

12635

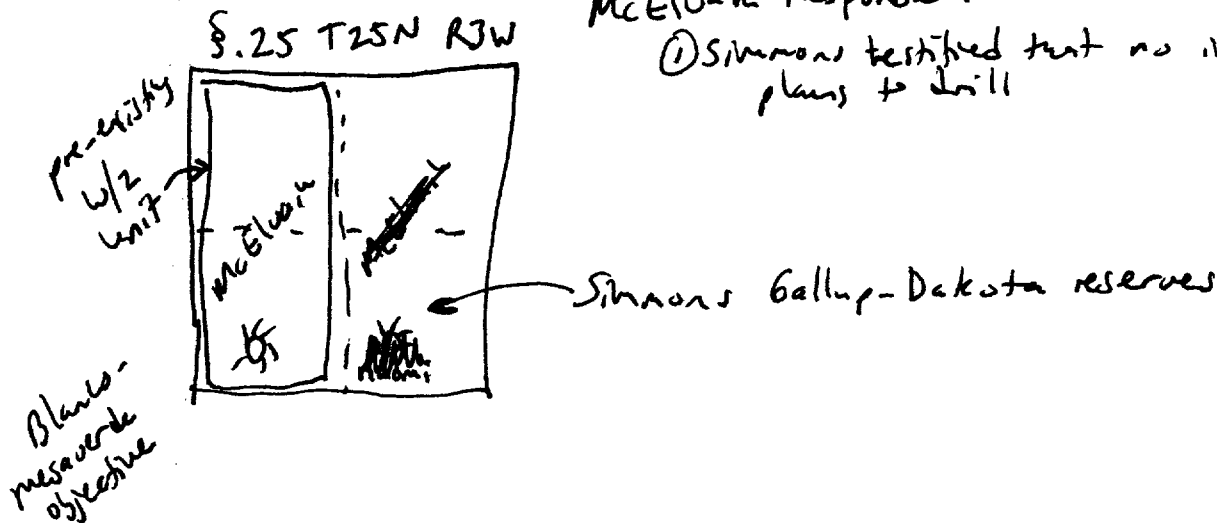
S. non-Motion to Stay:

- ① risk mitigation not a proper rationale for passing pursuant to 70-2-17
- ② McElvagh will not be prejudiced

McElvagh	S/2	(lay down)
D.J. Simmons	E/2	(stand-up)

McElvagh Response:

- ① Simmons testified that no imminent plans to drill



Order - deal w/ Memo. No. 3-85

Simmons

70-2-17(c)

2 or more separately owned tracts
2 or more separately owned royalty interests
owners not agreed to pool interests
separate owner has right to drill - or - proposes to drill a well

avoidance of drilling of unnecessary wells
protect correlative rights
prevent waste

orders:

1. notice + hearing
2. just and reasonable terms and conditions
3. afford opportunity to recover or receive without unnecessary expense his just and fair share of the oil or gas
4. describe lands included in the unit
5. identify the pools or pools
6. designate an operator
7. make provision as to any owner who elects not to pay his proportionate share in advance - for pro rata reimbursement solely out of production
- 8.

McElvain / Simmons
12635 de novo
12705

McElvain - 3 witnesses
Simmons - 3 witnesses

McElvain - Opening
70 - 2 - 17 (c)

Lead witness - ex 15

proposed Blanco - mesa verde re-entry project

* no Simmons proposal - Division hearing made
[seems to argue that Division hearing should
bar consideration of competing pooling
application despite a de novo filing -
when no application filed before Division hearing
calls it a "policy issue"]

"due diligence not required?"

harps on the issue

w/2 well leaves other interest owners
out of a mesa verde development
well

Simmons

mesa verde + Lewis +

best developed on a stand up basis
pre existing fractures run N to S
20' to the right of N

Naomi well will not drain SE

Misapplication of compulsory
pooling statute

McElvanin has pre-existing Standup
w/2 - McElvanin's witness said
that wanted to minimize risk all
place on others —
[no basis in statute]

risk has no basis in Oil & Gas Act
[but what about Vikings?]

