



DELO DURABILITY FOR THE AGRICULTURAL INDUSTRY



Delo[®]
Let's go further.®

WELCOME TO TEXACO® DELO® PRODUCTS

Keeping your machinery performing year-round is part of our business. Making the most of your investment is yours. At Chevron, we understand just how critical both of these are to your agricultural operation and livelihood.

Thank you for the opportunity to let us introduce you to the Delo product line, providing bumper-to-bumper protection.

We'll share why Delo with ISOSYN® Technology helps provide the world-class protection customers need to be confident they are maximising vehicle productivity and minimising operating costs.

You'll also see how Delo 400 engine oils compare to competitive products in testing and what our customers are saying about the value Delo contributes to their business and bottom line, in a wide range of operating conditions.

We consider this guide to be an introduction. We look forward to learning more about the needs of your agricultural equipment and how our full suite of Texaco products can help you and your business go further.

DELO®: A HISTORY OF FIRSTS



1936

Marketed first compounded diesel engine oil making high speed diesel engines feasible



1953

First in world to develop successful multigrade engine oil



1989

First to document million mile, no overhaul engine life in Caterpillar 3406B



1998

First heavy duty engine oil to meet the API CH-4, Cummins CES 20076 and Mack EO-M Plus extended drain specifications



2013

Chevron receives SAE research award for 'Extending the Boundaries of Diesel Particulate Filter Maintenance with Ultra-Low Ash - Zero-Phosphorus Oil'



2014

Launched first low emission oil (API CJ-4) formulated to protect diesel engines using up to 5,000ppm diesel fuel sulphur levels



Delo family of products.

Helping you achieve optimum performance out of every hour by delivering extended service protection, helping maximise engine durability and minimise operating cost.

LET'S GO FURTHER WITH TEXACO® DELO®



When your heavy duty agricultural tractors and equipment are working reliably, your farm can achieve high productivity. At Chevron, our goal is to optimise your diesel engine performance to help minimise operating costs and maximise engine reliability.

As your lubrication partner, we strive to keep your machinery running reliably. This includes diesel engines, tractor hydraulic systems, transmissions, differentials and wheel bearings, helping to minimise operating costs and maximise performance.

We understand the challenges facing agricultural equipment and tractors today:

- New engine technology development
- Fuel type and quality
- Extending oil and coolant drain intervals
- Multiple critical component lubrication requirements
- Consolidation of lubricant products
- Energy efficiency
- Emission standards.

Count on Chevron's industry experience, technology leadership and the Delo family of premium products to stay ahead of these challenges and help protect and maximise the life of your key machinery and vehicles.



Reliability and durability are our priority

Chevron lubricants stand for one thing above all else – reliability. Properly lubricating the inside of a heavy duty diesel engine requires more than just creating a protective film. Delo heavy duty engine oils provide soot dispersancy, wear protection and sludge control, to guard against loss of engine life and help reduce fuel and oil consumption.

Additionally, the Delo family of products deliver integrity and performance as proven by various bench testing results. Delo's industry-leading lubricants have logged countless hours providing protection to diesel engine parts and key components, so your agricultural equipment can go further.



Delo® with ISOSYN® Technology gives you the performance, protection and confidence you need to help your business go further.

What is ISOSYN?

ISOSYN Technology is how Chevron formulates its top-tier Delo products. It's the combination of premium base oils with high performance additives and Chevron's formulation expertise that provides protection for diesel engine parts. All at great value.

Delo with ISOSYN Technology gives you the performance, protection and confidence you need to help your business go further.

- Provides extended service protection
- Helps maximise engine durability
- Helps minimise operating costs.



=

Premium base oils

+

High performance additives

+

Chevron formulated expertise

Focused parts protection

Delo with ISOSYN Technology protects critical engine parts to help maximise engine and machinery life.



HEAVY DUTY ENGINE OILS PROVIDING WORLD-CLASS PROTECTION



Helping your machinery and business go further, we have the proven lubrication products to fit your needs.

