM D7593*	>4.0	▲ 13.8	▲ 13.9	▲ 10.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.1	12.1	18.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	20.4	28.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>400	3	3	8
Boron	ppm	ASTM D5185(m)		74	82	28
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		79	65	126
Manganese	ppm	ASTM D5185(m)		<1	3	22
Magnesium	ppm	ASTM D5185(m)		407	415	425
Calcium	ppm	ASTM D5185(m)	2100	1124	1087	1383
Phosphorus	ppm	ASTM D5185(m)		614	624	657
Zinc	ppm	ASTM D5185(m)	870	706	679	1023
Sulfur	ppm	ASTM D5185(m)		2040	2168	1835
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.7	14.3	31.1
Base Number (BN)	mg KOH/g	ASTM D2896*		5.45	3.87	3.69
Visc @ 100°C	cSt	ASTM D7279(m)	8.3	▲ 5.3	▲ 5.3	▲ 6.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02627285 **Received** : 08 Apr 2024
Lab Number : 02627285 **Tested** : 10 Apr 2024
Unique Number : 5760417 **Diagnosed** : 10 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PercentFuel)

WILCO CONTRACTORS
 3031 ARTHUR ST
 ROSSLYN, ON
 CA P7K 0P2
 Contact: David Cramer

To discuss this sample report, contact Customer Service at 1-800-827-0711.
 * - 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)

T: (807)475-5951
 F: (807)475-8619