

Equipment - Component
FURGON CHEVROLET NKR IIIE 2397 - Engine - Diesel
MOTOR

Site/Vessel Name - Code
COORDINADORA MERCANTIL MEDELLIN -
21636

Customer
COORDINADORA MERCANTIL

Manufacturer - Model
Chevrolet (GM) - NKR III

LubeAnalyst Code
01409659/EOH01

Registered Lubricant
Shell - Rimula R4 X 15W-40








Attention

Diagnosis

El aceite presenta Sílice (Si) en niveles de precaución, que proviene de arena o tierra que han entrado al motor y causan abrasión. Recomendamos revisar filtro de aire.

Sample Information

Sample Number	4913186822	4913186865	4913181259	4913169531	4913155524
Sample Condition					
Sample Date	24/Mar/2021	23/Mar/2021	15/Sep/2020	07/Jul/2020	28/Apr/2020
Sample Received	09/Apr/2021	09/Apr/2021	08/Oct/2020	25/Jul/2020	18/May/2020
Sample Completed	11/Apr/2021	11/Apr/2021	09/Oct/2020	27/Jul/2020	21/May/2020
Lubricant in use	Rimula R4 X 15W-40	Rimula R4 X 15W-40	Rimula R4 X 15W-40	Rimula R4 X 15W-40	Rimula R4 X 15W-40
Equipment Life	226575 (Kilometres)	226283 (Kilometres)	212059 (Kilometres)	204494 (Kilometres)	197312 (Kilometres)
Lubricant Life	8000 (Kilometres)	8000 (Kilometres)	8000 (Kilometres)	17000 (Kilometres)	8500 (Kilometres)
Top-up Volume					
Sample from Oil Drain	No	No	Yes	Yes	No




Physical Characteristics

Viscosity 100°C cSt	14.0	13.4	13.0	13.0	12.9
TBN (D 2896) mg KOH/g	UTT*	UTT*	UTT*	UTT*	UTT*
TAN (D 664) mg KOH/g	UTT*	UTT*	UTT*	UTT*	UTT*

Wear

Iron (Fe) ppm	7	17	9	25	18
Chromium (Cr) ppm	0	0	0	0	0
Tin (Sn) ppm	0	0	0	0	0
Lead (Pb) ppm	0	0	1	0	0
Copper (Cu) ppm	1	4	2	5	3
Nickel (Ni) ppm	0	0	0	0	0
Aluminium (Al) ppm	2	4	3	5	4
Vanadium (V) ppm	0	0	0	0	0
Silver (Ag) ppm	0	0	0	0	0
Titanium (Ti) ppm	0	0	0	1	1
Manganese (Mn) ppm	0	0	1	1	1

Contamination

Water (FT-IR) %	0.00	0.00	0.00	0.00	0.00
Glycol (FT-IR) %	0.00	0.00	0.00	0.00	0.00
Sodium (Na) ppm	8	13	15	 50	 51
Silicon (Si) ppm	 15	12	6	13	13
Fuel (FT-IR) %	0.00	0.00	0.00	1.00	1.10
Soot (FT-IR) Abs cm ⁻¹	0.13	0.08	0.08	0.16	0.09

Additives

Calcium (Ca) ppm	3741	3678	2226	3649	3641
Zinc (Zn) ppm	1319	1393	1340	1359	1384
Phosphorus (P) ppm	1216	1300	1219	1214	1284
Molybdenum (Mo) ppm	45	46	50	43	39
Magnesium (Mg) ppm	31	87	324	17	17
Boron (B) ppm	483	411	208	407	427

Oil Condition

Oxidation (FT-IR) Abs cm ⁻¹	0.08	0.05	0.15	0.04	0.03
Nitration (FT-IR) Abs cm ⁻¹	0.08	0.06	0.07	0.06	0.05
Sulfation (FT-IR) Abs cm ⁻¹	0.00	0.06	0.03	0.04	0.02