Delo® oils are formulated to provide diesel engine parts protection and performance in the wide range of operating conditions experienced by agricultural equipment. For decades, Delo has been committed to helping your vital engine parts and your business operate efficiently.

Delo 400 XLE SAE 10W-30

Long-drain CK-4, E6/E9 low SAPS engine oil with some fuel economy benefits

Product highlights:

- Designed for high performance oxidation resistance
- Promotes wear and corrosion protection
- Helps improve fuel economy
- Backwards compatible
- Formulated for optimum DPF life
- Offers low temperature protection



Delo 400 XLE HD SAE 10W-40

Long-drain CJ-4, E4/E6/E7/E9 low SAPS engine oil

Product highlights:

- Suitability for a wide range of OEM applications helps reduce inventories
- Helps keep piston rings, piston lands and valves clean
- Offers latest technology engine protection
- Formulated to reduce emission control system maintenance
- Designed for extended oil drain intervals
- Promotes good cold-start wear protection

Delo 400 MGX SAE 15W-40

Low SAPS CJ-4, E7/E9 engine oil with strong TBN retention, for use in high and low sulphur fuel regions

Product highlights:

- Wide range of uses helps minimise misapplication
- Reduces large oil inventories and costs
- Helps control soot and valve train wear
- Designed for optimum service with minimal maintenance
- Formulated to aid DPF service life

Delo 400 LE Synthetic SAE 5W-40

NEW

Heavy-duty synthetic CJ-4, E7/E9 diesel engine oil

Product highlights:

- Formulated for protection in latest ULSD diesel engines
- Designed with low SAPS technology
- Helps protect against wear, corrosion, deposits and soot
- Suitable for mixed fleets
- Promotes cold start wear protection
- Offers wide temperature operations

Delo Gold Ultra E SAE 15W-40

CI-4, E7 engine oil

Product highlights:

- Promotes resistance to low temperature sludge and high temperature deposits
- Engine and bearing corrosion protection
- Offers protection against wear and bore polishing
- Formulated to protect against deposits and filter plugging

Delo 400 RDE SAE 10W-30

Long-drain CI-4, E6/E7/E9 low SAPS engine oil with some fuel economy benefits

Delo 400 RDS SAE 10W-40

Long-drain CI-4, E6/E7/E9 low SAPS engine oil

Delo Gold Ultra T SAE 10W-40

Long-drain CI-4, E4/E7 engine oil

Delo Gold Ultra E SAE 10W-40

CI-4, E7 engine oil

We can't afford downtime in our farming operations. In today's competitive environment, one day of lost harvesting can cost us up to \$25,000 in reduced profitability.



Mike Matuska
Supervisor,
Zuckerman Family Farms, Inc.

