

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:**

***DE NOVO*
CASE NO. 11925
Order No. R-10983-A**

**APPLICATION OF KCS MEDALLION RESOURCES,
INC. FOR AN UNORTHODOX GAS WELL LOCATION,
EDDY COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

This cause came on for hearing before the Oil Conservation Commission of New Mexico ("Commission") at 9:00 a.m. on July 16, 1998, at Santa Fe, New Mexico.

NOW, on this 30th day of July, 1998, the Commission, a quorum being present, having considered the testimony and the exhibits received at the hearing, and being otherwise fully advised in the premises:

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, KCS Medallion Resources, Inc. ("KCS"), seeks approval to drill its proposed PDM Well No. 1 at an unorthodox gas well location within the Turkey Track-Morrow Gas Pool 860 feet from the South line and 660 feet from the West line (Unit M) of Section 16, Township 19 South, Range 29 East, NMPM, Eddy County, New Mexico.

(3) The S/2 of said Section 16 is to be dedicated to that well in order to form a standard 320-acre gas spacing and proration unit for that pool.

(4) Records of the Oil Conservation Division show that:

(a) The Turkey Track-Morrow Gas Pool currently comprises the following described area in Eddy County, New Mexico:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM

Section 11: E/2

Section 12: All

Section 13: S/2

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM

Sections 2 and 3:	All
Section 7:	All
Sections 10 and 11:	All
Sections 14 through 18:	All
Section 23:	All
Section 24:	W/2.

- (b) The Turkey Track-Morrow Gas Pool is a "non-prorated gas pool" and is therefore not governed by the "*General Rules for the Prorated Gas Pools of New Mexico*," as promulgated by Division Order No. R-8170, as amended. The gas pool is subject to the Division's Rule 104.C(2)(b), which provides for 320-acre gas spacing and proration units, or drilling units, and requires that wells be located no closer than 660 feet to the nearest side boundary of the designated tract, no closer than 1650 feet to the nearest end boundary, and no closer than 330 feet to any quarter-quarter section or subdivision inner boundary thereon; this pool is also subject to Rule 104.D(3), which restricts the number of producing wells within a single gas spacing unit in non-prorated pools to one.
 - (c) Southwest Royalties, Inc. ("SW Royalties"), which currently operates a Turkey Track-Morrow Gas Pool well in Section 17, Township 19 South, Range 29 East, NMPM, that well being the Union Texas State Well No. 1 (**API No. 30-015-21210**), located at a standard gas well location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 17, appeared at the hearing in opposition to the application. A standard 320-acre gas spacing and proration unit comprising the S/2 of Section 17 is currently dedicated to the Union Texas State Well No. 1.
- (5) The combined geological and engineering evidence and testimony presented by both KCS and SW Royalties indicate that:
- (a) the primary objective of the subject well is the three channel sands that comprise the interval designated by the applicant as the Middle Morrow; these channel sands trend north northwest - south southeast in this general area and are thin, lenticular and not continuous over long distances;

- (b) a well drilled at the proposed unorthodox gas well location should encounter a greater amount of net sand within the Middle Morrow sand intervals than a well drilled at a standard gas well location within the S/2 of Section 16, thereby increasing the likelihood of obtaining commercial gas production;
- (c) there are four key wells with Middle Morrow gas production within this general area: (i) the aforementioned SW Royalties Union Texas State Well No. 1 in Unit "N" of Section 17, which is currently producing at a rate of 376 MCFPD from the S/2 of Section 17, with cumulative total production in the last 24 years of approximately 5.2 BCF of gas and 64,000 barrels of condensate; (ii) the Gruy Petroleum Management Company's Parkway State "17" Com. Well No. 1 (API No. 30-015-24897) (formerly owned by Burlington) in Unit "G" of Section 17, which has produced a total of 2.0 BCF of gas and 20,000 barrels of condensate since 1985 with a current rate of production of approximately 369 MCFPD; (iii) the Burlington Oil & Gas Resources Company State "16" Com. Well No. 1 (API No. 30-015-22692) located in Unit "F" of Section 16 which produced a total of 1.5 BCF of gas and 16,200 barrels of condensate from the N/2 of Section 16 between February, 1979 and December, 1995; and (iv) the Burlington Oil & Gas Resources Company State "16-A" Com. Well No. 1 (API No. 30-015-22924) located in Unit "O" of Section 16 which produced a total of 325 MMCF of gas and 3,700 barrels of condensate from the S/2 of Section 16 between September, 1979 and November, 1986 (Note: this well was deemed "noncommercial" by KCS);
- (d) there are two additional wells offsetting the proposed PDM Well No. 1: the UMC Petroleum Corporation Parkway Unit Well No. 9 in Unit "G" of Section 21 and the dry and abandoned Petroleum Corporation Parkway West Unit Well No. 4 in Unit "C" of Section 20, both in Township 19 South, Range 29 East, NMPM, Eddy County, New Mexico. Both of these wells penetrated the Morrow formation, but neither well was productive;

