



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PETERBILT 3435-14**  
 Component  
**Front Diesel Engine**  
 Fluid  
**TRC PRO-SPEC V SYN BLEND 10W30 (42 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02644732	TR02544438	TR02497997
Sample Date		Client Info		31 May 2024	16 Feb 2023	15 Jun 2022
Machine Age	kms	Client Info		544173	513793	488688
Oil Age	kms	Client Info		106091	75711	50606
Filter Age	kms	Client Info		30380	25105	25068
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	91	85	67
Chromium	ppm	ASTM D5185(m)	>5	2	2	2
Nickel	ppm	ASTM D5185(m)	>4	3	2	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	7	7	5
Lead	ppm	ASTM D5185(m)	>150	72	113	33
Copper	ppm	ASTM D5185(m)	>90	21	25	6
Tin	ppm	ASTM D5185(m)	>5	2	2	<1
Vanadium	ppm	ASTM D5185(m)		0	<1	0

## CONTAMINATION

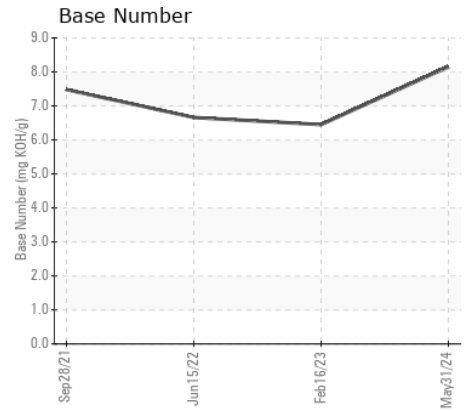
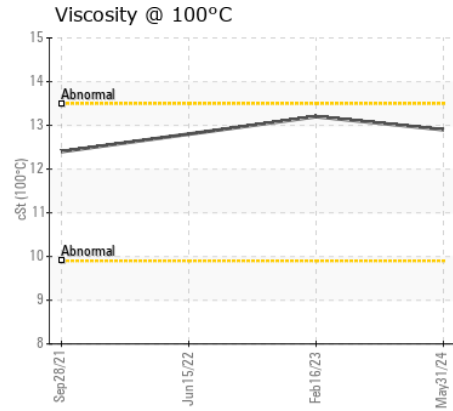
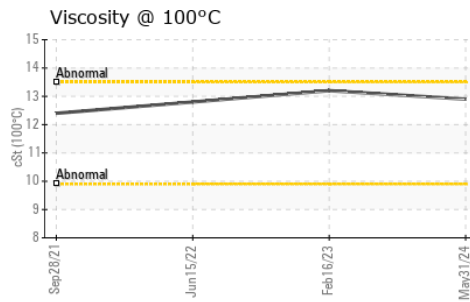
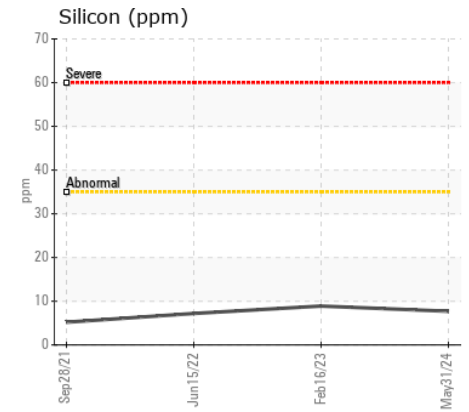
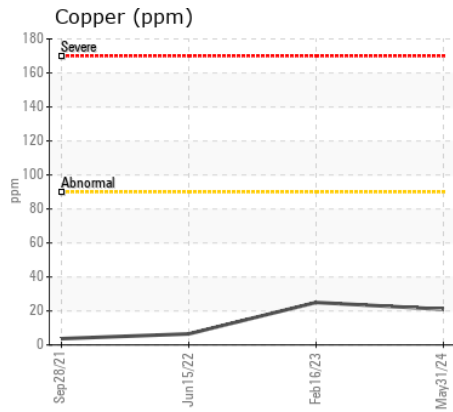
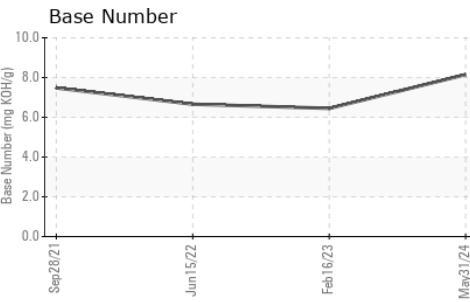
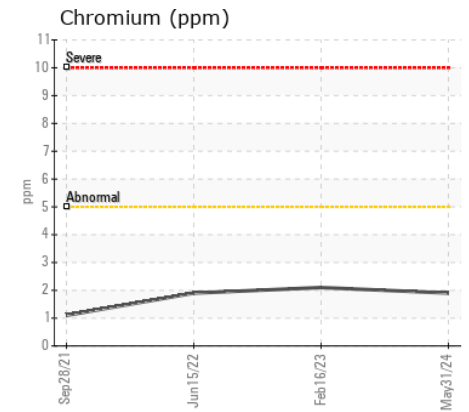
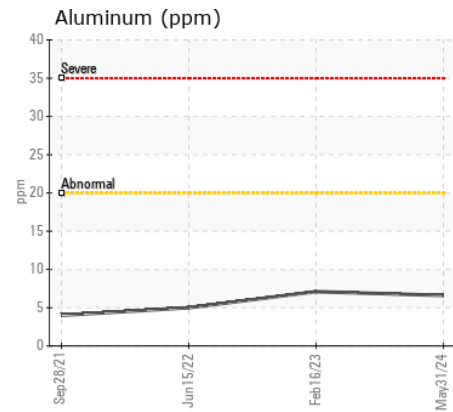
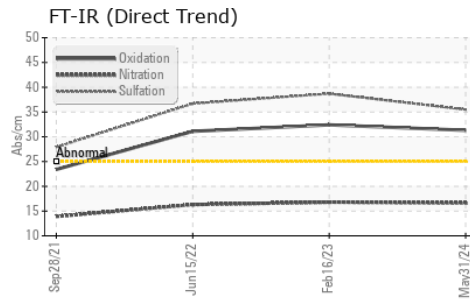
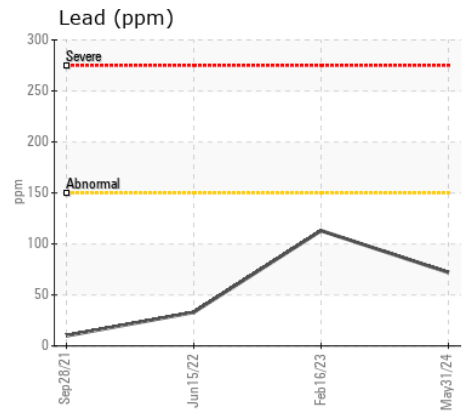
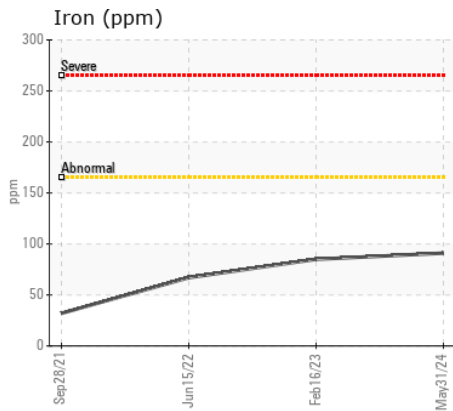
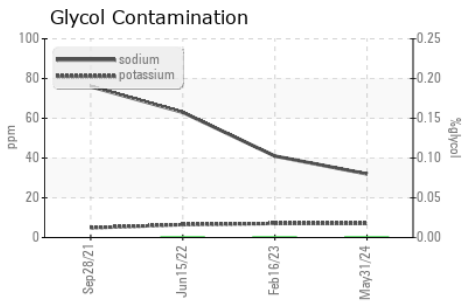
