



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETERBILT 505
Component
Diesel Engine
Fluid
CHEVRON URSA SUPER PLUS EC 15W40 (40 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0011935	KLM2339714	KLM2327443
Sample Date		Client Info		28 Jul 2023	12 Apr 2020	12 May 2018
Machine Age	mls	Client Info		699667	655560	571905
Oil Age	mls	Client Info		17000	20000	10000
Filter Age	mls	Client Info		17000	20000	10000
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	14	18
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	4	3
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	25	33	8
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

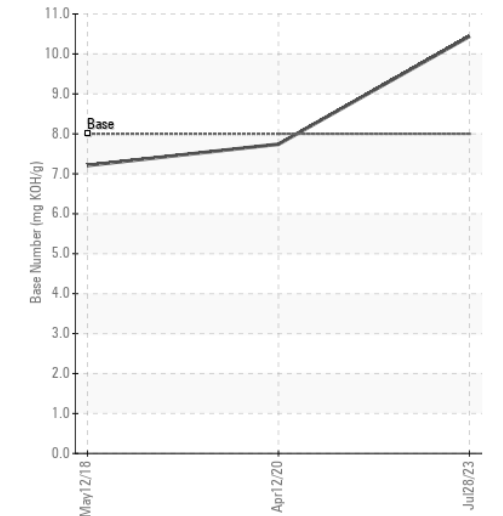
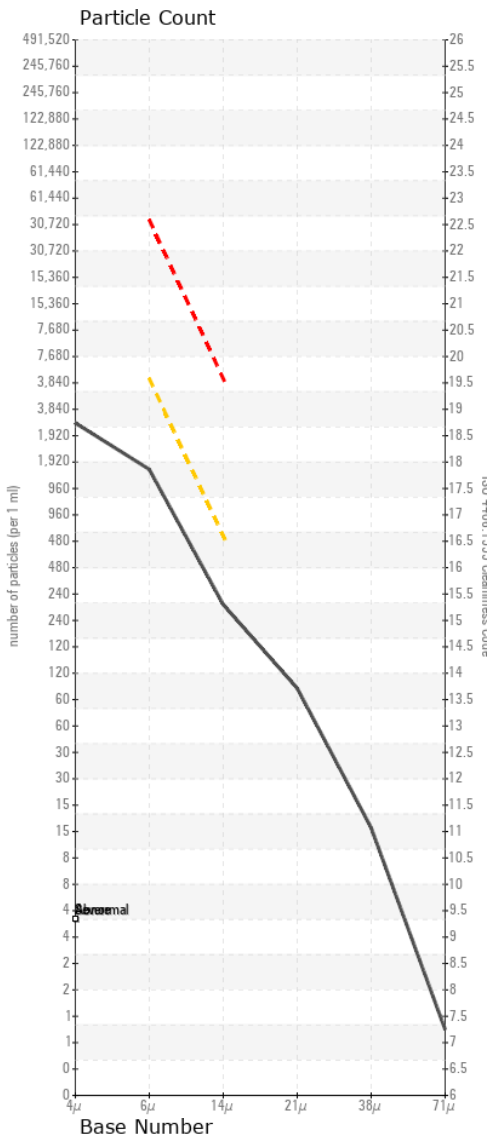
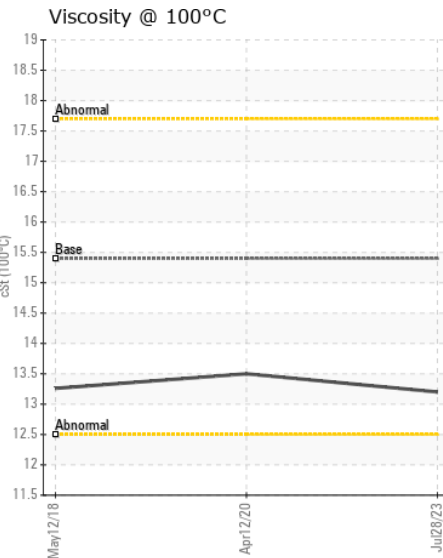
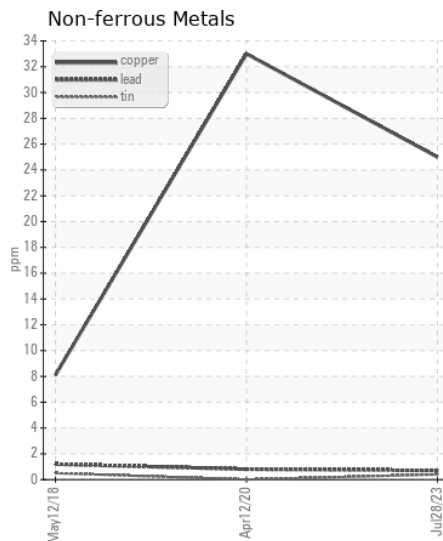
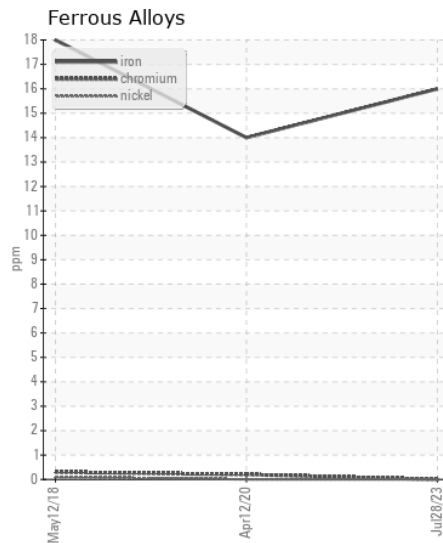
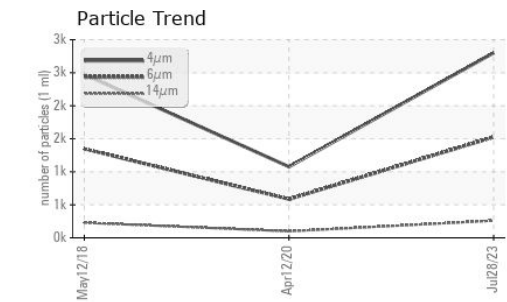
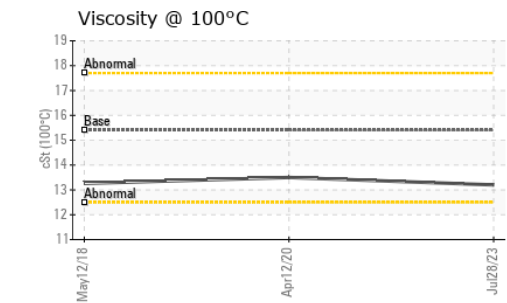
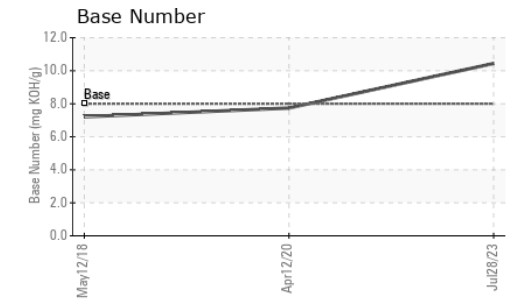
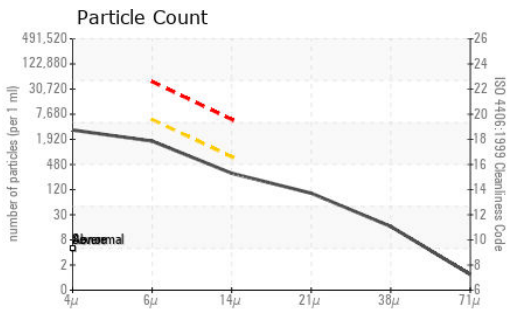
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>25	10	4	3
Potassium	ppm	ASTM D5185m	>20	0	<1	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.3	7.1	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	21.5	19.
Particles >4µm		ASTM D7647		2801	1076	2474
