



CONSTRUCTION EQUIPMENT

SPM647231 SENNEBOGAN 835M 835.0.2 195 - DIESEL ENGINE



Sample No: VCP435699
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM647231



SAMPLE INFORMATION

Sample Number	VCP435699	VCP401722	VCP404343	VCP343321
Sample Date	03 Feb 2024	02 Aug 2023	03 Apr 2023	24 Aug 2022
Machine Hours	18465	18054	17516	16508
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

SIMS METAL MANAGEMENT

2500 S. PAULINA
 CHICAGO, IL
 US 60608

Contact: RYAN WISE
 ryan.wise@simsmm.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	12.4	14.8	12.3	13.0
Base Number (BN)	mg KOH/g	7.6	8.8	6.2	8.0
Oxidation (PA)	%	66	54	86	66

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.1	0.5	0.2
Nitration (PA)	%	81	47	103	88
Sulfation (PA)	%	55	49	65	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.0	<1.0	1.9	<1.0
Silicon	ppm	5	5	7	10
Sodium	ppm	1	2	0	1
Potassium	ppm	2	2	2	4



WEAR METALS

Iron	ppm	13	6	44	18
Copper	ppm	20	13	213	384
Lead	ppm	<1	0	0	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	2	2	2	4
Chromium	ppm	<1	<1	2	<1
Molybdenum	ppm	45	55	40	33
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	<1	0	1
Manganese	ppm	<1	<1	1	3
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1133	1054	1256	1766
Magnesium	ppm	1002	955	798	331
Zinc	ppm	1232	1272	1084	1026
Phosphorus	ppm	978	1024	861	821
Barium	ppm	0	0	0	7
Boron	ppm	14	4	14	33

Depot: SIMCHIIL
Unique No: 10882799
Signed: Wes Davis
Report Date: 19 Feb 2024

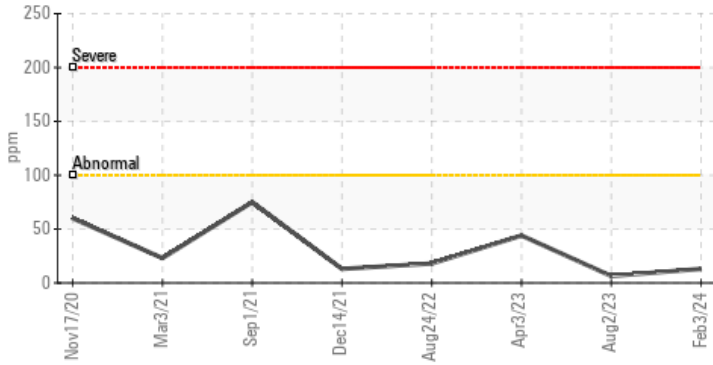


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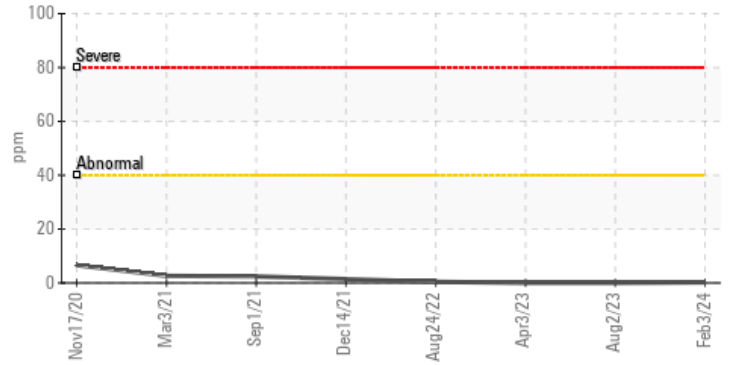


