

DAFTAR PUSTAKA

- Adams, M. J., Romeo, M. J., & Rawson, P. (2007). FTIR analysis and monitoring of synthetic aviation engine oils. *Talanta*, 73(4), 629–634. <https://doi.org/10.1016/J.TALANTA.2007.04.036>
- ASTM International. (2013). Standard practice for in-service monitoring of mineral turbine oils for steam, gas, and combined cycle turbines (ASTM D4378-13). *ASTM International*. <https://doi.org/10.1520/D4378-13>
- Benjumea, D. C., Laniado, H., & Combata, O. (2023). Analytical model to monitor the oil conditions on the main components of mining dumpers. *Results in Engineering*, 17. <https://doi.org/10.1016/j.rineng.2023.100934>
- Coombs, P., Cox, I., & Samways, A. (1998). 981368 Doubling Oil Drain Intervals-The Reality of Centrifugal Bypass Filtration Reprinted From: Lubricants for Passenger Cars and Diesel Engines (SP-1368) *International Spring Fuels and Lubricants Meeting and Exposition Dearborn, Michigan*.
- Gransberg, D. D. (2015). Major Equipment Life-cycle Cost Analysis. <http://www.lrrb.org/pdf/201516.pdf>
- Green, D. A., & Lewis, R. (2007). Investigation of soot contaminated lubricant wear mechanisms. *SAE Technical Paper 2007-01-1964*. <https://doi.org/10.4271/2007-01-1964>
- Heywood, J. (2018). *Internal combustion engine fundamentals* (2nd ed.). McGraw-Hill Education.
- Hanifuddin, M., Hastuningtyas, S. S., dan Pertama, P. (2011). Analisa Kerusakan Komponen Mesin Diesel Melalui Uji Fisika Kimia Minyak Lumas aP1 cF-4. In *Oktober* (Vol. 109).
- Helmold, M. (2019). Excellence in Performance Management. *In Management for Professionals: Vol. Part F568*. https://doi.org/10.1007/978-3-030-20534-8_3

- Imran, S., Mohd Zulkifli, N. W., Kalam, M. A., Ijaz Malik, M. A., Hassan, M. B. H., Ali, M., & Mostofa, K. Z. (2025). Enhanced engine performance and corrosion mitigation via novel modified oil filters in biodiesel-driven internal combustion engines. *Industrial Lubrication and Tribology*.
- Jetter, S. M., Kelly, K. J., Ragomo, M. A., Morrow, R. C., Nycz, D. S., Karl, G. M., Gullett, D. F., Dussault, R. G., Butler, B., Becker, T. H., & Francisco, S. (2018). Extended Oil Drain Performance Capabilities of Diesel Engine Oils International Fall Fuels and Lubricants Meeting and Exposition.
- Kaleli, H., Üniversitesi, Y. T., Fakültesi, M., Bölümü, M. M., Dali, A., & Khorramian, B. (2018). 981448 Used Oil Analysis and Study of Oil Drain Period in Gasoline Engine Reprinted From: Lubricants for Passenger Cars and Diesel Engines (SP-1368) *International Spring Fuels and Lubricants Meeting and Exposition Dearborn, Michigan*.
- Kamal, M., Hermawan, A., Basino, Dewi, P., Daging, I. K., & Fachruddin, F. (2024). Physical Test Of Lubricating Oil Viscosity (Kinematic Viscosity) And Tbn (Total Base Number) Of Lubricating Oil Using And Without Using A Cjc Type Fine Filter On The Main Engine KM Binama II. *Journal of Innovation Research and Knowledge*, 4(1).
- Kirkby, T., Pacino, A., Smith, J. J., Fowell, M., Berryman, J., Frennfelt, C., La Rocca, A., & Reddyhoff, T. (2024). Correlating wear with the lubricant properties of heavy-duty diesel engine oils. *Tribology International*, 199, 110018. <https://doi.org/10.1016/j.triboint.2024.110018>
- Komatsu, (2005). Shop Manual: Engine 12V140E-3 Series (Form No. SEN00291-00, SEN00296-00, SEN00307-00) [Manual]. Komatsu Ltd.
- Komatsu, (2006). Shop manual: Dump truck HD785-7 (SEN05900-17). Komatsu Ltd.
- Komatsu, (2020). The basics of oil analysis booklet. Komatsu Oil & Wear Analysis (KOWA). Bureau Veritas.
<https://www.kowaresource.com>
- Sarma, H., Huzuri, D., & Deka, M. K. (2021). A real time implementation of an IoT based vehicle health monitoring system. *International Journal of*

Recent Technology and Engineering, 10(3), 140–143.

