

465 **EXTREME** RACING ENGINE OILS

**ADVANCED SYNTHETIC LUBRICANT SYSTEM
FOR HIGH-OUTPUT ENGINES**

465 LUBRICANTS Racing Oils are engineered with premium base oils and a high-performance additive system to deliver exceptional protection, power and reliability under extreme conditions.



PREMIUM BASE OIL TECHNOLOGY



GROUP III
HYDROCRACKED
BASE OILS



**GROUP IV
(PAO)**
POLYALPHAOLEFIN
BASE OILS



**GROUP V
(ESTER)**
ESTER
BASE OILS



ADVANCED ADDITIVE SYSTEM

- ✓ ZDDP anti-wear system for high-pressure protection
- ✓ Friction-modifying chemistry for reduced drag
- ✓ Detergent/Dispersant package for superior cleanliness
- ✓ Shear-stable viscosity improvers for consistent performance



WHY IT MATTERS



**BETTER
PROTECTION
AT STARTUP**



**STRONGER
FILM AT
HIGH RPM**



**CLEANER
ENGINES**



**LOWER OIL
CONSUMPTION**



**MORE
CONFIDENCE**



**FOR HIGH-
PERFORMANCE
DRIVERS**

BUILT FOR



PERFORMANCE CARS



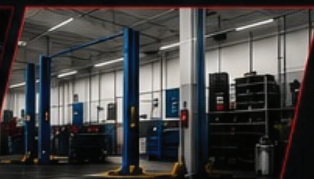
TURBO ENGINES



TRACK DAYS



TUNED VEHICLES



**PREMIUM
SERVICE CENTERS**



**PERFORMANCE DRIVEN.
ENGINEERED TO WIN.**



**MADE
IN USA**



**PREMIUM
QUALITY**



**RACE
PROVEN**

REAL WORLD PERFORMANCE VERIFIED



THE TEST Third-Party Independent Oil Analysis



اينوك
enoc



BUREAU
VERITAS

Dubai, United Arab Emirates



9,000 km
of desert heat.



Turbocharged
engine.



Real-world
driving conditions.



465
EXTREME
RACING
ENGINE OIL OW-20

SERVICE INTERVAL

9,000 km

KEY RESULTS



VISCOSITY STAYED STRONG

Maintained proper oil film strength and protected the engine under extreme heat.



LOW ENGINE WEAR

Very low wear metals indicate excellent protection for bearings, cams and valvetrain.



ADDITIVES STAYED ACTIVE

Key anti-wear additives remained effective after extended service.



CLEAN OIL CONDITION

No contamination issues. The oil stayed clean, stable and reliable.



HEALTHY OIL CHEMISTRY

TBN and TAN are in good balance, showing the oil still has useful life.

INDEPENDENT TEST RESULTS

OIL: 465 EXTREME RACING OW-20

INTERVAL: 9,000 km



1 VISCOSITY STAYED STRONG

Your oil didn't thin out — it stayed in grade and protected the engine.

VISCOSITY @ 100°C (cSt)

Fresh Oil

7.171

After 9,000 km

6.977

STAYED IN GRADE ✓



2 WEAR METALS STAYED LOW

Single digit ppm across the board. Your bearings, cams, and valvetrain stayed protected.

WEAR METALS (ppm)

Iron
(Fe)

7

Copper
(Cu)

6

Aluminium
(Al)

<1

Lead
(Pb)

<1

EXCELLENT WEAR PROTECTION ✓



3 ADDITIVES STAYED ACTIVE

Over 90% of the anti wear chemistry remained in the oil. That means long lasting protection.

KEY ADDITIVES (ppm)

Zinc
(Zn)

860

Phosphorus
(P)

691

Calcium
(Ca)

1212

Magnesium
(Mg)

481

STRONG ADDITIVE RETENTION ✓



4 NO CONTAMINATION ISSUES

- ✓ No coolant
- ✓ No dirt
- ✓ No fuel dilution
- ✓ Just clean, stable oil

CONTAMINATION (ppm)

Silicon
(Si)

2

Sodium
(Na)

9

Water Content
(% vol)

<0.05

CLEAN & STABLE ✓



5 HEALTHY CHEMISTRY

TBN and TAN stayed in balance — the oil still had life left.

