



PROCOR
CHEMICALS, INC.

**WYOMING / POWDER
RIVER / NIOBRARA
CASE HISTORIES**

Revision Date: 01/26/26





PROCOR CHEMICALS, INC.

Date: 01/26/2026	PROCOR CUSTOMER LIST – WYOMING POWDER SPRINGS/NIOBRARA OPERATORS	
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Company

- ConocoPhillips
- Samson Exploration
- Chesapeake Energy
- North Silo Resources
- Crowheart Energy

Niobrara / Wyoming Case Histories:

Carbon County, WY – PRO Sweep Aid, SB Superceal, PRO V+, PRO X

Date: 11/16/25
Operator: Crowheart Energy
Well: Barrel Springs 27-29-1LH
Field: Barrel Springs
County: True 38
Rig: County: Carbon County, WY

Challenges:

Operator drilling a 4 well pad, needed wellbore stability, prevent fluid losses and ensuring good cement jobs..

Solutions:

Products recommended included PRO Sweep Aid, SB SuperCeal, PRO V+, PRO X, Once slurry was ready began pumping 10-20bbl sweeps as needed. For seepage (0-15bph) we recommended pumping a sweep each time the prior sweep exits the bit. For losses (15-25bph) we also recommended pumping a sweep each time the prior sweep is halfway to the bit, this will place 2 sweeps on the annulus.

- 80bbbls @ 30ppb, SB Superceal (10ppb) PRO V+(10ppb), PRO X (10ppb)
- 80bbbls @ 40ppb: SB Superceal (10ppb), PRO V+(15ppb), PRO X (15ppb)
- 80bbbls @ 65ppb: SB Superceal (5ppb), PRO V+(30ppb), PRO X (30ppb)
- 80bbbls @ 80ppb: 50+bph , PRO V+(40ppb), PRO X (40ppb)
- 80bbbls @ 100ppb: 75+bph: PRO V+(50ppb), PRO X (50ppb)
- 200bbbls @ 110ppb: Total Losses: PRO V+(40ppb), PRO X (40ppb), PRO HG (30ppb)

Also recommended PRO Slide/ Synthetic Based Lubricant for reducing torque and drag while increasing ROP.

Results:

Utilized preventative sweep program as recommended, adjusting sweeps as needed. Successfully drilled and cemented 4 wells.

Laramie County, WY – PRO V+, PTCM, PRO X

Date: 7/11/19
Operator: North Silo Resources (Boomtown Oil) (LONGS PEAK)
Well: Singletree Land 17-64-E2S-36-3CH
Field: Condell Target (WILD CAT)
County: Laramie County, WY
Rig: Akita Drilling Rig 518

Challenges:

Preventing fluid losses and complete loss returns while drilling.

Solutions:

When seepage increased over Sbbbls/hr started with 25ppb sweeps(10 SB Superceal, Sppb PROV+, Sppb Pro Tight Medium and Sppb PRO X, sweeps would immediately stop seepage but losses would return when the sweep would pass loss zone. It was then decided to dust system w Sppb SB Superceal which immediately stopped all losses in conjunction w sweeps and allowed operator to drill additional 2000' w no issues. Drilled additional 2000' and lost full returns but after 1 - 50ppb pill we were able to get returns back and continue drilling.

Results:

After 1 - 50ppb pill Operator was able to get returns back and resumed drilling with minimal fluid losses.

Johnson County, WY – PRO V+, PTCM, SB SuperCeal

Date: 11/16/17
Operator: ConocoPhillips
Well: Ghost Rider 3778 7-1H
Field: Powder River
County: Johnson County, WY
Rig: H&P 448

Challenges:

PROCOR was called out 11/16 to help stabilize wellbore and prevent fluid losses. When we arrived well was flowing gas, over pressured.

Solutions:

PROCOR recommended treating the active fluid system with PRO V+, PRO TightCeal/M and SB SuperCeal to prevent losses while weighting up to try and kill well. Products were mixed in the active system through the suction pit. Initial treatment of 5ppb SBSC 4ppb PTCM and 1.5ppb PRO V+.

Results:

The original LOT was 11.3ppg. After applying PROCOR products the operator was able to weight up to 12.1ppg (12.58 ECD) preventing further fluid losses in this highly fractured wellbore. Operator was successful in controlling the well and able to run cement to begin redrilling.

Dunn County, WY – PRO V+, SB SuperCeal, PTCF

Date: 9/21/17
Operator: ConocoPhillips
Well: CCU Badger 1A TFH
Field: Coral Creek
County: Dunn County, WY
Rig: H&P 515

Challenges

Operator suspected possible losses drilling through Mowry & Dakota formations.

Solutions

PROCOR recommended pumping 25-30 bbl "Aggressive LCM Preventative Sweeps" of 40ppb LCM sweeps (20ppb PRO V+, 10ppb SB SuperCeal, & 10ppb PRO TightCeal/F) should losses occur through area of concern. If no losses observed, use sweep built in slug pit at TD to bring up remaining cuttings & clean hole prior to casing run. Built 80 bbls of 40ppb LCM sweep/pill (20ppb PRO V+, 10ppb SB SuperCeal, & 10ppb PRO TightCeal/F) in slugging pit through rig hopper.

