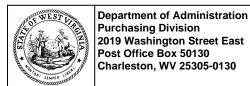


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





State of West Virginia **Solicitation Response**

Proc Folder: 1829560

Solicitation Description: OIL25 - Statewide Contract for: Oils, Lubricants, & Grease

Proc Type: Statewide MA (Open End)

Solicitation Closes Solicitation Response Version 2025-11-18 13:30 SR 0212 ESR11102500000003040 1

VENDOR

000000223741 NCH CORPORATION

Solicitation Number: CRFQ 0212 SWC2600000004

Total Bid: 0 **Response Date:** Response Time: 2025-11-18 12:54:53

Comments:

FOR INFORMATION CONTACT THE BUYER

Mark A Atkins (304) 558-2307 mark.a.atkins@wv.gov

Vendor

FEIN# DATE Signature X

All offers subject to all terms and conditions contained in this solicitation

FORM ID: WV-PRC-SR-001 2020/05 Date Printed: Nov 18, 2025 Page: 1

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Oils, Lubricants, & Grease: Use Exhibit_A	0.00000	EA	0.000000	0.00
	Pricing Page				

Comm Code	Manufacturer	Specification	Model #	
15120000				

Commodity Line Comments:

Extended Description:

Note: Vendor shall use Exhibit_A Pricing Pages for bid pricing. If vendor is submitting a bid online, Vendor should enter \$0.00 in the Oasis commodity line. Vendor shall enter pricing into the Exhibit_A Pricing Pages and must attach with bid.

FORM ID: WV-PRC-SR-001 2020/05 Date Printed: Nov 18, 2025 Page: 2

Certified ATF™



Automatic Transmission Oil







Provides superior protection against <u>leaking</u>, <u>over-</u> <u>heating</u>, <u>water contamination</u>, <u>oxidation</u> and <u>foaming</u>. Transmission Fluid Specifically Formulated for Heavy-Duty Automatic Transmissions.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Waste Management
- ❖ Steel Mills & Foundries
- Paper mills, Printing, & Packaging
- Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Logging
- Concrete & Asphalt paving
- Other Industries that Utilize Heavy Equipment

- **Conditions Seals and Gaskets**
- Dissipates Heat, Improves Shift Quality
- **Reduces Planetary Gear and Clutch Wear**
- **Displaces Water Contamination**
- **Prevents Rust and Corrosion**
- **Controls Foaming**
- **Resists Oxidation**
- Wide Temperature Range from -40°F (-40°C) to 300°F (148°C)

- Dexron, Dexron II-D, Dexron III
- Mercon IV Ford M2C138-CJ & M2C166H
- Caterpillar TO-2
- Allison C-4
- Sperry, Vickers, Denison, Sunstrand
 Hydraulic Pump Systems

Certified ATF™ contains a total additive package that sets it apart from other automatic transmission fluids



Additives	User Benefits
Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high-temperature breakdown to maintain better lubricity.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.
Seal Conditioners	Special compounds that soften and condition seals to keep them from hardening and cracking.
Leak Inhibitors	Most seal leaks occur because many oils cause seals to shrink. Special agents provide a controlled swell to bring the seals back to their normal size.
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running down to -20 degrees.
Anti-Foam Agents	Withstand agitation and heat without forming foam contaminants. Reduce pressure level on seals and vents.

Physical Pro	operties
Density, lbs/gl	7.3
API Gravity, 60°F	31
Viscosity at 40°C, cSt (ASTM D445)	34.5
Viscosity at 100°C, cSt (ASTM D445)	7.5
Brookfield Viscosity at -40°C, cP (ASTM D2983)	17,500
Brookfield Viscosity at -20°C, cP (ASTM D2983)	1,350
Viscosity Index (ASTM D2270)	193
Flash point, COC, °F (°C) (ASTM D92)	693 (367)
Pour Point °F (°C), (ASTM D97)	60 (-51)
Appearance	Red

IDEAL FOR USE IN:

Automatic transmissions that require Dexron, Dexron II-D, Dexron III, Mercon IV, Ford M2C138-CJ and M2C166H (type H), Allison C-4, Caterpillar TO-2, Sperry Vickers, Denison and Sunstrand hydraulic pump systems, power-shift transmissions, torque converters, hydrostatic and other types of service where an ATF is recommended. Can be used for passenger cars and trucks.

DO NOT USE FOR:

Eaton Spicer/Dana Fuller transmissions, truck transmissions that only allow the use of GL-1 gear oil or motor oil or any other equipment for which the manufacturer does not recommend this type of gear lubricant.

Certop

Advanced Performance
Multi-Grade Gear Oil
80W-90 and 85W-140









Provides superior protection against <u>leaking seals</u>, <u>dry starts</u>, <u>water contamination</u>, <u>oxidation</u>, and <u>foaming</u>.

Heavy-Duty Gear Oil Specifically
Formulated for Construction and Heavy
Industrial Equipment.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Food Processing
- Steel Mills & Foundries
- Paper mills, Printing, & Packaging
- ❖ Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving

For Peak Performance, use With Certified Labs System Purge

- Eliminates Dry Start Wear
- Prevents Seals from Leaking
- Prevents Rust and Corrosion
- Displaces Water for Easy Drainage
- Controls Foaming
- Lowers Operating Temperatures and Resists Oxidation to Prolong Oil Life
- Wide Temperature Range Up to 320°F (160°C)
 - 80W-90 flows down to -30°F (-34°C)
 - 85W-140 flows down to -5°F (-21°C)

<u>Certop Meets or Exceeds these</u> <u>Performance Requirements:</u>

- All API GL-3, GL-4 and GL-5 (most GL-1 and GL-2 applications), MT-1
- SAE J2360
- Viscosity Ranges 4EP, 5EP and 6EP
- Mack Truck GO-A through GO-H (applies to 80W-90)
- Rockwell Standard 0-76 (applies to 80W-90)
- KW Dart specifications (applies to 80W-90)

LASTS UP TO 4 TIMES

LONGER

CERTIFIED

CERTOP™ contains a total additive package that sets it apart from other gear oils

Additives	User Benefits
Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high-temperature breakdown to maintain better lubricity.
Seal Conditioners	Special compounds that soften and condition seals to keep them from hardening and cracking.
Leak Inhibitors	Most seal leaks occur because many oils cause seals to shrink. Special agents provide a controlled swell to bring the seals back to their normal size.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Demulsifiers	Separates water from oil to keep metal surfaces dry. Allows excess water to be drained from equipment.
Anti-Foam Agents	Inhibits oil foaming during operation to reduce seal pressure, prevent pump cavitation wear and decrease air entrapment that can cause erratic operation.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Adhesive and Cohesive Polymers, Tackiness Agents	Keep oil on gears during high-speed operations and during idle periods. Helps prevent mechanical wear, stress fractures and dry starts
Viscosity Index Improvers	Maintain full viscosity over a wider temperature range to ensure full protection in fluctuating conditions. Eliminate the need to switch oil grades in different seasons.

Physical Prope	erties	
	80W-90	85W-140
Weight Per Gallon	7.5	7.5
Viscosity at 40°C,cSt (ASTM D445) Viscosity at 100°C, cSt (ASTM D445)	176.8 17.8	410.5 29.1
Viscosity Index (ASTM D2270)	110	99
Fire Point, COC, °F (°C) (ASTM D92)	445 (229)	455 (235)
Pour Point °F (°C), (ASTM D97)	-16 (-27)	10 (-12)
Maximum Continuous Operating Temperatures, °F (°C)	320 (160)	320 (160)
Copper Corrosion (D4048)	Pass, 1B	Pass, 1B
Thermal Oxidation Stability Test L-60	Pass	Pass
Timken OK Load, Ibs (ASTM D2509)	60	60
Film Strength, PSI, Four Ball Method, (ASTM D2783)	19,000	23,000
Four-Ball Weld, kg (ASTM D2596)	315	400
Load Wear Index (ASTM D2596)	57	69
Four-Ball Wear, mm (ASTM D2266)	0.28	0.28

IDEAL FOR USE IN:

Differentials, Simple Manual Transmissions, Axles, Power Dividers, Gear Trains, Bronze Gears [up to 200°F (93°C)] and Gear Boxes including enclosed gears of spur type, hypoid, spiral bevel, worm, herringbone, helical, planetary and unusual combinations of gear types. Can be added as make-up oil to other GL-5 paraffin-base gear oils.

DO NOT USE FOR:

Automatic, universal C-3 fluid, combined transmissions, truck transmissions that only allow the use of GL-1 gear oil / motor oil (use STRATA Motor Oils), Spicer/Dana or Fuller transmissions or any other equipment for which the manufacturer does not recommend this type of gear lubricant. Never mix with asphaltic-type or "SCL"-type lubricants.

Certop™ Industrial



Advanced Performance Gear and Bearing Oil

ISO 68, 150, 220, 320, 460, 680, 1000







Heavy-Duty Gear and Bearing Oil Specifically Formulated for Heavy Industrial Equipment.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Food Processing
- Steel Mills & Foundries
- ❖ Paper Mills, Printing, & Packaging
- * Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- **Utility Construction**
- Concrete & Asphalt Paving

Provides superior protection against leaking seals, dry starts, water contamination, oxidation, and foaming.

For Peak Performance, use With Certified Labs System Purge

- Helps Eliminate Dry Start Wear
- **Prevents Rust and Corrosion**
- **Displaces Water for Easy Drainage**
- **Controls Foaming**
- **Lowers Operating Temperatures and Resists Oxidation to Prolong Oil Life**
- Ideal for Yellow Metal Gear Arrangements (ISO 460 & 680)
- Wide Temperature Range Operates from 10°F to 250°F (-12°C to 120°C) intermittently with monitored re-lubrication.

LASTS UP TO 4 TIMES LONGER

Meets or Exceeds these Performance Requirements:

- API GL GL-3, GL-4 and GL-5 (Most GL-1 and GL-2 applications)
- DIN 51517 Part 3
- GM LS 2 EP Gear Oil
- Clean Panel Coker
- David Brown \$1.53.101
- ISO 12925-1 CKC/CKD
- U.S. Steel 224
- AGMA 2EP-8EP
- AGMA 905-D94
- AGMA 9005-E02 (replaced AGMA 250.04)
- Cincinnati Milacron

CERTOP™ INDUSTRIAL contains a total additive package that sets it apart from other gear oils



Additives	User Benefits
Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high temperature breakdown to maintain better lubricity.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Anti-Foam Agents	Inhibits oil foaming during operation to reduce seal pressure, prevent pump cavitation wear and decrease air entrapment that can cause erratic operation.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Adhesive and Cohesive Polymers, Tackiness Agents	Keeps oil on gears during high-speed operations and during idle periods. Helps prevent mechanical wear, stress fractures and dry starts.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Anti-Wear Agents	Form a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Friction Reducers	Plate out on metal surfaces to prevent friction and wear under heavy loads.

Physical Properties									
	ISO 68	<u>ISO 150</u>	ISO 220	ISO 320	<u>ISO 460</u>	ISO 680	ISO 1000		
Color Red		Red	Red	Red	Red	Green	Dark		
API Gravity	29.3	32.4	29.3	27.9	26.3	24.0	27.0		
Flash Point, COC, °F (°C) (ASTM D92)	435 (224)	425 (218)	450 (232)	500 (260)	560 (293)	565 (296)	600 (316)		
Pour Point °F (°C), (ASTM D97)	5 (-15)	16 (-9)	16 (-9)	16 (-9)	16 (-9)	20 (-7)	0 (-18)		
Viscosity Index (ASTM D2270)	107	107	112	113	95	95	105		
Viscosity at 40°C,cSt (ASTM D445)	73.6	154.4	220.9	319.1	468.6	680.0	950.0		
Viscosity at 100°C, cSt (ASTM D445)	9.5	15.9	20.9	25.6	30.6	38.9	53.0		
Rust Test Rating (ASTM D1743)	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
Copper Corrosion (D4048)	1A	1A	1A	1A	1A	1A	1C		
Four-Ball Wear, mm (ASTM D2266)	0.31	0.31	0.32	0.32	0.28	0.28	.32		
Four-Ball Weld, kg (ASTM D2596)	250	250	250	250	250	250	340		
Timken OK Load, lbs (ASTM D2509)	60	65	65	65	65	65	80		

IDEAL FOR USE IN:

Oil filled bearings, gear boxes including enclosed gears of spur type, hypoid, spiral bevel, worm, herringbone, helical, planetary and unusual combinations of gear types. Can be used as a cylinder oil, except for steam cylinders. Can be added as make up oil to other Industrial grade mineral gear oils. For Bronze Gears use CERTOP Industrial 460 & 680 only.

DO NOT USE FOR:

Do not use CERTOP 68, 150, 220 or 320 for copper, bronze worm gears. Any equipment for which the manufacturer does not recommend this type of gear lubricant.

Certop[™] SN

Synthetic Long Life Gear Oil 75W-90 and 80W-140









Provides superior protection against <u>leaking</u>, water contamination, <u>oxidation</u> and <u>foaming</u>.

Extended Drain, Heavy-Duty Synthetic Gear Oil Specifically Formulated for Heavy-Duty Trucks, Construction and Heavy Industrial Equipment.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Food processing
- Steel Mills & Foundries
- Paper Mills, Printing, & Packaging
- Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving
- Golf Courses

- Resists Oxidation for Longer Oil & Gear Life Resists acid, carbon and varnish formation
- **Superior Shear Stress Stability**
- Reduces Gear Wear Maintains viscosity during extended service life for maximum wear control and fuel efficiency
- **Displaces Water Contamination**
- **Controls Foaming**
- **Excellent Low Temperature Performance**
 - 75W-90 down to -40°F (-40°C)
 - 80W-140 down to -26°F (-32°C)

Engineered for 500,000 Mile Service Life in Over-the-Road Trucks

Meets or Exceeds the Following Requirements:

- API GL-5 & MT-1
- SAE J2360
- Dana SHAES 256 (Eaton PS-163) for 500,000 miles
- MACK GO-J, GO-J+
- Scania STO 1:0
- International Navistar TMS-6816
- Arvin/Meritor 0-76N (75W-90)
- Arvin/Meritor 0-80 (80W-140)

CERTOP™ SN contains a total additive package that sets it apart from other gear oils



Additives	User Benefits
Synthetic grade base oil	100% PAO synthetic oil base that resists breakdown to provide longer oil life. Provides superior lubrication at a wider temperature range.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.

Physical	Properties		
TEST	75W-90	80W-140	
Viscosity at 40°C, cSt (ASTM D445)	111.7	282.6	
Viscosity at 100°C, cSt (ASTM D445)	15.0	27.0	
Viscosity index (ASTM D2270)	139	125	
Specific Gravity	0.8756	0.8855	
Flash Point, COC, °F (°C) (ASTM D92)	396 (202)	417 (214)	
Pour Point °F (°C), (ASTM D97)	-42 (-41)	-29 (-34)	
Brookfield Viscosity, cP (ASTM D2983)	<150,000 at -40°C (-40°F)	<150,000 at - 26°C (-14.8°F)	
Foam Tendency (ASTM D892)	0/0/0	0/0/0	

IDEAL FOR USE IN:

Power Dividers, Gear Trains, Bronze Gears [up to 200°F (93°C)] and Gear Boxes including enclosed gears of spur type, hypoid, spiral bevel, worm, herringbone, helical, planetary and unusual combinations of gear types, Differentials, Limited-Slip Differentials, Simple Manual Transmissions, Axles. Certop SN has been fully tested and field proven, demonstrating outstanding wear protection and oxidation resistance throughout a 500,000-mile service life in over-the-road trucks.

DO NOT USE FOR:

Gear boxes that only allow the use of GL-1 gear oil / motor oil or any other equipment for which the manufacturer does not recommend this type of gear lubricant. Never mix with asphaltic-type or "SCL"-type lubricants.

HOC[™] Xtreme

Advanced Performance Synthetic Blend Hydraulic Oil with Molysol™ ISO 22, 32, 46, 68, 100, 150 & 220









Provides Superior Protection Against Leaking Seals. Contaminants, Pump Wear, and Erratic Operation.

Synthetic blend single-grade hydraulic oil formulated for severe duty and extended drain intervals

Provides Superior Equipment Protection for

- Industrial Manufacturing
- **❖** Food Processing
- * Steel Mills & Foundries
- * Paper Mills, Printing, & Packaging
- **❖** Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- **Utility Construction**
- Concrete & Asphalt **Paving**

For Peak Performance, use with Certified Labs System Purge

- Synthetic Blend Formula Engineered For Extended Drain Intervals* - Lasts Up To 6000 Hours (ASTM D943)
- Controls Seal Swell To Help Prevent Seals From Leaking
- **Controls Water And Other Contaminants**
- **Controls Foaming To Prevent Pump Cavitation**
- Heavy Duty Anti-Wear Additives And MOLYSOL** Friction Reducer **Prevents Pump And Cylinder Wear**
- **Prevents Rust And Corrosion**
- **Highly Resistant To Oxidation**
- Ideal for Use With Vane Pumps, Piston Pumps, And Gear Pumps
- **Factory Filtered For Maximum Cleanliness**
- **High V.I. For Wide Temperature Range** Up to 275°F (135°C). Flows Down To -33°F (-36°C)

- AIST 126 and 127
- ANSI/AGMA 9005-E02-R0
- ASTM D6158 (HM, HV)
- Bosch Rexroth RDE 90235
- DIN 51524-2 (HM), DIN 51524-3 (HV)
- Eaton-Vickers E-FDGN-TB002-E, I-286-S and M-2950-S
- GM LS-2
- JCMAS P041 HK Hydraulic
- CINCINNATTI/MAG/Fives P68, P69, P70 (HM, HV)
- Parker (formerly Dennison) HF-0, HF-1, HF-2, (HM, HV)
- SAE MS 1004 (HM, HV)
- SEB 181222
- US Steel 1367, 136, 127, 126
- ISO 11158 (HM, HV)
- Ford M6C32

^{*}Always use oil analysis to establish new drain intervals

^{**}MOLYSOL is an oil soluble synthetic molybdenum compound

HOC™ XTREME HYDRAULIC OILS contain a total additive package that sets them apart from other hydraulic oils

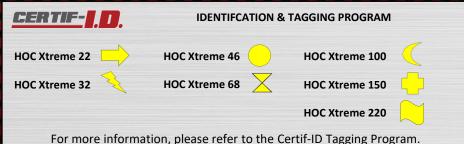


Additives	User Benefits	
Premium Synthetic- Blend Oil	Highly-refined, oxidation-resistant synthetic blend base oils provide exceptional, long-term lubrication to reduce friction, decrease heat, and	0.11.1. 0.11.1. 1. (4)
Seal Conditioners	Special compounds that soften and condition seals to keep them from	Oxidation Stability, hrs, (A: D943)
Leak Inhibitors	hardening and cracking. Leak Inhibitors Most seal leaks occur because many oils cause seals to shrink. Special agents provide a controlled swell to bring the seals back to their normal size.	
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.	Specific Gravity Rust Characteristics, (ASTN A & B)
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.	Copper Corrosion (ASTM D
Demulsifiers	Separates water from oil to keep metal surfaces dry. Allows excess water to be drained from equipment.	Flash Point: °F (°C), (ASTM
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.	Viscosity (ASTM D445)
Anti-Foam Agents	Inhibits oil foaming during operation to reduce seal pressure, prevent pump cavitation wear and decrease air entrapment that can cause erratic operation.	100
Sludge Inhibitors	Keeps seals cleaner by preventing the build-up of sludge, varnish and lacquer.	Viscosity Index (ASTM D22
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.	Four Ball Wear Test, mm, (ASTM D2266)
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.	Dielectric Strength, kv (ASTM D877-76)
Metal Deactivators	Prevents corrosion on yellow metals such as bronze, copper and brass.	Coefficient of Friction, (ASTM D1894)
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.	Pour Point °F (°C) (ASTM D
Molysol	An oil soluble synthetic molybdenum compound that plates onto metal to provide exceptional wear protection.	CERTIF-

IDEAL FOR USE IN: Heavy duty straight hydraulics operating up to 6,000PSI (413 Bar), all Sperry-Vickers vane and piston pumps for standard operation (200 psi, 1200 rpm, 150-175°F (65-79°C)) or severe operation (3000psi, 2400 rpm, 200°F (93°C)).

