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District I 1625 N. French Dr., Hobbs, NM 88340 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 98210 District III 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office.

## Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes \( \subseteq \text{No \( \subseteq \)}\) Type of action: Registration of a pit or below-grade tank \( \subseteq \) Closure of a pit or below-grade tank \( \subseteq \) Telephone: 972-443-6489 e-mail address; zfarris@cimarex.com Operator: Cunarex Energy Co. Address: P.O. Box 140907, Irving, Tx 75014-0907 Facility or well name: Caudill South 21 Fee No. 1 API#: 30-025-37304 U/L or Otr/OtrF Sec 21 TISS R36E 1.atirude\_330018.42 N Longitude 103 1838 52 W \_ NAD: 1927 🔀 1983 🔲 Surface Owner Federal 🗌 State 🔲 Private 🔀 Indian 🗍 Pit Below-grade tank Type: Drilling 🛛 Production 🗌 Disposal 🗎 Volume: \_\_\_\_\_bbl Type of fluid: \_ Workover ☐ Emergency ☐ Construction material: Double-walled, with leak detection? Yes [ If not, explain why not, Lined X Unlined [ Liger type: Synthetic ☑ Thickness 12 mit Clay ☐ Volume Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal high 30 feet or more, but less than 100 feet (10 points) water elevation of ground water.) ( 0 points) 100 feet or more (20 points) Yes Wellhead protection area: (Less than 200 feet from a private domestic No (O points) water source, or less than 1000 feet from all other water sources.) Less than 200 feet (20 points) Distance to surface water: Thorizontal distance to all wetlands, playas, 200 feet or more, but less than 1000 feet (10 points) irrigation canals, disches, and perennial and ephemeral watercourses.) 1000 feet or man ( 0 points) Ranking Score (Total Points) 10 If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location onsite offsite if offsite, name of facility .... (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No 🛛 Yes 🗀 If yes, show depth below ground surface \_\_\_\_\_\_\_ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations Thereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit . or an (attached) alternative OCD-approved plan . Date: 07-00-00 Signature Printed Name/Title Zeno Facris Manager Operations Administration Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or Approval Date: 0533.06 Printed Name/Title L JOHNSON ZWICE GAGE

## Surface Pit Closure Plan

## Pit Parameters

Well site: Caudill South 21 Fee No. 1

Legal Description: 1830' FNL & 1980' FWL

Section 21 15S 36E

Lea County, New Mexico

The reserve pit insitu on this leasehold is being permitted to close as per New Mexico OCD "Pit and Below Grade Tank Guidelines" dated November 1, 2004.

This pit was excavated and formed to the dimensions roughly 120 feet x 115 feet x 6 feet deep. A 12 mil membrane liner and pad was used to prevent leakage to the surface soils. A visual examination of the membrane liner indicates that the liner has maintained its integrity.

The well bore penetrated a salt/anhydrite section causing the drilling fluid to saturate to a concentration weight of > 9.5 ppg.

After the drilling and completion phase of this project, the water phase of the pit contents were pumped and hauled to an approved water injection facility. The remaining solids were mechanically pulled to the corners of the containment area to allow them to dry and leach out as much liquid phase as possible. Again these liquids we hauled to an approved water injection facility. It is estimated that the volume of solids remaining are to +/- 1750 yards. The burial cell is to

be excavated and lined with a minimum 12 mil membrane that complies with ASTM Standard(s): D 5747, D 5199, D-5994, and D-4833. The cuttings will be loaded as to allow for > 36" freeboard to ground level. After the cuttings are loaded, the 12 mil liner will be folded over the top. A 20 mil minimum thickness liner meeting the minimum requirements as outlined in ASTM Standard Methods: D-5747, D-5199, D-5994, D-4833; will be used to cap and cover to an extended area that exceeds three feet in all directions from the edge of the burial cell. This cap will be constructed as to slope and allow for water runoff from burial cell.

A minimum of 36" of top soil will be used to cover the burial cell. This soil must be capable of supporting native plant growth. A seed mixture will be used as to conform to local BLM as well as New Mexico OCD requirements. The seeding and propagation of required native plants will be monitored as to insure that growth is reestablished.

After the drilled solids are buried, the natural contour of the surrounding soils will be mechanically shaped as prevent erosion of the well site until vegetation is established.

The caliches and soils will be pulled from the well site pad to allow for a 200 X 300 pad dimension for production use. The remaining materials will be used to maintain lease roads and other drill sites