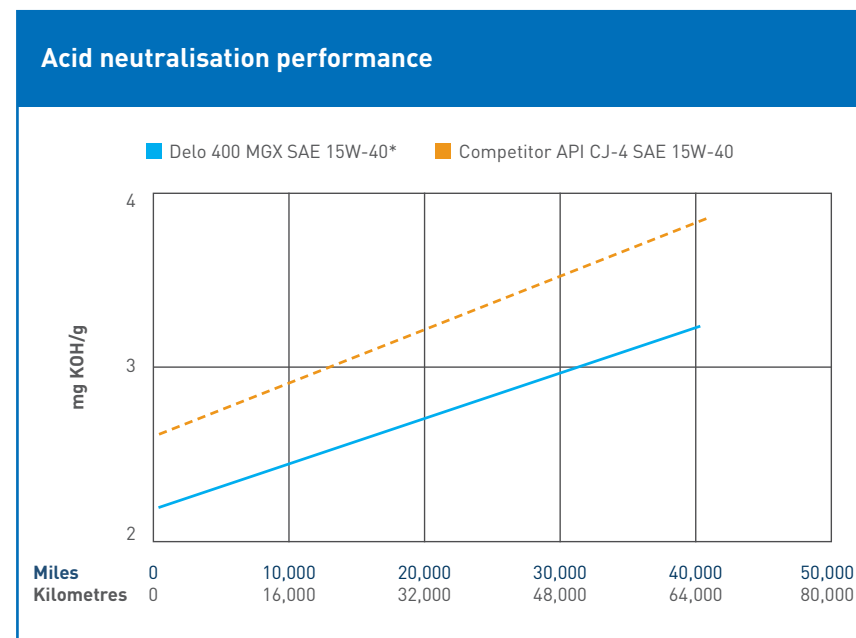
HEAVY DUTY ENGINE OILS WITH PROVEN PERFORMANCE RESULTS



Robust real world testing

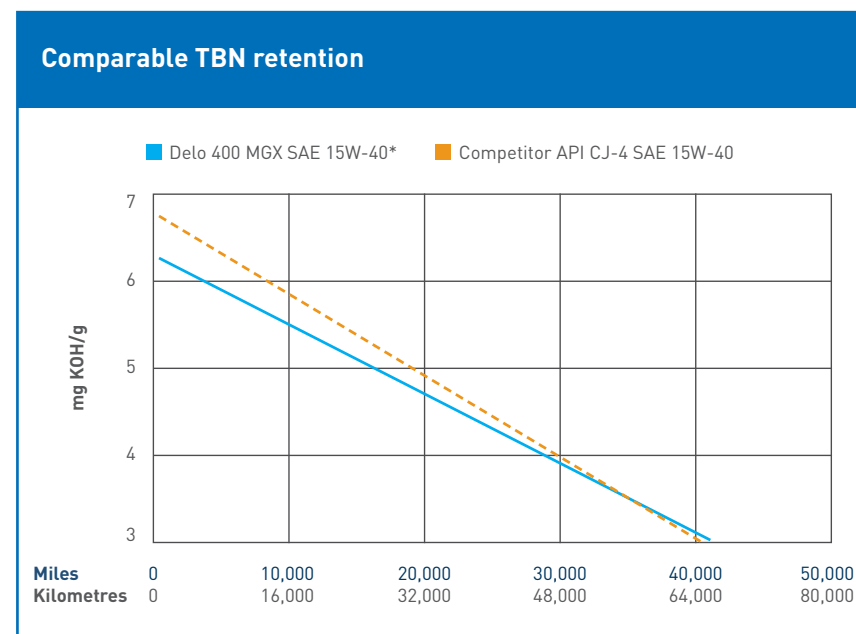
Every day, your agricultural equipment can put heavy duty engine oils to the test with extreme operating conditions, extended oil-drain performance and high loads, to help ensure on time production work. Delo® goes further to prove its value across your diesel engines.

In head-to-head field testing, Delo 400 MGX SAE 15W-40 was tested against a well-known leading competitor API CJ-4 product. Delo 400 MGX SAE 15W-40 performed well with comparable TBN retention and showed directionally better acid neutralisation performance.



Total acid number test

Delo 400 MGX delivered acid neutralisation even in extended-drain applications and performed directionally better than a leading competitor API CJ-4 oil.



Total base number test

Delo 400 MGX shows lower rate of alkalinity loss indicating its capability to neutralise acids and still retain its effectiveness even in extended-drain applications. Shows directionally better performance than a leading competitor API CJ-4 engine oil.

* Chart data relates to Delo 400 MGX SAE 15W-40 product blended in Port Arthur, Texas

H.J. Linde & Sons achieves 16,000 hours of engine life using Delo® 400 in their New Holland tractors

H.J. Linde & Sons have been farming for 100 years and have been very successful in focusing on productivity and a top notch maintenance programme to help it weather the ups and downs of the farming business.

They operate over 25 pieces of New Holland agricultural equipment and were recently interested in seeing the condition of one of their tractors that had achieved 16,000 hours of operation, which was over 6,000 hours more than typically achieved for a major overhaul by the OEM.

The teardown and inspection was conducted at their OE dealer workshop facility and it impressed not only the H.J. Linde maintenance team, but also the OE dealer technical personnel at the shop, with minimal wear on engine parts and visible cleanliness of the engine. For the H.J. Linde personnel, it was a visual confirmation of how Delo 400 protects their equipment.



