

## COMMINGLING Order No. MU8875

MADE at the City of Calgary, in the Province of Alberta, on

8th day of July 2021.

Jehnilae

ALBERTA ENERGY REGULATOR

The Alberta Energy Regulator (AER) pursuant to the *Oil and Gas Conservation Act*, chapter O-6 of the Revised Statutes of Alberta, 2000, orders as follows:

- 1) The following table shows
  - the specified pools and wells in the **WAYNE-ROSEDALE Field** wherein production may be commingled in the wellbore, and
  - the allocation factors to prorate the commingled production to the specified pools:

	Pools	Wells (Unique Identifier)	Allocation Percentage
a)	WAYNE-ROSEDALE VIKING A,	All	None
	WAYNE-ROSEDALE VIKING X,		
	WAYNE-ROSEDALE VIKING X2X,		
	WAYNE-ROSEDALE VIKING F3F,		
	WAYNE-ROSEDALE BASAL COLORADO F,		
	WAYNE-ROSEDALE MANNVILLE EE,		
	WAYNE-ROSEDALE MANNVILLE FF,		
	WAYNE-ROSEDALE UPPER MANNVILLE ZZ,		
	WAYNE-ROSEDALE UPPER MANNVILLE YYY,		
	WAYNE-ROSEDALE UPPER MANNVILLE A2A,		
	WAYNE-ROSEDALE UPPER MANNVILLE Q2Q,		
	WAYNE-ROSEDALE UPPER MANNVILLE S2S,		
	WAYNE-ROSEDALE UPPER MANNVILLE C3C,		
	WAYNE-ROSEDALE UPPER MANNVILLE D3D,		

WAYNE-ROSEDALE UPPER MANNVILLE 040,

WAYNE-ROSEDALE UPPER MANNVILLE 050,

WAYNE-ROSEDALE UPPER MANNVILLE S5S,

WAYNE-ROSEDALE UPPER MANNVILLE V5V,

WAYNE-ROSEDALE UPPER MANNVILLE Z5Z,

WAYNE-ROSEDALE GLAUCONITIC D.

WAYNE-ROSEDALE GLAUCONITIC T,

WAYNE-ROSEDALE GLAUCONITIC V,

WAYNE-ROSEDALE GLAUCONITIC AA,

WAYNE-ROSEDALE GLAUCONITIC BB,

WAYNE-ROSEDALE GLAUCONITIC NNN,

WAYNE-ROSEDALE GLAUCONITIC QQQ,

WAYNE-ROSEDALE GLAUCONITIC RRR,

WAYNE-ROSEDALE GLAUCONITIC C3C.

WAYNE-ROSEDALE GLAUCONITIC L3L,

WAYNE-ROSEDALE GLAUCONITIC P3P,

WAYNE-ROSEDALE LOWER MANNVILLE SS,

WAYNE-ROSEDALE LOWER MANNVILLE LLL,

WAYNE-ROSEDALE LOWER MANNVILLE D4D,

WAYNE-ROSEDALE LOWER MANNVILLE F4F,

WAYNE-ROSEDALE LOWER MANNVILLE L4L,

WAYNE-ROSEDALE LOWER MANNVILLE P4P,

WAYNE-ROSEDALE LOWER MANNVILLE T4T,

WAYNE-ROSEDALE OSTRACOD E,

WAYNE-ROSEDALE BASAL QUARTZ SS,

WAYNE-ROSEDALE BASAL QUARTZ ZZ,

WAYNE-ROSEDALE BASAL QUARTZ KKK,

WAYNE-ROSEDALE BASAL QUARTZ C3C.

WAYNE-ROSEDALE ELLERSLIE H,

WAYNE-ROSEDALE ELLERSLIE I,

WAYNE-ROSEDALE ELLERSLIE L,
WAYNE-ROSEDALE PEKISKO D,
WAYNE-ROSEDALE PEKISKO H,
WAYNE-ROSEDALE PEKISKO Q,
WAYNE-ROSEDALE MFP8502 MED HAT,
WAYNE-ROSEDALE MFP8506 BELLY RIVER, and
WAYNE-ROSEDALE MFP8543 BSL BELLY RIV

