District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Crand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico **Energy Minerals and Natural Resources**

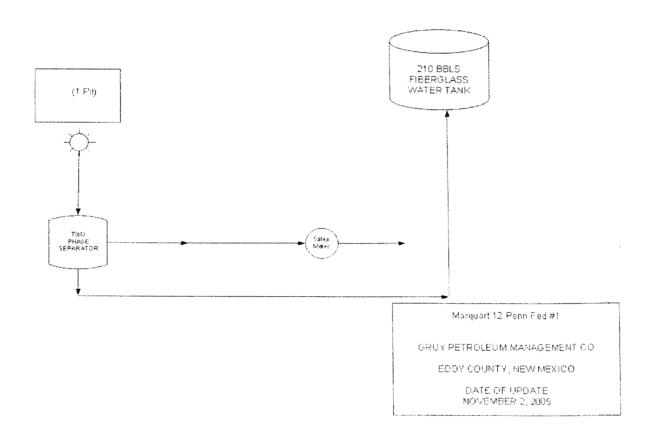
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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

Is pit or below-grade tan	k covered by a "general plan"? Yes w rhelow-grade tank \(\begin{array}{c}\) Closure of a pic or	s 🗌 No 🛛
Operator: Gruy Petroleum Management Co. Telephone: o Address: P.O. Box 140907, Irving, Tx 75014-0907	72 <u>443-6489</u> e-mail address: zfatris@mas	zoumhunter.com
Pacility or well name: Marquardt 12 Penn Federal # 1 AP1 #: 30-015-3  County: Eddy Latitude 320822.23 N Longitude 10414		
Pit  [ype: Drilling   Production   Disposal     Workover   Emergency     Lined   Unlined     Liner type: Synthetic   Thickness   12 mil   Clay   Volume     bbl	Below-grade tank  Volume:bbi Type of fluid:  Construction material:  Double-walled, with leak detection? Yes	Additional to the Principle of the Princ
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) ( 0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) ( 0 points)
	Ranking Score (Total Points)	-0-
If this is a pit closure: (1) attach a diagram of the facility showing the pit onsite ☑ offsite ☐ If offsite, name of facility date. (4) Groundwater encountered: No ☑ Yes ☐ If yes, show depth beliagram of sample locations and excavations.	(3) Attach a general description of re ow ground surfaceft, and at	medial action taken including remediation start date and en tach sample results. (5) Attach soil sample results and a
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines	a general permit . or an (attached) alte  Signature	rnative OCD approved plan
Approval: FEB 1 7 2006  Date: USGS information shows this area to be water sensitive.	eap De scl	ease submit a plan that can be proved for a sensitive area or hedule a meeting where other ater data can be reviewed.



## Surface Pit Closure Plan

## **Pit Parameters**

Well site: Marquardt 12 Penn Federal # 1

Legal Description: 880 FSL 1760 FEL

Section: 12 25S 26 E

Eddy 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 +/- 2500 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

