# catalyst







## **Overview**

A large producer in the Montney formation is currently using a Paraffin Inhibitor on free flowing wells injected down the annulus to mitigate paraffin through-out the system. This application moves from downhole to the flowline and then through the separator package out the pipeline into the facility.

# Challenge

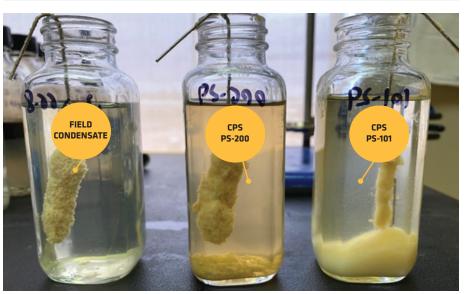
As the Producer starts installing pumpjacks on aging wells, downhole continuous casing-delivered applications become unfeasible due to casing gas flows causing poor delivery of the chemical application. Alternate downhole wax mitigation strategies need to be developed to avoid the need for capillary string installation.

Although a continuous inhibition/dispersion strategy is a proactive approach to paraffin deposit mitigation, solvent batch applications can be an effective means to clean out deposited material before the deposition can cause production or integrity issues.

# **Solution**

To reduce costs associated with solvent applications, producers that have a suitable hydrocarbon condensate source will often use that as a solvent base to clean out wax-prone areas of the system. The Producer has identified the need for downhole solvent batching and would like to use their own Condensate to reduce costs. Catalyst performed solvency testing with the Condensate against our proprietary condensate-based product CPS PS-200 and our fraction-based CPS PS-101 and the results yielded the following:

	PERCENT (%) DEPOSIT REMOVED BASED ON TIME				
Product	2 mins	5 mins	10 mins	15 mins	30 mins
Field Condensate	1	1	2	2	5
CPS PS-200	5	7	15	20	35
CPS PS-101	15	30	50	75	100



## Result/Benefit

Based on this testing, the formulated solvent product CPS PS-101 drastically outperformed the field condensate and other formulated solvent tested. The performance advantage displayed by the CPS PS-101 product is anticipated to provide the customer a higher cost-effective solution than batching with condensate alone:



Reduced batch volumes will be required to attain same deposition removal characteristics.



More complete deposition removal, equating to reduced residual wax "aging" that leads to hard-to-remove deposits and less frequent batch re-applications required.



Faster deposit removal, equating to less well downtime or production interruptions.







## **About** Catayst

Catalyst ownership has over 16 years experience in the Oil and Gas Industry. Catalyst is a locally based Production Chemical company in Grande Prairie, AB. We pride ourselves on providing superior customer service and technical solutions. Our people are trained to solve your problems and provide solutions right at the wellhead or plant site, so there is no lag between sample collection and recommendation. With a strong focus on paraffin treatment solutions in specific crudes in Northern AB, Catalyst can a tailor any program to your well and operating system. Cataylst can provide a full suite of Production Chemicals to service all of your upstream needs. Through innovative technology we are able to provide cost effective solutions with superior customer service.

**Contact us** today at: 1-780-897-0404 or visit catalystproductionsystems.com