I can't always count on the rain or agricultural prices. But I can count on Delo 400 to protect the life of my engines and equipment reliability.

Hansie Linde
Owner & Principal,
H.J. Linde & Sons Farms

Piston

Clean ring grooves and minimal deposits on the crown-land at 16,000 hours of operation.



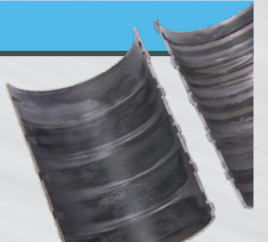
Connecting rod bearings

Good overall protection even after more than 6,000 hours past typical replacement.



Main bearings

Minimal wear and in very good condition after 16,000 hours of use. No visible copper was showing through the main bearings indicating effective protection provided by Delo 400.



Cam shaft

Minimal wear, no skidding or abrasions. Cam shaft is in such good condition it could be reused again.



PROTECTING YOUR AGRICULTURAL EQUIPMENT, BUMPER-TO-BUMPER

Vehicles used in the agricultural service need to be able to work reliably both on and off road, ensuring that valuable harvests make it to their intended destination on time and in good condition.

Delo® heavy duty engine oils, extended life coolants, greases and gear oils are specially formulated to help meet the intense demands your agricultural equipment and tractors face.

Choosing the proven performance of Delo® quality lubricants supports an operator's need for optimal reliability and performance, under diverse operating conditions and for long periods of time. This could mean a higher return on investment, hour after hour.

At Chevron, we have a history of heavily investing in research and development to ensure your vehicles and machinery get the utmost protection from bumper-to-bumper. We're so confident about the quality of Delo products, that we offer a bumper-to-bumper warranty you may not find from other manufacturers.

For a full list of product recommendations for your vehicle, visit: chevron-eu.lubricantadvisor.com

Engine crankcase

- Delo 400 XLE SAE 10W-30
- Delo 400 XLE HD SAE 10W-40
- Delo 400 MGX SAE 15W-40
- Delo 400 LE Synthetic SAE 5W-40
- Delo Gold Ultra E SAE 15W-40
- Delo 400 RDE SAE 10W-30
- Delo 400 RDS SAE 10W-40
- Delo Gold Ultra T SAE 10W-40
- Delo Gold Ultra E SAE 10W-40

Differentials & gear drives

- 1000 THF
- Super Universal Tractor Oil Extra SAE 10W-30, 10W-40
- GearTex LS SAE 85W-90

Hydraulic system

- Clarity Synthetic Hydraulic Oil AW 32, 46, 68
- Rando HEES 46
- Clarity Hydraulic Oil AW 32, 46, 68
- Rando HD LVZ 32, 46, 68
- Rando HDZ 15, 22, 32, 46, 68
- Rando HD 32, 46, 68
- Hydraulic Oil HDZ 32, 46, 68
- Hydra 32, 46
- 1000 THF

Coolant system

- Delo XLC Antifreeze/Coolant

Transmissions

- 1000 THF
- Super Universal Tractor Oil Extra SAE 10W-30, 10W-40

Hitch pins

- Delo Starplex EP 2
- Molytex EP 2
- Hytex EP 2 LF

Bearings

- Delo Starplex EP 2
- Hytex EP 2 LF

General lubrication

- Molytex EP 2 (where extra protection required, e.g. pinions and attachments)

Engine

- Delo 400 XLE SAE 10W-30
- Delo 400 XLE HD SAE 10W-40
- Delo 400 MGX SAE 15W-40
- Delo 400 LE Synthetic SAE 5W-40
- Delo Gold Ultra E SAE 15W-40
- Delo 400 RDE SAE 10W-30
- Delo 400 RDS SAE 10W-40
- Delo Gold Ultra T SAE 10W-40
- Delo Gold Ultra E SAE 10W-40

Coolant system

- Delo XLC Antifreeze/Coolant

Engine gearbox

- 1000 THF
- Super Universal Tractor Oil Extra SAE 10W-30
- Rando HD LVZ 46, 68
- Rando HDZ 46, 68

