



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Master Agreement

Order Date: 2015-03-13

CORRECT ORDER NUMBER
MUST APPEAR ON ALL PACKAGES,
INVOICES, AND SHIPPING PAPERS.
QUESTIONS CONCERNING THIS
ORDER SHOULD BE DIRECTED TO
THE BUYER.

Order Number: CMA 0212 0212 SWC0000000021	Procurement Folder: 60515
Document Name: OIL15 - STATEWIDE CONTRACT FOR OILS, LUBRICANTS & GREASE	Reason for Modification:
Document Description: OIL15 - STATEWIDE CONTRACT FOR OILS, LUBRICANTS & GREASE	
Procurement Type: Central Master Agreement	
Buyer Name: Evelyn Melton	
Telephone: (304) 558-7023	
Email: evelyn.p.melton@wv.gov	
Shipping Method: Best Way	Effective Start Date: 2015-03-25
Free on Board: FOB Dest, Freight Prepaid	Effective End Date: 2016-03-24

VENDOR	DEPARTMENT CONTACT
APOLLO OIL LLC 800 FIRST AVE S NITRO WV 25143 US Vendor Contact Phone: (304) 482-0173 Extension: Discount Percentage: 0.0000 Discount Days: 30	Requestor Name: Evelyn Melton Requestor Phone: (304) 558-7023 Requestor Email: evelyn.p.melton@wv.gov

INVOICE TO	SHIP TO
ALL STATE AGENCIES VARIOUS LOCATIONS AS INDICATED BY ORDER No City WV 99999 US	STATE OF WEST VIRGINIA VARIOUS LOCATIONS AS INDICATED BY ORDER No City WV 99999 US

AGENCY COPY

PURCHASING DIVISION AUTHORIZATION SIGNED BY: <i>[Signature]</i> DATE: 3/13/15 ELECTRONIC SIGNATURE ON FILE	ATTORNEY GENERAL APPROVAL AS TO FORM SIGNED BY: <i>J. Robert Rishie</i> DATE: 3/17/15 ELECTRONIC SIGNATURE ON FILE	ENCUMBRANCE CERTIFICATION SIGNED BY: <i>Beverly Tolson</i> DATE: 3/17/15 ELECTRONIC SIGNATURE ON FILE
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Extended Description:

THE VENDOR, APOLLO OIL LLC, AGREES TO ENTER INTO A BLANKET OPEN-END STATEWIDE CONTRACT WITH THE STATE OF WEST VIRGINIA TO PROVIDE THE SUPPLY AND DELIVERY OF OILS, LUBRICANTS AND GREASE TO ALL WEST VIRGINIA STATE AGENCIES PER THE SPECIFICATIONS, TERMS AND CONDITIONS, BID REQUIREMENTS AND THE VENDOR'S PROPOSAL DATED 01/07/2015 INCORPORATED HEREIN BY REFERENCE AND MADE A PART OF HEREOF.

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
1	15120000			EA	\$0.000000

Description: Lubricants and oils and greases and anti corrosives

Extended Description:

STATEWIDE CONTRACT FOR OILS, LUBRICANTS AND GREASE.

PLEASE REFER TO ATTACHED PRICING PAGE FOR OIL PRICING AND VENDOR CONTACT INFORMATION WHEN ORDERING.

SPENDING UNITS SHALL PROCESS RELEASE ORDERS USING AGENCY DELEGATED ORDERS (ADO).

Total Order Amount	Open End
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SWC0000000021	Document Phase Pending	Document Description OIL15 - STATEWIDE CONTRACT FOR OILS, LUBRICANTS & GREASE	Page 3 of 3
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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

GENERAL TERMS AND CONDITIONS:

1. **CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
2. **DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
 - 2.1. **"Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
 - 2.2. **"Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.
 - 2.3. **"Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.
 - 2.4. **"Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.
 - 2.5. **"Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.
 - 2.6. **"Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
 - 2.7. **"State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
 - 2.8. **"Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. **CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☒ **Term Contract**

Initial Contract Term: This Contract becomes effective on March 25, 2015 and extends for a period of ONE (1) year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to three (3) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed 36 months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

- ☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____ days.
- ☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional _____ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed _____ months in total. Automatic renewal of this Contract is prohibited.
- ☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.
- ☐ **Other:** See attached.

4. **NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.
5. **QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.
 - ☒ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
 - ☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.
 - ☐ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
 - ☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
6. **PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
7. **EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
8. **REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

- ☐ **BID BOND:** All Vendors shall furnish a bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
- ☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of _____. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.
- ☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.

- ☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
- ☐ **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:

☐ **Commercial General Liability Insurance:** In the amount of _____ or more.

☐ **Builders Risk Insurance:** In an amount equal to 100% of the amount of the Contract.

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☐
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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

- ☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

☐
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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

- 9. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.
- 10. LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
- 11. LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount of _____ for _____.
This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 12. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part. Vendor's signature on its bid signifies acceptance of the terms and conditions contained in the Solicitation and Vendor agrees to be bound by the terms of the Contract, as reflected in the Award Document, upon receipt.
- 13. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 14. PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.
- 15. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 16. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-7.16.2.
- 17. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.
- 18. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 19. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable law.
- 20. PREVAILING WAGE:** On any contract for the construction of a public improvement, Vendor and any subcontractors utilized by Vendor shall pay a rate or rates of wages which shall not be less than the fair minimum rate or rates of wages (prevailing wage), as established by the West Virginia Division of Labor under West Virginia Code §§ 21-5A-1 et seq. and available at <http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx>. Vendor shall be responsible for ensuring compliance with

prevailing wage requirements and determining when prevailing wage requirements are applicable. The required contract provisions contained in West Virginia Code of State Rules § 42-7-3 are specifically incorporated herein by reference.

21. **ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
22. **MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary, no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). No Change shall be implemented by the Vendor until such time as the Vendor receives an approved written change order from the Purchasing Division.
23. **WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
24. **SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
25. **ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.
26. **WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
27. **STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
28. **BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

29. CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

30. DISCLOSURE: Vendor's response to the Solicitation and the resulting Contract are considered public documents and will be disclosed to the public in accordance with the laws, rules, and policies governing the West Virginia Purchasing Division. Those laws include, but are not limited to, the Freedom of Information Act found in West Virginia Code §§ 29B-1-1 et seq. and the competitive bidding laws found West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq.

If a Vendor considers any part of its bid to be exempt from public disclosure, Vendor must so indicate by specifically identifying the exempt information, identifying the exemption that applies, providing a detailed justification for the exemption, segregating the exempt information from the general bid information, and submitting the exempt information as part of its bid but in a segregated and clearly identifiable format. Failure to comply with the foregoing requirements will result in public disclosure of the Vendor's bid without further notice. A Vendor's act of marking all or nearly all of its bid as exempt is not sufficient to avoid disclosure and WILL NOT BE HONORED. Vendor's act of marking a bid or any part thereof as "confidential" or "proprietary" is not sufficient to avoid disclosure and WILL NOT BE HONORED. A legend or other statement indicating that all or substantially all of the bid is exempt from disclosure is not sufficient to avoid disclosure and WILL NOT BE HONORED. Additionally, pricing or cost information will not be considered exempt from disclosure and requests to withhold publication of pricing or cost information WILL NOT BE HONORED.

Vendor will be required to defend any claimed exemption for nondisclosure in the event of an administrative or judicial challenge to the State's nondisclosure. Vendor must indemnify the State for any costs incurred related to any exemptions claimed by Vendor. Any questions regarding the applicability of the various public records laws should be addressed to your own legal counsel prior to bid submission.

31. LICENSING: In accordance with West Virginia Code of State Rules §148-1-6.1.7, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

- 32. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.
- 33. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein. Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.
- 34. PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.
- ☐ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.
- 35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but

not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing. Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by and extends to other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). This Contract shall be extended to the aforementioned Other Government Entities on the same prices, terms, and conditions as those offered and agreed to in this Contract. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 39. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 40. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:
- ☒ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

- ☒ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

41. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision.

The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater.

For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

- d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products.

This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids for a blanket open-end statewide contract for oils, lubricants and grease. This contract shall cover all West Virginia state agencies.

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
 - 2.1 **“Contract Item” or “Contract Items”** means the list of items identified in Section 3, Subsection 1 below.
 - 2.2 **“Pricing Pages”** means the schedule of prices, estimated order quantity, and totals attached hereto as Exhibit A and used to evaluate the solicitation.
 - 2.3 **“CRFQ”** means the official request for quotation published by the Purchasing Division and identified as SWC1500000010.

3. GENERAL REQUIREMENTS:

- 3.1 **Contract Items and Mandatory Requirements:** Vendor shall provide Agency with the Contract Items listed below on an open-end and continuing basis. Contract Items on the pricing pages must meet or exceed the mandatory requirements as shown below.

3.1.1 Items 1 & 2

- 3.1.1.1 **Chain Saw Motor Oil:** (also Power Mowers, Pumps, and Snowmobiles). This oil shall be of high quality and specifically compounded and marketed for mixing with gasoline to lubricate two-cycle, air and water cooled engines. It shall meet the warranty requirements as an engine lubricant for the major manufacturers of two-cycle engines used on chain saws, power mowers, pumps and snowmobiles.

The motor oil shall be satisfactory for use in any fuel to oil ratio as specified by the engine manufacturer up to an including 50:1. The product offered shall be available in the SAE viscosity grade(s) specified for use in Homelite, McCulloch, Poulan and other two-cycle chain saws or equal.

3.1.1.2 Out Board Motor Oil: This motor oil shall be high quality, ashless and specifically compounded and marketed for mixing with gasoline to lubricate two-cycle, water cooled engines. Must be tested and certified by the National Marine Manufacturers Association (NMMA) for TC-W III.

The motor oil shall be satisfactory for use in any fuel to oil ratio as specified by the engine manufacturer, up to and including 50:1. The product offered shall be available in the SAE viscosity grade(s) specified by the engine manufacturers for use in all Evinrude, Johnson, Mercury and other two- cycle outboard motors or equal.

3.1.2 Items 3 – 14 & 47

3.1.2.1 Motor oil and hydraulic oil: Shall be produced from virgin materials, suitable for use in passenger cars and trucks, and heavy duty engines used in trucks and heavy construction equipment, diesel and gasoline engines. The viscosity grade, SAE 15W-40 must be API certified and have the API seal of approval on the product.

The oil furnished shall meet the performance requirement ("Primary Performance Criteria") described in ASTM designated D4485 for performance categories API, CJ-4, CI-4 Plus, CH-4, CG-4, CF-4/SL, SM. Conformance of the oil furnished with the performance requirements shall be Determined with the test methods identified in ASTM D 4485 for all categories.

Crankcase oil must be suitable for use in late model diesel and gasoline engines where this service category oil requirement is specified by the engine manufacturer.

Must meet the performance level of MIL-L-2104E and MIL-L-45152D or equal

Sulfated ash (ASTM D-874) shall be a maximum of 1% by weight.

Minimum viscosity index for all motor oils shall be 95.

3.1.3 Items 15 - 17

3.1.3.1 Extreme Pressure Gear Lubricant:

API Service Category – GL-5, PG-1, PG-2

These lubricants are intended for use in passenger car, truck, and tractor differentials (particularly hypoid type), steering gears, and other points requiring a lubricant of exceptional load carrying ability.

SAE Viscosity Grades – 80W90 and 85W140

3.1.4 Item 18

3.1.4.1 Gear lubricant: Must be designed for use in automotive and heavy duty equipment transmission and differentials where an EP (extreme pressure) lubricant is not required and when an API Service Designation GL-1 gear Oil is specifically called for by the equipment manufacturer.

3.1.5 Item 19

3.1.5.1 Synthetic Lubricant: Must be fully synthetic, SAE50 lubricant for use in heavy –duty truck manual transmissions that meet EATON PS-164, R7, MACT TO-A PLUS, NAVISTAR TMS 6816 or equal.

3.1.6 Items 20 - 22

3.1.6.1 Wheel bearing and chassis grease: Shall be designated by manufacturers as suitable for a multi-purpose use in cars, light and heavy duty trucks, and industrial equipment. Must be made from a lithium complex soap.

This grease shall have good resistance to oxidation & water washout, shall possess outstanding anti-wear properties, rust protection, extreme pressure properties and has a good load carrying capacity.

Must meet minimum Salient Characteristics below: (High Dropping Point)

1. NLGI Consistency #1 and #2
2. Resistance to water without washout (ASTM D 1264)

3. Leakage resistance (ASTM D 1263)
4. Dropping point (ASTM D2265) of Min. 450 degree F.
5. Worked penetration (ASTM D217)
NLGI# 1 310-340
NLGI #2 265-295
6. NLGI – GC/LB

3.1.7 Items 23 -25

3.1.7.1 All Purpose Grease (Moly): Shall be designated by the manufacturer as suitable for use in industrial, automotive and construction equipment applications including heavy stock loading conditions. Specified for use with Caterpillar Registered Trademark or equal

Must meet minimum Salient Characteristics below:

1. NLGI Consistency #2
2. Dropping point (ASTM D 2265) of Min. 500 Degree F.
3. 3% Moly

3.1.8 Items 26 - 32

3.1.8.1 Hydraulic Oil (Hydraulic Hoist Oil):

This product shall be specially blended for service in hydraulic systems employing either vane or gear-type pumps on snow removal and road construction equipment and hydraulic-operated equipment.

Abex Denision HF-0, HF-1 HF-2
Sperry Vickers M-2950-S, 1-286-S
Sunstrand Hydrostatics
Or equal

Note: This oil is not intended for use in hydraulic brakes and automobile –type power Steering units.

Grades:

Light Weight – for use when outside temperature is generally below 32 degrees F.

Medium Weight – for use when outside temperature is generally between 32 Degrees and 100 Degrees F.

Heavy Weight – for use in some systems where ambient temperatures are generally higher and heavier weight products are recommended.

This hydraulic oil shall satisfy the requirements of hydraulic systems used in the application above. Oil shall have good demulsifying characteristics and shall not produce deleterious effects on neoprene, leather or other type seals used in such hydraulic systems. Products shall contain corrosion, oxidation, anti-wear and foam inhibitors in sufficient quantities and quality to adequately protect the hydraulic system including pumps, motor and valves. This oil shall be tested per ASTM D2619 and approved for use as quality product in this application.

Minimum viscosity index for all Hydraulic Oil shall be 95.

3.1.9 Items 33 & 34

3.1.9.1 Transmission Fluid: DEXRON II – MERCON OR EQUAL

This automatic transmission fluid shall be suitable for use in any application where conventional ATF fluid is specified.

3.1.10 Items 35 & 36

3.1.10.1 TO-4 Fluids:

Must meet rigid demands of Caterpillar equipment and Allison C-4 or equal. Must provide outstanding rust corrosion control and oxidation stability, foam resistance and elastomer compatibility. The product offered shall meet CAT TO-4 requirements or equal.

3.1.11 Item 37

3.1.11.1 Automatic Transmission Fluid: DEXRON III, MERCON, MERCONV, ATF+3 & ATF+4 OR EQUAL

This automatic transmission fluid shall be suitable for use in any application where multi-vehicle ATF fluid is specified.

3.1.12 Items 38 & 39

3.1.12.1 Combination Fluid:

Formulated for late model farm equipment, off highway machinery, and industrial tractor where transmissions, final drives, wet brakes and hydraulics are supplied from a common fluid reservoir.

Combination fluid, combination hydraulic, transmission and differential fluid for use in tractor requiring combination fluid. This fluid shall have all the varying characteristics of the following specifications John Deere J20A, Allis Chalmers 257541, Massey Ferguson Permatran III, White Equipment Q-1722, and Ford M2C134A or equal.

3.1.13 Items 40

3.1.13.1 Railroad diesel engine oil: Must be a generation 4 oil as designated by (LOMA) EMD approved.

3.1.14 Items 41

3.1.14.1 Synthetic Motor Oil for Diesel and Gasoline Engines:

All must meet the following: Passenger cars and light truck – GM 6094M, GM 4718M and Ford ESE-MC153-E or equal

Must meet the performance level of MIL-L-46152E and MIL-L-2104D or equal

3.1.15 Items 42 - 44

3.1.15.1 Synthetic Multipurpose Gear Lubricant:

API Service Category – GL-5

These Lubricants are intended for use in passenger car, truck, and tractor differentials, steering gears and other points requiring a lubricant of exceptional load carrying ability.

SAE Viscosity grades, 75W90 and 80W140

The gear lubricant shall be manufactured from synthesized hydrocarbon base oils and a sulfur phosphorus gear lubricant additive package.

Formulated for late model farm equipment, off highway machinery, and industrial tractor where transmissions, final drives, wet brakes and hydraulics are supplied from a common fluid reservoir.