DO NOT USE FOR: Brake systems, transmissions, aircraft, Lucas hydraulic pumps or other silver-lined pumps (use MULTOIL ™). Not for systems requiring water-based hydraulic oils. Not for universal multi-purpose power transmission systems found in rubber-tired backhoes and tractors (use OIL-ALL™ XTREME).

Physical Properties							
	ISO 22	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150	ISO 220
Oxidation Stability, hrs, (ASTM D943)	Up to 6000						
Water Separability (ASTM D1401)	40-40-0 (20)						
Specific Gravity	0.855	0.857	0.861	0.867	0.8702	0.8768	0.8818
Rust Characteristics, (ASTM D665 A & B)	Pass						
Copper Corrosion (ASTM D130)	1A						
Flash Point: °F (°C), (ASTM D93)	410 (210)	443 (228)	468 (242)	475 (246)	>475 (>246)	>475 (>246)	>475 (>246)
Viscosity (ASTM D445)							
SAE	10W	10W	20	20	30	40	50
40 °C, cSt	22.3	32	43.6	66.2	99.4	149	224
100 °C, cSt	4.5	5.6	6.8	9	12.03	15.2	20.3
Viscosity Index (ASTM D2270)	111	115	115	119	112	105	105
Four Ball Wear Test, mm, (ASTM D2266)	N/A	0.27	0.27	0.25	0.34	0.34	0.31
Dielectric Strength, kv (ASTM D877-76)	43	52.6	41.8	42.6	>35	>35	>35
Coefficient of Friction, (ASTM D1894)	N/A	0.0659	0.0737	0.0712	NA	NA	NA
Pour Point °F (°C) (ASTM D97)	-44 (-42)	-33 (-36)	-28 (-33)	-28 (-33)	-18 (-28)	-10 (-25)	-20 (-28)



Lithiplex

Advanced Performance
Synthetic Blend,
Lithium Complex Grease
NLGI 2









Heavy duty synthetic blend lithium complex grease specifically formulated for construction and heavy industrial equipment.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Food Processing
- Steel Mills & Foundries
- Paper Mills, Printing, & Packaging
- Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving

Provides superior protection for equipment against <u>heavy loads</u>, <u>contaminant</u>, <u>heat</u>, and <u>high speeds</u>.

- > Stays in Place to Prevent Wear Under Heavy-Load Conditions
- Resists Thickening at Low Temperatures
- Minimizes Abrasive Wear Caused by Dirt and Dust
- Superior Water Resistance
- Prevents Rust and Corrosion
- Ideal for use in Electric and Fan Motor Bearings
- Excellent High Temperature Performance –
 remains effective 275°F (135°C) continuous and 400°F (204°C) intermittent.

- US Steel Mill Grease Specifications
 - Roll Neck Grease, Req. No. 340
 - Extreme Pressure Grease Reg. No. 350
 - Extra Duty EP Grease. Req. No. 352
 - Extreme-Temp. Req. No. 355, 370, & 372
 - Ball and Roller Bearing, Req. No. 371
 - Mill Utility Grease Reg. No. 375
- NLGI #2 Requirements for a lithium based grease Allis-Chalmers, AMCA International, CMI, John Deere HG, Euclid, Gomaco, Gradall, Hitachi, Kawasaki, Komatsu, Kobelco, Kubota, Link-Belt, Manitowoc, Mitsubishi, Terex, Vermeer, Volvo
- DIN 51825: (2004-06): K2P-20 Electric Motor Bearing (EMB), Fan Motor Bearing (FMB), and automotive wheel bearings requiring greases conforming to NLGI GC-LB

LITHIPLEX contains a total additive package for outstanding long-term performance.



Additives	User Benefits
Synthetic Blend Base Oil	Superior grade, highly-refined base oil blended with PAO synthetic oil resists oxidation and high-temperature breakdown to maintain better lubricity.
Lithium Complex Base	Excellent general purpose base which also performs well in high temperature or wet conditions.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.

Physical Properties			
NLGI Grade	#2		
Dropping Point, °F (°C) (ASTM D2265)	568 (298)		
Rust Test Rating (ASTM D1743)	Pass		
Oil Separation at 24 Hours, % (ASTM D1742)	NIL		
4 Ball Weld, kg (ASTM D 2596)	500		
4 Ball Wear, mm (ASTM D266)	0.47		
Timken Method (ASTM D 2509)	60		
Copper Corrosion (ASTM D 130)	1B		

IDEAL FOR USE ON:

Wheel bearings, trucks, trailers, automotive chassis points, and various equipment under shock loads that require a lithium grease.

IDEAL FOR USE ON:

Bearings that exceed 10,000 RPM, or applications with a continuous temperature exceeding 400°F (204°C). For grease recommendations, refer to Certified DN chart.

Multoil

Zinc-Free Hydraulic, Turbine, Bearing Oil 5W-20 (ISO 32), 10W-40 (ISO 100)



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Provides superior protection against <u>friction</u>, <u>wear</u>, <u>oxidation</u>, <u>leaking seals</u>, & <u>equipment downtime</u>.

Heavy duty oil specifically formulated for rotary (5W-20) and reciprocating (10W-40) compressors

Provides Superior Equipment Protection for

- **❖** Industrial Manufacturing
- ***** Food Processing
- **❖ Steel Mills & Foundries**
- Paper Mills, Printing,Packaging
- **❖** Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving

For Peak Performance, use with Certified Labs System Purge

- Contains Molysol® (Synthetic-Organic Molybdenum) which Prevents
 Wear & Friction on Metal Surfaces
- > Multi-Viscosity Formula Handles a Wide Range of Operating Temperatures
- Highly Resistant to Oxidation
- High Dielectric Strength: 30,000 Volts
- Reduces Inventory by Replacing Single-Weight Oils

> Maintains Viscosity Over a Wide Temperature Range

5W-20 from -30°F (-34°C) to 190°F (87°C) 10W-40 from -25°F (-32°C) to 220°F (104°C)

- Dennison-Abex HF-1, HF-2, HF-O
- Vickers I-286-S and M-2950-S
- Ford M6C32
- GM LH Specs: 04, 06, 03
- US Steel 127, 136
- Cincinnati Milacron P-68, P-69, P-70

MULTOIL contains a total additive package that sets it apart from other multi-purpose lubricants



Additives	User Benefits
Premium Grade Base Oil	Superior grade, high-refined base oil resists oxidation and high-temperature breakdown to maintain better lubricity.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Anti-Foam Agents	Inhibits oil foaming during operation to reduce seal pressure, prevent pump cavitation wear and decrease air entrapment that can cause erratic operation.
Seal Conditioners	Special compounds that soften and condition seals to keep them from hardening and cracking.
Viscosity Index Improvers	Maintain full viscosity over a wider temperature range to ensure full protection in fluctuating conditions. Eliminates the need to switch oil grades in different seasons.
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.
Molysol	Clear, synthetic moly that provides non-staining barrier film for excellent heavy load protection. Provides the benefits of moly without the black coloration.

Physical Properties				
	5W-20	10W-40		
ISO Grade	32	100		
API Gravity 60/60°F	31.4	30.30		
Weight Per Gallon 60/60°F	7.233	7.282		
Viscosity at 40°C, cSt, (ASTM D445)	35	106		
Viscosity by CCS at -0°F, (ASTM D-5293-20)	1200	2400		
Viscosity Index (ASTM D2270)	124	135		
Pour Point °F (°C), (ASTM D97)	-35 (-37)	-30 (-34)		
Flash Point, COC, °F (°C), (ASTM D92)	425 (218)	440 (226)		
Conradson Carbon Residue, %, (ASTM D189-06)	0.15	0.15		
Oxidation Test, hours, (ASTM D943)	2000+	3500+		
Rotary Bomb Oxidation Test, Minutes, (ASTM D2272)	220+	294+		
Demulsiblity Characteristics, (ASTM D1400)	40-40-0 @ 15 min.	29-40-11 @ 30 min.		
Rust Test, (ASTM D665-19) Distilled Water Synthetic Sea Water	PASSES PASSES	PASSES PASSES		
Dielectric Strength, Volts	30,000	30,000		
Vickers Pump Wear, Mg, (ASTM D2882)	13.2	10.8		

IDEAL FOR USE IN:

General Lubrication on Air-tools, Babbitt Bearings, Turbines, Non-Extreme Pressure Hydraulics, Oil-Lubricated Sleeve and Roller Bearings, Ring-Oiled Bearings, Bath and Hand-oiled Chains, Electric Motor Bearings, Printing Press Equipment, Motors and Gearboxes NOT REQUIRING EP GEAR OIL, Air Conditioning, Refrigeration and Heating Equipment (Fans, Blowers, Unit Heaters, Oil Cups ONLY) Air Lines for Pneumatic Equipment, Hydraulics on Utility Service Trucks (Cherry-pickers / Bucket Trucks), Man-lifts, Scissor-Lifts, Garbage Compactors.

DO NOT USE FOR:

Internal Combustion Engines, Extreme Pressure Gear Boxes or Extreme Pressure Hydraulic Systems



IDENTIFCATION & TAGGING PROGRAM



SAE 10W-40



For more information, please refer to the Certif-ID Tagging Program.

Oil-All[™]Xtreme

Advanced Performance
Synthetic Blend
Universal Hydraulic Fluid
SAE 10W-30









Universal power torque fluid specifically formulated for construction and farm equipment.

Provides Superior Equipment Protection for

- Construction
- Mining
- Waste Management
- Agriculture
- Logging

- Federal, State, and Local Agencies
- Other Industries that Utilize Heavy Equipment

Provides Superior Protection Against <u>Leaking Seals</u>, <u>Contaminants</u>, <u>Wear</u>, and <u>Erratic Operation</u>.

- Synthetic Blend Formula Engineered for Extended Drain Intervals*
- Controls Seal Swell to Help Prevent Seals from Leaking
- **Helps Eliminate Dry Start Wear**
- **Displaces Water for Easy Drainage**
- **Reduces Brake Chatter**
- **Prevents PTO Clutch Slippage**
- Prevents Rust and Corrosion
- Reduces Pump, Cylinder, Gear and Clutch Wear
- Reduces Oil Inventory Can also be Used in Straight Hydraulic Systems Requiring an ISO 46 or 68.
- Wide Temperature Range (-35°F to 375°F) (-37°C to 190°C)

Meets or Exceeds the Following Performance Requirements:

For Peak Performance, use with Certified Labs System Purge

- AGCO: Power Fluid 821XL, 821
- Case-IH: Hy-Tran® Ultra, Hy-Tran® Plus, Hy-Tran®, MAT-3505, MS-1210, MS-1209, MS-1207, MS-1206, JIC 144/145, Powergard PTF
- Caterpillar: MTO, TO-2
- Deutz/Allis: Power Fluid 821
- Fendt CVT: 1000 hour drain
- Ford New Holland: Mastertran Ultraction (MAT 3540), M2C-134 D/C/B/A, MAT-3525, M2C-41B, M2C-53A/B, M2C-86B
- Hesston/Fiat: Oliofiat Tutela Multi-F
- John Deere: Hy-Gard, J20C/D, JD 303, J14C/B J21A
- Komatsu Dresser: B-06-002/1
- Komatsu KES 07.866
- Kubota: Kubota UDT Fluid, Transdraulic Fluid
- Landini: Tractor II Hyd Fluid
- Denison: HF-0, HF-1, HF-2 (T5D & P46 Pumps Only)

-Continued on Back-

*Always use oil analysis to establish new drain intervals

OIL-ALL™ XTREME contains a total additive package that sets it apart from other universal hydraulic fluids



Additives	User Benefits
Premium Synthetic- Blend Base Oil	Highly-refined, oxidation-resistant synthetic blend base oils provide exceptional, long-term lubrication to reduce friction, decrease heat, and prevent wear.
Brake Conditioners	Reduces chatter for better stopping performance and sharper turning response. Dissipates heat for less disc distortion.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Demulsifiers	Separates water from oil to keep metal surfaces dry. Allows excess water to be drained from equipment.
Anti-Wear Agents	Forms of lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Anti-Foam Agents	Inhibit oil foaming during operation to reduce seal pressure, prevent pump cavitation wear and decrease air entrapment that can cause erratic operation.
PTO Buffers	Prevent PTO clutch slippage to promote faster stall-out if work implement jams on a foreign object.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Metal Deactivators	Prevents corrosion on yellow metals such as bronze, copper and brass.
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Friction Modifiers	Keep high-friction surfaces fully lubricated to reduce breakdowns and lower operating temperatures. Provides smooth clutch performance and reduces noise and vibration.
Seal Conditioners	Special compounds that soften and condition seals to keep them from hardening and cracking.

Physical Properties		
API Gravity (lbs/gal)	29.5 (7.32)	
Viscosity at 40°C, cSt (ASTM D445)	57	
Viscosity at 100°C, cSt (ASTM D445)	9.6	
Viscosity Index (ASTM D2270)	152	
Pour Point °F (°C), (ASTM D97)	-49 (-45)	
Flash Point, COC, °F (°C) (ASTM D92)	428 (220)	
Foam (ASTM D892)	Pass	
DKA Oxidation Test	Pass	
Seal Compatibility	Pass	
OEM Shear Stability	Pass	

Meets or Exceeds the Following Performance Requirements:

- Massey Ferguson: M-1145, 1143 Permatran III, MF-1127A/B, MF-1129A
- **Steiger:** Hydraulic/Transmission Fluid 17001
- Versatile: HyGear Fluid, Specification 23
- Volvo: WB-102, WB 101
- White/Oliver/MM: AF ONE, Universal Fluid, Type 55, Q-1826 HTF
- Zetor OT-H, GL-4
- Z-F: TE-ML 03E, 05F, 06K, 17E, 21F
- Allison C-4 (Agriculture Applications Only)
- API GL-4
- CLAAS Tractors Agri-Universal/Agri-Shift Fluid
- Vickers 35VQ25

<u>Hydrostatic Transmissions</u> - Increases EP performance and reduces shock loads even under high operating temperatures.

<u>Power Take Off (PTO)</u> - Prevents friction and wear of critical parts when shifting into or out of action.

<u>Wet Brake</u> - Helps oil maintain proper torque on brake discs and dissipates heat.

<u>Power Steering Assembly</u> - Prevents sludge build-up in directional valves.

<u>Hydraulics</u> - Anti-wear additives reduce friction to protect pumps and valves.

IDEAL FOR USE IN:

Universal hydraulics, straight hydraulic systems, power transmission systems and equipment calling for a torque fluid.

DO NOT USE FOR:

Crankcases or engines, or compressors, or automatic transmission fluids that run through the transmission.

Premalube

Multi-Purpose, Heavy Load, Extreme Pressure, High Temperature Grease

NLGI #1, #2, #3









Provides superior protection for equipment against, <u>heavy loads</u>, <u>dirt</u>, <u>dust</u>, <u>water</u>, and <u>heat</u>.

Heavy Duty Aluminum Complex Grease Specifically Formulated for Construction and Heavy Industrial Equipment.

Provides Superior Equipment Protection for

- Industrial Manufacturing
- ❖ Food Processing
- Steel Mills & Foundries
- * Paper Mills, Printing, & Packaging
- ❖ Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving

- Stays in Place to Prevent Wear Under Heavy-Load Conditions.
- > Exceptional Heat Reversion Properties.
- > Contains Molybdenum Disulfide to Minimize Abrasive Wear Cause by Dirt and Dust
- Superior Water Resistance.
- > Prevents Rust and Corrosion.
- Reduces Grease Inventory to Save Money.
- > Excellent High Temperature Performance NLGI #2 remains effective to 275°F (135°C) continuous and 400°F (204°C) intermittent with monitored lubrication,.
- > Also Available in a Red Formula NLGI #2, #1.

- US Steel Mill Grease Specifications
 - Roll Neck Grease, Req. No. 340
 - Extreme Pressure Grease Req. No. 350
 - Extra Duty EP Grease. Reg. No. 352
 - Extreme-Temp. Req. No. 355, 370, & 372
 - Ball and Roller Bearing, Req. No. 371
 - Mill Utility Grease Req. No. 375
- Military Spec. MIL-G-23549C
- CASE 251H EP
- Caterpillar MPG
- Ford M16693A





Additives	User Benefits
Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high-temperature breakdown to maintain better lubricity.
Aluminum Complex Base	Withstands high heat – the only grease base with heat revision characteristics. Resists water washout.
Molybdenum Disulfide	Layered solid lubricant that places on metal surfaces to provide excellent protection against wear on heavily loaded surfaces and in dusty, dirty environment.
Adhesive & Cohesive Polymers, Tackiness Agents	Highly-elastic polymers hold grease together and in place to prevent the entry of contaminants, squeeze out, channeling and sling-off.
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Anti-Wear and Friction Reducing Additives	Prevent metal-to-metal contact, two surface wear, vibration and chatter. Keeps high friction surfaces, such as bearings, properly lubricated to prevent metal loss, downtime, and replacement expenses.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Shock Load Reducers	Cushions impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Graphite	Layered solid that provides added protection at high temperatures and improves lubrication in wet conditions.

IDEAL FOR USE ON:

Bearings, journals, couplings, gears requiring grease, universal joints, rollers, conveyors and any other rolling or sliding surface

DO NOT USE ON:

Bearings that exceed 4500 RPM, or applications with operating temperatures above 400°F (204°C).