b)	WAYNE-ROSEDALE VIKING A,	00/08-04-027-19W4/0	None
	WAYNE-ROSEDALE VIKING Y,		
	WAYNE-ROSEDALE GLAUCONITIC LLL, and		
	WAYNE-ROSEDALE GLAUCONITIC MMM		
c)	WAYNE-ROSEDALE VIKING A,	00/06-28-026-19W4/0	None
0)	WAYNE-ROSEDALE VIKING JJ, and	00/16-28-026-19W4/0	110110
		00/10-26-020-1944/0	
	WAYNE-ROSEDALE GLAUCONITIC XXX		
d)	WAYNE-ROSEDALE VIKING A and	00/04-33-026-19W4/0	None
	WAYNE-ROSEDALE GLAUCONITIC XXX	00/08-15-026-19W4/0	
e)	WAYNE-ROSEDALE VIKING A,	02/07-06-029-21W4/0	50
	WAYNE-ROSEDALE ELLERSLIE E,	02/07-06-029-21W4/0	50
	WAYNE-ROSEDALE VIKING A,	00/04-07-029-21W4/0	50
	WAYNE-ROSEDALE ELLERSLIE E,	00/04-07-029-21W4/0	50
	WAYNE-ROSEDALE VIKING A, and	00/06-18-029-21W4/0	50
	WAYNE-ROSEDALE ELLERSLIE E	00/06-18-029-21W4/0	50
0	WAYNE DOOEDALE WIKING D	00/00 00 000 40\\\4/0	Nicos
f)	WAYNE-ROSEDALE VIKING B and	02/06-30-026-19W4/0	None
	WAYNE-ROSEDALE GLAUCONITIC XXX		
g)	WAYNE-ROSEDALE VIKING B,	All	None
	WAYNE-ROSEDALE GLAUCONITIC V2V,		
	WAYNE-ROSEDALE GLAUCONITIC X2X,		

WAYNE-ROSEDALE OSTRACOD I,
WAYNE-ROSEDALE BASAL QUARTZ SSS, and
WAYNE-ROSEDALE BASAL QUARTZ L3L

h)	WAYNE-ROSEDALE VIKING LL and	All	None
	WAYNE-ROSEDALE GLAUCONITIC P2P		
i)	WAYNE-ROSEDALE VIKING MM,	All	None
'/		All	None
	WAYNE-ROSEDALE GLAUCONITIC VVV,		
	WAYNE-ROSEDALE GLAUCONITIC WWW,		
	WAYNE-ROSEDALE GLAUCONITIC XXX,		
	WAYNE-ROSEDALE GLAUCONITIC G2G,		
	WAYNE-ROSEDALE GLAUCONITIC H2H,		
	WAYNE-ROSEDALE GLAUCONITIC I2I, and		
	WAYNE-ROSEDALE OSTRACOD W		
j)	WAYNE-ROSEDALE VIKING UU and	All	None
	WAYNE-ROSEDALE GLAUCONITIC D3D		
1/1	MANNE DAREDALE MIKING YOY and	00/09 14 099 100/4/0	
k)	WAYNE-ROSEDALE VIKING X2X and	00/02-14-028-19W4/0	None
K)	WAYNE-ROSEDALE LOWER MANNVILLE H	00/02-14-026-19994/0	None
K)		00/02-14-026-19994/0	none
l)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)	00/02-14-026-19VV4/0	None
	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15) WAYNE-ROSEDALE VIKING A3A,		
	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and		
	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15) WAYNE-ROSEDALE VIKING A3A,		
	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and		
1)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and WAYNE-ROSEDALE UPPER MANNVILLE Y2Y	All	None
1)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and WAYNE-ROSEDALE UPPER MANNVILLE Y2Y  WAYNE-ROSEDALE VIKING G3G and	All	None
1)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and WAYNE-ROSEDALE UPPER MANNVILLE Y2Y  WAYNE-ROSEDALE VIKING G3G and	All	None
l) m)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and WAYNE-ROSEDALE UPPER MANNVILLE Y2Y  WAYNE-ROSEDALE VIKING G3G and WAYNE-ROSEDALE UPPER MANNVILLE I3I	AII	None
l) m)	WAYNE-ROSEDALE LOWER MANNVILLE H (see clause 15)  WAYNE-ROSEDALE VIKING A3A, WAYNE-ROSEDALE UPPER MANNVILLE HHH, and WAYNE-ROSEDALE UPPER MANNVILLE Y2Y  WAYNE-ROSEDALE VIKING G3G and WAYNE-ROSEDALE UPPER MANNVILLE I3I  WAYNE-ROSEDALE MANNVILLE E and	AII	None

p)	WAYNE-ROSEDALE MANNVILLE K and	All	None
	WAYNE-ROSEDALE MANNVILLE KK		
q)	WAYNE-ROSEDALE MANNVILLE M and	All	None
	WAYNE-ROSEDALE UPPER MANNVILLE A3A		
r)	WAYNE-ROSEDALE MANNVILLE W and	All	None
',	WAYNE-ROSEDALE UPPER MANNVILLE T2T	7 (11	None
s)	WAYNE-ROSEDALE UPPER MANNVILLE UU and	All	None
	WAYNE-ROSEDALE LOWER MANNVILLE I		
t)	WAYNE-ROSEDALE UPPER MANNVILLE XX,	All	None
	WAYNE-ROSEDALE UPPER MANNVILLE O2O, and		
	WAYNE-ROSEDALE LOWER MANNVILLE LL		
u)	WAYNE-ROSEDALE UPPER MANNVILLE AAA,	All	None
	WAYNE-ROSEDALE UPPER MANNVILLE CCC, and		
	WAYNE-ROSEDALE BANFF H		
v)	WAYNE-ROSEDALE UPPER MANNVILLE MMM,	All	None
	WAYNE-ROSEDALE UPPER MANNVILLE M5M,		
	WAYNE-ROSEDALE LOWER MANNVILLE Z, and		
	WAYNE-ROSEDALE MFP8540 BSL BELLY RIV		
w)	WAYNE-ROSEDALE UPPER MANNVILLE VVV and	All	None
,	WAYNE-ROSEDALE LOWER MANNVILLE KK	<i>y</i>	
x)	WAYNE-ROSEDALE UPPER MANNVILLE L5L and	All	None
	WAYNE-ROSEDALE LOWER MANNVILLE 030		
y)	WAYNE-ROSEDALE GLAUCONITIC HH and	All	None
	WAYNE-ROSEDALE GLAUCONITIC G3G		

z)	WAYNE-ROSEDALE GLAUCONITIC JJJ and	All	None
	WAYNE-ROSEDALE BASAL QUARTZ B2B		
aa)	WAYNE-ROSEDALE GLAUCONITIC SSS and	All	None
,	WAYNE-ROSEDALE OSTRACOD V		
bb)	WAYNE-ROSEDALE GLAUCONITIC XXX,	00/06-12-026-19W4/0	65
	WAYNE-ROSEDALE OSTRACOD E,	00/06-12-026-19W4/0	35
	WAYNE-ROSEDALE GLAUCONITIC XXX,	00/08-14-026-19W4/0	60
	WAYNE-ROSEDALE OSTRACOD E,	00/08-14-026-19W4/0	40
	WAYNE-ROSEDALE GLAUCONITIC XXX, and	00/08-22-026-19W4/0	60
	WAYNE-ROSEDALE OSTRACOD E	00/08-22-026-19W4/0	40
cc)	WAYNE-ROSEDALE GLAUCONITIC XXX and	02/08-02-026-19W4/0	60
	WAYNE-ROSEDALE OSTRACOD H	02/08-02-026-19W4/0	40
dd)	WAYNE-ROSEDALE GLAUCONITIC C2C and	00/14-13-026-20W4/0	75
	WAYNE-ROSEDALE GLAUCONITIC F2F	00/14-13-026-20W4/0	25
ee)	WAYNE-ROSEDALE GLAUCONITIC K2K and	All	None
	WAYNE-ROSEDALE OSTRACOD AA		
ff)	WAYNE-ROSEDALE GLAUCONITIC L2L,	All	None
	WAYNE-ROSEDALE GLAUCONITIC K3K, and		
	WAYNE-ROSEDALE BASAL QUARTZ 121		
,			
gg)	WAYNE-ROSEDALE GLAUCONITIC W2W and	All	None
	WAYNE-ROSEDALE BASAL QUARTZ Y		
hh)	WAYNE-ROSEDALE GLAUCONITIC M3M and	All	None
	WAYNE-ROSEDALE BASAL QUARTZ C		
ii)	WAYNE-ROSEDALE GLAUCONITIC U5U and	All	None
	WAYNE-ROSEDALE GLAUCONITIC Y5Y		