3.1.16 Items 45 & 46

3.1.16.1 Formulated Gear Oil:

API Service Category – GL-5

These lubricants are intended for use in limited slip and conventional differentials of passenger cars and trucks. Product shall contain: rust, corrosion, anti-wear and foam inhibitors for transmissions and differentials.

SAE Viscosity grade: 80W90

3.1.17 Item 48: DEXRON-VI OR EQUAL

3.1.17.1 Automatic Transmission Fluid meeting GM specification or equal

3.1.18 Item 49

3.1.18.1 Heavy-duty universal power shift and automatic transmission fluid

Must be premium quality which is suitable for use in transmissions requiring Allison TES-295 fluids or equal.

3.1.19 Item 50 & 51

3.1.19.1 Hydraulic/Transmission oil: HY-GARD OIL OR EQUAL

Must meet the best performance and wear protection for John Deere hydraulic and transmission systems or equal. Must be specified for equipments with either common system reservoirs or separate transmission or hydraulic systems, including those with wet brakes and wet clutches. Must exceed JDM J20C Specifications or equal.

Minimum viscosity @ 40°C must be ISO grade 46.

3.1.20 Item 52 & 53

3.1.20.1 Hydraulic Oil: CAT HYDO ADVANCED 10 OR EQUAL

Must meet the best product for CAT Machine Hydraulic systems or equal. Must meet minimum oxidation stability per ASTM D943. Must have a minimum viscosity index per ASTM D2270 of 114.

SAE Viscosity Grade – 10W

3.1.21 Item 54 & 55

3.1.21.1 Automatic Transmission Fluid: MOTORCRAFT MERCON LV OR EQUAL

Must be premium quality ATF specified for Ford Motor Company or equal. Must be manufactured with high-viscosity index, premium-quality, hydro-processed base oils and specially designed performance additives.

Minimum viscosity index must be 155

3.1.22 Item 56 & 57

3.1.22.1 Transmission Fluid: VALVOLINE CVT FLUID OR EQUAL

Must be formulated with premium synthetic base stocks, long-life friction modifiers, special anti-wear additives and shear stable viscosity modifiers. Recommended for use in most belt and chain-driven continuously variable transmissions that will not void vehicle warranties. Must be specified for use meeting Chrysler's specification or equal.

Minimum viscosity @ 100°C, cSt must be 7.2.

4. CONTRACT AWARD:

4.1 Contract Award: The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest grand total cost as shown on the Pricing Pages for the most complete bid. This contract will not be a split award.

4.2 Pricing Pages: Vendors should complete the Pricing Pages in their entirety as failure to do so may result in the Vendor's bid being disqualified. Vendors are **strongly encouraged** to complete the Pricing Pages electronically in Microsoft Excel. **(PLEASE REFER TO EXHIBIT B IF RESPONDING THROUGH THE ONLINE VENDOR SELF SERVICE)** Doing so will reduce the number of calculations required and the possibility for calculation errors as explained below:

4.2.1. Information Requested. Vendor should complete the Pricing Pages by filling in any blank spaces with the information requested. The information requested on the Pricing Pages for each frequently purchased Contract Item includes the Vendor's Contract Item manufacturer, the brand bid, Unit Price per the Unit of measure provided, the Extended Price and the total costs for each Sections specified. The Vendor should also include the Grand Total Cost, and the Contract Manager's contact information. Vendor should complete all columns as failure to complete the Pricing Pages in their entirety may result in Vendor's bid being disqualified.

4.2.2. Pricing Page Calculations. Vendor should complete the Pricing Pages by providing in Column 4 the Manufacturer's Name, completing Column 5 with the Brand Bid and entering the Unit Price in Column 7 and also entering the Extended Price in Column 9. The pricing pages have two sections. Section 1 is for truck loads and section 2 is for less than truckloads (LTL). If Vendor completes the Pricing Pages electronically using the Microsoft Excel version from the Purchasing division, these calculations will be automatically completed.

Totals for Section 1 & 2 should be entered in the sections on the last page of the pricing pages, and totaled to create a grand total. Vendor should also complete the section under grand total stating the number of days for delivery, location of warehouse shipment can be made from and completing the vendor information section, along with providing a signature and date of their bid.

Any charges for Superfund Tax must be included in the contract item price.

- a. **Unit Price** – The Unit Price is the price provided by Vendor per unit of measure specified on the pricing page for calculation purposes only.

Example: Unit price of a pint (pt). of motor oil will be \$1.50.

- b. **Unit of Measure (for calculations purposes only)** – The minimum possible Unit of Measure for an item provided in the pricing page for use in the price calculations. (Ex. oz., qt., gal.)
- c. **Extended Price** – The Extended Price is calculated by multiplying the estimated quantity by the Unit Price.

Example: An estimated quantity of 1800 pt. motor oil multiplied by a Unit Price of \$1.50 per pt. equals a \$2,700.00 extended price for that item.

- d. **Total (Truck Load/less than a Truck Load)** – The total bid cost is calculated by adding the extended price for every item listed on the pricing page.

Example: Item extended prices of \$2,700.00 and \$ 3,600.00 would equal to a Total of \$ 6,300.00 (assuming that the Pricing Page contained only two items).

- e. **Grand Total** – The Grand Total is calculated by adding the Total of Section 1 (Total Truck Load) and Section 2 (Total of Less than Truck Load).

Example: Total Truck Load of \$6,300.00 and Total Less than Truck Load of \$ 4,000.00 would equal to a Grand Total of \$ 10,300.00.

4.2.3. Estimated Quantities Only. The Pricing Pages contain a list of frequently purchased items and estimated quantity that will be purchased. The estimated quantity for each item represents the approximate volume of anticipated purchases only. No future use of the Contract or any individual item is guaranteed or implied.

4.2.4. Corrections of Errors. Notwithstanding the foregoing, the Purchasing Division may correct errors at its discretion. Vendor should type or electronically enter the information into the Pricing Pages to prevent errors in the evaluation.

4.2.5. Electronic Version. The Pricing Pages were created as a Microsoft Excel document and Vendor can request an electronic copy for bid purposes by sending an email request to the following address: [evelyn.p.melton@wv.gov]

5. ORDERING AND PAYMENT:

5.1 Ordering: Vendor shall accept orders by regular mail, facsimile, e-mail, or any other written forms of communication. Vendor may, but is not required to, accept on-line orders through a secure internet ordering portal/website. If Vendor has the ability to accept on-line orders, it should include in its response a brief description of how Agencies may utilize the on-line ordering system. Any on-line ordering system must have the capability to restrict prices and available items to conform to the Contract Items provided with this RFQ. Vendor shall ensure that its on-line ordering system is properly secured prior to processing Agency orders on-line.

Spending units shall process release orders through WVOASIS system using Agency delegated release orders (ADO). Spending units shall keep documentation for audit and annual usage reports purposes.

Minimum orders shall be \$100.00 and shipped FOB Destination. Orders less than \$100.00 may be obtained by the Agency using proper Purchasing Procedures.

This contract covers case lots, trailer load prices and bulk delivery to any location within West Virginia. A trailer load normally will be between 40,000 and 45,000 pounds. Trailer load shipments do not necessarily have to be one product. A combination of any and all products may be ordered to meet the trailer load price.

5.2 Payment: Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

6. DELIVERY AND RETURN:

6.1 Delivery Time/Requirement: Bidders should enter the number of days required for delivery after receipt of an order (ARO) on the pricing page for standard delivery and emergency deliveries. Vendor shall ship all orders in accordance with the above schedule and shall not hold orders until a minimum delivery quantity is met.

All drums furnished shall be labeled as required by OSHA for hazardous materials. Material Safety Data Sheets (MSDS) shall be furnished in accordance with current federal and state laws and requirements concerning hazardous chemicals to the ordering Agency. MSDS must be submitted and shipped with the product ordered.

A packing slip must accompany all shipments. All drums must be sealed and shipped on a two-way, non-returnable pallet.

Drum Deposit : Where a drum deposit is required for shipping a product in a returnable drum, the amount shall be shown as a separate item on the invoice and the full amount shall be refundable or credited to the Agency upon return.

Returnable drums may be returned by the contractor picking up the drums with his own truck or by the state shipping them to the Vendor where transportation is charged collect.

- 6.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order, and/or obtaining the items ordered from a third party.

Any Agency seeking to obtain items from a third party under this provision must first obtain approval of the Purchasing Division.

- 6.3 Delivery Payment/Risk of Loss:** Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost of standard order delivery charges in its bid price and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

- 6.4 Quality Assurance/Return of Unacceptable Items:** The State of West Virginia reserves the right to conduct test, require samples or require test results to ensure compliance with the requirements of this contract.

All products delivered shall be furnished as specified and shall be packaged in accordance with the best commercial practices. All shipping containers shall be marked to show the brand name and description of the products.

Agency shall inspect for proper identification of products, damages or leakage and

other irregularities. If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

The West Virginia Department of Transportation will randomly test samples of the delivered product through its Material Division Laboratory or an independent laboratory throughout the term of the contract to ensure continuous conformity with the specifications. Upon failure of a random test sample, the Vendor shall be required to replace all containers of the product of the same batch number as a failed sample.

- 6.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. MISCELLANEOUS:

- 7.1 Warranty/Manuals:** The Vendor warrants under the penalty for fraud, that any products furnished shall be of the grade and quality required in this specification.

The Vendor shall provide technical information concerning the use of products when requested by the Agency.

- 7.2 Certifications/Samples:** Each Vendor should provide nationally published certifiable literature and/or certification from an independent laboratory that contract items passed the ASTM requirements described herein. Vendors shall be responsible for the cost of the independent laboratory testing.

The successful Vendor may be required to furnish a sample of any or all oil bid submitted for test purposes prior to award.

- 7.3 No Substitutions:** Vendor shall supply only Contract Items submitted in response to the RFQ unless a contract modification is approved in accordance with the provisions contained in this Contract.

- 7.4 Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.

- 7.5 Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.

- 7.6 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Randy Ward
Vendor's Address: 800 First Ave South
Nixa MO 65143
Telephone Number: 304-382-1626
Fax Number: 304-722-6972
Email Address: RWard@Apollolub.com



Typical Properties Specification

STA-MIX SM3248SM

<i>Typ Vis @ 100C, cSt</i>	9
<i>Typ Vis @ 40C, cSt</i>	90
<i>Typ VI</i>	80
<i>Typical API Gravity @ 60F</i>	25.3
<i>Density - pounds/gallon</i>	7.5
<i>Typical Pour Point F</i>	-2 F
<i>Flash open or closed</i>	CLOSED
<i>Typical Flash Point F</i>	220 F
<i>Color(Visual)</i>	GREEN
<i>Typical Moisture</i>	PASS POP TEST

Sta-mix 16/32:1 Two Cycle Engine Lubricant meets or exceeds manufacturer's requirements for all ratios up to 32:1. This oil can be used in all two cycle air cooled engines, and for unleaded fuel. This product meets API TC requirements.

Spectrum Corporation is committed to work toward customers' satisfaction and to continually improve products and services that meet or exceed customer expectation.

***Quality Assurance Manager - Valeria Wedley
Telephone (731)645-4937***

Friday, January 09, 2015

Page 1 of 1



Shell Spirax S5 ATF X

Premium, Synthetic Technology Multi-Vehicle Automatic Transmission Fluid

Shell Spirax S5 ATF X is a premium performance, synthetic technology fluid designed to meet the needs of multiple vehicle types for service fill in automatic transmission service. Shell Spirax S5 ATF X meets the needs of many Asian and North American designed automatic transmissions.

DESIGNED TO MEET CHALLENGES

Main Applications



- Passenger car automatic transmissions
- Heavy duty automatic transmissions
- Power steering units
- Hydraulic systems requiring this grade of fluid

Performance, Features & Benefits

- **Friction modified**
Provides consistent, reliable, smooth and trouble free operation of automotive transmission systems.
- **Exceptionally high oxidation resistance**
Resistant to oil degradation and keeps automatic transmissions clean.
- **Excellent shear-stability**
A special 'VI' improver minimises the changes in viscosity with operating temperature.

- **Dependable anti-wear and gear protection**
Long component life.
- **Low temperature performance**
Excellent oil fluidity at low temperatures.
- **Synthetic base fluids**
Excellent fluid life in the most demanding applications.

Specifications, Approvals & Recommendations

Suitable for use in applications which require

- Allison C-4
- Aisin JWS 3309 (all applications)
- JASO 1-A, 2A-02
- Ford Mercon® V, Mercon®
- General Motors Dexron®, Dexron® II, Dexron® III
- Toyota T III, T IV

See the Application Table and notes for additional vehicle coverage

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Spirax S5 ATF X
Flash Point (COC)		°C	ASTM D92	190
Viscosity	@-40°C	mPa s	ASTM D2983	12000
Viscosity	@40°C	mm ² /s	ASTM D445	35
Viscosity	@100°C	mm ² /s	ASTM D445	7.2
Density	@15°C	kg/m ³	ASTM D1298	850

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Application Table

Spirax S5 ATF-X is suitable for use in the following:

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Manufacturer	Fluid Specification	Manufacturer	Fluid Specification
Aisin	JWS 3309	Mercedes-Benz	Pre-1996
Allison	C4	Mini	83 2 0 402 42
Audi	G 055 025-A2	Mitsubishi	Diamond SP-II
Audi	G 052 162-A1	Mitsubishi	Diamond SP-III
BMW	LA2634, ETL-7045E	Nissan/ Infiniti	Matic-D
BMW	LT71141	Nissan/ Infiniti	Matic-J (Note 3)
Fiat	9.55550 AV	Nissan/ Infiniti	Matic-K
Ford	MERCON	Porsche	JWS 3309 (Cayenne)
Ford	MERCON V	Saab	JWS 3309 and 5 Speed Automatics, Transmax J, TIV
Ford	M2C138-CJ	Scion	T-II, T-III, T-IV
Ford	M2C166-H	Subaru	ATF
Ford	M2C202-B	Subaru	ATF-HP
Ford	WSS-M2C924-A (JWS 3309 in Five Hundred and Montego)	Suzuki	Dexron III
Ford	M2C922-A1	Texaco	ETL-7045E, N402
GM	Type A, Suffix A	Toyota	Type T-II
GM/Saturn	9986195 (JWS 3309)	Toyota	Type T-III, and where a Dexron III fluid is allowed
GM	DEXRON	Toyota/ Lexus	Type T-IV
GM	DEXRON-II	Voith	55.6335.32 (G607, G1363) Voith DIWA #013S
GM	DEXRON-II D	Volvo	JWS 3309, 5 Speed Automatics
GM	DEXRON-III, IIIH	Volvo	Volvo 1273.41 and 97340
Honda/Acura	Premium	Various	ZF TE-ML 14B
Honda/Acura	ATF-Z1	Various	ZF-TE-ML 16L
Hyundai	SP-II or SP-III	Various	JWS-3309
Idemitsu	K17	VW	G 055 25-A2, TL-5612, TL-52162
Isuzu	SCS, ATF-II, ATF-III, Genuine	ZF	TE-ML 02F
JASO	JASO 1A	ZF	TE-ML 03D
Kia	SP-II or SP-III	ZF	TE-ML 04D
Kia	ATF Red I-K	ZF	TE-ML 09
MAN	339F Ty V-1, V-2, Z-1, Z-2, Z-3	ZF	TE-ML 11A
Mazda	ATF M-111	ZF	TE-ML 14A/14B/14C
Mazda	ATF MV	ZF	TE-ML 16L
Mercedes-Benz	Sheet 236.1, 236.2, 236.5, 236.6, 236.7, 236.9, 236.10	ZF	TE-ML 17C

Shell Spirax S5 ATF X is suitable in many Kia, pre-2003 VW/Audi, Mazda, Subaru, Suzuki, Isuzu, Hyundai, Daewoo transmissions where a DEXRON®/MERCON®/MERCON® V fluid is allowed.

Application Exceptions

- 1) Shell Spirax S5 ATF X should not be used where Type F fluids are recommended; check application manual if the vehicle is one of the following: Datsun/Nissan pre 1971, Lincoln pre 1978, Ford/Mercury pre 1981, Toyota pre 1983, Volvo pre 1985, Mazda pre 1986, Saab pre 1993.
- 2) Shell Spirax S5 ATF X should not be used in Continuous Variable Transmissions (CVTs) or Double Clutch Transmissions (DCTs).
- 3) Shell Spirax S5 ATF X does not meet the low viscosity requirements of 2006 and later GM vehicles requiring DEXRON®-VI, Ford applications requiring Ford MERCON® LV or Mercon® SP, Shell 1375.4, Toyota WS, Hyundai SP-IV or SPH-IVRR, Nissan Matic-S, Honda ATF DW-1, Chrysler ZF 8 and 9 speed ATF, other ZF 8 and 9-speed ATFs (in a number of European cars), newer Daimler transmissions (ATF 134 or later MB Approval 236.12, 236.14, 236.15 or 236.16) and other specialty transmissions where a low viscosity ATF is recommended.