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	8	9	7
Potassium	ppm	ASTM D5185(m)	>20	7	7	6
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>7.5	0.6	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	16.6	16.8	16.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.5	38.7	36.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

## FLUID CONDITION

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)		32	41	63
Boron	ppm	ASTM D5185(m)		33	40	35
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		125	124	105
Manganese	ppm	ASTM D5185(m)		1	1	1
Magnesium	ppm	ASTM D5185(m)		217	256	419
Calcium	ppm	ASTM D5185(m)		3003	3237	2702
Phosphorus	ppm	ASTM D5185(m)		1368	1530	1290
Zinc	ppm	ASTM D5185(m)		1710	1743	1620
Sulfur	ppm	ASTM D5185(m)		3241	3677	3442
Oxidation	Abs/.1mm	ASTM D7414*	>25	31.3	32.4	31.1
Base Number (BN)	mg KOH/g	ASTM D2896*		8.15	6.45	6.66
Visc @ 100°C	cSt	ASTM D7279(m)		12.9	13.2	12.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : TR02644732  
**Lab Number** : 02644732  
**Unique Number** : 5802271  
**Test Package** : MOB 2 ( Additional Tests: Glycol )

**Received** : 28 Jun 2024  
**Tested** : 02 Jul 2024  
**Diagnosed** : 02 Jul 2024 - Kevin Marson

**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)

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