OIL REPORT

LAB NUMBER: N01204 **UNIT ID:** 74 BMW 3.0CS
REPORT DATE: 1/14/2021 **CLIENT ID:** 174058
CODE: 20/698 **PAYMENT:** CC: Visa

UNIT

MAKE/MODEL: BMW 3.0L 6-Cylinder
FUEL TYPE: Gasoline (Unleaded)
ADDITIONAL INFO:
OIL TYPE & GRADE: Valvoline VR1 20W/50
OIL USE INTERVAL: 4,000 Miles

CLIENT

ERIC VAN NICE
1343 CAUDOR STREET
ENCINITAS, CA 92024
PHONE: (949) 436-2479
FAX:
ALT PHONE:
EMAIL: evannice@cox.net

COMMENTS

ERIC: Chrome, iron, copper, and lead are high compared to our averages for this kind of 3.0L, based on ~6,000 miles of use. Chrome is from rings, iron shows wear from steel parts (cylinders, shafts), and copper is from brass/bronze parts like bushings. Lead can show bearing wear, but it could also be from past use of leaded fuel. Note silicon. If the engine was worked on recently, it can show sealers, which may help explain metal as wear-in, but if not, check air filtration as it can be dirt. The TBN is good, but we suggest checking back to monitor metals in 2,000 miles.

ELEMENTS IN PARTS PER MILLION

		UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
MI/HR on Oil	4,000							
MI/HR on Unit								
Sample Date	12/29/2020							
Make Up Oil Added	1 qt							
ALUMINUM	8							5
CHROMIUM	**6**							0
IRON	**48**							14
COPPER	**21**							8
LEAD	**32**							3
TIN	2							1
MOLYBDENUM	22							103
NICKEL	0							0
MANGANESE	2							2
SILVER	0							0
TITANIUM	4							0
POTASSIUM	0							2
BORON	30							54
SILICON	**10**							5
SODIUM	191							10
CALCIUM	2019							2430
MAGNESIUM	77							123
PHOSPHORUS	1069							833
ZINC	1142							1007
BARIUM	1							0

PROPERTIES

		Values Should Be*					
SUS Viscosity @ 210°F	**74.0**	77-94					
cSt Viscosity @ 100°C	**14.00**	14.8-19.2					
Flashpoint in °F	390	>385					
Fuel %	<0.5	<2.0					
Antifreeze %	0.0	0.0					
Water %	0.0	0.0					
Insolubles %	0.4	<0.6					
TBN	3.6	>1.0					
TAN							
ISO Code							

*** THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE**

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