

**SPECIAL PROJECT RULES AND OPERATING PROCEDURES
FOR THE
GRAMA RIDGE MORROW GAS STORAGE UNIT PROJECT AREA**

RULE 1. Each newly drilled or recompleted well penetrating the Morrow formation in the ~~area of~~ the Grama Ridge Morrow Gas Storage Unit Project Area shall be drilled, operated and produced in accordance with the Special Project Rules and Operating Procedures hereinafter set forth.

RULE 2. Provisions of these Special Project Rules and Operating Procedures shall apply to the Grama Ridge Morrow Gas Storage Unit Project Area (the "Unit Project Area" or "Unit Area") defined as and consisting of the following described acreage in Lea County, New Mexico:

**GRAMA RIDGE MORROW
GAS STORAGE UNIT
PROJECT AREA**

Township 21 South, Range 34 East

Section 33

Section 34

Township 22 South, Range 34 East

Section 3

Section 4

Section 10

Handwritten note:
All Wells Definition of Unitized Formation in both State & Fed Agreements

RULE 3. For purposes of these Special Project Rules and Operating Procedures, the "Unitized Formation", as to State lands is defined by that April 25, 1973 Unit Agreement For The Operation Of The Grama Ridge Morrow Unit Area, Lea County, New Mexico, as amended, consists of "[t]hat subsurface portion of the unit area commonly known as the Morrow sands which is the same zone as the top and bottom of which were encountered at log depths of 12,722 feet and 13,208 feet in the Shell Oil Company State GRA Well No. 1 as shown on the Schlumberger Sonic Log B Gamma Ray Log of said well dated July 5, 1965, which said well is located 1980 feet from the North line and 660 feet from the west line of Section 3, Township 22 South, Range 34 East". As to State and fee lands, the Unit Area includes Section 33 and 34, Township 21 South, Range 34 East. and the NE/4 of Section 4 and all of Section 3, Township 22 South Range 34 East. As to Federal lands, the "Unitized Formation" consists of the Morrow Formation underlying the "gas storage reservoir area" (also the Unit Area) in Section 4 (excluding the surface of the NE/4 of said Section 4) and Section 10, Township 22 South, Range 34 East, as defined in that November 24, 1975 Agreement for the Subsurface Storage of Gas, No. 14-08-0001-14277, as amended.

total floor formation is penetrated

RULE 4. For purposes of these Special Project Rules and Operating Procedures, the “Morrow Formation” is defined as the full extent of the vertical limits of the Morrow formation as defined by Order No. R-3006. The “Unit Operator” is defined as the operator of the Grama Ridge Morrow Gas Storage Unit Area.

RULE 5. Operators other than the Unit Operator proposing to drill a new well or recomplete an existing well penetrating or that may penetrate, the Morrow Formation within the Unit Project Area of the Grama Ridge Morrow Gas Storage Unit, as defined above, shall:

- a.) Provide the Unit Operator with advance written notification of intent to drill at the sooner of the date of filing of APD, C-101 and C-102 forms or thirty (30) days prior to commencing drilling operations.
- b.) On commencement of drilling operations, the operator shall provide the Unit Operator with the following information within twenty-four (24) hours of its availability:
 - (i) Daily drilling reports, including detailed time breakdown and other parameters normally associated with IADC daily drilling reports.
 - (ii) The anticipated date and time when the top of the Morrow formation will be encountered by the drill bit.
- c.) Provide Unit Operator with copies of all logs run on the well within twenty-four (24) hours of their availability and before casing is set.

RULE 6. For each well penetrating the Morrow Formation within the boundaries of the Unit Project Area and completed above the top of Unitized Formation, the operator shall:

- a.) Comply with the requirements of Rule 5 (a) through (c), above;
- b.) In the event of a cased hole into or through the Unitized Formation, operator will isolate the Unitized Formation by squeezing cement immediately above and below (if penetrated) the Unitized Formation and immediately below the operator’s deepest completion interval. Run a cement bond log and then fill the casing with cement to a level higher than the top of the Unitized Formation.
- c.) In the case of an open hole into or through the Unitized Formation with casing set above the Unitized Formation;
 - (i) If the hole Total Depth is within the Unitized Formation, fill the hole with cement to a level 15’ higher than the top of the Unitized Formation.
 - (ii) If the hole Total Depth is below the bottom of the Unitized Formation, set a bridge plug at a depth 15’ below the bottom of the Unitized Formation and fill the hole with cement from the bridge plug to a level 15’ higher than the top of the Unitized Formation.

RULE 7. For each well penetrating the Morrow Formation and completed below the base of Unitized Formation within the boundaries of the Unit Project Area, the operator shall:

- a.) Comply with the requirements of Rule 5 (a) through (c), above;
- b.) Squeeze cement immediately above the perforation interval, squeeze cement immediately below the Unitized Formation and squeeze cement immediately above the Unitized Formation.
- c.) Provide the Unit Operator with a cement bond log to document bond on all squeeze jobs; and
- d.) The operator shall take such other reasonable measures to assure that the Unitized Formation is isolated.

RULE 8. For each exploratory well penetrating the Morrow Formation that is to be plugged and abandoned without casing;

- a.) Comply with the requirements of Rule 5 (a) through (c), above;
- b.) Fill the hole with cement from a bridge plug set at 15' below the base of the Unitized Formation (if applicable) to a level 15' above the top of the Unitized Formation.

RULE 9. No completions within the Unitized Formation underlying the Unit Project Area by other than the Unit Operator shall be permitted.

RULE 10. These Special Project Rules and Operating Procedures shall not apply to any well that does not penetrate the Morrow Formation within the Grama Ridge Morrow Gas Storage Unit Project Area.