



FIELD CONDENSATE AND NGL PURIFICATION



GETTING MORE VALUE IN MIDSTREAM PROCESSING

PETRODARCO® MS and PETRODARCO MS EXTRA activated carbon

Liquids handling has increasingly become an important and complex part of the midstream gas process. As condensate and NGL production continue to grow plant operators are encountering streams of varying composition. Our PETRODARCO MS activated carbon has been used successfully to remove color from condensates (C3+) as well as NGLs (propane and butane). We have expanded our portfolio to include PETRODARCO MS EXTRA activated carbon which has the added capability for removing sulfur compounds such as carbonyl sulfide, hydrogen sulfide (H₂S), mercaptans and elemental sulfur.

Color and contaminant removal is critical in the monetization of natural gas resources. With PETRODARCO MS and PETRODARCO MS EXTRA activated carbon the midstream producers are able to increase the value of field condensate and clean-up contaminated NGLs.

Rely on PETRODARCO MS activated carbon to:

- ◆ Remove color to achieve NGL pipeline specifications of +25 Saybolt
- ◆ Remove asphaltenes and resins that contribute to maintenance problems

Use PETRODARCO MS EXTRA activated carbon to:

- ◆ Deliver all of the benefits of standard PETRODARCO MS activated carbon
- ◆ Remove sulfur compounds to pass copper strip corrosion test

Application overview: color, asphaltene and sulfur removal

Manufactured specifically for the purification of midstream oil and hydrocarbon processes, PETRODARCO MS activated carbon's mixture of mesopores and macropores adsorbs high molecular weight hydrocarbon impurities and color bodies. With PETRODARCO MS activated carbon you can transform a wide variety of dark and waxy condensate into colorless NGLs.

In addition to meeting the Saybolt color requirement for NGL pipeline specifications, PETRODARCO MS EXTRA activated carbon's unique surface chemistry facilitates removal of sulfur compounds.

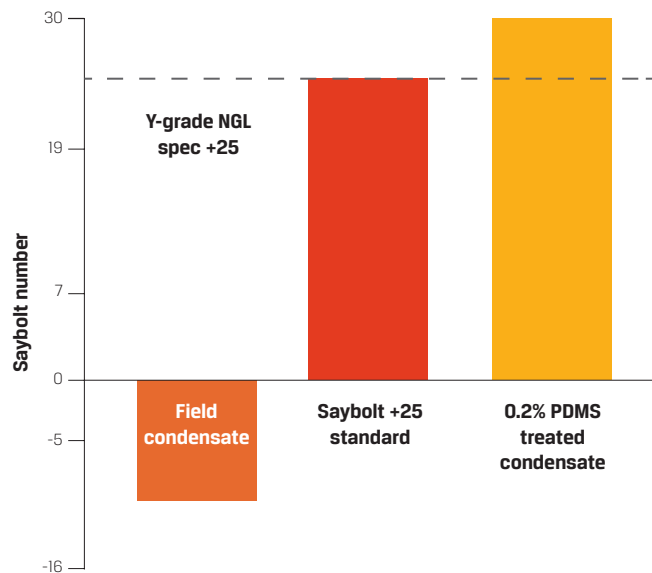


Figure 1. Saybolt number comparison before and after treatment with PETRODARCO MS activated carbon

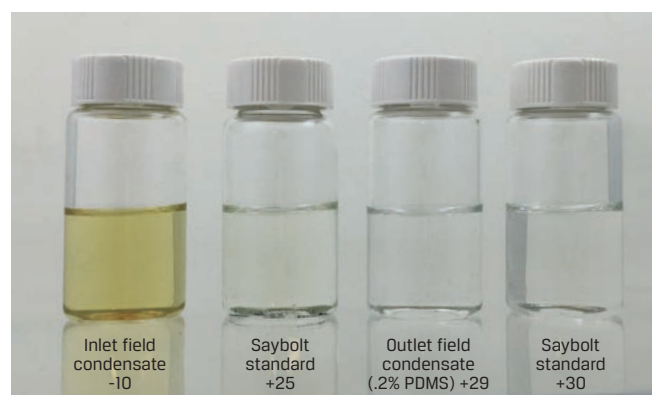


Figure 2. Photo comparison of Saybolt before and after treatment with PETRODARCO MS activated carbon