Where applications allow use of an alternate fluid of a higher viscosity (example Nissan Matic-J when Nissan Matic-S is not available) to one of the above fluid specifications, Pennzoil Platinum™ High Mileage & Import MV ATF is an excellent recommendation.

- DEXRON is a registered trademark of General Motors Corporation. MERCON is a registered trademark of Ford Motor Company.

Health, Safety & Environment

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- **Health and Safety**

Shell Spirax S5 ATF X is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

- **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

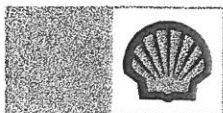
Additional Information

- **Colour**

Shell Spirax S5 ATF X is dyed red for identification purposes.

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.



Previous Name: Shell Donax TC 10W

Shell Spirax S4 CX 10W

High performance off-highway transmission and hydraulic oil

Shell Spirax S4 CX 10W is designed to provide operators with trouble-free operation and maximum reliability for the lifetime of the equipment. Spirax S4 CX 10W meets the demanding requirements of modern transmission, oil-immersed brake and hydraulic systems fitted to heavy-duty off-highway equipment.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Frictional performance and material compatibility**
Highly consistent and reliable friction performance when used with the advanced metallic and non-metallic materials found in modern systems. Minimal clutch slippage, smooth and quiet brake operation, and trouble-free hydraulic and transmission operation.
- **Anti-wear protection**
The shear-stable SAE 10W viscosity grade is free from viscosity index (VI) improvers and thickeners and give the best protection of heavily loaded components.
- **Low temperature characteristics**
Formulated to meet low temperature viscosity and fluidity requirements, providing superior protection during start-up and low operating temperature conditions.
- **Optimum mechanical performance and long oil life**
Wide-ranging protection for critical components, such as bronze friction discs in powershift transmissions and highly loaded hydraulic pumps.
- **Vickers 35V25 hydraulic pump test**
Excellent performance in this demanding test.
- **Oxidation stability**
Contains inhibitors to control oxidation and deposit formation. Protects both ferrous and non-ferrous metals from corrosion. Suppresses foaming. With improved flow properties at low temperatures enhances efficiency.

Main Applications



- Shell Spirax S4 CX 10W is recommended for use in heavy duty off-highway equipment produced by the world's leading manufacturers including; Caterpillar, Komatsu, Komatsu-Dresser and in transmissions manufactured by Eaton, Eaton Fuller, ZF, Dana, Rockwell amongst others:
- Powershift transmissions
- Oil immersed brakes
- Hydraulic systems

Specifications, Approvals & Recommendations

- Caterpillar Tractor TO-4
- ZF TE-ML 03C
- Suitable for use in applications where Allison C-4 type fluids are required
- Shell Spirax S4 CX 10W is suitable* for use in many powershift or manual transmissions, wet brake systems, and many off-highway hydraulic systems including those of Komatsu and Caterpillar.

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

*Please check equipment manuals for appropriate selection of viscosity grade.

Typical Physical Characteristics

Properties			Method	Shell Spirax S4 CX 10W
SAE Viscosity Grade			SAE J 300	10W
Kinematic Viscosity	@40°C	mm ² /s	ISO 3104	36
Kinematic Viscosity	@100°C	mm ² /s	ISO 3104	6
Density	@15°C	kg/m ³	ISO 12185	884
Flash Point (GCC)		°C	ISO 2592	200
Pour Point		°C	ISO 3016	-36

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

• Health and Safety

Shell Spirax S4 CX 10W is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

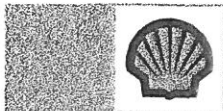
• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

• Advice

Advice on applications not covered here may be obtained from your Shell representative.



Previous Name: Shell Spirax ASX-R 75W-90

Shell Spirax S6 AXRME 75W-90

Superior performance, extended drain synthetic, GL-5 axle oil for Roadranger, Meritor and others

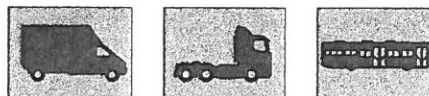
Shell Spirax S6 AXRME 75W-90 is a fuel-efficient axle fluid, designed to provide ultimate protection to the latest heavy-duty axles calling for API GL-5 type products. Specially formulated with synthetic base oils and additive technology that provide improved lubrication of the drive train, lowers the operating temperature and helps promote longer life for the equipment. Shell Spirax S6 AXRME 75W-90 is capable of extended oil drain and is approved by several OEMs for extended drain specifications. Extensive fleet testing has demonstrated a fuel efficiency improvement of over 1% when compared to several products in the same application.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Fuel efficient formulation**
Proven fuel efficiencies in both standard industry and commercial fleet testing methods of over 1%.
- **Longer oil drain capability**
Meets the requirements of Dana SHAES 256 Rev C, (500,000 mile oil drains, with warranty for 750,000 miles), which documents the long drain capability of the fuel efficient formulation.
- **Longer equipment life**
Excellent protection against gear wear and pitting, helps prevent premature failures. Outstanding oxidation resistance also helps prevent damage to seals due to deposit formation.
- **Less lubricant usage**
Excellent static and dynamic seal compatibility that meets or exceeds a number of leading OEM requirements, which helps minimize seal leaks. The extended drain capabilities help maximize oil drain intervals resulting in less overall lubricant usage during the life of the equipment.
- **Recognized by leading equipment manufacturers**
A number of leading equipment manufacturers recognize the benefits of Shell Spirax S6 AXRME 75W-90 and have formally approved it against their specifications.

Main Applications



- **Drive axles in heavy duty on-highway trucks**
Heavy duty axles and other applications where a 75W-90 API GL-5 extreme pressure (EP) mineral or synthetic gear oil is recommended.

Note: For Eaton Roadranger Transmissions Use Spirax S6 GME 50

Specifications, Approvals & Recommendations

- ArvinMeritor O76-N
- DANA SHAES-256 Rev C
- International TMS 6816
- Mack GO-J Plus
- API GL-5, MT-1
- SAE J2360
- US Military MIL-PRF-2105E

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

Typical Physical Characteristics

Properties			Method	Shell Spirax S6 AXRME 75W-90
SAE Viscosity Grade			SAE J306	75W-90
Appearance				Amber
Kinematic Viscosity	@40°C	cSt	ASTM D445	103
Kinematic Viscosity	@100°C	cSt	ASTM D445	15
Viscosity	@-40°C	cP	ASTM D2983	90000
Viscosity Index			ASTM D2270	152
Density	@15.6°C	g/l	ASTM D1298	891
Density	60°F	lbs/gal.	ASTM D1298	7.42
Flash Point (COC)		°C/ (°F)	ASTM D92	215 / (420)
Pour Point		°C/ (°F)	ASTM D97	<-45 / (<-49)

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

• Health and Safety

Shell Spirax S6 AXRME 75W-90 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

• Advice

Advice on applications not covered here may be obtained from your Shell representative.



Previous Name: Shell Spirax ASX 80W-140

Shell Spirax S6 AXME 80W-140

Superior performance, extended drain, synthetic transmission axle oil for many premium applications

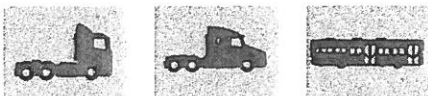
Shell Spirax S6 AXME 80W-140 is a fully synthetic, multipurpose, heavy-duty gear lubricant specifically designed for heavy duty differentials that call for an API GL-5 type product.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Outstanding thermal stability especially in applications where heat, wear and extended drain intervals contribute to severe service.
- High film strength and excellent shear stability.
- Excellent low temperature properties promote oil flow to help protect gears and bearings even at sub-zero temperatures.
- Synthetic formula provides maximum protection over a wide range of temperatures.
- Separates readily from water.
- Compatible with other MIL-L-2105D or MIL-PRF-2105E quality gear lubricants.

Main Applications



- Heavy duty differentials.
- All applications normally lubricated by automotive gear oil such as rear wheel bearings, manual steering gears and universal joints calling for an SAE 80W-140 grade.
- Transfer cases for automobiles, light and heavy-duty trucks, farm equipment and heavy construction equipment calling for SAE 80W-140 or 85W-140 grades.

- Industrial gear applications where extreme pressure oils with excellent low and high temperature properties are required.
- Differentials used in conjunction with Eaton and Meritor extended warranties calling for an SAE 80W-140 grade.
- Manual transmissions where the manufacturer specifies a GL-5 oil of SAE 80W-140 or 85W-140 grades.

Specifications, Approvals & Recommendations

- Dana Specification SHAES 429 Rev. A
- Mack GO-J
- ArvinMeritor Specification O76-B (standard drain), O76-Q and R (extended drain)
- SAE J2360
- Harnischfeger (P&H) 474
- International Truck and Engine TMS 6816
- API Classifications GL-5 and MT-1
- General Electric D50E9C
- US Military MIL-PRF-2105E
- U.S. Steel Specification 224
- American Gear Manufacturers (AGMA) Standard 250.03
- Scania STO 1:0

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical physical Characteristics

Properties		Method	Shell Spirax S6 AXME 80W-140
SAE Viscosity Grade			80W-140
Product Code			59227
Gravity	°API	D 287	23.6
Viscosity	@40°C cSt	D 445	271
Viscosity	@100°C cSt	D 445	30.5
Viscosity	@-18°C cP	D 2983	20500
Viscosity	@-26°C cP	D 2983	75000
Viscosity	@-40°C cP	D 2983	-
Viscosity Index		D 2270	146
Flash Point	°C (°F)	D 92	201 (395)
Pour Point	°C (°F)	D 97	< -40 (< -40)
Timken, OK Load		D 2509	85
FZG Gear Test			12

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

• Health and Safety

Shell Spirax S6 AXME 80W-140 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

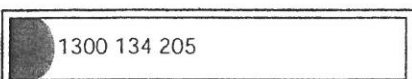
Additional Information

• Optimum Performance

For optimum performance, mineral oil lubricants should be drained before using Shell Spirax S6 AXME 80W-140. Mixing with other products may reduce its effectiveness and field performance.

• Advice

Advice on applications not covered here may be obtained from your Shell representative.



The Shell Company of Australia Limited
(ABN 46 004 610 459) 8 Redfern Road
Hawthorn East Victoria 3123 Australia



Shell Spirax S6 ATF A295

- Maintenance Saving
- Enhanced Efficiency

Synthetic Extended Drain Heavy Duty Automatic Transmission Fluid

Shell Spirax S6 ATF A295 Oil is a fully synthetic, heavy-duty automatic transmission fluid which is specifically designed and approved for use in transmissions requiring Allison TES-295 fluids. Spirax S6 ATF A295 is approved for extended service intervals and remains stable even under severe operating conditions.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long enhanced protection – long equipment life**

Viscosity Control : Spirax S6 ATF A295 incorporates latest synthetic base fluid technology and mechanically stable viscosity index improver technology to help ensure the viscosity of the oil remains constant over the complete oil drain, thus helping to ensure consistent lubrication and oil film thickness required to ensure protection of the gears, bearings and other mechanical components.

- **Long fluid life – maintenance saving**

The exceptional oxidation resistance of Spirax S6 ATF A295 helps resist formation of deposits to ensure longer fluid life and better fluid performance under arduous conditions.

Extended fluid life demonstrated in full scale long duration transmission testing.

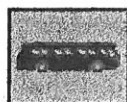
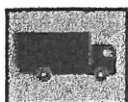
- **Enhanced efficiency**

Extremely high frictional stability, excellent viscometric control and durability helps ensure consistent shifting and power transfer characteristics. This helps provide smooth shifting and helps maintain the fuel efficient operation of the transmissions.

Excellent low temperature properties help ensure efficient transmission operation even under cold climate conditions.

Excellent anti-foam and filterability characteristics to help ensure efficient and effective lubrication and hydraulic control system performance within the transmission.

Main Applications



- **Allison Medium/Heavy Duty Automatic Transmissions**

Spirax S6 ATF A295 was developed to meet the extended drain requirements of late model medium and heavy duty Allison automatic transmissions. It is particularly suitable for transmissions requiring a TES-295 type product.

Spirax S6 ATF A295 is recommended for use in transmissions found in the following applications:

- Municipal fleets
- Vans, school buses
- Buses and Coaches
- Emergency vehicles
- Commercial vehicles and trucks
- Motor-homes
- Heavy duty pickup trucks
- Spirax S6 ATF A295 can also be used in some ZF and Voith heavy duty transmissions as well as those previously serviceable by Dexron® III and Mercon® fluids, and is particularly suited to mixed fleet operations.

Specifications, Approvals & Recommendations

Approved:

- Allison TES-295 AN-121008
- Allison TES-468 AN-121008

Suitable for use in applications calling for:

- Former Dexron-III applications
- Voith DIWA transmissions
- ZF TE-ML, 14A, 14B, 14C
- MAN 339 Z3
- MB 236.91
- Caterpillar AT-1

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

Typical Physical Characteristics

Properties			Method	Shell Spirax S6 ATF A295
Kinematic Viscosity	@40°C	cSt	ASTM D445	36
Kinematic Viscosity	@100°C	cSt	ASTM D445	7.3
Viscosity Index			ASTM D2270	181
Density	@15°C	kg/l	ASTM D287	0.840
Flash Point (COC)		°C	ASTM D92	213
Pour Point		°C	ISO 3016	-51

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

• Health and Safety

Shell Spirax S6 ATF A295 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

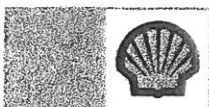
• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

• Advice

Advice on applications not covered here may be obtained from your Shell representative.



Technical Data Sheet

- Reliable Lubrication

Shell Rotella® T1 30 (CF/CF-2)

High Quality Heavy Duty Diesel Engine Oils

Shell Rotella® T1 Energized Protection™ oils use well-proven performance additives to fight engine wear and prevent deposits, providing reliable lubrication and consistent performance. Suitable for day to day use in turbo and non-turbocharged older engines.



ENERGIZED PROTECTION
Adapting to your engine's changing needs

Performance, Features & Benefits

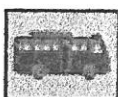
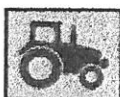
▪ Reliable performance

Provide reliable all-year-round performance in the applications for which they are intended.

▪ Proven durability

Shell Rotella® T1 provides excellent wear protection that promotes engine durability. It has a low ash content which minimizes the formation of deposits and keeps intake ports clean. It offers excellent rust and corrosion protection for critical engine parts.

Main Applications



▪ Heavy duty diesel engines

Shell Rotella® T1 is suitable for a variety of applications including older on and off-road trucks and some stationary engines.

▪ Shell Rotella® T1 is suitable for heavy equipment used for construction, mining or quarry operations.

▪ Shell Rotella® T1 30 is suitable for use in Detroit Diesel two-cycle engines (Series 53, 71 and 92).

▪ Hydraulic and transmissions

Shell Rotella® T1 oils can be used in certain transmission and mobile hydraulic systems where the equipment manufacturer recommends use of mono-grade engine oils.

Specifications, Approvals & Recommendations

▪ API CF-2, CF

▪ Detroit Diesel Series 53, 71, 92

▪ For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk, or the OEM Approvals website.

Typical Physical Characteristics

Properties	Method	Shell Rotella T1 30
SAE Viscosity Grade	J300	30
Kinematic Viscosity @40°C	ASTM D445	107
Kinematic Viscosity @100°C	ASTM D445	11.9
Viscosity Index	ASTM D2570	101
Density @15°C	ASTM D4052	0.867
Total Base Number	ASTM D2896	7.5
Flash Point (Cleveland Open Cup)	ASTM D92	210
Pour Point	ASTM D97	-24

These characteristics are typical of current production. While future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment**▪ Health and Safety**

Shell Rotella T1 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

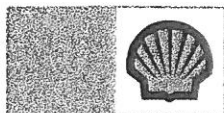
Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

▪ Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Additional Information**▪ Advice**

Product recommendations for applications and specifications not covered here may be obtained from your Shell representative.



Previous Name: Shell Tellus T

Shell Tellus S2 V 22

- Extra Protection
- Versatile Applications

Industrial Hydraulic Fluid for wide temperature range

Shell Tellus S2 V fluids are high performance hydraulic fluids that use Shell's unique patented technology with excellent viscosity control under both severe mechanical stress and across a wide range of temperatures. They provide outstanding protection and performance in most mobile equipment and other applications subjected to wider ranges of ambient or operating temperatures.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long fluid life – Maintenance saving**

Shell Tellus S2 V fluids help extend equipment maintenance intervals by resisting thermal and chemical breakdown. This minimizes sludge formation and provides excellent performance in the industry standard ASTM D943 TOST test (Turbine Oil Stability Test), providing better reliability and system cleanliness.