"Due diligence" as a predicate
to pooling — in brief
McElvanin's "proposal" perfunctory

Commission should set parameters of good
faith —

=
McElvanin

Mona Binion - proposes to re-enter ~~the~~
Naomi #1 (prev. approved NSL) P+A'd
12-98

Ugona to test Dakota oil well
pursuant to test Mesa-verde formation

Minerals released after P+A in 12-98
required w/2
proposed quantity 1 mo. later ex. 2

Simon rec'd letter

proposed S/2 because:

ownership - McElvagh has interest

risk - what parties benefit and who should bear risk

benefit - potential for future development

test - could be done at low cost

and risk could be shared by

more than one party and

all parties who benefit -

looking out for other parties -

geology unknown until test

complete

risk sharing a common and reasonable

consideration - (normally the
predominant reason
for land dept.)

U. of Lignite

Prevailing sparsity - none

some N/2 some E-W

[Special Rule for Blanco-Mesa Verde
R-10987-A]

Division approved unorthodox location
on Dec. 29, 2000 [Effect]

objection: hearsay-Ex. 8

10
10/11

I would admit Exhibit 8 but point out
that ~~because~~ it is hearsay and that
the legal residence rule might ^{admission} present problems
if ~~that~~ Ex. 8 is the only evidence on
a proposition.

I would admit Ex. 8 but point

Brian dismisses Simmons' 6-7-01 proposal as well as inadequate doesn't address clearly mesa-verde or Dakota

Simmons:

surface to base of Dakota
(letter doesn't address how to deal w/ Fruitland)

(Ex. 12 doesn't agree to complete in mesa-verde - traditionally wells completed from bottom up at shore at drilling costs not requested until completion is done)

Dakota - 160's

McElvain & Simmons - s/2 mesa-verde (only?)
- E/2 mesa-verde

objective: Gallup Dakota oil well (NE/4 well)

McElvain

1-7

9-14

Cross → not creating w/2 unit because maximum # of parties should share the risk and have the potential to benefit - exploration benefits the entire section - by exploring the formation [attrition?]

* risk mitigation of s/2 the primary motivation - also orderly development

★ do we need title opinion? "owner..."

"good faith effort" = could vary from owner to owner, assuring other party has adequate information, proposal clear and concise, states intent of proposal, cost estimates, terms, plan for development, alternatives to participation, adequate time to consider, ~~also~~ sharing info. on request,

McElvain evaluates proposals rec'd - not geology (not given), not engineering info, ≠ economics,

min. info - terms, timing,

★ only 1 contact initiated w/ Simmons before filing compulsory pooling app.

didn't call Simmons because their position seemed clear —

Handwritten notes and a circular stamp at the bottom right of the page.

McElvain pools a lot
in Lindero area because
of difficult w/ owners
in the area

Bailey -

could propose well in E/2
if an E-W unit were
created - would have to
propose to operator (Simmons)

wouldn't be able to develop
the entire section as it
sees fit -

Jane Jackson -

Geologist

mesa verde formation
Blanco-mesa verde pool

papers not applicable
ex 23 - not applicable

14 wells drilled in mesa verde
(completed)

used well data from active
wells

M. Eluain
16, 17
admitted

RJ Simmons
25
admitted

Simmons 25 shows east-west sand trend? used resistivity cut off rather than porosity cut off?

Menette at Pt. Lookout
at Mesa Verde (specific objective)

general correlation between sand thickness and production yet good producers in §17 have less sand

[RL - thickness largely irrelevant - need to know where fractures are]

[she alludes to #s of wells but then offers a sand thickness map?]

no evidence of fracture in §25

log has no evidence of fracturing

RL →

Mesa Verde produces through matrix rather than vertical fracture system

John Steuble

Naomi: 1 had problems
volumes too low to justify
work hours

AFE: prepared himself 10-20^m
Procedure: low

agrees w/ $\left\{ \begin{array}{l} \$5455/\text{mo.} \text{ drilling,} \\ \$5455/\text{mo.} \text{ operable,} \end{array} \right.$ ~~oper~~

does not agree w/ 150%

believes 2002o should apply
wildcat well
no mesa verde production in area
only one mesa verde
well in area - and it
only made 613 mcf (ex. 18)
a good well in § 15, 3 mi.
to the NW (ex. 19)
(ex. 20)
total lack of mesa verde
production justified high
risk factor

criticizes papers

- 98- 12 wells in Lindith area, 14 in Mera Verde
- 35 frac jobs w/in formation
- 5 re-entries
- No evidence of N/S trends in wells