Physical Properties					
Description	#2	#1	#3	Red #2	Red #1
Density, PPG	8.34	7.5	8.34	6.88	8.34
Evaporation Rate	N/D	<0.01	N/D	<1	<0.011
Timken Method, Ibs (ASTM D2509)	65	65	65	60	60
4 Ball Wear, mm (ASTM D2266)	0.4	0.4	0.4	0.73	0.69
4 Ball Weld , kg (ASTM D2596)	800	800	800	400	250
Load Wear Index (ASTM D2596)	101	100	101	53.4	28.25
Oxidation Stability 100 hrs at 210°F, PSI (ASTM D942)	2	2	2	2	3
Oxidation Stability 500 hrs at 40°F, PSI (ASTM D942)	8	8	8	7	9
Maximum Continuous Temperature °F (°C)	275 (135)	275 (135)	275 (135)	275 (135)	275 (135)
Maximum Temperature °F (°C)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)
Rust Test (ASTM D665)	Pass	Pass	Pass	Pass	Pass
Copper Corrosion (ASTM D130)	1B	1B	1B	1B	1B
Heat Reversion	Excellent	Excellent	Excellent	Excellent	Excellent
Base Oil Viscosity SUS at 100°F (Maximum) (ASTM D445)	1230	750	1230	1250	750
Base Oil Viscosity SUS at 210°F (Minimum) (ASTM D445)	80.5	41.5	80.5	80	41.5
Pour Point, °F (°C) (ASTM D97)	-20 (-28)	-20 (-28)	-20 (-28)	-20 (-28)	-20 (-28)
VOC %	0	0	0	0.05	0
Worked Penetration - 60 Strokes, .1mm (ASTM D217)	265-285	310-340	220-250	265-295	310-340
Penetration Stability - 10,000 Strokes, % (ASTM D217)	5.22	6.8	5.6	5.6	4.2
Dropping Point, °F (°C) (ASTM D2265)	500+ (260+)	500 (260)	500+ (260+)	500+ (260+)	475 (246)
Water Washout, % (ASTM D1264)	3 Max	3 Max	3 Max	2.5 Max	4.5 Max

Spectra[™] RR DEO 40

CERTIFIED.

Railroad Diesel Engine Oil **SAE 40**







Provides superior protection against <u>deposit formation</u>, <u>oil</u> <u>breakdown</u>, <u>parts wear</u>, and <u>loss of compression</u>.

Railroad Diesel Engine Oil Formulated for Severe Duty and Extended Drain Intervals

Provides Superior Equipment Protection for

- Class 1 Railroads
- Regional, Short Line, Yard,
 All 2- and 4-cycle,
 Switcher engines
 naturally aspirate
- Railroad Engines
- Marine Engines

- Stationary engines
 - All 2- and 4-cycle, naturally aspirated or turbocharged medium speed diesel engines

- Reduces Wear And Extends Engine Life
- **▼ Zinc-Free** Provides Superior Corrosion Control For Silver Bearings And Yellow Metals
- ♦ Provides Outstanding Control of Oxidation, Volatility, Thermal And Viscosity Breakdown Promoting Extended Lubricant Life
- ♠ Reduces Oil Consumption, Sludge And Varnish For A Cleaner Engine
- ▶ Detergents & Dispersants Reduces Deposit Formation And Lube Oil Filter Blockage
- ♠ Rust Protection Excellent Rust Protection To Prevent System Degradation

- EMD Generation V, VI
- GE Generation 4
- Long Life LMOA Generation V
- Generation 4 long life
- Alco
- Baldwin
- Fairbanks-Morse Engines
- LMAO Gen 6 (Suitable for use in Tier IV EMD engines requiring LMAO Gen 7 Zinc-Free Fluids)

SPECTRA RR DEI 40 contains a total additive package that sets it apart from all other railroad engine oils



Additives	User Benefits
Premium Base Oil	Highly-refined, oxidation-resistant base oils provides long-term lubrication to reduce friction, decrease heat, and prevent wear.
Acid Neutralizers	Helps prevent the formation of various acids and sludge and outlasts conventional oils by up to 300% due to its high residual TBN.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.
Dispersants	Keep sludge, carbon, soot, varnish and gum suspended in the oil and carry them to the filter. Prevent deposits on high-contact surfaces.
Detergents	Keep surfaces clean and free of deposits that cause wear and increase blow-by.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Corrosion Inhibitors	Shield sensitive metals against acids and other corrosive compounds.
Rust Inhibitors	Plate metal surfaces to retard metal deterioration and reduce abrasive rust contaminants.
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.

IDEAL FOR USE IN: EMD Engines requiring the use of Zinc Free fluids for silver lined bearing components.

DO NOT USE FOR: Not compatible with 2-cycle gasoline engines that mix oil with fuel.

Physical Properties			
	SAE 40		
Specific Gravity (API)	25.6		
Viscosity by CCS, (ASTM D5293)			
cP at -15°C, Max	NA		
Viscosity (ASTM D445)			
40°C, cSt	145		
100°C, cSt	15		
Viscosity Index (ASTM D2270)	105		
Flash Point, COC, °F (°C), (ASTM D92)	(450) 232		
Pour Point °F (°C), (ASTM D97)	(-10) -23		
TBN, mgKOH/ml, (ASTM D2896)	9.0		



IDENTIFCATION & TAGGING PROGRAM

Spectra RR DEO 40



For more information, please refer to the Certif-ID Tagging Program.

Spectra[™] Xtreme CK-4

Advanced Performance Full Synthetic Motor Oil SAE 5W-40









Full Synthetic, Multi-Grade Diesel or Gasoline Engine Oil Formulated for Severe Duty and Extended Drain Intervals

Provides Superior Equipment Protection for

- Construction
- ❖ Trucking & Fleet
- ❖ Waste Hauling
- ❖ Marine
- ❖ Federal, State & Local Agencies
- Agriculture
- Logging
- Material Handling Equipment,
- Other Industries that Utilize Heavy Equipment

For Peak Performance, use with Certified Labs System Purge

Provides superior protection against <u>deposit formation</u>, <u>oil</u> <u>breakdown</u>, <u>parts wear</u>, and <u>loss of compression</u>.

- Full Synthetic Formula Engineered for Extended Drain Intervals*
- High TBN Provides Extended Acid Neutralization While Maintaining Low Ash
- Excellent Performance with EGR, ACERT™, ASET™ and Turbo Charged Equipment
- Superior Thermal Stability for Higher Temperature Operation
- High Detergent Retention Prevents Deposit Build-up
- Highly Resistant to Oxidation for Longer Oil Life
- High V.I. Number Provides Stable Viscosity Over a Wide Temperature Range
- Superior Cold Cranking and Oil Pumpability at Low Temperature
- Compatible with Synthetic, Synthetic Blend, and Mineral Based Motor Oils

*Always use oil analysis to establish new drain intervals

- API Service Classification: CK-4, CJ-4, CI-4, CI-4+, CH-4+, CH-4, and SM for gasoline engines
- ACEA E&-04 (2004), E-07 (2007), E-09 (2012)
- MIL-PRF-2104G, CID-A-A-52306A, and CID-A-A-52039B
- Mack EO-O Premium Plus 07, EO-N
- MTU Type 2, Type 2.1
- MAN 3275, MAN M3575
- Caterpillar ECF-1-A, ECF-2, ECF-3
- Cummins CES 20081
- Renault RVI RLD-3
- Daimler Chrysler MB228.31, MB228.3
- Detroit Diesel PGOS 93K218, 93K215
- Volvo VDS-3, VDS-4
- Ford WSS-M2C171-F1

SPECTRA XTREME motor oils contains a total additive package that sets it apart from all other motor oils



Additives	User Benefits
Premium Synthetic Base Oil	Highly-refined, oxidation-resistant 100% synthetic base oils provides long-term lubrication to reduce friction, decrease heat, and prevent wear and provide excellent low temperature performance.
Acid Neutralizers	Helps prevent the formation of various acids and sludge and outlasts conventional oils by up to 300% due to its high residual TBN.
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.
Dispersants	Keep sludge, carbon, soot, varnish and gum suspended in the oil and carry them to the filter. Prevent deposits on high-contact surfaces.
Detergents	Keep surfaces clean and free of deposits that cause wear and increase blow-by.
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.
Corrosion Inhibitors	Shield sensitive metals against acids and other corrosive compounds.
Rust Inhibitors	Plate metal surfaces to retard metal deterioration and reduce abrasive rust contaminants.
Viscosity Index Improvers	Maintain full viscosity over a wider temperature range to ensure full protection in fluctuating conditions. Eliminates the need to switch oil grades in different seasons.
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.

Physical Properties			
	5W-40		
Specific Gravity (API)	35.4		
Viscosity by CCS, (ASTM D5293-20)			
cP at -30°C, Max	6369		
Viscosity (ASTM D445)			
40°C, cSt	91.5		
100°C, cSt	15.3		
Viscosity Index (ASTM D2270)	177		
Flash Point, COC, °F (°C), (ASTM D92)	224 (435)		
Pour Point °F (°C), (ASTM D97)	(-41) -42		
Sulfated Ash Content, %, (ASTM D874)	1.0		
Magnesium, %	0.116		
Calcium, %	0.082		
Phosphorus, %	0.115		
Zinc, %	0.127		
TBN, mgKOH/ml, (ASTM D2896)	13.3		

IDEAL FOR USE IN:

Compatible with gasoline or diesel engines or combustion engines which have been converted to natural gas. Suitable for use in Caterpillar hydraulic systems requiring > 900ppm zinc (CAT DEO Cold Weather).

DO NOT USE FOR:

Not compatible with 2-cycle gasoline engines that mix oil with fuel.

Spectra[™] Xtreme CK-4

Advanced Performance
Synthetic Blend Motor Oil

SAE 15W-40 SAE 10W-30







Synthetic blend, multi-grade Diesel or Gasoline motor oil formulated for severe duty and extended drain intervals

Provides Superior Equipment Protection for

- Construction
- ❖ Trucking & Fleet
- Waste Hauling
- Marine
- ❖ Federal, State & Local Agencies
- Agriculture
- Logging
- Material Handling Equipment
- Other Industries that Utilize Heavy Equipment

For Peak Performance, use with Certified Labs System Purge

Provides superior protection against <u>deposit formation</u>, <u>oil breakdown</u>, <u>parts wear</u>, and <u>loss of compression</u>.

- Synthetic Blend Formula Engineered for Extended Drain Intervals*
- * TBN of 13.3 Provides Extended Acid Neutralization While Maintaining Low Ash
- Excellent Performance with EGR, ACERT, ASET, Turbo Charged Equipment and Tier 4 Final Engines
- Superior Thermal Stability for Higher Temperature Operation
- High Detergent Retention Prevents Deposit Build-up
- Contains MOLYSOL** for Superior Wear Protection
- Highly Resistant to Oxidation for Longer Oil Life
- High V.I. Number Provides Stable Viscosity Over a Wide Temperature Range
- Superior Cold Cranking and Oil Pumpability at Low Temperature
- Compatible with Synthetic, Synthetic Blend, and Mineral Based Motor Oils

*Always use oil analysis to establish new drain intervals
** MOLYSOL is an oil soluble synthetic molybdenum compound

- API Service Classification: CK-4, CJ-4, CI-4, CI-4 Plus, CH-4 Plus, CH-4, and SN for gasoline engines
- ACEA E&-04 (2004), E-07 (2007), E-19 (2012)
- Allison C-4 (also acceptable for TES-439 applications)
- MIL-PRF-2104G, CID-A-A-52306A and CID-A-A-52039B
- Mack EO-O Premium Plus 07, EO-N
- MTU Type 2, Type 2.1, Type 3.0
- MAN 3275, MAN M3575
- Caterpillar ECF-1-A, ECF-2, ECF-3
- Cummins CES 20081, CES 20086, CES 20087 (10W-30)
- Renault RVI RLD-3
- Daimler Chrysler MB228.31, MB228.3
- Detroit Diesel PGOS 93K218, 93K215
- Volvo VDS-4.5, VDS-4, VDS-3
- Ford WSS-M2C171-F1

SPECTRA XTREME motor oils contains a total additive package that sets it apart from all other motor oils



Additives	User Benefits		
Premium Synthetic Blend Base Oil	Highly-refined, oxidation-resistant synthetic blend base oils provides exceptional, long-term lubrication to reduce friction, decrease heat, and prevent wear.		
Acid Neutralizers	Helps prevent the formation of various acids and sludge and outlasts conventional oils by up to 300% due to its high residual TBN.		
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.		
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.		
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.		
Dispersants	Keep sludge, carbon, soot, varnish and gum suspended in the oil and carry them to the filter. Prevent deposits on high-contact surfaces.		
Detergents	Keep surfaces clean and free of deposits that cause wear and increase blow-by.		
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.		
Corrosion Inhibitors	Shield sensitive metals against acids and other corrosive compounds.		
Rust Inhibitors	Plate metal surfaces to retard metal deterioration and reduce abrasive rust contaminants.		
Viscosity Index Improvers	Maintain full viscosity over a wider temperature range to ensure full protection in fluctuating conditions. Eliminates the need to switch oil grades in different seasons.		
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.		
Molysol	An oil soluble synthetic molybdenum compound that plates onto the metal to provide exceptional wear protection.		

IDEAL FOR USE IN:

Compatible with gasoline or diesel engines or combustion engines which have been converted to natural gas.

DO NOT USE FOR:

Not compatible with 2-cycle gasoline engines that mix oil with fuel.

Physical Properties			
	15W-40	10W-30	
Specific Gravity (API)	29.7	34	
Viscosity by CCS, (ASTM D5293-20)			
cP at -20°C, Max	6070	6290	
Viscosity (ASTM D445)			
40°C, cSt	122.1	82.9	
100°C, cSt	16	12.2	
Viscosity Index , (ASTM D2270)	139	142	
Flash Point, COC, °F (°C) , (ASTM D92)	400 (204)	400 (204)	
Pour Point °F (°C), (ASTM D97)	-33 (-27)	-40 (-40)	
Copper Corrosion, (ASTM D130)	1A	1A	
Foam Suppression, (ASTM D892)			
Sequence I	0	0	
Sequence II	0	0	
Sequence III	0	0	
Sulfated Ash Content, %, (ASTM D874)	1.0	1.0	
TBN, mgKOH/ml, (ASTM D2896)	13.3	13.3	

Spectra[™] Xtreme d1

Advanced Performance Full
Synthetic GM dexos1® Motor Oil
SAE 5W-30, 5W-20*, 0W-20







Provides superior protection against deposit formation, oil breakdown, parts wear, and loss of compression.

- Full Synthetic Formula Engineered for Extended Drain Intervals*
- Meets ILSAC GF-6 for Improved Fuel Economy
- Meets or Exceeds OEM Warranty Requirements
- Superior Thermal Stability for Higher Temperature Operation
- High Detergent Retention Prevents Deposit Build-up
- Highly Resistant to Oxidation for Longer Oil Life
- High V.I. Number Provides Stable Viscosity Over a Wide Temperature Range
- Superior Cold Cranking and Oil Pumpability at Low Temperature down to -30°C (-22°F)
- Compatible with Synthetic, Synthetic Blend, and Mineral Based Motor Oils
- Engineered to be Used With Flex-Fuel Technology and GM EOLS Systems

Full Synthetic, dexos1® Gasoline Engine Oil Formulated for Severe Duty and Extended Drain Intervals

Provides Superior Equipment Protection for

- Construction
- ❖ Trucking & Fleet
- ❖ Waste Hauling
- Marine
- ❖ Federal, State & Local Agencies
- Agriculture
- Logging
- Material Handling Equipment
- Other Industries that Utilize Heavy Equipment

For Peak Performance, use with Certified Labs System Purge

Meets or Exceeds the Following Performance Requirements:

- API Service Classification: SP, SN Plus, SN, SM, Resource Conserving
- GM Dexos1® Gen 3 License #D32510DJ033 (0W-20); #D32509DJ033 (5W-30)
- ILSAC GF-6, GF-5, GF-4 and GF-3
- Ford WSS M2C929 and M2C945-A*
- 946-A EcoBoost™ Engines
- GM 6094M
- Chrysler MS-6395S



*Always use oil analysis to establish new drain intervals

SPECTRA XTREME motor oils contains a total additive package that sets it apart from all other motor oils.



Additives	User Benefits		
Premium Synthetic Base Oil	Highly-refined, oxidation-resistant synthetic base oils provides long-term lubrication to reduce friction, decrease heat, and prevent wear and provide excellent low temperature performance.		
Acid Neutralizers	Helps prevent the formation of various acids and sludge and outlasts conventional oils by up to 300% due to its high residual TBN.		
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.		
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.		
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.		
Dispersants Keep sludge, carbon, soot, varnish and gum suspended in the oi carry them to the filter. Prevent deposits on high-contact surfaces			
Detergents	Keep surfaces clean and free of deposits that cause wear and increase blow-by.		
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.		
Corrosion Inhibitors	Shield sensitive metals against acids and other corrosive compounds.		
Rust Inhibitors	Plate metal surfaces to retard metal deterioration and reduce abrasive rust contaminants.		
Viscosity Index Improvers	Maintain full viscosity over a wider temperature range to ensure full protection in fluctuating conditions. Eliminates the need to switch oil grades in different seasons.		
Pour Point Depressants	Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme low temperatures.		

Physical Properties			
	5W-30	5W-20	0W-20
Specific Gravity (API)	34.3	34.4	35.1
Viscosity by CCS, (ASTM D5293-20)			
cP at -30°C, Max	5,100	4,900	
cP at -35°C, Max			5,900
Viscosity (ASTM D445)			
40°C, cSt	56	48	46
100°C, cSt	9.9	8.6	8.4
Viscosity Index , (ASTM D2270)	164	158	158
Flash Point, COC, °F (°C) , (ASTM D92)	455 (235)	446 (230)	444 (228)
Pour Point °F (°C), (ASTM D97)	-49 (-45)	-49 (-45)	-49 (-45)
MRV-TP1, (ASTM D4684)			
cP at -35°C	23,000	18,000	
cP at -40°C			36,000
High Temp / High Shear, (ASTM D4683)			
cP at 150°C	2.9	2.7	2.7

IDEAL FOR USE IN:

Compatible with gasoline or diesel engines or combustion engines which require oils to meet GM dexos1 standards.

DO NOT USE FOR:

Not compatible with 2-cycle gasoline engines that mix oil with fuel.

Strata

Advanced Performance Single Grade Motor Oil

SAE 10W, 30, 40, 50









Provides superior protection against <u>deposit formation</u>, <u>oil breakdown</u>, <u>parts wear</u>, and <u>loss of compression</u>.

The only single weight Diesel or Gasoline engine oil specifically formulated for construction and automotive equipment.

Provides Superior Equipment Protection for

- Construction
- Mining
- ❖ Waste Management
- Federal, State & Local Agencies
- ❖ Agriculture
- Logging
- Other Industries that Utilize Heavy Equipment

For Peak Performance, use with Certified Labs System Purge

- Helps Prevent Rings from Failing
- Helps Prevent Piston and Cylinder Wear
- Compatible with All Mineral Based Engine Oils
- Prevents Rust and Corrosion
- Helps Stop Deposit Formation
- Highly Resistant to Oxidation
- Controls Acid Formation
- Withstands Heavier Loads and Shear

- API CH-4, SJ
- MIL-L-2104G, CID-A-A-52306, CID-A-A-52039
- Mack EO-J, EO-K, EO-KII
- Caterpillar TO-2, 1M-PC
- CAT 10TBN, 10W & 30 Hydraulic Requirements
- Cummins NTC 400
- Allison C-3, C-4
- Detroit Diesel 6V-53T

STRATA Motor Oils contains a total additive package that sets it apart from all other motor oils



Additives	User Benefits	
Premium Grade Base Oils	Highly-refined, oxidation-resistant base stocks provide consistent, long-term lubrication to reduce friction, decrease heat and prevent wear.	
Acid Neutralizers	Helps prevent the formation of various acids and sludge and outlasts conventional oils by up to 300% due to its high residual TBN.	
Friction Reducers Plates out on metal surfaces to prevent friction and wear under heavy loads.		
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.	
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.	
Dispersants	Keep sludge, carbon, soot, varnish and gum suspended in the oil and carry them to the filter. Prevent deposits on high-contact surfaces.	
Detergents	Keep surfaces clean and free of deposits that cause wear and increase blow-by.	
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.	
Corrosion Inhibitors	Shield sensitive metals against acids and other corrosive compounds.	
Rust Inhibitors	Plate metal surfaces to retard metal deterioration and reduce abrasive rust contaminants.	
Pour Point Depressants Keeps oil flowing properly in cold temperatures. Lowers frictional drag and keeps equipment running in extreme leading temperatures.		

IDEAL FOR USE IN:

Compatible with gasoline or diesel engines or combustion engines which have been converted to natural gas.

DO NOT USE FOR:

Not compatible with 2-cycle gasoline engines that mix oil with fuel.

Physical Properties				
	10W	30	40	50
Specific Gravity (AP)	29-31	27-29	26-28	24-26
Viscosity (ASTM D445)				
20°C, cSt	41		•	-
40°C, cSt	-	106.2	160.2	180
100°C, cSt	4.1-5.5	9.3-12.4	12.5-16.3	16.4-21.9
Viscosity (ASTM D2161)				
100°F, SUS	180-215	575-625	750-850	1300-1450
210°F, SUS	46-47	68-70	78-82	95-105
Sulfated Ash Content, %, (ASTM D874)	1.3	1.3	1.3	1.3
Zinc, %	0.13	0.13	0.13	0.13
Phosphorous %	0.11	0.11	0.11	0.11
TBN, mgKOH/ml, (ASTM D2896)	10	10	10	10
Viscosity Index , (ASTM D2270)	95	95	95	95
Pour Point °F (°C), (ASTM D97)	-25 (-31)	-10 (-23)	10 (-12)	15 (-9)
Viscosity by CCS, (ASTM D5293-20)				
cP at -10°C, Max		-		
cP at -20°C, Max	3000	-		

Synthetic SAE 40 Transmission Lubricant

Eaton Roadranger Approved







Synthetic transmission oil that provides superior all-climate, year round protection.

Transmission Oil Specifically Formulated for Eaton Fuller PS-386 **Transmission Specifications**

Provides Superior Equipment Protection for

- Industrial Manufacturing
- **❖** Waste Management
- * Steel Mills & Foundries
- * Paper Mills, Printing, & Packaging
- ❖ Federal, State & Local Agencies Heavy Equipment
- Construction, Mining, Agriculture
- Excavation & Demolition
- Concrete & Asphalt Paving
- Other Industries that Utilize

- Meets or Exceeds API GL-1, GL-5 & MT-1 Eaton PS-.081 And PS-386 (500,000 Extended Drain, 750,000 Mile **Extended Factory Fill)**
- **Improves Cold Weather Shifting**
- **Controls High Temperature Deposits**
- **Protects Bearings & Synchronizers**
- **Prevents Rust & Corrosion**
- **Resists Oxidation & Viscosity Breakdown**

Approved for Extended Drain

Eaton-Fuller Transmission

A & B Class (7 Speeds)

All 9 Speeds

All 10 Speeds

All Super 10's

All 13 Speeds

All 15 Speeds

All 18 Speeds

Synthetic SAE 40 Transmission Lubricant contains a total additive package for Eaton Roadranger Equipment



Additives	User Benefits		
Synthetic Grade Base Oil	Highly refined diester base oil that resists breakdown to provide longer oil life. Provides superior lubrication at a wider temperature range.		
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.		
Pour Point Depressants	Keeps oil flowing properly in cold temperature. Lowers frictional drag and keeps equipment running temperatures down to -20 degrees.		
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.		
Shear Stabilizers	Increase surface viscosity and improve shear stability to carry heavier loads, withstand extreme pressures and prevent shock impact.		
Anti-Wear Agents	Forms a lubricant film on metal surfaces in the presence of heavy loads and high temperatures. Prevents cold welding.		
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.		

0 0 0	Physical Properties			
	Density, lbs / gal	7.064		
•	Viscosity at 40°C, cSt (ASTM D445)	95.0		
i	Viscosity at 100°C, cSt (ASTM D445)	15.6		
•	Brookfield Viscosity at -40°C, cP (ASTM D2983)	53.64		
	Viscosity Index (ASTM D2270)	175		
•	Flash Point, COC, °F (°C) (ASTM D92)	442 (228)		
	Pour Point °F (°C) (ASTM D97)	-54 (-48)		
•	4-Ball Wear Scar, mm (ASTM D4172), (75°C, 1200 rpm, 40 kg, 1 hr)	0.41		
•	Foam Test I, II, III (ASTM D-892)	0/0/0		
•	Copper Corrosion (ASTM D130)	1A		



DENTIFCATION & TAGGING PROGRAN

Synthetic SAE 40 Transmission



For more information, please refer to the Certif-ID Tagging Program.

IDEAL FOR USE IN: Eaton Fuller Truck transmissions. For Eaton and Mack 500,000 extended drain, 750,000 mile extended warranties.

DO NOT USE FOR: Differentials, Limited-Slip Differentials, Simple Manual Transmissions, Axles, Power Dividers, hypoid gear applications of differentials and final drives, Automatic universal, combined transmissions or any other equipment for which the manufacturer does not recommend this type of gear lubricant.

TO-4 Transmission

CERTIFIED.

Advanced Performance SAE 10W, 30, 50







Superior protection for transmissions, hydraulics, torque converters, final drives, and wet brakes.

Transmission oil specifically formulated for Caterpillar T0-4 TDTO oil specification

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Waste Management
- Steel Mills & Foundries
- Paper mills, Printing, & Packaging
- Federal, State & Local Agencies
- Construction, Mining, Agriculture
- Excavation & Demolition
- Logging
- Concrete & Asphalt paving
- Other Industries that Utilize Heavy Equipment

- **Resists Oxidation**
- Minimizes Brake Chatter
- Reduces Clutch Plate and Pump Wear
- Minimizes Deposit Build-up
- **Prevents Rust and Corrosion**
- Reduces Transmission and Final Gear Wear

- Hydrostatic Transmissions
 - Increases EP performance and reduces shock loads even under high operating temperatures.
- Powershift Transmissions
 - Prevents friction and wear of critical components upon shifting into or out of action.
- Gear Boxes
 - Helps maintain proper lubrication on gears, dissipates heat, minimizes deposit formation.
- Differential Gears
 - Prevents sludge build-up and oxidation on directional gears, inhibits rust and corrosion.
- Hydraulics
 - Anti-wear additives reduce friction and valve wear.

Meets or Exceeds the Following Performance Requirements:

- Caterpillar T0-4, TDTO
- Allison C-4
- Komatsu KES 07.868.1

Meets Caterpillar
High Zinc Hydraulic
Requirements
(>900ppm zinc)
CAT HYDO Advanced
SAE 10 & SAE 30

TO-4 Transmission Oil contains a total additive package for Caterpillar Equipment.



Additives	User Benefits		
Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high-temperature breakdown to maintain better lubricity.		
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.		
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.		
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.		
Shock Load Reducers Cushions impact to minimize the stress, vibration and chatter can occur under heavy loads and during start-stop operations			
Anti-Wear Agents Forms a lubricant film on metal surfaces in the presence of he loads and high temperatures. Prevents cold welding.			
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.		

Physical Properties				
	SAE 10W	SAE 30	SAE 50	
Viscosity at 40°C, cSt (ASTM D446)	27	97	228	
Viscosity at 100°C, cSt (ASTM D446)	4.8	10.9	19.2	
Density, lbs / gal	7.33	7.46	7.51	
Flash point, COC, °F (°C) (ASTM D92)	428 (220)	466 (241)	500 (260)	
Viscosity Index (ASTM D2270)	96	96	95	
Brookfield Viscosity at - 40°C, cP (ASTM D445)	59,400 at -30°F (-34°C)	70,000 at -11°F (-24°C)	46,500 at 5°F (-15°C)	
Cold Crank Viscosity, cP (ASTM D 5293)	3,200 at 0°F (-18°C)	1		
Borderline Pumping Viscosity, cP (ASTM D4684)	4,300 at -24°C (-11°F)	6,900 at -15°C (5°F)	10,300 at -10°C (14°F)	
Sulphur, % Wt. (ppm)	0.32 (3200)	0.32 (3200)	0.32 (3200)	
Phosphorus, % Wt. (ppm)	0.09 (900)	0.09 (900)	0.09 (900)	
Zinc, % Wt. (ppm)	0.11 (1100)	0.11 (1100)	0.11 (1100)	
Calcium, % Wt. (ppm)	0.42 (4200)	0.42 (4200)	0.42 (4200)	
Pour Point, °F (°C) (ASTM D97)	38 (-36)	-20 (-29)	5 (-15)	

IDEAL FOR USE IN:

Caterpillar power-shift transmissions, hydrostatic transmissions, hydraulic systems which call for a TO-4 fluid.

DO NOT USE FOR:

Automatic Transmission, Truck transmissions that only allow the use of GL-1 gear oil / motor oil, Spicer/Dana or Fuller transmissions or any other equipment for which the manufacturer does not recommend this type of gear lubricant. Never mix with asphaltic-type or "SCL"-type lubricants.

Torque-Glide

Synthetic Automatic Transmission Fluid









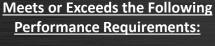
Provides superior protection against leaking, overheating, water contamination, oxidation and foaming. **Synthetic Transmission Fluid Specifically Formulated for Heavy-Duty Automatic Transmissions**

Provides Superior Equipment Protection for

- * Construction
- * Mining
- * Agriculture
- * Federal, State & Local Agencies
- Logging
- Waste Management
- Other Industries that **Utilize Heavy Equipment**

- For use in applications requiring Allison® TES-668 Fluids
 - **Resists Oxidation to Extend Oil Life** Helps prevent the formation of sludge and varnish
- **Extreme Temperature Performance** High viscosity index provides exceptional performance in hot and cold temperatures
- Provides Consistent, Smooth Clutch Engagement Throughout the Life of the Fluid.
- Durable Synthetic Lubricant Film Provides Better Protection for Vital Components
- Wide Temperature Ranges from -50°F (-45.5°C) to 300°F (148°C)





- Allison® C-4, TES-668/TES-295, TES-468, **TES-389**
- Dexron[®] III
- Voith G 607 & G 1363
- ZF® TE-ML 03D, 04D, 05L, 09, 11B, 14A, 14B, 16L, 17C
- Audi G 052 162, G 052 990, G 055 025
- BMW 7045E, LA 2634, LT 71141
- GM Dexron® III-H
- Honda ATF-Z1

Continued on Back...

Typical Applications Include:

Transit Buses, School Buses, Dump Trucks, Tow Trucks, Cement Trucks, Utility Vehicles, **Emergency Vehicles, and Garbage Trucks**

TORQUE GLIDE™ contains a total additive package that sets it apart from other automatic transmission fluids



Physical Properties					
Viscosity at 40°C, cSt (ASTM D445)	36.8				
Viscosity at 100°C, cSt (ASTM D445)	7.6				
Specific Gravity	0.8467				
Viscosity Index (ASTM D2270)	181				
Density, (lb/gal)	7.927				
Flash Point, COC, °F (°C) (ASTM D92)	435 (224)				
Pour Point °F (°C) (ASTM D97)	-50 (-45.5)				
Four Ball Wear Test 75°C, 1200 rpm, 40kg, 1hr (ASTM D4172)	0.33				
Appearance	Red				
Foam Tendency (ASTM D892)	0/0/0				
Copper Corrosion 150°C, 3hr (ASTM D130)	1B				
Boron	0.0275%				
Calcium	0.0255%				
Phosphorus	0.0650%				
Sulfur	0.2145%				

Meets or Exceeds the Following Performance Requirements:

- Chrysler AF + 4[®], Mopar[®] AS68RC
- Ford Mercon®, Mercon V®, ESP- M2C1266-H
- Hyundai SP-II, SP-III
- Idemitsu K17
- JWS 3309, 3314, 3317
- Kia SP-II, SP-III, ATF Red-1
- MAN 339 (F, V1, V2, Z1, Z2)
- Mazda ATF-M III, ATF-MV
- Mercedes Benz 236.1, 236.2, 236.3, 236.5, 236.6, 236.7, 236.9, 236.10, 236.11, 236.81

Continued...

- Mitsubishi SP-II, SP-III
- Nissan Matic-(D, J, K)
- Shell 3403, LA 2634
- Subaru ATF, ATF-HP
- Suzuki 3314, 3317
- Texaco ETL-7045E, ETL-8072B, N402
- Toyota Type T-III & T-IV
- Volvo 97340, 97341
- Volkswagen G 052 162, G 052 990, G 055 025

While Torque-Glide™ is not licensed by transmission manufacturers, it is designed for use according to the extended drain recommendations of the transmission manufacturer for the listed specifications.

Where extended drain intervals are not specified by the OEM, it is recommended that Torque-Glide be evaluated with oil analysis at standard drain intervals to establish the proper drain interval.

Where extended drain intervals are recommended by the OEM, follow that recommendation. This includes the recommendations set by Allison® in document #1099H for TES-295 fluids.

IDEAL FOR USE IN:

Automatic transmissions that require Allison TES-668 (backwards compatible for TES 295 Fluids) & TES-389, Allison C-4, GM Dexron III, ZF TE-ML 14C, Voith G 607 & G 1363.

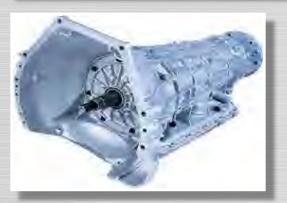
DO NOT USE FOR:

Eaton Spicer/Dana Fuller transmissions, truck transmissions that only allow the use of GL-1 gear oil or motor oil or any other equipment for which the manufacturer does not recommend this type of gear lubricant.

Universal[™]ATF

Universal Synthetic Automatic Transmission Oil







One Fluid for Most Global Transmission Applications

Transmission Fluid Specifically Formulated for Almost All Applications in Heavy-Duty Automatic Transmissions

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Waste Management
- Steel Mills & Foundries
- ❖ Paper Mills, Printing, & Packaging
- Construction, Mining, Agriculture
- Federal, State & Local Agencies
- Logging
- Excavation & Demolition
- Concrete & Asphalt Paving
- Other Industries that Utilize Heavy Equipment

- **Excellent Friction Stability for Smooth Shifting**
- **Superior Shear Stability and Wear Protection**
- **Provides Additional Oxidation Control for Extended Drain Intervals**
- Protection Against Varnish, Corrosion, and Sludge Formation
- **Superior Thermal Stability**
- Provides Active Anti-Wear Agents to Protect Critical Transmission Components
- **Outstanding Low-Temperature Performance**

Meets or Exceeds the Following Performance Requirements:

- Allison TES 389, C-4
- ATF 3403 M115
- Audi/VW G-052-025-A2, G-052-162-A1, G-055-005-A2, G-055-162, G-060-162-A2
- BMW LT71141, M-1375.4
- Ford MERCON (V, SP, LV, FNR5)
- GM 9986195
- . GM DEX II, III, IV and VI
- Honda/Acura ATF-Z, DW-1 (except in CVTs);
- Hyundai SP-II, SP-III, SP-IV, SPH-IV; JWS 3309
- Isuzu SCS ATF
- KIA Red 1, SP-II, SP-III
- JWS 3309
- MAN 339 Type F
- Mazda M-V
- Mercedes Benz MB236.1, MB236.6, MB236.7, MB236.9, MB236.10, NAG-1

Continued on Back....

UNIVERSAL™ ATF contains a total additive package that sets it apart from other gear oils



Additives	User Benefits			
Synthetic grade base oil	100% PAO synthetic oil base that resists breakdown to provide longer oil life. Provides superior lubrication at a wider temperature range.			
Rust & Corrosion Inhibitors	Blocks out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.			
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.			
Oxidation Inhibitors	Extends service life of the lubricant by retarding the oxidation or breakdown process.			
Shock Load Reducers Cushions impact to minimize the stress, vibration and chatter that car occur under heavy loads and during start-stop operations.				
Anti-Wear Agents Forms a lubricant film on metal surfaces in the presence of heavy and high temperatures. Prevents cold welding.				
Friction Reducers	Plates out on metal surfaces to prevent friction and wear under heavy loads.			
Seal Conditioners Special compounds that soften and condition seals to keep the hardening and cracking.				
Leak Inhibitors Most seal leaks occur because many oils cause seals to shrink. S agents provide a controlled swell to bring the seals back to their no size.				
Pour Point Depressants Keeps oil flowing properly in cold temperatures. Lowers frictional dr keeps equipment running down to -20 degrees.				
Anti-Foam Agents	Withstand agitation and heat without forming foam contaminants. Reduce pressure level on seals and vents.			

	Physical Properties						
	Viscosity at 40°C, (ASTM D445)	29.0					
	Viscosity at 100°C, (ASTM D445)	6.06					
	Viscosity at -40°C, cP (ASTM D445)	8,380					
•	Viscosity Index (ASTM D2270)	180					
	API Gravity at 60°F	1.88					
	Flash Point, COC, °F (°C) (ASTM D92)	450 (232)					
	Pour Point, °F (°C) (ASTM D97)	-60 (-51)					
	Foam Test (ASTM D6082)	Pass					
	Appearance	Red					

Meets or Exceeds the Following Performance Requirements:

- Misc OEMs M1375.4
- Mitsubishi Diamond SP-II, SP-III; Nissan Matic-D, Matic-J, Matic-K, Matic-S
- MOPAR AS68RC
- Saab 93 165 147
- Subaru ATF, ATF-HP
- Toyota/Lexus Type T, T-III, T-IV, WS (except Hybrids)
- Volvo 1161521, 1161540, STD 1273.41
- Voith H55.6336.33 (G1363), H55.6335.33 (G607)
- VW TL52162
- ZF TE-ML-14B, 16L, 17C

Universal ATF is specifically designed to meet and exceed the performance requirements of virtually all global automatic transmission fluid requirements for passenger cars, flex-fuel vehicles, hybrids, light-trucks, sport utility vehicles, and most heavy-duty transmission standards. It is recommended for use in "warrantied" applications and WILL NOT void applicable vehicle warranties.

CRFQ 0212 SWC2600000004 Oil, Lubrincants, Grease (OIL25)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11
LINE ITEM	DESCRIPTION	UNIT OF MEASURE (SIZE/WT) (for information use only and not to be used for calculations)	MANUFACTURER	BRAND BID	ESTIMATED QTY.	UNIT PRICE	Unit of Measure (For calculation purposes only)	EXTENDED PRICE	VENDOR ORDER/PART NUMBER	VENDOR PREFERRED ORDER SIZE/WT.
Example:	Motor oil SAE15W40	55 gal. drum	ABC	DEF	385	\$ 1.00	1 gal.	\$ 385.00	GHIJKL	55 Gal. Drum
	3.1.1 2-CYCLE MOTOR OIL -									
	Chainsaw, Power Mowers, Pumps, & Snowmobiles Motor oil for lubricating 2 cycle engines in 8 oz. containers (chain saw motor	0								
1	oil) - API TC or equal	8 oz.	NO BID		1800	\$ -	1 oz.	\$ -		
	3.1.2 OUTBOARD MOTOR OIL									
2	Motor oil for lubricating 2 cycle engines (outboard motor oil) - API TC-W3 or equal	1 qt.	NO BID		1300	\$ -	1 qt.	\$ -		
	3.1.3 MOTOR OIL SAE (Gas and/or Diesel)									
3	Motor oil SAE30 - CF-4, CF-2 CF/SJ	1 qt.	CERTIFIED LABS	STRATA 30W	1000	\$ 5.63	1 qt.	\$ 5,630.00	10187709	5 GL PAIL
4	Motor oil SAE15W40 - CI-4 CF/SJ CJ-4, CI-4 PLUS, CH-4, CK-4	1 qt.	CERTIFIED LABS	SPECTRA XTREME CK-	100,000	\$ 4.77	1 qt.	\$ 477,000.00	12071120	330 GL TOTE
5	Motor oil SAE15W40 - CI-4 CF/SJ CJ-4, CI-4 PLUS, CH-4, CK-4	1 gal	CERTIFIED LABS	SPECTRA XTREME CK-	10,000	\$ 19.05	1 gal.	\$ 190,500.00	12071120	330 GL TOTE
6	Motor oil SAE15W40 - CI-4, CI-4 PLUS, CH-4, CF-4/SN, SM, CK-4	55 gal. drum	CERTIFIED LABS	SPECTRA XTREME CK-	1210	\$ 20.80	1 gal.	\$ 25,168.00	12071119	55 GL DRUM
7	Motor oil SAE15W40 - BULK CJ-4, CI-4PLUS, CH-4, CF-4/SN, SM, CK-4	BULK 6,000 gallon	CERTIFIED LABS	SPECTRA XTREME CK-	6000	\$ 19.05	1 gal.	\$ 114,300.00	12071120	330 GL TOTE
9	Motor oil SAE15W40 - FA-4	1 qt. 1 gal.	NO BID	CDCCTDA VTDCASC CV	1000	\$ - \$ 29.40	1 qt.	\$ -	12070067	CVACL CASE
10	Motor oil SAE15W40 - FA-4 Motor oil SAE15W40 - BULK - FA-4	55 gal. drum	CERTIFIED LABS CERTIFIED LABS	SPECTRA XTREME CK- SPECTRA XTREME CK-	1000 385	\$ 29.40 \$ 20.80	1 gal.	\$ 29,400.00 \$ 8,008.00		6 X 1 GL CASE 55 GL DRUM
11	Motor oil SAE10 - CF/SN CAT TO-2, ALLISON C-4 or equal	5 gallon	CERTIFIED LABS	STRATA 10W	2400	\$ 22.50	1 gal.	\$ 54,000.00	10187723	5 GL PAIL
12	Motor oil SAE10 - CF/SN CAT TO-2, ALLISON C-4 or equal	55 gal. drum	CERTIFIED LABS	STRATA 10W	550	\$ 20.20	1 gal.	\$ 11,110.00		55 GL DRUM
13	Motor oil 0W20 - GM Dexos 1 Gen 3 EOS-5 approved or Equal	1 qt	CERTIFIED LABS	SPECTRA XTREME D1	500	\$ 8.40	1 qt.	\$ 4,200.00	12085196	4 X 1.25 GL CS \$168.0
14	Motor oil 0W20 - GM Dexos 1 Gen 3 EOS-5 approved or Equal	5 qt	CERTIFIED LABS	SPECTRA XTREME D1	1000	\$ 8.40	1 qt.	\$ 8,400.00		4 X 1.25 GL CS \$168.0
15	Motor oil 5W20 - GM Dexos 1 Gen 3 EOS-5 approved or Equal	1 qt	CERTIFIED LABS	SPECTRA XTREME D1	1500	\$ 5.49	1 qt.	\$ 8,235.00	12078215	
16	Motor oil 5W20 - GM Dexos 1 Gen 3 EOS-5 approved or Equal	5 qt 1 qt	CERTIFIED LABS	SPECTRA XTREME D1	1000	\$ 5.49	1 qt.	\$ 5,490.00 \$ 8,235.00	12078215	55 GL DRUM
17	Motor oil 5W30 - GM Dexos 1 Gen 3 EOS-5 approved or Equal Motor oil 5W30 - GM Dexos 1 Gen 3 EOS-5 approved or Equal	5 qt	CERTIFIED LABS CERTIFIED LABS	SPECTRA XTREME D1 SPECTRA XTREME D1	1500 1000	\$ 5.49 \$ 5.49	1 qt.	\$ 8,235.00 \$ 5,490.00	12078215 12078215	55 GL DRUM 55 GL DRUM
19	Motor oil 5W30 - Synthetic Blend CF/SN ILSAC GF-5	1 qt.	NO BID	SEE ABOVE FOR FULL-	7500	\$ -	1 qt.	\$ -	120/6213	33 GE DIKOWI
20	Motor oil 5W30 - Synthetic Blend - BULK - CF/SN SM, SJ, ILSAC GF-5	55 gal. drum	CERTIFIED LABS	SPECTRA XTREME D1	550	\$ 21.95	1 gal.	\$ 12,072.50	12060258	55 GL DRUM
21	Motor oil 5W30 - GM Dexos approved or Equal	1 qt	CERTIFIED LABS	SPECTRA XTREME D1	1000	\$ 5.49	1 qt.	\$ 5,490.00	12077323	55 GL DRUM
22	Motor oil 5W30 - GM Dexos approved or Equal	5 qt	CERTIFIED LABS	SPECTRA XTREME D1	1000	\$ 8.40	1 qt.	\$ 8,400.00	12085198	4 X 1.25 GL CASE
23	Motor oil 5W30 -Mack EOS-5 approved or Equal	1 ga	CERTIFIED LABS	SPECTRA XTREME D1	1000	\$ 21.95	1 gal.	\$ 21,950.00	12077323	55 GL DRUM
24	Motor oil 10W30 - CF/SN SM, SJ, ILSAC GF-5	1 qt.	CERTIFIED LABS	SPECTRA XTREME CK-	20000	\$ 5.05	1 qt.	\$ 101,000.00	12070970	330 GL TOTE
25	Motor oil 10W30 Motorcraft Super Duty or Equal (must meet WSS-M2C171-F1, CES20086, Detroit Diesel 93K2222, Volvo VDS-4.5, & Mack EOS-4.5 standards)	1 qt.	CERTIFIED LABS	SPECTRA XTREME CK-	5000	\$ 5.05	1 qt.	\$ 25,250.00	12070970	330 GL TOTE
26	Motor oil 10W30 Motorcraft Super Duty or Equal (must meet WSS-M2C171-F1,	5 qt.	CERTIFIED I ARC	CDECTRA VIDENIE CV	1000	A 735	1	A 7.250.00	12070067	C V 1 CL CASE
	CES20086, Detroit Diesel 93K2222, Volvo VDS-4.5, & Mack EOS-4.5 standards) Motor oil 10W30 - BULK - Motorcraft Super Duty or Equal (must meet WSS-M2C171-F1, CES20086, Detroit Diesel 93K2222, Volvo VDS-4.5, & Mack EOS-4.5	55 gal. drum	CERTIFIED LABS	SPECTRA XTREME CK-	1000	\$ 7.35	1 qt.	\$ 7,350.00		6 X 1 GL CASE
27	standards)	1 qt.	CERTIFIED LABS CERTIFIED LABS	SPECTRA XTREME CK-	330 350	\$ 21.95 \$ 7.35	1 gal.	\$ 7,243.50 \$ 2,572.50		55 GL DRUM
29	Motor oil 10W30 - Diesel Engine Service SB (synthetic blend) Motor oil 10W30 - Diesel Engine Service SB (synthetic blend)	1 gal.	CERTIFIED LABS	SPECTRA XTREME CK-	500	\$ 21.95	1 qt. 1 gal.	\$ 2,572.50		6 X 1 GL CASE 55 GL DRUM
30	Motor oil 10W30 - FA-4	1 qt.	CERTIFIED LABS	SPECTRA XTREME CK-	1000	\$ 5.49	1 qt.	\$ 5,490.00	12070969	55 GL DRUM
31	Motor oil 10W30 - FA-4	1 gal.	CERTIFIED LABS	SPECTRA XTREME CK-	500	\$ 7.35	1 gal.	\$ 3,675.00	12070967	6 X 1 GL CASE
32	Motor oil 10W40 - CF/SN	1 qt.	NO BID		500	\$ -	1 qt.	\$ -		
33	Motor oil 20W50 - CF/SN	1 qt.	NO BID		500	\$ -	1 qt.	\$ -		
34	Synthetic motor oil SAE 5W40 - CF/SN	1 qt. 1 gal.	CERTIFIED LABS	SPECTRA XTREME 5W	500	\$ 8.13	1 qt.	\$ 4,065.00	12075885	5 GL PAIL
35 36	Synthetic motor oil SAE 5W40 - CF/SN Synthetic motor oil SAE 10W30 - CF/SN	1 gai. 1 qt.	CERTIFIED LABS CERTIFIED LABS	SPECTRA XTREME 5W SPECTRA XTREME 5W	500	\$ 24.80	1 gal.	\$ 12,400.00 \$ 4,065.00	12075886 12075885	55 GL DRUM 5 GL PAIL
37	Synthetic motor oil SAE 10W30 - Cr/SN Synthetic motor oil SAE 5W40 - CJ-4, CH-4/SN	1 qt.	NO BID	S. ECTIVA ATREIVIE SW	100	\$ -	1 qt.	\$ -	12073883	JULIAL
38	Synthetic motor oil SAE 0W40 - FCA- MS-12633	1 qt.	NO BID		500	\$ -	1 qt.	\$ -		
	3.1.4 EXTREME PRESSURE (EP) GEAR LUBRICANT									
	Extreme pressure gear lubricant	35 lb.								
39	80W90 GL-5, MT-1, MACK GO-J or equal Extreme pressure gear lubricant		CERTIFIED LABS	CERTOP 80W90	280	\$ 4.25	1 lb.	\$ 1,190.00	12093691	35 LB/5 GL
40	80W90 GL-5, MT-1, MACK GO-J or equal	120 lb.	CERTIFIED LABS	CERTOP 80W90	3360	\$ 3.95	1 lb.	\$ 13,272.00	12093692	120 LB
41	Extreme pressure gear lubricant 85W140 GL-5, MT-1, MACK GO-J or equal	120 lb.	CERTIFIED LABS	CERTO 85W140	720	\$ 3.95	1 lb.	\$ 2,844.00	12093687	120 LB
	3.1.5 GEAR LUBRICANT									
		35 lb.								
42	Gear Lubricant - mineral gear lube 90 GL-1	33 10.	CERTIFIED LABS	CERTOP IND ISO 220	385	\$ 3.25	1 lb.	\$ 1,251.25	10194581	120 LB
	3.1.6 SYNTHETIC LUBRICANT									
43	SAESO Powertranz EW 50 EATON PS-164, R7 MACK GO-A PLUS NAVISTAR TMS 6816 or equal	35 lb.	CERTIFIED LABS	SYNTHETHIC TRANS 5	350	\$ 8.80	1 lb.	\$ 3,080.00	12079920	35 LB
	3.1.7 WHEEL BEARING & CHASSIS GREASE									
	Wheel bearing and chassis grease	14 to 14-1/2 oz. tubes	CERTIFIES : 122	LITHIDI SY	252-				40	OF OF 42 V 4 2 3 3 3 3
44	summer weight NLGI #2 Wheel bearing and chassis grease		CERTIFIED LABS	LITHIPLEX	2500	\$ 0.43	1 oz.	\$ 1,075.00	12106060	CS OF 48 X 14.3 OZ (\$
45	summer weight NLGI #2	35 lb.	CERTIFIED LABS	LITHIPLEX	250	\$ 6.25	1 lb.	\$ 1,562.50	12099087	35 LB PAIL
46	Wheel bearing and chassis grease summer weight NLGI #2	120 lb.	CERTIFIED LABS	LITHIPLEX	1200	\$ 5.45	1 lb.	\$ 6,540.00	12000080	400 LB DRUM

CRFQ 0212 SWC2600000004 Oil, Lubrincants, Grease (OIL25)

	3.1.8 ALL PURPOSE GREASE (MOLY):									
	All purpose grease (3% molly)	44.440								
47	water and heat resistant grease NGLI #2 All purpose grease (3% molly)	14 to 14-1/2 oz. tubes	CERTIFIED LABS	PREMALUBE	120	\$ 0.45	1 oz.	\$ 53.76	10032735	CS OF 48 X 14.8 OZ \$3
48	water and heat resistant grease NGLI #2	35 lb.	CERTIFIED LABS	PREMALUBE	200	\$ 5.15	1 lb.	\$ 1,030.00	10036335	35 LB PAIL
49	All purpose grease (3% molly) water and heat resistant grease NGLI #2	120 lb.	CERTIFIED LABS	PREMALUBE	240	\$ 4.85	1 lb.	\$ 1,164.00	10044526	120 LB KEG
	3.1.9 HYDRAULIC OIL (HYDRAULIC HOIST OIL):									
50	Hydraulic oil-light weight RO22 Turbine/Circulating Oil	5 gal.	CERTIFIED LABS	MULTOIL 5W20	50	\$ 32.70	1 gal.	\$ 1,635.00	10185858	2 X 2.5 GL CASE
51	Hydraulic oil-light weight (AW32)	5 gal.	CERTIFIED LABS	HOC XTREME ISO 32	400	\$ 16.75	1 gal.	\$ 6,700.00	12063747	5 GL PAIL
52	Hydraulic oil-light weight (AW32)	55 gal. drum	CERTIFIED LABS	HOC XTREME ISO 32	110	\$ 14.45	1 gal.	\$ 1,589.50	12063748	55 GL DRUM
53	Hydraulic oil-medium weight (AW46)	5 gal.	CERTIFIED LABS	HOC XTREME ISO 46	35	\$ 16.75	1 gal.	\$ 586.25	12063750	5 GL PAIL
54	Hydraulic oil-medium weight (AW46)	55 gal. drum	CERTIFIED LABS	HOC XTREME ISO 46	110	\$ 14.45	1 gal.	\$ 1,589.50	12063751	55 GL DRUM
55	Hydraulic oil-heavy weight (AW68)	5 gal.	CERTIFIED LABS	HOC XTREME ISO 68	200	\$ 16.75	1 gal.	\$ 3,350.00	12063753	5 GL PAIL
56	Hydraulic oil-heavy weight (AW68)	55 gal. drum	CERTIFIED LABS	HOC XTREME ISO 68	880	\$ 14.45	1 gal.	\$ 12,716.00	12063754	55 GL DRUM
	3.1.11 CATAPILLAR HYDRAULIC OIL									
57	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	5 gal	CERTIFIED LABS	TO-4 10W	120	\$ 21.95	1 gal.	\$ 2,634.00	12094901	5 GL PAIL
58	Hydraulic Oil - CAT HYDO ADVANCED 10 or equal	55 gal. drum	CERTIFIED LABS	TO-4 10W	6,600	\$ 19.65	1 gal.	\$ 129,690.00		55 GL DRUM
	3.1.12 TRANSMISSION FLUID									
59	Automatic Transmission Fluid - Multi Vehicle - Dexron II, Mercon, or equal	1 qt.	CERTIFIED LABS	CERTIFIED ATF	22000	\$ 4.63	1 qt.	\$ 101,860.00	10043498	55 GL DRUM
60	Automatic Transmission Fluid - Multi Vehicle - Dexron II, Mercon, or equal	55 gal. drum	CERTIFIED LABS	CERTIFIED ATF	495	\$ 27.90	1 gal.	\$ 13,810.50	10043498	2 X 2.5 GL CASE
61	Transmission fluid - CAT T0-4 , Allison C-4, or Equal	5 gal.	CERTIFIED LABS	TO-4 10W, 30W, 50W	350	\$ 21.95	1 gal.	\$ 7,682.50	10W:12073691, 30W	5 GL PAIL
62	Transmission fluid - CAT TO-4 , Allison C-4, or Equal	55 gal. drum	CERTIFIED LABS	TO-4 10W, 30W, 50W	605	\$ 19.65	1 gal.	\$ 11,888.25	10W:12073692, 30W	55 GL DRUM
63	Automatic Transmission Fluid Multi-Vehicle ATF API DEXRON III, MERCON, MERCON V, ATF+3 ATF+4 or equal	1 qt.	CERTIFIED LABS	UNIVERSAL ATF	1000	\$ 8.45	1 at.	\$ 8,450.00		55 GL DRUM
64	Transmission fluid - Dexron -VI-ATF or equal	1 qt.	CERTIFIED LABS	UNIVERSAL ATF	120	\$ 10.01	1 qt.	\$ 1,201.20		5 GL PAIL
65	Transmission fluid - Dexron - ULV or equal	1 qt.	CERTIFIED LABS	UNIVERSAL ATF	120	\$ 10.01	1 qt.	\$ 1,201.20		5 GL PAIL
66	TES - 668 Alison TES-668 Fluid BP Autran or Equal	1 qt.	CERTIFIED LABS	TORQUE GLIDE	30	\$ 9.68	1 qt.	\$ 290.40		5 GL PAIL
67	TES - 668 Alison TES-668 Fluid BP Autran or Equal	1 gal	CERTIFIED LABS	TORQUE GLIDE	30	\$ 38.70	1 gal.	\$ 1,161.00		5 GL PAIL
68	Automatic Transmission Fluid - MOTORCRAFT MERCON LV or equal	1 qt.	CERTIFIED LABS	UNIVERSAL ATF	30	\$ 10.01	1 qt.	\$ 300.30		5 GL PAIL
69	Automatic Transmission Fluid - MOTORCRAFT MERCON SP or equal	1 qt.	CERTIFIED LABS	UNIVERSAL ATF	30	\$ 10.01	1 qt.	\$ 300.30		5 GL PAIL
70		1 qt.	NO BID	UNIVERSAL ATF	30	\$ 10.01		\$ 300.30	12072244	5 GL PAIL
70	Transmission Fluid - VALVOLINE CVT FLUID or equal 3.1.13 COMBINATION FLUID		NO BID		30	\$ -	1 qt.	\$ -		
	Combination Fluid: Hydraulic/Transmission Oil: HY-GARD Transmission Oil	5 gal.	CENTIFIED I 122	OIL ALL VEDELE	250				10000	E CL DAIL
71	or equal Combination Fluid: Hydraulic/Transmission Oil: HY-GARD Transmission Oil	55 gal. drum	CERTIFIED LABS	OIL-ALL XTREME	250	\$ 18.20	1 gal.	\$ 4,550.00		5 GL PAIL
72	or equal 3.1.14 RAILROAD DIESEL ENGINE OIL	9	CERTIFIED LABS	OIL-ALL XTREME	20900	\$ 15.90	1 gal.	\$ 332,310.00	12062163	55 GL DRUM
	Railroad diesel engine oil must be a generation 5 oil as designated by (LMOA)	55 gal. drum								
73	EMD approved 3.1.15 SYNTHETIC MULTIPURPOSE GEAR LUBRICANT	9-4 414111	CERTIFIED LABS	SPECTRA RR DEO 40	880	\$ 27.65	1 gal.	\$ 24,332.00	12094631	55 GL DRUM
	75W90 GL-5 Synthesized multipurpose gear lubricant - DANA SHADES 256, REV.	35 lb.								
74	C, EATON E500, MACK GO J PLUS or equal 75W90 GL-5 Synthesized multipurpose gear lubricant - DANA SHADES 256,	120 lb.	CERTIFIED LABS	CERTOP SN 75W90	700	\$ 6.85	1 lb.	\$ 4,795.00		35 LB PAIL
75	REV C, EATON E500, MACK GO-J PLUS or equal 80W140 GL-5 Synthesized multipurpose gear lubricant - DANA SHADES 256,	35 lb.	CERTIFIED LABS	CERTOP SN 75W90	120	\$ 6.35	1 lb.	\$ 762.00		120 LB KEG
76	ARVIN MERITOR O-76, MACK GO -J or equal 3.1.16 FORMULATED GEAR OIL (LS)	35 10.	CERTIFIED LABS	CERTOP SN 80W140	140	\$ 6.85	1 lb.	\$ 959.00	12091987	35 LB PAIL
	Limited slip gear lubricant 80W90 GL-	25 11-								
77	5 Limited slip gear lubricant 80W90	35 lb.		NO BID	770	\$ -	1 lb.	\$ -		
78	GL-5 3.1.17 DEPOSIT & CREDIT FOR RETURNABLE 55 GALLON	120 lb.		NO BID	1080	\$ -	1 lb.	\$ -		
	DRUMS					Must be				
79	Deposit & Credit for Returnable 55 Gal. Drum (Inc. in product price)	55 gal. drum				included in Drum Price.	Drum (each)	No Additional Charge permitted		
				_			ND TOTAL			

GRAND TOTAL: \$ 1,896,570.91

IMPORTANT All pricing is broken down into the least possible container pricing and the pricing pages are formatted to calculate based upon this model.

See Example highlighted in yellow above.

Vendor's Name:

Contract Manager's Name:

Phone:
Fax:

Email Address:

NCH CORPORATION DBA CERTIFIED LABORATORIES

TONI L. BOYD

972-438-0563

672-438-0634

CL.BIDS@NCH.COM

196.45)

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18.45

Statewide Contract for Oils, Lubricants & Grease

SPECIFICATIONS

1. PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids to establish an Open-End Statewide Contract for Oils, Lubricants, and Grease. This contract Must cover all West Virginia State Agencies and Political Subdivisions located in the State of West Virginia.

The subsequent award resulting from this RFQ is intended to replace the current contract "OIL22" which can be viewed in its entirety at: https://www.state.wv.us/admin/purchase/SWC/default.html

- **2. DEFINITIONS:** The terms listed below Must 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 3.1 below and on the Pricing Pages.
 - **2.2** "Pricing Pages" means the schedule of prices, estimated order quantity, and totals contained in wvOASIS or attached hereto as Exhibit A and used to evaluate the Solicitation responses.
 - **2.3** "Solicitation" or "RFQ" (Request for Quotation) means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
 - **2.4** "SAE" mean the "Society of Automotive Engineering" used to grade motor oils according to their viscosity.
 - **2.5** "API" means the "American Petroleum Institute".
 - **2.6** "ILSAC" means the "International Lubricant Standardization and Approval Committee.
 - **2.7** "LMOA" means the "Locomotive Maintenance Officers Association.
 - **2.8** "EMD" Means "Electro-Motive Diesel" engine.
 - **2.9** "NLGI" means the "National Lubricating Grease Institute".
 - **2.10 "OSHA"** means the "Occupational Safety and Health Association".

Statewide Contract for Oils, Lubricants & Grease

3. GENERAL REQUIREMENTS:

3.1 Contract Items and Mandatory Requirements: Vendor Must provide Agency with the Contract Items listed below on an open-end and continuing basis. Contract Items must <u>meet or exceed</u> the mandatory requirements as shown below.

3.1.1 2-CYCLE MOTOR OIL - CHAINSAW, POWER MOWERS, PUMPS, & SNOWMOBILES:

- **3.1.1.1** Motor Oil must be specifically compounded and marketed for mixing with gasoline to lubricate air- and water-cooled engines.
- **3.1.1.2** Motor Oil must meet the minimum requirements as an engine lubricant for the major manufacturers of two-cycle engines.
- **3.1.1.3** Motor Oil must be satisfactory for use in any fuel to oil ration as specified by the engine manufacturer up to and including 50:1 ration.
- **3.1.1.4** Motor Oil Must be available in the SAE viscosity grade(s) specified for use in Homelite, McCulloch, Poulan, Stihl, Husqvarna, or other two-cycle engines or equal.

3.1.2 OUTBOARD MOTOR OIL:

- **3.1.2.1** Outboard Motor Oil specifically compounded and marketed for mixing with gasoline to lubricate two-cycle, water cooled engines.
- **3.1.2.2** Outboard Motor Oil must be tested and certified by the National Marine Manufacturers Association (NMMA) for TCW III.
- **3.1.2.3** Outboard Motor Oil must be satisfactory for use in any fuel to oil ration as specified by the engine manufacturer up to and including 50:1 ration.

Statewide Contract for Oils, Lubricants & Grease

3.1.2.4 Outboard Motor Oil Must be available in the SAE viscosity grade(s) specified by the engine manufacturers for use in Evinrude, Johnson, Mercury, Yamaha, Honda, or other two-cycle outboard motors or equal.

3.1.3 MOTOR OIL (GAS AND/OR DIESEL):

- **3.1.3.1** Must be produced from virgin materials.
- **3.1.3.2** Must be suitable for use in passenger cars, trucks, and heavy construction equipment.
- **3.1.3.3** Must be approved for gasoline and diesel engines.
- **3.1.3.4** Must be API certified and have the API seal of approval on the product.
- **3.1.3.5** Must meet the performance requirement ("Primary Performance Criteria") described in ASTM designated D4485 for performance categories: API Service CK-4, CJ-4, CI-4 Plus, CH-4/SN, SN Plus, SM, SL, SJ, FA-4..
 - **3.1.3.5.1** Conformance of the oil furnished with the performance requirements Must be determined with the test methods identified in the most recent edition of ASTM D4485 for all categories.
- **3.1.3.6** Crankcase oil must be suitable for use in new model gasoline and diesel engines where this service category oil requirement is specified by the engine manufacturer.
- **3.1.3.7** Must meet the performance level of MIL-L 2104E and MIL-L 45152D or equal.
- **3.1.3.8** Sulfate ash (ASTMD-874) Must be a maximum of 1.00% by weight.
- **3.1.3.9** Minimum viscosity index for all motor oils Must be 95.

(OIL25) Statewide Contract for Oils, Lubricants & Grease

3.1.3.10 Synthetic Motor Oil:

- **3.1.3.10.1** Must be approved for both Gas and/or Diesel engines.
- **3.1.3.10.2** Must be API Certified and have the API seal of approval on the product.
- **3.1.3.10.3** Must meet GM-6094M, GM-4718M, and Ford ESE-MC153-E or Equal
- **3.1.3.10.4** Must meet the performance level of MIL-L-46152E and MIL-L-2104D or Equal.

3.1.4 EXTREME PRESSURE (EP) GEAR LUBRICANT:

3.1.4.1 API Service Category: GL-5, PG-1, PG-2

3.1.4.2 SAE Viscosity Grades: 80W90 and 85W140

3.1.4.2.1 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.

3.1.5 GEAR LUBRICANT:

3.1.5.1 API Service Category: GL-1

3.1.5.2 Mineral gear lube 90.

3.1.5.2.1 For use in automotive and heavy equipment transmission differentials where EP lubricant is not required.

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3.1.6 SYNTHETIC LUBRICANT:

- **3.1.6.1** Must be fully synthetic.
- **3.1.6.2 SAESO** Lubricant for use in heavy-duty truck manual transmissions must meet EATON PS-164, R7, MACK GO-A PLUS, NAVISTAR TMS 6816 or Equal.

3.1.7 WHEEL BEARING & CHASSIS GREASE:

- **3.1.7.1** Must be designated by manufacturer as suitable for multi-purpose use in cars, light & heavy trucks, and industrial equipment.
- **3.1.7.2** Must be made from a lithium complex soap.
- **3.1.7.3** Minimum NLGI Consistency #1 and #2.
- **3.1.7.4** Must be resistant to oxidation and water washout as specified in ASTM D1264.
- **3.1.7.5** Must meet minimum leakage resistance as specified in ASTM D1263.
- **3.1.7.6** Minimum 450-degree Fahrenheit dropping point as specified in ASTM D2265.
- **3.1.7.7** Worked penetration per ASTM D217 and D1403.
 - **3.1.7.7.1** NLGI#1 310-340
 - **3.1.7.7.2** NLGI#2 265-295
- **3.1.7.8** NLGI-GC/LB

3.1.8 ALL PURPOSE GREASE (MOLY):

3.1.8.1 Must be designated by the manufacturer as suitable for use in industrial, automotive, and construction equipment including heavy stock loading conditions.

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- **3.1.8.2** Must meet minimum requirements for all major heavy equipment manufacturers such as Caterpillar, John Deere, Komatsu, Case, Volvo, etc
- **3.1.8.3** Minimum NLGI Consistency #2.
- **3.1.8.4** Minimum 500-degree Fahrenheit dropping point as specified in ASTM D2265.
- **3.1.8.5** Minimum 3% moly.

3.1.9 HYDRAULIC OIL (HYDRAULIC HOIST OIL):

- **3.1.9.1 Turbine/Circulating Oil (RO22)**: Product must be specially blended for service in hydraulic systems employing either vane or gear-type pumps as utilized on snow removal, road construction, and hydraulic operated equipment. (This oil is not intended for use in hydraulic brakes and automobile type steering units).
 - **3.1.9.1.1** Abex Denision HF-0, HF-1, HF-2 or Equal.
 - **3.1.9.1.2** Sperry Vickers M-2950-S, 1-286-S or Equal.
 - **3.1.9.1.3** Sunstrand Hydrostatics or Equal.

3.1.9.2 Hydraulic Oil Light-Weight (AW32):

3.1.9.2.1 For use when outside temperature is generally below 32-degrees Fahrenheit.

3.1.9.3 Hydraulic Oil Medium-Weight (AW46):

3.1.9.3.1 For use when outside temperature is generally between 32-100 degrees Fahrenheit.

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3.1.9.3.2 Hydraulic Oil Heavy-Weight (AW68):

3.1.9.3.2.1 For use in some systems where ambient temperatures are generally higher and/or when heavier weight products are recommended.

3.1.10 HYDRAULIC OIL REQUIREMENTS:

- **3.1.10.1** Manufactured to meet or exceed manufacturers' hydraulic requirements.
- **3.1.10.2** Must not produce deleterious effects on neoprene, leather, or other seals used in hydraulic systems.
- **3.1.10.3** Must contain corrosion, oxidation, anti-wear, and foam inhibitors to protect the hydraulic system. This Must include but not limited to pump, motor, and valves.
- **3.1.10.4** Minimum viscosity index for all hydraulic oil Must be 95.
- **3.1.10.5** Hydraulic oil Must be tested per ASTM D2619 and approved.

3.1.11 CATAPILLAR HYDRUALIC OIL:

3.1.11.1 Cat Hydro Advanced 10 or Equal:

- **3.1.11.1.1** Must meet minimum requirements for all CAT Machine Hydraulic Systems.
- **3.1.11.1.2** Must meet minimum oxidation stability per ASTM D943.
- **3.1.11.1.3** Must have a minimum viscosity index of 114 per ASTM D2270.
- **3.1.11.1.4** SAE Viscosity grade IOW.

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3.1.12 TRANSMISSION FLUID:

3.1.12.1 Dexron – Mercon, or Equal:

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

3.1.12.1.2 1T0-4 Fluids:

- **3.1.12.1.2.1** Must meet CAT T0-4 requirements.
- **3.1.12.1.2.2** Must meet Allison C-4 requirements.
- **3.1.12.1.2.3** Must provide rust corrosion control, oxidation stability, foam resistance, and elastomer compatibility.

3.1.12.1.3 Dexron III, Mercon, Mercon V, ATF+3, & ATF+4 or Equal:

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

3.1.12.1.4 Dexron VI or Equal:

3.1.12.1.4.1 ATF meeting GM specifications or equal.

3.1.12.1.5 TES-295 Allison Fluid BP Autran or Equal:

3.1.12.1.5.1 ATF must meet Allison specifications or equal.

3.1.12.1.6 Motorcraft Mercon LV or Equal:

- **3.1.12.1.6.1** ATF must meet Ford Motor Company specifications.
- **3.1.12.1.6.2** Minimum Viscosity index must be 155.

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3.1.12.1.7 Motorcraft Mercon SP or Equal:

- **3.1.12.1.7.1** ATF must meet Ford Motor Company specifications.
- **3.1.12.1.7.2** Minimum Viscosity index must be 155.

3.1.12.1.8 Valvoline CVT Fluid or Equal:

- **3.1.12.1.8.1** Must be formulated with premium synthetic base stocks, long-life friction modifiers, anti-wear additives and shear stable viscosity modifiers.
- **3.1.12.1.8.2** Minimum Viscosity @ 100-degrees Celsius must be 7.2.
- 3.1.12.1.8.3 Must meet all major automobile (i.e. Ford, Chrysler, GM, Toyota, etc.) manufacturers specifications for belt and chain driven continually variable transmissions (CVT) and will not void vehicle warranties.

3.1.13 COMBINATION FLUID (Universal Tractor Hydraulic/Transmission Oil):

- 3.1.13.1 HY-GUARD OIL or Equal.
- **3.1.13.2** Minimum Viscosity @ 40-degree Celsius must be ISO grade 46.
- **3.1.13.3** Must meet the minimum manufacturer requirements for farm equipment, off highway machinery, and industrial tractor transmissions, final drives, wet brakes, and hydraulics when supplied from a common fluid reservoir.
 - **3.1.13.3.1** This fluid Must meet or exceed all of the manufacturer requirements for John

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Deere J20A, John Deere J20C, Allis Chalmers 257541, Massey Ferguson Permatran III, White Equipment Q-1722, and Ford M2C134A, or Equal.

3.1.14 RAILROAD DIESEL ENGING OIL:

3.1.14.1 Must be generation 4 SAE40 oil as designated by (LOMA) EMD approved.

3.1.15 SYNTHETIC MULTIPURPOSE GEAR LUBRICANT:

- **3.1.15.1** API Service Category GL-5.
- **3.1.15.2** SAE Viscosity grade 75W90.
 - **3.1.15.2.1** DANA SHADES 256, REV.C, EATON E500, MACK GO-J PLUS, or Equal.
- **3.1.15.3** SAE Viscosity grade 80W140.
 - **3.1.15.3.1** DANA SHADES 256, ARVIN MERITOR O-76, MACK GO-J or Equal.
- 3.1.15.4 Must be manufactured from synthesized hydrocarbon base oils and a sulfur phosphorus gear lubricant additive package.
- **3.1.15.5** Must meet manufacturers minimum requirements for farm equipment, off highway machinery, and industrial tractors.

3.1.16 FORMULATED GEAR OIL (Limited-Slip Gear Lubricant):

- **3.1.16.1** API Service Category GL-5.
- **3.1.16.2** SAE Viscosity grade 80W90.

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3.1.16.3 Must contain rust, corrosion, anti-wear and foam inhibitors.

3.1.17 55 GALLON DRUMS:

- **3.1.17.1** All drums shipped become the property of the ordering agency and cannot be invoiced separately for deposits or credits.
- **3.1.17.2** Vendor should include the price of the drum into their Unit Price cost for each commodity item shipped in drum packaging.
 - **3.1.17.2.1** If an Agency desires to return any drum purchased when empty, the vendor may pick up the drum at no charge to the agency if the vendor desires.
- **3.1.17.3** See **Section 6.1** for additional drum requirements.
- **3.2 REPORTS**: The Contractor Must provide to the State of West Virginia's primary contact person quarterly utilization reports containing at a minimum the following information pertaining to the State of West Virginia agencies, boards, commissions, and political subdivisions:
 - **3.2.1** Ordering Entity;
 - **3.2.2** Purchase order number;
 - **3.2.3** Description;
 - **3.2.4** Quantity;
 - **3.2.5** Price.

These reports must be provided in Excel format and sent via email on a quarterly basis as

follows:	PERIOD END	REPORT DUE
	December 31	January 31
	March 31	April 30
	June 30	July 31
	September 30	October 31

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The contract number **CMA 0212 OIL25** must be included on all Quarterly Sales Reports. Any quarter with zero sales must be reported as zero sales.

FAILURE TO PROVIDE THE REPORTS SPECIFICED IN THE RFQ MAY BE GROUNDS FOR CONTRACT CANCELLATION.

3.3 ADMINISTRATIVE FEE: The Vendor shall pay to the West Virginia Purchasing Division by check, an Administrative Fee of One (1) Percent (1.00% or 0.01) no later than sixty (60) calendar days following the end of each quarter for purchases made by all state or local government agencies within the jurisdiction of the State of West Virginia under West Virginia Contract No.: CMA 0212 OIL25.

This fee is to be included as part of the prices incorporated into this Contract and will begin on the contract start date. The Administrative Fee shall be submitted quarterly and is based on the gross amount of all sales made in the State of West Virginia under the West Virginia Master Agreement No. **CMA 0212 OIL25.**

Payment shall be made by check payable to the "WV Purchasing Division". The West Virginia Contract number CMA 0212 OIL25 must be included on all payments.

Remit Checks To: WV Purchasing Division

2019 Washington Street, East

Charleston, WV 25305 Attn: Purchasing Director

4. CONTRACT AWARD:

- **4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price on all Contract Items. The Contract Must be awarded to the Vendor that provides all Contract Items meeting the required specifications for the lowest overall Grand Total Cost as shown on the Pricing Pages.
- 4.2 Pricing Pages: Vendor should complete the Exhibit_A Pricing Pages by entering the Manufacturer (Column 4), Brand Name (Column 5), Unit Price (Column 7), Vendor Order/Part Number (Column 10), and Vendor Preferred Order size/weight (Column 11), into the correct boxes and complete the vendor information at the bottom of the pricing page. The Exhibit_A Pricing pages are formatted to automatically calculate the Extended Price and Grand Total Cost when the Unit Price is entered. However, it is the vendors responsibility to ensure the calculations for their bid is correct before

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submitting. In the event of an error, the Unit Price Must prevail. The Purchasing Division may correct errors at its discretion. Vendor should complete the Pricing Pages in their entirety as failure to do so may result in Vendor's bids being disqualified.

If submitting in wvOasis, vendor should download the Exhibit_A Pricing pages and complete then upload as an attachment to their bid.

If responding on paper, vendor should download the Exhibit_A Pricing pages, complete, then print and attach with their bid submission.

The Pricing Pages contain a list of the Contract Items and estimated purchase volume. The estimated purchase volume 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.

Vendor should electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document.

5. ORDERING AND PAYMENT:

5.1 Ordering: Vendor Must accept orders through wvOASIS, regular mail, facsimile, e-mail, or any other written form 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. Vendor Must ensure that its on-line ordering system is properly secured prior to processing Agency orders on-line.

Spending Units (Agencies) Should process release orders through WVOasis using Agency delegated release orders (ADO).

Minimum orders Must be \$200.00 and shipped FOB Destination. Orders less than \$200.00 may be obtained by the Agency using proper purchasing procedures.

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

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6. DELIVERY AND RETURN:

6.1 Delivery Time: Vendor Must deliver standard orders within seven (7) calendar days after orders are received (ARO). Vendor Must deliver emergency orders within three (3) calendar days after orders are received. Vendor Must ship all orders in accordance with the above schedule and Must not hold orders until a minimum delivery quantity is met.

<u>DRUMS</u>: All Drums furnished Must be labeled as required by OSHA for hazardous materials. Material Safety Data Sheets (MSDS) Must be furnished in accordance with the 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-refundable pallet.

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 Must be F.O.B. destination to the Agency's location. Vendor Must include the cost of standard order delivery charges in its bid pricing/discount 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 Return of Unacceptable Items:** If the Agency deems the Contract Items to be unacceptable, the Contract Items Must be returned to Vendor at Vendor's expense and with no restocking charge. Vendor Must either make arrangements for the return within five (5) days of being notified that the 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 Must be F.O.B. the Agency's location. The returned product Must either be replaced, or the Agency Must receive a full credit or refund for the purchase price, at the Agency's discretion.

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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 Must not charge a restocking fee if returned products are in a resalable condition. Items Must 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 Must be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- **7.1** The following Must be considered a vendor default under this Contract.
 - **7.1.1** Failure to provide Contract Items in accordance with the requirements contained herein.
 - **7.1.2** Failure to comply with other specifications and requirements contained herein.
 - **7.1.3** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - **7.1.4** Failure to remedy deficient performance upon request.
- **7.2** The following remedies Must be available to Agency upon default.
 - **7.2.1** Immediate cancellation of the Contract.
 - **7.2.2** Immediate cancellation of one or more release orders issued under this Contract.
 - **7.2.3** Any other remedies available in law or equity.

8. MISCELLANEOUS:

- **8.1 No Substitutions:** Vendor Must supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- **8.2 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.

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- **8.3 Reports:** Vendor Must 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 Must 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.
- **8.4 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.

IONI L. BOYD
972-438-0563
BIDS@NCH.COM



CERTIFIED ADVANCED LUBRICATION **TECHNOLOGY**



- **International Company Established 1949**
- **Global Manufacturing Facilities**
- **Extensive Laboratory Research & Development**
- **Rigid Quality Control**

GREASE































PREMALUBE™& PREMALUBE™RED

Heavy Duty Multi-Purpose Grease

NLGI #3: Heavy-duty Aluminum Complex Grease specifically formulated for isolation, plug & production valves. Operating temperatures from 0°F to 275°F (-17°C to 135°C) continuous and up to 400°F (204°C) intermittent.

NLGI #2: Heavy-duty Aluminum Complex Grease specifically formulated for construction and heavy industrial equipment. Designed to handle harsh environments. Will save downtime, labor costs, and parts replacement. From 0°F to 275°F (-17°C to 135°C) continuous and up to 400°F (204°C) intermittent.

NLGI #1: Winter-Grade version of Premalube. Designed for easier pumpability in cold temperatures from -20°F to 275°F (-29°C to 135°C) continuous, intermittent up to 400°F (204°C).

PREMALUBE ELITE™ RED "0", "00", "000"

Liquid Grease with the Same Heavy-Duty Additive Package as the Premalube Red Solid Lubricant, Giving it Exceptional Anti-Wear Properties.

Excellent for Applications Requiring a Pourable Grease.

NLGI #0 & #00: Operating Temperature from -30°F to 275°F (-34°C to 135°C) continuous, intermittent up to 400°F (204°C).

NLGI #000: Operating Temperature from -35°F to 275°F (-37°C to 135°C) continuous, intermittent up to 400°F (204°C).

PREMALUBE™ XTREME &

PREMALUBE™ XTREME GREEN

Extreme Duty, Multi-Purpose, Synthetic Blend Grease NLGI #2: Extreme duty Calcium Sulfonate grease specifically formulated for construction and heavy industrial equipment. From -10°F to 400°F (-23°C to 204°C) continuous, intermittent up to 500°F (260°C). Patent #5,126,062. (Calcium Sulfonate base recommended by Caterpillar.)

NLGI #1: Winter-Grade version of Premalube Xtreme. Designed for easier pumpability in cold temperatures from -20°F to 400°F (-29°C to 204°C) continuous, intermittent up to 500°F (260°C). *Green version is recommended for marine applications.

ARCTIC PREMALUBE™

Extreme Pressure, Low Temperature, Heavy Load, Synthetic Blend Aluminum Complex Grease

NLGI #1: Synthetic blend low temperature grease for arctic temperatures. Resists rust, corrosion and water washout, and protects metal better than clay-thickened or calcium soap greases. From -45°F to 350°F (-43°C to 176°C) continuous, intermittent up to 400°F (204°C).

ARCTIC PREMALUBE ELITE™RED "000"

Extreme Pressure, Low Temperature, Heavy Load, Synthetic Blend Aluminum Complex Red Grease.

NLGI #000: Synthetic blend low temperature grease for arctic temperatures. Resists rust, corrosion and water washout, and protects metal better than clay-thickened or calcium soap greases. From -40°F to 300°F (-40°C to 148°C) continuous, intermittent up to 400°F (204°C).

COURIER'

Multi-Purpose High Speed Low Temp Grease

NLGI #2: Calcium 12 Hydroxy Stearate grease designed specifically for high-speed bearings up to 55,000 rpm. From -60°F to 200°F (93°C) continuous, intermittent up to 250°F (121°C).

HEAT SHIELD

Extreme Temperature Grease

NLGI #2: The only patented grease specifically formulated to protect equipment exposed to extremely high temperatures. Maximum continuous temperature 550°F (288°C), use up to 2000°F (1093°C) intermittently. Patent # 5,126,062.

LITHIPLEX"

Advanced Performance Synthetic Blend Lithium Complex Grease

NLGI #2: From 0°F to 300°F (-17°C to 148°C) continuous, intermittent up to 400°F (204°C).

CERTICAM™ - Walking Cam Lubricant

Provides long-lasting protection and all-season pumpability without the use of harsh solvents. Eliminates vibration, chatter and reduces wear on draglines

BIO-BASED GREASES

ENVIROCAL EAL

Bio-Based Grease made with Greater than 70% Renewable Resources.

NLGI #1 & #2: Operating Temperature -21°F to 302°F (-34°C to 150°C) continuously, and up to 400°F (204°C) intermittently.

ENVIRO PREMALUBE ELITE™ "O", "OO", "OOO"

Bio-Based Grease Made with Greater than 70% Renewable Resources. Excellent for use in Triplex and Quintuplex Pumps.

NLGI #0, #00, & #000 : Operating Temperature -21°F to 302°F (-34°C to 150°C) Continuously, and up to 400°F (204°C) intermittently.

GREASE PURGING COMPOUND

BEARING PURGE

Bearing Purge Compound and Cleaner

The only patented bearing purge compound proven to extend bearing life and improve grease performance. Patent #7,241,723

FOOD-GRADE GREASES

PREMALUBE™ FG

NSF H1, FG Aluminum Complex Grease

NLGI #2 and #1: White Food-Grade Aluminum Complex Grease. From -10°F to 275°F (-23°C to 135°C) continuous, intermittent up to 400°F (204°C).

PREMALUBE™ XTREME FOOD-GRADE

NSF H1, White, Extreme Load & Pressure, High Temperature FG Grease

NLGI #2: Extreme duty Calcium Sulfonate food-grade grease specifically formulated for equipment requiring an NSF H1 grease. From -10°F to 400°F (-23°C to 204°C) continuous, intermittent up to 500°F (260°C). Patent #5,126,062.

PUREPLEX[™]

H1, Extreme Pressure, High Temperature, Clear FG Grease

NLGI #2: Clear, heavy-duty Aluminum Complex food-grade grease specifically formulated for food processing equipment. From 0°F to 275°F (-17°C to 135°C) continuous, intermittent to 400°F (204°C).

THERMA-LUBE™

NSF H1, High Temperature, White FG Grease With PTFE

NLGI #2: Heavy duty, non-melting Bentonite based grease specifically formulated for food processing equipment. From 10°F to 300°F (-12°C to 135°C) continuous, intermittent to 450°F (232°C).



- · Patent Pending
- Reduces Grease Storage Space, 1 Tote = 22.5 Kegs
- NO More Lifting Pumps or Heavy Containers
- Reduces Waste Container Disposal
- Reduces Contamination!
 Container is never opened



MOTOR OILS

SPECTRA™ XTREME CK-4 - (10W30, 15W40*)

Advanced Performance Synthetic Blend Motor Oils Built for Extended **Drilling on Location**

Synthetic blend, multi-grade Diesel or Gasoline motor oil formulated for severe duty and extended drain intervals. Provides superior protection against deposit formation, oil breakdown, parts wear, and loss of compression. Specifically designed to withstand extended idling on location.

STRATA™ XTREME CJ-4

Advanced Performance Full Synthetic Motor Oil

Fully Synthetic, multi-grade Diesel or Gasoline motor oils formulated for severe duty and extended drain intervals. Provide superior protection against deposit formation, oil breakdown, parts wear, and loss of compression.

SPECTRA™ XTREME CK-4 - (5W40*)

Advanced Performance Synthetic Blend Motor Oil

Synthetic blend, multi-grade Diesel or Gasoline motor oils formulated for severe duty and extended drain intervals. Provides superior protection against deposit formation, oil breakdown, parts wear, and loss of compression. *Meets the 2007 engine requirement CJ-4.

SPECTRA™ XTREME D1 - (0W20, 5W30, 5W20)

Advanced Performance Full Synthetic Motor Oil

Fully Synthetic Dexos® Equivalent Motor Oil.

SPECTRA™ NGEO - (15W40) Mid-Ash Natural Gas Engine Oil

Provides a unique detergent/dispersant and antioxidant package to minimize deposits and help keep the engine clean.

15W40 Mid-Ash Natural Gas Engine Oil

Specifically designed for use in Heavy-Duty vehicles. May be used in either stationary engines (including landfill gas) or vehicles running on natural gas.

SAE 40 Mid-Ash & Low-Ash Natural Gas Engine Oil

Specifically designed for use in 2 and 4 cycle stationary compressed natural gas powered engines.

STRATA™ - (10W, 30, 40, & 50) Premium Single Grade Motor Oils

Contains advanced additive packages for added equipment and automotive protection. TBN rating of 10.

STRATA™ PLUS - Advanced Motor Oil Performance Improver

Extends conventional motor oil service by up to 100%. Advanced additive package reduces the formation of acids, lowers blowby of fuel contaminants, protects against rust and corrosion, lowers operating temperatures, and raises TBN of motor oil by 5 points.

HYDRAULIC OILS

ENVIRO HOC™ XTREME EAL

Advanced Performance, Synthetic Blend, EAL Hydraulic Oil ISO 32, 46, 68 EAL certified, single-grade, synthetic blend hydraulic oil specifically formulated for VGP compliance.

ENVIRO HOC™ XTREME EAL PG

Environmentally Acceptable Hydraulic Oil ISO 32, 46, 68

EAL formula, single-grade, full synthetic hydraulic oil specifically formulated for Maritime Applications and VGP compliance.

HI-TOP™ BIO - Biodegradable Hydraulic Oils ISO 32, 46, & 68

Designed for applications where incidental environmental contact is likely.

HI-TOP™ - (10W30) Multi-Viscosity Advanced Performance Hydraulic Oil

Designed for straight hydraulic systems on construction equipment. Extends oil change intervals, reduces inventory by replacing ISO 32, 46, 68, and 100, helps prevent leaking seals, controls water, and performs down to -30°F.

HI-TOP™ FG - NSF H1, Food-Grade Hydraulic Oils ISO 32, 46, 68, & 100

Food-grade hydraulic oils specifically formulated for food processing equipment.

HOC™ - Premium Single Grade Hydraulic Oils ISO 100, 150, & 220

Designed to meet the heavy mechanical demands of hydraulic systems.

HOC™ XTREME - Premium Single Grade Hydraulic Oils ISO 22, 32, 46, & 68

Designed to meet the heavy mechanical demands of hydraulic systems.

LUBRA-LIFT™ - Patented Hydraulic Oil Improver

Patented formula enhances performance, reduces leakage, and extends service life of new and used construction equipment hydraulic oils by up to 1,400 hours. Patent # 5,700,765

LUBRA-MATE™ FR - Non-Flammable Hydraulic Oil ISO 46

Non-flammable hydraulic oil specifically designed for construction and heavy industrial equipment.

LUBRA-TORQUE™ PLUS - Universal Transmission Hydraulic Fluid Improver

Provides 18 separate additives to boost a universal torque fluid's existing additive package and improve overall equipment performance.

OIL-ALL™ XTREME - Universal Transmission Hydraulic Fluid

A heavy-duty torque fluid for universal hydraulic systems formulated for the extreme operating conditions of construction equipment. Provides the advantages of a transmission fluid, a hydraulic oil, and a wet brake application all in one.

*For zinc-free hydraulic oil see Industrial Oils

SPECTRA™ XTREME ARCTIC 32 - Premium All Seasons Synthetic Blend

Hydraulic Oil, ISO 32

Provides superior protection against leaking seals, contaminants, pump wear, and erratic operation in arctic climates. Specifically formulated for construction, mining, and heavy industrial equipment.

SPECTRA™ MV NZ - Multi-Viscosity, Zinc-Free Hydraulic Oil,

SAE 5W-20 = ISO 32/46

Specifically formulated for construction, mining, and heavy industrial equipment.

RADIATOR & HEAT TRANSFER OILS

COOL-FLUSH™

Cooling System Cleaner and Flush

Removes scale, rust and corrosion, silica gel, phosphate sludge, oil, and dirt throughout the cooling system. Lowers operating temperature of construction equipment. Will not damage systems.

COOL-PLUS™

Cooling System Performance Additive

Designed to improve construction equipment cooling system performance. Extends coolant life, helps prevent electrolysis, controls corrosion, prevents overheating, and contains a synthetic lubricant package to protect water pumps and hoses.

PYRO-THERM™ ASP

Extended Life Heat Transfer Fluid

Specifically designed for use in circulating hot oil systems. Open System Temp to 600°F (315°C). Closed Loop System Temp to 650°F (343°C)

PYRO-THERM™ 600 FG

Food Grade Extended Life Heat Transfer Oil

Specifically designed for use in circulating hot oil systems. From -5°F to 500°F (-20°C to 260°C) continuous, intermittent up to 600°F (315°C)

PYRO-THERM™ XT

Synthetic, Extreme Temperature Heat Transfer Oil

Specifically designed for use in circulating hot oil systems. Operating temperatures from -70°F to 650°F (-56 to 343°C).

PYRO-THERM™ CLX

Heat Transfer Fluid System Cleaner

Specifically designed for use in circulating hot oil systems

RAD-COOL™ 50/50 & RAD-COOL™ 60/40 (FOR EXTREME COLD WEATHER CLIMATES)

Single Coolant/Antifreeze for All Heavy-Duty and Automotive Vehicles

RTU, SCA Pre-charged formula that contains Nitrite for superior wet sleeve liner cavitation protection. Compatible with all coolants that meet ASTM D6210, TMC RP-329, automotive and heavy-duty engine manufacturer's specifications.

GEAR & TRANSMISSION OILS

CERTOP™ - (80W90, 85W140) Multi-Viscosity, High Performance Gear Oils

Designed specifically to handle heavy loads in construction, automotive, and some industrial equipment. A superior additive package eliminates dry starts, helps prevent leaking seals, and functions well in wet conditions.

CERTOP™ INDUSTRIAL - Advanced Performance Power End Lubricants & Bearing Oils ISO 68, 150, 220, 320, 460, 680

Heavy-duty gear and bearing oils specifically formulated for heavy industrial equipment. Regularly extends service intervals by 3-4x.

CERTOP™ SYNTHETIC INDUSTRIAL - Advanced Performance Synthetic Power End Lubricants and Bearing Oils ISO 68, 150, 220, 320, 460, & 680

Heavy-duty synthetic gear and bearing oils specifically formulated for heavy industrial equipment. Regularly extends service interval 3-4x.

CERTOP™ SN - (75W90, 80W140, 75W140) Synthetic Multi-Viscosity Gear Oils, Eaton Roadranger Approved

Synthetic Multi-Viscosity Gear Oils Superior performance in high and low temperature applications. Formulated for Eaton, Dana Shaes, and Spicer for extended drain intervals and warranty.