jj)	WAYNE-ROSEDALE GLAUCONITIC V5V and	All	None
	WAYNE-ROSEDALE MFP8535 BSL BELLY RIV		
kk)	WAYNE-ROSEDALE GLAUCONITIC A6A and	All	None
,	WAYNE-ROSEDALE ELLERSLIE D		
II)	<sup>1</sup> WAYNE-ROSEDALE LOWER MANNVILLE U5U and	All	None
	WAYNE-ROSEDALE MFP8540 BSL BELLY RIV		
mm)	WAYNE-ROSEDALE BASAL QUARTZ F2F and	All	None
	WAYNE-ROSEDALE PEKISKO A		
nn)	WAYNE-ROSEDALE MFP8506 BELLY RIVER and	00/04-16-031-19W	/4/0 None
1111)	WATNE-ROSEDALE INFF6500 BELLT RIVER and	00/04-10-031-191	74/0 None
	WAYNE-ROSEDALE MFP8540 BSL BELLY RIV		
00)	WAYNE-ROSEDALE MFP8506 BELLY RIVER and	00/13-10-031-19W	/4/0 None
	WAYNE-ROSEDALE MFP8540 BSL BELLY RIV		

2) Coalbed methane and non associated gas production from the EDMONTON GRP, HORSESHOE CANYON FM, and LETHBRIDGE may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 28, RANGE 23, WEST OF THE 4th MERIDIAN:

Sections 27-28, 33-34

IN TOWNSHIP 31, RANGE 20, WEST OF THE 4th MERIDIAN:

Section 14

3) Coalbed methane and non associated gas production from the EDMONTON GRP, HORSESHOE CANYON FM, LETHBRIDGE, RIBSTONE CREEK MBR, VICTORIA MBR, BROSSEAU MBR, and TABER SD may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 31, RANGE 19, WEST OF THE 4th MERIDIAN:

Section 19

4) Non associated gas production from the EDMONTON GRP, BELLY RIVER GRP, MILK RIVER FM, COLORADO

SHALE, FIRST WHITE SPECKS, MEDICINE HAT SD, SECOND WHITE SPECKS, FISH SCALE MEMBER, VIKING FM, and MANNVILLE GRP may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 28, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 18 and 19 IN TOWNSHIP 28, RANGE 20, WEST OF THE 4th MERIDIAN: Sections 6 and 24 IN TOWNSHIP 28, RANGE 21, WEST OF THE 4th MERIDIAN: Sections 1-5, 9-11 IN TOWNSHIP 28, RANGE 22, WEST OF THE 4th MERIDIAN: Sections 1-3, 9-16 IN TOWNSHIP 28, RANGE 23, WEST OF THE 4th MERIDIAN: Sections 15, 25-26, 34-35 Non associated gas production from the EDMONTON GRP, BELLY RIVER GRP, MEDICINE HAT SD, VIKING FM, and MANNVILLE GRP may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 27, RANGE 21, WEST OF THE 4th MERIDIAN: Sections 31-33 IN TOWNSHIP 28, RANGE 19, WEST OF THE 4th MERIDIAN: Section 7 IN TOWNSHIP 28, RANGE 20, WEST OF THE 4th MERIDIAN: Sections 7-8, 12-13, 18-19, 29-32

IN TOWNSHIP 28, RANGE 21, WEST OF THE 4th MERIDIAN:

Sections 5-8, 12-36

IN TOWNSHIP 28, RANGE 22, WEST OF THE 4th MERIDIAN:

Sections 18-36

IN TOWNSHIP 28, RANGE 23, WEST OF THE 4th MERIDIAN:

Sections 13-14, 24

(see clause 19)

6) Coalbed methane production from the HORSESHOE CANYON FM and LETHBRIDGE may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 31, RANGE 19, WEST OF THE 4th MERIDIAN:

Sections 10 and 15

7) Non associated gas production from the BELLY RIVER GRP and BASAL BELLY RIVER SD may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 31, RANGE 19, WEST OF THE 4th MERIDIAN:

Sections 2, 4, 6, 8-9, 11, 14, 16, 18, 20, 22

IN TOWNSHIP 31, RANGE 20, WEST OF THE 4th MERIDIAN:

Sections 15 and 16

8) Non associated gas and oil production from the BELLY RIVER GRP, MEDICINE HAT SD, VIKING FM, MANNVILLE GRP, and BASAL QUARTZ SD may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 27, RANGE 19, WEST OF THE 4th MERIDIAN:

Sections 15 and 21

(see clause 18)

9) Non associated gas production from the BASAL BELLY RIVER SD may be taken without segregation in the wellbore from wells in the following areas:

IN TOWNSHIP 31, RANGE 20, WEST OF THE 4th MERIDIAN: Sections 1 and 3 Non associated gas production from the MEDICINE HAT SD, VIKING SANDSTONE, and MANNVILLE GRP may 10) be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 26, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 27-28, 34 IN TOWNSHIP 27, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 4, 9, 11 Non associated gas and oil production from the MEDICINE HAT SD and BASAL QUARTZ SD may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 27, RANGE 19, WEST OF THE 4th MERIDIAN: Section 16 (see clause 17) Non associated gas production from the VIKING FM and MANNVILLE GRP may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 27, RANGE 17, WEST OF THE 4th MERIDIAN: Section 19 IN TOWNSHIP 27, RANGE 18, WEST OF THE 4th MERIDIAN: Sections 23-28, 32-36 IN TOWNSHIP 28, RANGE 18, WEST OF THE 4th MERIDIAN: Sections 2-5, 7-11, 14, 18-22, 27-34 IN TOWNSHIP 28, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 12-14, 23

13) Associated gas, non associated gas, and oil production from the MANNVILLE GRP may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 27, RANGE 17, WEST OF THE 4th MERIDIAN: Section 7 Non associated gas production from the MANNVILLE GRP may be taken without segregation in the wellbore from wells in the following areas: IN TOWNSHIP 25, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 31-36 IN TOWNSHIP 25, RANGE 20, WEST OF THE 4th MERIDIAN: Section 36 IN TOWNSHIP 26, RANGE 18, WEST OF THE 4th MERIDIAN: Sections 32-35 IN TOWNSHIP 26, RANGE 19, WEST OF THE 4th MERIDIAN: Sections 1-12, 14-23, 29-36

IN TOWNSHIP 26, RANGE 20, WEST OF THE 4th MERIDIAN:

Sections 1, 12-14, 23-27, 34-35

IN TOWNSHIP 27, RANGE 17, WEST OF THE 4th MERIDIAN:

Sections 17-21, 28-30, 32-33

IN TOWNSHIP 27, RANGE 18, WEST OF THE 4th MERIDIAN:

Sections 1-5, 7-36

IN TOWNSHIP 27, RANGE 19, WEST OF THE 4th MERIDIAN:

Sections 1-5, 8-16, 21-36

IN TOWNSHIP 27, RANGE 20, WEST OF THE 4th MERIDIAN:

Sections 25, 35-36

IN TOWNSHIP 28, RANGE 17, WEST OF THE 4th MERIDIAN:

Sections 6-7, 17-19

IN TOWNSHIP 28, RANGE 18, WEST OF THE 4th MERIDIAN:

Sections 1-6, 9-14, 24-25

- 15) Allocation is for gas only. All oil production to be allocated to the Lower Mannville H
- 16) Commingling of the Edmonton Group and Mannville Formation shall only occur if the pressure of the Mannville Formation does not exceed 90% of the fracture pressure of the Edmonton Group.
- 17) Non-associated gas production from pools in the Medicine Hat Sand and oil production from the Basal Quartz Formation may be taken without segregation in the wellbore.
- Non-associated gas production from pools in the Belly River Group, Medicine Hat Sand, Viking Formation, and Mannville Group and oil production from the Basal Quartz Formation may be taken without segregation in the wellbore.
- 19) Commingling of the Edmonton Group and Mannville Group shall only occur if the pressure of the Mannville Group does not exceed 90% of the fracture pressure of the Edmonton Group.
- 20) AER Order No. MU8874 is rescinded.

END OF DOCUMENT