



CONSTRUCTION EQUIPMENT

TMR-PUNTA GORDA SWA400459-30 467142 VOLVO L90H 624974 DIESEL ENGINE



Sample No: VCP433591
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWA400459-30



SAMPLE INFORMATION

Sample Number	VCP433591	VCP353639	VCP344092	VCP332010
Sample Date	18 Dec 2023	18 Jun 2022	24 Jan 2022	08 Dec 2021
Machine Hours	81421	5881	0	5030
Oil Hours	0	0	0	0
Oil Changed	Not Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



TRADEMARK METALS RECYCLING - PUNTA GORDA
 5005 DALEWOOD STREET
 PUNTA GORDA, FL
 US 33982
 Contact: RYAN BOWDEN



OIL CONDITION

Visc @ 100°C	cSt	▲ 11.8	■ 13.0	■ 13.3	■ 13.3
Base Number (BN)	mg KOH/g	■ 10.2	■ 9.8	■ 11.5	■ 11
Oxidation (PA)	%	71	75	82	78

T:
 F: (941)575-4458

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	■ 0.2	■ 0.4	■ 0.2	■ 0.2
Nitration (PA)	%	49	59	52	47
Sulfation (PA)	%	57	59	63	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	▲ 3.2	<1.0	<1.0	<1.0
Silicon	ppm	■ 13	■ 7	■ 7	■ 8
Sodium	ppm	■ 4	■ 2	■ 2	■ 2
Potassium	ppm	■ 2	■ 0	■ 0	■ 0



WEAR METALS

Iron	ppm	■ 5	■ 12	■ 5	■ 5
Copper	ppm	■ 2	■ <1	■ <1	■ <1
Lead	ppm	■ 0	■ <1	■ 0	■ <1
Tin	ppm	■ 0	■ <1	■ 0	■ <1
Aluminum	ppm	■ 14	■ 16	■ 5	■ 4
Chromium	ppm	■ <1	■ 1	■ <1	■ <1
Molybdenum	ppm	■ 61	■ 56	■ 42	■ 45
Nickel	ppm	■ <1	■ <1	■ 0	■ 0
Titanium	ppm	0	<1	<1	0
Silver	ppm	■ 0	2	<1	<1
Manganese	ppm	■ <1	■ <1	■ <1	■ <1
Vanadium	ppm	■ <1	0	0	0



ADDITIVES

Calcium	ppm	■ 1624	■ 1639	■ 1541	■ 1740
Magnesium	ppm	■ 516	■ 529	■ 453	■ 529
Zinc	ppm	■ 1179	■ 1133	■ 1003	■ 1118
Phosphorus	ppm	■ 1024	■ 910	■ 840	■ 954
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 112	■ 49	■ 54	■ 62

Depot: TRAPUN
Unique No: 10804397
Signed: Jonathan Hester
Report Date: 29 Dec 2023



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GRAPHS