GEAR-UP® PLUS - Premium Gear Oil Additive

Uses the same technology found in CERTOP to dramatically improve the useful life and performance of conventional gear oils in construction equipment.

CERTOP™ FG - 90 (ISO 220) & 140 (ISO 460) NSF H1,

Premium FG Gear & Bearing Oils

Food-grade gear and bearing oils specifically formulated to solve problems with food-processing equipment.

BIO-GEAR ISO 220 - Heavy-Duty Biodegradable Gear Oil

Designed for construction and industrial equipment applications where incidental environmental contact is likely.

ENVIRO CERTOP XTREME EAL PG - Full Synthetic EAL PG Environmentally Acceptable Gear & Bearing Oil ISO 100, 150, 200

VGP Compliant formula Specifically for the Maritime Industry.

ATF - Premium Automatic Transmission Fluid

Special additive package provides superior protection against wear, moisture, corrosion, sludge and gum deposits, and leaking seals.

SYNTHETIC SAE 50 TRANSMISSION LUBRICANT - Eaton Roadranger Equivalent

Transmission oil specifically formulated for Eaton Fuller PS 164 transmission specifications.

SPECTRA XTREME MG TO-4 ALL SEASONS - Year Round, Synthetic Blend, Multi-Grade, Heavy Duty off-Highway Transmission Fluid

Formulated to meet Allison C-4, Caterpillar T0-4 TDTO, Euclid, Terex, Dresser, Komatsu KES 07.868.1, Tremac/TTC, ZF Power Shift TE-ML 07F, 03C

SPECTRA XTREME MG ARCTIC TO-4 - Year Round, Synthetic Blend, Multi-Grade, Heavy Duty off-Highway Transmission Fluid

Formulated to meet Allison C-4, Caterpillar T0-4 TDT0 & 0W-20, Euclid, Terex, Dresser, Komatsu KES 07.868.1, Tremac/TTC, ZF Power Shift TE-ML 07F, 03C

TO-4 TRANSMISSION OIL - Advanced Performance SAE 10W, 30, & 50 Transmission oil specifically formulated for Caterpillar TO-4 TDTO oil specification

TORQUE-GLIDE™ - Synthetic, Long Drain, Automatic Transmission Fluid Heavy duty formulated for exceptional all weather performance in extreme temperatures. Formulated to meet both Allison TES-295 and TES-389.

UNIVERSAL ATF™ - Universal Synthetic Automatic Transmission Fluid Formulated to meet Allison TES 389, C-4, DEXRON®* II, III and VI, MAN 339 Type F, MERCON®* V, SP and LV, MOPAR AS68RC ATF, ZF TE-ML-14B, 16L and 17C

COMPRESSOR OILS

FIVE-FLO®

Multi-Grade Reciprocating Compressor Oil

Replaces and outperforms SAE 40 and 50 single grade oils.

SYNCOM"

(SAE 10, 20, & 30) Premium Synthetic Oils for Rotary or Reciprocating Compressors Synthetic diester technology will extend oil drain intervals and improve performance.

TWIN-LUBE™

Multi-Grade Rotary Air-Compressor Lubricant with Molysol™

5W-20 (ISO 22, 32, 46)

Heavy-duty ashless, zinc-free compressor oil specifically formulated for rotary compressors.

VPO™

Vacuum Pump & Refrigerant Oil (ISO 68)

Highly refined oil for vacuum pumps, refrigerant, and ammonia systems.

INDUSTRIAL OIL

FLOWLUBE™

NSF General Purpose Lubricant, ANSI/NSF 60

Specifically formulated to withstand decomposition while protecting against rust and oxidation

MULTOIL™ (WITH MOLYSOL™)

(5W-20, 10W-40) Zinc Free Hydraulic, Turbine, & Bearing Oil

Excellent lubricant for hand-oiled or reservoir-fed machines, motors, bearings, chains, and many other applications.

S.O.C.™ 10

ISO 10 Spindle Oil

Low viscosity oil for lubrication of machine spindles rotating in excess of 3,600 rpm.

WAY LUBRICANT

Way Lubricant (ISO 68 & 220)

Compounded with additives to improve film strength, reduce the coefficient of friction, and assure adhesion to machine tool slideways.

METAL WORKING FLUIDS

LONG-LIFE™ 20/20 PLUS

Super Synthetic, Multi-Purpose Metalworking Fluid

100% Synthetic coolant designed to work in high speed, high temperature operations.

LONG-LIFE™ 3500 PLUS

High Lubricity, Heavy-Duty Metalworking Fluid

100% Synthetic coolant designed to handle high speeds and heavy load operations.

LONG-LIFE™ 4400

Semi-Synthetic, Heavy-Duty Metalworking Fluid

Specially formulated for moderate to high-speed machining with heavy chip load.

LONG-LIFE™ 6100 PLUS

Low Foaming Water Soluble Coolant

Highly effective cooling action prolongs tool life and improves work quality.

LONG-LIFE™ HD-9100

Heavy-Duty Coolant

Combines lubrication and cooling action, mixes with water and oil and is effective at the highest speeds and feeds.

AEROSOL & SPECIALTY LUBRICANTS



ANTI-SEIZE

LOK-CEASE 20/20® - NSF H1, Anti-Seize High Temperature Compound

High performance Anti-Seize for Use on Fluid Ends New non-staining white formula provides superior protection against seizing, galling, rust, and corrosion for nuts, screws, fittings, and other metal parts. Works in temperatures up to 2300°F.

LOK-CEASE® BRUSHTOP & AEROSOL - High Temperature, Anti-Seize Lubricating Compound

High Performance Anti-Seize for Use on Fluid Ends Works long after other anti-seize and lubricating compounds have worn away and hardened.

CHAIN & CABLE LUBRICANTS

CERTI-ROPE WRD - Chain and Cable Lubricant

Specialty chain & cable dressing for mining industry.

CCX-77™ - Chain and Cable Lubricant

Lubrication penetrates to the core to provide continual protection to critical stress areas, protects against rust and corrosion, clings to chains and cables to eliminate sling off, and forms a durable outer barrier between the chain or cable and the elements. Available in bulk only.

CCX-97™ AEROSOL & BULK - Clear Penetrating Chain and Cable Lubricant

New clear formula allows for easier inspection of chains and cables. Molysol™ lubrication penetrates to the core to provide continual protection to critical stress areas, protects against rust and corrosion, clings to chains and cables to eliminate sling off, and forms a durable outer barrier between the chain or cable and the elements. Also available in bulk.

CHAINMASTER™ AEROSOL - Synthetic, Extreme Temperature Chain & Cable Oil

Penetrates, lubricates, and protects in extreme temperatures to increase chain, cable, and wire rope life. Protects from -30°F to 530°F. Also available in bulk.

CHAINMASTER™ FG & FG XT - Heavy-Duty Aerosol Chain and Cable Lubricant

Penetrates, lubricates, and protects in extreme temperatures to increase chain, cable, and wire rope life. Protects from -30°F to 500°F continuous, intermittent up to 700°F.

ENVIRO X-433™ EAL BULK- Environmentally Acceptable Chain and Cable Lubricant with Moly

Contains Moly and dries to a smooth film that penetrates and coats to lubricate friction points and protects against rust and corrosion. Effective up to 225°F.

PENTRAFOAM™ AEROSOL - Penetrating, Heavy-Duty Aerosol Chain and Cable Lubricant

Foaming lubricant that penetrates to extend chain and cable life.

SPIROIL™ - Low Temperature, Food-Grade, Spiral Freezer Ball Rail Chain, Gear, and Hydraulic Oil Synthetic Food-Grade formula provides superior anti-wear and corrosion protection in extreme low temperature, humid environments. From -80°F to 462°.

X-433[™] AEROSOL - Moly Chain and Cable Lubricant

Contains Moly and dries to a smooth film that penetrates and coats to lubricate friction points and protects against rust and corrosion. Effective up to 225°F. Also available in bulk.

CUTTING FLUIDS

KOOL-SPRAY™ - Multi-Purpose, Extreme Pressure Cutting Fluid

All in one formula combines cooling action with lubrication to provide superior performance on even the most difficult operations and hardest metals.

KOOL-SPRAY™ HD AEROSOL - Heavy-Duty Cutting Fluid for Extreme Applications

Advanced formula provides increased lubricity and cooling for low speed, high pressure operations, and hard-to-machine metals. Cherry scent.

DRY FILM & MOLD RELEASE

ACCEL™ AEROSOL - M1, Silicone Mold Release Agent

Excellent for use as a mold release agent. Effective up to 500°F.

DRI-LUBE™ PLUS AEROSOL - Molybdenum Disulfide Dry Lubricant

Long lasting moly lubricant spray that withstands heavy loads and pressures. Dries to a non-transferable lubricant that protects against moisture, abrasive particles, rust, and corrosion. Effective up to 750°F.

TEL-X™ PLUS AEROSOL - Dry Film Lubricant and Release Agent With PTFE

Excellent lubricant and release agent for a variety of uses where a smooth, quick drying, slick surface is needed. Effective up to 500°F.

ENGINE STARTING FLUID

QWIK-START™ AEROSOL - Starting Fluid for Diesel and Gasoline Engines

Faster, smoother starts in all sizes of diesel and gasoline

FLUSHING OIL

SYSTEM PURGE™ - Advanced Technology Flushing Oil

Dissolves deposits, neutralizes acids, and cleans metal surfaces to reduce operating temperatures, hydraulic pressure spikes, and system wear.

GENERAL PURPOSE

ANDROIL™AEROSOL - H1, Food-Grade Machinery Oil

Simply a better general purpose lubricant for food processing and industrial applications. Quickly penetrates into chains, cables, and other hard to reach areas.

NP-1™AEROSOL - Clear Gel Lubricant

Ultra-versatile heavy-duty clear gel penetrates and lubricates.

GREASE

PREMALUBE™ RED AEROSOL - Aluminum Complex NLGI #2 Aerosol Grease

Our heavy-duty performance construction equipment grease for use where you need a #2 grease but have no grease fittings. Same properties as bulk PREMALUBE RED. Sprays like an aerosol, sets to a #2 grease!

PREMALUBE™ XTREME GREEN AEROSOL -

Calcium Sulfonate Aerosol Grease

Excellent general lubricant to reduce friction, wear, and noise on fine parts, equipment, and mechanisms.

PREMALUBE™ WHITE AEROSOL - NSF H1,

Aluminum Complex NLGI #2 Aerosol Grease
Excellent white assembly grease for food processing
equipment with all of the same great properties as our bulk

RESOLVE™ AEROSOL - NSF H1, Food-Grade Lubricant

Thin, clear lubricant film that won't sling off or break down even in water, steam, or under heavy loads.

PENETRANTS

FREE® WITH MOLY AEROSOL - Penetrant and Release Agent with Moly

The best penetrant and release agent on the market! Works immediately to penetrate rust, grease, sludge, and corrosion. Penetrates deeply to free even countersunk bolts. Leaves a long-lasting moly film to prevent rust and seizure of parts.

BOLT-OFF™ PLUS AEROSOL - Penetrant and Release Agent

Formula loosens rusted bolts, nuts, and fittings in seconds, preventing breakage. Protects against future rust, corrosion, and wear, leaving nuts and bolts in reusable condition. This product is not classified as a flammable or extremely flammable aerosol under regulation 16 CFR Part 1500.45.

SPECIAL PURPOSE LUBRICANTS

HOLD-FAST™ PLUS AEROSOL - Belt Conditioner

Reduces belt slippage as it protects and extends belt life.

HI-GEAR™ 20/20 - Synthetic Lithium Complex Open-Gear Grease

Cleaner non-staining base stays in place, provides protection against rust and corrosion while forming a protective barrier cushioning impact in-between meshing gears. Available in caulking tubes and bulk.

LUBE-TRAC® AEROSOL - Aerosol Open-Gear Lubricant

Super-tacky formula forms a strong adhesive film immediately upon application to eliminate bare spots on gears. Contains Molysol™ for solid film lubrication even when all oil is forced out. Effective up to 250°F.

HI-GEAR™ PLUS - Sprayable Open-Gear Lubricant

Sprayable Moly-CR™ open-gear lubricant prolongs equipment life by protecting against extreme pressure, rust, and corrosion. Strong adhesion ensures even coverage, maximum protection, and prevents water washout. Effective up to 200°F intermittently. Available in bulk only.

BULK DISPENSING SYSTEM

Maria Syrican

SEALED, CONTAMINANT FREE TOTE WITH EVERY SWITCH

No more bulk containers with water & sludge build-up

LOW COST, HIGH PERFORMANCE EQUIPMENT

• Graco® Oil Pumps – Precise dispensing, no waste

SIMPLE, EFFICIENT SYSTEM

- Convenient tote mounted or remote mounted reels & nozzles
- Portable Easy to move within shop or to new shop locations

NEVER RUN OUT OF OIL AND FLUIDS

- · Back-up totes easily stored for emergencies
- Local representative monitors inventory



VALUE ADDED SERVICES



OIL ANALYSI

80% of maintenance technicians change oil too early or too late. Changing oil too early wastes money on oil, filters, and labor. Changing oil too late can lead to deposit build-up and costly equipment repairs. The best way to determine when to accurately change oil is through oil analysis.

FUEL ANALYSIS

Helps save money by allowing managers to easily monitor the condition of their diesel fuel and storage tanks. Analyzes bacteria, fungi, water contamination, and base cetane level.

LURRICATION PLANT SURVEY

Identifies opportunities to reduce lubricant consumption, consolidate lubricant inventory, reduce parts repair and replacement costs, and lower lubricant related downtime.

LUBRICATION TRAINING SEMINARS

Designed for maintenance personnel; Training modules review General Lubrication, Grease, Gear & Transmission Oil, Hydraulic Fluid, Motor Oil, Oil Analysis, Fuel Quality Assurance, and OSHA Safety.

FOUIPMENT RELIABILITY PROPOSA

Based on the plant survey, a detailed report is provided with specific recommendations for increased equipment reliability and projected cost savings.

CASE STUDY & COST SAVINGS RESULTS

A case study documents actual savings by measuring energy consumption, operating temperature, line pressure, and system wear on selected equipment before and after purging the system, and adding advanced performance lubricants.

VALUE RECOGNITION REPORT

A Value Recognition Report (VRR) will be provided each year that documents actual savings generated by using Certified Labs products and services. The average savings realized in the first 12 months alone is over 20%1

ON-SITE RELIABILITY AUDITS

Certified Labs supports "Continuous Improvement" by performing on-site reliability audits each year to identify and implement additional lubricant related cost savings.

HCSS™ EQUIPMENT MAINTENANCE SOFTWARE

Web-based proactive maintenance software that is perfect for organizing, monitoring, analyzing, and scheduling maintenance.

CERTIF - I.D - BULK OIL TAGGING PROGRAM

CUSTOM, RELIABILTY BASED ASSET & LUBRICATION TAGGING PROGRAM

- Designed to Meet your Specific Needs
- Fully Customizable
- Easily Organize & Label your Assets, Lubrication Application & Storage
- Product Information Readily Available On-Demand
- Helps to Eliminate Lubrication Cross Contamination
- Helps to Eliminate Equipment Misfills



FUEL QUALITY

Maintaining quality diesel fuel requires a full program and at Certified Labs...

WE INVENTED THAT PROGRAM!

STEP 1

Quarterly testing of your on-site storage tanks for water content, biological growth, cetane levels, cloud point, CFPP, pour point, and biodiesel.

STEP 2

Installation of our Solar Direct Inject Pump that will deliver an accurate dilution of our diesel fuel additive Diesel-Mate All Seasons, during your fuel deliveries without any dedicated human resource. That means you will receive fuel additive every time you receive diesel fuel, worry free.



STEP 3

Our automatic pump will deliver our diesel fuel additive, Diesel-Mate All Seasons, which prevents severe operating problems caused by today's poor quality fuel.

STEP 4

We will provide you with our EPA registered fuel biocide if and when you storage tanks test positive for any biological growth; with a 100%, 8 hour kill and a 90 day residual effect. You can be certain your diesel fuel will be clean of any contamination.

STEP 5

Certified's technical sales representatives have extensive training on diesel fuel and will be on site monthly to service the Solar Direct Inject pumps, fluid levels, test results analysis, consultation and to provide Value Recognition reports indicating our performance.

OTHER FUEL QUALITY PRODUCTS

ARCTIC DIESEL-MATE™ - Year Round Diesel Fuel Improver

Year round diesel fuel conditioner designed to improve the performance of on-road, off-road, and marine diesel fuel.

BIO DIESEL-MATE™ - Year Round Biodiesel Fuel Improver

Complete year-round fuel improver for biodiesel up to B20, improves storage stability, boosts cetane, reduces emissions & wear, increases mileage/hours, and lowers fuel gel point. Works in all types of diesel fuel.

DIESEL-MATE™ ALL SEASONS - Year Round Diesel Fuel Improver

Year round diesel fuel conditioner designed to improve the performance of on-road, off-road, and marine diesel fuel.

DZL CLEAN™ - Diesel Fuel System Cleaner

Single application diesel fuel system cleaner designed to improve the performance of on-road, off-road, and marine diesel fuel. Cleans the system of gum, varnish, lacquer, and carbon deposits.

FIRE-UP!™ - Diesel Fuel Cold Flow Improver

Lowers diesel fuel pour point by as much as 40°F (4.4°C) to prevent gelling and to keep fuel flowing in cold weather.

FULL-BLAST™ PLUS - Heating Oil Improver

Advanced performance heating oil improver designed to eliminate furnace fouling and fuel line clogging.

MILE-HI™ - Gasoline Performance Improver

Contains a combination of 8 additives that improve engine performance. Improves combustion, keeps exhaust system cleaner, cleans injectors, prevents corrosive wear, lubricates upper cylinders, eliminates water contaminants, and helps prevent icing.

THAW-OUT™ - Emergency Diesel Fuel De-Icing And Anti-Gelling Agent

For diesel emergencies – immediately de-ices frozen fuel filters and re-liquefies gelled fuel.







LUBRICANT EQUIPMENT

Fuel Additive Injectors

Grease **Pumps**

Oil **Pumps**

Oil **Filtration**

Hose Heels

Grease Guns













Auto Lubrication

BOS Lubrication

10,000 **PSI Digital** Grease Gun

Oil **Containers**

Spill **Containment**











OTHER PRODUCT LINES



- Partswashing
- **Industrial Cleaning**
- **Drains**
- **Grounds Care & Pesticides**
- **Commercial Cleaning**
- **Spill Control**
- **Paint Strippers**
- Patchings, Coatings, Adhesives
- **HVAC**
- Ice Melt

CERTIFIED LABS www.certifiedlabs.com

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Consult the label for complete directions and precautions before using any product.