Shell Tellus S2 V fluids also have good stability in the presence of moisture, which ensures long fluid life and reduces the risk of corrosion and rusting, particularly in moist or humid environments.

Highly shear stable viscosity modifiers help minimize variations in the fluid properties throughout the fluid drain interval.

- **Outstanding wear protection**

Proven zinc-based anti-wear additives are incorporated to be effective throughout the range of operating conditions, including low load and severe duty high load conditions.

Outstanding performance in a range of piston and vane pump tests, including the tough Denison T6C (dry and wet versions) and the demanding Vickers 35VQ25, demonstrates how Shell Tellus S2 V fluids can help system components last longer.

- **Maintaining system efficiency**

The extended temperature range capability of Shell Tellus S2 V allows efficient operation of mobile equipment from cold start to normal operating conditions.

Superior cleanliness, excellent filterability and high performance water separation, air release and anti-foam characteristics all help contribute to maintaining or enhancing the efficiency of hydraulic systems.

The unique additive system in Shell Tellus S2 V, in combination with superior cleanliness (meeting the requirements of max ISO 4406 21/19/16 class, ex Shell filling lines. As recognized by DIN 51524 specification, the oil is exposed to various influences with transport and storage that could effect the cleanliness level) helps reduce the impact of contaminants on filter blocking, allowing both extended filter life and use of finer filtration for extra equipment protection.

Shell Tellus S2 V fluids are formulated for fast air release without excessive foaming to help efficient hydraulic power transfer and minimise fluid and equipment impacts of cavitation-induced oxidation that can shorten fluid life.

Main Applications



- **Mobile/exterior hydraulic applications**

Hydraulic and fluid power transmission systems in exposed environments can be subject to wide variations in temperature. The high viscosity index of Shell Tellus S2 V helps deliver responsive performance from cold start conditions to full load, severe duty operation.

- **Precision hydraulic systems**

Precision hydraulic systems require excellent control of fluid viscosity over the operating cycle. Shell Tellus S2 V provides greater temperature-viscosity stability compared to ISO HM fluids that can help improve the performance of such systems.

For more severe operating conditions, longer fluid life and enhanced efficiency, the Shell Tellus "S3" and "S4" ranges offer additional performance benefits.

Specifications, Approvals & Recommendations

- Denison Hydraulics (HF-0, HF-1, HF-2)
- Fives Cincinnati P-68 (ISO 32), P-70 (ISO 46), P-69 (ISO 68)
- Eaton Vickers (Brochure 694)
- Swedish Standard SS 15 54 34 AM
- ISO 11158 (HV fluids)
- AFNOR NF-E 48-603
- ASTM 6158-05 (HV fluids)
- DIN 51524 Part 3 HVP type
- GB 111181-1-94 (HV fluids)

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties	Method	Tellus S2 V 22
ISO Viscosity Grade	ISO 3448	22
ISO Fluid Type		HV
Kinematic Viscosity @-20°C cSt	ASTM D445	695
Kinematic Viscosity @40°C cSt	ASTM D445	22
Kinematic Viscosity @100°C cSt	ASTM D445	4.8
Viscosity Index	ISO 2909	142
Density @15°C kg/m ³	ISO 12185	872
Flash Point (COQ) °C	ISO 2592	190
Pour Point °C	ISO 3016	-42
Dielectric Strength* kV	ASTM D877	>30

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

- * Dielectric strength value applies only to "point of manufacture" at a Shell authorized manufacturing facility. As with all hydraulic fluids, contamination with water or particulate leads to a reduction in dielectric strength.

Health, Safety & Environment

- Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>
- **Protect the Environment**
Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**
Advice on applications not covered here may be obtained from your Shell representative.

Compatibility & Miscibility

Compatibility

Shell Tellus S2 V fluids are suitable for use with most hydraulic pumps. However, please consult your Shell Representative before using in pumps containing silver plated components.

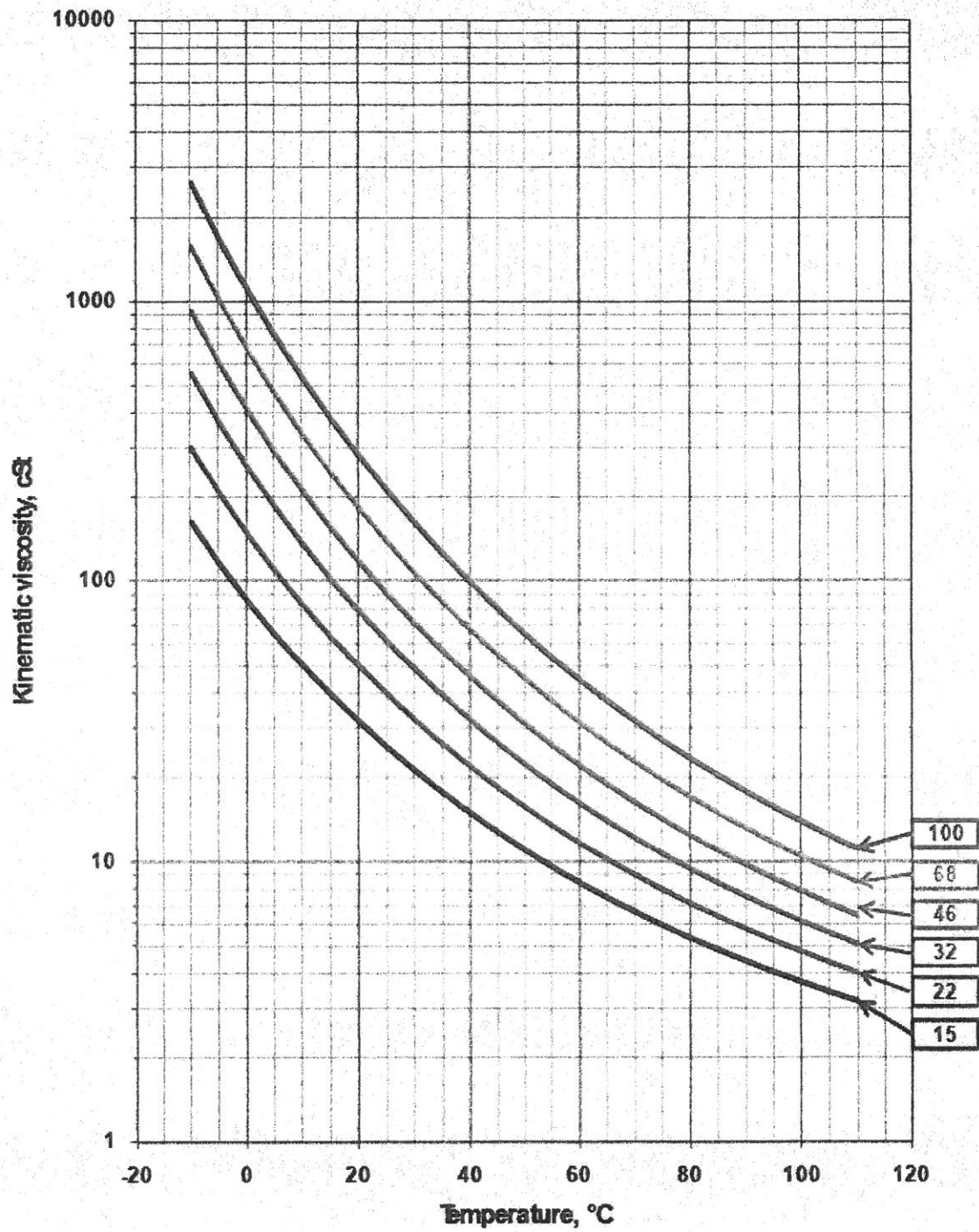
Fluid Compatibility

Shell Tellus S2 V fluids are compatible with most other mineral oil based hydraulic fluids. However, mineral oil hydraulic fluids should not be mixed with other fluid types (e.g. environmentally acceptable or fire resistant fluids).

Seal & Paint Compatibility

Shell Tellus S2 V fluids are compatible with seal materials and paints normally specified for use with mineral oils.

Viscosity - Temperature Diagram for Shell Tellus S2 V



Shell Spirax S5 ATF X



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DESIGNED TO MEET CHALLENGES

Every part of your vehicle has been meticulously engineered, so you want to use a lubricant that has been designed to ensure that your equipment is well protected and works efficiently.

The Shell Spirax range of multi-vehicle automatic-transmission fluids has been developed to enable mixed fleet operators, independent workshops and other consumers to select the oil that will deliver optimum value through wear protection, long oil life and efficiency. As this single fluid is suitable for a wide variety of vehicle types, it can also help to simplify your operations.

KEY BENEFITS

- ✓ Exceptional wear protection for longer equipment life
- ✓ Exceptional thermal, oxidation and shear stability for longer oil life
- ✓ Excellent oil fluidity at low temperatures and reduced friction for improved fuel efficiency
- ✓ Special viscosity index improver for less change in viscosity with operating temperature

SHELL'S MOST-ADVANCED, MULTI-VEHICLE, SYNTHETIC AUTOMATIC-TRANSMISSION FLUID

Shell Spirax S5 ATF X is Shell's most-advanced, multi-vehicle, synthetic automatic-transmission fluid and is designed to provide efficient, smooth and trouble-free operation. Shell Spirax S5 ATF X is a fluid that you can rely on to offer exceptional oxidation and shear stability for excellent fluid life in the most demanding applications and in a wide range of vehicle types. A special viscosity-index improver reduces the change in viscosity with operating temperature for excellent oil fluidity at low temperatures.

DESIGNED TO PROTECT

Protecting automatic-transmission systems from wear, pitting and corrosion can help to extend component life and maximise your return on investment. Shell Spirax S5 ATF X offers

- **exceptional wear and gear protection,**
which can promote long component life and help to extend transmission life.





**SHELL SPIRAX S5 ATF X
IS DESIGNED TO MEET
THE NEEDS OF KEY ASIAN,
EUROPEAN AND NORTH
AMERICAN VEHICLE
MANUFACTURERS**

DESIGNED FOR LONG OIL LIFE

Limiting fluid degradation can help to prolong oil and component life. Shell Spirax S5 ATF X has exceptional resistance to physical and chemical breakdown, which means that it can go on protecting components for longer. It offers

- **excellent resistant to oil degradation,**
which helps to prolong oil and equipment life
- **a special viscosity index improver,**
which reduces the changes in viscosity with operating temperature, so that the oil can protect components for longer.



SPECIFICATIONS AND APPROVALS

Shell Spirax S5 ATF X is designed to meet the requirements of key Asian, European and North American equipment manufacturers, and has the following approvals:

- Aisin JWS 3309 (all applications)
- Allison C-4
- Ford Mercon® and Mercon V
- General Motors Dexron® IIIH
- JASO 1-A and 2A-02.

FULL PRODUCT AND SERVICE PORTFOLIO

Whatever your needs or application, we can provide a full range of lubricants and services, including Shell Helix, Pennzoil and Quaker State passenger car engine oils, Shell Gadus greases and the Shell LubeAnalyst oil and equipment condition monitoring service.

APPLICATIONS



Suitable for passenger car, SUV and pickup truck automatic transmission systems

For more information, please contact

shell.com/lubricants



Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline™ All-Fleet Plus™ Engine Oil

Valvoline™ All-Fleet Plus™ Engine Oils are formulated to provide optimum performance in modern, emissions treatment equipped diesel engines operating under a wide variety of service conditions, including engines with diesel particulate filters (DPF) and cooled exhaust gas recirculation (EGR). They are blended with premium basestocks and high quality additive chemistry to achieve the following benefits: high temperature piston deposit control, foam protection, soot dispersancy and oil-thickening control, oxidation inhibition, low temperature sludge protection, corrosion and rust inhibition, valve train wear protection and TBN retention.

Valvoline™ All-Fleet Plus™ Engine Oils are recommended for use in turbocharged and naturally aspirated two and four cycle diesel engines. They may also be used in gasoline engines for the "mixed fleet" operator. These motor oils provide excellent performance in local stop and go routes, on-and off-highway, farm, construction, and mining applications. All Fleet Plus meets all the requirements for Tier IV engines and is backwards compatible with Tier III.

Approvals/Formulated to Meet Performance							
API CJ-4, CI-4, CH-4, CG-4	15W-40	10W-30					
API CF	15W-40	10W-30	10W	20W	30	40	50
API CF-2			10W	20W	30	40	50
API SM	15W-40	10W-30					
API SF					30	40	50
ACEA E9/E7-08	15W-40						
CATERPILLAR	15W-40#	10W-30#					
CUMMINS (CES 20081/20078)	15W-40##	10W-30##					
DETROIT DIESEL	15W-40**				30*	40*	50*
DEUTZ DQC III-10 LA	15W-40^						
MACK EO-O PP-07	15W40	10W-30					
MB p228.31	15W-40^						
NAVISTAR	15W-40						
ALLISON C-4	15W-40^		10W^		30^		
VOLVO VDS-4	15W-40	10W-30					
Global DHD-1	15W-40^^	10W-30^^					
JASO DH-2	15W-40^^	10W-30^^					
Typical Properties	15W-40	10W-30	10W	20W	30	40	50
Gravity, degree API	29.5	31.1	31.5	30.4	29.7	29.3	27.8
Specific Gravity, 15 C	0.879	0.870	0.868	0.874	0.878	0.880	0.888
Viscosity @ 40 C, cSt	117	80	37	52	87	138	204
Viscosity @ 100 C, cSt	15.2	11.9	6.4	8.0	11.0	14.6	20.0
Viscosity Index	135	143	122	122	113	105	113
CCS Viscosity, cP	6600@-20	6600@-25	6800@-25	8000@-15	-----	-----	-----
HTHS Viscosity, cP	4.2	3.5	-----	-----	3.7	>3.7	>3.7
Borderline Pumping Viscosity	Pass	Pass	Pass	Pass	-----	-----	-----
Pour Point, deg. C	-30	-33	-36	-30	-24	-21	-18
Total Base Number (D-2896)	9	10	7	7	7	7	7
Sulfated Ash, %	1.0	1.0	0.8	0.8	0.8	0.8	0.8
Zinc, wt %	0.127	0.127	0.126	0.126	0.126	0.126	0.126
Part Numbers							
Bulk	VV3850	VV3820	VV3900	VV3920	VV3930	VV3980	VV4010
Tote	852824	853212	841599		841622	841623	844139
55 Gallon Drum	VV385	VV382	VV390		VV393	VV398	VV401
5 Gallon Plastic Pail	VV386		VV391		VV395	VV400	
1 Gallon Jug	773634				773635		
12/1 Quart	VV388				VV396		

* Two-Stroke engines only.

** Approved for DDC 93K218 (Detroit Diesel recommends this viscosity grade only for their four-cycle engines.)

Meets Caterpillar ECF-3 and older Specification Requirements

Meets the engine performance requirements of CES 20078. Is approved against CES 20081.

^ Meets the performance requirements of

^^ Meets engine performance requirements of

ASHLAND

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline's Premium Blue® Extreme Engine Oil

Hi-Performance Synthetic Engine Oil

Valvoline Premium Blue® Extreme continues the tradition of providing a superior full synthetic oil that is field proven and delivers exceptional TBN retention, extended drain approved*, enhanced fuel economy potential over conventional oils, advanced soot control, outstanding viscosity retention and excellent all weather performance. The hi-performance synthetic technology meets the stringent demands of modern diesel engines; including EGR (Exhaust Gas Recirculation) and DPF (Diesel Particulate Filter) control systems, operating under standard and extended service interval*, running both ultra-low sulfur diesel fuel and low sulfur diesel fuel.

Premium Blue Extreme provides fuel economy benefits for on-highway Class-8 trucks. Statistically significant test results find up to 3% maximum improvement in fuel economy using SAE J1321/TMC RMP 1103, Type II techniques. Testing was conducted by a leading independent laboratory.

The Premium Blue® Extreme Advantage

- Hi-Performance Synthetic Technology meets the most demanding requirements of modern EGR engines operating at elevated temperatures, higher soot and higher acid levels in the engine oil.
- Cummins approved for 5,000-mile oil drain extension, under normal duty, for 2007 engines.
- Superior synthetic basestocks provide faster, safe starts during freezing weather and enhanced thermal properties for hot weather operations.
- Unique formulation has enhanced fuel economy potential over conventional oils.
- Reduced high temperature carbon buildup - both single and two-piece pistons - and ring/liner wear protection leads to improved oil consumption control.
- Unique dispersive polymer technology (DPT) provides advanced soot control and outstanding engine cleanliness.
- Provides fuel economy benefits for on-highway Class-8 trucks.