Economic Summary -

Summary exhibits show no intention of completing in Mera Verde

Rot Return should justify well under Samson's ex. 32

Their recompletion Cheaper

December completion window
hunting season / landowner a prob.

McElvorn
18-22
Admitted

cross →
Could have recompleted as a
w/2 well w/out delay -

expects Naomi well to drain
a relatively small area -
this area probably a bit tighter
w/ less fractured than remainder
of the basin

Can't drain SE corner (but could
do an infill) (other areas downspanned
to 80's - Area of drainage small)

McElvain opposes 160's ~~but~~
because 320's is the std.
Spacing -

wants people who will benefit
to also share the risk

no fracture link studies - expects
fractures less than 300' - can't
say what the orientation would be

reserves est. at .5 to 1 bcf

Simmons

Ed Dunn

E/2

Simmons

1-18

D-1

Admitted

efforts to obtain

Wants to pool:

pool surface to base of
mesaverde less Fruitland coal

target: Dakota (main objection)

want Mesaverde in case Dakota
does not turn out well

Gusek
Lisa ~~xxxxxx~~ - geologist

6 wells drilled w/ Simmons
12 wells operating
12 Lewis shale
6 well Chaco Ussie

Blanco - Mesaverde post limits
set out

750' below Huerfanoite Bentonite marker

shouldn't be included? Chaco unit
Otero sands

Manco directly underlies Dakota
(Studies done) - Burlington work - elliptical
fracture patterns (supported)

most fractures N/S - these were traced
natural fractures also follow this pattern

applicable to
80 to 80 acre
spacing)

mesa verde tight - will need
to be fractured to produce

Point Lookout the best producer
Cliff House - wet

should be developed as stand-p

primary fracture orientation N/S

McElvain well wouldn't drain SE

multiple pay here—

test all formations while drilling

eg, PC

Gallup-Dakota

~~reservoir~~

Mesa Verde

Lewis Chalk

no other operator looking @ Gallup-Dakota

best produces have thinner reservoir
rock rather than thicker rock —

McElvain

19-~~25~~24

admitted

(cover
objection)

Cross

penalty? too close to S line

Tom Mullins

drainage/fractures on N/S basis
(to N40°)

3-1 permeability - ex. 29

160 acre max. drainage area

estimates Dakota reserves $\approx E/2$
§30 \rightarrow 326 MMcf

mesa verde uneconomic - 66 MMcf - by
itself

26-33
Simmons
admitted

Jackson / McElvain

- 125 net sand isopach map $> 8\%$ porosity
- 126 E to W trend
Menefee / Point Lookout intervals
- 127 location of existing wellbore better situated to
draw Mesaverde from S/2 "because trend
goes E - W"
- 127 - 130 Complaints about DJ Simmer theory
says papers don't address fracturing of Mesaverde
in § 5.25
- 132 isopach maps prepared from porosity logs
- 136 objective is Menefee & Point Lookout
intervals of Mesaverde formation
- 137 believes well will be production because of
production from wells in §§ 27, 17
- 137-8 Ex. 17 - correlation between sand thickness
and productivity? "general correlation"
but in § 17, 18 production correlated w/
thinner sands; well in § 29 - worse production
w/ thicker sands
- 142 doesn't agree that fracture patterns influence
direction of drainage

- 143 fracturing in Gallup but believes it won't have any effect on §25 Mesaverde
- 143 doesn't know fracture direction in Gallup in vicinity of well
- 144 Sole basis for drainage of SE/4 townships location is porosity trends but, E-W
- 146 clastic mechanism for production is through the matrix -
- 147 If there is natural fracturing, it's influenced by structural features
- 148 nk prevailing stress trends in subject area
- 148-9 set of NE → SW and NW → SE trends
no pure E-W trends !!
- 149 Blanco-Mesaverde is a tight sand gas reservoir

