



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DODGE 774165

Component
Diesel Engine

Fluid
TRC PRO-SPEC IV+ SYN BLEND 15W40 (11 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02633717	TR02591353	TR02561182
Sample Date		Client Info		20 Apr 2024	14 Oct 2023	23 May 2023
Machine Age	kms	Client Info		287912	276281	264586
Oil Age	kms	Client Info		23326	12000	30124
Filter Age	kms	Client Info		23326	12000	30124
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	82	41	▲ 172
Chromium	ppm	ASTM D5185(m)	>10	1	<1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	1	2
Aluminum	ppm	ASTM D5185(m)	>20	4	4	6
Lead	ppm	ASTM D5185(m)	>20	0	<1	2
Copper	ppm	ASTM D5185(m)	>125	3	2	7
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	<1

CONTAMINATION

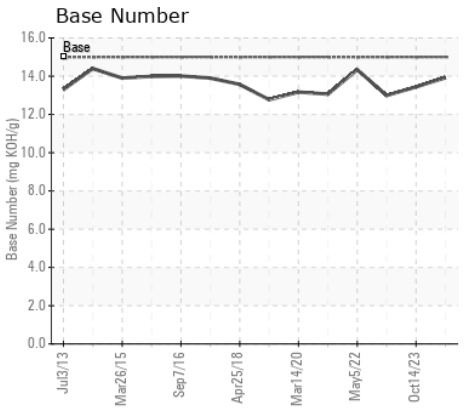
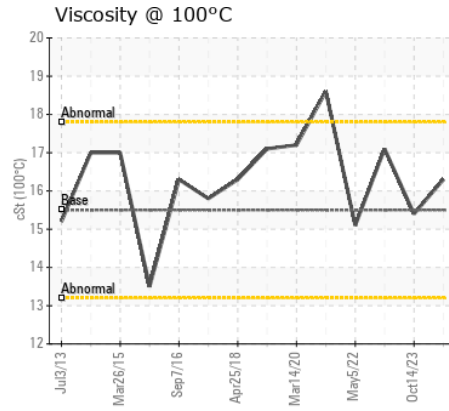
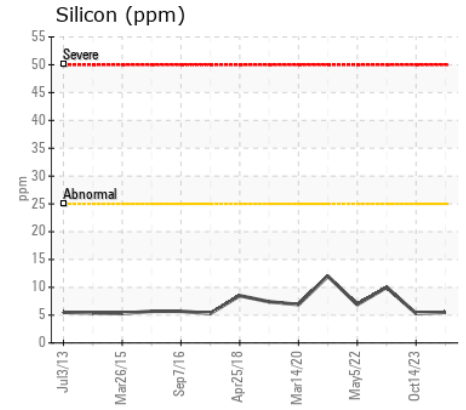
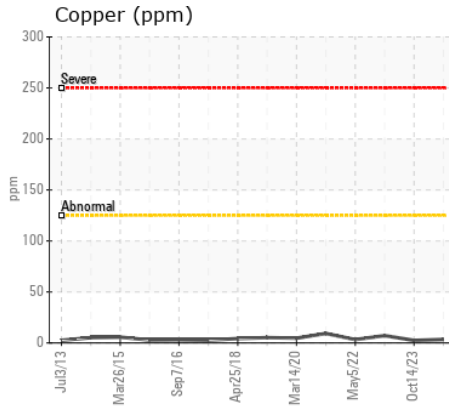
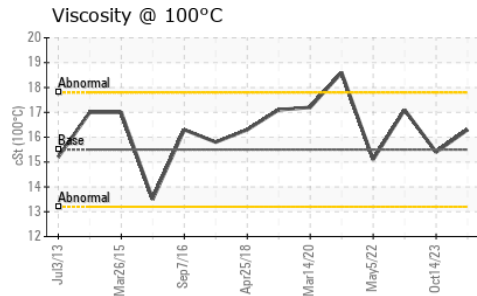
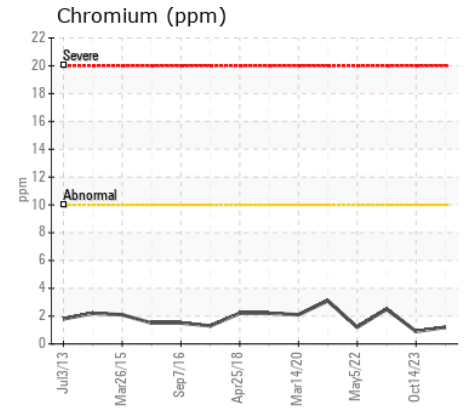
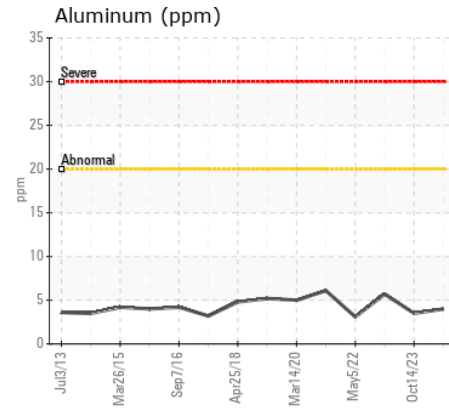
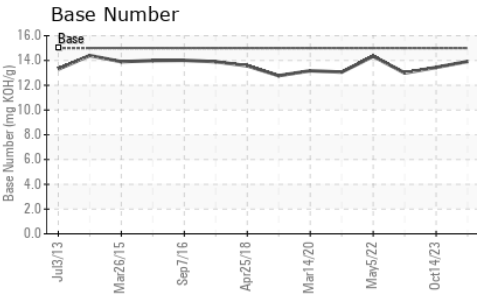
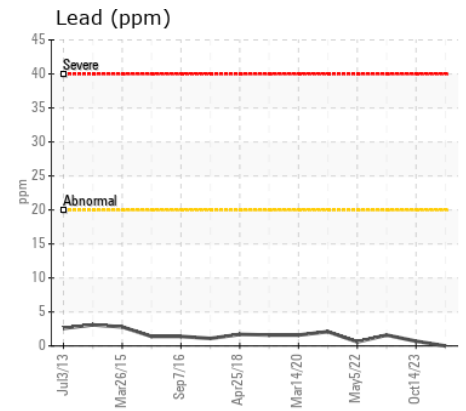
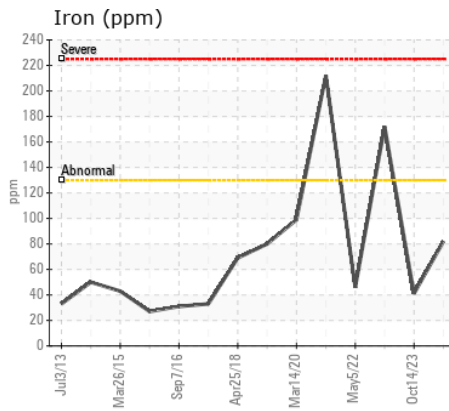
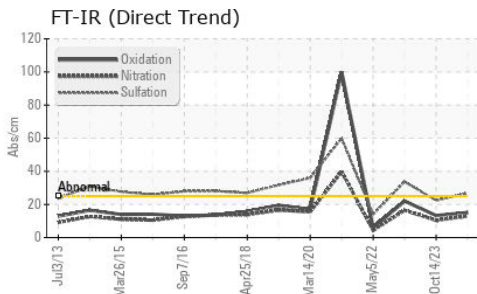
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	5	10