Figure 3. Asphaltenes are removed (left) with PETRODARCO MS activated carbon

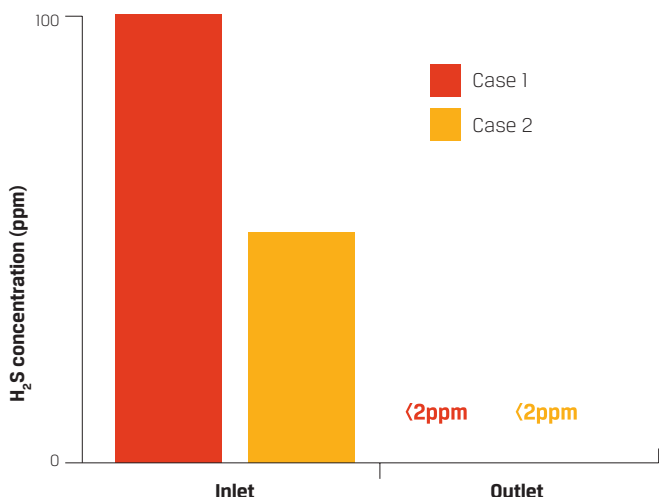


Figure 4. H₂S removal with PETRODARCO MS EXTRA activated carbon

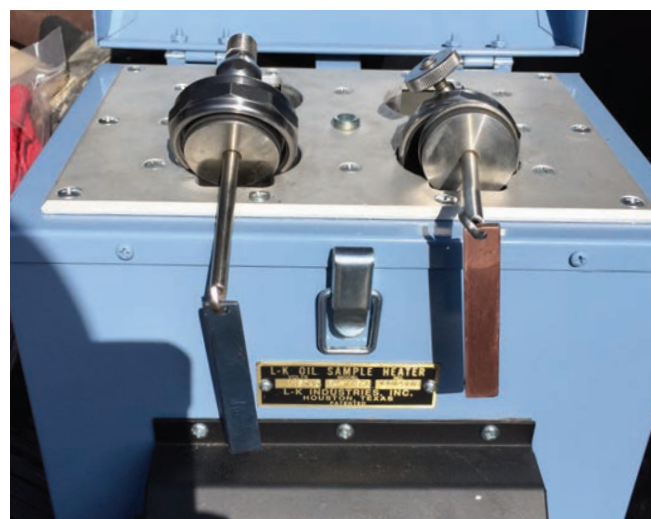


Figure 5. Photo comparison of copper strip at the inlet and outlet after PETRODARCO MS EXTRA activated carbon treatment

Improve economics at any point in gas processing

PETRODARCO MS activated carbon can be installed to purify condensate before and after stabilization in gas processing. Operators may also find a need for temporary set-ups to purify incoming liquids that are trucked in or liquids at the outlet to the NGL pipeline.

Transportation	Liquids received by truck can be purified on-site instead of rejected	} PETRODARCO MS activated carbon and PETRODARCO MS EXTRA activated carbon
Processing	Purify condensate before or after stabilization to move to the NGL pipeline	
Storage	Solve contamination problems caused in gathering systems and storage facilities	
Finished Product	Temporary solutions at the outlet to the pipeline to purify propane, butane and Y Grade NGL	





Contact us

We have applied our material science expertise and experience in oil and gas applications to help the midstream gas processor improve operating margins through purification of field condensates and NGLs. Our technical team provides support to establish economic feasibility by evaluating condensate and gas composition, auditing the process, performing treatability evaluations and recommending solutions. We are also there to assist with installation, start-up and performance monitoring.



Our sales, technical service and customer service teams are prepared to serve customers around the world. Contact us at cabotcorp.com/activatedcarboncontact.

CABOT 
 NORIT ACTIVATED CARBON
cabotcorp.com

NORTH AMERICA
 Cabot Norit Americas, Inc.
 3200 University Avenue
 Marshall, Texas 75670
 USA
T +1 903 923 1000
F +1 903 923 1035

EUROPE, MIDDLE EAST & AFRICA
 Cabot Norit Nederland B.V.
 Astronaut 34
 3824 MJ Amersfoort
 THE NETHERLANDS
T +31 33 4648911
F +31 33 4617429

ASIA PACIFIC
 Cabot China Ltd.
 558 Shuangbai Road
 Shanghai 201108
 CHINA
T +86 21 5175 8800
F +86 21 6434 5532

SOUTH AMERICA
 Cabot Brasil Industria e Comercio Ltda.
 Rua do Paraíso 148 - 5 andar
 Sao Paulo 04103-000
 BRAZIL
T +55 11 2144 6400
F +55 11 3253 0051

The data and conclusions contained herein are based on work believed to be reliable, however, Cabot cannot and does not guarantee that similar results and/or conclusions will be obtained by others. This information is provided as a convenience and for informational purposes only. No guarantee or warranty as to this information, or any product to which it relates, is given or implied. This information may contain inaccuracies, errors or omissions and CABOT DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO (i) SUCH INFORMATION, (ii) ANY PRODUCT OR (iii) INTELLECTUAL PROPERTY INFRINGEMENT. In no event is Cabot responsible for, and Cabot does not accept and hereby disclaims liability for, any damages whatsoever in connection with the use of or reliance on this information or any product to which it relates.

The PETRODARCO name is a registered trademark of Cabot Corporation or its subsidiary.