

How to Analyze a Sale with Mineral Rights

This is a real life example. The key is to have the sale properly analyzed.

Property

A farm consisting of numerous tracts within 30 minute drive from a large city is to be marketed by bid and online auction. This is a typical way of marketing large agricultural tracts in Western Oklahoma and thus, represents a market (not distressed) sale. The following tracts are put up for bid (summarized)

Parcel 1 is six tracts totaling 162 acres of pasture and crop land with the mineral rights intact and producing income.

It sells for \$665,600. There are no improvements. (\$4109 /acre)

Parcel 2 is 2 tracts of 394 acres without minerals consisting of cropland and native pasture.

It sells for \$563,680. There are no improvements. (\$1,431/acre)

Parcel 3 is 2 tracts of 93 acres total of 15 acres in crops and the rest is pastureland.

It sells for \$135,200. There are no improvements. (\$1,454 /acre.)

Parcel 4 is 29 acres consisting of native grasses and a large watershed pond.

It sells for \$54,080. There are no improvements. (\$1,865/acre)

Parcel 5 is 22 acres consisting of a 7 acres cropland, native grass, and a homesite.

It sells for \$104,000 and includes a dwelling, shop and corrals. (\$4,727/acre)

Parcel 6 is 118 acres with 82 acres in cropland and the balance native grass.

It sells for \$161,200 (\$1,366/ac.)

Parcel 7 is 2 tracts totaling 89 acres consisting of a woodlot and pasture with creek and pond.

It sells for \$202,800. There are no dwellings. (\$2,279/ac)

Parcel 8 is 31 acres in timberland and pasture. There is a large pond stocked with bass.

It sells for \$57,200. There are no buildings. (\$1,845/ac.)

Parsing the data

In looking over the sales, the appraiser should group sales according to the highest and best use. Only 2 sales exceed \$4,000 per acre. One is improved with a 1,300 SF dwelling and a shop building. Therefore, Parcel 5 should be eliminated as all other sales are vacant land tracts. Only parcel one remains over \$4,000 per acre and it included the mineral rights.

Three sales are between \$1300 and \$1500 per acre. They are mixed cropland and native pasture. Three sales are between \$1800 and \$2300 per acre. These are recreational tracts with ponds and/or creeks.

Charting them as follows

MINERALS	NO MINERALS		
PASTURE-CROP	IMPROVED	PASTURE - CROP	RECREATIONAL LAND
\$4,109	\$4,727	\$1,366	\$1,865
		\$1,431	\$2,279
		\$1,451	\$1,845
MEAN	\$4,727	\$1,416	\$1,996
	ELIMINATE	Say, \$1,430/acre	Say, \$2000/acre

Since we know that Parcel 1 contains minerals but is otherwise similar to the Pasture crop properties that sold, we can estimate the land contribution at \$1,430 per acre, thus the mineral rights is contributing \$4,109 less \$1,430±, or (apparently) \$2,679 per acre.

The 2006 income for the mineral rights was \$31,126 and \$30,448 for 2005. However, a review of the documents indicated that the actual mineral rights sold were 144/160th of 160 acres PLUS mineral rights under an additional 320 acres. In other words, the net mineral acres sold was not \$2,679 per acre of surface, but rather was an income from 320 + 144 acres = 464 total acres.

Thus the $162 \times \$1,430 = \$231,660$, what the land contribution was to the Fee simple of 162 acres. But the balance, $\$665,600 \text{ LESS } \$231,660 = \$433,940$ under 464 acres or \$935 per acre. Since the property is held by production, that interest is the value to the lessee, thus is a leasehold value, not a fee simple value.

Thus, the contribution of \$433,940 to earn an income of \$31,126 per year is a return of 7.2%, a gross income multiplier of 13.89. It seems unlikely that a mineral buyer would pay that much for mineral rights, with few mineral buyers willing to pay over 7 times the property income, but the motivation of the buyer of the surface rights might consider that in order to control the property and to receive an income which should about cover the interest on the mineral property contribution such a cost is justified.

The appraiser could infer that the land/royalty owner has a higher threshold for risk, therefore is willing to accept a much lower risk rate than would a professional investor in mineral rights.

In the above example, I would suggest that \$900 - \$1,000 would be a typical per acre contribution to the fee simple assuming the subject property is in a similar market with the mineral rights being held by production and offering a reasonably stable income.

Also, note that in our analysis there is about \$600 per acre difference in agricultural land and land for recreation, hunting, and (probably) the rural large tract residential market, and it could be used as a basis for making adjustments in the Sales Comparison Approach.