<https://doi.org/10.35940/ijrte.C6338.0910321>

Lacey, P. I., Gunsel, S., Ferner, M. D., Pozebanchuk, M., & Alim, A. (2003). Effect of Oil Drain Interval on Crankcase Lubricant Quality.

<https://doi.org/10.4271/2003-01-1957>

Liyakat, K. K. S., & Konnur, R. G. (2024). Vehicle Health Monitoring System (VHMS) by Employing IoT and Sensors.

<https://orcid.org/0000000156239211>

Margaroni, D. (1999). Extended drain intervals for crankcase lubricants. *Industrial Lubrication and Tribology*, 51(2), 69–76.

<https://doi.org/10.1108/00368799910261478>

Miyahara, M., Watanabe, Y., Naitoh, Y., Hosonuma, K., & Tamura, K. (1991). Investigation into Extending Diesel Engine Oil Drain Interval (Part 1)- Oil Drain Interval Extension by Increasing Efficiency of Filtering Soot in Lubricating Oil. <https://doi.org/10.4271/912339>

Naitoh, Y., Hosonuma, K., Tamura, K., Miyahara, M., & Watanabe, Y. (2018). Investigation into Extending Diesel Engine Oil Drain Interval (Part 2)- Development of Long-Drain Diesel Engine Oil Having Low Soot Dispersancy. <https://doi.org/10.4271/912339>

Omiya, T., Hanyuda, K., & Nagatomi, E. (2025). Predicting engine oil degradation across diverse vehicles and identifying key factors. *Mechanical Systems and Signal Processing*, 229.

Onishchenko, O. A., Melnyk, O. M., Yarovenko, V. A., Aleksandrovska, N. I., Kurdiuk, S. V., Parmenova, D. G., & Storchak, O. O. (2023). Study of efficiency and advancement of marine engine oil purification and filtration technologies. *Journal of Chemistry and Technologies*, 31(4), 762-774. <https://doi.org/10.1016/j.ymsp.2025.112524>

Pelitli, V., Dogan, & Köroglu, H. J. (2017). Waste oil management: Analyses of waste oils from vehicle crankcases and gearboxes. *Global Journal of Environmental Science and Management*, 3(1), 11–20.

<https://doi.org/10.22034/gjesm.2017.03.01.002>

- Penchaliah, R., Harvey, T. J., Wood, R. J. K., Nelson, K., & Powrie, H. E. G. (2011). The effects of diesel contaminants on tribological performance on sliding steel on steel contacts. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, 225 (J9), 779–797. <https://doi.org/10.1177/1350650111409825>
- PT Mandala Karya Prima. (2023). M23014034_4133_ENGINE_NORMAL. *Internal Report Test*
- PT Pertamina Patra Niaga. (2025). Oli diesel Pertamina Meditrans SX 15W-40 CH-4. Retrieved November 29, 2024, <https://www.patraenergy.id/product/oli-diesel-pertamina-meditrans-sx-15w-40-ch-4-p1042944.aspx>
- Putro, D. A., (2007). Analisis Sistem Pelumasan Pada Mesin Toyota Kijang Seri-5K.
- Pytel, K., Filipek, R., Kalwar, A., Piaskowska-Silarska, M., Hudy, W., Depešová, J., & Kurdziel, F. (2025). Proactive Maintenance and Data-Driven Optimization of Mineral Lubricating Oil in a Gas Engine Cogeneration System Extending Oil Change Intervals for Cost Savings and a Reduced Environmental Footprint. *Energies*, 18(1). <https://doi.org/10.3390/en18010154>
- Rahimi, M., Pourramezan, M.-R., & Rohani, A. (2022). Modeling and classifying the in-operando effects of wear and metal contaminations of lubricating oil on diesel engine: A machine learning approach. *Expert Systems With Applications*, 203, 117494. <https://doi.org/10.1016/j.eswa.2022.117494>
- Raposo, H., Farinha, J. T., Fonseca, I., & Ferreira, L. A. (2019). Condition monitoring with prediction based on diesel engine oil analysis: A case study for urban buses. *Actuators*, 8(1). <https://doi.org/10.3390/act8010014>
- Rizaldy, N. D., & Johaness, S. (2021). Analisa Perubahan Sifat Pelumas Terhadap Keausan Dan Performa Engine SAA12v140E-3 Komatsu HD785-7. *Jurnal Material Teknologi Proses: Warta Kemajuan Bidang Material Teknik Teknologi Proses*, 2(1), 6. <https://doi.org/10.22146/jmtp.66065>