R-10987
Blanco - mes - wide
order

Gusek/Simmons

220

well in NE/4 §34 / Schalk 43-2
small amounts of gas - excessive water

NE/NW §13 tested water only

well in NW/4 §35, small amounts of gas

221

well in NW/4 §15 produced uneconomic amounts
93,000 MCF - incl that included Gallup-Duke
production

221-2

nearest economic well 3 1/2 mile NW

225

high variability of production numbers in area
of subject is indicative of fracturing in
the area -

227

Emmerdenter used dipmeter - fracture log to
understand structural relationship of fracture
patterns in Mancos-Gallup
(directly underlies Mesaverde)

plotted fracture orientation measurements
~~on log~~

Callins Federal No. 6 - 104 samples taken show
breakout fractures show N-S orientation

228 Medio Canyon No. 7 - 12 samples - N/S
fracture orientation

majority of fracturing is N/S to about N=40-
degrees east orientation

229 tight sands - downspaced from 320 to 160 and
now to 80

Durlington research shows elliptical drainage
pattern N-10-degrees-east

many papers support this in Mesa-verde,
Gallup and Dakota

230 fair to extrapolate research to different areas
of Basin - Durlington did a lot of work

232 matrix porosity has nothing to do with this -
these wells will have to be artificially
stimulated

233 standup units are the best - because
will follow primary fracture orientation
N-S N-40-degrees-east

234 no way to drain SE/4

234

reservoir very tight

drainage area between 80 to 160 acres

not drain SE/4

238

using an 8 percent porosity cutoff, likely
to include wet or unproductive sand

DJ Simmons

246 DJ Simmons will drill
would like "opportunity" or "option"
to recomplete

263 could recomplete Mesaverde in "a couple
of months"

270 north-south orientation to permeability in the
area caused by natural fractures

271 fracture orientation in § 25 is north-south
to North-40-degrees-east

271 drainage patterns are elliptical - 3-to-1
(160 acres) (maximum drainage) permeability anisotropy
→ higher permeability is three
times the shorter distance

* 275 drainage patterns based on permeability of the
rocks - and hydraulic fracture direction

276 § 25 best developed w/ stand up 320s

277 deposition of sands is from northwest-se
direction in Point Look out interval
(descriptive of Mesaverde in this §)

pos. in favor of Simmons in Gallup-Dakota?
uneconomic w/out Mesaverde?

277- nearby production verifies

278 nearby Gallup-Dakota production

282 Mesaverde uneconomic

282 not intending to complete in Mesaverde for
several months or several years

284-5 Simmons ^{well} ~~drill~~ to Gallup is going to be "marginal"

297 Has "not committed to" a Mesaverde completion
to interest owners - has not committed to a time
frame -

298 agrees that DJ Simmons hasn't agreed to a
Mesa Verde completion

302 McElvanis recompletion would predominantly
drain the ~~well~~ NW/4 on a 3-to-1 basis

303 Good faith: std industry practice - call other interest
owners

★ 305 Simmons
well in SE/4 not going to be drilled w/out add'l
reserves in Mesaverde

307

Silman sought voluntary agreement of other
working interest owners for eval. of Mesquite reserve
in conjunction w/ Gallup-Dakota well

deny McEl - in - let them develop w/ =
deny Simmons in Mesaverde; grant in Gallup - Dakota

Simmons - Dunn (landman) (183)

184 proposes well to test Gallup - Dakota - E / 2 units
Bishop 25-1 2 Mesaverde
8174 feet

189 efforts to obtain consent detailed

192 procedure for obtaining consent:
well proposal +
AFE
follow-up clarification
well plan

193 this was TD
diligent

For article, "State Conservation Regulation and the Proposed R-199," see 6 Nat. Resources J. 223 (1966).

For comment on geothermal energy and water law, see 19 Nat. Resources J. 445 (1979).