OIL CHEMISTRY

TBN (mgKOH/g)

5.27

TAN (mgKOH/g)

1.79

OIL STILL HAS LIFE LEFT ✓

PERFORMANCE HIGHLIGHTS



EXCELLENT
WEAR
PROTECTION



OUTSTANDING
THERMAL
STABILITY



MAINTAINS
VISCOSITY



LOW OIL
CONSUMPTION



HIGH TEMPERATURE
PROTECTION



INDEPENDENTLY
LABORATORY
TESTED



**TESTED UNDER
EXTREME DESERT CONDITIONS**

Independent laboratory analysis by Bureau Veritas and ENOC, Dubai



Results are based on the tested vehicle, operating conditions, lubricant grade, maintenance practices, and analysis performed by Bureau Veritas. Individual results may vary depending on engine condition and operating environment.

EXTREME TEST. REAL DATA. PROVEN PERFORMANCE.



PERFORMANCE
DRIVEN

465 EXTREME RACING ENGINE OIL 0W-20

1 WEAR METAL ANALYSIS (ppm)

All wear metals remained below 10 ppm, including Fe, Cu, Al, and Pb.

Metal	Fresh	Used	Change
Iron (Fe)	<1	7	↓ Low
Copper (Cu)	<1	6	↓ Low
Aluminum (Al)	<1	4	↓ Low
Lead (Pb)	<1	3	↓ Low

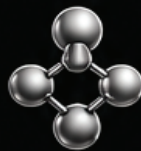


ENGINEERING INTERPRETATION

- Minimal abrasive wear
- Minimal adhesive wear
- Stable hydrodynamic and boundary lubrication
- No evidence of bearing distress or valvetrain scuffing

2 ADDITIVE ELEMENT RETENTION (ppm)

Element	Fresh	Used	Retention
Calcium (Ca)	1297	1212	93%
Magnesium (Mg)	606	585	97%
Phosphorus (P)	825	812	98%
Zinc (Zn)	862	818	95%
Boron (B)	97	28	29%



ENGINEERING INTERPRETATION

High retention confirms additive durability, thermal stability, and minimal depletion under severe service.

3 CONTAMINANT ANALYSIS (ppm)

Contaminant	Fresh	Used	Assessment
Silicon (Si)	<1	9	✓ Normal
Sodium (Na)	<1	9	✓ Normal
Water (%)	<0.05	<0.05	✓ Normal



ENGINEERING INTERPRETATION

- No coolant ingress
- No air filtration failure
- No moisture contamination
- No abnormal environmental exposure

4 ACID / BASE CHEMISTRY

Property	Fresh	Used	Change
TBN (mgKOH/g)	5.37	3.27	↓ -2.10
TAN (mgKOH/g)	1.39	1.65	↑ +0.26



ENGINEERING INTERPRETATION

- Controlled oxidation
- Healthy detergency reserve
- Balanced acid/base progression typical of high-quality synthetic formulations

5 PHYSICAL PROPERTIES

Property	Fresh	Used	Change
KV40 (cSt)	38.02	30.99	↓ -7.03
KV100 (cSt)	7.717	6.979	↓ -0.738
Flash Point (°C)	220	207	↓ -13
TBN (mgKOH/g)	5.37	3.27	↓ -2.10
TAN (mgKOH/g)	1.39	1.65	↑ +0.26
Water (%)	<0.05	<0.05	= 0

OVERALL ASSESSMENT



The oil maintained viscosity, protected critical components, and preserved its additive system under extended high-temperature, high-load conditions.

THESE RESULTS ARE CONSISTENT WITH A HIGH-ESTER, HIGH-PAO RACING FORMULATION ENGINEERED FOR SEVERE SERVICE ENVIRONMENTS.



EXCELLENT WEAR PROTECTION



HIGH TEMPERATURE STABILITY



ADDITIVE DURABILITY



CLEAN & CONTAMINATION FREE



DESERT HEAT



TURBOCHARGED
ENGINE



REAL-WORLD
DRIVING



9,000 KM
SERVICE INTERVAL

INDEPENDENT LABORATORY
ANALYSIS BY ENOC /
BUREAU VERITAS, DUBAI

Results are based on the tested vehicle, operating conditions, lubricant grade, maintenance practices performed by Bureau Veritas. Results may vary depending on engine condition and operating environment.

