



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**GMC SIERRA 8507**  
 Component  
**Diesel Engine**  
 Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (10 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06212598</b>	TR06174744	TR06128047
Sample Date		Client Info		<b>11 Jun 2024</b>	25 Apr 2024	15 Mar 2024
Machine Age	mls	Client Info		<b>152752</b>	147484	141934
Oil Age	mls	Client Info		<b>5000</b>	5000	5000
Filter Age	mls	Client Info		<b>5000</b>	5000	5000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	8	9
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	3	5
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	0	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

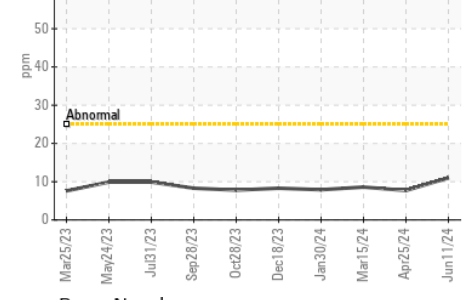
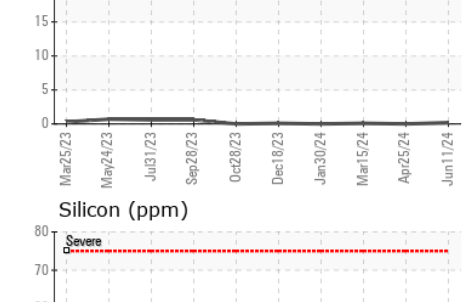
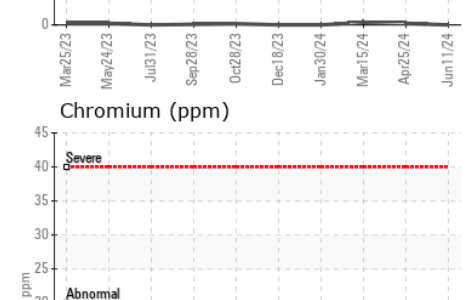
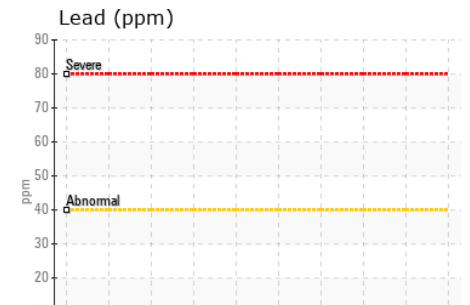
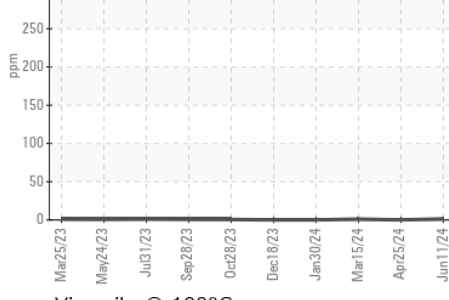
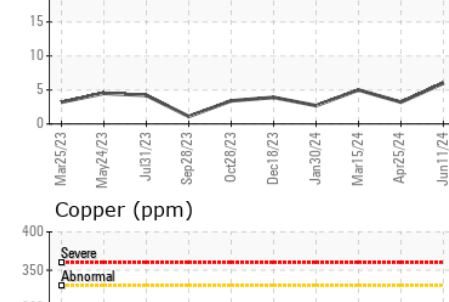
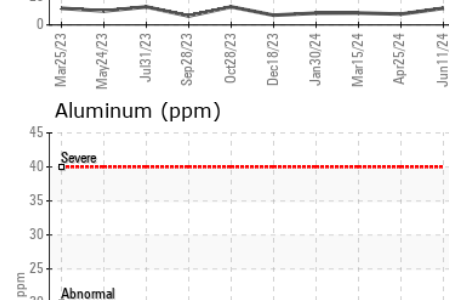
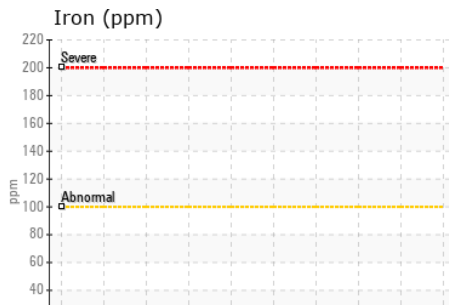
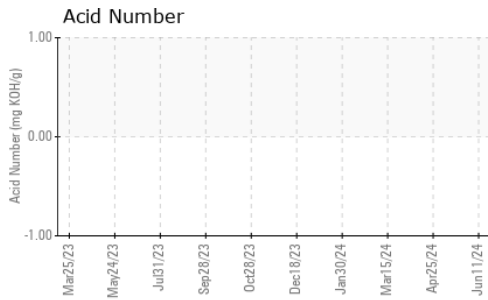
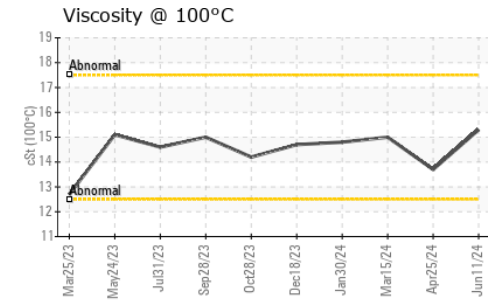
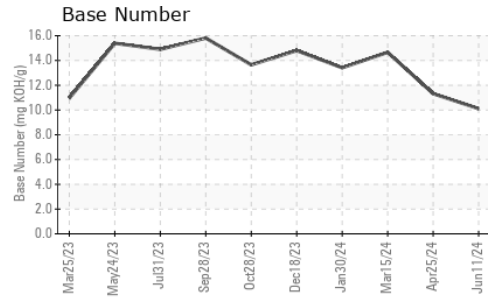
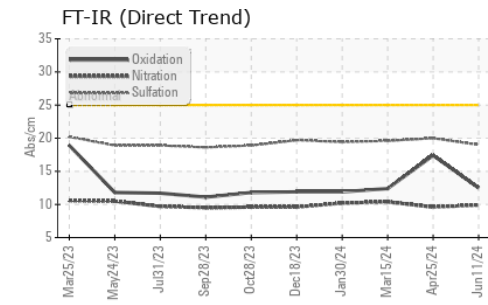
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	8	9
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	3	6
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.9</b>	9.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.0</b>	20.0	19.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>4</b>	2	3
Boron	ppm	ASTM D5185m		<b>8</b>	36	5
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>113</b>	67	131
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>122</b>	622	20
Calcium	ppm	ASTM D5185m		<b>4036</b>	1764	4153
Phosphorus	ppm	ASTM D5185m		<b>980</b>	796	932
Zinc	ppm	ASTM D5185m		<b>1081</b>	905	1059
Sulfur	ppm	ASTM D5185m		<b>4937</b>	3144	4918
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.5</b>	17.4	12.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.11</b>	11.32	14.66
Visc @ 100°C	cSt	ASTM D445		<b>15.3</b>	13.7	15.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06212598  
**Lab Number** : 06212598  
**Unique Number** : 11085462  
**Test Package** : MOB 2 ( Additional Tests: TAN Man )

**MITCHELL EXCAVATING - BODI MITCHELL**  
 200 SOUTH 1455 WEST  
 LINDON, UT  
 US 84042  
 Contact: JOHN AAGARD

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Angela Borella

*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: (801)796-3698  
 F: