

LUBE OILS, ANTIFREEZE AND GREASE BID OPENING 2-25-14	BAUMAN OIL DISTRIBUTORS	MANGO DISTRIBUTING COMPANY	SCHAFFER MANUFACTURING CO	SIEVEKING INC
	1503 Commercial Blvd Herculaneum MO 63048	6918 Front Street Barnhart, MO 63012	102 Barton Street St. Louis, MO 63104	4636 Waldo Ind Dr High Ridge, MO 63049
In emergency, can we call you after regular hours? Y/N	YES	YES	YES	YES
If yes, Name of party to call/Telephone Number:	Bobby Venz 314-550-5770	Tom Denman 314-402-5975	Eric Beasley 314-324-6840	Scott Semar 573-200-3165
<b>HIGHWAY AND FLEET DIVISION</b>				
<b>MOTOR OILS</b>				
<b>15 W 40</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
CONVENTIONAL/SYNTHETIC BLEND	Diesel	Conv.	Synthetic Plus	Conventional
SIZE OF DRUM	55 gal	55 Gallon	55 gal	55 gals.
PRICE PER DRUM	\$420.75	\$426.80	\$961.03	\$481.25
BULK (OUR TANK) PRICE PER GAL	\$7.29	\$7.76	we do have 275 gal tote	\$8.25
<b>10 W 30</b>				
BRAND	Phillips 66	N/A	Schaeffer's	Chevron
CONVENTIONAL/SYNTHETIC BLEND	Synthetic Blend		Synthetic Plus	Syn-B
SIZE OF DRUM	55 gal		55 gal	55 gals.
PRICE PER DRUM	\$409.35		\$950.25	\$649.00
BULK (OUR TANK) PRICE PER GAL	\$6.97		we do have 275 gal tote	\$11.30
<b>5 W 20</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
CONVENTIONAL/SYNTHETIC BLEND	Synthetic Blend	Conv.	Synthetic Plus	Conventional
SIZE OF DRUM	55 gal	55 Gallon	55 gal	55 gals.
PRICE PER DRUM	\$409.35	\$506.00	\$1,108.18	\$420.75
BULK (OUR TANK) PRICE PER GAL	\$6.97	\$9.20	we do have 275 gal tote	\$7.15
<b>5 W 30</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
CONVENTIONAL/SYNTHETIC BLEND	Synthetic Blend	Conv.	Synthetic Plus	Conventional
SIZE OF DRUM	55 gal	55 Gallon	55 gal	55 gals.
PRICE PER DRUM	\$409.35	\$506.00	\$950.25	\$420.75
BULK (OUR TANK) PRICE PER GAL	\$6.97	\$9.20	we do have 275 gal tote	\$7.15
<b>HYDRAULIC/TRANSMISSION OIL</b>				
<b>424 TYPE/UNITRAC HYDRAULIC OIL</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
SIZE OF DRUM	55 gal	55 Gallon	55 gal	55 gals.
PRICE PER DRUM	\$391.65	\$676.50	\$896.90	\$481.25
BULK (OUR TANK) PRICE PER GALLON	\$6.76	\$12.30	we do have 275 gal tote	\$8.25
<b>10 WEIGHT HYDRAULIC OIL</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
SIZE OF DRUM	55 gal	55 Gallon	55 gal dr/410 lbs	55 gals.
PRICE PER DRUM	\$397.64	\$532.40	\$984.41	\$456.50
BULK (OUR TANK) PRICE PER GALLON	\$6.87	\$9.68	we do have 275 gal tote	\$8.30
<b>ATF DEXTRON 6 TRANSMISSION OIL</b>				
BRAND	Phillips 66	Valvoline	Schaeffer's	Chevron
SIZE OF DRUM	55 gal	55 Gallon	\$5 gal/dr 400 lbs	55 gals.

LUBE OILS, ANTIFREEZE AND GREASE	BAUMAN OIL DISTRIBUTORS	MANGO DISTRIBUTING COMPANY	SCHAFFER MANUFACTURING CO	SIEVEKING INC
PRICE PER DRUM	\$613.25	\$881.65	\$1,544.48	\$1,064.25
BULK (OUR TANK) PRICE PER GALLON	\$10.75	\$16.03	we do have 275 gal tote	\$19.35
ANTIFREEZE				
ANTIFREEZE (GREEN)				
BRAND	JD Street	Cardinal (JD Street)	N/A	Chevron
SIZE OF DRUM	55 gal	55 Gallon		55 gals.
PRICE PER DRUM	\$409.85	\$396.00		\$406.45
BULK (OUR TANK) PRICE	\$	\$7.20/gal		\$7.39
ANTIFREEZE EXTENDED LIFE (RED)				
BRAND	JD Street	Zerex	N/A	Chevron
SIZE OF DRUM	55 gal	55 Gallon		55 gals.
PRICE PER DRUM	\$482.83	\$591.80		\$684.75
BULK (OUR TANK) PRICE	\$	\$10.76/gal		\$12.45
ANTIFREEZE EXTENDED LIFE DEXCOOL (ORANGE)				
BRAND	Shell	Zerex	N/A	Chevron
SIZE OF DRUM	55 gal	55 Gallon		55 gals.
PRICE PER DRUM	\$585.75	\$525.25		\$594.00
BULK (OUR TANK) PRICE	\$	\$9.59/gal		\$10.80
ANTIFREEZE EXTENDED LIFE (GOLD)				
BRAND		Coolants Plus	N/A	Chevron
SIZE OF DRUM		55 Gallon		55 gals.
PRICE PER DRUM	\$	\$486.75		\$480.15
BULK (OUR TANK) PRICE	\$	\$8.85/gal		\$8.73
GREASE/GEAR OIL				
80 W 90 GEAR OIL				
BRAND	Phillips	Valvoline		Chevron
SIZE OF DRUM	410 lb	55 Gallon	55 gal/dr 420lbs	55 gals.
PRICE PER DRUM	\$619.10	\$752.40	\$1,327.20	\$575.85
BULK (OUR TANK) PRICE	\$1.46 lb	\$13.68/gal		\$10.47
MULTIPURPOSE GREASE IN TUBES				
# TUBES IN CASE	40	50	30	Chevron-10
PRICE PER CASE	\$94.22	\$143.00	\$105.90	\$27.00
ADDITIONAL NEEDS				
275 GALLON TANK W/AIR DRIVEN PUMP, 75FT. REEL, AND METERED NOZZLE (QTY 3)				
PRICE	\$1,570 plus		Separate Contract From Lubes	N/C
PORTABLE LUBRICANT TANK				
100 GALLON PRICE	See Attached			N/C
200 GALLON PRICE				N/C
PERCENT DISCOUNT OFF OF LIST PRICE ON ANY ADDITIONAL LUBRICANTS, OILS AND FLUIDS NEEDED	5%	10%		3%
AFFIDAVIT COMPLETED	YES	YES	YES	YES
COPY OF INSURANCE PROVIDED	YES	YES	YES	YES
COMMENTS:	See Attached Pricing Sheets	See Attached Product Information Sheets	See Attached Additional Pricing, Product and Company Information	Note on Tanks: As long as county is purchasing lubricants from SieveKing Inc., tanks will be supplied at no charge.



**JEFFERSON COUNTY  
DEPARTMENT OF ADMINISTRATIVE SERVICES  
729 MAPLE ST / PO BOX 100  
HILLSBORO MO 63050  
WWW.JEFFCOMO.ORG**

**Invitation for Bid: LUBE OILS, ANTIFREEZE AND  
GREASE 2014**

**Date Issued: 1-17-14**

BIDS SHALL BE ACCEPTED UNTIL: FEBRUARY 25, 2014, AT 2:00 P.M. LOCAL TIME.

**Specification  
Contact:**  
JASON JONAS  
Department of Public Works  
636-797-5369

**Contract  
Contact:**  
VICKIE PRATT  
Department of Administrative Services  
636-797-5382

**Mail (3) Three  
Complete Copies  
With Vendor And  
Bid Information As  
Shown In Sample:**

**Contract Term:  
UPON APPROVAL OF THE  
COUNTY COUNCIL AND  
COUNTY EXECUTIVE**

**Vendor  
Information:**

SAMPLE ENVELOPE

<i>VENDOR NAME</i>	
<i>VENDOR ADDRESS</i>	
<i>CONTACT NUMBER</i>	<b>DEPARTMENT OF THE COUNTY CLERK</b>
	<b>JEFFERSON COUNTY MISSOURI</b>
	<b>729 MAPLE ST / PO BOX 100</b>
	<b>HILLSBORO MO 63050-0100</b>
SEALED BID: (BID NAME)	

The undersigned certifies that he/she has the authority to bind this company in an agreement/contract to supply the commodity or service in accordance with all terms, conditions, and pricing specified. This Bid, if accepted, will constitute an Agreement and Contract with Jefferson County, Missouri, upon approval of the County Council and County Executive. Prices are firm during this agreement term, unless agreed upon in writing by the County. The County has the option to renew this agreement at the same terms and conditions as the original agreement for one additional one-year term with the written consent of the successful Bidder. Price increases for renewals are not authorized unless approved in writing by the County.

Bauman Oil Distributors, Inc.

Paul F. Bauman

Company Name

Authorized Agent (Print)

1503 Commercial Blvd

Address

Signature

Herculaneum, MO 63048

President

City/State/Zip Code

Title

(636) 937-3412

2/21/2014 / 43-1213984

Telephone #

Date Tax ID #

[pfbauaman@baumanoil.com](mailto:pfbauaman@baumanoil.com)

(636) 937-1446

E-mail

Fax #

Mid-South Steel Products, Inc  
PO Box 277 - 2071 Corporate Circle  
Cape Girardeau, MO 63703  
1-800-325-8658 Fax: 1-573-335-0824

# Sales Quotation



**Bauman Oil**

Attn: Bobby Venz

P.O. Box 3

Herculaneum

636-937-3412

636-937-1446 fax



MO 63048

[www.midsouthsteel.com](http://www.midsouthsteel.com)

Date

1/22/2014

Quote Expires on:

2/6/2014

Quote Number: 007661

Item #	Part #	Description	Price	Qty	Extend
1	OV275	275 gallon oil tank, oval (obround "basement") with hose reel bracket 28"W x 44"H x 60"L x 14 ga. Painted primer grey and black for finish coat.	\$475.00	2	\$950.00
2	347120	Samson heavy duty 5:1 air operated oil pump instead of the standard 3:1 pump. 3/4" outlet.	\$534.00	2	\$1,068.00
3	2199	Samson preset electronic meter control handle. Allows setting dispense volume and results in an automatic shutoff. 1/2" inlet.	\$477.00	2	\$954.00
4	7575	Samson heavy duty spring rewind reel complete with 1/2" x 75' dispensing hose for oil. Inlet 3/4", outlet 1/2"	\$785.00	2	\$1,570.00
5	1390	Mounting brackets for attaching hose reels to steel I-beam. One set of two brackets, two sets equal four brackets.	\$42.00	2	\$84.00
6	984	Samson high capacity 3/8" filter, regulator, lubricator, gauge combo.	\$159.00	2	\$318.00
7	906	Hose connect kit and fittings from pump to hose reel.	\$106.00	2	\$212.00
8	179MCI-2100-1C	(M) 2" black CI fillcap/vent, male NPT, hinged & lockable.	\$12.00	2	\$24.00
9	184-3400-1P	1" cast iron plug for the drain on each end.	\$1.50	2	\$3.00
10	D-275	At-A-Glance 2" tank gauge for 275 gallon basement tank	\$26.00	2	\$52.00
11	FSMM.75x12	Fire shield steel braided flexible hose connector from pipe to each reel. 3/4" x 12"	\$59.00	2	\$118.00
		Subtotal			\$5,353.00
		<b>Optional tanks and hose reel:</b> 300 gallon single wall steel tank 38" X 60" X 14ga., with four 12" wide saddle bracket legs. Includes top bracket for mounting hose reel. Primed grey and choice of white, aluminum, red or black as a finish coat.	\$425.00		\$0.00
12	300SA				
13	7550	Samson heavy duty spring rewind reel complete with 3/4" X 50' dispensing hose for oil. Inlet 3/4", outlet 3/4"	\$807.00		\$0.00
		<b>These two items are not included in the bid total.</b>			

Item #	Part #	Description	Price	Qty	Extend
14	Installation	<p>Scope of work:</p> <ol style="list-style-type: none"> <li>1. Mid-South Steel (MSS) technicians to load tanks and equipment, travel to site.</li> <li>2. MSS to dress out tanks at the maintenance shed. Put into position at the respective I-beam support columns at the access doors on each side of the building (north and south).</li> <li>3. MSS mount each hose reel approximately eight (8) feet above floor level.</li> <li>4. MSS to plumb oil pump to hose reel using 3/4" galvanized pipe and a 3/4" flex hose.</li> <li>5. MSS to attach 3/8" x 5' hose to air line installed by others. 3/8" MNPT threads.</li> <li>6. MSS to test equipment with oil supplied by others. Check for leaks.</li> <li>7. MSS to clean up debris remaining from this equipment installation.</li> </ol> <p><b>Note: Copper air line for each tank must be installed by others prior to arrival of MSS technicians.</b>  <b>Also, customer is to supply a forklift or backhoe to offload the tanks and set in place.</b></p>	\$2,852.00	1	\$2,852.00

I accept the terms and conditions as shown on the back of this quotation.

Signed: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Terms: 1% 10 days, Net 30 days

**Total \$8,205.00**

Plus - Applicable taxes and freight

Signed Dennis Wessel 01-22-14  
 Dennis Wessel QUOTE # 607661



**JEFFERSON COUNTY**  
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**Contact:**

**JASON JONAS**

Department of Public Works  
636-797-5369

**Contract**

**Contact:**

**VICKIE PRATT**

Department of Administrative Services  
636-797-5382

**Mail (3) Three Complete Copies With Vendor And Bid Information As Shown In Sample:**

**SAMPLE ENVELOPE**

*VENDOR NAME*

*VENDOR ADDRESS*

*CONTACT NUMBER*

**DEPARTMENT OF THE COUNTY CLERK**

**JEFFERSON COUNTY MISSOURI**

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**HILLSBORO MO 63050-0100**

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**Vendor Information:**

MARCO DISTRIBUTING COMPANY

Company Name

Tom Denman

Authorized Agent (Print)

6918 FRONT STREET

Address

Tom Denman

Signature

BALTIMORE, MO 63012

City/State/Zip Code

GENERAL MANAGER

Title

(636) 464-2121

Telephone #

2-20-14 MO: 10523472  
FEB: 43-1056729

Date

Tax ID #

tommy.d@hsail.com

E-mail

(636) 464-8535

Fax #

# Product Information

A PRODUCT OF VALVOLINE, A DIVISION OF ASHLAND INC.



## Valvoline™ All-Fleet Plus™ Engine Oil

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

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

### Approvals/Formulated to Meet Performance

API CJ-4, CI-4, CH-4, CG-4	15W40	10W30					
API CF	15W40	10W30	10W	20W	30	40	50
API CF-2			10W	20W	30	40	50
API SM	15W-40	10W30					
API SF					30	40	50
ACEA E9/E7-08	15W40						
CATERPILLAR	15W40#	10W30#					
CUMMINS (CES 20081/20078)	15W40##	10W30##					
DETROIT DIESEL	15W40**						
DEUTZ DQC III-10 LA	15W-40^						
MACK EO-O PP-07	15W40	10W-30					
MB p228.31	15W-40^						
NAVISTAR	15W40						
ALLISON C-4	15W40^		10W^				
VOLVO VDS-4	15W40	10W-30			30^		

Typical Properties	15W-40	10W-30	10W	20W	30	40	50
Gravity, degree API	29.5	31.1	31.5	30.4	29.7	29.3	27.8
Specific Gravity, 15 C	0.879	0.870	0.868	0.874	0.878	0.880	0.888
Viscosity @ 40 C, cSt	117	80	37	52	87	138	204
Viscosity @ 100 C, cSt	15.2	11.9	6.4	8.0	11.0	14.6	20.0
Viscosity Index	135	143	122	122	113	105	113
CCS Viscosity, cP	6600@-20	6600@-25	6800@-25	8000@-15	-----	-----	-----
HTHS Viscosity, cP	4.2	3.5	-----	-----	3.7	>3.7	>3.7
Borderline Pumping Viscosity	Pass	Pass	Pass	Pass	-----	-----	-----
Pour Point, deg. C	-30	-33	-36	-30	-24	-21	-18
Total Base Number (D-2896)	9	10	7	7	7	7	7
Sulfated Ash, %	1.0	1.0	0.8	0.8	0.8	0.8	0.8
Zinc, wt %	0.127	0.127	0.126	0.126	0.126	0.126	0.126

### Part Numbers

Bulk	VV3850	VV3820	VV3900	VV3920	VV3930	VV3980	VV4010
55 Gallon Drum	VV385	VV382	VV390		VV393	VV398	VV401
5 Gallon Plastic Pail	VV386		VV391		VV395	VV400	
1 Gallon Jug	773634				773635		
12/1 Quart	VV388				VV396		

\* Two-Stroke engines only.

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

# Meets Caterpillar ECF-3 and older Specification Requirements

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

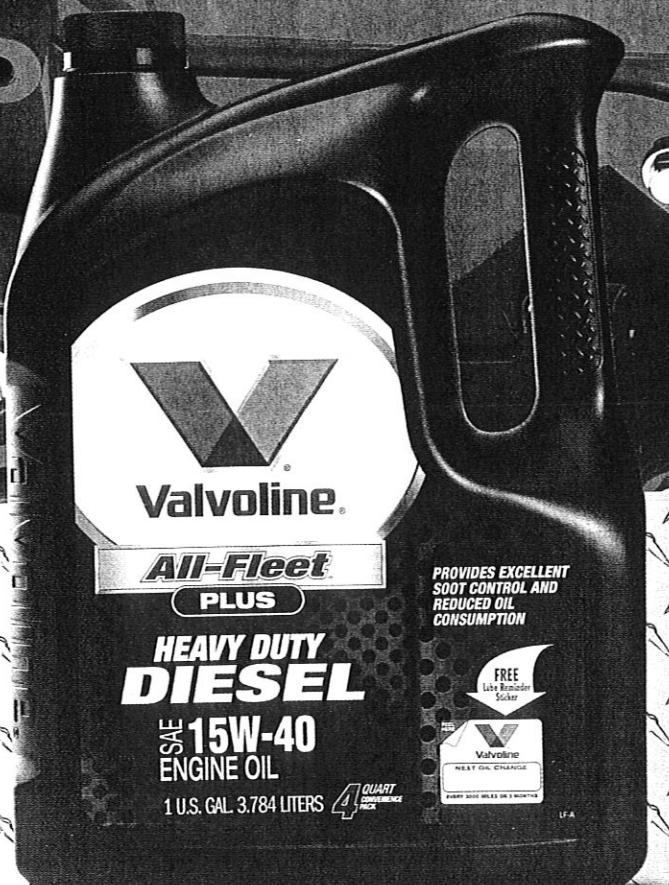
^ Meets the performance requirements of

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

ASHLAND

# ALL-FLEET™ PLUS ENGINE OIL

**ISX15C** Cummins



## Overview:

All-Fleet Plus delivers value-added performance in combination with Valvoline protection for fleets that need a great all-purpose engine oil.

All-Fleet Plus uses premium basestocks to provide optimum performance across a broad spectrum of diesel engines. Its additive package is designed to operate under a wide variety of service conditions, including engines equipped with Exhaust Gas Recirculation (EGR) and/or Diesel Particulate Filter (DPF), NOx Absorber Catalysts and Selective Catalytic Reduction (SCR). It works equally well in turbocharged or naturally-aspirated two- and four-cycle diesel engines.

Valvoline's All-Fleet Plus engine oil is API CJ-4 licensed and approved for Cummins CES 20081, Mack EO-O PP07, Volvo VDS-4, DDC 93K218 and Caterpillar ECF-1,2 &3. Using All-Fleet Plus diesel engine oil is permissible under engine warranties from all major OEMs.

It provides excellent performance and value in local stop-and-go routes, on- and off-highway, farm, construction and mining applications.

## Product Features And Benefits:

Valvoline's All-Fleet Plus engine oil offers benefits to equipment owners today – along with a positive environmental impact for years to come.

Feature	Benefit
High temperature piston deposit control	Prevents piston deposits, loss of performance and fuel economy degradation
Anti-foaming agents	Protects against boundary wear in metal parts
Dispersive Polymer Technology	Resists soot clumping and oil thickening
Oxidation inhibitors	Helps prevent viscosity increase
Strong shear stability	Maintains additive strength for the full duration of the drain cycle interval, protecting against valve train wear and acidic corrosion
Sludge deposit inhibitors	Prevents oil filter restriction

Please contact your local Valvoline representative or Valvoline Customer Service at 1-800 TEAM-VAL.

	15W-40	10W-30
<b>Bulk</b>	VV3850	W3820
<b>DRUM</b>	V385	W382
<b>5 GAL PAIL</b>	W386	—
<b>3/1 GAL</b>	W388	—



Visit us at [www.valvolinehd.com](http://www.valvolinehd.com) or call us at **1-800-354-9061**.  
Learn more about all of our full line of Off-Road, On-Highway and Industrial products at [www.valvolinehd.com](http://www.valvolinehd.com) or phone 1-800 354-9061 to put the Valvoline Advantage PERFORMANCE and PROTECTION to work for you.



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Schaeffer Manufacturing Co. Eric M. Beasley  
Company Name Authorized Agent (Print)

162 Barton Street Eric M. Beasley  
Address Signature

Saint Louis, MO 63104 Account Manager  
City/State/Zip Code Title

(806) 325-9962 2-20-14 43-0501920  
Telephone # Date Tax ID #

Eric.SchaefferOil@gmail.com (800) 553-0072  
E-mail Fax #



Good people. Great products.



**ERIC BEASLEY**  
Account Manager  
Direct: 314-324-6840

102 Barton Street  
St. Louis, MO 63104

1-800-325-9962

[www.schaefferoil.com](http://www.schaefferoil.com)  
Eric.SchaefferOil@gmail

Company: Schaeffer Mfg. Company  
102 Barton St.  
St. Louis, MO 63104

A/R Name: Debbie Bollmann  
A/R Phone: 314-865-4100  
A/R Fax: 314-865-4107

Remittance Address:

Schaeffer Mfg. Company  
Dept. 3518 P.O. Box 790100  
St. Louis, MO 63179-0100

Website: [www.schaefferoil.com](http://www.schaefferoil.com)

Email: [dbollmann@schaefleroil.com](mailto:dbollmann@schaefleroil.com)  
Terms: 1% 10 Net 30  
Fed ID # : 43-0501920      Corporation  
DUNS # : 00-627-1308      4A1 Rating  
NAICS Code: 324191  
SIC codes 2992  
Commodity code # 1512

SINCE 1839



## SPECIALIZED LUBRICANTS

Good people. Great products.

- Agriculture
- Fuel Jobbers
- Trucking
- Industrial
- Power Plants
- Manufacturing
- Excavating
- Construction
- Metal Working
- Machining
- Food Processing
- School Districts
- Government
- Automotive Repair & More...

*"The oldest and proven superior, via lowest total owning and operating cost, oil, lubricants, fuel additive, and surfactant's*

*manufacturer in the United States"*



- Engine Oils
- Fuel Additives
- Transmission & Drivetrain Fluids
- Gear Lubricants
- Hydraulic Fluids
- Metal Working Fluids
- Industrial Oils
- Open Gear, Wire & Thread Fluids
- Non-Staining Textile Oils
- Food Grade Lubricants
- Surfactants, Spreader Stickers & Soil Conditioners
- Specialty Products

*Call me for a free presentation and I will show you how you can lower your operating cost!*

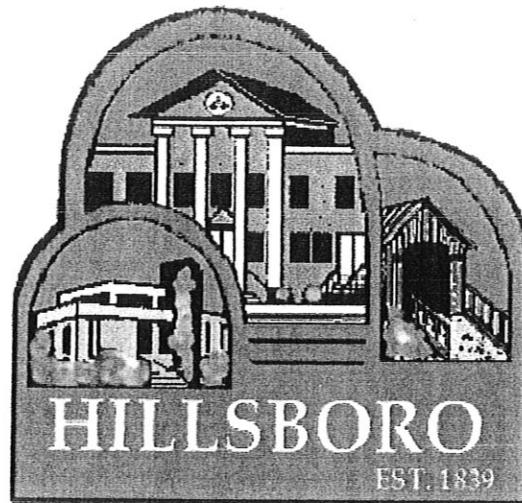


**Eric Beasley**

**314-324-6840**

Eric.SchaefferOil@gmail.com  
www.SchaefferOil.com





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**LUBRICANT PROPOSAL  
FOR  
JEFFERSON COUNTY, MISSOURI**

**Schaeffer Mfg. Company**

**February 21, 2014**

**Eric Beasley**

This is a confidential document intended for the use of Schaeffer Manufacturing Company and Jefferson County, Missouri. Use of this document by unauthorized persons is prohibited.

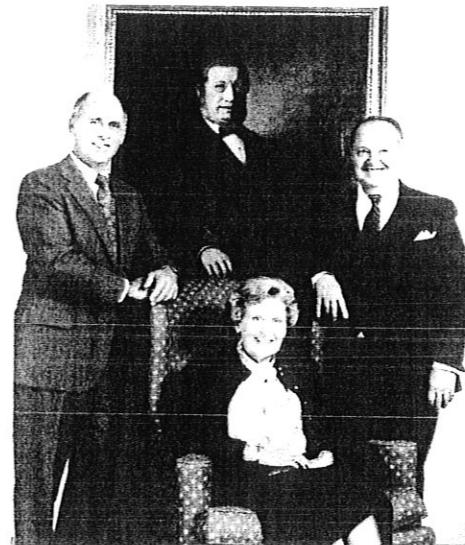
# Proposal for Jefferson County, Missouri

## Scope

This document outlines a proposal by Schaeffer Manufacturing Co. to Jefferson County, Missouri regarding the use of superior quality lubricants to reduce overall operating cost in their police car and service vehicle fleet.

## About the Company

Nicholas Schaeffer established Schaeffer Manufacturing Company in 1839. The company is a family owned, privately held, Missouri Corporation with headquarters in St. Louis, MO.



Today, as a manufacturer of superior quality oils, greases, compounds and additives, Schaeffer has over 500 lubrication specialists serving over 40 countries. Schaeffer Manufacturing Company is a GSA contract holder and has a third-party certified ISO 9002 Quality System designed to provide consistency and uniformity in the products we manufacture.

## About our Market

Schaeffer Mfg. Company is a domestic and international supplier to various companies in diverse types of industries. The following is a partial list of our customers by industry:

### **Steel & Aluminum**

USX  
LTV  
Inland Steel  
Alcoa

### **Food Processing**

Kraft Foods  
Leprino Foods  
Sara Lee Bakeries  
Tyson Foods

### **Construction & Aggregate**

Arkansas Lime  
Mississippi Lime  
Unimen Corp.  
Rinker Materials

### **Public Utilities**

KC Power & Light  
Ameren UE  
AEP  
Florida Power

### **Petrochemical Industry**

Shell Oil  
Koch Refining  
Equilon  
Petron Corp.

### **Machining Industry**

Dana Corporation  
Pratt & Whitney  
Master Setco  
Hershey Machine

### **Grain Processing**

Purina Mills  
Cargil  
ADM  
Iowa Beef Packers

### **OEM & Equipment**

Ingersol-Rand  
X-Tek  
Natoli Engineering  
Eaton Corporation

### **Pulp / Paper / Timber**

International Paper  
Boise Cascade  
Stone Container  
Austell Boxboard

### **Manufacturing**

Shaw Carpet Industries  
Michelin Tire Company  
Titan Wheel International  
Hussmann Corporation

### **Power Generation**

Ameren UE  
Delmarva Power  
Nevada Power  
Pacificorp

### **Municipalities / Waste Water**

City of Phoenix Waste Water  
City of Seattle Waste Water  
City of Dallas Sewer Dist.  
City of Portland Waste Water

### **Trucking**

Yuba Trucking Inc.  
Ambest Trucking

### **Racing**

Richard Petty Driving School  
Scott Bloomquist Racing

## **Services Proposal**

In addition to superior quality lubricants, we propose the following services to assist Jefferson County, Missouri in their pursuit of a world-class preventive maintenance system:

### *Oil Analysis Program*

Schaeffer's uses Wear Check as the primary analysis lab for all Regal Beloit plants. These lab services are provided as part of the LUBRICATION MANAGEMENT PROGRAM at no additional charge. The sampling program is designed as a preventive / predictive maintenance tool. Internet reporting insures rapid access to data.



### *Engineering Support*

Schaeffer's engineers and technical support staff will insure that lubricants are used according to manufacturer's specifications and that proper lubricants are recommended for specific applications.

### *Lubrication Seminars*

Seminars conducted on-sight by qualified lubrication specialists will further assist Jefferson County, Missouri in the implementation of the preventive / predictive maintenance program. These seminars are focused on practical, rather than theoretical, lubrication issues. Classes are conducted by STLE Certified Lubrication Specialists and qualify for continuing education credit from the Society of Tribologists and Lubrication Engineers.

### *Supervised Evaluation*

Schaeffer personnel will assist Jefferson County, Missouri in the evaluation of lubrication products. Our commitment is to get the best product in the application to insure maximum efficiency and component life.

### **Product Technical Data**

Technical Data and MSDS information is provided on the web at [www.schaefferoil.com](http://www.schaefferoil.com) for products outlined in this proposal. Material is also available upon request from the local service representative.

## Commodity vs. Superior Performance

Commercial quality industrial lubricants are formulated to meet standard specifications. Schaeffer's products are engineered to outperform commercial lubricants with:

- **Better Base Oils**

Schaeffer utilizes 100% Pure Paraffin petroleum base oils and PAO synthetic stocks to formulate the highest quality lubricants available.

- **Superior Additives**

The additives in Schaeffer's formulas are designed to deliver added protection, especially in severe duty and high contamination environments.

- **Friction Modifiers**

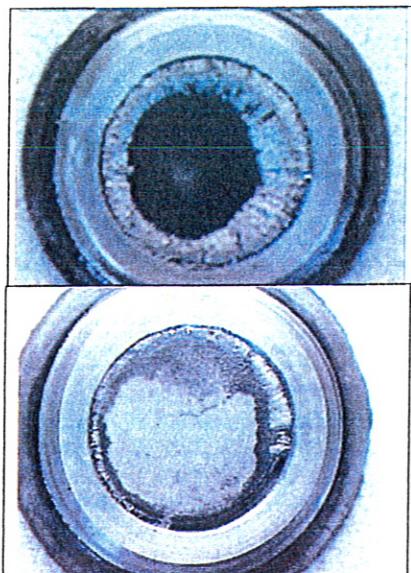
Specialized friction modifiers act as extra protection in hot, wet overloaded applications.

- **Proprietary Technology**

Schaeffer employs 169 years of experience in formulating and blending the highest quality lubricants available.

### Wear Reduction

Schaeffer's products are designed to reduce wear in severe applications. Proprietary additive combinations and superior base oils reduce friction and surface fatigue, while cooling critical components and protecting them from rust, corrosion and oxidation. Schaeffer products are engineered for critical systems and high contamination.



These magnetic plugs show the difference.

The top plug is from a gear differential using a top name brand gear oil. This oil was left in operation for 600 hours.

The bottom plug is from the same piece of equipment after changing to Schaeffer gear oil. This picture was taken after the oil had been in service for 2000 hours.

## **Maintenance Operation**

Bottom Line savings of this type result from 5 key areas in a maintenance operation:

- 1) Lubricant cost – Although the initial purchase price of superior quality petroleum and synthetic based lubricants may be higher than conventional oils, lubricant costs are reduced through extended service intervals and reduced oil consumption.
- 2) Fuel costs – Friction modified oils such as Schaeffer reduce the friction in engines, transmissions and gears. Reducing friction contribute to lower fuel costs. Current studies by leading gasoline and lubricant manufacturers indicate 3 - 5% fuel economy is available through the use of friction modified synthetic based oils.
- 3) Labor costs – Extended drain intervals and reduced engine and component wear reduces labor costs and allows labor to be reallocated to more productive, preventive maintenance tasks. Shop labor rates of \$20 - \$40 dollars per hour are common in today's industrial and commercial marketplace.
- 4) Extended equipment life – Engine, transmission, suspension and power train components last longer and run more efficiently, reducing service and maintenance costs.
- 5) Equipment availability – Fewer oil changes and reduced maintenance provides higher equipment up time.

*Overall Goal is to extend police fleet oil drain intervals to 10,000 miles and gain 3-5% fuel economy.*

*The lube equipment was not included in this bid as each system should be evaluated to best meet our customer's needs.*

### Lubricant Consolidation and Storage

Extended lubrication intervals and fewer products is one of the initial goals of the Schaeffer program. Proper storage and documentation of lubricants insures the quality of the product. Schaeffer's program is designed to insure the products are clean and ready for use. Reducing the number of products in inventory saves money and reduces the chance for cross contamination.



Local Service Representative

A local factory representative, Eric Beasley, will service Jefferson County, Missouri. Please contact him directly at (314) 324-6840 or Eric.SchaefferOil@gmail.com

The products addressed for 2014 Lube Oils, Antifreeze and Grease Bid:

# 700	Supreme 7000 Synthetic Plus	15w-40
# 701	Supreme 7000 Synthetic Plus	10w-30
# 703	Supreme 7000 Synthetic Plus	5w-30
# 9004	Supreme 9000 Full Synthetic	5w-20
# 315	Simplex Supreme	
# 239S	Super Lube Supreme	SAE 10
# 204	SAT All-Trans Supreme	
# 205	Dexron VI	
# 267	Supreme Gear Lube	SAE 80w-90
# 221	Moly Ultra - Multipurpose, extreme pressure grease for hot and wet applications	

APPENDIX A  
Pricing & Terms

**All products are sealed and delivered directly from our Plant to ensure quality and cleanliness.**

Standard payment terms: 1% 10 days, net 30.  
3% Cash With Order discount  
Complete EDI Process Support  
Credit card orders accepted  
All prices include freight for orders over \$375

[www.SchaefferOil.com](http://www.SchaefferOil.com)



## **BOTTOM LINE COST ANALYSIS PROJECTION**

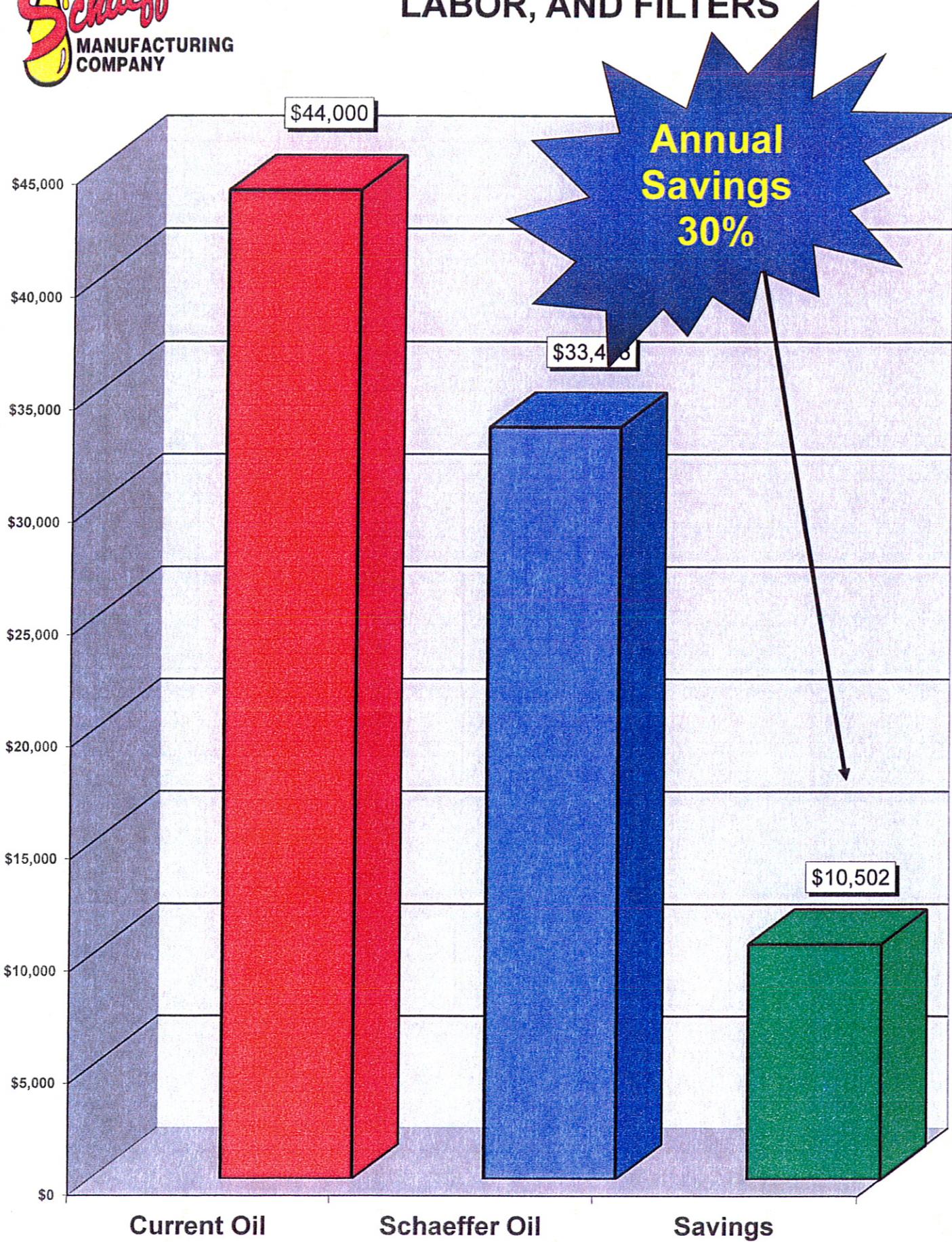
**PREPARED FOR:**

**Jefferson County, MO**

Eric Beasley  
SCHAEFFER MFG. CO.  
21-Fev-2014



## ANNUAL MEASURABLE COST OF OIL, LABOR, AND FILTERS



## Data For Chart Generation

### PER UNIT \$\$\$\$

\$200.00	CURRENT COST/UNIT
\$152.26	SCHAEFFER COST/UNIT
220	# OF UNITS IN FLEET

### TOTAL \$\$\$\$\$

Current Oil	\$44,000
Schaeffer Oil	<u>\$33,498</u>
Savings	\$10,502

**Jefferson County, MO**



## BOTTOM LINE COST ANALYSIS FOR:

MANUFACTURING COMPANY						Cost per gallon	Capacity in gallons	Oil cost per change	Labor cost per change	Change Interval*	Filter Cost	Miles/hours per year	Annual Changes per year	Total cost per change	Total cost per year
CURRENT OIL	XYZ 5w-30	\$10.00	1.5	\$15.00	\$25.00						\$10.00	20,000	4.00	\$50.00	\$200.00
SCHAFFER OIL	Supreme 7000 5w-30	\$17.27	1.5	\$25.91	\$25.00						\$10.00	20,000	2.50	\$60.91	\$152.26

\*Based on oil analysis.

### SCHAFFER OIL

Supreme 7000 5w-30

### TOTAL SAVINGS PER VEHICLE:

\$47.74

### 220 VEHICLE FLEET

### TOTAL FLEET OIL RELATED SAVINGS:

\$10,502.25  
\$18,652.17

### FLEET FUEL SAVINGS AT 3%:

FUEL		
CURRENT MPG/GPH:	23	
CURRENT FUEL COST/Gallon:	\$3.25	
<b>CURRENT FUEL COST/YEAR:</b>	<b>\$621,739.13</b>	

### GRAND TOTAL FLEET SAVINGS:

**\$29,154.42**

### Break-even change interval in miles/hours:

**6090.5**

NOTE: Break-even interval is a function of oil, labor, and filter costs only.

**Savings are hard costs of oil, labor, and filters only.**

Other benefits include:  
Increased parts life.  
Faster cold starts.  
Decreased oil consumption.  
Decreased downtime.  
Increased fuel economy.  
Reduced oil disposal costs.  
More time for enhanced PM.



#### OTHER BENEFITS OF USING SCHAEFFER OIL:

- Increased Equipment Life
- Decreased Operating Temperatures
- Reduced Oil Disposal Costs
- Decreased Oil Consumption
- Decreased Unscheduled Downtime
- Increased Fuel Economy
- More Available Horsepower
- Improved Cold Starts
- Reduced Parts Inventory
- More Time Available to Enhance PM Programs



## BOTTOM LINE COST ANALYSIS FOR:

Cost per gallon	Capacity in gallons	Oil cost per change	Labor cost per change	Change Interval*	Filter Cost	Miles/hours per year	Annual Changes	Total cost per change	Total cost per year
<b>CURRENT OIL</b>									
XYZ 5w-30	<u>\$12.00</u>	1.5	\$18.00	\$25.00	5,000	\$10.00	20,000	4.00	\$53.00

### SCHAFFER OIL

Supreme 7000 5w-30  
\*Based on oil analysis.

### TOTAL SAVINGS PER VEHICLE:

\$90.19

### TOTAL FLEET OIL RELATED SAVINGS:

### FLEET FUEL SAVINGS AT 5%:

\$19,841.80  
\$18,652.17

### GRAND TOTAL FLEET SAVINGS:

**\$38,493.97**

FUEL		
CURRENT MPG/GPH:	23	
CURRENT FUEL COST/Gallon:	\$3.25	
<b>CURRENT FUEL COST/YEAR:</b>	<b>\$621,739.13</b>	

### Break-even change interval in miles/hours: **5745.8**

NOTE: Break-even interval is a function of oil, labor, and filter costs only.

**Savings are hard costs of oil, labor, and filters only.**

Other benefits include:  
Increased parts life.  
Faster cold starts.  
Decreased oil consumption.  
Decreased downtime.  
Increased fuel economy.  
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More time for enhanced PM.



## Jefferson County, MO

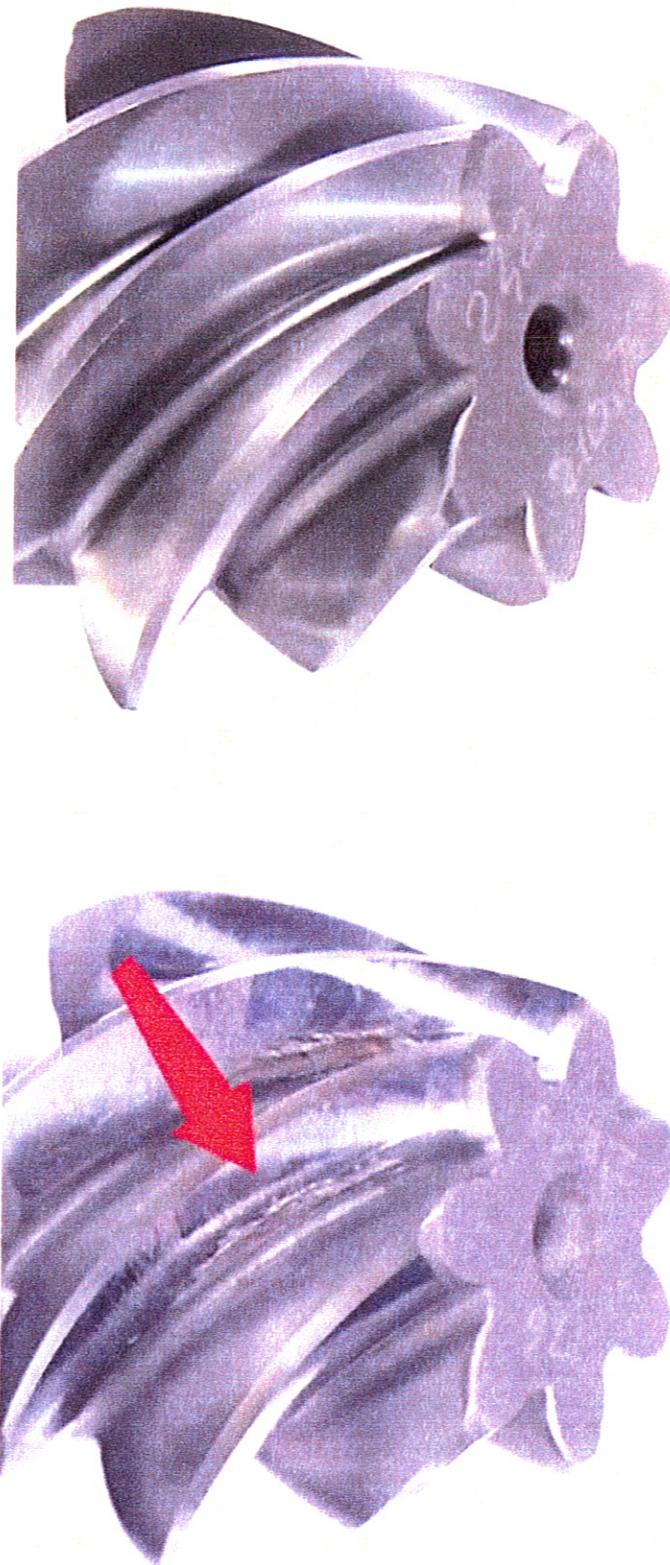
### COST SAVINGS BASED ON THE FOLLOWING DATA:

Current Oil Cost per Gallon	\$10.00
Average Oil Capacity in Gallons	1.5
Labor Rate per Hour*	\$25.00
Required Service Time in Hours	1
Current Change Interval (Hours/Miles)	5000
Total Filters Cost	\$10.00
Annual Operating Hours/Miles	20000
Schaeffer Recommended Change Interval (Hours/Miles)**	8000
Schaeffer Oil Cost per Gallon	\$17.27
Current MPG/GPH	23
Current Fuel Cost per Gallon	\$3.25
Projected Fuel savings	3.00%
Fleet Size	220

Labor Costs Including All Benefits

\*Based on Oil Analysis

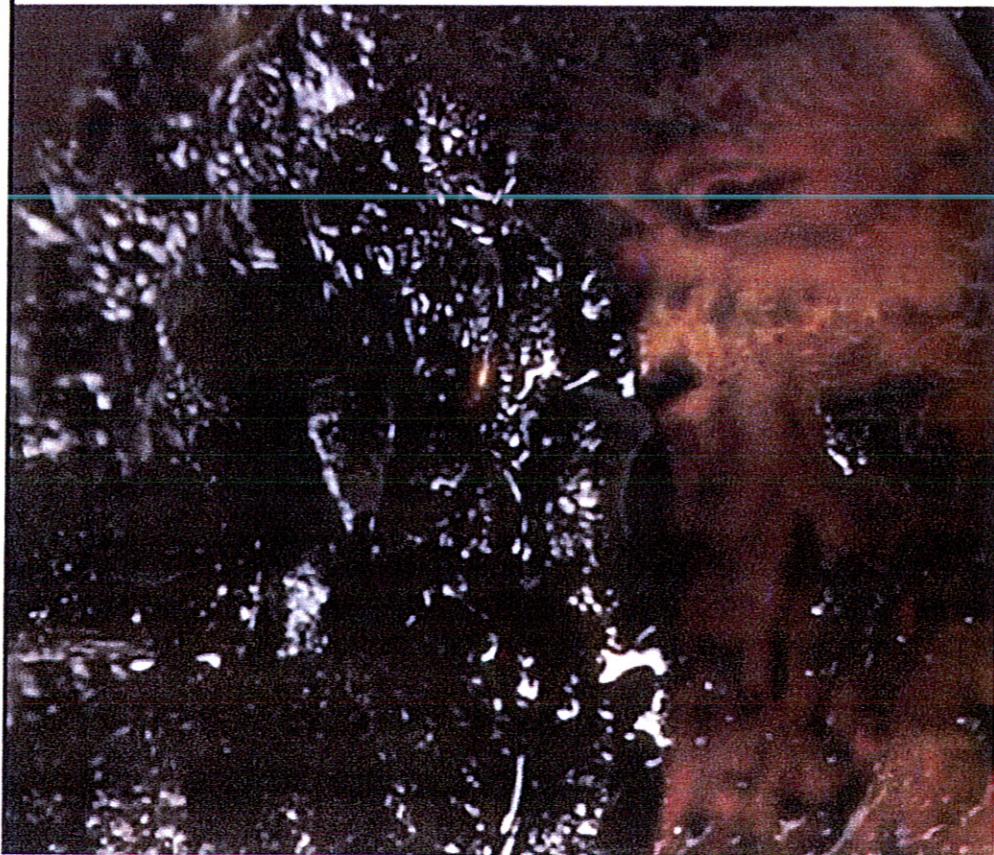
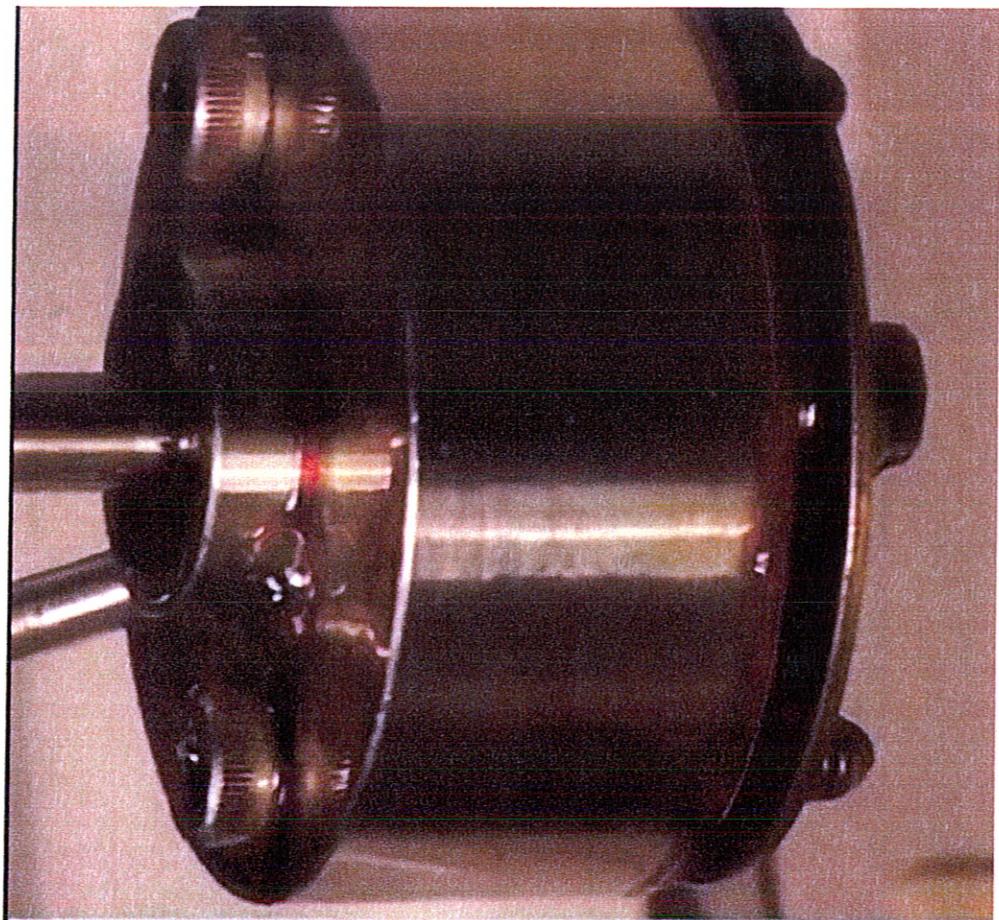
# “Bargain Brands” Can’t Take the Pressure

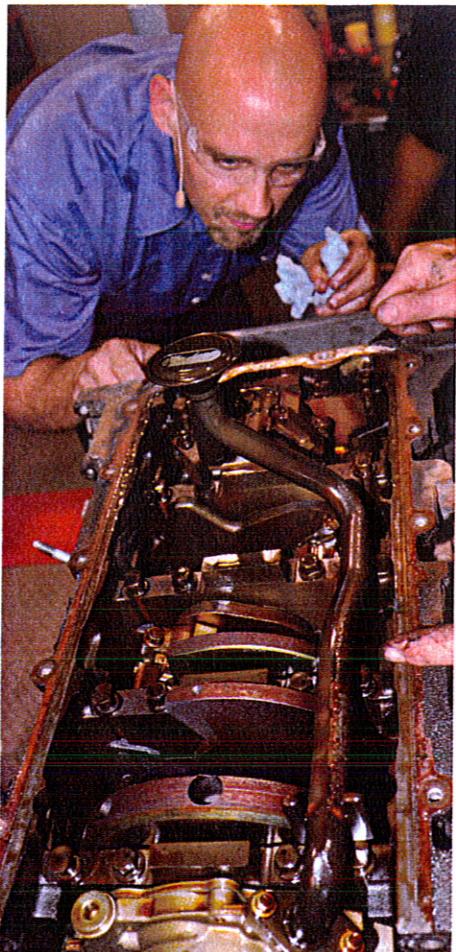


“Bargain Brand”      High Performance Fluid

High Performance Fluid

“Bargain Brand”





# 1000000 MILLION MILE Gasoline Engine

## Security Transport Services

Security Transport Services (STS) in Topeka, KS, provides inmate transportation services throughout the United States. They run a fleet of vans, mainly Ford E150s and E250s with 5.4L gasoline engines, which are typically fitted with 600 lb. cage assemblies. STS has been using Schaeffer products since 1999.

## Reaching the milestone

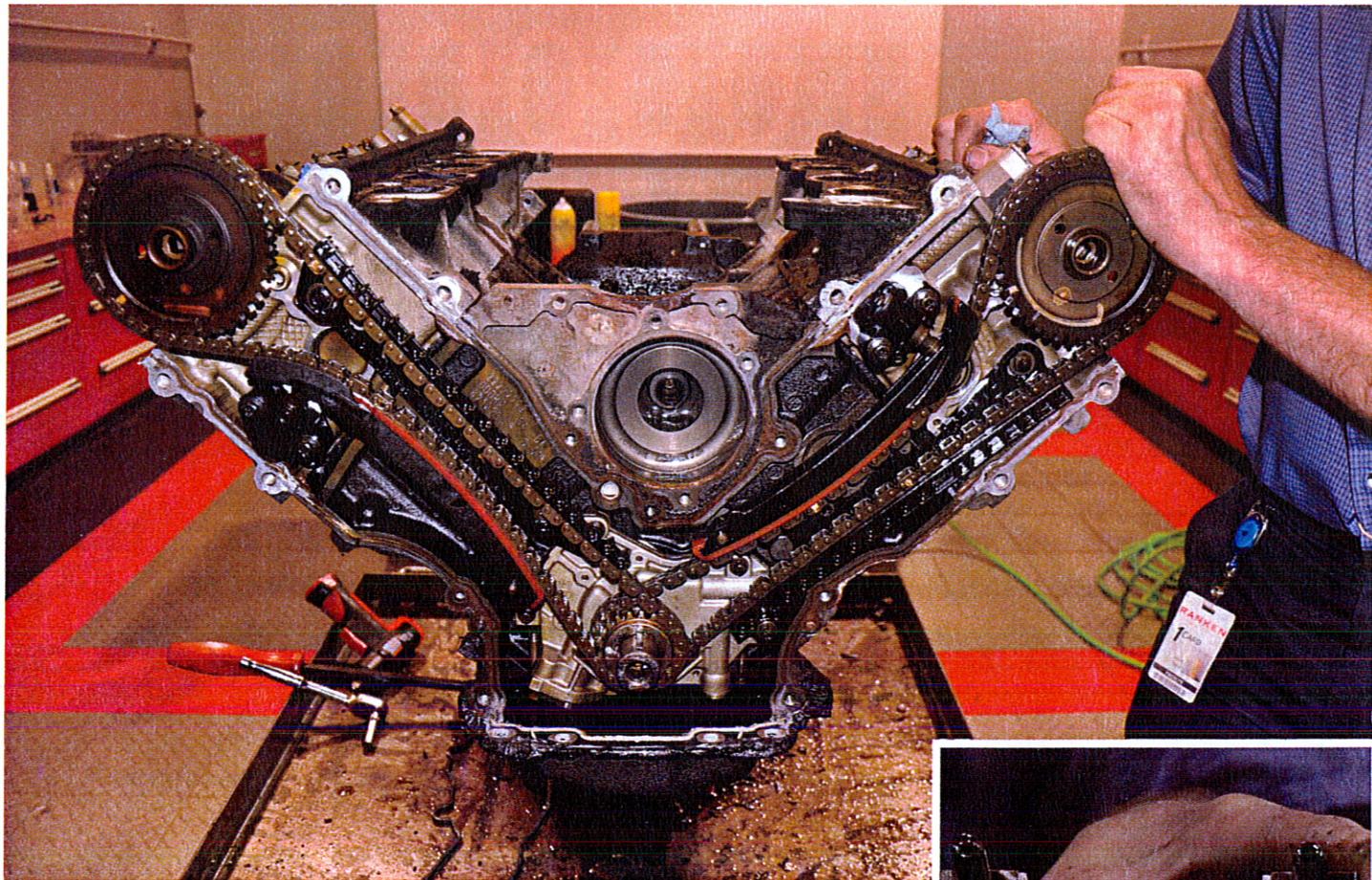
It's not often a gasoline engine reaches a million miles without a major overhaul. When a 2003 F150 van in STS' fleet was within 11 miles of this milestone, Maintenance Director John Pickett and President Tom Braumann knew it was a big deal.

Impressively, the high mileage workhorse never required repairs beyond normal maintenance work (oil and other fluid changes, tire changes and replacing used filters and worn belts). At 500,000 miles, Ford replaced the van's chain tensions per STS' maintenance procedures.

"The van was serviced exclusively with Schaeffer's Supreme 7000™ Synthetic Plus," says Doug Rogers, Schaeffer sales rep. "STS changed the van's oil at 8,000 mile drain intervals. John did a great job of keeping well documented maintenance records and DOT inspections."

By hitting a million miles, Tom and John knew they got a strong return on their investment by using Schaeffer's Oil. Even though the engine was running well, the chassis was starting to show wear. It was time to replace the van, and STS knew Schaeffer would be interested in documenting the major milestone.





"Several years ago, Tom and John worked with Schaeffer on a 500,000 mile van teardown that ran exclusively on our products," says Doug. "With that engine, they were amazed at how clean it was under the valve cover."

### Getting an inside look

Schaeffer took ownership of the million-mile vehicle and worked with Ranken Technical Institute to inspect the engine. "Regardless of the outcome, Ranken agreed to be objective with their findings," says Steve Rober, national sales manager for Schaeffer.

"Their High Performance Racing Technology instructors are recognized leaders in the Midwest, and we value their opinion on all things mechanical."

As it turns out, the experts were shocked at what they saw – a clean engine with minimal wear.

The cylinder wall had minor carbon buildup, and the experts reported no wear on the cylinders. To the expert's surprise, the manufacturer's original numbers inked on the engine's main bearings were still visible.



### Watch the teardown

Visit our YouTube page to see the million-mile gasoline engine teardown:  
[www.youtube.com/user/schaeffervideos](http://www.youtube.com/user/schaeffervideos)



[www.schaefferoil.com](http://www.schaefferoil.com) • (800) 325-9962

SINCE 1839  
  
**Schaeffer's**  
**SPECIALIZED LUBRICANTS**  
 Good people. Great products.



Good people. Great products.

# PRODUCT LINE



## FOR MUNICIPALITIES

**Schaeffer offers the absolute best line of lubricants for all Municipal applications.**

### ENGINE OILS

#### #700 SUPREME 7000™ SYNTHETIC PLUS 15W40 #711 SUPREME 7000™ SYNTHETIC PLUS 10W30

Para-Synthetic, Multi-grade Engine Oil, CJ-4/CI-4/CI-4 Plus/SM, 10-TBN, 1.0% Sulfated Ash, MACK EO-O Premium Plus-07, Detroit Diesel, Powerguard, 93K218, CAT ECF-1--a, ECF-2, ECF-3; Cummins, CES 20081, Volvo VDS-4, ACEA E7-10 & E9-10.

#### #701, #702, #703 SYNTHETIC PLUS

5W-30, 10W-30, 5W20, SAE 30 AND 40, Para Synthetic Engine Oil, SN, Resource Conserving, ILSAC GF-5.

#### #706 SUPREME 7000™ SYNTHETIC PLUS 2-CYCLE TC-W3

Ashless oil for water cooled, 2-cycle engines.

#### #9006 2-CYCLE FULL SYNTHETIC RACING OIL

Recommended for water cooled and air cooled 2-Cycle engines. Meets TC-W3, JASO FC, JASO ISO-L-EGC, JASO ISO-L-EGD AND API TC

#### #9000 SUPREME 9000™ FULL SYNTHETIC ENGINE OIL SAE 5W-40

CJ-4/CI-4/CI-4 Plus/SM, 10-TBN, 1.0% Sulfated Ash, MACK EO-O Premium Plus-07, Detroit Diesel Powerguard, 93K218, CAT ECF-1-a/ECF-2/ECF-3, Cummins CES 20081, Volvo VDS-4, ACEA E7-10 & E9-10 Volkswagen 505.01.

#### #114S SYN. PLUS NAT. GAS ENGINE OIL

SAE 30 and 40, Para-Synthetic, 0.45% ash content. Protects natural gas engines without leaving deposits.

#### #114CNG SYN. PLUS NAT. GAS ENGINE OIL

5W40, Para-Synthetic, 0.6% ash content. For CNG, LNG, LPG powered vehicles. API CF Cummins, CES 200074, Detroit Diesel 93K216, Mack CNC, Volvo CNG, John Deere CNG/LNG.

### GEAR LUBES

#### #214S SUPREME ONE FOR ALL 80W-140

Para-Synthetic, Multi-grade Gear Lube, E.P., GL-5, MIL-PRF-2105-E, SAE J2360, Pour Point -25°F.

#### #293A SUPREME GEAR LUBE NO TACK

75W90, 80W90, ISO 150 AND 220, Para-Synthetic, w/Soluble Moly, E.P., GL-5, MT-1, MIL-PRF-2105-E, SAE J2360 US Steel 224, AGMA 9005-E02 Pour Point -15°F to -20°F.

#### #294A SUPREME GEAR LUBE NO TACK

ISO Grades 320, 460, 680. Extreme Pressure, Para-Synthetic with Soluble Moly.

#### #567 ECOSHIELD™ BIODEGRADABLE EP GEAR OIL

ISO 68 thru 680. Readily biodegradable, environmentally friendly, EP US Steel 224, AGMA 9005-E02.

#### #239S SUPER LUBE SUPREME

SAE 10, 30 & 50. Contains soluble moly. Cat TO-4, Para-synthetic Cat Powershift Transmissions Hydraulics & Cat Final Drives Eaton Road Ranger & Spicer Meritor Transmissions (SAE 50 only), Allison C-4, Komatsu Kes 07.8C2 and 07.868.1.

### TRANSMISSION FLUIDS

#### #204SAT ALL-TRANS SUPREME®

Full Synthetic Multi-vehicle, Dexron III-H / Mercon® / Mercon®. Also Exceeds Allison, TES295 & TES389, Chrysler ATF, JASO A-1 Specs.

#### #205 DEXRON® VI

Full Synthetic ATF. Meets GM Dexron® VI

## HYDRAULIC/TRANSMISSION FLUID

### #204SAT ALL-TRANS SUPREME®

Full Synthetic Multi-vehicle, Dexron III-H / Mercon® / Mercon®. Also Exceeds Allison, TES295 & TES389, Chrysler ATF, JASO A-1 Specs.

### #315 SIMPLEX SUPREME

Universal Tractor Transmission Hydraulic Fluid, Exceeds John Deere, Case-New Holland and most farm tractor specs Para-Synthetic base for higher heat resistance and better cold weather performance. Pour Point to -45°F.

### #275S DI-LEX SUPREME MEHF HYDRAULIC FLUID

Para-synthetic, Multi-grade R&O/Anti-Wear hydraulic fluid for use in hydraulic applications that operate in wide temperature ranges. Contains VarniShield®. Available in ISO 32 and 46 grades.

### #275SW DI-LEX SUPREME MEHF HYDRAULIC FLUID

ISO 15. Same as 275S in Winter Grade. Meets MIL-H-5606A

### #512 ECOSHIELD™ BIODEGRADABLE H.T.C. OIL

Readily biodegradable; Environmentally friendly, Anti-Wear/R&O, Pour Point -28°F, Exceeds Denison HF-O, Eaton / Vickers.

### #515 ECOSHIELD™ BIODEGRADABLE SIMPLEX UTHF

Readily biodegradable. Environmentally friendly, Universal Tractor Hydraulic Fluid. Exceeds John Deere, Case, New Holland and most tractor specs.

## FUEL ADDITIVES

### #137 DIESEL TREAT 2000™ ULTRA LOW SULFUR

One pint treats 125 gal. fuel. Contains SynShield®. Contains less than 15 ppm of Sulfur.

### #137 USLW DIESEL TREAT 2000™ ULTRA LOW SULFUR

WINTER PREMIUM, 1 gal. to 1000 gal. fuel. Flow improver / fuel economy package. Cummins L-10 Superior Performance. Contains SynShield®/Cold Weather storability. Contains less than 15 ppm of Sulfur.

## GREASE

### #238 ULTRA SUPREME

NLGI #1, #2 and #3, Para-Synthetic, Extreme Pressure Grease. Contains extra MoS2 / other solids. Aluminum Complex Base. Meets Cat's 5% Moly Grease Spec. Extra Tacky / Waterproof / Hi-Heat Good up to 350°F.

### #229 ULTRA RED SUPREME GREASE

Para-synthetic, Extreme Pressure Grease Aluminum Complex Base, Extra Tacky, contains synthesized moly. Red color for use where a clean (not black) grease is needed. Water proof / Hi-Heat Good up to 350°F.

### #274 MOLY E.P. SYNTHETIC PLUS GREASE

NLGI #00, #0, #1 and #2 , Para-Synthetic, Extreme Pressure Grease, Aluminum complex base, water proof, Low temperature / pumpable to -35°F. Good up to 350°F.

## SPECIALTY PRODUCTS

### #190 PENETRO 90® PENETRATING OIL

Lubricating & penetrating oil. Designed to unfreeze, lubricate and protect practically anything. Aerosol.

### #266 CITROL® DEGREASER

Biodegradable, heavy-duty, citrus-based degreaser. Dilutes with water up to 15:1. Aerosol.

### #743 SCHAEFFERSEAL™ TIRE SEALANT

Seals punctures of 3/8" inch in any air filled tire. Can be used in high speed, low speed, tubeless or tube type. Water soluble.

## SOIL CONDITIONERS

### #233 WET-SOL® CONCENTRATE

Soil Penetrant. Spreader / Sticker Surfactant. Non-Ionic. 25% Active Ingredient.

### #233G WET-SOL® GRO CONCENTRATE

Same as 233 with enzymes and fermentation products to stimulate microbes and root growth. (Not for use as spreader / sticker.)



Good people. Great products.

102 Barton Street  
St. Louis, MO 63104  
800-325-9962

[www.schaefferoil.com](http://www.schaefferoil.com)



**It's not the Cost to Buy  
It's the Cost to Use**

## **Bottom Line**

### **THE BOTTOM LINE**

Schaeffer's Supreme 7000™ saves oil cost, extends drain intervals on fleet, and prevents motors from being ruined from misuse on Sheriff's patrol vehicles and other county owned vehicles.

### **THE COMPANY**

Fayette County Commission, Fayette County, WV

### **THE STORY**

Dan Pauley, the head mechanic for the Fayette County Commission, believes that he can not operate the county's fleet of over 40 sheriff patrol vehicles and another 40 plus county owned vehicles any cheaper and get such good results. With Schaeffer's #701 Supreme 7000™ 5W-30, he is able to do oil changes on the county vehicles at 7000 or more miles between drain intervals. The police patrol cars go between 5000 and 7000 between oil changes as well. He believes they could easily go longer on the police cars, too, as the oil is not dirty at that point, but likes to have serviced sooner to check the brakes and tires. Occasionally, the county vehicles are brought in for maintenance 14 or 15 thousand OVER their regular change interval. Dan said, "Luckily, we are using good oil that is able to protect the engines even with that kind of neglect".

When they switched to the Schaeffer oil several years back, the deputies noticed better MPG as well. He is able to save money on drain interval, fuel economy, and better engine protection. The local parts store tried to get him to switch back to their generic brand synthetic, but their lowest price per barrel was always over \$100 more than Schaeffer's #701 Supreme 7000™ 5W30.

Fayette County Commission also uses #190 Penetro penetrating oil and #238 Ultra Supreme grease.

In Photo:  
Mechanics Dan (right)  
and Randy (Left) in  
front of one of the over  
40 Patrol cars in their  
county fleet that they  
maintain.



Submitted by Phillip Wine

SL-605-701-WV (02/11)

This case history documents performance of superior quality lubricants in a specific application. It is not a blanket endorsement of any brand of lubricant by the company involved.



It's not the Cost to Buy  
It's the Cost to Use

## Bottom Line

### THE BOTTOM LINE

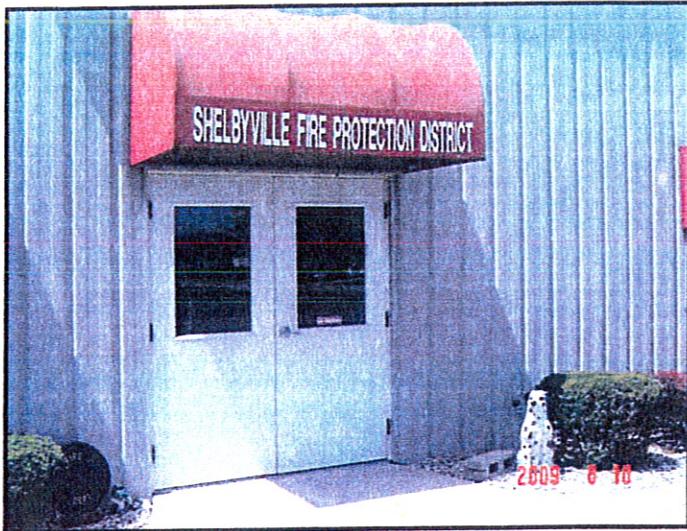
Schaeffer Products Help Fire Department Save Time, Money & LIVES!

### THE COMPANY

Shelbyville Fire Department, Shelbyville, IL

### THE STORY

Brian Litteral is in charge of maintenance of the eight (8) vehicle fleet of the Shelbyville Fire Department. Three years ago, they changed to Schaeffer Supreme 7000 15W-40 in the heavy diesels with 137ND and 10W-30 in the gas vehicles. The gas vehicles have been changed every 9,000 miles, while the heavy diesels have gone two (2) YEARS without an oil change! Brian takes oil samples on the seven (7) units every six months and samples are still clean. Brian states that the use of Schaeffer's saves the city an estimated \$1,800 every year that the oil samples remain clean. Shelbyville is a small community and the fire department averages about 20 calls per month. Brian also stated, **"The extra money we save on maintenance can go towards critical equipment we need that could save a life."**



Submitted By Dusty Wright



SL-605 -700 -IL (0/09)

This case history documents performance of superior quality lubricants in a specific application. It is not a blanket endorsement of any brand of lubricant by the company involved.



It's not the Cost to Buy  
It's the Cost to Use

## Bottom Line

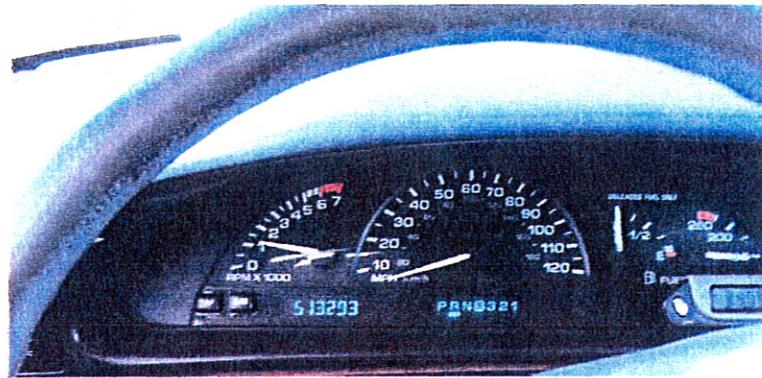
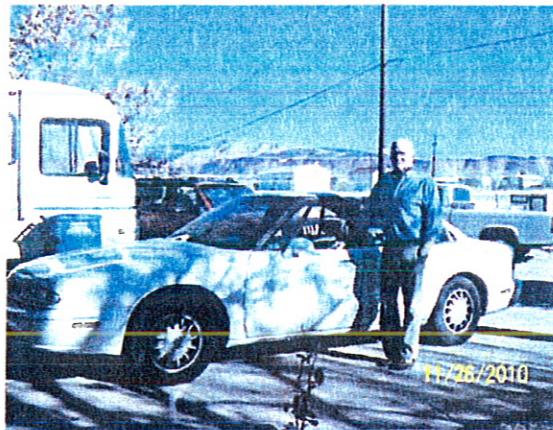
### THE BOTTOM LINE

With the protection of Supreme 7000, a 1997 Olds 88 rolls over to 513,000 miles on the odometer.

### THE STORY

Mike Krycho, a former Schaeffer sales rep, still uses Schaeffer product. When he bought his Olds 88, it had 100,000 miles on the odometer. He immediately changed it over to Supreme 7000. It is still on the road and gets 30 mpg and has over 513,000 on the same engine.

The engine has never had the valve covers off, yet oil consumption is about 1/2 qt. between 10,000 mile oil change intervals. The car has plenty of power and is still driven all over a five state area 3,000 to 4,000 miles per month.



Submitted by Customer, Mike Krycho

SL-709-700-CO (12/2010)

This case history documents performance of superior quality lubricants in a specific application. It is not a blanket endorsement of any brand of lubricant by the company involved.



**It's not the Cost to Buy  
It's the Cost to Use**

## **Bottom Line**

### **THE BOTTOM LINE**

Schaeffer's #9003 Supreme 9000™ Full Synthetic Engine Oil 5W-30 improves gas mileage and saves time and money.

### **THE COMPANY**

Andy's Auto Repair & Welding - Grinnell, IA

### **THE STORY**

Andy's Auto is a full service repair shop, Schaeffer's Extend-It oil change center and a Schaeffer Retailer. Adam Underwood, mechanic at Andy's Auto, has a daily commute of 70 miles round trip. He drives a 1999 Pontiac Grand Prix GTP with a supercharged 3.8L engine. Adam switched his engine oil from Mobil 1 to Schaeffer's #9003 Supreme 9000™ Full Synthetic Engine Oil 5W-30 and through oil analysis went from oil changes every 5,000 miles to oil changes every 12,500. He also adds a can of #131 Neutra™ Fuel Stabilizer to the gas tank when changing the oil. Adam's fuel mileage has improved from 21 to 23.5 mpg since switching to Schaeffer's.

Adam says, "Saving time is great, and like most mechanics, I don't want to spend my time servicing my own car at the end of the day". The real savings comes from the fuel mileage improvement. Since switching to Schaeffer's, Adam is saving 63 gallons of gas for every 12,500 miles he drives. With gas at \$3.19 gallon, that puts around \$200 back in Adam's pocket, plus he's spending less on oil and filters.

The crew at Andy's Auto recommends Schaeffer's Extend-It oil changes and #131 Neutra™ Fuel Stabilizer to all their customers. Andy says, "Our customers are happy with longer drain intervals and better mileage". Adam and Andy use Schaeffer's in all their own vehicles, and in the winter they notice how their cars start easier and run smoother.

Other Schaeffer products Andy's Auto uses are: #705 Supreme 7000™ Synthetic Plus SAE 20W-50 Para-Synthetic Racing Oil, #221 Moly Ultra Extreme Pressure Grease, #190 Penetro 90®, #293 Supreme Gear Lube, & #266 Citrol®. They also retail a wide variety of Schaeffer's Products.



Andy & Adam at Andy's Auto

Submitted by Dan Dykema

This case history documents performance of superior quality lubricants in a specific application. It is not a blanket endorsement of any brand of lubricant by the company involved.

SL-703-9003-IA (11/2012)



# TECHNICAL DATA

102 Barton Street, St. Louis, Missouri 63104

In-State (314) 865-4100/Out of State 800-325-9962/Fax (314) 865-4107 <http://www.schaefferoil.com>

**701 SUPREME 7000 SYNTHETIC PLUS SAE 5W-30**

**703 SUPREME 7000 SYNTHETIC PLUS SAE 10W-30**

**API SN, RESOURCE CONSERVING, ILSAC GF-5**

Supreme 7000 Synthetic Plus gasoline engine oils are a premium quality multi-grade para-synthetic engine oils that are specifically formulated to protect critical engine parts from damaging friction and wear, provide enhanced protection against the formation of sludge and deposits, provide increased engine efficiency and fuel economy benefits and extend engine life in all gasoline fueled automobile and light duty truck engines including those that are turbocharged and supercharged.

Supreme 7000 Synthetic Plus gasoline engine oils are blended from a unique combination of the finest quality severely hydrotreated polyalphaolefin (PAO) synthetic based fluids and solvent refined, and severely raffinate hydroconverted Group II Plus available. This unique combination provides Supreme 7000 Synthetic Plus gasoline engine oils with the following advantages:

- 1. Superior Cold Weather Startability and Operating Characteristics** - This results in less friction and lubricant drag in the engine and instant lubrication during cold weather start up.
- 2. Superior Oxidative Stability** - Any oil as it is increasingly exposed to high temperature operation undergoes the process of oxidation. This results in the oils thickening and the buildup of acidic components. Because of the PAO's and the Group II+ base oil's uniform molecular structure, the process of oxidation is greatly reduced.
- 3. Excellent Resistance to Thermal Degradation**
- 4. Lower Volatility** - This results in reduced oil consumption and a reduction in emissions
- 5. Lower Engine Oil Pumpability at Low Temperature** - This ensures the Supreme 7000 Synthetic Plus gasoline engine oils will pump rapidly and be distributed rapidly at low temperatures, thus providing the optimum protection it needs at low temperature startup
- 6. A High Viscosity Index** - This results in minimum change in viscosity. The adequate viscosity for the proper lubrication of the engine is provided regardless of temperature..
- 7. Excellent Film Strength** - This results in increased protection against wear
- 8. Compatibility with All Types of Seals**
- 9. Extended Oil Drain Capability and Intervals**

Blended into the synthetic blend base stocks is a highly advanced proprietary performance additive package and a highly shear stable viscosity index improver. This combination provides the Supreme 7000 Synthetic Plus gasoline engine oils with the following performance benefits:

- 1. A patented novel zinc anti-wear additive system that minimizes volatility and chemical breakdown of the zinc anti-wear additive in order to provide maximum and long lasting anti-wear performance and robustness needed to protect the engine**
- 2. Outstanding protection against the formation of high temperature deposits**
- 3. High detergency and dispersancy to suppress the formation of deposits, sludge and varnish**
- 4. Active cleaning agents for increased and enhanced engine cleanliness**
- 5. Exceptional protection against the formation of coking deposits on turbochargers**

Continued next page

TD 701, 703 (6/2013)

6. Exceptional protection against thermal breakdown during high engine oil operating temperature conditions
7. Rapid circulation and excellent pumpability
8. Excellent low temperature flow characteristics and pumpability to provide rapid circulation and minimize wear during start-up
9. Excellent resistance to thinning at high temperatures
10. Excellent shear stability to resist viscosity shear down and breakdown
11. Excellent high temperature/high shear performance to provide excellent oil film thickness and engine protection at high operating temperatures and shear rates, while minimizing lubricant frictional resistance
12. Enhanced lubrication to maintain maximum horsepower and acceleration
13. Hydro-Ethanol inhibitors that significantly reduce the problems that can result from the use of ethanol blended fuels
14. Substantially reduced oil consumption
15. Extra protection for hot running engines
16. Extra protection for cold running engines in stop-and-go service.
17. Reduced oil ageing allowing for increased drain intervals
18. A substantial reduction in ring and cylinder wear
19. Reduced bearing wear and increased bearing life
20. Excellent rust and bearing corrosion protection
21. Enhanced vehicle emissions control system compatibility
22. Extended vehicle emissions control system life
23. Increased fuel economy benefits and retention for improved gas mileage during the oil's entire oil drain interval
24. Superior valve train-wear protection
25. Increased engine life
26. Excellent anti-foaming properties

Further blended into these synthetic blend base fluids, the highly advanced proprietary performance additive package and shear stability viscosity index improver are two proven frictional modifiers, Micron Moly®, a liquid soluble type of Moly and Schaeffer Mfg's own proprietary additive Penetro®. These two proven frictional modifiers once plated, form a long lasting slippery tenacious lubricant film, which prevents the metal surfaces from coming into contact with each other. By preventing metal-to-metal contact, damaging frictional wear is prevented from occurring. This prevention of metal-to-metal contact and reduction in wear results in:

- \* Increased fuel economy
- \* A low coefficient of friction
- \* Significantly less bearing, ring, piston, cylinder and valve-train wear
- \* Increased engine efficiency
- \* Increased engine durability
- \* Increased engine life
- \* Less down-time
- \* Reduced maintenance costs

Supreme 7000 Synthetic Plus gasoline engine oils meet and exceed the following specifications and manufacturers' requirements: MIL-PRF-46152E, CID A-A-52039B, API Service Classification SN, Resource Conserving, ILSAC GF-5, Ford WSS-M2C945A (SAE 5W-20), Ford WSS-M2C946-A (SAE 5W-30), Ford WSS-M2C930-A (SAE 5W-20), Ford WSS-M2C929A (SAE 5W-30), General Motors 6094M, Chrysler MS-6395, Chrysler MS-9214.

Typical Properties

SAE Grade	5W-30 (701)	10W-30 (703)
Specific Gravity 60°F (15.6°C)	0.87	0.87
Viscosity @ 40°C, cSt. (ASTM D-445)	47-52	62.00-72.00
Viscosity @ 100°C, cSt. (ASTM D-445)	10.00-12.00	10.00-12.00
HTHS Viscosity 302°F (150°C), cP (ASTM D-4683)	3.1	3.06
Cold Cranking Viscosity @-30°C, cP (ASTM D-5293)	6,200	-----
Cold Cranking Viscosity @-25°C, cP (ASTM D-5293)	-----	4,239
Mini Rotary Viscosity TP1, cP @-35°C (ASTM D-4684)	22,400	
Mini Rotary Viscosity TP-1, cP @-30°C (ASTM D-4684)	-----	14,000
Viscosity Index (ASTM D-2270)	159	150
Flash Point °F (°C) (ASTM D-92)	448° (231°)	444° (229°)
Pour Point °F (°C) (ASTM D-97)	-39° (-38°)	-39° (-38°)
Total Base Number (ASTM D-2896)	7 TO 7.5	7 TO 7.5
Sulfated Ash Content % wt (ASTM D-874)	0.84%	0.84%
NOACK Volatility %Evaporation Loss (ASTM D-5800)	11.06%	11.11%
Foam Test (ASTM D-892)		
Sequence I	0/0	0/0
Sequence II	0/0	0/0
Sequence III	0/0	0/0
Sequence IV	0/0	0/0
High Temperature Foam Test (ASTM D6082 Option A)	0/0	0/0
MHT-4 TEOST (ASTM D-7097)		
Deposit Weight, mg	10	10
TEOST 33C ASTM D-6335)		
Deposit Weight, mg	12.4	12.4
Engine Rusting Ball and Rust Test (ASTM D-6557)		
Average Gray Value	133	133
Sequence IIIG		
% Viscosity increase @ 40°C	130%	130%
Average Cam & Lifter Wear, $\mu\text{m}$	9.8	9.8
% Phosphorous (ASTM D-4951)	0.076	0.076



**SPECIALIZED LUBRICANTS**



## **1. Substance/Product Identification**

**Product Name:** 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20

**Company/Address:** Schaeffer Mfg  
102 Barton Street  
Saint Louis, Missouri 63104  
USA

**Synonyms:**

**Preparation/Revision Date:** 03/08/2011

**Product Use/Type:** Engine oil for gasoline powered vehicles

**Emergency Phone Number:** +1 314 865-4105 (24-hour response number)  
+ 1 314 865-4100 (Business hours 8:30AM-5:00PM)  
1-800-325-9962 (US & Canada)

**Website:** [www.schaefferoil.com](http://www.schaefferoil.com)

**MSDS Number:** 701/703/704 Version 1.0

## **2. Hazards Identification**

**Appearance:** Green color

**Odor:** Petroleum

**Principal Hazards:** Eye, skin and upper respiratory irritation

**Hazardous Materials Information System  
(U.S.A.)**

Health: 1

Fire: 1

Reactivity: 0

**National Fire Protection Agency System  
(U.S.A.)**

Health: 1

Fire: 1

Reactivity: 0

See Section 11 for complete health hazard information

**Product Name: 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20**

### **3. Composition and Information on Ingredients**

#### **Hazardous Ingredients**

Ingredient Name	CAS No.	EU Number	Percentage (by wt.)
Complex Mixture of Petroleum Base Oils	Various	Various	10 – 90
Polyalphaolefin Synthetic Base Fluids	68037-01-4	500-183-1	10 -90
Proprietary Additives - Specific Chemical Identity withheld (trade secret)	Complex Mixture of Chemicals Trade Secret	Complex Mixture of Chemicals Trade Secret	<20
Zinc alkyl dithiophosphate	Trade Secret	Trade Secret	0.4 – 0.85

**The petroleum base oils contained in this product have been highly refined by various processes including severe hydrotreating and hydrocracking to reduce their aromatic content and to improve performance properties. The highly refined petroleum base oils contain <3% w/w DMSO extracts according to the IP 346 Test method and are not considered to be carcinogenic.**

**The complex mixture of petroleum base oils may contain a mixture of the following CAS numbers: 64742-54-7, 64742-46-7, 64742-52-6, 72623-87-1, 72623-86-0, 72623-84-8, 72623-85-9, 178603-63-9, 178603-64-0, 178603-68-1 and 178603-66-2.**

### **4. First Aid Measures**

**Ingestion:** If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.

**Eyes:** Flush eyes with running water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical attention.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

**701 Supreme 7000™ Synthetic Plus SAE 5W-30**

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**704 Supreme 7000™ Synthetic Plus SAE 5W-20**

#### **4. First Aid Measures continued**

**Skin:** To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. Get medical attention if any irritation or redness develops.

**Additional Information:** Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

#### **5. Fire Fighting Measures:**

**Flash Point:** >435°F (>224°C) ASTM D-92 C.O.C Method

**Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Firefighting Procedures:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus

**Unusual Fire & Explosion:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

#### **6. Accidental Release Measures**

**Spill Procedures and Clean up methods:** Eliminate all sources of ignition in vicinity of spilled material. Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Personal Precautions:** Wear appropriate personal protective equipment when cleaning up spills.

**Environmental Precautions:** U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.

**701 Supreme 7000™ Synthetic Plus SAE 5W-30**

**703 Supreme 7000™ Synthetic Plus SAE 10W-30**

**704 Supreme 7000™ Synthetic Plus SAE 5W-20**

## **7. Handling & Storage**

**Handling:** Avoid all contact of product with eyes and skin. Wash thoroughly after handling and before eating, smoking or using toilet facilities. Do not swallow product. Do not inhale vapors or mists. Do not eat, drink or smoke in work areas.

**Storage:** Do not store product at elevated temperatures. Store in a cool dry place that has adequate ventilation. Do not store near food or feed products. Keep containers closed when not in use.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid and/or vapor) and can be dangerous. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity or other sources of ignition. There may explode and cause injury or death. Empty containers should be completely drained, properly closed and promptly returned to a drum reconditioner or disposed of properly.

## **8. Exposure Controls and Personal Protection**

### **Occupational Exposure Limits**

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Complex Mixture of Petroleum Base Oils	5.0 mg/m <sup>3</sup>		5.0 mg/m <sup>3</sup>	
Polyalphaolefin Synthetic Base Fluids	5.0 mg/m <sup>3</sup>		5.0 mg/m <sup>3</sup>	
Zinc alkyl dithiophosphate	NE		NE	

(s)-Skin exposure

(p) proposed limit

(c) – Ceiling limit

(l) Recommended exposure limit

(u) supplier limit

(N/E) – not established

**701 Supreme 7000™ Synthetic Plus SAE 5W-30**

**703 Supreme 7000™ Synthetic Plus SAE 10W-30**

**704 Supreme 7000™ Synthetic Plus SAE 5W-20**

## **8. Exposure Controls and Personal Protection continued**

### **Other Exposure Limits**

**Engineering Controls:** If user operations generate an oil mist, determine if airborne concentrations are below the OSHA Permissible Limit (PEL) of 5 mg/m<sup>3</sup> for mineral oil mist. If not, wear a NIOSH approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

### **Personal Protective Equipment**

**Gloves:** Nitrile or oil resistant gloves

**Protective Clothing:** Wear impervious protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.

**Eye Protection:** Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

**Skin Protection:** Wear impervious protective clothing to prevent skin contact.

**Respiratory Protection:** If user operations generate an oil mist, determine if airborne concentrations are below the OSHA Permissible Limit (PEL) of 5 mg/m<sup>3</sup> or other applicable standards for mineral oil mist. If not, wear a NIOSH approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge

## **9. Physical and Chemical Properties**

**Flash Point:** >435°F (>224°C) ASTM D-92 C.O.C. Method

**Specific Gravity:** 0.85 - 0.88 @ 15°C

**Upper Flammable Limit (UEL):** Not Determined

**Lower Flammable Limit (LEL):** Not Determined

**Vapor Pressure:** Not Determined

**Vapor Density (air =1):** >1

**Percent Volatile:** Negligible

**Evaporation Rate:** Not Determined

**pH:** Not Applicable

**Boiling Point:** >600°F (>315°C)

**Melting Point:** Not Applicable

**Appearance:** Green color

**Odor:** Petroleum

**Solubility in Water:** Negligible

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise specified

**701 Supreme 7000™ Synthetic Plus SAE 5W-30**

**703 Supreme 7000™ Synthetic Plus SAE 10W-30**

**704 Supreme 7000™ Synthetic Plus SAE 5W-20**

**10. Stability and Reactivity**

**Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Materials to Avoid:** Strong acids, bases and oxidizers

**Polymerization:** Not expected to occur during conditions of normal use.

**Thermal Decomposition:** Smoke, a complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

**Conditions to Avoid:** May react with oxygen and strong oxidizing agents, such as chlorates, peroxides, etc.

**11. Toxicological Information:**

**Routes of Exposure:** Skin, eyes, ingestion and inhalation

**Target Organs:** Skin, eyes, upper respiratory tract

**Acute Exposure**

**Ingestion:** Ingestion may cause a laxative effect. This material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.

**Eye Contact:** Slight irritation and redness to eyes

**Skin Contact:** Contact with skin is not expected to cause prolonged or significant irritation

**Inhalation:** Contains synthetic hydrocarbon and petroleum base oils. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

**Dermal Sensitization:** Product may be a dermal sensitizer

**Inhalation Sensitization:** Not expected to be an inhalation sensitizer.

**Carcinogenicity:** This product does not contain any of the chemicals listed on the United States National Toxicology Program Annual Reports on Carcinogens, The International Agency for Cancer Research Monographs and United State's Occupational Safety and Health Administrations 29CFR 1910.10 Subpart Z List. Ames Test: Negative

The highly refined petroleum base oils contain <3% w/w DMSO extracts according to the IP 346 Test method and are not considered to be carcinogenic.

**Additional Toxicological Information:** No data available to indicate the product or any of its components are present at greater than 0.1% are mutagenic, genotoxic or teratogenic

**Product Name: 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20**

**11. Toxicological Information continued:**

**Acute toxicity**

**Petroleum base oils**

**Acute Inhalation Toxicity:** LC50 >5,000 mg/m<sup>3</sup> (rat)

**Acute Oral Toxicity LD50:** >2,000 mg/kg (rat)

**Acute Dermal Toxicity: LD50:** >2,000 mg/kg (rabbit)

**Acute toxicity**

**Polyalphaolefin Synthetic Base Fluids CAS 68037-01-4**

**Acute Oral Toxicity:** LD50 / rat / > 5000 mg/kg / based on data for a similar material.

**Acute Dermal Toxicity:** LD50 / rat / > 2000 mg/kg

**Acute Inhalation Toxicity:** LC50 / not known / based on data for a similar material.

**Proprietary Additives**

**Acute Oral Toxicity:** LD50 / rat / > 2000 mg/kg

**Acute Dermal Toxicity:** LD50 / rat / > 2000 mg/kg

**Acute Inhalation Toxicity:** LC50 /rat/ >200 mg/l (4 hr)

**12. Environmental and Ecological Information**

**Ecotoxicity**

**Petroleum Base Oils**

96 hour(s) / LC50 / Fresh water fish (Oncorhynchus mykiss) / >5,000 mg/l

- 48 hour(s) / EC50 / water flea (Daphnia magna) / >1,000 mg/l

- 96 hour(s) / LC50 / Rainbow trout (Salmo gairdneri) / >1,000 mg/l

**Polyalphaolefin Synthetic Base Fluids**

This material is not expected to be harmful to aquatic organisms.

- 96 hour(s) / LC50 / fathead minnow (Pimephales promelas) / >750 mg/l

- 48 hour(s) / EC50 / water flea (Daphnia magna) / 190 mg/l

- 96 hour(s) / LC50 / Rainbow trout (Salmo gairdneri) / >1000 mg/l

**Proprietary Additive System**

- 96 hour(s) / LC50 / Rainbow trout (Salmo gairdneri) / 10-100 mg/l

- 48 hour(s) / EC50 / water flea (Daphnia magna) / 10-100 mg/l

- 48 hour(s) / EC50 / water flea (Daphnia magna) / 190 mg/l

**Product Name: 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20**

## **12. Environmental and Ecological Information**

### **Environmental Fate**

**Biodegradation:** This material is not expected to be readily biodegradable

**Bioaccumulation:** This material is not expected to bioaccumulate

**Water Class Hazard (Germany):** Water Hazard Class 2 according to appendix 4  
VwVwS dated 27.7.2005

## **13. Disposal Considerations**

**Waste Handling and Disposal:** This product in its neat state when discarded or disposed of is not a hazardous waste according to United States Federal Regulations 40CFR 261.4 (b)(4). Dispose of product in accordance with all applicable Federal, State and local laws and regulations. Under RCRA, it is the responsibility of the user of this product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Do not re-use empty containers

## **14. Transport Information**

**US DOT Classification Non-Bulk:** Not regulated as a hazardous material or dangerous good for transportation.

**US DOT Classification Bulk:** Not regulated as a hazardous material or dangerous good for transportation.

**IMDG Classification:** Not regulated as a hazardous material or dangerous good for transportation.

**IATA/ICAO Classification:** Not regulated as a hazardous material or dangerous good for transportation

**Product Name:** 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20

## **15. Regulatory Information**

### **Hazard Symbols**

**EU**



**Xi Irritant**



**GHS Symbol:**

**Health Hazards:** May be fatal if swallowed and enters airways.

### **US Regulations**

**TSCA Inventory:** All of the components in this material are on the US TSCA Inventory or are exempt.

**State of California Proposition 65:** This product does not contain any of the chemical listed on the State of California's Proposition 65 List for chemicals classified as potential reproductive or cancer causing agents.

### **US EPA SARA Title III and CERCLA Listings and Reportable Quantities**

This product contains 0.4 to 0.85% of Zinc alkyl dithiophosphate which listed on the US EPA's SARA Title III and CERCLA Lists as Zinc and Zinc Compounds.

### **US EPA Section 311/313 Classifications**

None

### **US EPA Section 313 Chemicals**

This product contains 0.4 to 0.85% of Zinc alkyl dithiophosphate which listed on the US EPA's Section 313 List as Zinc and Zinc Compounds.

**US Tariff Heading Number:** 2710.19.3020

**Schedule B Number:** 2710.19.3020

**Product Name: 701 Supreme 7000™ Synthetic Plus SAE 5W-30  
703 Supreme 7000™ Synthetic Plus SAE 10W-30  
704 Supreme 7000™ Synthetic Plus SAE 5W-20**

**15. Regulatory Information continued**

**Other Regulations:**

**Canada:** All of the ingredients of this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substance List

**Canadian WHMIS Classifications and Symbols:** This product is not considered to be a WHMIS hazard

**EEC:** All components are in compliance with the EC Seventh Amendment Directive 92/32/EEC

**16. Other Information**

**For additional information call +1 314-865-4100 (outside the US and Canada) or 1-800-325-9962 inside the United States and Canada.**

Although the information and recommendations set forth herein (hereafter referred to as information) are presented in good faith and believed to be accurate and factual as of the date hereof, Schaeffer Mfg. Company makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the person receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Schaeffer Mfg. Company be responsible for damages of any natures whatsoever resulting from the use or reliance upon information. **No representation or warranty, either expressed or implied, of merchantability or fitness for a particular purpose is made with respect to information of the product to which the information refers.** Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.

# A long-term commitment

*At Schaeffer Manufacturing Co. of St. Louis, rooted in the founding family's Christian values, an irrevocable trust has been established to ensure the business stays in family hands. The owners say this strategy—which can be risky—helps their company stand out from the competition.* **BY MARGARET STEEN**

**S**CHAEFFER MANUFACTURING Co. has been in business for 172 years—since before homes had electric lights. Its family owners, having built a successful business that includes a particularly loyal sales team, have laid the foundation to keep it in family hands for the foreseeable future.

The company, begun as a soap- and candle-making business, today sells petroleum and synthetic lubricants and agricultural chemicals. "Our motto is, 'Family-owned, American made, globally focused,'" says Jay Schaeffer Shields, 59, the company's president.

The descendants of founder Nicholas Schaeffer restructured the company at several key points in its history. One of these points occurred in the 1980s, when the family decided to plan for a leadership transition rather than sell the business. The company's leaders made another critical move in the late 1990s, when they set their sights on growth.

During the recent economic challenges, their ambitious plans went only slightly off track. The downturn was just another hurdle for a company that has survived the Great Depression and both world wars.

## From candles to oil

Nicholas Schaeffer was born in 1814 in a village in what is today Alsace Lorraine, France. When he was 17, he made the six-week voyage to America with his mother and three brothers.

Schaeffer spent two years in Baltimore before heading west to St. Louis. While saving the money to start his own company, he worked at menial jobs for six years. (At one of those jobs, in a tannery, he earned 75 cents per week.) In 1839, Schaeffer moved to St. Louis and started a soap and candle business near the spot where the city's

famous arch now stands.

The company faced some trials in its early years. In 1849, a huge fire destroyed much of downtown St. Louis, including Schaeffer's office and plant. The soap business languished as men named Procter and Gamble figured out that customers preferred soap wrapped in paper to soap sold plain out of a barrel. The advent of electric lights in the 1880s depressed the demand for candles. And in the 1920s and '30s, the company suffered along with the rest of the country in the Great Depression.

But Schaeffer rebuilt the company after the fire, and its products evolved with the market. Its first lubricant, Red Engine Oil, was a byproduct of making soap and candles and was used by steamboats on the Mississippi. The company's Black Beauty axle grease oiled the wheels of wagons that took settlers west from St. Louis.

"Later on we adjusted: We replaced animal fats with petroleum products," says John Schaeffer Shields, 85, the company's chairman.

Nicholas Schaeffer's son Jacob ran the company from 1880 until his death in 1917. Then William Shields, Jacob's son-in-law, took over until 1946, when Tom Schaeffer Shields, William's son, took the reins.

## Turning points

In 1981, the company faced a pivotal point in its ownership. Tom Shields was diagnosed with Lou Gehrig's disease; his brother Gwynne, who had been a vice president, had died a year earlier. Tom Shields needed to make plans for the company after his death. He had two siblings who would survive him: his brother John and his sister Jacqueline Schaeffer Herrmann (known as Jackie).

Each of the three siblings owned one-third of the com-



Founder Nicholas Schaeffer



Family employees (from left) Rich Niedbalski, Will Gregerson, William Schaeffer Herrmann, Tom Schaeffer Herrmann, Jill Niedbalski, John Schaeffer Shields and Jay Schaeffer Shields. A job in the company is 'not just given to you—you do have to earn it,' CEO Tom Herrmann says.

pany, though Tom had been running it. "Tom originally wanted to sell the business, but John and Jacqueline wanted to keep the business in the family," says company president Jay Shields. "They said, 'We want to preserve the future of the company for family members as well as for our hundreds of sales associates."

"That was pretty gutsy of them," says Tom Herrmann, 68, Jackie's son and the current CEO. "The business had offers—they all could have cashed out," says Herrmann, who has held the reins since 2006.

When Tom died in 1982, John Schaeffer Shields became chairman and CEO. His sister Jackie Herrmann was board secretary. The company's current leadership started taking shape in 1986, when Tom Herrmann became president after a few years in which a non-family member, Charles Pollnow, held the position. In 2006, Herrmann became CEO and John Shields' son Jay Schaeffer Shields became president; they continue in these roles today.

The company's products cost more than some, but they help make equipment last longer. "We're providing our customers with the lowest total cost of ownership of their equipment," Shields says.

Schaeffer has 71 employees at its St. Louis office and 140,000-square-foot factory. It is adding a second, 60,000-square-foot plant.

Although there were periods early in the company's history when it didn't grow quickly, in recent years the focus has been on growth. In 1994, the company generated about \$24 million in annual sales. It set a goal to reach \$50 million by 2000. When it reached \$53 million in 2003, company executives took the entire sales force on a trip to Florida.

Jamie Duke, vice president of corporate and international sales, joined the company in 1992. At that time, he says, it was "a 150-year-old startup."

"Schaeffer was at a stage where it was ready to make the leap to the next level," says Duke, 60, who is married to Jay Shields' sister.

The next big goal was \$100 million in sales by 2010, though in light of the recent financial crisis, "we're going to be a year or two late on that," Jay Shields says. Nonetheless, the company weathered the financial storm fairly well, he says. It currently generates about \$90 million in annual revenues and, since mid-2010, has been seeing record sales.

Shields credits the company's sales force and its customers with getting Schaeffer Manufacturing through the downturn. Because the company sells higher-end products, its customers were more financially stable than some. And because the sales staff works on commission only, they had extra incentive to make up for any decrease in sales.

## Keeping it in the family

When Tom Shields died, his two surviving siblings decided to ensure that the company would remain in the family. They created an irrevocable trust that would prevent the company from being sold for about 100 years.

If there comes a time when no Schaeffer relatives are able to manage the company's operations, John Shields explains, the family will hire an outsider to run the company. The trust will end 21 years after the death of the last family member named in it.

Family business advisers say an irrevocable trust can be a risky strategy. "It can be very inflexible," says Stephen G. Salley, a senior partner with the family business center and fiduciary services group at GenSpring, a multi-family office. If no family member is able to act as trustee, a commercial trustee may be appointed; that commercial trustee may not have the same philosophy as family members, Salley explains.

"The drafting of the trust is crucial," especially for long-term trusts, Salley says. "You've got to think about things that the family doesn't think are likely: a family member in prison, alcoholic or drug addicted. There are just a million variables." Under some circumstances, courts will agree to revoke a trust.

"The irrevocable trust works well for us," Jay Shields says. "We have over 600 people who have cast their lot with Schaeffer. Knowing the company has put a significant portion of its stock in irrevocable trust so the company cannot be sold out from underneath them is a big selling point for our associates, especially when recruiting straight commission sales reps."

This commitment to keep the business in the family also helps distinguish the company from its competitors, Schaeffer stakeholders say. "The concept of being a family-owned company appeals to certain people," and helps

attract employees who value family and stability, says Jay Ballinger, Schaeffer's northwest regional sales manager.

Although there are provisions for hiring outside managers, the family has so far led the company itself since Tom Herrmann took over as president in 1986. Herrmann started working for the company when he was 13. "I really did start at the very bottom: I started in the basement emptying water from the elevator shaft," he says. He began working full-time for the company in 1968, after college and a stint in the Marine Corps. He spent most of this career working with the sales department.

Herrmann says he knew from a young age that a high-level management position with the company was a possibility. His grandfather told him when he was a teenager that he could be president of the company someday. Still, Herrmann was not promised a job, just as family members today are not promised particular positions—or indeed, any job at all—with the company.

"Nothing's guaranteed in life," Herrmann says. "It's not just given to you—you do have to earn it."

Will Gregerson, 44, a nephew of Tom Herrmann's who is the company's controller and treasurer, worked in the company's grease room before going to college. "It was steaming hot in the middle of a St. Louis summer, and I just remember sitting there thinking, 'There is no way I'm making my living like this,'" he says. He went to college and worked outside the company in a series of jobs, including a position as a materials manager.

When he wanted to return, the available opening was in accounting, so he got certified as a CPA. "It wasn't just a foregone conclusion that there would be a job for me," says Gregerson, who is also a board member.



The company's sales staff in 1951. Tom Schaeffer Shields, who headed the company from 1946 until his death in 1982, is in the center of the front row.



Nicholas Schaeffer's son Jacob (left) ran the company from 1880 until his death in 1917. His daughter Marie (center) married William Shields (right), who succeeded Jacob Schaeffer and led the firm until 1946, when his son Tom took over.

## Success without a salary

Schaeffer sells its products all over the U.S. and in some 45 other countries. The company doesn't use distributors much; it primarily sells its products directly to end users, including farmers, truckers and construction companies.

The company's 550 sales professionals work on straight commission, a system that is "naturally selective of the really good salesmen," says Tom Cori, a member of the board of directors and former CEO of chemical company Sigma-Aldrich.

"These people are very well supported, just as if they're salaried employees," says regional sales manager Jay Ballinger. "However, we let them be 100% commission because that puts no cap on their income. The people we hire and who are successful are naturally very entrepreneurial."

Ballinger and his father both work in sales for Schaeffer. They are one of several non-Schaeffer families with more than one relative working for the company.

Schaeffer provides its sales staff with training, technical support and dispute arbitration. Although the company does not establish rigid sales territories, individual accounts are protected once a sales team member has established a relationship.

"Their expression is, 'You're in business for yourself, but not by yourself,'" Cori says. Getting started in a commission-only system can be difficult, Cori says, but "once you have a set of customers, away you go."

Schaeffer sales rep Bruce Sullivan says that although it was scary to get started, he has gotten used to working completely on commission. He was unemployed before he joined the company, he notes. "I wasn't about to quit a salaried position for straight commission, but I didn't have a salaried position anymore, so I had nothing to lose."

He adds, "I've changed over the past 15 years. If something ever happened to this company, I'd go looking for something just like it." Sullivan, who home-schools his children, says he enjoys the ability to set his own schedule. "I'm able to earn a very good income and yet have incredible flexibility," he says.

## Guiding principles

Schaeffer Manufacturing is guided by the family's Christian values. The company's mission statement refers to "the grace of God," and, according to Jay Shields, board meetings begin with a prayer. "It's important to have guiding principles," he says.

These values and the commitment to family ownership create strong bonds, Duke says. "You feel like you're part of a big family," he says, "and there are people out there who have got your back."

Chairman John Shields helped set this tone during the company's recent history, Sullivan says. He recalls that when he first interviewed at the company, Shields took him to Dairy Queen for a banana split. "I thought, 'Even though this family is very successful and well off, they're not pretentious at all,'" Sullivan says. Employees say John Shields goes out of his way to help workers resolve both personal and business problems.

Eight members of the controlling family work at Schaeffer Manufacturing. Bill Schaeffer Herrmann, 58, the vice president of production, is Tom Herrmann's brother.

Family members say they all get along well. "We're pretty good about working at work and not working when we're not at work," says Jill Niedbalski, 41, Tom Herrmann's daughter and the company's quality assurance manager.



**Tom Herrmann (left), Jackie Herrmann and John Shields celebrate the firm's 150th anniversary in 1989.**

"There are no family members that work here that aren't hard workers," says Niedbalski, who has worked for the company for 18 years.

While, as Niedbalski points out, "it's a little early" to decide who in the next generation will one day take over, it's clear the company will continue to evolve. The next big goal for revenue is \$150 million by 2015. Jay Shields says that target is based on "conservative, consistent growth."

"Ten years from now, six to eight of the key executives will not be available," Gregerson says. "How do we keep the spirit of the current Schaeffer, which is very much family-oriented, very much a Christian organization—how do we keep that same motif as we move to the next generation? How do we get bigger?"

Jay Shields says the company's top executives recently started an annual succession planning process in which they identify key positions and who might be able to fill them in the future. The goal, he says, is "seamless and transferable leadership succession." FB

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