Am. Jur. 2d, A.L.R. and C.J.S. references. — 38 Am. Jur. 2d Gas and Oil §§ 161, 164.

Rights and obligations, with respect to adjoining landowners, arising out of secondary recovery of gas, oil, and other fluid minerals, 19 A.L.R.4th 1182.

58 C.J.S. Mines and Minerals § 240.

70-2-17. Equitable allocation of allowable production; pooling; spacing.

A. The rules, regulations or orders of the division shall, so far as it is practicable to do so, afford to the owner of each property in a pool the opportunity to produce his just and equitable share of the oil or gas, or both, in the pool, being an amount, so far as can be practically determined, and so far as such can be practicably obtained without waste, substantially in the proportion that the quantity of the recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas, or both, in the pool, and for this purpose to use his just and equitable share of the reservoir energy.

B. The division may establish a proration unit for each pool, such being the area that can be efficiently and economically drained and developed by one well, and in so doing the division shall consider the economic loss caused by the drilling of unnecessary wells, the protection of correlative rights, including those of royalty owners, the prevention of waste, the avoidance of the augmentation of risks arising from the drilling of an excessive number of wells, and the prevention of reduced recovery which might result from the drilling of too few wells.

C. When two or more separately owned tracts of land are embraced within a spacing or proration unit, or where there are owners of royalty interests or undivided interests in oil and gas minerals which are separately owned or any combination thereof, embraced within such spacing or proration unit, the owner or owners thereof may validly pool their interests and develop their lands as a unit. Where, however, such owner or owners have not agreed to pool their interests, and where one such separate owner, or owners, who has the right to drill has drilled or proposes to drill a well on said unit to a common source of supply, the division, to avoid the drilling of unnecessary wells or to protect correlative rights, or to prevent waste, shall pool all or any part of such lands or interests or both in the spacing or proration unit as a unit.

All orders effecting such pooling shall be made after notice and hearing, and shall be upon such terms and conditions as are just and reasonable and will afford to the owner or owners of each tract or interest in the unit the opportunity to recover or receive without unnecessary expense his just and fair share of the oil or gas, or both. Each order shall describe the lands included in the unit designated thereby, identify the pool or pools to which it applies and designate an operator for the unit. All operations for the pooled oil or gas, or both, which are conducted on any portion of the unit shall be deemed for all purposes to have been conducted upon each tract within the unit by the owner or owners of such tract. For the purpose of determining the portions of production owned by the persons owning interests in the pooled oil or gas, or both, such production shall be allocated to the respective tracts within the unit in the proportion that the number of surface acres included within each tract bears to the number of surface acres included in the entire unit. The portion of the production allocated to the owner or owners of each tract or interest included in a well spacing or proration unit formed by a pooling order shall, when produced, be considered as if produced from the separately owned tract or interest by a well drilled thereon. Such pooling order of the division shall make definite provision as to any owner, or owners, who elects not to pay his proportionate share in advance for the prorata reimbursement solely out of production to the parties advancing the costs of the development and operation, which shall be limited to the actual expenditures required for such purpose not in excess of what are reasonable, but which shall include a reasonable charge for supervision and may include a charge for the risk involved in the drilling of such well, which charge for risk shall not exceed two hundred percent of the nonconsenting working interest owner's or owners' prorata share of the cost of drilling and completing the well.

In the event of any dispute relative to such costs, the division shall determine the proper costs after due notice to interested parties and a hearing thereon. The division is specifically authorized to provide that the owner or owners drilling, or paying for the drilling, or for the operation of a well for the benefit of all shall be entitled to all production from such well which would be received by the owner, or owners, for whose benefit the well was drilled or operated, after payment of royalty as provided in the lease, if any, applicable to each tract or interest, and obligations payable out of production, until the owner or owners drilling or operating the well or both have been paid the amount due under the terms of the pooling order or order settling such dispute. No part of the production or proceeds accruing to any owner or owners of a separate interest in such unit shall be applied toward the payment of any cost properly chargeable to any other interest in said unit.