Valvoline's Premium Blue Extreme Engine Oil is endorsed by Cummins Engine Company and is approved against the CES 20081 specification. The product meets, and is approved against, Mack EO-O Premium Plus, Volvo VDS-4, Detroit Diesel 93K218, and MB-approval 228.31. In addition, the product meets API CJ-4/SM and older category, Caterpillar ECF-3/2/1a, Renault RLD-3, ACEA E9-08/E7-08 and Perkins/Wilson engine requirements. It also meets the engine test performance requirements of MTU Type I/II, MAN 3275, JASO DH-2, and Global DHD-1 specifications. Premium Blue Extreme provides excellent performance in "mixed fleet" gasoline engines, pickup and delivery, city fleet, long haul over-the-road, and off-highway applications.

Typical Properties	SAE 5W-40
Viscosity @ 40 C, cSt	88.6
Viscosity @ 100 C, cSt	14.5
Viscosity Index	170
CCS Viscosity @ -30 C, cP	6,300
Borderline Pumping Viscosity @ -35 C, cP	40,000
High Temp. High Shear Viscosity @ 150 C, cP	3.8
Pour Point, deg. C	-39
Sulfated Ash, %	<1.0
Total Base Number (D-2896)	10
Foam / Aeration Tests	Pass
Part Numbers	
Bulk	VV705160
55 Gallon Drum	VV70516
1 Gallon Jug	774038

Endorsed and Recommended by Cummins Inc.



* Approval is for Cummin ISX and ISM engines On-Highway. To determine your optimum maintenance interval, consult your owner's manual or call Valvoline at 1-800-ALL-FLEET. Results may vary based on environment, operating, and maintenance procedures.

Refer to Valvoline's Material Safety Data Sheet for health and safety information.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Pages	Code
1/6/12	NA	3/31/10	JRT	1	PBX 1201

ASHLAND

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline's Cerulean® Grease

Valvoline's Cerulean grease is a uniquely formulated premium product designed to meet the stressful demands of both industrial and commercial fleet environments. It provides excellent performance over a variety of operating conditions and may displace other top of the line greases for severe and general purpose lubrication.

Valvoline's Cerulean grease is a tacky lithium complex grease containing a high level of select extreme pressure additives for maximum loading protection. The product also contains oxidation, rust and corrosion inhibitors for long life performance. It has excellent resistance to water wash-out.

Valvoline's Cerulean grease is dyed blue for easy identification and is recommended in numerous fleet, agricultural, mining and industrial applications where maximum performance grease is required. Typical examples are disc and other wheel bearings, sleeve and anti-friction bearings, chassis, bucket and king pins, universal joints, couplings, crushers and vibratory rollers. Valvoline's Cerulean grease meets GC/LB specifications.

Typical Properties	Test Method	NLGI 0	NLGI 1	NLGI 2
Thickener Type	—	Lithium Complex	Lithium Complex	Lithium Complex
Color and Texture	Visual	Blue, Smooth,	Blue, Smooth,	Blue, Smooth,
Penetration, worked	ASTM D217	355-385	310-340	265-295
Dropping Point, °F, min	ASTM D2265	N/A	475	500
Dropping Point, °C, min	ASTM D2265	N/A	246	260
Rust Prevention Rating	ASTM D1473	Pass	Pass	Pass
Copper Corrosion	ASTM D4048	1B	1B	1B
Timken OK Load, lbs.	ASTM D2509	60	65	65
Four Ball EP: Weld Point, kg	ASTM D2596	400	400	400
Four Ball EP: Load Wear Index,	ASTM D2596	59	59	59
Four Ball Wear: Scar, mm	ASTM D2266	0.55	0.55	0.55
Water Washout, 80 °C, % loss,	ASTM D1264	N/A	15	10
Leakage Tendency, gram. max.	ASTM D4290	N/A	6.0	4.0
High Temp Life, hrs., min	ASTM D3527	80	80	80

Base Oil Characteristics		ISO 220	ISO 220	ISO 220
Pour Point, °F (°C)	ASTM D5949	+5(-15)	+5(-15)	+5(-15)
Flash Point, °F (°C)	ASTM D92	400(204)	400(204)	400(204)

Part Numbers				
400 Lb. Drum		VV70125	VV70125	VV70129
120 Lb. Keg (L)				VV70130
35 Lb. Plastic Pail				VV70132
50/14 Oz. Carton				VV70133

Refer to Valvoline's Material Safety Data Sheet for health and safety information.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Code
02/18/2013	N/A	10/25/2010	KD	PI 1301

ASHLAND

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline's Palladium® Grease

Valvoline's Palladium grease is a premium quality multi-purpose lubricant for use in extreme pressure and high temperature operating conditions. It is manufactured from carefully selected petroleum oils and performance additives to create superior grease with a dropping point of 460-500° F. The smooth textured grease has a heavy bodied consistency but provides good pumpability in both hot and cold operating temperatures. The product has excellent resistance to water washout problems. Oil separation is minimal even under extreme pressures.

Valvoline's Palladium grease is formulated with special lubricity, anti-wear and extreme pressure additives including molybdenum disulfide and is completely fortified with oxidation, rust and corrosion inhibitors. It displaces other greases as top-of-the-line quality products for severe applications and general purpose lubrication.

The product is recommended for all types of bearing and slide applications, for shock loading, pounding, rough chassis usage and high loads. Four NLGI grades are available for seasonal temperature changes.

Typical Properties	Test Method	NLGI 00	NLGI 0	NLGI 1	NLGI 2
Molybdenum Disulfide, %	---	3	3	3	3
Thickener Type	---	Lithium Complex	Lithium Complex	Lithium Complex	Lithium Complex
Texture	Visual	Smooth	Smooth	Smooth, Tacky	Smooth, Tacky
Color	Visual	Grey	Grey	Grey	Grey
Penetration, Worked	ASTM D217	400-430	355-385	310-340	265-295
Dropping Point, °F, min	ASTM D2265	N/A	N/A	500	500
Dropping Point, °C, min	ASTM D2265	N/A	N/A	260	260
Rust Prevention, Rating	ASTM D1473	N/A	N/A	Pass	Pass
Copper Corrosion	ASTM D4048	1b	1b	1b	1b
Water Washout, % Loss, max	ASTM D1264	N/A	N/A	10	5
Timken OK Load, lbs.	ASTM D2509	50	50	55	55
Four Ball Wear: Scar, mm	ASTM D2266	0.6	0.6	0.6	0.6
Four Ball EP: Weld Point, kg	ASTM D2596	315	315	400	400
Four Ball EP: Load Wear Index, kg	ASTM D2596	50	50	65	65
Leakage Tendency, g, min	ASTM D4290	N/A	N/A	5.0	2.0
Oil Separation, wt. %, max	ASTM D1742	N/A	N/A	6	6

Base Oil Characteristics		ISO 320	ISO 320	ISO 320	ISO 320
Pour Point, °F (°C)	ASTM D97	-15 (-26)	-15 (-26)	+10 (-12)	+10 (-12)
Flash Point, °F (°C)	ASTM D92	400(204)	400(204)	400 (204)	400 (204)

Part Numbers					
Tote			NA		NA
400 Lb. Drum			VV70142		VV70109
120 Lb. Keg (L)			VV70143		VV70110
50/14 Oz. Carton					VV70112

Refer to Valvoline's Material Safety Data Sheet for health and safety instructions.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Code
02/18/2013	N/A	12/19/2011	KD	PI 1301

ASHLAND

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline™ Drive Train Transmission Oil

Valvoline™ Drive Train Transmission Oil is a heavy duty powershift transmission and drive train lubricant designed and recommended for applications requiring oils meeting the Caterpillar TO-4 specification and Allison C-4 (Off-road applications) specification or in any other equipment in which TO-4 is called for. They also meet performance requirements of Komatsu equipments, Komatsu micro clutch, where TO-4 is called for in Dana Powershifts, Eaton Fuller, and Tremac/TTC equipments.

The oils are formulated from premium base stocks and a select additive system to meet the challenging demands of modern equipment. It provides friction material and elastomer compatibility, while guarding against gear wear, rust and corrosion, foaming and oxidation. Valvoline™ Drive Train Transmission Oil provides superior wear control and strong extreme pressure performance.

Valvoline™ Drive Train Transmission Oil is designed for transmissions and drive trains only and should not be used as engine oil.

Typical Properties	10W	30	50
Gravity, degree API	30.3	28.9	26.5
Viscosity @ 40°C (cSt)	42	94	220
Viscosity @ 100°C (cSt)	6.6	11.0	19.3
Viscosity @ -25°C (cP)	<6800		
Viscosity Index	109	102	99
Pour Point (°C) max	-35	-25	-15
Sulfated Ash, wt. %	1.2	1.2	1.2
Part Numbers			
Tote	853214	841597	841598
Bulk	VV3190	VV3230	VV3270
55 Gallon Drum	VV319	VV323	VV327
5 Gallon Pail	VV321	VV325	VV329

Refer To Valvoline's Material Safety Data Sheet for health and safety instructions.

This information only applies to products manufactured in the following location(s): USA. Canada

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Pages	Code
8/04/2014	N/A	4/29/2014	KD	1	PI 1402

ASHLAND

Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



Valvoline® Heavy Duty Synthetic Transmission Fluid SAE 50

Valvoline Heavy Duty Synthetic Transmission Fluid SAE 50 is selectively engineered for heavy duty manual transmissions operating in severe service applications (temperature extremes, extended drain intervals, critical units, etc.) and requiring a MIL-L-2104 mineral engine oil, and is approved against Eaton PS-164 revision 7. It is a blend of premium synthetic base stocks and high quality additives to meet the challenging demands of manual transmission lubrication in modern equipment. In addition, the reformulated product is now amber in color to differentiate it from older versions, and other products, that do not meet the new Eaton PS-164 revision 7 requirements.

Advantages of Valvoline Heavy Duty Synthetic Transmission Fluid SAE 50 include:

- Improved cold weather shift ability and quicker lubrication of transmission components.
- Longer seal life due to fewer deposits, better seal compatibility and improved high temperature properties.
- Increased thermal stability and reduced component deposits.
- Reduced component wear and deposits lead to longer transmission and lubricant service life.
- Operational benefits such as the potential for fuel economy and reduced downtime maintenance.
- Allows extended warranty coverage (750,000 miles) at Eaton and Rockwell International.
- Meets the requirements of Dana, Navistar, Rockwell International 0-81, Eaton Transmission Division PS-081 & PS-164 REV 7, ArvinMeritor 0-81, Mack TO-A Plus, ZF FreedomLine, International TMS 6816, and API MT-1.
- Meets the requirements of Volvo 97305-89, and can be used in Volvo I-Shift transmissions at the standard drain intervals.

Typical Properties	SAE 50
Gravity, degree API	23.0
Viscosity @ 100° C, cSt	18.20
Viscosity Index	151
Pour Point, °C	<-40
Flash Point - COC, °C	225
Foaming Test (ASTM D-892)	Pass
Copper Strip Corrosion (ASTM D130)	Pass
FZG, stages for pass	10
Part Numbers	
55 Gallon Drum	VV70601
16 Gallon Keg	VV70602
5 Gallon Pail	VV706035M

Refer to Valvoline's Material Safety Data Sheet for health and safety information.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:	Expiration Date:	Replaces:	Author's Initials:	Pages	Code
08/27/2008	N/A	04/14/2008	JH	1	PI 0802

ASHLAND.

Product Information



A PRODUCT OF ASHLAND CONSUMER MARKETS, A BUSINESS UNIT OF ASHLAND INC.

VALVOLINE OUTBOARD 2-CYCLE MARINE ENGINE OIL

Valvoline Outboard 2-Cycle Marine Engine Oil is a superior quality NMMA certified ashless two-cycle lubricant. Premium base stocks are blended with a modern ashless detergent additive package to provide fortification for maximum performance in outboard engines. It is pre-diluted for ease of mixing with gasoline and may also be used in direct fuel injection systems.

This product is recommended for all leading outboard engines, including the latest high horsepower units direct fuel injection models. Valvoline Outboard 2-Cycle Marine Engine Oil will also provide excellent performance in two-cycle engines of motorcycles, all-terrain vehicles, snowmobiles and personal watercrafts. It may be used at manufacturers recommended fuel/oil ratios from 11:1 to 100:1.

The Valvoline Outboard 2-Cycle Marine Engine Oil Advantages:

- Improves engine life through enhanced deposit protection
- Improves wear protection
- Controls combustion and exhaust system deposits
- Maintains torque and acceleration
- Acceptable for outboards with Direct Fuel Injection (DFI) systems
- NMMA (formerly BIA) TC-W3 certified

Approvals/Performance Levels

NMMA TC-W3

Typical Properties

Gravity (API)	31.9
Vis @ 100°C (cSt)	6.70
Vis @ -25°C, cP	3000
Pour Point, °C max	-36
Sulfated Ash, wt%	Nil
Color	Blue-Green
Flash Point (D-93), °C	65

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:
04-10-13

Replaces:
07-08-03

Author's Initials:
Alexey Stiop

Code

Product Information

A PRODUCT OF ASHLAND CONSUMER MARKETS, A DIVISION OF ASHLAND INC.

Valvoline DEXRON®-VI ATF

Valvoline DEXRON®-VI ATF (automatic transmission fluid) is formulated with premium synthetic base stocks and advanced additive technology, and meets all the stringent requirements of General Motors' DEXRON®-VI specification*, which is designed for the modern automatic transmissions in GM vehicles. Valvoline DEXRON®-VI ATF is officially licensed with GM and can be used in new and old GM automatic transmissions. It is fully back-serviceable and can be used wherever DEXRON®-II and/or DEXRON®-III are recommended.

* DEXRON® is a registered trademark of General Motors Corporation.

The Valvoline DEXRON®-VI ATF Advantages:

- Provides consistent shift performance for new and old GM transmissions
- Extends transmission fluid life and prevents fluid breakdown at higher operating temperatures
- Provides excellent oxidative stability under severe conditions
- Reduces sludge and varnish build-up
- Protects transmission gears and allows them to operate smoothly
- Maintains lubricity
- Flows well for cold start-up
- Thoroughly field tested

Approvals

DEXRON®-VI

Exceeds the latest performance requirements of DEXRON®-III, DEXRON®-II

Meets the performance requirements of Allison C-4

Test	Method	Typical Property
Viscosity @ 100°C	ASTM D445	6.0 cSt
Viscosity @ 40°C	ASTM D445	29.5 cSt
Viscosity Index	ASTM D2270	155
Cold Crank Simulation @ -30°C	ASTM D5293	2,900 cP
Brookfield Viscosity @ -40°C	ASTM D2983	12,500 cP
Pour Point	ASTM D5949/5950/6892	-48 °C / -54 °F
Density @ 15°C	ASTM D4052	0.848 g/cm³ / 7.08 lb/gal
Flash Point	ASTM D92	208 °C / 406 °F
Color	ASTM D1500	7.0
Appearance	Visual	Red
Sulfur	ASTM D4951	1620 ppm
Phosphorus	ASTM D4951	190 ppm

Product Information

A PRODUCT OF THE VALVOLINE COMPANY A DIVISION OF ASHLAND INC.

VALVOLINE CVT FLUID

Valvoline CVT (Continuously Variable Transmission) Fluid is specifically formulated for today's technologically sophisticated variable transmissions. It is formulated with premium synthetic base stocks, long-life friction modifiers, special anti-wear additives, and shear stable viscosity modifiers. Valvoline CVT Fluid is recommended for use in most belt and chain-driven continuously variable transmissions and will not void new car warranties. Valvoline CVT Fluid is not recommended for Hybrid CVT units (Toyota and Ford).

The Valvoline CVT Fluid Advantages:

- Full synthetic fluid
- Excellent anti-shudder durability
- Superior wet clutch performance
- Excellent anti-wear performance
- Excellent metal-metal friction protection
- Designed to provide excellent torque transfer

Valvoline CVT fluid recommended for use where the following fluids are called for:

- BMW Mini Cooper EZL 799
- Dodge/Jeep NS-2, CVTF+4
- Ford CVT23, CVT30/Motorcraft XT-7-QCFT, Mercon C
- GM/ Saturn DEX-CVT
- Honda HMMF, HCF-2
- Hyundai/ Kia CVT applications (SP-CVT 1)
- Mazda CVTF 3320
- Mercedes Benz 236.20
- Mitsubishi CVTF-J1, CVTF-J4
- Nissan NS-2, NS-3
- Shell Green 1V
- Subaru Lineartronic CVTF (P/N K0425Y0710), CV-30, High Torque CVTF, e-CVTF
- Suzuki TC, NS-2, CVTF 3320, CVT Green 1, CVT Green 2
- Toyota TC, FE
- Volkswagen/Audi TL 52180; G 052 180, G 052 516

Test	Typical Property
Viscosity @ 100°C, cSt	7.2
Specific Gravity @ 60°F	0.852
Brookfield Viscosity @ -40°C, cP	9,000
Calcium, %	0.060
Phosphorus, %	0.074
Sulfur, %	0.105

Part Number	804751
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Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



VALVOLINE PREMIUM CONVENTIONAL MOTOR OIL

Valvoline Premium Conventional multigrade motor oils are formulated with advanced additive technology and highly refined, premium quality basestocks that protect today's engines against undesirable deposits, contamination, and viscosity and thermal breakdown under severe service conditions. They meet the performance requirements of virtually all naturally aspirated, turbocharged and supercharged gasoline fueled passenger cars and light duty trucks, including European and Japanese vehicles*.