Particles >6µm		ASTM D7647	>5000	1526	586	1347
Particles >14µm		ASTM D7647	>640	260	99	229
Particles >21µm		ASTM D7647	>160	87	33	77
Particles >38µm		ASTM D7647	>40	14	5	11
Particles >71µm		ASTM D7647	>10	1	0	1
Oil Cleanliness		ISO 4406 (c)	>19/16	18/15	16/14	18/15
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

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 D5185m		2	1	1
Boron	ppm	ASTM D5185m		33	266	251
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		60	112	118
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		842	469	481
Calcium	ppm	ASTM D5185m		1414	1355	1313
Phosphorus	ppm	ASTM D5185m	1200	915	605	668
Zinc	ppm	ASTM D5185m	1300	1132	691	737
Sulfur	ppm	ASTM D5185m		3959	3295	1535
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	17.7	15.
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	10.44	7.74	7.21
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.5	13.26



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011935 **Received** : 24 Aug 2023
Lab Number : 05934515 **Tested** : 28 Aug 2023
Unique Number : 10619786 **Diagnosed** : 28 Aug 2023 - Don Baldrige
Test Package : MOB 2 (Additional Tests: PrtCount)

BERRINGTON CUSTOM HAY
 PO BOX 540
 WELLINGTON, NV
 US 89444
 Contact: GARY BERRINGTON

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)

T: (775)465-2264

F: