

Appendix C: CMG models

C-1 Crossflow reservoirs.

C-1-1 CO₂-WAG

INUNIT SI

WSRF WELL 1

WSRF GRID TIME

OUTSRF GRID PRES SG SO SW

OUTSRF RES NONE

OUTSRF WELL LAYER ALL DOWNHOLE

OUTSRF WELL PSPLIT

OUTSRF WELL GHGTHY

 XWEL 'CO2' 'Producer'

 ZWEL 'CO2' 'Producer'

WPRN GRID 0

OUTPRN GRID NONE

OUTPRN RES NONE

** Distance units: m

RESULTS XOFFSET 0.0000

RESULTS YOFFSET 0.0000

RESULTS ROTATION 0.0000 ** (DEGREES)

RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0

** Definition of fundamental cartesian grid

GRID VARI 55 20 5

KDIR DOWN

DI IVAR

55*11

DJ JVAR

20*10

DK ALL

1100*5 1100*6 1100*7 1100*4 1100*5

DTOP

1100*400

PERMI KVAR

100 200 250 2*300

** 0 = null block, 1 = active block

NULL CON 1

POR KVAR

0.15 0.18 0.17 0.2 0.1

PERMJ KVAR

100 200 250 2*300

PERMK EQUALSI * 0.1

** 0 = pinched block, 1 = active block

PINCHOUTARRAY CON 1

CPOR 1e-6

**The following is the fluid component

**property data in GEM format.

**The unit system and fluid compositions should

**be specified in the I/O control section.

**The units and compositions specified in WinProp

**are included here as comments for informational purposes.

** PVT UNITS CONSISTENT WITH *INUNIT *SI

**COMPOSITION *PRIMARY

** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01

** 7.4353881E-02 1.7382418E-01 3.2421938E-02

**COMPOSITION *SECOND

** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00

** 0.0000000E+00 0.0000000E+00 0.0000000E+00

** Model and number of components

MODEL SRK

NC 7 7

COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'

TRES 102

VISCOR MODPEDERSEN

MW

2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01

2.2139553E+02 4.6602207E+02

AC

0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349

PCRIT

3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01

1.8232484E+01 1.0836202E+01

VCRIT

8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01

1.4181450E+00

TCRIT

1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02

7.4083684E+02 9.4079417E+02

PCHOR

41 78 77 140.159 280.49 589.01 1016.06

SG

0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926

TB

-195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129

HCFLAG

0 0 0 0 0 0

OMEGA

0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748

OMEGB

0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404

VSHIFT

0 0 0 0 0.0882057 0.195725 0.241098

HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03 0 1

0.081875 0.000538873 0.838459

0.13375 0.00319988 0.694516

0.185625 0.00907169 0.567307

0.2375 0.0190012 0.45595

0.289375 0.0337163 0.359546

0.34125 0.0538685 0.277174

0.393125 0.080055 0.20789

0.445 0.112831 0.150726

0.496875 0.152718 0.104682

0.54875 0.20021 0.0687235

0.600625 0.255779 0.0417773

0.6525 0.319876 0.0227183

0.704375 0.392935 0.0103584

	0.75625	0.475374	0.00342424
	0.808125	0.567598	0.000516122
	0.86	0.67	0
**	Sl	kg	krog

SLT

	0.13	0.72	0
	0.1825	0.578889	2.65671e-005
	0.235	0.458479	0.000370048
	0.2875	0.356891	0.00172745
	0.34	0.272295	0.00515433
	0.3925	0.202915	0.0120346
	0.445	0.14703	0.0240613
	0.4975	0.102979	0.0432232
	0.55	0.0691594	0.0717936
	0.6025	0.0440391	0.112322
	0.655	0.0261552	0.167627
	0.7075	0.014123	0.240789
	0.76	0.00664308	0.335145
	0.8125	0.00251233	0.454285
	0.865	0.000638099	0.602047
	0.9175	6.12924e-005	0.782512
	0.97	0	1

INITIAL

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03	9.8000000E-03	5.7420000E-01	1.3400000E-01	7.4353881E-02	1.7382418E-01
3.2421938E-02					

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

54 10 2 1.0 OPEN FLOW-TO 1

54 10 3 1.0 OPEN FLOW-TO 2

54 10 4 1.0 OPEN FLOW-TO 3

54 10 5 1.0 OPEN FLOW-TO 4

**

WELL 'Injector'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

2 10 2 1.0 OPEN FLOW-TO 1

2 10 3 1.0 OPEN FLOW-TO 2

2 10 4 1.0 OPEN FLOW-TO 3

2 10 5 1.0 OPEN FLOW-TO 4

LAYERXYZ 'Injector'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

DATE 2021 2 1.00000

DATE 2021 3 1.00000

DATE 2021 4 1.00000

DATE 2021 5 1.00000

DATE 2021 6 1.00000

DATE 2021 7 1.00000

DATE 2021 8 1.00000

DATE 2021 9 1.00000

DATE 2021 10 1.00000

DATE 2021 11 1.00000

DATE 2021 12 1.00000

DATE 2022 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP WATER
OPERATE MAX STW 3200.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2022 2 1.00000
DATE 2022 3 1.00000
DATE 2022 4 1.00000
DATE 2022 5 1.00000
DATE 2022 6 1.00000
DATE 2022 7 1.00000
DATE 2022 8 1.00000
DATE 2022 9 1.00000
DATE 2022 10 1.00000
DATE 2022 11 1.00000
DATE 2022 12 1.00000
DATE 2023 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0
OPERATE MAX BHG 1000.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2023 2 1.00000
DATE 2023 3 1.00000
DATE 2023 4 1.00000
DATE 2023 5 1.00000
DATE 2023 6 1.00000
DATE 2023 7 1.00000
DATE 2023 8 1.00000
DATE 2023 9 1.00000

DATE 2023 10 1.00000

DATE 2023 11 1.00000

DATE 2023 12 1.00000

DATE 2024 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP WATER

OPERATE MAX STW 3200.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2024 2 1.00000

DATE 2024 3 1.00000

DATE 2024 4 1.00000

DATE 2024 5 1.00000

DATE 2024 6 1.00000

DATE 2024 7 1.00000

DATE 2024 8 1.00000

DATE 2024 9 1.00000

DATE 2024 10 1.00000

DATE 2024 11 1.00000

DATE 2024 12 1.00000

DATE 2024 12 31.00000

DATE 2025 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0

OPERATE MAX BHG 1000.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2025 2 1.00000

DATE 2025 3 1.00000

DATE 2025 4 1.00000
DATE 2025 5 1.00000
DATE 2025 6 1.00000
DATE 2025 6 19.00000
DATE 2025 7 1.00000
DATE 2025 8 1.00000
DATE 2025 9 1.00000
DATE 2025 10 1.00000
DATE 2025 11 1.00000
DATE 2025 11 16.00000
STOP
DATE 2025 12 1.00000
DATE 2025 12 31.00000
DATE 2026 1 1.00000
DATE 2026 2 1.00000
DATE 2026 3 1.00000
DATE 2026 4 1.00000
DATE 2026 5 1.00000
DATE 2026 6 1.00000
DATE 2026 7 1.00000
DATE 2026 8 1.00000
DATE 2026 9 1.00000
DATE 2026 10 1.00000
DATE 2026 11 1.00000
DATE 2026 12 1.00000
DATE 2027 1 1.00000
DATE 2027 2 1.00000
DATE 2027 3 1.00000
DATE 2027 4 1.00000
DATE 2027 5 1.00000
DATE 2027 6 1.00000

DATE 2027 7 1.00000
DATE 2027 8 1.00000
DATE 2027 9 1.00000
DATE 2027 10 1.00000
DATE 2027 11 1.00000
DATE 2027 12 1.00000
DATE 2028 1 1.00000
DATE 2028 2 1.00000
DATE 2028 2 14.00000
DATE 2028 3 1.00000
DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000
DATE 2028 7 1.00000
DATE 2028 8 1.00000
DATE 2028 9 1.00000
DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000
DATE 2029 6 1.00000
DATE 2029 7 1.00000
DATE 2029 8 1.00000
DATE 2029 9 1.00000
DATE 2029 10 1.00000
DATE 2029 11 1.00000
DATE 2029 12 1.00000

DATE 2030 1 1.00000
DATE 2030 2 1.00000
DATE 2030 3 1.00000
DATE 2030 4 1.00000
DATE 2030 5 1.00000
DATE 2030 6 1.00000
DATE 2030 7 1.00000
DATE 2030 8 1.00000
DATE 2031 1 1.00000
DATE 2040 1 1.00000
RESULTS RELPERMCORR NUMROCKTYPE 1
RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03
RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38
RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999
RESULTS RELPERMCORR NOSWC false
RESULTS RELPERMCORR CALINDEX 0
RESULTS RELPERMCORR STOP
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1

RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE

RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0

RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1

RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40

RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1

RESULTS PROCESSWIZ TABLEIFT 0 18.2

RESULTS PROCESSWIZ TABLEIFT 0.05 0.5

RESULTS PROCESSWIZ TABLEIFT 0.1 0.028

RESULTS PROCESSWIZ TABLEIFT 0.2 0.028

RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057

RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121

RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037

RESULTS PROCESSWIZ TABLEIFT 1 0.5

RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8

RESULTS PROCESSWIZ SURFACTCONC 0 0.05

RESULTS PROCESSWIZ TABLEIFTS 0 23.4

RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163

RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356

RESULTS PROCESSWIZ TABLEIFTS 1 3.715

RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102

RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805

RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521

RESULTS PROCESSWIZ TABLEIFTS 2 2.953

RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0

RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN

RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0

RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1

RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40

RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1

RESULTS PROCESSWIZ TABLEIFT 0 18.2

RESULTS PROCESSWIZ TABLEIFT 0.05 0.5

RESULTS PROCESSWIZ TABLEIFT 0.1 0.028

RESULTS PROCESSWIZ TABLEIFT 0.2 0.028

RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057

RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121

RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037

RESULTS PROCESSWIZ TABLEIFT 1 0.5

RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8

RESULTS PROCESSWIZ SURFACTCONC 0 0.05

RESULTS PROCESSWIZ TABLEIFTS 0 23.4

RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163

RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356

RESULTS PROCESSWIZ TABLEIFTS 1 3.715

RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102

RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805

RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521

RESULTS PROCESSWIZ TABLEIFTS 2 2.953

RESULTS PROCESSWIZ TABLEIFTS 0 0.17

RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011

RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005

RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50

RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7

RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'

RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'

RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

C-1-2 Enriched CO₂-WAG

INUNIT SI
WSRF WELL 1
WSRF GRID TIME
OUTSRF GRID PRES SG SO SW
OUTSRF RES NONE

OUTSRF WELL LAYER ALL DOWNHOLE

OUTSRF WELL PSPLIT

OUTSRF WELL GHGTHY

XWEL 'CO2' 'Producer'

ZWEL 'CO2' 'Producer'

WPRN GRID 0

OUTPRN GRID NONE

OUTPRN RES NONE

** Distance units: m

RESULTS XOFFSET 0.0000

RESULTS YOFFSET 0.0000

RESULTS ROTATION 0.0000 ** (DEGREES)

RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0

** Definition of fundamental cartesian grid

GRID VARI 55 20 5

KDIR DOWN

DI IVAR

55*11

DJ JVAR

20*10

DK ALL

1100*5 1100*6 1100*7 1100*4 1100*5

DTOP

1100*400

PERMI KVAR

100 200 250 2*300

** 0 = null block, 1 = active block

NULL CON 1

POR KVAR

0.15 0.18 0.17 0.2 0.1

PERMJ KVAR

100 200 250 2*300

PERMK EQUALSI * 0.1

** 0 = pinched block, 1 = active block

PINCHOUTARRAY CON 1

CPOR 1e-6

**The following is the fluid component

**property data in GEM format.

**The unit system and fluid compositions should

**be specified in the I/O control section.

**The units and compositions specified in WinProp

**are included here as comments for informational purposes.

** PVT UNITS CONSISTENT WITH *INUNIT *SI

**COMPOSITION *PRIMARY

** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01

** 7.4353881E-02 1.7382418E-01 3.2421938E-02

**COMPOSITION *SECOND

** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00

** 0.0000000E+00 0.0000000E+00 0.0000000E+00

** Model and number of components

MODEL SRK

NC 7 7

COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'

TRES 102

VISCOR MODPEDERSEN

MW

2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01

2.2139553E+02 4.6602207E+02

AC

0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349

PCRIT

3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01
1.8232484E+01 1.0836202E+01

VCRIT

8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01
1.4181450E+00

TCRIT

1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02
7.4083684E+02 9.4079417E+02

PCHOR

41 78 77 140.159 280.49 589.01 1016.06

SG

0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926

TB

-195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129

HCFLAG

0 0 0 0 0 0

OMEGA

0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748

OMEGB

0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404

VSHIFT

0 0 0 0 0.0882057 0.195725 0.241098

HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03	0	1
0.081875	0.000538873	0.838459
0.13375	0.00319988	0.694516
0.185625	0.00907169	0.567307
0.2375	0.0190012	0.45595
0.289375	0.0337163	0.359546
0.34125	0.0538685	0.277174
0.393125	0.080055	0.20789
0.445	0.112831	0.150726
0.496875	0.152718	0.104682
0.54875	0.20021	0.0687235
0.600625	0.255779	0.0417773
0.6525	0.319876	0.0227183
0.704375	0.392935	0.0103584
0.75625	0.475374	0.00342424
0.808125	0.567598	0.000516122
0.86	0.67	0

** Sl krg krog

SLT

0.13	0.72	0
0.1825	0.578889	2.65671e-005
0.235	0.458479	0.000370048
0.2875	0.356891	0.00172745
0.34	0.272295	0.00515433

0.3925	0.202915	0.0120346
0.445	0.14703	0.0240613
0.4975	0.102979	0.0432232
0.55	0.0691594	0.0717936
0.6025	0.0440391	0.112322
0.655	0.0261552	0.167627
0.7075	0.014123	0.240789
0.76	0.00664308	0.335145
0.8125	0.00251233	0.454285
0.865	0.000638099	0.602047
0.9175	6.12924e-005	0.782512
0.97	0	1

INITIAL

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01 7.4353881E-02 1.7382418E-01
3.2421938E-02

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

54 10 2 1.0 OPEN FLOW-TO 1

54 10 3 1.0 OPEN FLOW-TO 2

54 10 4 1.0 OPEN FLOW-TO 3

54 10 5 1.0 OPEN FLOW-TO 4

**

WELL 'Injector'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

2 10 2 1.0 OPEN FLOW-TO 1

2 10 3 1.0 OPEN FLOW-TO 2

2 10 4 1.0 OPEN FLOW-TO 3

2 10 5 1.0 OPEN FLOW-TO 4

LAYERXYZ 'Injector'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

DATE 2021 2 1.00000

DATE 2021 3 1.00000

DATE 2021 4 1.00000

DATE 2021 5 1.00000

DATE 2021 6 1.00000

DATE 2021 7 1.00000

DATE 2021 8 1.00000

DATE 2021 9 1.00000

DATE 2021 10 1.00000

DATE 2021 11 1.00000

DATE 2021 12 1.00000

DATE 2022 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP WATER

OPERATE MAX STW 3200.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2022 2 1.00000

DATE 2022 3 1.00000

DATE 2022 4 1.00000

DATE 2022 5 1.00000

DATE 2022 6 1.00000

DATE 2022 7 1.00000
DATE 2022 8 1.00000
DATE 2022 9 1.00000
DATE 2022 10 1.00000
DATE 2022 11 1.00000
DATE 2022 12 1.00000
DATE 2023 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP SOLVENT 0.0 0.8 0.2 0.0 0.0 0.0 0.0

OPERATE MAX BHG 1680.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2023 2 1.00000

DATE 2023 3 1.00000

DATE 2023 4 1.00000

DATE 2023 5 1.00000

DATE 2023 6 1.00000

DATE 2023 7 1.00000

DATE 2023 8 1.00000

DATE 2023 9 1.00000

DATE 2023 10 1.00000

DATE 2023 11 1.00000

DATE 2023 12 1.00000

DATE 2024 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP WATER

OPERATE MAX STW 3200.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2024 2 1.00000
DATE 2024 3 1.00000
DATE 2024 4 1.00000
DATE 2024 5 1.00000
DATE 2024 6 1.00000
DATE 2024 7 1.00000
DATE 2024 8 1.00000
DATE 2024 9 1.00000
DATE 2024 10 1.00000
DATE 2024 11 1.00000
DATE 2024 12 1.00000
DATE 2024 12 31.00000
DATE 2025 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP SOLVENT 0.0 0.8 0.2 0.0 0.0 0.0 0.0

OPERATE MAX BHG 1680.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2025 2 1.00000
DATE 2025 3 1.00000
DATE 2025 4 1.00000
DATE 2025 5 1.00000
DATE 2025 6 1.00000
DATE 2025 6 19.00000
DATE 2025 7 1.00000
DATE 2025 8 1.00000
DATE 2025 9 1.00000
DATE 2025 10 1.00000
DATE 2025 11 1.00000
DATE 2025 11 16.00000

STOP

DATE 2025 12 1.00000

DATE 2025 12 31.00000

DATE 2026 1 1.00000

DATE 2026 2 1.00000

DATE 2026 3 1.00000

DATE 2026 4 1.00000

DATE 2026 5 1.00000

DATE 2026 6 1.00000

DATE 2026 7 1.00000

DATE 2026 8 1.00000

DATE 2026 9 1.00000

DATE 2026 10 1.00000

DATE 2026 11 1.00000

DATE 2026 12 1.00000

DATE 2027 1 1.00000

DATE 2027 2 1.00000

DATE 2027 3 1.00000

DATE 2027 4 1.00000

DATE 2027 5 1.00000

DATE 2027 6 1.00000

DATE 2027 7 1.00000

DATE 2027 8 1.00000

DATE 2027 9 1.00000

DATE 2027 10 1.00000

DATE 2027 11 1.00000

DATE 2027 12 1.00000

DATE 2028 1 1.00000

DATE 2028 2 1.00000

DATE 2028 2 14.00000

DATE 2028 3 1.00000

DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000
DATE 2028 7 1.00000
DATE 2028 8 1.00000
DATE 2028 9 1.00000
DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000
DATE 2029 6 1.00000
DATE 2029 7 1.00000
DATE 2029 8 1.00000
DATE 2029 9 1.00000
DATE 2029 10 1.00000
DATE 2029 11 1.00000
DATE 2029 12 1.00000
DATE 2030 1 1.00000
DATE 2030 2 1.00000
DATE 2030 3 1.00000
DATE 2030 4 1.00000
DATE 2030 5 1.00000
DATE 2030 6 1.00000
DATE 2030 7 1.00000
DATE 2030 8 1.00000
DATE 2031 1 1.00000
DATE 2040 1 1.00000

RESULTS RELPERMCORR NUMROCKTYPE 1
RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03
RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38
RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999
RESULTS RELPERMCORR NOSWC false
RESULTS RELPERMCORR CALINDEX 0
RESULTS RELPERMCORR STOP
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15

RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05

RESULTS PROCESSWIZ TABLEFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51

RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108

RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1

RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356

RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5

RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK

RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'

RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1

RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'

RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

C-1-3 CWI

INUNIT SI
WSRF WELL 1
WSRF GRID TIME
OUTSRF GRID PRES SG SO SW
OUTSRF RES NONE
OUTSRF WELL LAYER ALL DOWNHOLE
OUTSRF WELL PSPLIT
OUTSRF WELL GHGTHY
 XWEL 'CO2' 'Producer'
 ZWEL 'CO2' 'Producer'
WPRN GRID 0
OUTPRN GRID NONE
OUTPRN RES NONE
** Distance units: m

RESULTS XOFFSET 0.0000
RESULTS YOFFSET 0.0000
RESULTS ROTATION 0.0000 ** (DEGREES)
RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0

** *****

** Definition of fundamental cartesian grid

** *****

GRID VARI 55 20 5

KDIR DOWN

DI IVAR

55*11

DJ JVAR

20*10

DK ALL

1100*5 1100*6 1100*7 1100*4 1100*5

DTOP

1100*400

PERMI KVAR

100 200 250 2*300

** 0 = null block, 1 = active block

NULL CON 1

POR KVAR

0.15 0.18 0.17 0.2 0.1

PERMJ KVAR

100 200 250 2*300

PERMK EQUALSI * 0.1

** 0 = pinched block, 1 = active block

PINCHOUTARRAY CON 1

CPOR 1e-6

**The following is the fluid component

**property data in GEM format.

**The unit system and fluid compositions should

**be specified in the I/O control section.

**The units and compositions specified in WinProp

**are included here as comments for informational purposes.

** PVT UNITS CONSISTENT WITH *INUNIT *SI

**COMPOSITION *PRIMARY

** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01

** 7.4353881E-02 1.7382418E-01 3.2421938E-02

**COMPOSITION *SECOND

** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00

** 0.0000000E+00 0.0000000E+00 0.0000000E+00

** Model and number of components

MODEL SRK

NC 7 7

COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'

TRES 102

VISCOR MODPEDERSEN

MW

2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01

2.2139553E+02 4.6602207E+02

AC

0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349

PCRIT

3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01

1.8232484E+01 1.0836202E+01

VCRIT

8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01

1.4181450E+00

TCRIT

1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02

7.4083684E+02 9.4079417E+02

PCHOR

41 78 77 140.159 280.49 589.01 1016.06

SG

0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926

TB

-195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129

HCFLAG

0 0 0 0 0 0

OMEGA

0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748

OMEGB

0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404

VSHIFT

0 0 0 0 0.0882057 0.195725 0.241098

HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03 0 1

0.081875 0.000538873 0.838459

0.13375	0.00319988	0.694516
0.185625	0.00907169	0.567307
0.2375	0.0190012	0.45595
0.289375	0.0337163	0.359546
0.34125	0.0538685	0.277174
0.393125	0.080055	0.20789
0.445	0.112831	0.150726
0.496875	0.152718	0.104682
0.54875	0.20021	0.0687235
0.600625	0.255779	0.0417773
0.6525	0.319876	0.0227183
0.704375	0.392935	0.0103584
0.75625	0.475374	0.00342424
0.808125	0.567598	0.000516122
0.86	0.67	0

** Sl krg krog

SLT

0.13	0.72	0
0.1825	0.578889	2.65671e-005
0.235	0.458479	0.000370048
0.2875	0.356891	0.00172745
0.34	0.272295	0.00515433
0.3925	0.202915	0.0120346
0.445	0.14703	0.0240613
0.4975	0.102979	0.0432232
0.55	0.0691594	0.0717936
0.6025	0.0440391	0.112322
0.655	0.0261552	0.167627
0.7075	0.014123	0.240789
0.76	0.00664308	0.335145
0.8125	0.00251233	0.454285

0.865	0.000638099	0.602047
0.9175	6.12924e-005	0.782512
0.97	0	1

INITIAL

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03	9.8000000E-03	5.7420000E-01	1.3400000E-01	7.4353881E-02	1.7382418E-01
3.2421938E-02					

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

54 10 2 1.0 OPEN FLOW-TO 1

54 10 3 1.0 OPEN FLOW-TO 2

54 10 4 1.0 OPEN FLOW-TO 3

54 10 5 1.0 OPEN FLOW-TO 4

**

WELL 'Injector_Gas'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector_Gas'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-FROM 'SURFACE'

2 10 2 1.0 OPEN FLOW-FROM 1

2 10 3 1.0 OPEN FLOW-FROM 2

2 10 4 1.0 OPEN FLOW-FROM 3

2 10 5 1.0 OPEN FLOW-FROM 4

LAYERXYZ 'Injector_Gas'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

**

WELL 'Injector_Water'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector_Water'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-FROM 'SURFACE'

2 10 2 1.0 OPEN FLOW-FROM 1

2 10 3 1.0 OPEN FLOW-FROM 2

2 10 4 1.0 OPEN FLOW-FROM 3

2 10 5 1.0 OPEN FLOW-FROM 4

LAYERXYZ 'Injector_Water'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

DATE 2021 2 1.00000

DATE 2021 3 1.00000

DATE 2021 4 1.00000

DATE 2021 5 1.00000

DATE 2021 6 1.00000

DATE 2021 7 1.00000

DATE 2021 8 1.00000

DATE 2021 9 1.00000

DATE 2021 10 1.00000

DATE 2021 11 1.00000

DATE 2021 12 1.00000

DATE 2022 1 1.00000

**

WELL 'Injector_Gas'

INJECTOR 'Injector_Gas'

INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0

OPERATE MAX BHG 320.0 CONT

OPERATE MAX BHP 50000.0 CONT

**

WELL 'Injector_Water'

INJECTOR 'Injector_Water'

INCOMP WATER

OPERATE MAX STW 3200.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2022 2 1.00000

DATE 2022 3 1.00000

DATE 2022 4 1.00000

DATE 2022 5 1.00000

DATE 2022 6 1.00000

DATE 2022 7 1.00000

DATE 2022 8 1.00000

DATE 2022 9 1.00000

DATE 2022 10 1.00000

DATE 2022 11 1.00000

DATE 2022 12 1.00000

DATE 2023 1 1.00000

DATE 2023 2 1.00000

DATE 2023 3 1.00000

DATE 2023 4 1.00000

DATE 2023 5 1.00000

DATE 2023 6 1.00000

DATE 2023 7 1.00000

DATE 2023 8 1.00000

DATE 2023 9 1.00000

DATE 2023 10 1.00000

DATE 2023 11 1.00000
DATE 2023 12 1.00000
DATE 2024 1 1.00000
DATE 2024 2 1.00000
DATE 2024 3 1.00000
DATE 2024 4 1.00000
DATE 2024 5 1.00000
DATE 2024 6 1.00000
DATE 2024 7 1.00000
DATE 2024 8 1.00000
DATE 2024 9 1.00000
DATE 2024 10 1.00000
DATE 2024 11 1.00000
DATE 2024 12 1.00000
DATE 2025 1 1.00000
DATE 2025 2 1.00000
DATE 2025 3 1.00000
DATE 2025 4 1.00000
DATE 2025 5 1.00000
DATE 2025 6 1.00000
DATE 2025 6 19.00000
DATE 2025 7 1.00000
DATE 2025 8 1.00000
DATE 2025 9 1.00000
DATE 2025 10 1.00000
DATE 2025 11 1.00000
DATE 2025 11 16.00000
STOP
DATE 2025 12 1.00000
DATE 2026 1 1.00000
DATE 2026 2 1.00000

DATE 2026 3 1.00000
DATE 2026 4 1.00000
DATE 2026 5 1.00000
DATE 2026 6 1.00000
DATE 2026 7 1.00000
DATE 2026 8 1.00000
DATE 2026 9 1.00000
DATE 2026 10 1.00000
DATE 2026 11 1.00000
DATE 2026 12 1.00000
DATE 2027 1 1.00000
DATE 2027 2 1.00000
DATE 2027 3 1.00000
DATE 2027 4 1.00000
DATE 2027 5 1.00000
DATE 2027 6 1.00000
DATE 2027 7 1.00000
DATE 2027 8 1.00000
DATE 2027 9 1.00000
DATE 2027 10 1.00000
DATE 2027 11 1.00000
DATE 2027 12 1.00000
DATE 2028 1 1.00000
DATE 2028 2 1.00000
DATE 2028 2 14.00000
DATE 2028 3 1.00000
DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000
DATE 2028 7 1.00000
DATE 2028 8 1.00000

DATE 2028 9 1.00000
DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000
DATE 2029 6 1.00000
DATE 2029 7 1.00000
DATE 2029 8 1.00000
DATE 2029 9 1.00000
DATE 2029 10 1.00000
DATE 2029 11 1.00000
DATE 2029 12 1.00000
DATE 2030 1 1.00000
DATE 2030 2 1.00000
DATE 2030 3 1.00000
DATE 2030 4 1.00000
DATE 2030 5 1.00000
DATE 2030 6 1.00000
DATE 2030 7 1.00000
DATE 2030 8 1.00000
DATE 2031 1 1.00000
DATE 2040 1 1.00000

RESULTS RELPERMCORR NUMROCKTYPE 1

RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03

RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38

RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999

RESULTS RELPERMCORR NOSWC false
RESULTS RELPERMCORR CALINDEX 0
RESULTS RELPERMCORR STOP
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028

RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
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RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805

RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0

RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END

RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121

RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17

RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000

RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
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FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END

RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999

RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1

RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1

RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

C-2 No-Crossflow reservoirs

C-2-1 CO₂-WAG

INUNIT SI
WSRF WELL 1
WSRF GRID TIME
OUTSRF GRID PRES SG SO SW
OUTSRF RES NONE
OUTSRF WELL LAYER ALL DOWNHOLE
OUTSRF WELL PSPLIT
OUTSRF WELL GHGTHY
 XWEL 'CO2' 'Producer'
 ZWEL 'CO2' 'Producer'

WPRN GRID 0
OUTPRN GRID NONE
OUTPRN RES NONE

** Distance units: m

RESULTS XOFFSET 0.0000
RESULTS YOFFSET 0.0000
RESULTS ROTATION 0.0000 ** (DEGREES)
RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0

** *****

** Definition of fundamental cartesian grid

** *****

GRID VARI 55 20 5

KDIR DOWN

DI IVAR

55*11

DJ JVAR

20*10

DK ALL

1100*10.5 1100*0.5 1100*7 1100*0.5 1100*8.5

DTOP

1100*400

PERMI KVAR

100 0 250 0 300

** 0 = null block, 1 = active block

NULL CON 1

POR KVAR

0.15 0.18 0.17 0.2 0.1

PERMJ KVAR

100 0 250 0 300

PERMK EQUALSI * 0.1

** 0 = pinched block, 1 = active block

PINCHOUTARRAY CON 1

CPOR 1e-6

**The following is the fluid component

**property data in GEM format.

**The unit system and fluid compositions should

**be specified in the I/O control section.

**The units and compositions specified in WinProp

**are included here as comments for informational purposes.

** PVT UNITS CONSISTENT WITH *INUNIT *SI

**COMPOSITION *PRIMARY

** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01

** 7.4353881E-02 1.7382418E-01 3.2421938E-02

**COMPOSITION *SECOND

** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00

** 0.0000000E+00 0.0000000E+00 0.0000000E+00

** Model and number of components

MODEL SRK

NC 7 7

COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'

TRES 102

VISCOR MODPEDERSEN

MW

2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01

2.2139553E+02 4.6602207E+02

AC

0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349

PCRIT

3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01

1.8232484E+01 1.0836202E+01

VCRIT

8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01

1.4181450E+00

TCRIT

1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02

7.4083684E+02 9.4079417E+02

PCHOR

41 78 77 140.159 280.49 589.01 1016.06

SG

0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926

TB

-195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129

HCFLAG

0 0 0 0 0 0

OMEGA

0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748

OMEGB

0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404

VSHIFT

0 0 0 0 0.0882057 0.195725 0.241098

HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03 0 1

0.081875 0.000538873 0.838459

0.13375 0.00319988 0.694516

0.185625 0.00907169 0.567307

0.2375 0.0190012 0.45595

0.289375 0.0337163 0.359546

0.34125 0.0538685 0.277174

0.393125	0.080055	0.20789
0.445	0.112831	0.150726
0.496875	0.152718	0.104682
0.54875	0.20021	0.0687235
0.600625	0.255779	0.0417773
0.6525	0.319876	0.0227183
0.704375	0.392935	0.0103584
0.75625	0.475374	0.00342424
0.808125	0.567598	0.000516122
0.86	0.67	0
**	Sl	kg
SLT		
0.13	0.72	0
0.1825	0.578889	2.65671e-005
0.235	0.458479	0.000370048
0.2875	0.356891	0.00172745
0.34	0.272295	0.00515433
0.3925	0.202915	0.0120346
0.445	0.14703	0.0240613
0.4975	0.102979	0.0432232
0.55	0.0691594	0.0717936
0.6025	0.0440391	0.112322
0.655	0.0261552	0.167627
0.7075	0.014123	0.240789
0.76	0.00664308	0.335145
0.8125	0.00251233	0.454285
0.865	0.000638099	0.602047
0.9175	6.12924e-005	0.782512
0.97	0	1
INITIAL		

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01 7.4353881E-02 1.7382418E-01
3.2421938E-02

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1	1.0	OPEN	FLOW-TO 'SURFACE' REFLAYER
54 10 2	1.0	OPEN	FLOW-TO 1
54 10 3	1.0	OPEN	FLOW-TO 2
54 10 4	1.0	OPEN	FLOW-TO 3
54 10 5	1.0	OPEN	FLOW-TO 4

**

WELL 'Injector'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector'

** UBA ff Status Connection

2 10 1	1.0	OPEN	FLOW-TO 'SURFACE' REFLAYER
2 10 2	1.0	OPEN	FLOW-TO 1
2 10 3	1.0	OPEN	FLOW-TO 2
2 10 4	1.0	OPEN	FLOW-TO 3
2 10 5	1.0	OPEN	FLOW-TO 4

LAYERXYZ 'Injector'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1	16.500000	95.000000	400.000000	16.500000	95.000000	405.000000	5.000000
2 10 2	16.500000	95.000000	405.000000	16.500000	95.000000	411.000000	6.000000
2 10 3	16.500000	95.000000	411.000000	16.500000	95.000000	418.000000	7.000000
2 10 4	16.500000	95.000000	418.000000	16.500000	95.000000	422.000000	4.000000
2 10 5	16.500000	95.000000	422.000000	16.500000	95.000000	427.000000	5.000000

DATE 2021 2 1.00000

DATE 2021 3 1.00000

DATE 2021 4 1.00000

DATE 2021 5 1.00000

DATE 2021 6 1.00000

DATE 2021 7 1.00000

DATE 2021 8 1.00000
DATE 2021 9 1.00000
DATE 2021 10 1.00000
DATE 2021 11 1.00000
DATE 2021 12 1.00000
DATE 2022 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP WATER
OPERATE MAX STW 3200.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2022 2 1.00000
DATE 2022 3 1.00000
DATE 2022 4 1.00000
DATE 2022 5 1.00000
DATE 2022 6 1.00000
DATE 2022 7 1.00000
DATE 2022 8 1.00000
DATE 2022 9 1.00000
DATE 2022 10 1.00000
DATE 2022 11 1.00000
DATE 2022 12 1.00000
DATE 2023 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0
OPERATE MAX BHG 1000.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2023 2 1.00000

DATE 2023 3 1.00000

DATE 2023 4 1.00000

DATE 2023 5 1.00000

DATE 2023 6 1.00000

DATE 2023 7 1.00000

DATE 2023 8 1.00000

DATE 2023 9 1.00000

DATE 2023 10 1.00000

DATE 2023 11 1.00000

DATE 2023 12 1.00000

DATE 2024 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP WATER

OPERATE MAX STW 3200.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2024 2 1.00000

DATE 2024 3 1.00000

DATE 2024 4 1.00000

DATE 2024 5 1.00000

DATE 2024 6 1.00000

DATE 2024 7 1.00000

DATE 2024 8 1.00000

DATE 2024 9 1.00000

DATE 2024 10 1.00000

DATE 2024 11 1.00000

DATE 2024 12 1.00000

DATE 2024 12 31.00000

DATE 2025 1 1.00000

**

WELL 'Injector'

INJECTOR 'Injector'

INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0

OPERATE MAX BHG 1000.0 CONT

OPERATE MAX BHP 50000.0 CONT

DATE 2025 2 1.00000

DATE 2025 3 1.00000

DATE 2025 4 1.00000

DATE 2025 5 1.00000

DATE 2025 6 1.00000

DATE 2025 6 19.00000

DATE 2025 7 1.00000

DATE 2025 8 1.00000

DATE 2025 9 1.00000

DATE 2025 10 1.00000

DATE 2025 11 1.00000

DATE 2025 11 16.00000

STOP

DATE 2025 12 1.00000

DATE 2025 12 31.00000

DATE 2026 1 1.00000

DATE 2026 2 1.00000

DATE 2026 3 1.00000

DATE 2026 4 1.00000

DATE 2026 5 1.00000

DATE 2026 6 1.00000

DATE 2026 7 1.00000

DATE 2026 8 1.00000

DATE 2026 9 1.00000

DATE 2026 10 1.00000

DATE 2026 11 1.00000

DATE 2026 12 1.00000
DATE 2027 1 1.00000
DATE 2027 2 1.00000
DATE 2027 3 1.00000
DATE 2027 4 1.00000
DATE 2027 5 1.00000
DATE 2027 6 1.00000
DATE 2027 7 1.00000
DATE 2027 8 1.00000
DATE 2027 9 1.00000
DATE 2027 10 1.00000
DATE 2027 11 1.00000
DATE 2027 12 1.00000
DATE 2028 1 1.00000
DATE 2028 2 1.00000
DATE 2028 2 14.00000
DATE 2028 3 1.00000
DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000
DATE 2028 7 1.00000
DATE 2028 8 1.00000
DATE 2028 9 1.00000
DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000

DATE 2029 6 1.00000

DATE 2029 7 1.00000

DATE 2029 8 1.00000

DATE 2029 9 1.00000

DATE 2029 10 1.00000

DATE 2029 11 1.00000

DATE 2029 12 1.00000

DATE 2030 1 1.00000

DATE 2030 2 1.00000

DATE 2030 3 1.00000

DATE 2030 4 1.00000

DATE 2030 5 1.00000

DATE 2030 6 1.00000

DATE 2030 7 1.00000

DATE 2030 8 1.00000

DATE 2031 1 1.00000

DATE 2040 1 1.00000

RESULTS RELPERMCORR NUMROCKTYPE 1

RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03

RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38

RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999

RESULTS RELPERMCORR NOSWC false

RESULTS RELPERMCORR CALINDEX 0

RESULTS RELPERMCORR STOP

RESULTS PROCESSWIZ PROCESS -1

RESULTS PROCESSWIZ FOAMYOILMODEL -1

RESULTS PROCESSWIZ SGC 0.15

RESULTS PROCESSWIZ KRGCW 0.0001

RESULTS PROCESSWIZ COALESCENCE -99999 FALSE

RESULTS PROCESSWIZ BUBBLEPT -99999

RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163

RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097

RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999

RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2

RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715

RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE

RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'

RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END

RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200

RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1

RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100

RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 10.5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 8.5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

C-2-2 Enriched CO₂-WAG

INUNIT SI
WSRF WELL 1
WSRF GRID TIME
OUTSRF GRID PRES SG SO SW
OUTSRF RES NONE
OUTSRF WELL LAYER ALL DOWNHOLE
OUTSRF WELL PSPLIT
OUTSRF WELL GHGTHY
 XWEL 'CO2' 'Producer'
 ZWEL 'CO2' 'Producer'

WPRN GRID 0
OUTPRN GRID NONE
OUTPRN RES NONE
** Distance units: m
RESULTS XOFFSET 0.0000
RESULTS YOFFSET 0.0000
RESULTS ROTATION 0.0000 ** (DEGREES)
RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0

** Definition of fundamental cartesian grid

GRID VARI 55 20 5
KDIR DOWN
DI IVAR
 55*11
DJ JVAR
 20*10
DK ALL
 1100*10.5 1100*0.5 1100*7 1100*0.5 1100*8.5
DTOP
 1100*400
PERMI KVAR
 100 0 250 0 300
** 0 = null block, 1 = active block
NULL CON 1
POR KVAR
 0.15 0.18 0.17 0.2 0.1
PERMJ KVAR
 100 0 250 0 300
PERMK EQUALSI * 0.1
** 0 = pinched block, 1 = active block
PINCHOUTARRAY CON 1
CPOR 1e-6
**The following is the fluid component
**property data in GEM format.

**The unit system and fluid compositions should
 **be specified in the I/O control section.
 **The units and compositions specified in WinProp
 **are included here as comments for informational purposes.
 ** PVT UNITS CONSISTENT WITH *INUNIT *SI
 **COMPOSITION *PRIMARY
 ** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01
 ** 7.4353881E-02 1.7382418E-01 3.2421938E-02
 **COMPOSITION *SECOND
 ** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00
 ** 0.0000000E+00 0.0000000E+00 0.0000000E+00
 ** Model and number of components
 MODEL SRK
 NC 7 7
 COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'
 TRES 102
 VISCOR MODPEDERSEN
 MW
 2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01
 2.2139553E+02 4.6602207E+02
 AC
 0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349
 PCRIT
 3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01
 1.8232484E+01 1.0836202E+01
 VCRIT
 8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01
 1.4181450E+00
 TCRIT
 1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02
 7.4083684E+02 9.4079417E+02
 PCHOR
 41 78 77 140.159 280.49 589.01 1016.06
 SG
 0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926
 TB
 -195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129
 HCFLAG
 0 0 0 0 0 0
 OMEGA
 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748
 OMEGB
 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404
 VSHIFT
 0 0 0 0 0.0882057 0.195725 0.241098
 HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03 0 1

0.081875 0.000538873 0.838459

0.13375 0.00319988 0.694516

0.185625 0.00907169 0.567307

0.2375 0.0190012 0.45595

0.289375 0.0337163 0.359546

0.34125 0.0538685 0.277174

0.393125 0.080055 0.20789

0.445 0.112831 0.150726

0.496875 0.152718 0.104682

0.54875 0.20021 0.0687235

0.600625 0.255779 0.0417773

0.6525 0.319876 0.0227183

0.704375 0.392935 0.0103584

0.75625 0.475374 0.00342424

0.808125 0.567598 0.000516122

0.86 0.67 0

** SI krg krog

SLT

0.13 0.72 0

0.1825 0.578889 2.65671e-005

0.235 0.458479 0.000370048

0.2875 0.356891 0.00172745

0.34 0.272295 0.00515433

0.3925 0.202915 0.0120346

0.445 0.14703 0.0240613

0.4975 0.102979 0.0432232

0.55 0.0691594 0.0717936

0.6025 0.0440391 0.112322

0.655 0.0261552 0.167627

0.7075 0.014123 0.240789

0.76 0.00664308 0.335145

0.8125	0.00251233	0.454285
0.865	0.000638099	0.602047
0.9175	6.12924e-005	0.782512
0.97	0	1

INITIAL

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01 7.4353881E-02 1.7382418E-01
3.2421938E-02

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

54 10 2 1.0 OPEN FLOW-TO 1

54 10 3 1.0 OPEN FLOW-TO 2

54 10 4 1.0 OPEN FLOW-TO 3

54 10 5 1.0 OPEN FLOW-TO 4

**

WELL 'Injector'

```

**      rad geofac wfrac skin
GEOMETRY K 0.0762 0.37 1.0 0.0
  PERF    GEOA 'Injector'
** UBA      ff      Status Connection
  2 10 1    1.0 OPEN  FLOW-TO 'SURFACE' REFLAYER
  2 10 2    1.0 OPEN  FLOW-TO 1
  2 10 3    1.0 OPEN  FLOW-TO 2
  2 10 4    1.0 OPEN  FLOW-TO 3
  2 10 5    1.0 OPEN  FLOW-TO 4
LAYERXYZ 'Injector'
** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length
  2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000
  2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000
  2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000
  2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000
  2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000
DATE 2021 2 1.00000
DATE 2021 3 1.00000
DATE 2021 4 1.00000
DATE 2021 5 1.00000
DATE 2021 6 1.00000
DATE 2021 7 1.00000
DATE 2021 8 1.00000
DATE 2021 9 1.00000
DATE 2021 10 1.00000
DATE 2021 11 1.00000
DATE 2021 12 1.00000
DATE 2022 1 1.00000
**
WELL 'Injector'
INJECTOR 'Injector'
INCOMP WATER
OPERATE MAX STW 3200.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2022 2 1.00000
DATE 2022 3 1.00000
DATE 2022 4 1.00000
DATE 2022 5 1.00000
DATE 2022 6 1.00000
DATE 2022 7 1.00000
DATE 2022 8 1.00000
DATE 2022 9 1.00000
DATE 2022 10 1.00000
DATE 2022 11 1.00000
DATE 2022 12 1.00000
DATE 2023 1 1.00000

```

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP SOLVENT 0.0 0.8 0.2 0.0 0.0 0.0 0.0
OPERATE MAX BHG 1680.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2023 2 1.00000
DATE 2023 3 1.00000
DATE 2023 4 1.00000
DATE 2023 5 1.00000
DATE 2023 6 1.00000
DATE 2023 7 1.00000
DATE 2023 8 1.00000
DATE 2023 9 1.00000
DATE 2023 10 1.00000
DATE 2023 11 1.00000
DATE 2023 12 1.00000
DATE 2024 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP WATER
OPERATE MAX STW 3200.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2024 2 1.00000
DATE 2024 3 1.00000
DATE 2024 4 1.00000
DATE 2024 5 1.00000
DATE 2024 6 1.00000
DATE 2024 7 1.00000
DATE 2024 8 1.00000
DATE 2024 9 1.00000
DATE 2024 10 1.00000
DATE 2024 11 1.00000
DATE 2024 12 1.00000
DATE 2024 12 31.00000
DATE 2025 1 1.00000

**

WELL 'Injector'
INJECTOR 'Injector'
INCOMP SOLVENT 0.0 0.8 0.2 0.0 0.0 0.0 0.0
OPERATE MAX BHG 1680.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2025 2 1.00000
DATE 2025 3 1.00000
DATE 2025 4 1.00000

DATE 2025 5 1.00000
DATE 2025 6 1.00000
DATE 2025 6 19.00000
DATE 2025 7 1.00000
DATE 2025 8 1.00000
DATE 2025 9 1.00000
DATE 2025 10 1.00000
DATE 2025 11 1.00000
DATE 2025 11 16.00000
STOP
DATE 2025 12 1.00000
DATE 2025 12 31.00000
DATE 2026 1 1.00000
DATE 2026 2 1.00000
DATE 2026 3 1.00000
DATE 2026 4 1.00000
DATE 2026 5 1.00000
DATE 2026 6 1.00000
DATE 2026 7 1.00000
DATE 2026 8 1.00000
DATE 2026 9 1.00000
DATE 2026 10 1.00000
DATE 2026 11 1.00000
DATE 2026 12 1.00000
DATE 2027 1 1.00000
DATE 2027 2 1.00000
DATE 2027 3 1.00000
DATE 2027 4 1.00000
DATE 2027 5 1.00000
DATE 2027 6 1.00000
DATE 2027 7 1.00000
DATE 2027 8 1.00000
DATE 2027 9 1.00000
DATE 2027 10 1.00000
DATE 2027 11 1.00000
DATE 2027 12 1.00000
DATE 2028 1 1.00000
DATE 2028 2 1.00000
DATE 2028 2 14.00000
DATE 2028 3 1.00000
DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000
DATE 2028 7 1.00000
DATE 2028 8 1.00000
DATE 2028 9 1.00000

DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000
DATE 2029 6 1.00000
DATE 2029 7 1.00000
DATE 2029 8 1.00000
DATE 2029 9 1.00000
DATE 2029 10 1.00000
DATE 2029 11 1.00000
DATE 2029 12 1.00000
DATE 2030 1 1.00000
DATE 2030 2 1.00000
DATE 2030 3 1.00000
DATE 2030 4 1.00000
DATE 2030 5 1.00000
DATE 2030 6 1.00000
DATE 2030 7 1.00000
DATE 2030 8 1.00000
DATE 2031 1 1.00000
DATE 2040 1 1.00000
RESULTS RELPERMCORR NUMROCKTYPE 1
RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03
RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38
RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999
RESULTS RELPERMCORR NOSWC false
RESULTS RELPERMCORR CALINDEX 0
RESULTS RELPERMCORR STOP
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRG CW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1

RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102

RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ

RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028

RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
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RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
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RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50

RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK
RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END

RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250

RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'

RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 10.5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 8.5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1

RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP

C-2-2 CWI

```

INUNIT SI
WSRF WELL 1
WSRF GRID TIME
OUTSRF GRID PRES SG SO SW
OUTSRF RES NONE
OUTSRF WELL LAYER ALL DOWNHOLE
OUTSRF WELL PSPLIT
OUTSRF WELL GHGTHY
      XWEL 'CO2' 'Producer'
      ZWEL 'CO2' 'Producer'
WPRN GRID 0
OUTPRN GRID NONE
OUTPRN RES NONE
** Distance units: m
RESULTS XOFFSET      0.0000
RESULTS YOFFSET      0.0000
RESULTS ROTATION      0.0000 ** (DEGREES)
RESULTS AXES-DIRECTIONS 1.0 -1.0 1.0
** *****
** Definition of fundamental cartesian grid
** *****
GRID VARI 55 20 5
KDIR DOWN
DI IVAR
55*11
DJ JVAR
20*10
DK ALL
1100*10.5 1100*0.5 1100*7 1100*0.5 1100*8.5
DTOP
1100*400
PERMI KVAR
100 0 250 0 300
** 0 = null block, 1 = active block
NULL CON      1
POR KVAR
0.15 0.18 0.17 0.2 0.1
PERMJ KVAR
100 0 250 0 300
PERMK EQUALSI * 0.1
** 0 = pinched block, 1 = active block
PINCHOUTARRAY CON      1
CPOR 1e-6
**The following is the fluid component
**property data in GEM format.
**The unit system and fluid compositions should

```

**be specified in the I/O control section.

**The units and compositions specified in WinProp

**are included here as comments for informational purposes.

** PVT UNITS CONSISTENT WITH *INUNIT *SI

**COMPOSITION *PRIMARY

** 1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01

** 7.4353881E-02 1.7382418E-01 3.2421938E-02

**COMPOSITION *SECOND

** 0.0000000E+00 1.0000000E+00 0.0000000E+00 0.0000000E+00

** 0.0000000E+00 0.0000000E+00 0.0000000E+00

** Model and number of components

MODEL SRK

NC 7 7

COMPNAME 'N2' 'CO2' 'CH4' 'C2HtoNC4' 'IC5toC06' 'C10toC21' 'C26+'

TRES 102

VISCOR MODPEDERSEN

MW

2.8013000E+01 4.4010000E+01 1.6043000E+01 4.1092710E+01 9.5004877E+01

2.2139553E+02 4.6602207E+02

AC

0.04 0.225 0.008 0.136576 0.274212 0.59027 1.06349

PCRIT

3.3500000E+01 7.2800000E+01 4.5400000E+01 4.3450226E+01 3.1115187E+01

1.8232484E+01 1.0836202E+01

VCRIT

8.9500000E-02 9.4000000E-02 9.9000000E-02 1.8945622E-01 3.7540045E-01 7.9130636E-01

1.4181450E+00

TCRIT

1.2620000E+02 3.0420000E+02 1.9060000E+02 3.5660996E+02 5.3739677E+02

7.4083684E+02 9.4079417E+02

PCHOR

41 78 77 140.159 280.49 589.01 1016.06

SG

0.809 0.818 0.3 0.462352 0.718507 0.851279 0.948926

TB

-195.75 -78.45 -161.45 -25.0282 95.3781 286.578 502.129

HCFLAG

0 0 0 0 0 0

OMEGA

0.42748 0.42748 0.42748 0.42748 0.42748 0.42748 0.42748

OMEGA

0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404 0.0866404

VSHIFT

0 0 0 0 0.0882057 0.195725 0.241098

HEATING_VALUES

0 0 844.29 1966.43 960.716 0 0

BIN

0.0000000E+00

2.0000000E-02 1.2000000E-01

7.1283582E-02 1.5000000E-01 6.9826985E-03

1.0854128E-01 1.5000000E-01 2.8941751E-02 7.7468685E-03

1.2000000E-01 1.5000000E-01 6.8176090E-02 3.3178799E-02 9.2012531E-03

1.2000000E-01 1.5000000E-01 1.0811687E-01 6.4152287E-02 2.8782276E-02 5.6480492E-03

VISW 0.45

ROCKFLUID

RPT 1

** Sw krw krow

SWT

0.03 0 1

0.081875 0.000538873 0.838459

0.13375 0.00319988 0.694516

0.185625 0.00907169 0.567307

0.2375 0.0190012 0.45595

0.289375 0.0337163 0.359546

0.34125 0.0538685 0.277174

0.393125 0.080055 0.20789

0.445 0.112831 0.150726

0.496875 0.152718 0.104682

0.54875 0.20021 0.0687235

0.600625 0.255779 0.0417773

0.6525 0.319876 0.0227183

0.704375 0.392935 0.0103584

0.75625 0.475374 0.00342424

0.808125 0.567598 0.000516122

0.86 0.67 0

** Sl krg krog

SLT

0.13 0.72 0

0.1825 0.578889 2.65671e-005

0.235 0.458479 0.000370048

0.2875 0.356891 0.00172745

0.34 0.272295 0.00515433

0.3925 0.202915 0.0120346

0.445 0.14703 0.0240613

0.4975 0.102979 0.0432232

0.55 0.0691594 0.0717936

0.6025 0.0440391 0.112322

0.655 0.0261552 0.167627

0.7075 0.014123 0.240789

0.76 0.00664308 0.335145

0.8125 0.00251233 0.454285

0.865 0.000638099 0.602047
0.9175 6.12924e-005 0.782512
0.97 0 1

INITIAL

VERTICAL DEPTH_AVE WATER_OIL EQUIL

ZOIL

1.4000000E-03 9.8000000E-03 5.7420000E-01 1.3400000E-01 7.4353881E-02 1.7382418E-01
3.2421938E-02

REFPRES

42600

REFDEPTH

427

DWOC

428

SWOC

0.99

GASZONE NOOIL

NUMERICAL

DTMIN 1e-005

CONVERGE MAXRES LOOSE

RUN

DATE 2021 1 1

DTWELL 0.01

**

WELL 'Producer'

PRODUCER 'Producer'

OPERATE MIN BHP 13789.514 CONT

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Producer'

** UBA ff Status Connection

54 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

54 10 2 1.0 OPEN FLOW-TO 1

54 10 3 1.0 OPEN FLOW-TO 2

54 10 4 1.0 OPEN FLOW-TO 3

54 10 5 1.0 OPEN FLOW-TO 4

**

WELL 'Injector_Gas'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector_Gas'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

2 10 2 1.0 OPEN FLOW-TO 1

2 10 3 1.0 OPEN FLOW-TO 2

2 10 4 1.0 OPEN FLOW-TO 3

2 10 5 1.0 OPEN FLOW-TO 4

LAYERXYZ 'Injector_Gas'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

**

WELL 'Injector_Water'

** rad geofac wfrac skin

GEOMETRY K 0.0762 0.37 1.0 0.0

PERF GEOA 'Injector_Water'

** UBA ff Status Connection

2 10 1 1.0 OPEN FLOW-TO 'SURFACE' REFLAYER

2 10 2 1.0 OPEN FLOW-TO 1

2 10 3 1.0 OPEN FLOW-TO 2

2 10 4 1.0 OPEN FLOW-TO 3

2 10 5 1.0 OPEN FLOW-TO 4

LAYERXYZ 'Injector_Water'

** perf geometric data: UBA, block entry(x,y,z) block exit(x,y,z), length

2 10 1 16.500000 95.000000 400.000000 16.500000 95.000000 405.000000 5.000000

2 10 2 16.500000 95.000000 405.000000 16.500000 95.000000 411.000000 6.000000

2 10 3 16.500000 95.000000 411.000000 16.500000 95.000000 418.000000 7.000000

2 10 4 16.500000 95.000000 418.000000 16.500000 95.000000 422.000000 4.000000

2 10 5 16.500000 95.000000 422.000000 16.500000 95.000000 427.000000 5.000000

DATE 2021 2 1.00000

DATE 2021 3 1.00000

DATE 2021 4 1.00000

DATE 2021 5 1.00000

DATE 2021 6 1.00000

DATE 2021 7 1.00000

DATE 2021 8 1.00000

DATE 2021 9 1.00000

DATE 2021 10 1.00000

DATE 2021 11 1.00000

DATE 2021 12 1.00000

DATE 2022 1 1.00000

**

WELL 'Injector_Gas'
INJECTOR 'Injector_Gas'
INCOMP SOLVENT 0.0 1.0 0.0 0.0 0.0 0.0 0.0
OPERATE MAX BHG 320.0 CONT
OPERATE MAX BHP 50000.0 CONT
**

WELL 'Injector_Water'
INJECTOR 'Injector_Water'
INCOMP WATER
OPERATE MAX STW 3200.0 CONT
OPERATE MAX BHP 50000.0 CONT
DATE 2022 2 1.00000
DATE 2022 3 1.00000
DATE 2022 4 1.00000
DATE 2022 5 1.00000
DATE 2022 6 1.00000
DATE 2022 7 1.00000
DATE 2022 8 1.00000
DATE 2022 9 1.00000
DATE 2022 10 1.00000
DATE 2022 11 1.00000
DATE 2022 12 1.00000
DATE 2023 1 1.00000
DATE 2023 2 1.00000
DATE 2023 3 1.00000
DATE 2023 4 1.00000
DATE 2023 5 1.00000
DATE 2023 6 1.00000
DATE 2023 7 1.00000
DATE 2023 8 1.00000
DATE 2023 9 1.00000
DATE 2023 10 1.00000
DATE 2023 11 1.00000
DATE 2023 12 1.00000
DATE 2024 1 1.00000
DATE 2024 2 1.00000
DATE 2024 3 1.00000
DATE 2024 4 1.00000
DATE 2024 5 1.00000
DATE 2024 6 1.00000
DATE 2024 7 1.00000
DATE 2024 8 1.00000
DATE 2024 9 1.00000
DATE 2024 10 1.00000
DATE 2024 11 1.00000
DATE 2024 12 1.00000

DATE 2025 1 1.00000
DATE 2025 2 1.00000
DATE 2025 3 1.00000
DATE 2025 4 1.00000
DATE 2025 5 1.00000
DATE 2025 6 1.00000
DATE 2025 6 19.00000
DATE 2025 7 1.00000
DATE 2025 8 1.00000
DATE 2025 9 1.00000
DATE 2025 10 1.00000
DATE 2025 11 1.00000
DATE 2025 11 16.00000
STOP
DATE 2025 12 1.00000
DATE 2026 1 1.00000
DATE 2026 2 1.00000
DATE 2026 3 1.00000
DATE 2026 4 1.00000
DATE 2026 5 1.00000
DATE 2026 6 1.00000
DATE 2026 7 1.00000
DATE 2026 8 1.00000
DATE 2026 9 1.00000
DATE 2026 10 1.00000
DATE 2026 11 1.00000
DATE 2026 12 1.00000
DATE 2027 1 1.00000
DATE 2027 2 1.00000
DATE 2027 3 1.00000
DATE 2027 4 1.00000
DATE 2027 5 1.00000
DATE 2027 6 1.00000
DATE 2027 7 1.00000
DATE 2027 8 1.00000
DATE 2027 9 1.00000
DATE 2027 10 1.00000
DATE 2027 11 1.00000
DATE 2027 12 1.00000
DATE 2028 1 1.00000
DATE 2028 2 1.00000
DATE 2028 2 14.00000
DATE 2028 3 1.00000
DATE 2028 4 1.00000
DATE 2028 5 1.00000
DATE 2028 6 1.00000

DATE 2028 7 1.00000
DATE 2028 8 1.00000
DATE 2028 9 1.00000
DATE 2028 10 1.00000
DATE 2028 11 1.00000
DATE 2028 12 1.00000
DATE 2029 1 1.00000
DATE 2029 2 1.00000
DATE 2029 3 1.00000
DATE 2029 4 1.00000
DATE 2029 5 1.00000
DATE 2029 6 1.00000
DATE 2029 7 1.00000
DATE 2029 8 1.00000
DATE 2029 9 1.00000
DATE 2029 10 1.00000
DATE 2029 11 1.00000
DATE 2029 12 1.00000
DATE 2030 1 1.00000
DATE 2030 2 1.00000
DATE 2030 3 1.00000
DATE 2030 4 1.00000
DATE 2030 5 1.00000
DATE 2030 6 1.00000
DATE 2030 7 1.00000
DATE 2030 8 1.00000
DATE 2031 1 1.00000
DATE 2040 1 1.00000
RESULTS RELPERMCORR NUMROCKTYPE 1
RESULTS RELPERMCORR CORRVALS 0.03 0.03 0.14 0.14 0.1 0.1 0.03 0.03
RESULTS RELPERMCORR CORRVALS 1 0.67 0.72 -99999 2.57 2.73 3.8 3.38
RESULTS RELPERMCORR CORRVALS_HONARPOUR -99999 -99999 -99999 -99999 -
99999 -99999 -99999 -99999
RESULTS RELPERMCORR NOSWC false
RESULTS RELPERMCORR CALINDEX 0
RESULTS RELPERMCORR STOP
RESULTS PROCESSWIZ PROCESS -1
RESULTS PROCESSWIZ FOAMYOILMODEL -1
RESULTS PROCESSWIZ SGC 0.15
RESULTS PROCESSWIZ KRGCW 0.0001
RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
RESULTS PROCESSWIZ BUBBLEPT -99999
RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
RESULTS PROCESSWIZ NUMSETSFOAMY 2
RESULTS PROCESSWIZ PRODTIME 1
RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1

RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
RESULTS PROCESSWIZ CHEMMODEL -1
RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
FALSE
RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
13.86 0 0.02 0.35
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
15 0.7 10 0.8 5 0.9 2 1 0.02
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
0.6 220 0.7 150 0.8 48 0.9 20 1 15
RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
0.6 335 0.7 255 0.8 180 0.9 125 1 40
RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
RESULTS PROCESSWIZ TABLEIFT 0 18.2
RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356

RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0
RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'

RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
 FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
 RESULTS PROCESSWIZ LSWIREACTAQ
 RESULTS PROCESSWIZ LSWIREACTMIN
 RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
 RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
 RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
 RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
 RESULTS PROCESSWIZ LSWIAQINJ
 RESULTS PROCESSWIZ LSWIAQINIT
 RESULTS PROCESSWIZ LSWIMIN
 RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
 FALSE
 RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
 RESULTS PROCESSWIZ REACTO2
 RESULTS PROCESSWIZ BURN
 RESULTS PROCESSWIZ CRACK
 RESULTS PROCESSWIZ COMPNAMES
 RESULTS PROCESSWIZ BLOCKAGE FALSE 4
 RESULTS PROCESSWIZ END
 RESULTS PROCESSWIZ PROCESS -1
 RESULTS PROCESSWIZ FOAMYOILMODEL -1
 RESULTS PROCESSWIZ SGC 0.15
 RESULTS PROCESSWIZ KRGCW 0.0001
 RESULTS PROCESSWIZ COALESCENCE -99999 FALSE
 RESULTS PROCESSWIZ BUBBLEPT -99999
 RESULTS PROCESSWIZ MINPRESSURE -99999 FALSE
 RESULTS PROCESSWIZ NUMSETSFOAMY 2
 RESULTS PROCESSWIZ PRODTIME 1
 RESULTS PROCESSWIZ FOAMYREACTIONS 1 1 1 1 1
 RESULTS PROCESSWIZ VELOCITYFOAMY TRUE
 RESULTS PROCESSWIZ CHEMMODEL -1
 RESULTS PROCESSWIZ CHEMDATA1 TRUE FALSE TRUE TRUE FALSE 0 3 FALSE
 FALSE
 RESULTS PROCESSWIZ CHEMDATA2 0.1 -99999 0 1 0 5 0.9 180 -99999 0 0
 RESULTS PROCESSWIZ CHEMDATA3 2.65 0 0.1 0.1 0.1 0.1
 RESULTS PROCESSWIZ FOAMDATA FALSE TRUE FALSE 80 101.3 16.7 1.386 0.693 693
 13.86 0 0.02 0.35
 RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.02 0 1 0.1 20 0.2 40 0.3 45 0.4 48 0.5 49 0.6
 15 0.7 10 0.8 5 0.9 2 1 0.02
 RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.1 0 1 0.1 160 0.2 170 0.3 180 0.4 205 0.5 210
 0.6 220 0.7 150 0.8 48 0.9 20 1 15
 RESULTS PROCESSWIZ TABLEFOAMVISC 0 0.2 0 1 0.1 235 0.2 255 0.3 345 0.4 380 0.5 415
 0.6 335 0.7 255 0.8 180 0.9 125 1 40
 RESULTS PROCESSWIZ FOAMVISCWEIGHT 1 0.1 0.4 1
 RESULTS PROCESSWIZ TABLEIFT 0 18.2

RESULTS PROCESSWIZ TABLEIFT 0.05 0.5
RESULTS PROCESSWIZ TABLEIFT 0.1 0.028
RESULTS PROCESSWIZ TABLEIFT 0.2 0.028
RESULTS PROCESSWIZ TABLEIFT 0.4 0.0057
RESULTS PROCESSWIZ TABLEIFT 0.6 0.00121
RESULTS PROCESSWIZ TABLEIFT 0.8 0.00037
RESULTS PROCESSWIZ TABLEIFT 1 0.5
RESULTS PROCESSWIZ IFTSURFACTANT TRUE 8
RESULTS PROCESSWIZ SURFACTCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTS 0 23.4
RESULTS PROCESSWIZ TABLEIFTS 0.5 5.163
RESULTS PROCESSWIZ TABLEIFTS 0.75 4.356
RESULTS PROCESSWIZ TABLEIFTS 1 3.715
RESULTS PROCESSWIZ TABLEIFTS 1.25 4.102
RESULTS PROCESSWIZ TABLEIFTS 1.5 3.805
RESULTS PROCESSWIZ TABLEIFTS 1.75 3.521
RESULTS PROCESSWIZ TABLEIFTS 2 2.953
RESULTS PROCESSWIZ TABLEIFTS 0 0.17
RESULTS PROCESSWIZ TABLEIFTS 0.5 0.011
RESULTS PROCESSWIZ TABLEIFTS 0.75 0.005
RESULTS PROCESSWIZ TABLEIFTS 1 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.25 0.007
RESULTS PROCESSWIZ TABLEIFTS 1.5 0.056
RESULTS PROCESSWIZ TABLEIFTS 1.75 0.097
RESULTS PROCESSWIZ TABLEIFTS 2 0.098
RESULTS PROCESSWIZ IFTSURFACTANTSALINITY TRUE 8
RESULTS PROCESSWIZ SURFACTSALINITYCONC 0 0.05
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 23.4
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 5.163
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 4.356
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 3.715
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 4.102
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 3.805
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 3.521
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 2.953
RESULTS PROCESSWIZ TABLEIFTSSALINITY 0 0.17
RESULTS PROCESSWIZ TABLEIFTSSALINITY 15000 0.011
RESULTS PROCESSWIZ TABLEIFTSSALINITY 22500 0.005
RESULTS PROCESSWIZ TABLEIFTSSALINITY 30000 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 37500 0.007
RESULTS PROCESSWIZ TABLEIFTSSALINITY 45000 0.056
RESULTS PROCESSWIZ TABLEIFTSSALINITY 52500 0.097
RESULTS PROCESSWIZ TABLEIFTSSALINITY 60000 0.098
RESULTS PROCESSWIZ ADSORPTION TRUE TRUE FALSE TRUE 2 TRUE
RESULTS PROCESSWIZ ADSPOR 0.2494 0.2494 0.2494
RESULTS PROCESSWIZ ADSSURF 0 0

RESULTS PROCESSWIZ ADSSURF 0.1 27.5
RESULTS PROCESSWIZ ADSALK 0 0
RESULTS PROCESSWIZ ADSALK 0.1 50
RESULTS PROCESSWIZ ADSPOLYMER 0 0
RESULTS PROCESSWIZ ADSPOLYMER 0.1 50
RESULTS PROCESSWIZ ALKALINECONC 0 0.3 0.6
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 27.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 39.5
RESULTS PROCESSWIZ ADSSURF2 0 0
RESULTS PROCESSWIZ ADSSURF2 0.1 51
RESULTS PROCESSWIZ SALINITYPPM 0 30000 60000
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 27.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 39.5
RESULTS PROCESSWIZ ADSSURF3 0 0
RESULTS PROCESSWIZ ADSSURF3 0.1 51
RESULTS PROCESSWIZ VELOCITY 0.01
RESULTS PROCESSWIZ SALINITY 1000
RESULTS PROCESSWIZ COMPPOLY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ POLYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ COMPSALINITY 0 0.03 0.05 0.075
RESULTS PROCESSWIZ SALINITYVISC 1 3.5 5.2 10.8
RESULTS PROCESSWIZ SALINITY_INITIAL -99999
RESULTS PROCESSWIZ FINES 10000 8000 -99999 15000 500 50 10 5000 0.0001 0.0624279
FALSE
RESULTS PROCESSWIZ LSWI 50 0.19 0.5 0 2 2 'Ca-X2'
RESULTS PROCESSWIZ LSWIREACT FALSE TRUE TRUE TRUE TRUE TRUE TRUE
FALSE FALSE FALSE FALSE FALSE FALSE 0.9999
RESULTS PROCESSWIZ LSWIREACTAQ
RESULTS PROCESSWIZ LSWIREACTMIN
RESULTS PROCESSWIZ LSWIREACTAQMINTEQ
RESULTS PROCESSWIZ LSWIREACTMINMINTEQ
RESULTS PROCESSWIZ LSWIRPT 0.6 0.7
RESULTS PROCESSWIZ LSWIRPTCHG TRUE 0.001 2 4
RESULTS PROCESSWIZ LSWIAQINJ
RESULTS PROCESSWIZ LSWIAQINIT
RESULTS PROCESSWIZ LSWIMIN
RESULTS PROCESSWIZ ISCMODEL -1 FALSE FALSE FALSE FALSE FALSE FALSE
FALSE
RESULTS PROCESSWIZ ISCDATA 10000 0.5 9 9.4 0.065 0.708108 0.065 0.708108
RESULTS PROCESSWIZ REACTO2
RESULTS PROCESSWIZ BURN
RESULTS PROCESSWIZ CRACK

RESULTS PROCESSWIZ COMPNAMES
RESULTS PROCESSWIZ BLOCKAGE FALSE 4
RESULTS PROCESSWIZ END
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 200
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 6
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 4
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability J'
RESULTS SPEC SPECNOTCALCVAL -99999

RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Porosity'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.15
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.18
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.17
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'

RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.2
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.1
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability I'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 100
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 250
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 300
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Permeability K'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'All Layers (Whole Grid)'
RESULTS SPEC REGIONTYPE 'REGION_WHOLEGRID'
RESULTS SPEC LAYERNUMB 0
RESULTS SPEC PORTYPE 1
RESULTS SPEC EQUALSI 1 0.1

RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Top'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 400
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP
RESULTS SPEC 'Grid Thickness'
RESULTS SPEC SPECNOTCALCVAL -99999
RESULTS SPEC REGION 'Layer 1 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 1
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 10.5
RESULTS SPEC REGION 'Layer 2 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 2
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 3 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 3
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 7
RESULTS SPEC REGION 'Layer 4 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 4
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 0.5
RESULTS SPEC REGION 'Layer 5 - Whole layer'
RESULTS SPEC REGIONTYPE 'REGION_LAYER'
RESULTS SPEC LAYERNUMB 5
RESULTS SPEC PORTYPE 1
RESULTS SPEC CON 8.5
RESULTS SPEC SPECKEEMOD 'YES'
RESULTS SPEC STOP