LUBRICATING OIL CONDITION MONITORING REPORT

EQUIPMENT DETAILS

Location: Dubai

Make / Year: SUV-GMC-TAHU-2017

Sampling Point: Not Stated

Distributor: EPPCO Lubricants

Model: -

Lube In Use: 465- Extreme Racing Engine Oil 0W20

Customer Name: FNCT

Equipment Total Time: 9000

Sampled By: Client

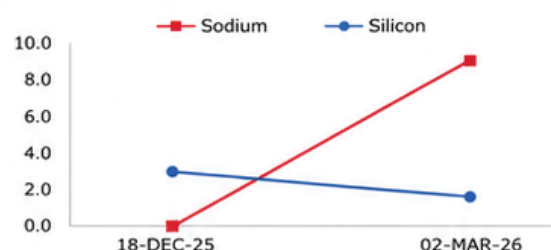
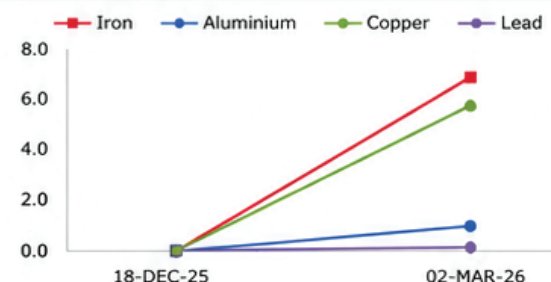
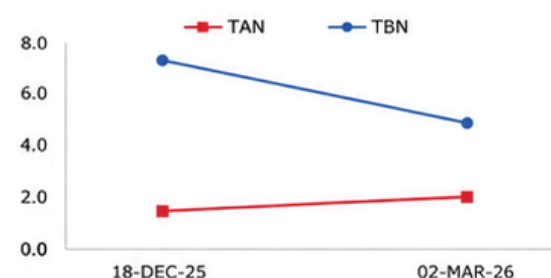
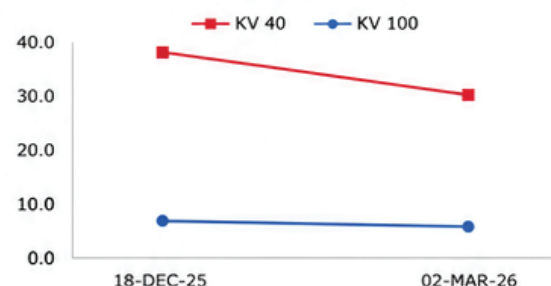
Sample ID: -

Reference: 2021002708

i Analysis results are given for reference only.

Sample Details		Fresh Oil	Unknown
Enoc Ref:		-	2021002708
Sample Number		25-03517-021	26-00776-023
Date Sampled		18-Dec-25	02-Mar-26
Date Received		27-Dec-25	03-Apr-26
Date Reported		30-Dec-25	06-Apr-26
Kms/Hours on Equipment		-	9,000
Kms/Hours on Lubricant		-	-
Physical Tests			
Kinematic Viscosity @ 40 °C, cSt	D445	38.02	30.98
Kinematic Viscosity @ 100 °C, cSt	D445	7.171	6.977
Flash Point, °C	D3828*	>200	>200
Total Base Number, mgKOH/g	D2896	7.58	5.27
Total Acid Number, mgKOH/g	D664*	1.39	1.79
Water Content, %vol	D6304	<0.05	<0.05
FT-IR*			
Soot, Abs/0.1mm		-	-
Oxidation, Abs/cm		-	-
Nitration, Abs/cm		-	-
Sulfonation, Abs/cm		-	-
Inductively Coupled Plasma (ICP)			
Spectro Analysis, ppm wt	D 5185		
Wear Metals			
Iron (Fe)		<1	7
Copper (Cu)		<1	6
Lead (Pb)		<1	<1
Aluminium (Al)		<1	<1
Tin (Sn)		<1	<1
Chromium (Cr)		<1	<1
Nickel (Ni)		<1	<1
Vanadium (V)		<1	<1
Additive			
Calcium (Ca)		1297	1212
Magnesium (Mg)		506	481
Phosphorus (P)		655	691
Zinc (Zn)		802	860
Molybdenum (16l)		161	149
Barium (Ba)		<1	<1
Boron (B)		97	28
Contamination			
Silicon (Si)		3	2
Sodium (Na)		<1	9

Graphs



Reported By: Shihab A. Rahiman - Senior Chemist (ICML-MLA I)

NA : Not Available



This is computer generated report and do not require any stamo or signature

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