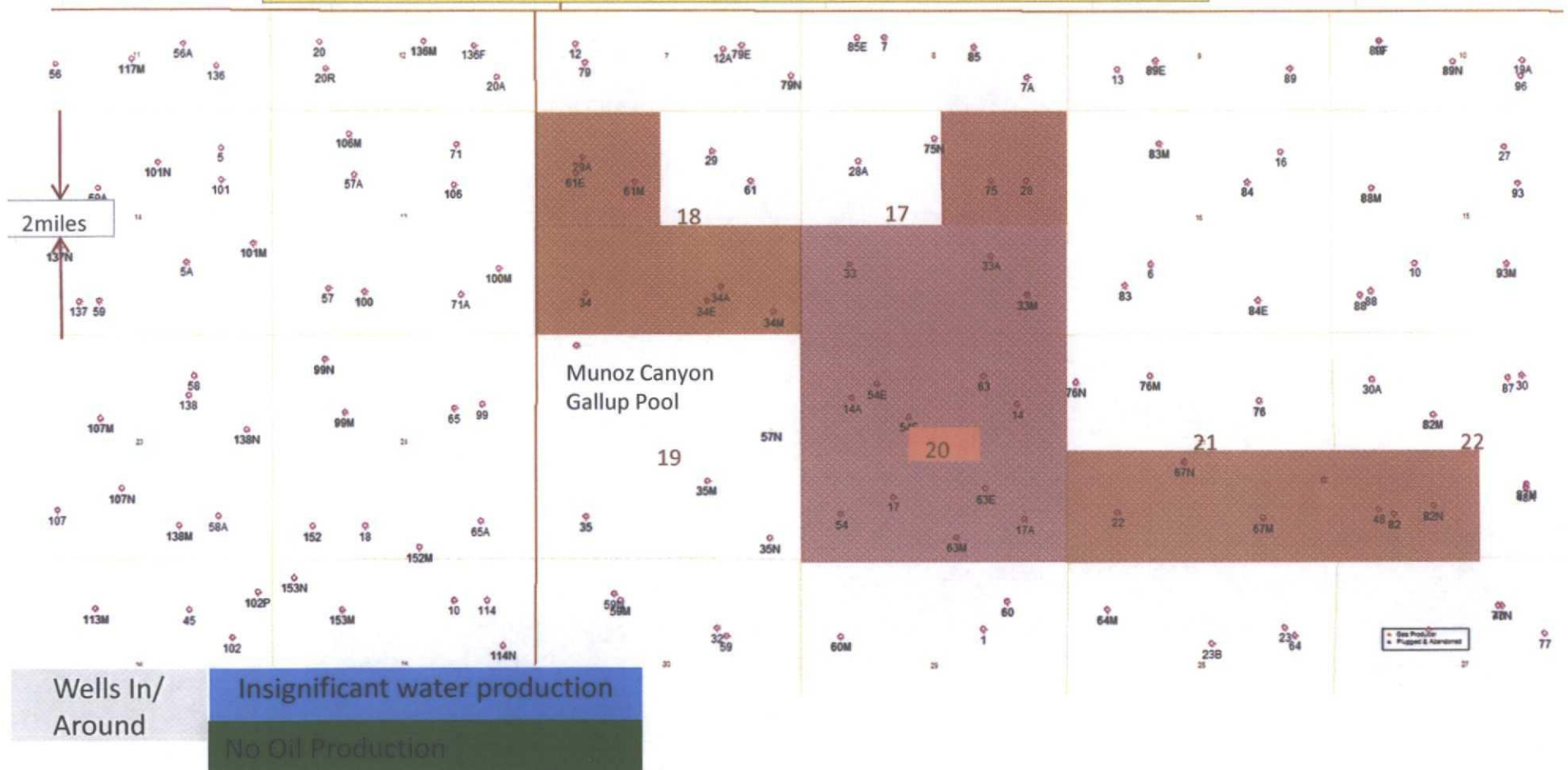


Munoz Canyon Gallup Pool

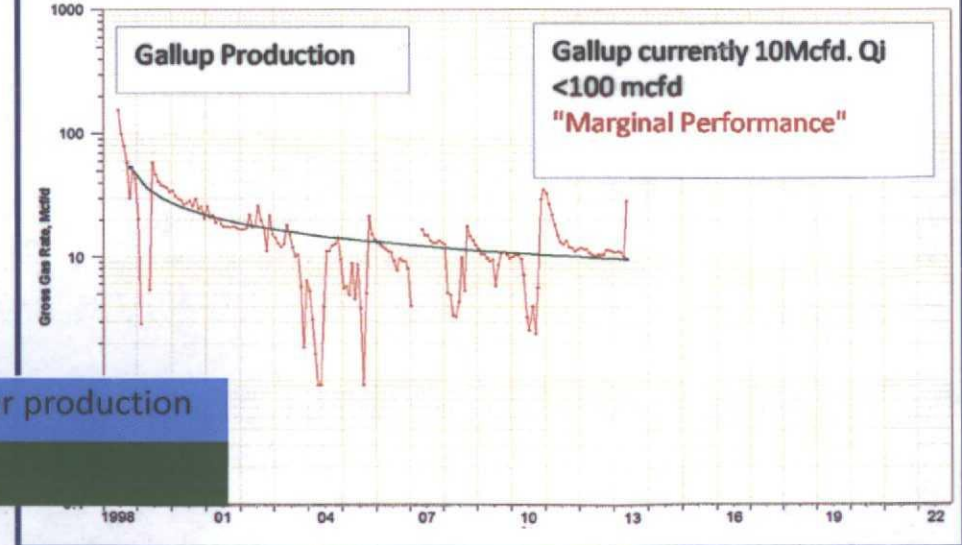
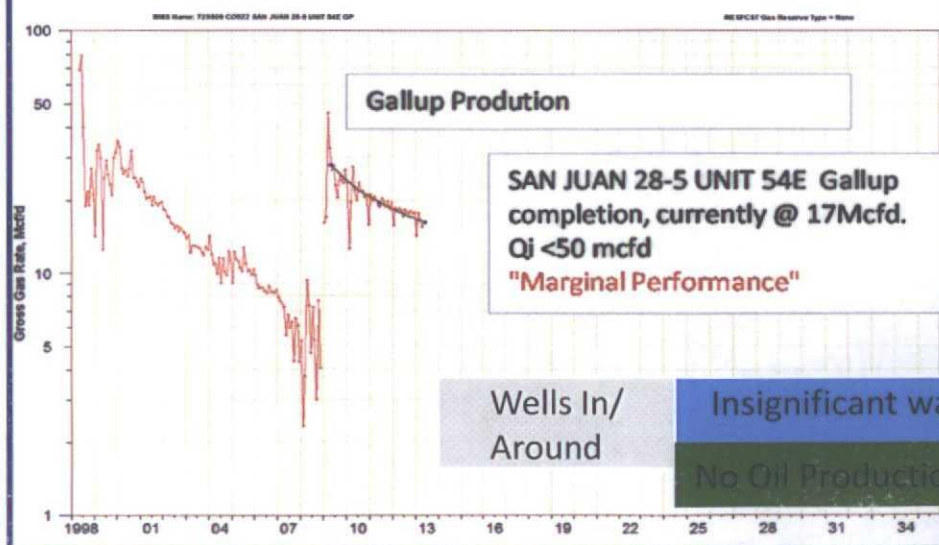
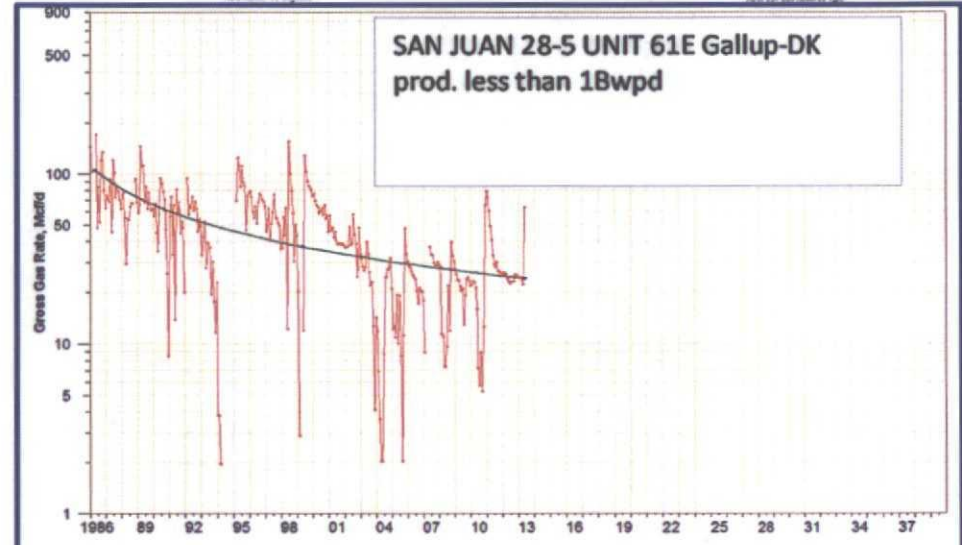
MUNOZ CANYON GALLUP POOL T28N R5W sections
17/18/20/21/22



Munoz Canyon Gallup Pool

Production/ Marginal Gallup

- (a) Marginal production from Gallup
- (b) Fluid compatibility and water sensitivity/damage issues
- (c) Pressure criteria
- (d) Cross-flow issues
- (e) Will commingling decrease the value of production?



Wells In/
Around

Insignificant water production

No Oil Production

Munoz Canyon Gallup Pool

Line pressure
130 psia

Similar BTU content

Comp	Dakota	Mesaverde	Gallup
Methane	95.65%	82.29%	96.65%
Ethane	3.18%	9.91%	2.65%
Propane	0.60%	4.41%	0.35%
I-Butane	0.29%	2.01%	0.11%

Pressure differential do not pose a risk

Estimated Pressures	Dakota	Mesaverde	Gallup
	1190	910	2700

Target zones

MV top perf 4500-4600

DK bot perf 7900-8000

Frac pressure 2730psi @ 0.6psi/ft

Criteria

- (a) Marginal production from Gallup
- (b) Fluid compatibility and water sensitivity/damage issues
- (c) Pressure criteria
- (d) Cross-flow issues
- (e) Will commingling decrease the value of production?