The Valvoline Premium Conventional Motor Oil Advantage

- **High Temperature Protection:** Resists breakdown in the most severe engine environments.
- **Low Temperature Protection:** Flows easily at low temperatures, reducing wear at start-up.
- **High Detergency:** Fights formation of sludge and varnish deposits that reduce engine life.
- **Wear Protection:** Contains anti-wear additives that dramatically reduce engine wear. Meets European and Japanese Wear requirements.
- **Turbo Approved:** Provides excellent protection to critical turbo unit components.

Approvals/Performance Levels

API SN/SM	SAE 10W-40	SAE 20W-50
Meets engine & emission system protection requirements of ILSAC GF-5		

Test	SAE 10W-40	SAE 20W-50
Vis @ 100°C (cSt)	14.5	18.5
Vis @ 40°C (cSt)	95.4	170.9
Viscosity Index	151	121
Spec Gravity @ 60°F	0.8685	0.8802
Density (lbs/gal)	7.24	7.34
Total Base No.	7.5	7.5
Flash COC (°C)	220	236
Pour Point (°C) max	-33	-24
CCS cP (°C)	6200(-25°C)	8200(-15°C)
MRV TP-1 cP (°C)	35,000(-30°C)	21,000(-20°C)
Noack % off @ 250°C	<15.0	<15.0
Sulfated Ash	0.80	0.80
Zinc/Phosphorus	0.083/0.076	0.083/0.076
Calcium/Sodium	0.167/0.049	0.167/0.049

* VALVOLINE PREMIUM CONVENTIONAL MOTOR OILS are not recommended for use in diesel fueled vehicles. Use Valvoline All Fleet Plus, Valvoline Durablend, Valvoline SynPower motor oils(see owner's manual)

See operator's manual for recommended viscosity grade and API service classification.

This information only applies to products manufactured in the following location(s): USA, Canada.

Effective Date:
10-26-11

Replaces:
12-15-10

Author's Initials:
ZGZ

Rev. Code
007

ASHLAND.

SPECIAL HEAVY-DUTY MOTOR OILS

SAE 10W, 20W-20, 30, 40, 50

SAE Grade Automotive	<u>Typical Properties</u>				
	10W	20W-20	30	40	50
Viscosity, cSt					
At 40 C	42	72	114	155	233
At 100 C	6.5	8.8	11.8	15.1	18.7
Viscosity, SUS					
At 100 F	210	363	560	800	1100
At 210 F	48	56	65	77	93
Viscosity Index	+90	+90	+90	+90	+90
Flash Pt., (COC) F	+400	+420	+435	+450	+465
Pour Point, Deg F	-30	-20	-5	0	+5
Sulfated Ash, %wt	<1.0	<1.0	<1.0	<1.0	<1.0
Neut. No., TBN-E (min)	7.5	7.5	7.5	7.5	7.5
Gravity, API @ 60F	27.9	27.2	26.5	25.5	24.9

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

These HDMOs (Heavy Duty Motor Oil) SAE Single-Grade crankcase oils are formulated for diesel and gasoline engines. These oils are blended from selected and highly refined base stocks. They are compounded with detergents, dispersants, wear control elements, anti-oxidants, corrosion inhibitors, and a foam suppressant additive.

APPLICATIONS

Recommended for all major automotive diesel and four-cycle gasoline engines in all services and under all operating conditions. SAE grades 30, 40, and 50 meet current API Service Classifications CF, CF-2/SM (including API Classification SJ and SL) and SAE Grades 10W and 20W meet API CF/SM; all comply with obsolete API classifications CD, CD-II, CE. These products meet the performance requirements of MIL-L-2104F (SAE 10W, 30, 40), MIL-L-46152D and conform to all major automobile manufacturers' and automotive/truck diesel engine builders' requirements, including Caterpillar, Cummins, Detroit Diesel-Allison, and Mack Truck. SAE 10W thru SAE 30 meet the Allison Type C-3, C-4 transmission performance requirements recommended for hydraulic systems.

[Do not use in EMD Diesel Engines (railroad, marine) which require oil with <10 ppm zinc content].

PREMIUM TRACTOR HYDRAULIC FLUID

	<u>Typical Properties</u>
SAE Grade	
Automotive	10W-20 (Approx)
Gear	75
Viscosity, cSt	
✓ At 40 C	55
At 100 C	92
Viscosity, SUS	
At 100 F	220
At 210 F	58
Viscosity Index	140 (Minimum)
Flash Point, Deg F	392
Pour Point, Deg F	-40
Gravity, API @ 60 F	28.2
Density, lbs/gallon	7.38

The values shown are typical of current production. Some are controlled in the manufacturing process, while other are not. All of them may vary within tolerable ranges.

A high quality, specially designed lubricant containing anti-rust, anti-foam and oxidation inhibitors; plus other additives necessary for the wide range of applications recommended by various tractor manufacturers. The product is an "all-seasonal" type of oil that resists thickening in cold weather and thinning in the heat of summer. It is compounded with detergents to keep transmissions clean and maintain hydraulic control circuits in perfect working condition; and provides excellent protection against seal and pump deterioration. Operators, especially farmers, will appreciate the multi-purpose application of Premium Tractor Hydraulic Fluid for transmissions, final drives, and hydraulic systems of tractors thereby eliminating the requirement to stock a variety of oil products. Premium Tractor Hydraulic Fluid is currently being used in a variety of mechanical systems world-wide.

APPLICATION

Formulated and recommended for multipurpose use in transmissions, differentials, hydraulic and power steering units in many different makes of tractors and farm equipment. A listing below suggests those applications where Premium Tractor Hydraulic Fluid may be used with confidence.

Allis Chalmers - 272843

Allison Transmission Div., GMC C-3, C-4 *

J.I. Case MS-1206 & MS-1210

Caterpillar TO-2**

Clark Transmissions

John Deere J20C, J21A, J14C

Deutz-Allis 272843

Ford New Holland ESN-M2C41-B, M2C134-D

Hesston Fiat AF-87

International Harvester B-6

Kubota UDT Fluid

Landini

Massey Ferguson M-141

Oliver Type 55

Steiger

Sundstrand

White Q 1826 & Type 55

*Allison does not recommend Tractor Hydraulic Fluids for C-4 service.

**Premium Tractor Hydraulic Fluid is not recommended for Cat TO-4 service.

Use Drive Train TC of the appropriate viscosity.

MULTIPURPOSE GEAR LUBRICANT
SAE GEAR 80W-90 and 85W-140
GL-5, MT-1

Typical Properties

SAE Grade Gear	80W-90	85W-140
Viscosity, cSt		
At 40 C	136	406
At 100 C	14.0	27.0
Viscosity, SUS		
At 100 F	716	2172
At 210 F	75.6	133.3
Viscosity Index	100	96
Flash Point, (COC) Deg F	410	420
Pour Point, Deg F	-15	+5
Deg C	-26	-15
Gravity, API @ 60 F	24.5	24.0

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

A multi-purpose sulfur/phosphorus type gear lubricant designed for API Service Classifications GL-5 and MT-1. Compounded with highly refined paraffinic base stocks and additives to ensure extreme pressure characteristics, anti-wear performance, anti-corrosion inhibition, rust prevention, anti-foaming tendencies and service fill limited slip capability.

APPLICATIONS

Recommended for differentials, rear axles, final drives, conventional manual transmissions, manual steering gears, and limited slip top-off suitability, in passenger cars and trucks where GL-5 type lubricant is specified. Recommended for gear applications where sulfur/phosphorus controlled chemically-active additive package is designated. Meets MT-1 capability for non-synchronized manual transmissions in heavy duty systems. Meets the requirements of U.S. Military Specification MIL-L-2105D, MIL-PRF-2105E and Mack GO-G, H, & GO-J classifications. SAE Grade 80W-90 is primarily recommended for passenger cars and light trucks; Grade 85W-140 for heavy duty equipment, both on and off-highway fleets, as well as many industrial and commercial mechanical systems applications.

PREMIUM ANTI-WEAR "HD" HYDRAULIC OILS

ISO GRADES 22, 32, 46, 68, 100

Typical Properties

ISO Grade	22	32	46	68	100
Viscosity, cSt					
At 40 C	22.0	30.2	44.2	66.2	93.8
At 100 C	4.3	5.2	6.6	8.5	10.6
Viscosity Index	100	100	98	95	95
Flash Point, (COC) Deg F	385	390	415	425	450
Pour Point, Deg F	-30	-25	-20	-15	-0
Neut. No., ASTM D 974	0.55	0.55	0.55	0.55	0.55
Gravity, API @ 60 F	31.0	30.0	29.0	28.7	28.3
Oxidation Life, ASTM D 943, Hrs	+4500	+4500	+4500	+4500	+4500
Rust Test, ASTM D-665 A & B	No rust	No Rust	No Rust	No Rust	No Rust
Demulsibility, ASTM D-1401	Pass	Pass	Pass	Pass	Pass
**Dielectric Strength, ASTM D 877	30 KV+	30KV+	30KV+	30KV+	-----

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

The five grades are premium-quality anti-wear hydraulic oils with excellent stability, designed to meet the most stringent requirements of most all the major manufacturers and users of hydraulic equipment. These oils are characterized by providing rust protection, low deposit formation, rapid release of entrained air, oxidation resistance, low pour points, and good anti-foam properties. They contain an effective anti-wear agent that helps reduce wear in high-speed, high-pressure vane and gear pumps.

APPLICATIONS

Recommended for vane, gear, and piston-type pumps where operating pressures may exceed 3000 psi. These anti-wear hydraulic oils are very effective in reducing vane and gear pump wear and greatly extend the life of systems operating at high loads, speeds, and temperatures. In a clean dry system, typical value** for ASTM D-877, "Dielectric Breakdown Voltage of Insulating Liquids" will exceed 30 Kilovolts. These hydraulic oils meet performance requirements of Denison HF-0, Eaton-Vickers I-286-S, M-2950-S and Cincinnati Lamb Landis P-68, P69, and P-70.

**Application ISO Grades 22, 32, 46, & 68 meet dielectric strength test results described in ASTM D-877 @ 30KV+ providing customer storage and containment are free of moisture under all conditions.

PREMIUM SYNTHETIC BLEND MULTIGRADE PCMO
[Passenger Car Motor Oil, API SN]
SAE GRADES: 5W-20, 5W-30, 10W-30, 10W-40, 20W-50

Typical Properties

SAE Auto Grade	5W-20	5W-30	10W-30	10W-40	20W-50
API Service Category	SN	SN	SN	SN	SN
ILSAC	GF-5	GF-5	GF-5		
Viscosity, cSt					
At 40° C	49.5	61.9	69.5	105.0	165.9
At 100° C	8.7	10.6	10.7	14.5	18.5
Viscosity Index	155	162	142	145	125
Viscosity, cP max @ -30°C	6600	6600			
cP max @ -25°C			7000	7000	
cP max @ -15°C					9500
Flash Point, (COC) Deg °F	+405	+410	+415	+420	+460
Pour Point, Deg °F	-35	-35	-30	-30	-20
Neut. No., TBN-E, ASTM D-2896	7.5	7.5	7.5	7.5	7.5
Gravity, API @ 60°F	31.5	31.0	30.5	29.5	28.0
Sulfated Ash, %wt.	<1.0	<1.0	<1.0	<1.0	<1.0

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

Premium Synthetic Blend Passenger Car Motor Oils (PCMO) are formulated to provide engine protection under severe operating limits (SAE 5W-20, SAE 5W-30, SAE 10W-30) provided by ILSAC GF-5 requirements. These API SN oils (including SAE 10W-40 and SAE 20W-50) are intended to extend automotive life by providing engine protection against city traffic and reducing the harmful effects of high and low-temperature operations. Their backward compatibility with previous API/ILSAC Specifications allows for use in older vehicles. They are blended from selected and highly refined base oils and synthetic base stocks compounded to provide protection against wear and corrosion, prevent oxidative thickening, inhibit the promotion of engine acids, prevent sludge, and reduce varnish deposits. These multi-grades may be used over an extended temperature range and permit easier cold weather starting thereby minimizing the effects of engine friction at startup.

APPLICATIONS

Recommended for all major automotive gasoline engine applications, including those equipped with both superchargers and turbochargers, used in passenger cars, light trucks, power boats, motorcycles, and other mobile and stationary equipment. SAE grades 5W-20, 5W-30, and 10W-30 meet current ILSAC GF-5 requirements and all grades are suggested for use in place of former API Classifications SH, SJ, SL, SM. For optimum vehicle performance, operating under normal conditions, it is recommended that crankcase oil change intervals should not exceed the manufacturers requirements.

SPECIAL HD 15W-40 MULTIGRADE HEAVY-DUTY MOTOR OIL CJ-4

[Meeting API Service Levels CF-4, CG-4, CH-4, CI-4, CI-4 PLUS, CJ-4/SN]

	<u>Typical Properties</u>
SAE Grade, Automotive	15W-40
Viscosity, cSt	
At 40° C	115
At 100° C	15.2
Viscosity Index	138 ✓
Viscosity, CCS, D-5293, -20°C/cP	6000
Flash Point, (COC), °C/°F	227/440
Pour Point, °C/°F	-30/-22
Sulfated Ash, %wt	1.0 ✓
Neutralization No., TBN-E	9.3
HTHS, Vis/cP, D-4683	4.3
Gravity, API @ 60° F	29.0

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

Special HD 15W-40 Multigrade, API CJ-4, is the most current formulated heavy duty motor oil for all-season use in highway commercial diesel engines, including EGR equipped engine emission controlled systems. The product is manufactured from selected premium quality base stocks with additive technology to provide engine protection for current EPA exhaust particulate emissions standards using Ultra-Low Sulfur Diesel (ULSD). It meets performance requirements for all naturally aspirated, turbocharged and supercharged, diesel engines as well as all four-cycle gasoline engines. The product reflects test improvements in reducing aeration, better oxidation stability, enhanced soot control, and advanced wear protection.

Special HD 15W-40 meets API current service classifications CF, CF-4, CG-4, CH-4, CI-4, CI-4 Plus, and CJ-4 and ACEA European Oil Sequences Section E-7. The product satisfies the following engine manufacturer requirements: Mack EO-0 Premium Plus '07, Caterpillar ECF-1, ECF-3, Cummins CES 200801, Detroit Diesel (DDC) Power Guard 93K218, JASO DH-2, Navistar, Global DHD-1, MB-228.31, MAN 3275, and Volvo VDS-4. For gasoline engines, Special HD 15W-40 is classified API SH, SJ, SL, and SM.

APPLICATIONS

Recommended for all major diesel and mixed fleet (diesel/four-cycle gasoline) engine operations in all service and under all operating conditions where the equipment owner specifies the additional performance benefits of multigrade oils. This product is preferable for newer diesel engines with EGR systems and those equipped with Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC) technologies.

EMD/TRANS ENGINE OIL MARINE & RAILROAD

Typical Properties

SAE Grade		
Engine Class	30	40
Viscosity, cSt		
At 40 C	135	180
At 100 C	12.1	14.5
Viscosity Index	76	77
Flash Point, (COC) Deg F	465	480
Pour Point, Deg F	-5	+5
TBN, ASTM D 2896	13	13
Ash, %wt.-Sulfated	1.5	1.5
Zinc Content, ppm	< 10	< 10
Gravity, API @ 60 F	27	24

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

Outstanding high-dispersancy, high-alkalinity crankcase oil for railroad and marine diesel engines. Compounded from MVI Base (Mixed-Base/Paraffinic-Napthenic) Oils to reduce hard carbon formation in ring belt area and minimize port blocking in 2-stroke cycle diesel engines. Contains detergent, dispersant, anti-wear, anti-oxidant, corrosion inhibitor, and foam-suppressant additives. The additives used do NOT contain 'zinc-compound' derivatives.

APPLICATIONS

Recommended for use in Electro-Motive Division of General Motors Corporation (EMD), Caterpillar, and other diesel engines operating on higher than normal sulfur distillate-fuel where sulfated ash of +1% is acceptable. Also highly recommended for medium speed industrial engines such as Fairbanks-Morse opposed-piston (OP) engines for which a medium viscosity index oil is the preferred product. In many marine applications this product can be used in both main propulsion engines as well as auxiliaries. Meets API Service Classification Level "CF" and obsolete "CD".