Potassium	ppm	ASTM D5185(m)	>20	2	2	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	4	2.4	▲ 5.4
Nitration	Abs/cm	ASTM D7624*	>20	12.9	10.4	16.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.9	22.4	33.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		3	3	3
Boron	ppm	ASTM D5185(m)	0	44	53	36
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	91	89	89
Manganese	ppm	ASTM D5185(m)		<1	0	2
Magnesium	ppm	ASTM D5185(m)	900	23	22	23
Calcium	ppm	ASTM D5185(m)	1300	4428	4372	4610
Phosphorus	ppm	ASTM D5185(m)		1038	1033	1151
Zinc	ppm	ASTM D5185(m)	1300	1193	1196	1222
Sulfur	ppm	ASTM D5185(m)	3100	3315	3461	3352
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.1	13.3	22.0
Base Number (BN)	mg KOH/g	ASTM D2896*	15	13.92	13.44	12.99
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	16.3	15.4	▲ 17.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02633717
Lab Number : 02633717
Unique Number : 5774870
Test Package : MOB 2

Received : 06 May 2024
Tested : 07 May 2024
Diagnosed : 07 May 2024 - Kevin Marson

ALAN BENNETT
 BOX # 60
 MEACHAM, SK
 CA S0K 2V0
 Contact: Alan Bennett

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)

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