Greases

- Delo Starplex EP 2
- Texclad 2
- Molytex EP 2 (where extra protection required, e.g. pinions and attachments)
- Marfak 00, 1
- Clarity Synthetic EA Grease
- Hytex EP 2 LF

Hydraulic and hydrostatic system

- 1000 THF
- Super Universal Tractor Oil Extra SAE 10W-30
- Clarity Synthetic Hydraulic Oil AW 46, 68
- Rando HEES 46
- Clarity Hydraulic Oil AW 46, 68
- Rando HD LVZ 46, 68
- Rando HDZ 46, 68
- Hydraulic Oil HDZ 46, 68
- Hydra 32, 46

Other gearboxes and final drives

- Delo Syn-TDL SAE 75W-90
- GearTex EP-5 SAE 80W-90

COOLANTS TO PROTECT ALL TYPES OF COOLING SYSTEMS

Producing an enormous amount of heat, heavy working diesel engines in agricultural vehicles and equipment require good cooling system protection and maintenance.

Delo® coolants help deliver high performance and value.

Keeping your engines operating efficiently requires a high performing, extended life coolant – plus a good coolant maintenance programme. Delo XLC Antifreeze/Coolant has a proven track record for high performance.

Delo XLC delivers optimum engine performance and simplifies the way cooling systems are maintained. Our patented corrosion inhibitors help maximise hardware parts performance and heat transfer over the life of your engine. That's protection that has stood the test of time through countless hours of performance.

Compared to conventional coolants, Delo XLC products can help minimise operation costs and maximise your engine life.

Delo XLC Antifreeze/Coolant Concentrate, Premixed 50/50, Premixed 40/60

Extended life antifreeze/coolants

Product highlights:

- Formulated for long, low maintenance service life
- Offers 8 years or 15,000 hours in off-highway use
- Promotes reliability and corrosion protection
- Contributes to reliable hard water stability
- Aids high temperature corrosion protection

Delo XLI Corrosion Inhibitor Concentrate

Extended life corrosion inhibitor



PREMIUM UNIVERSAL TRACTOR OILS PROVIDE PROTECTION IN AGRICULTURAL EQUIPMENT

Protecting transmissions, hydraulics and differentials is critical to achieving total agricultural equipment reliability.

To keep your agricultural equipment operating at high efficiency takes premium products to help ensure ongoing protection. Texaco® universal tractor oils and hydraulic fluids provide long-term performance versus low tier tractor hydraulic fluids.

Texaco 1000 THF and Super Universal Tractor Oil Extra are engineered for long life, oxidation resistance and wear performance to protect critical components. They are recommended for use over a wide range of OEM specifications including John Deere, Case New Holland, International Harvester, Kubota, White Farm Equipment and others.

Texaco universal tractor oils and hydraulic fluids offer wide temperature range coverage, wear control, seal compatibility, oxidation stability and stay in-grade viscosity performance.

1000 THF

Multi-functional tractor hydraulic fluid

Product highlights:

- Helps protect against scuffing and wear
- Formulated for quiet and efficient operation
- Designed to reduce inventories and costs
- Offers resistance to varnish and sludge
- Provides protection against rust and corrosion

Super Universal Tractor Oil Extra SAE 10W-30, 10W-40

Multi-purpose Super Tractor Oil Universal (STOU) lubricants

Product highlights:

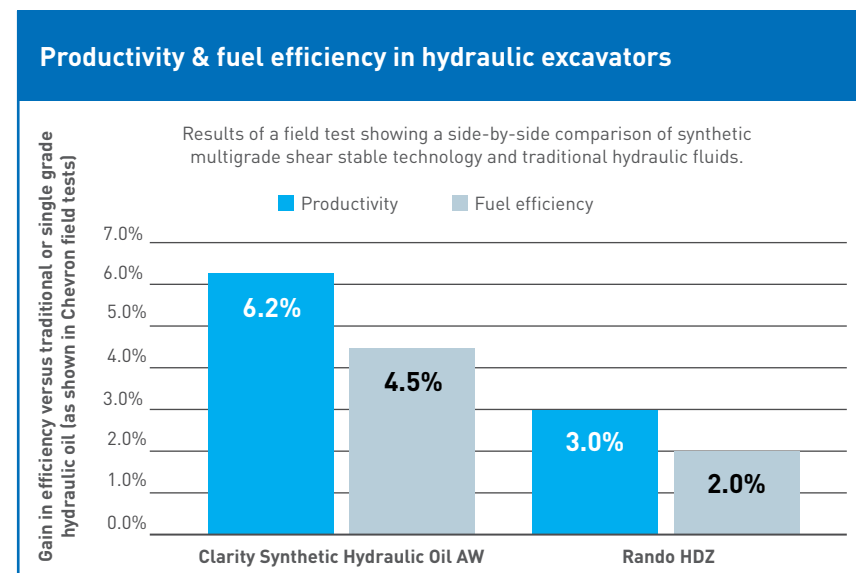
- Formulated for Super Tractor Oil Universal (STOU) service
- Assists smooth, quiet operation
- Aids critical low temperature start-up protection
- Helps prevent in-service oil thickening
- Promotes protection in vulnerable bearings



PREMIUM FLUIDS FOR HYDRAULICS

Texaco® has a complete family of hydraulic oils that can help minimise costs and could create a material improvement in productivity.

Clarity Synthetic Hydraulic Oil AW 32, 46, 68	
Zinc-free premium performance synthetic hydraulic oils, also suitable in environmentally sensitive areas	
Product highlights:	
<ul style="list-style-type: none"> Ultra high performance wear and oxidation protection Rust and corrosion resistance 	<ul style="list-style-type: none"> Hydrolytic stability, rapid water separation, foam inhibition and filterability Very low acute aquatic toxicity
Rando HEES 46	
Biodegradable, high premium performance ester based hydraulic oil; Ecolabel approved	
Product highlights:	
<ul style="list-style-type: none"> Wide service temperature window Ecolabel- 'Euro Margerite' compliant Meets Swedish Standard SS 15 54 34 	<ul style="list-style-type: none"> Extended oil drain Offers long fluid service life WGK 1 WGK classification
Clarity Hydraulic Oil AW 32, 46, 68	Rando HD LVZ 32, 46, 68
Ashless high performance long life hydraulic oils	Zinc-based premium performance high productivity synthetic hydraulic oils
Rando HDZ 15, 22, 32, 46, 68	Rando HD 32, 46, 68
Multi-viscosity anti-wear hydraulic fluids	Zinc-based monograde hydraulic oils
Hydraulic Oil HDZ 32, 46, 68	Hydra 32, 46
Heavy duty zinc-based multi-viscosity anti-wear hydraulic oils	Biodegradable hydraulic fluids for applications where environmental contamination may occur



By using premium hydraulic fluids, productivity and fuel efficiency can be improved relative to traditional hydraulic oils, as shown here.

These improvements have been measured in side-by-side testing versus standard types of hydraulic oil. Results show up to a 6.2% increase in productivity (material moved per hour) and as much as a 4.5% increase in fuel efficiency.

GEAR OILS FOR DIFFERENTIAL GEARS IN AGRICULTURAL OPERATION

For differential gears in agricultural operation, the wide range of Delo® gear oils provide wear protection and extended-drain performance for equipment durability and maintenance value.

Delo's range of automotive gear oils are formulated with special anti-wear compounds to protect gears and bearings of axle compartments from various modes of failure, while maintaining full-metal and seal compatibility. They are designed to provide the lubrication performance that you need.

Delo Syn-TDL SAE 75W-90
Volvo 97312 approved Total Driveline lubricant
Product highlights:
<ul style="list-style-type: none"> Suitable for many synchronised manual transmissions and final drives Long-drain capability Offers extended service capabilities Provides reliable EP protection and wear resistance Offers rapid oil circulation during cold start-up
Geartex LS SAE 85W-90
Automotive gear lubricant formulated for use in limited slip differentials and API GL-5 applications



HEAVY DUTY GREASES FOR AGRICULTURAL OPERATIONS

To help your agricultural equipment go further, it's important that every part operates smoothly. Our Texaco® premium grease products are formulated to provide high performance and long-life protection, across a range of operating conditions.