**AUTOMOTIVE GEAR LUBRICANT
GRADES GL-1 SAE GEAR 90 & 140**Typical Properties

SAE Grade		
Gear	90	140
Viscosity, cSt		
At 40 C	270	563
At 100 C	17.5	28.0
Flash Point, (COC) Deg F	420	425
Pour Point, Deg F	10	25
Gravity, API @ 60 F	24.3	22.8

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

An uninhibited gear lubricant designed for API Service Classification "GL-1". These gear oils are blended from highly refined base stocks that resist oxidation and thickening.

APPLICATIONS

Recommended for manual transmissions in passenger cars and trucks, and those applications where API Service Level GL-1 lubricant is specified.

National™ Multi-Vehicle/MERCON® V ATF

New performance requirements

The desire for fuel economy is rapidly driving changes in the automatic transmission designs for a growing number of late model vehicles being sold in the U.S.

Global OEMs are increasing the number of gears in newer transmissions from four or five, to six or as many as eight. Many of these newer models are designed to engage the torque converter clutch in a slipping mode at lower speeds to improve fuel efficiency. This operation causes newer transmissions to be more prone to shudder. Standard DIIIH/M fluids do not provide the friction control to meet these demands.

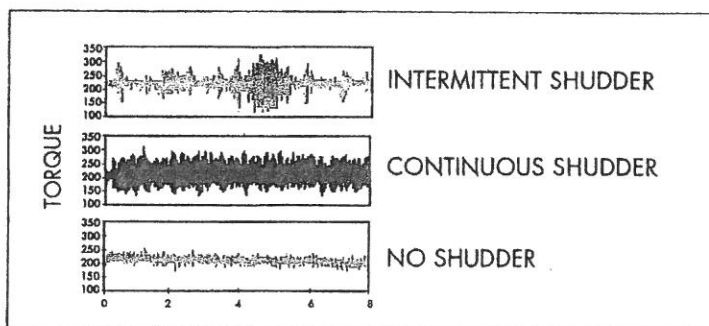
To ensure optimum transmission performance, OEMs are demanding more specialized fluids. Today, there are literally dozens of ATF types specified for the North American service fill market, creating confusion, increased inventory costs, and opportunities for error or misapplication.

National Multi-Vehicle/MERCON® V ATF is specially formulated to exceed the performance and protection requirements of newer transmissions. Installers can rely on this single fluid to conveniently and accurately meet a wide array of global OEM requirements in North America.

Extended Anti-Shudder Protection

Newer transmission designs require ATFs with specialized frictional performance for proper operation. It is estimated that the number of transmissions requiring anti-shudder durability has doubled in the past four years.

National Multi-Vehicle/MERCON® V ATF offers extended friction control protection that lasts over the life of the fluid—long after the anti-shudder protection found in many competitive brands has broken down.



Shudder is disturbing to drivers, who expect comfort and smooth driving. National Multi-Vehicle/MERCON® V ATF reduces transmission shudder, and improves operability and fuel efficiency.

Outstanding Benefits

- Exceeds the most demanding JASO 1A performance standard
- Covers OEM specialty requirements
- Delivers superior wear protection
- Provides extended anti-shudder performance for smooth driving
- Lowers inventory needs
- Reduces risk of installer error

Specifications National Multi-Vehicle/MERCON® V ATF technology is suitable where the following ATF types are specified:

• Allison C4	• Honda ATF-Z1	• Nissan Matic K	• Texaco N402
• Audi Part #G 052 025 A2	• Idemitsu K17	• Shell LA2634	• Toyota IWS 3309
• Chrysler	• MERCON® V	• Shell ATF M-1375.4	• Toyota Type T-IV
• DIIIH/M	• Mitsubishi SP-II/III	• Texaco 7045-E	• Toyota Type WS
• Esso Type LT 71141 ATF	• Nissan Matic J	• Texaco ETL-8072-B	• Volvo Part #1164540-B

Note: For Continuously Variable Transmission (CVT) applications, use only CVT fluids supplied by the vehicle manufacturer.

MERCON® is a registered trademark of Ford Motor Co.

PINNACLE OIL, INC.

5009 West 81st Street, Indianapolis, IN 46268
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F O R M U L A



CJ-4 /SN 15W-40 Motor Oil

FORMULA 500® CJ-4/SN 15W-40 motor oil is for use in diesel engines under service conditions from mild to heavy duty with fuel of any sulfur level. This oil is recommended for use in nearly all two- and four-cycle diesel applications. The current formulation meets all API Service Classifications up to CJ-4 including CI-4, CI-4 PLUS, and CH-4. FORMULA 500® CJ-4/SN 15W-40 is also suitable where Cummins CES 20081, CAT® ECF-3 and ECF-1-a, ACEA E7-04 Issue 2 (2007) and E9-08 (2008) specifications are demanded.

FORMULA 500® CJ-4/SN 15W-40 motor oil is licensed by the API as a CJ-4/SN motor oil and holds formal approvals for Mack EO-O Premium Plus, Detroit Diesel DDC 93K218, Volvo VDS-4 and Renault VI RLD-3. These formal approvals demonstrate the commitment of FORMULA 500® to produce quality products on the leading edge of lubrication technology.

This oil should not be used in Caterpillar TO-4 applications, two-cycle gasoline engines, aircraft engines, or EMD Diesel engines.

Typical Properties:

Product: FORMULA 500® CJ-4/SN 15W-40	
Product Code:	61119
SAE Viscosity Grade	15W-40
Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	15.9
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	132.9
Viscosity Index (ASTM D-2270)	138
Total Base Number (ASTM D-2896)	8.3
Flash Point °C (°F) (ASTM D-92)	232,(449)
Pour Point °C (°F) (ASTM D-97)	-36,(-33)
Zn (ppm)	1218
Ca (ppm)	2300
P (ppm)	1094

Motorcraft® Chemicals and Lubricants U.S. Catalog

TRANSMISSION FLUID



A/C & Engine Cooling Products		Brake & Engine Performance		Collision & Body Repair		Exterior & Interior Vehicle Cleaners		Greases		Hand Care Products	
Motor Oil		Touch-up Paint		Sealers & Adhesives		Steering Fluid		Transaxle Fluid		Transmission Fluid	
Home	FAQ	Product Search	MSDS / Fiche signalétique / Ficha de datos de seguridad			CPSC General Conformity Certification		Quick Reference Charts		Related Links	

MERCON® LV Automatic Transmission Fluid



- Motorcraft® MERCON® LV is a premium-quality automatic transmission fluid recommended by Ford Motor Company for use in Ford, Lincoln and Mercury vehicles that require MERCON® LV type fluid. This product also provides excellent performance in electronically controlled automatic transmissions. Check Owner Guide and transmission fluid charts for application
- Motorcraft® MERCON® LV is manufactured with high-viscosity index, premium-quality, hydroprocessed base oils and specially designed performance additives, which provide excellent shifting characteristics at high and low ambient temperatures and guards against transmission shudder. This fluid has excellent thermal, oxidation and shear stability and good low temperature fluidity. It provides wear protection and inhibits the formation of gum, sludge, lacquer and foam. It also prevents against rust and corrosion. It is dyed red for ease of leak detection
- Do not use in applications where MERCON® V, MERCON® SP (except TorqShift®), Continuously Variable Chain Type Transmission Fluid, Motorcraft® Premium Automatic Transmission Fluid, FNR5 Automatic Transmission Fluid or Type F Automatic Transmission Fluid is recommended, or in transfer cases
- Refer to the Motorcraft® MERCON® LV specification sheet below for additional information. For MSDS information call 1-800-448-2063

Note: MERCON® LV Automatic Transmission Fluid is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

Specifications		
Motorcraft® Part Number	XT-10-QLVC	XT-10-DLV
Specification Number	MERCON® LV	MERCON® LV
Size	1 Qt.	55 U.S. gal.
FIR No.	179895	179895
Unit Pack	12 (Case Qty.)	1

MSDS
179895

Additional Information
Product Data Sheet MERCON LV

EXHIBIT A OIL15 - PRICING PAGE

SECTION 1 - TRUCK LOAD

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
ITEM	DESCRIPTION	PREFERRED SIZE/WT (for information use only and not to be used for calculations)	MANUFACTURER	BRAND BID	ESTIMATED QUANTITY	UNIT PRICE TRUCK LOAD	Unit of Measure (For calculation purposes only)	EXTENDED PRICE TRUCK LOAD
1	Motor oil for lubricating 2 cycle engines one pint containers (chain saw motor oil) - API TC or equal	8 oz.	Spectrum	Sta-Mix	1800	\$ 0.13	1 oz.	\$ 234.00
2	Motor oil for lubricating 2 cycle engines (outboard motor oil) - API TC-W3 or equal	1 qt.	Valvoline	Outboard	1300	\$ 3.87	1 qt.	\$ 5,031.00
3	Motor oil for all diesel and gasoline engine service SAE30 - CF-4, CF-2 CF/SJ	1 qt.	Shell	Rotella T1	3300	\$ 3.16	1 qt.	\$ 10,428.00
4	Motor oil for all diesel and gasoline engine service SAE15W40 - CI-4 CF/SJ CI-4, CI-4 PLUS, CH-4, CG-4	1 qt.	Hicks	Formula 500	150,000	\$ 2.09	1 qt.	\$ 313,500.00
5	Motor oil for all diesel and gasoline engine service SAE15W40 - CI-4, CI-4 PLUS, CH-4, CG-4, CF-4/SL, SM	55 gal.	Pinnacle Res.	MG HD Premium	1320	\$ 6.54	1 gal.	\$ 8,632.80
6	Motor oil for all diesel and gasoline engine service SAE15W40 - BULK CI-4, CI-4PLUS, CH-4, CG4, CF-4/SL, SM	BULK 6,000 gallon	Valvoline	AF Plus	6000	\$ 5.99	1 gal.	\$ 35,940.00
7	Motor oil for all diesel and gasoline engine service SAE10 - CF/SL CAT TO-2, ALLISON C-4 or equal	5 gallon	Pinnacle Res.	MG Premium	2400	\$ 6.25	1 gal.	\$ 15,000.00
8	Motor oil for all diesel and gasoline engine service SAE10 - CF/SL CAT TO-2, ALLISON C-4 or equal	55 gal.	Pinnacle Res.	MG Premium	55	\$ 6.75	1 gal.	\$ 371.25
9	Motor oil for all diesel and gasoline engine service 5W20 - CF/SL SM, SJ, ILSAC GF-4	1 qt.	Pinnacle Res.	MG Syn. Blend	5000	\$ 1.78	1 qt.	\$ 8,900.00
10	Motor oil for all diesel and gasoline engine service 5W30 - CF/SL ILSAC GF-4	1 qt.	Pinnacle Res.	MG Syn. Blend	10000	\$ 1.78	1 qt.	\$ 17,800.00
11	Motor oil for all diesel and gasoline engine service 5W30 - CF/SL SM, SJ, ILSAC GF-4	55 gal.	Pinnacle Res.	MG Syn. Blend	550	\$ 5.80	1 gal.	\$ 3,190.00
12	Motor oil for all diesel and gasoline engine service 10W30 - CF/SL SM, SJ, ILSAC GF-4	1 qt.	Pinnacle Res.	MG Syn. Blend	58000	\$ 1.78	1 qt.	\$ 103,240.00
13	Motor oil for all diesel and gasoline engine service 10W40 - CF/SL	1 qt.	Pinnacle Res.	MG Syn. Blend	500	\$ 1.78	1 qt.	\$ 890.00
14	Motor oil for all diesel and gasoline engine service 20W50 - CF/SL	1 qt.	Valvoline	Premium Conventional	500	\$ 3.50	1 qt.	\$ 1,750.00
15	Extreme pressure gear lubricant 80W90 GL-5, MT-1, MACK GO-J or equal	35 lb.	Pinnacle Res.	MG HD GL-5	280	\$ 1.20	1 lb.	\$ 336.00
16	Extreme pressure gear lubricant 80W90 GL-5, MT-1, MACK GO-J or equal	120 lb.	Pinnacle Res.	MG HD GL-5	3360	\$ 1.20	1 lb.	\$ 4,032.00
17	Extreme pressure gear lubricant 85W140 GL-5, MT-1, MACK GO-J or equal	120 lb.	Pinnacle Res.	MG HD GI-5	720	\$ 1.40	1 lb.	\$ 1,008.00
18	Extreme pressure gear lubricant - mineral gear lube 90 gl-1	35 lb.	Pinnacle Res.	MG GL-1 90	385	\$ 1.20	1 lb.	\$ 462.00
19	Powertranz EW 50 EATON PS-164, R7 MACK GO-A PLUS NAVISTAR TMS 6816 or equal	35 lb.	Valvoline	HD Syn. Trans. 50	350	\$ 4.42	1 lb.	\$ 1,547.00
20	Wheel bearing and chassis grease summer weight NLGI #2	14 to 14-1/2 oz. tubes	Valvoline	Cerulean	2500	\$ 0.18	1 oz.	\$ 450.00
21	Wheel bearing and chassis grease summer weight NLGI #2	35 lb.	Valvoline	Cerulean	245	\$ 2.85	1 lb.	\$ 698.25
22	Wheel bearing and chassis grease summer weight NLGI #2	120 lb.	Valvoline	Cerulean	1200	\$ 2.53	1 lb.	\$ 3,036.00
23	All purpose grease (3% molly) water and heat resistant grease NGLI #2	14 to 14-1/2 oz. tubes	Valvoline	Palladium	120	\$ 0.22	1 oz.	\$ 26.40
24	All purpose grease (3% molly) water and heat resistant grease NGLI #2	35 lb.	Valvoline	Palladium	200	\$ 3.04	1 lb.	\$ 608.00
25	All purpose grease (3% molly) water and heat resistant grease NGLI #2	120 lb.	Valvoline	Palladium	240	\$ 3.04	1 lb.	\$ 729.60
26	Hydraulic oil-light weight RO22 Turbine/Circulating Oil	5 gal.	Shell	Tellus S2 V22	45	\$ 13.82	1 gal.	\$ 621.90