- Salehi, F. M., Morina, A., & Neville, A. (2017). The effect of soot and diesel contamination on wear and friction of engine oil pump. *Tribology International*, 115, 285–296.
<http://dx.doi.org/10.1016/j.triboint.2017.05.041>
- Saleh, S. H., & Tripp, C. P. (2021). A reagentless and rapid method to measure water content in oils. *Talanta*, 225, 121911.
<https://doi.org/10.1016/J.TALANTA.2020.121911>
- Siskayanti, R., & Kosim, M. E. (2017). Analisis Pengaruh Bahan Dasar terhadap Indeks Viskositas Pelumas Berbagai Kekentalan. 11, 94–100.
- Sumber Berkat Abadi. (2025). Donaldson P559000 Oil filter / P55-9000 Oil Filter.
<https://www.sumberberkatabadi.com/product/donaldson-p559000-lube-filter-p55-9000-oil-filter-p55-9000-p1316161.aspx>
- Stachowiak, G. W., & Batchelor, A. W. (2014). Engineering Tribology. *Engineering Tribology*, iii.
<https://doi.org/10.1016/B978-0-12-397047-3.00019-9>
- Sudianto, A., Syaifudin, A., Nugraha, A. S., & Wiyono, A. (2018). ANALISA CYLINDER HYDRAULIC DUMP TRUCK TIPE 143 DI PT. TRUBO ENGINEERING. *Konferensi Ilmiah Teknologi Texmaco*, 1, 272.
- Sun, R., Kittelson, D. B., & Blackshear, P. L. (1991). Size Distribution of Diesel Soot in the Lubricating Oil The Engineering Society IPIA =For Advancing Mobility--L a n d sea ~ i r and space, *International Fuels and Lubricants Meeting and Exposition Toronto*, Canada October 7-1 0,1991
4 0 0 C O M M O N W E A L T H D R I V E , W A R R E N D A L E , P
A 1 5 0 9 6 - 0 0 0 1 U.
- Wakiru, J. M., Pintelon, L., Muchiri, P. N., & Chemweno, P. K. (2019). A review of lubricant condition monitoring information analysis for maintenance decision support. *In Mechanical Systems and Signal Processing* (Vol. 118, pp. 108–132). Academic Press.
<https://doi.org/10.1016/j.ymsp.2018.08.039>
- Wifaqi, A. N. L., (2024). “Analisis Optimalisasi Perawatan Excavator Untuk Menunjang Produktivitas Unit Pada Pt Pp Presisi Site Weda Bay Nickel.”

Universitas Gadjah Mada.

Xu, X., Sun, S., Wang, P., Lei, A., & Peng, G. (2015). Study on tribology performance of diesel engine oil using SRV4 tribometer. *Tribology Online*, 10(2), 172–176.

<https://doi.org/10.2474/trol.10.172>

Yan, S., Kong, Z., Liu, H., Li, B., Fan, M., & Zhang, X. (2022). Oil Change Interval Evaluation of Gearbox Used in Heavy-Duty Truck E-Axle with Oil Analysis Data. *Lubricants*, 10(10).

<https://doi.org/10.3390/lubricants10100252>

Yudandhiss, C. D. R., Salmahaminati, & Sahadad. (2022). Jaminan Mutu pada Pengujian *Pour Point* ASTM D-97, *Flash Point* PMcc ASTM D-93 dan Viskositas Kinematik ASTM D-445 di Laboratorium Minyak Bumi PPSDM Migas Cepu (Vol. 7, Issue 1).

<https://doi.org/10.20885/ijcr.vol7.iss1.art3>

Yulianto & Sulaiman, M. (2024). Analisis kegagalan oli mesin berdasarkan uji dissolved gas analysis (studi kasus PT. APMS). *Jurnal Riset Teknik*, 3(3), 232–240. <https://doi.org/10.54980/jer.v3i3>

Zhu, Z., Zheng, J., & Chen, D. (2011). Using lubricating oil filter debris analysis to monitor abnormal wear of aero-engine. *Applied Mechanics and Materials*, 86, 821–824.

<https://doi.org/10.4028/www.scientific.net/AMM.86.821>