Delo Starplex EP 2	
Multi-purpose lithium complex grease	
Product highlights:	
<ul style="list-style-type: none"> High thermal resistance Aids long-term wear, corrosion and oxidation protection 	<ul style="list-style-type: none"> Mechanically stable Helps protect against dust, dirt and water ingress
Texclad 2	
Calcium grease containing Molybdenum Disulphide (MoS ₂) and Graphite	
Molytex EP 2	
Multi-purpose heavy duty EP lithium grease containing Molybdenum Disulphide (MoS ₂)	
Marfak 00, 1	
Sodium greases designed to provide inherent rust protection	
Clarity Synthetic EA Grease	
Biodegradable anhydrous calcium grease for use in bearings in wet and corrosive environments	



Marchini Ag achieves 10,000+ hours of engine and cooling system life using Delo® 400 and Delo XLC Antifreeze/Coolant

The Marchini family has deep roots in the agricultural heartland of California's Central Valley. Since Florindo Marchini arrived in this country from Lucca, Italy a century ago, the family has grown everything from tomatoes to almonds, and even holds the heritage of introducing radicchio to American salad bowls.

Equipment ploughing the company's fields includes a 300 brake horsepower (bhp) John Deere 8520T tractor that has been in operation for over nine years, accumulating more than 10,000 hours of service. Marchini was interested in how its equipment was being protected and agreed to conduct a teardown of the tractor to inspect its critical components.

We have been farming in the Central Valley for over 50 years and we have used Delo in our equipment the whole time, since it has a proven track record of providing engine durability and reliability – this is critical to the profitable operation of our farm.

Richard Marchini
President
Marchini Ag



Piston

In very good condition with minimal deposits allowing for effective ring sealing.



Piston liner exterior

No liner pitting or silicated deposits showing – indicating strong cavitation protection and heat transfer capability.



Main bearings

In very good condition with minimal abrasions and no visible wear areas.



Water pump

Very clean with no cavitation or erosive wear, showing the dependable protection provided by Delo XLC.



BEST-IN-CLASS TOOLS AND SERVICES FOR AGRICULTURE

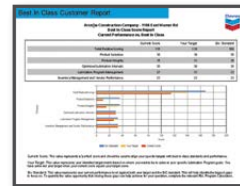
Chevron reliability

The RBL Programme is our commitment of business support and reliability – Chevron’s lubrication expertise combined with superior products and a tailored service programme work together to help your business.



Best in Class assessments

Through our RBL Programme, Chevron lubrication specialists who understand agricultural equipment can conduct an assessment of your current lubrication programme to help identify areas for improved performance compared to industry-best peers.



LubeWatch used oil analysis

Chevron’s premier programme incorporates standardised lubricant sampling and unique online tools to help ensure optimised equipment drain intervals and performance checks to ensure long machinery life.

LubeWatch®
Oil Analysis Program

Coolant maintenance kit

This kit helps ensure long life coolant system protection. It provides easy-to-use tools to monitor optimal coolant life along with incorporating helpful coolant knowledge information.



To find out more about how our products and services can assist you, contact your Texaco® Representative, your Authorised Texaco Lubricants Distributor or visit texacodelo.com

**Protection from bumper-to-bumper.
That’s the plus that comes with Delo®.**

At Chevron you could say R&D is in our DNA. We are constantly striving to improve the way our Delo family of products protect and perform. We stand with confidence behind our lubrication products with a bold bumper-to-bumper warranty you won’t find from most manufacturers.

texacodelo.com



The products featured are shortlisted. There is a full suite of Texaco® products that can tailor to customers' needs. Not all products featured are available in your market. Check with your local Texaco sales representative to find out more. Always check OEM requirements when making changes and utilise used oil analysis for extended oil drain intervals.



A Chevron company product

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