Results

Losses through formations of concern did not occur as suspected. Product was used to clean hole at TD. Some cuttings came up with large sweep, but hole appeared to be clean prior

Johnson County, WY – PRO V+, PTCM, SB SuperCeal

Date: 08/28/17
Operator: ConocoPhillips
Well: Ghost Rider 4778 8-1FH
Field: Powder River
County: Johnson County, WY
Rig: H&P 438

Challenges:

Operator suspected fluid losses/hole communication drilling through coal bed methane formations.

Solutions:

PROCOR recommended preventative sweep application consisting of (35ppb PRO V+, 10ppb PRO TightCeal/M, & 5ppb SB SuperCeal). Pumping every 45 ft while drilling through coal formations. Build 100 bbl pill (35ppb PRO V+, 10ppb PRO TightCeal/M, & 5ppb SB SuperCeal). Ready to pump should complete losses occur with no returns using sweeps. Also recommended building 80 bbl Pre-Cement spacer (80ppb PRO V+ & 5ppb PRO FLP) used to maintain returns throughout cement job.

Results

Drilling surface section sweeps were mixed in the slugging pit or pre-mix pit. Sweeps were pumped every 45 ft after initial losses through the coal formation. Complete losses - 100 bbl pill was spotted across coal after complete losses occurred. After two hours wait time, complete returns were established and 25-35 bbl sweeps were used every 45 ft until TD through coal formation. We averaged 50-75% returns through entire coal formation that was expected to have no returns. Also built 80 bbl "Pre-Cement Spacer" (80ppb PRO V+ & 5ppb PRO FLP) to pump ahead of cement job to maintain returns throughout cement job of the 13 3/8" casing.

Notes

Returns were not expected through the coal bed methane formations, nor were they expected during the cement job. We drilled through the coal with 50-75% returns throughout the coal to TD of the sections. We also maintained full returns throughout the 2-stage cement job and observed cement returns at surface on both stages. The products application recommended and successfully used enabled the operator to maintain returns drilling through formations expected to drill blind without returns.

Laramie County, WY – PRO V+

Date: 07/14/17
Operator: Samson Exploration
Well: Nabors B16
Field: Wildcat
County: Laramie County, WY
Rig: Nabors B16

Challenges:

Operator experiencing periodic fluid seepage when building curve and drilling out into the lateral section. Original LCM plan consisted of various blends of LCM not working at 40ppb (type unknown). As lateral was extended increase in torque and drag and reduced ROP became an issue and OBM alone was not preventing these hole problems.

Solutions:

PROCOR recommended PRO V+ for prevention of seepage and fluid losses, incorporating into the 40ppb blend at 10-15ppb (25-30ppb mud company LCM with 10-15ppb PRO V+ for a total of 40ppb) depending on losses. Periodic sweeps were pumped or spotted as pills.

Results:

Fluid losses were immediately resolved. Also pumped preventative sweeps as recommended and preventing further losses through the same zone where losses previously occurred. Samson attributes the use of the PRO V+ as the solution. PRO Slide reduced torque and drag and improved ROP by initially incorporating as a system treatment and maintaining concentration at 1-2% by volume. System maintained by continual additions at suction pit with periodic sweeps for sliding if needed at 4-6% by volume.

Converse County, WY – SB SuperCeal, PTCM

Date: 4/16/17
Operator: Chesapeake
Well: Combs 17-33-70 USA B MW 40H
Field: Powder River
County: Converse County, WY
Rig: Nomac 301

Challenges

Well was considered almost undrillable with a 10% success rate of being able to drill in to the top of the "Mowry" in this exact area, set pipe and get a good enough cement job and shoe to drill the lateral in the Mowry. Upper hole formations are too weak for mud weight needed to keep lower hole formation open, prevent from falling in and high gas. Plugging and differential pressure test performed on geological information for the Sussex, Niobrara and Mowry. 1000' of intermediate hole was drilled and pressure tested showing it could only hole 11.3ppg ECD, 12.5 – 13.0ppg was needed to TD this interval.

Product Recommendations/Volumes

According to the plugging test results. We recommended a background concentration of 10ppb (8ppb SB SuperCeal and 2ppb PRO TightCeal Fine). This treatment was maintained by hourly additions of 3sx PRO V+, 7sx SB SuperCeal and 3sx PRO TightCeal Fine every hour. On top of the hourly maintenance initial sweeps were pumped @ 10bbbls containing 25ppb (10ppb Pro V+, 5ppb PRO TightCeal Medium and 10ppb SB SuperCeal).

Results

There were no major losses. Had some seepage 300' from bottom of curve. Upped sweep concentrations to 40ppb (20ppb Pro V+, 10ppb SB SuperCeal and 10ppb PRO TightCeal Medium) pumping 15bbbls every hour. Without changing the system additions, the increase sweep concentrations stopped the seepage/losses and the curve was landed in the "Mowry" with a 12.7ppg OBM with and ECD of 13.0ppg. Casing was run and cemented with full returns and a good shoe test. This was all done with 70mesh API screens and LGS were a 3.0 when the curve was landed which is due to the good rheology and hole cleaning the products provide along with the plugging ability and tight filtration control.

Johnson County, WY – PRO V+, PTCM, SB SuperCeal

Date: 11/21/16
Operator: ConocoPhillips
Well: Ghost Rider 4778 7-1 FH
Field: Powder River
County: Converse Co., WY
Rig: H&P 448

Challenges:

PROCOR was called out 11/16 to help stabilize wellbore and prevent fluid losses. When we arrived well was flowing gas, over pressured.

Solutions:

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