

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

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

**CASE NO. 12144
Order No. R-11180**

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

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 1, 1999, at Santa Fe, New Mexico, before Examiner Mark W. Ashley.

NOW, on this 12th day of May, 1999, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised,

FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, KCS Medallion Resources, Inc. ("KCS"), seeks authorization to drill the Shugart Federal "27" Well No. 1 to test the Morrow formation, Shugart-Morrow Gas Pool at an unorthodox gas well location 1202 feet from the North line and 660 feet from the West line (Unit D) of Section 27, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico. The W/2 of Section 27 is to be dedicated to the well forming a standard 320-acre gas spacing and proration unit.

(3) The applicant is in partnership with RSE Partners-I, L.P. ("RSE") in the W/2 of Section 27. RSE currently operates the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1 (API No. 30-015-22601) located at a standard gas well location 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 27. RSE will be the operator of the proposed Shugart Federal "27" Well No. 1 upon completion.

(4) The applicant further seeks, on behalf of RSE, an exception to Division Rule 104.D.(3) to continuously and concurrently produce from the Shugart-Morrow Gas Pool through the proposed Shugart Federal "27" Well No. 1 and through the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1 (**API No. 30-015-22601**) located at a standard gas well location 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 27. The applicant further seeks to dedicate both wells to the existing 320-acre gas spacing and proration unit comprising the W/2 of Section 27.

(5) Rule No. 104.D.(3) currently states that "Unless otherwise permitted by special pool rules or authorized after notice and hearing, only one well per spacing unit is permitted in non-prorated pools."

(6) The proposed wells and spacing unit are located within Shugart-Morrow Gas Pool, which is currently governed by Division Rule 104.C.(2), which requires standard 320-acre gas spacing and proration units with wells to be located no closer than 660 feet to the nearest side boundary nor closer than 1650 feet to the nearest end boundary of the spacing unit, nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary.

(7) By Order No. R-1179 issued in Case No. 1444, dated May 26, 1958 and made effective June 1, 1958, the Division created and defined the Shugart-Pennsylvanian Gas Pool for the production of gas from the Pennsylvanian formation.

(8) By Order No. R-2707 issued in Case No. 3044, dated May 25, 1964, Division Rule 104 was amended to provide that all gas pools of Pennsylvanian age or older in Southeast New Mexico which were created and defined June 1, 1964 or later shall have 320-acre spacing and proration units.

(9) By Order No. R-5621 issued in Case No. 6114, dated January 17, 1978, the Division spaced the following acreage within the Shugart-Pennsylvanian Gas Pool on 160-acre gas spacing and proration units:

TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM

Section 26: S/2
Section 27: E/2
Section 34: NE/4.

(10) By Order R-6698 issued in Case No. 7260, dated June 2, 1981 and made

effective June 1, 1981, the Division contracted the vertical limits of the Shugart-Pennsylvanian Gas Pool to the Morrow formation only and redesignated it to the Shugart-Morrow Gas Pool.

- (11) The applicant presented geologic evidence and testimony indicating that:
- (a) the primary production from the Shugart-Morrow Gas Pool in this area is from the Morrow 'A' and Morrow "B" sands;
 - (b) based on offset Morrow production, both sands should be encountered in commercial quantities at the proposed location; and
 - (c) the proposed unorthodox location is necessary in order to avoid topographic features, pipelines, powerlines and roads, and not as a result of subsurface geology; and
 - (d) moving the proposed well location to the south could result in drainage from the Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1.
- (12) The applicant presented engineering evidence and testimony indicating that:
- (a) the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1 has produced 1.7 bcf since 1979 with little to no production reported since 1992. Its drainage radius is 1,118 feet;
 - (b) volumetric gas reserve calculations for the 'A' and 'B' sands in the Morrow formation within the W/2 of Section 27 are as follows:

Original Gas In Place	8.49 bcf
Recoverable Gas (85 % Recovery Factor)	7.39 bcf
Remaining Recoverable Reserves	5.71 bcf
Recoverable Reserves Per 160 Acres	3.7 bcf

(c) reserves and drainage radii of offset wells are as follows:

<u>Well</u>	<u>Cumulative Production (mcf)</u>	<u>Drainage Radius (feet)</u>
Shugart 22 Federal #1 (Section 22)	351,769	391
Shugart 28 Federal #1 (Section 28)	423,506	425
	<u>Estimated Ultimate Recovery (EUR)</u>	<u>EUR Drainage Radius</u>
Shugart 28 Federal #1:	3,533,345 mcf	1,190 feet

(d) based on the limited drainage in the offset wells, there are remaining gas reserves within the Morrow 'A' and 'B' sands that are not likely to be recovered by the Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1.

(13) The geologic and engineering evidence presented in this case demonstrates that the drilling of the Shugart Federal "27" Well No. 1 to the Morrow formation is necessary in order to effectively and efficiently recover the remaining gas reserves within the NW/4 of Section 27, which will not otherwise be recovered by the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1.

(14) No offset operator and/or interest owner appeared at the hearing in opposition to this application.

(15) RSE should be designated the operator of the subject well and unit.

(16) Approval of the proposed unorthodox gas well location and simultaneous dedication will afford the operator the opportunity to produce the remaining gas reserves underlying the NW/4 of Section 27, which may otherwise not be recovered, and will

otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, KCS Medallion Resources, Inc., is hereby authorized to drill the Shugart Federal "27" Well No. 1 to test the Morrow formation, Shugart-Morrow Gas Pool at an unorthodox gas well location 1202 feet from the North line and 660 feet from the West line (Unit D) of Section 27, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico.

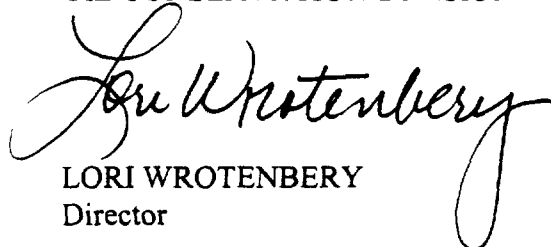
(2) The applicant, on behalf of RSE Partners-I, L.P. ("RSE"), is further authorized to simultaneously dedicate the W/2 of Section 27 in the Shugart-Morrow Gas Pool to the Shugart Federal "27" Well No. 1 and the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1 (**API No. 30-015-22601**) located at a standard gas well location 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 27. The applicant, on behalf of RSE, is further authorized to continuously and concurrently produce the Shugart Federal "27" Well No. 1 with the existing Greenwood Pre-Grayburg Unit Federal C Com. Well No. 1 in the Shugart-Morrow Gas Pool.

(3) SE is hereby designated the operator of the subject well and unit.

(4) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director

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