EXHIBIT A OIL15 - PRICING PAGE

27	Hydraulic oil-light weight	5 gal.	Pinnacle Res.	MG Premium AW 32	45	\$ 4.85	1 gal.	\$ 218.25
28	Hydraulic oil-light weight	55 gal.	Pinnacle Res.	MG Premium AW 32	24200	\$ 4.40	1 gal.	\$ 106,480.00
29	Hydraulic oil-medium weight	5 gal.	Pinnacle Res.	MG Premium AW 46	35	\$ 4.85	1 gal.	\$ 169.75
30	Hydraulic oil-medium weight	55 gal.	Pinnacle Res.	MG Premium AW 46	11000	\$ 4.40	1 gal.	\$ 48,400.00
31	Hydraulic oil-heavy weight	5 gal.	Pinnacle Res.	MG Premium AW 68	200	\$ 5.05	1 gal.	\$ 1,010.00
32	Hydraulic oil-heavy weight	55 gal.	Pinnacle Res.	MG Premium AW 68	880	\$ 4.60	1 gal.	\$ 4,048.00
33	Transmission fluid - Multi Vehicle ATF	1 qt.	Shell	Spirax S5 ATF X	22000	\$ 3.00	1 qt.	\$ 66,000.00
34	Transmission fluid - Multi Vehicle ATF	55 gal.	Pinnacle Res.	MG MV ATF	495	\$ 8.55	1 gal.	\$ 4,232.25
35	Transmission fluid - TO - 4 fluid	5 gal.	Valvoline	Drive Train 30	350	\$ 9.23	1 gal.	\$ 3,230.50
36	Transmission fluid - TO - 4 fluid	55 gal.	Valvoline	Drive Train 30	605	\$ 9.23	1 gal.	\$ 5,584.15
37	Automatic Transmission Fluid Multi-Vehicle ATF API DEXRON III, MERCON, MERCON V, ATF+3 ATF+4 or equal	1 qt.	Shell	Spirax S5 ATF X	1000	\$ 3.00	1 qt.	\$ 3,000.00
38	Combination fluid, combination hydraulic	5 gal.	Pinnacle Res.	MG Premium UTH	250	\$ 6.24	1 gal.	\$ 1,560.00
39	Combination fluid, combination hydraulic	55 gal.	Pinnacle Res.	MG Premium UTH	20900	\$ 5.82	1 gal.	\$ 121,638.00
40	Railroad diesel engine oil - must be a generation 4 oil as designated by (LOMA) EMD approved, (LOMA) generation 4 SAE40	55 gal.	Pinnacle Res.	MG EMD 40	880	\$ 8.00	1 gal.	\$ 7,040.00
41	Synthetic motor oil for gasoline and diesel engines SAE 5W40 - CF/SL, SAE 10W30 - CF/SL, SAE 5W40 - CJ-4, CH-4/SL	1 qt.	Valvoline	Premium Blue Extreme	100	\$ 4.60	1 qt.	\$ 460.00
42	Synthesized multipurpose gear lubricant 75W90 DANA SHADES 256, REV. C, EATON E500, MACK GO J PLUS or equal	35 lb.	Shell	Spirax S6 AXRME	700	\$ 4.93	1 lb.	\$ 3,451.00
43	Synthesized multipurpose gear lubricant 80W140 DANA SHADES 256, ARVIN MERITOR O-76, MACK GO -J or equal	35 lb.	Shell	Spirax S6 AXME	140	\$ 4.54	1 lb.	\$ 635.60
44	Synthesized multipurpose gear lubricant 75W90 DANA SHADES 256, REV C, EATON E500, MACK GO-J PLUS or equal	120 lb.	Shell	Spirax S6 AXRME	120	\$ 4.34	1 lb.	\$ 520.80
45	Limited slip gear lubricant 80W90 GL-5	35 lb.	Pinnacle Res.	MG HP GL-5	770	\$ 1.20	1 lb.	\$ 924.00
46	Limited slip gear lubricant 80W90 GL-5	120 lb.	Pinnacle Res.	MG HP GL-5	1080	\$ 1.20	1 lb.	\$ 1,296.00
47	Motor oil for all diesel and gasoline engine service CF/SL, SM, ILSAC GF-4	55 gal.	Pinnacle Res.	MG Syn. Blend	1300	\$ 5.59	1 gal.	\$ 7,267.00
48	Transmission fluid - Dexron -VI-ATF or equal	1 qt.	Valvoline	ATF Mercon VI	120	\$ 4.43	1 qt.	\$ 531.60
49	TES - 295 Allison TES Fluid or equal	1 qt.	Shell	Spirax S6 A295	30	\$ 6.40	1 qt.	\$ 192.00
50	Hydraulic/Transmission Oil: HY-GARD Transmission Oil or equal	5 gal	Pinnacle Res.	MG Premium UTH	150	\$ 6.24	1 gal.	\$ 936.00
51	Hydraulic/Transmission Oil: HY-GARD Transmission Oil or equal	55 gal	Pinnacle Res.	MG Premium UTH	8,250	\$ 5.82	1 gal.	\$ 48,015.00
52	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	5 gal	Shell	Spirax S4 CX	120	\$ 13.41	1 gal.	\$ 1,609.20
53	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	55 gal	Shell	Spirax S4 CX	6,600	\$ 13.41	1 gal.	\$ 88,506.00
54	Automatic Transmission Fluid - MOTORCRAFT MERCON LV or equal	1 qt.	Motorcraft	Mercon LV	30	\$ 3.86	1 qt.	\$ 115.80
55	Automatic Transmission Fluid - MOTORCRAFT MERCON LV or equal	1 gal	Motorcraft	Mercon LV	120	\$ 15.44	1 gal.	\$ 1,852.80

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56	Transmission Fluid - VALVOLINE CVT FLUID or equal	1 qt.	Valvoline	Syn. CVT Fluid	30	\$ 6.54	1 qt.	\$ 196.20
57	Transmission Fluid - VALVOLINE CVT FLUID or equal	1 gal	Valvoline	Syn. CVT Fluid	120	\$ 26.16	1 gal.	\$ 3,139.20
58	Deposit & Credit for Returnable 55 Gal. Drum	55 Gallon			1	\$ -	each	\$ -
SECTION 1 : TOTAL - TRUCK LOAD							\$	1,070,721.30

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SECTION 2 - LESS THAN TRUCK LOAD (LTL)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
LINE ITEM	DESCRIPTION	PREFERRED SIZE/WT (for information use only and not to be used for calculations)	MANUFACTURER	BRAND BID	ESTIMATED QTY.	UNIT PRICE LESS THAN TRUCK LOAD (LTL)	Unit of Measure (For calculation purposes only)	EXTENDED PRICE LESS THAN TRUCK LOAD (LTL)
1	Motor oil for lubricating 2 cycle engines one pint containers (chain saw motor oil) - API TC or equal	8 oz.	Spectrum	Sta-Mix	1800	\$ 0.13	1 oz.	\$ 234.00
2	Motor oil for lubricating 2 cycle engines (outboard motor oil) - API TC-W3 or equal	1 qt.	Valvoline	Outboard	1300	\$ 3.87	1 qt.	\$ 5,031.00
3	Motor oil for all diesel and gasoline engine service SAE30 - CF-4, CF-2 CF/SJ	1 qt.	Shell	Rotella T1	3300	\$ 3.16	1 qt.	\$ 10,428.00
4	Motor oil for all diesel and gasoline engine service SAE15W40 - CI-4 CF/SJ CI-4, CI-4 PLUS, CH-4, CG-4	1 qt.	Hicks	Formula 500	150,000	\$ 2.09	1 qt.	\$ 313,500.00
5	Motor oil for all diesel and gasoline engine service SAE15W40 - CI-4, CI-4 PLUS, CH-4, CG-4, CF-4/SL, SM	55 gal.	Pinnacle Resources	MG HD Premium	1320	\$ 6.54	1 gal.	\$ 8,632.80
6	Motor oil for all diesel and gasoline engine service SAE15W40 - BULK CI-4, CI-4PLUS, CH-4, CG4, CF-4/SL, SM	BULK 6,000 gallon	Valvoline	AF Plus	6000	\$ 5.99	1 gal.	\$ 35,940.00
7	Motor oil for all diesel and gasoline engine service SAE10 - CF/SL CAT TO-2, ALLISON C-4 or equal	5 gallon	Pinnacle Resources	MG HD Premium	2400	\$ 6.25	1 gal.	\$ 15,000.00
8	Motor oil for all diesel and gasoline engine service SAE10 - CF/SL CAT TO-2, ALLISON C-4 or equal	55 gal.	Pinnacle Resources	MG HD Premium	55	\$ 6.75	1 gal.	\$ 371.25
9	Motor oil for all diesel and gasoline engine service - CF/SL SM, SJ, ILSAC GF-4 5W20	1 qt.	Pinnacle Resources	MG Syn. Blend	5000	\$ 1.78	1 qt.	\$ 8,900.00
10	Motor oil for all diesel and gasoline engine service 5W30 - CF/SL ILSAC GF-4	1 qt.	Pinnacle Resources	MG Syn. Blend	10000	\$ 1.78	1 qt.	\$ 17,800.00
11	Motor oil for all diesel and gasoline engine service 5W30 - CF/SL SM, SJ, ILSAC GF-4	55 gal.	Pinnacle Resources	MG Syn. Blend	550	\$ 5.80	1 gal.	\$ 3,190.00
12	Motor oil for all diesel and gasoline engine service 10W30 - CF/SL SM, SJ, ILSAC GF-4	1 qt.	Pinnacle Resources	MG Syn. Blend	58000	\$ 1.78	1 qt.	\$ 103,240.00
13	Motor oil for all diesel and gasoline engine service 10W40 - CF/SL	1 qt.	Pinnacle Resources	MG Syn. Blend	500	\$ 1.78	1 qt.	\$ 890.00
14	Motor oil for all diesel and gasoline engine service 20W50 - CF/SL	1 qt.	Valvoline	Premium Conventional	500	\$ 3.50	1 qt.	\$ 1,750.00
15	Extreme pressure gear lubricant 80W90 GL-5, MT-1, MACK GO-J or equal	35 lb.	Pinnacle Resources	MG HD GL-5	280	\$ 1.20	1 lb.	\$ 336.00
16	Extreme pressure gear lubricant 80W90 GL-5, MT-1, MACK GO-J or equal	120 lb.	Pinnacle Resources	MG HD GL-5	3360	\$ 1.20	1 lb.	\$ 4,032.00
17	Extreme pressure gear lubricant 85W140 GL-5, MT-1, MACK GO-J or equal	120 lb.	Pinnacle Resources	MG HD GL-5	720	\$ 1.40	1 lb.	\$ 1,008.00
18	Extreme pressure gear lubricant - mineral gear lube 90 gl-1	35 lb.	Pinnacle Resources	MG GL-1 90	385	\$ 1.20	1 lb.	\$ 462.00
19	Powertranz EW 50. EATON PS-164, R7 MACK GO-A PLUS NAVISTAR TMS 6816 or equal	35 lb.	Valvoline	HD Syn. Trans 50	350	\$ 4.42	1 lb.	\$ 1,547.00
20	Wheel bearing and chassis grease summer weight NLGI #2	14 to 14-1/2 oz. tubes	Valvoline	Cerulean	2500	\$ 0.18	1 oz.	\$ 450.00
21	Wheel bearing and chassis grease summer weight NLGI #2	35 lb.	Valvoline	Cerulean	245	\$ 2.85	1 lb.	\$ 698.25
22	Wheel bearing and chassis grease summer weight NLGI #2	120 lb.	Valvoline	Cerulean	1200	\$ 2.53	1 lb.	\$ 3,036.00
23	All purpose grease (3% molly) water and heat resistant grease NGLI #2	14 to 14-1/2 oz. tubes	Valvoline	Palladium	120	\$ 0.22	1 oz.	\$ 26.40
24	All purpose grease (3% molly) water and heat resistant grease NGLI #2	35 lb.	Valvoline	Palladium	200	\$ 3.04	1 lb.	\$ 608.00
25	All purpose grease (3% molly) water and heat resistant grease NGLI #2	120 lb.	Valvoline	Palladium	240	\$ 3.04	1 lb.	\$ 729.60

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26	Hydraulic oil-light weight RO22 Turbine/Circulating Oil	5 gal.	Shell	Tellus S2 V22	45	\$ 13.82	1 gal.	\$ 621.90
27	Hydraulic oil-light weight	5 gal.	Pinnacle Resources	MG Premium AW32	45	\$ 4.85	1 gal.	\$ 218.25
28	Hydraulic oil-light weight	55 gal.	Pinnacle Resources	MG Premium AW32	24200	\$ 4.40	1 gal.	\$ 106,480.00
29	Hydraulic oil-medium weight	5 gal.	Pinnacle Resources	MG Premium AW46	35	\$ 4.85	1 gal.	\$ 169.75
30	Hydraulic oil-medium weight	55 gal.	Pinnacle Resources	MG Premium AW46	11000	\$ 4.40	1 gal.	\$ 48,400.00
31	Hydraulic oil-heavy weight	5 gal.	Pinnacle Resources	MG Premium AW68	200	\$ 5.05	1 gal.	\$ 1,010.00
32	Hydraulic oil-heavy weight	55 gal.	Pinnacle Resources	MG Premium AW68	880	\$ 4.60	1 gal.	\$ 4,048.00
33	Transmission fluid - Multi Vehicle ATF	1 qt.	Shell	Spirax S5 ATF X	22000	\$ 3.00	1 qt.	\$ 66,000.00
34	Transmission fluid - Multi Vehicle ATF	55 gal.	Pinnacle Resources	MG MV ATF	495	\$ 8.55	1 gal.	\$ 4,232.25
35	Transmission fluid - TO - 4 fluid	5 gal.	Valvoline	Drive Train 30	350	\$ 9.23	1 gal.	\$ 3,230.50
36	Transmission fluid - TO - 4 fluid	55 gal.	Valvoline	Drive Train 30	605	\$ 9.23	1 gal.	\$ 5,584.15
37	Automatic Transmission Fluid Multi-Vehicle ATF API DEXRON III, MERCON, MERCON V, ATF+3 ATF+4 or equal	1 qt.	Shell	Spirax S5 ATF X	1000	\$ 3.00	1 qt.	\$ 3,000.00
38	Combination fluid, combination hydraulic	5 gal.	Pinnacle Resources	MG Premium UTH	250	\$ 6.24	1 gal.	\$ 1,560.00
39	Combination fluid, combination hydraulic	55 gal.	Pinnacle Resources	MG Premium UTH	20900	\$ 5.82	1 gal.	\$ 121,638.00
40	Railroad diesel engine oil must be a generation 4 oil as designated by (LOMA) EMD approved	55 gal.	Pinnacle Resources	MG EMD 40	880	\$ 8.00	1 gal.	\$ 7,040.00
41	Synthetic motor oil for gasoline and diesel engines SAE 5W40 - CF/SL, SAE 10W30 - CF/SL, SAE 5W40 - CJ-4, CH-4/SL	1 qt.	Valvoline	Premium Blue Extreme	100	\$ 4.60	1 qt.	\$ 460.00
42	Synthesized multipurpose gear lubricant 75W90 DANA SHADES 256, REV. C, EATON E500, MACK GO J PLUS or equal	35 lb.	Shell	Spirax S6 AXRME	700	\$ 4.93	1 lb.	\$ 3,451.00
43	Synthesized multipurpose gear lubricant 80W140 DANA SHADES 256, ARVIN MERITOR O-76, MACK GO-J or equal	35 lb.	Shell	Spirax S6 AXME	140	\$ 4.54	1 lb.	\$ 635.60
44	Synthesized multipurpose gear lubricant 75W90 DANA SHADES 256, REV C, EATON E500, MACK GO-J PLUS or equal	120 lb.	Shell	Spirax S6 AXRME	120	\$ 4.34	1 lb.	\$ 520.80
45	Limited slip gear lubricant 80W90 GL-5	35 lb.	Pinnacle Resources	MG GL-5	770	\$ 1.20	1 lb.	\$ 924.00
46	Limited slip gear lubricant 80W90 GL-5	120 lb.	Pinnacle Resources	MG GL-5	1080	\$ 1.20	1 lb.	\$ 1,296.00
47	Motor oil for all diesel and gasoline engine service CF/SL, SM, ILSAC GF-4	55 gal.	Pinnacle Resources	MG Syn. Blend	1300	\$ 5.59	1 gal.	\$ 7,267.00
48	Transmission fluid - Dexron -VI-ATF or equal	1 qt.	Valvoline	ATF Mercon VI	120	\$ 4.43	1 qt.	\$ 531.60
49	TES - 295 Alison TES Fluid	1 qt.	Shell	Spirax S6 A295	30	\$ 6.40	1 qt.	\$ 192.00
50	Hydraulic/Transmission Oil: HY-GARD Transmission Oil or equal	5 gal	Pinnacle Resources	MG Premium UTH	150	\$ 6.24	1 gal.	\$ 936.00
51	Hydraulic/Transmission Oil: HY-GARD Transmission Oil or equal	55 gal	Pinnacle Resources	MG Premium UTH	8,250	\$ 5.82	1 gal.	\$ 48,015.00
52	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	5 gal	Shell	Spirax S4 CX	120	\$ 13.41	1 gal.	\$ 1,609.20
53	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	55 gal	Shell	Spirax S4 CX	6,600	\$ 13.41	1 gal.	\$ 88,506.00
54	Automatic Transmission Fluid - MOTORCRAFT MERCON LV or equal	1 qt.	Motorcraft	Mercon LV	30	\$ 3.86	1 qt.	\$ 1,158.00

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55	Automatic Transmission Fluid - MOTORCRAFT MERCON LV or equal	1 gal	Motorcraft	Mercon LV	120	\$ 15.44	1 gal.	\$ 1,852.80
56	Transmission Fluid - VALVOLINE CVT FLUID or equal	1 qt.	Valvoline	Syn. CVT Fluid	30	\$ 6.54	1 qt.	\$ 196.20
57	Transmission Fluid - VALVOLINE CVT FLUID or equal	1 gal	Valvoline	Syn. CVT Fluid	120	\$ 26.16	1 gal.	\$ 3,139.20
50	Deposit & Credit for Returnable 55 Gal. Drum	55 Gallon			1	\$ -	each	\$ -
SECTION2: TOTAL - LESS THAN TRUCK LOAD (LTL)							\$	1,070,721.30

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Vendor Contract Manager's Name:	RANDY WARD
Vendor Name:	Apollo O.I., LLC
Address:	800 FIRST AVENUE South NITRO, WV 25143
Authorized Signature:	William E. Star
Date:	1-12-15
Phone:	502-643-4165
Fax:	502-643-4165
Email:	ESTR@OIL15.COM

IF RESPONDING IN WVOASIS VSS,
PLEASE ENTER THIS AMOUNT AS YOUR
UNIT PRICE →

TOTAL: SECTION 1 - TRUCK LOAD	\$	1,070,721.30
TOTAL: SECTION 2 - LESS THAN TRUCK LOAD (LTL)	\$	1,070,721.30
GRAND TOTAL:	\$	2,141,442.60

STANDARD DELIVERY AFTER RECEIPT OF ORDER (ARO)	DAYS	5 days
EMERGENCY DELIVERY AFTER RECEIPT OF ORDER (ARO)	DAYS	2 DAYS

LOCATION OF WAREHOUSE FROM WHICH SHIPMENT CAN BE MADE FROM:
Apollo Oil, Nitro, WV.
800 FIRST AVENUE South
NITRO, WV 25143