STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division PDCC 0400 528295
1220 South St. Francis Dr. Re
Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? X Yes No
II.	OPERATOR: Merit Energy Company
	ADDRESS: 13727 Noel Road, Suite 500, Dallas, Texas 75240
	CONTACT PARTY: Jason Wacker PHONE: 972-628-1579
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? X Yes No If yes, give the Division order number authorizing the project: R-2268, WFX-700
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Jason WackerTITLE: Petroleum Engineer
•	SIGNATURE: Jasen Darles DATE: 9/16/2003
*	E-MAIL ADDRESS: jason.wacker@meritenergy.com If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

MERIT ENERGY COMPANY APPLICATION FOR AUTHORITY TO INJECT GRAYBURG-JACKSON WATERFLOOD

III. Well Data

a.

- i. Turner "B" #12 2080' FSL & 660' FWL Section 20, T-17-S, R-31-E Eddy County, New Mexico
- ii. Surface Casing
 7", 20# @ 609' with 50 sx. TOC @ 200' (calculated).
 Hole size is unknown.

Production Casing 5-1/2", 14# @ 1845' with 100 sx. TOC @ 500' (calculated). Hole size is unknown.

- iii. Tubing will be 2-3/8", 4.7#, J-55, 8rd, EUE, IPC set at 1845'.
- iv. 5-1/2" Baker Model "AD-1" injection packer @ 1845'.

b.

- i. The injection interval will be the Seven Rivers formation in the Grayburg-Jackson field.
- ii. Water injection will be through open-hole 1874' 2022'. This is the injection interval.
- iii. This well was originally drilled as a Seven Rivers producer.
- iv. No other completions are known to exist in this well.
- v. There are no known upper oil zones. The next lower oil zone is the Grayburg formation at +/-2744', which was not penetrated in this well.

MERIT ENERGY COMPANY WELLBORE SCHEMATIC WELL NAME: TURNER "B" #12 FIELD: GRAYBURG-JACKSON (SEVEN RIVERS) LOCATION: 2080'FSL & 660'FWL, SEC 20-T17S-R31E COUNTY: **EDDY** STATE: ELEVATION: GL=3626'; KB=UNK SPUD DATE: 3/13/1944 COMP DATE: 6/6/1944 API#: 30-015-05284 PREPARED BY: JASON WACKER DATE: 8/25/2003 DEPTH SIZE WEIGHT THREAD HOLE SIZE **GRADE** CASING: 0' - 609' 7" 20# CASING: 0' - 1874' 5-1/2" 14# CASING: TUBING: 0' - 1845' 2-3/8" 4.7# J-55 EUE 8rd, IPC TUBING: CURRENT PROPOSED **OPERATOR: MERIT ENERGY COMPANY** 7" CASING @ 609' W/50 SX. TOC @ 200' (calculated) BAKER "AD-1" INJECTION PACKER @ 1845' 5-1/2" CASING @ 1874' W/100 SX. TOC @ 500' (calculated) OPEN HOLE: 1874'- 2022' TD @ 2022'