



Great Western Oil and Gas Company

Mitigation Procedure

Wellname: **Colorado State #2** Prepared By: Michael Andrews
Location: **SESE 36 8N 67W** Office Phone:
API: **05-123-05454** Cell Phone: 970-433-8704
Directions: WCR 86 & 25. W 2/10. N INTO

Surface Casing: 9-5/8" 36# set @ 324'
Production Casing: 5-1/2" 15.5# set @ 9022'

TOC: 7250'
Perfs: Lyons: 8952' - 9014'

Tubing: 268 Jts of 2-7/8" to 8504'
PBMD: 9020"

KB: 12'

Invoice Coding: Please code to Enerplus - Beaufort Pad Mitigation - 8420.451

Objective: § Squeeze to isolate Niobrara and aquafer

Procedure:

- 1 MIRU
- 2 Blow down and kill well
- 3 NDWH/NUBOP
- 4 POOH w/ tbg
- 5 Set RBP at 8758'
- 6 Ran CBL, Had issue with CBL above 1500'
- 7 Re-ran CBL from 1500' to surface
- 8 Perforate at 6750' and 6444'
- 9 Set CICR @ 6470'
- 10 TIH and sting into CICR Squeeze 100sx through CICR
- 11 Perforate at 1000' and Establish circulation to surface
- 12 Set CICR at 900'
- 13 Sting into CICR and pump 310sx from 1000' to surface
- 14 Drill out Cement and CICR
- 15 Run CBL from 8200' to surface
- 16 Set RBP at 6511' for offset mitigation
- 17 Pressure test to 500 psi
- 18 Retrieved RBP from 6511' and 8758'
- 19 Land Tbg at 8504'
- 20 NDBOP/NUWH
- 21 RDMO

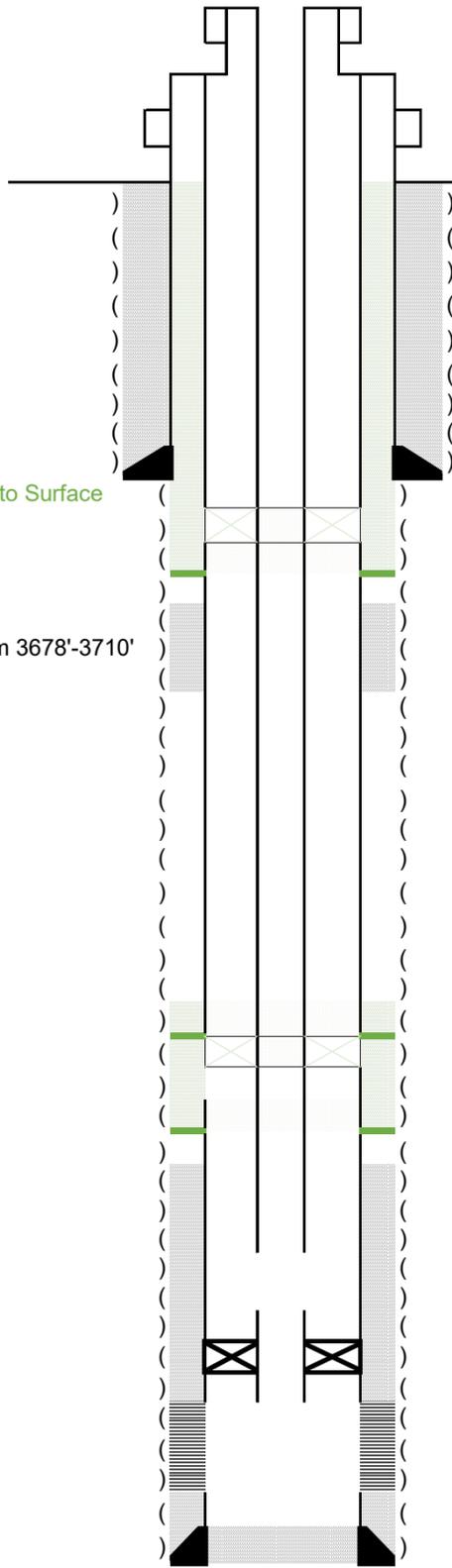


WELLBORE DIAGRAM

CURRENT WBD

660' FSL & 900' FEL

1 Mile Offset:
No PR Sussex
Deepest WW: 65'



Circ 310sx Cmt from 1000' to Surface
Set CICR @ 900'
Perf @ 1000'

Squeezed casing leaks from 3678'-3710'
w. 100 sx (1993)

Perf @ 6444'
Set CICR @ 6470'
Pump 100sx through CICR

Perf @ 6750'

Past Top of Fish @ 8773'
5' tbg with mud anchor

KB ' 5139'

GL ' 5129'

Spud Date: 4/2/1955
Date TD Reached: 4/29/1955
Completion Date: 4/29/1955

Surface Casing
(9" Hole) 9-5/8" 36# csg set @ 324'
w/ 200 sx cmt

Production casing
(7-7/8" Hole) 5.5", 15.5#, 17# csg set @ 9022'
w/ 325 sx cmt

Tubing
2-7/8" tbg @ 8583'

TOC = 7250'

Formation Tops (MD)

Niobrara 6811'
Carlile 7121'
Lyons 8951'

Perforations

Lyons
8952' - 8955'
8958' - 8965'
8967' - 8969'
8976' - 9014'

TMD = 9027'
PBTD = 9020'

Operator: Great Western Operating Co. LLC
Well Name: Colorado State 2
Lease Number:
Location: SESE 36 8N 67W
Field: Black Hollow - #6835
County, State: Weld, CO
API Number: 05-123-05454
Diagram Date: 5/3/2019
Lat/Long: 40-61239/-104.83504