

EAST LOVING DELAWARE FIELD
MATERIAL BALANCE CALCULATIONS

PURPOSE: DETERMINE RECOVERY FACTOR AS A FUNCTION OF CUMULATIVE GOR (R_p)

- ASSUMPTIONS
- 1) No initial gas cap
 - 2) Negligible water influx
 - 3) Significant free gas saturation develops

DATA:	Abandonment Pressure	P	350 PSIA
	Abandonment Oil FVF	B_o	1.171 RB/STB
	Initial Oil FVF	B_{oi}	1.543 RB/STB
	Abandonment Gas FVF	B_g	.04131 CF/SCF
	Abandonment Solution GOR	R_s	281 CF/BBL
	Initial Solution GOR	R_{si}	1108 CF/BBL

$$\text{RECOVERY FACTOR} = \frac{(B_o - B_{oi}) + (R_{si} - R_s)B_g}{B_o + (R_p - R_s)B_g}$$

$$\text{RECOVERY FACTOR} = \frac{(1.171 - 1.543) + (1108 - 281).04131}{1.171 + (R_p - 281).04131}$$

$$\text{RECOVERY FACTOR} = \frac{818}{R_p - 252}$$



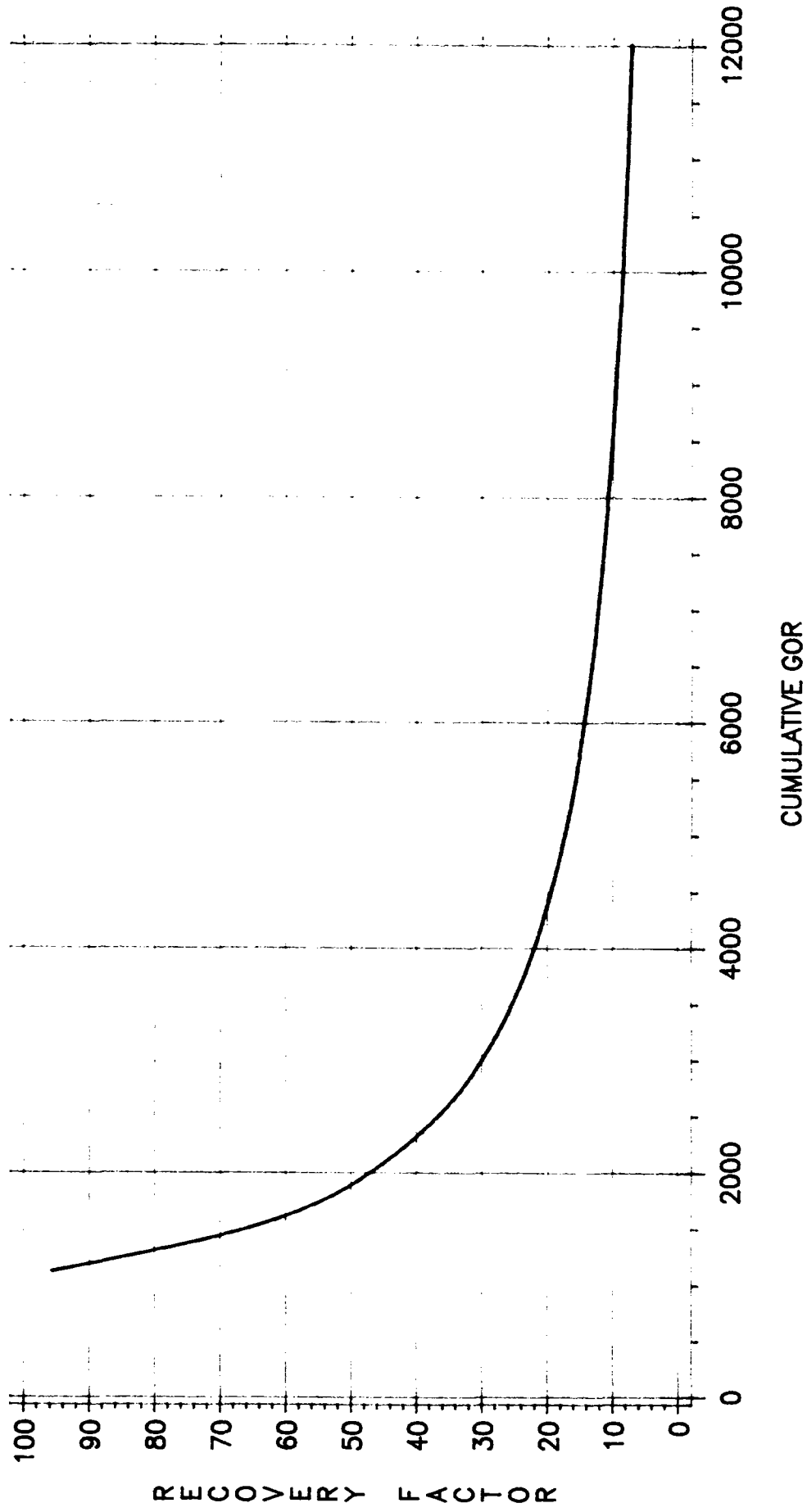
Oryx Energy Company

NMOCD CASE NO. 10226

AUGUST 29, 1991

EXHIBIT NO. 2

EAST LOVING DELAWARE FIELD
MATERIAL BALANCE
OIL RECOVERY VS CUMULATIVE GOR



NMOCC CASE NO. 10226
 FEBRUARY 21, 1991
 ORYX ENERGY EXHIBIT NO. _____