- (e) KCS's proposed unorthodox gas well location is equidistant from the two above-described previously productive Morrow gas wells in the NW/4 and SE/4 of Section 16 and the non-productive UMC Petroleum Corporation Parkway Unit Well No. 9 in the NE/4 of Section 21;
 - (f) the Middle Morrow sands appear to pinch out immediately to the west of SW Royalties' Union Texas State Well No. 1 in the SW/4 of Section 17;
- (6) KCS presented evidence that:
- (a) drainage of Middle Morrow gas reserves by the SW Royalties' Union Texas State Well No. 1 appears to be primarily from the east since:
 - (i) the Morrow sands pinch out immediately to the west;
 - (ii) the Morrow tested non-productive to the south in Unit "G" of Section 21;
 - (iii) there is competitive drainage from the north from the Gruy Petroleum Management Company Parkway State "17" Com. Well No. 1 in Unit "G" of Section 17;
 - (b) by drilling at an advantageous position within the Middle Morrow interval, KCS is attempting to capture and recover reserves within the SE/4 of Section 16 that might not otherwise be recovered;
 - (c) the proposed well will not drain SW Royalties' well; the drainage will be more from the north and east;
 - (d) the proposed well will have only a small effect on other offsetting wells; and
 - (e) the proposed well will not be economically feasible if it is subject to a production penalty of 60%
- (7) SW Royalties presented evidence that KCS's proposed well will drain reserves from Section 17.
- (8) The applicant should not be precluded from drilling its proposed PDM Well No. 1 at the location it believes, based upon its geologic interpretation, to be the best available location within the S/2 of Section 16; however, in order to protect the correlative rights of SW Royalties, a production penalty should be assessed against any future Morrow gas production from the subject well.

(9) The distance from the closest standard gas well location within the S/2 of Section 16 (which is 860 feet from the South line and 1650 feet from the West line (Unit N) of Section 16) to the proposed unorthodox gas well location (which is 860 feet from the South line and 660 feet from the West line (Unit M) of Section 16) is 990 feet.

(10) The production penalty should be based on the percentage of encroachment and be calculated as follows:

$$1.00 - (660 \text{ feet}/1650) \times 100 = 60 \text{ percent penalty.}$$

(11) The production penalty should be applied to the PDM Well No. 1's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semiannual basis.

(12) However, the proposed well will not be drilled if the production penalty is not tempered by a minimum amount of production. If the well is not drilled, oil and gas will be left unrecovered resulting in waste.

(13) A minimum amount of production for the proposed well of one million cubic feet per day until the cost of the well is recovered will allow the well to be commercially productive, and the penalty will protect the correlative rights of SW Royalties.

(14) Approval of this application with a 60 percent production penalty tempered for 2.33 years or 28 months from the date the well is completed by a minimum production amount of one million cubic feet per day will afford the applicant the opportunity to produce its just and equitable share of the gas in the Turkey Track-Morrow Gas Pool; will prevent the economic loss caused by the drilling of unnecessary wells; will avoid the increased risk associated with the drilling of an excessive number of wells; and will otherwise prevent waste and protect correlative rights.

(15) The applicant should advise the supervisor of the Division's Artesia district office of the date and time of the above-described production test(s) so that they may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, KCS Medallion Resources, Inc. ("KCS"), is hereby authorized to drill its proposed PDM Well No. 1 at an unorthodox gas well location within the Turkey Track-Morrow Gas Pool 860 feet from the South line and 660 feet from the West line (Unit M) of Section 16, Township 19 South, Range 29 East, NMPM, Eddy County, New Mexico.

(2) The S/2 of Section 16 shall be dedicated to the well in order to form a standard 320-acre gas spacing and proration unit for the pool.

(3) The PDM Well No. 1 is assessed a production penalty of 60 percent to be applied toward the well's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semiannual basis. However, the penalty is tempered by a minimum production amount of one million cubic feet per day for 2.33 years or 28 months from the date the well is completed.

(4) The applicant shall advise the supervisor of the Division's Artesia district office of the date and time of the above-described production test(s) in order that they may be witnessed.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

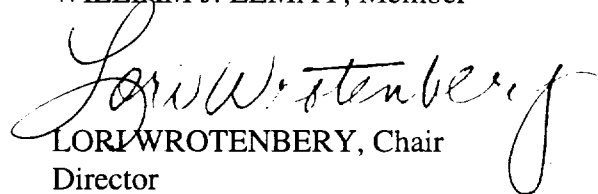
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



JAMI BAILEY, Member

WILLIAM J. LEMAY, Member



LORI WROTENBERY, Chair
Director

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