If the interest of any owner or owners of any unleased mineral interest is pooled by virtue of this act, seven-eighths of such interest shall be considered as a working interest and one-eighth shall be considered a royalty interest, and he shall in all events be paid one-eighth of all production from the unit and creditable to his interest.

D. Minimum allowable for some wells may be advisable from time to time, especially with respect to wells already drilled when this act takes effect, to the end that the production will repay reasonable lifting cost and thus prevent premature abandonment and resulting waste.

E. Whenever it appears that the owners in any pool have agreed upon a plan for the spacing of wells, or upon a plan or method of distribution of any allowable fixed by the division for the pool, or upon any other plan for the development or operation of such pool, which plan, in the judgment of the division, has the effect of preventing waste as prohibited by this act and is fair to the royalty owners in such pool, then such plan shall be adopted by the division with respect to such pool; however, the division, upon hearing and after notice, may subsequently modify any such plan to the extent necessary to prevent waste as prohibited by this act.

F. After the effective date of any rule, regulation or order fixing the allowable production, no person shall produce more than the allowable production applicable to him, his wells, leases or properties determined as in this act provided, and the allowable production shall be produced in accordance with the applicable rules, regulations or orders.

History: Laws 1935, ch. 72, § 12; 1941 Comp., § 69-213½; Laws 1949, ch. 168, § 13; 1953, ch. 76, § 1; 1953 Comp., § 65-3-14; Laws 1961, ch. 65, § 1; 1973, ch. 250, § 1; 1977, ch. 255, § 51.

Meaning of "this act". — The term "this act," referred to in this section, means Laws 1935, ch. 72, §§ 1 to 24, which appear as 70-2-2 to 70-2-4, 70-2-6 to 70-2-11, 70-2-15, 70-2-16, 70-2-21 to 70-2-25, 70-2-27 to 70-2-30, and 70-2-33 NMSA 1978.

The terms "spacing unit" and "proration unit" are not synonymous and the commission has power to fix spacing units without first creating proration units. *Rutter & Wilbanks Corp. v. Oil Conservation Comm'n*, 87 N.M. 286, 532 P.2d 582 (1975).

Proration formula required to be based on recoverable gas. — Lacking a finding that new gas proration formula is based on amounts of recoverable gas in pool and under tracts, insofar as these amounts can be practically determined and obtained without waste, a supposedly valid order in current use cannot be replaced. Such findings are necessary requisites to validity of the order, for it is upon them that the very power of the commission to act depends. *Continental Oil Co. v. Oil Conservation Comm'n*, 70 N.M. 310, 373 P.2d 809 (1962).

Findings required before correlative rights ascertained. — In order to protect correlative rights, it is incumbent upon commission to determine, "so far as it is practical to do so," certain foundational matters, without which the correlative rights of various owners cannot be ascertained.

Therefore, the commission, by "basic conclusions of fact" (or what might be termed "findings"), must determine, insofar as practicable: (1) amount of recoverable gas under each producer's tract; (2) the total amount of recoverable gas in pool; (3) proportion that (1) bears to (2); and (4) what portion of arrived at proportion can be recovered without waste. That the extent of the correlative rights must first be determined before commission can act to protect them is manifest. *Continental Oil Co. v. Oil Conservation Comm'n*, 70 N.M. 310, 373 P.2d 809 (1962).

In addition to making such findings the commission, "insofar as is practicable, shall prevent drainage between producing tracts in a pool which is not equalized by counter-drainage," under the provisions of 70-2-16 NMSA 1978. *Continental Oil Co. v. Oil Conservation Comm'n*, 70 N.M. 310, 373 P.2d 809 (1962).

Four basic findings required to adopt a production formula under this section can be made in language equivalent to that required in previous decision construing this section. *El Paso Natural Gas Co. v. Oil Conservation Comm'n*, 76 N.M. 268, 414 P.2d 496 (1966) (explaining *Continental Oil Co. v. Oil Conservation Comm'n*, 70 N.M. 310, 373 P.2d 809 (1962)).

Although subservient to prevention of waste and perhaps to practicalities of the situation, protection of correlative rights must depend upon commission's (now division's) findings as to extent and limitations of the right. This the commission is required to do