GRAPHS

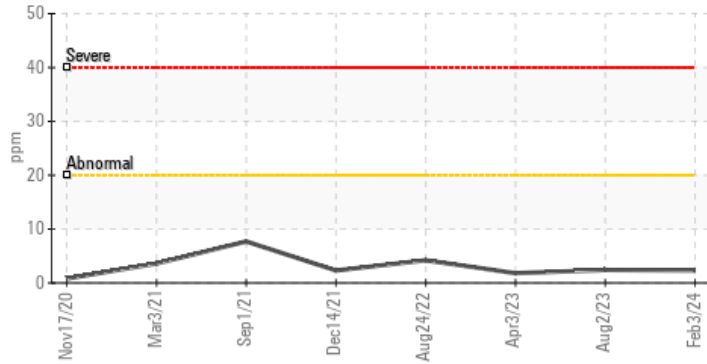
Iron (ppm)



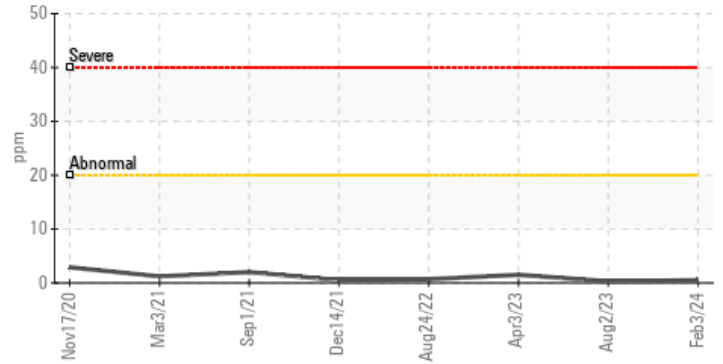
Lead (ppm)



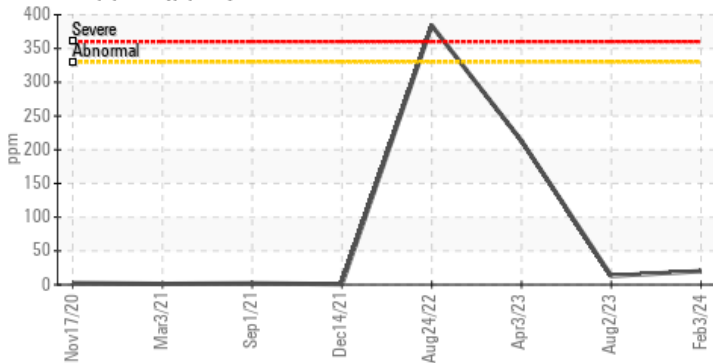
Aluminum (ppm)



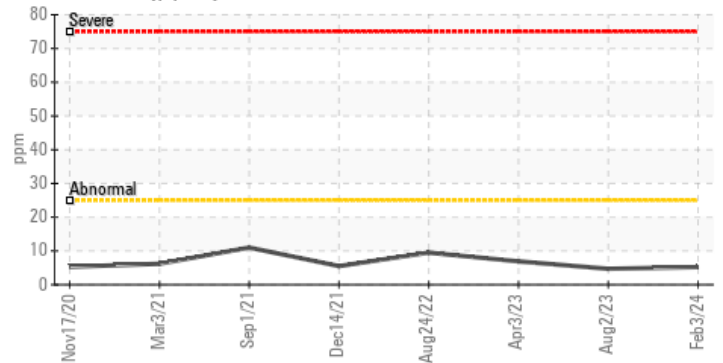
Chromium (ppm)



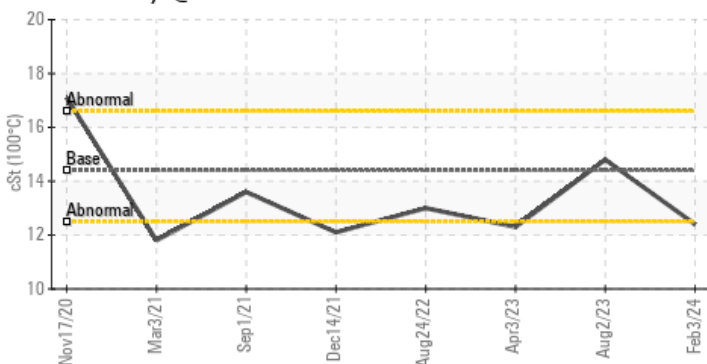
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

