Data Normalization for Sensitivity Analyses Simulation Results

640 Acre Section

- Production Volume/160 Acre Well x 4
- Production Volume/320 Acre Well x 2
- Production Volume/640 Acre Well x 1

Feet of Coal

- Production Volume/640 Acres/Coal Thickness

Initial Gas Content (Scf/ton)

- Gas Production Volume/(640ac-ft coal)/Gas Content

CMC C

9420

Use of Performance Curves from Sensitivity Analyses

Assumptions :

Area 1 Coal
5 md Cleat Permeability
0.25 % Cleat Porosity
10 Feet Coal Thickness
345 scf/ton Initial Gas Content
320 Acre Well Spacing
3 Years of Production

From Exhibit 88 (top half):

Gas Rate = 180 [(scf/d)/(640 ac-ft coal - scf/ton)]

Multiplying by 10 feet and 345 scf/ton,

Gas Rate = 621 mscf/d per 640 acres
or 310.5 mscf/d per 320 acre well

From Exhibit 88 (bottom half),

Cumulative Gas = 160[(mscf)/(640 ac-ft coal-scf/ton)]
or 552 mmscf per 640 acres

From Exhibit 89

Gas Recovery = 14% of IGIP

cmc D
9420

Incremental Production From Infill Drilling

Assumptions :

Area 1 Coal

5 md Cleat Permeability

0.25 % Cleat Porosity

10 Feet Coal Thickness

345 scf/ton Initial Gas Content

320 Acre Well Spacing

3 Years of Production

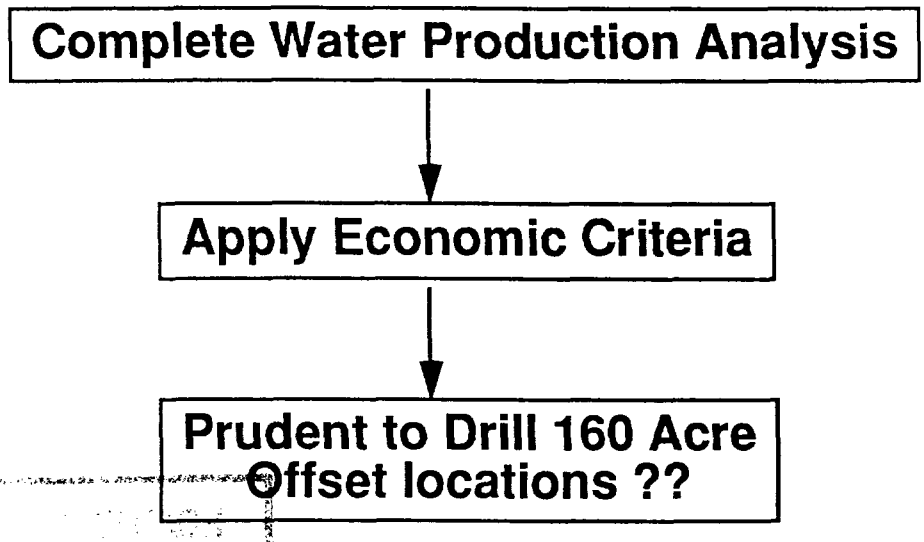
From Exhibit 94:

Difference in Cumulative Gas

= 150 [(mscf)/(640ac-ft coal-scf/ton)]

or 517.5 mmscf per 640 acres

or 129.4 mmscf per 160 acre well



CMC E

9420

Conclusions from Sensitivity Analyses for Areas 1,2 and 3

Gas Recovery Increases with :

Increasing

- Initial Free Gas Saturation
- Initial Reservoir Pressure
- Cleat Permeability
- Fracture Half-Length
- Initial Gas Content

Decreasing

- Well Spacing
- Coal Cleat Porosity