

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance XX Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No
- II. OPERATOR: Burlington Resources Oil & Gas, LP
ADDRESS: 3401 East 30th Street, Farmington, NM 87402
CONTACT PARTY: Patsy Clugston PHONE: 505-326-9518
- 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? _____ Yes XX No
If yes, give the Division order number authorizing the project: _____
- 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:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. 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: Patsy Clugston TITLE: Regulatory Specialist
SIGNATURE: Patsy Clugston DATE: 6/18/07
E-MAIL ADDRESS: clugspl@conocophillips.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.

INJECTION WELL DATA SHEET

OPERATOR: BURLINGTON RESOURCES OIL & GAS, LP

WELL NAME & NUMBER: EPNG COM A INJ #1

WELL LOCATION: 2500' FNL & 2665' FWL, FOOTAGE LOCATION

UNIT LETTER: F SECTION: 32 TOWNSHIP: T31N RANGE: R08W

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA
Surface Casing

Hole Size: 12-1/4" Casing Size: 9-5/8" set @ 200'
Cemented with: 162 sx or ft³
Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

Hole Size: 8-3/4" Casing Size: 7" set @ 3113'
Cemented with: 354 sx or ft³
Top of Cement: SURFACE Method Determined: CIRCULATED

Production Casing

Hole Size: 6-1/4" Casing Size: 5-1/2" 3083' - 3153'
Cemented with: NONE or ft³
Top of Cement: N/A Method Determined:
Total Depth: 3153' PBTD: 3153'

Injection Interval

3123' feet To 3148'

(Perforated or Open Hole; indicate which)

See attached wellbore schematic

INJECTION WELL DATA SHEET

Tubing Size 2-7/8" 6.4# J-55 Lining Material: K-55 LTC casing

Type of Packer: 7" Reliant Series Model M Mechanical set Single String Retrievable packer from Baker Oil Tools
Packer Setting Depth: 3073'

Other Type of Tubing/Casing Seal (if applicable): W-7" seal bore

Additional Data

1. Is this a new well drilled for injection? XX Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Fruitland Coal

3. Name of Field or Pool (if applicable): Basin Fruitland Coal

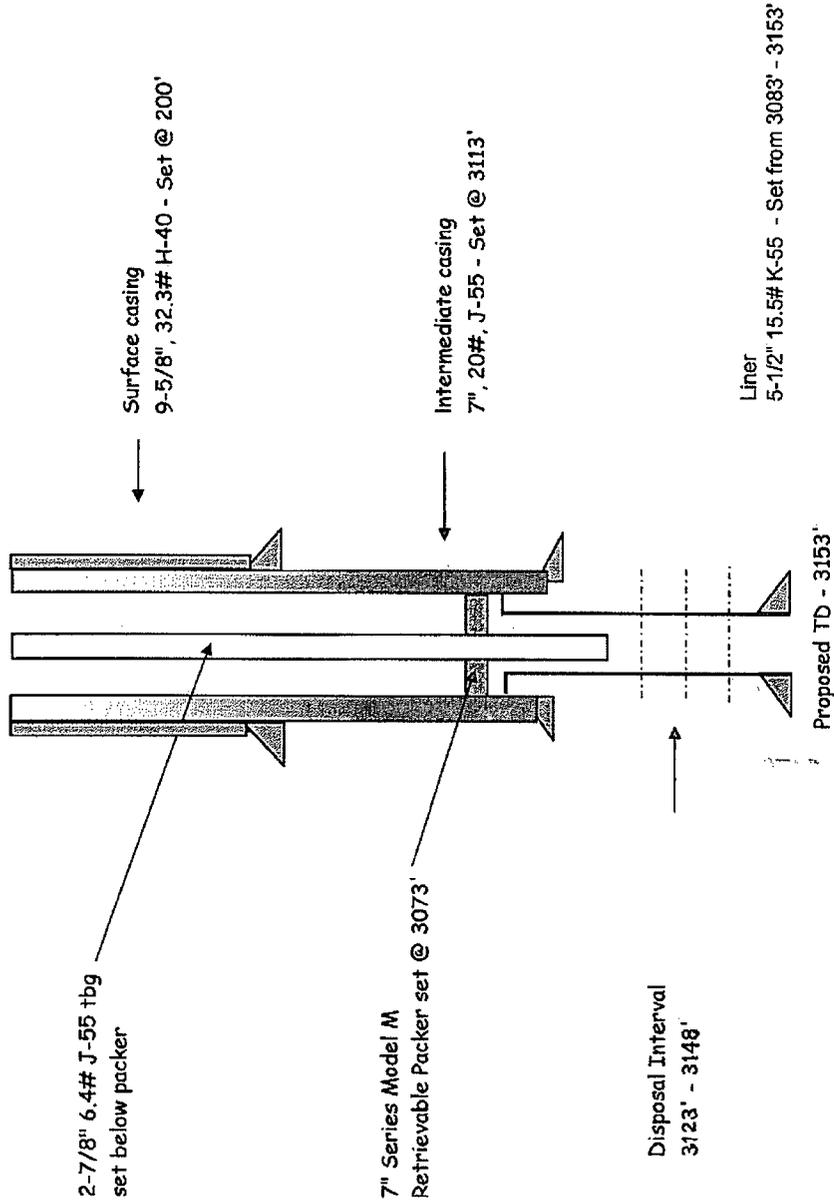
4. Has the well ever been perforated in any other zone(s)? No
List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Fruitland Coal - Top @ 2842'; Pictured Cliffs - Top @ 3192'

EPNG Com A INJECTION Well #1

Lease - E-1196-B
 Unit F, 2500' FNL & 2665' FWL
 Sec. 32, T31N, R8W
 San Juan County, New Mexico

Proposed Wellbore Schematic



Formation	Measured Depth	Subsea Depth
Ojo Alamo	2003	4330
Kirtland	2073	4260
Fruitland Coal	2840	3493
Upper Coal	2978	3353
Middle Coal	3068	3265
Lower Coal	3123	3210
TD	3153	

Burlington Resources Oil & Gas, LP
Application for Authorization to Inject
EPNG COM A INJ #1
Unit F (SEnw), 2500' FNL & 2665' FWL,
Section 32, T31N, R8W,
San Juan County, New Mexico

I. Purpose is CO2 Sequestration Project

II. Operator: Burlington Resources Oil & Gas, LP
Operator phone Number: (505) 326-9700
Operator address: 3401 East 30th Street
Farmington, New Mexico 87402
Contact: Patsy Clugston, Regulatory Specialist
Phone: (505) 326-9518

III. A. (1) Lease: State Lease - E-1196-B
Lease Size: 160 Acres
Lease Area: NW/4 of Section 32, T31N, R8W
Closest Lease Line: 35'
Well Name and Number: EPNG COM A INJ #1
Well Location: Unit F (SEnw), 2500' FNL & 2665' FWL
Section 32, T31N R8W - See Exhibit A (plat)

A. (2) Surface Casing - 9-5/8", 32.3 ppf, H-40 ST&C casing
Intermediate - 7", 20# J-55 ST&C casing
Production Casing - 5-1/2", 15.5 ppf, K-55 LTC casing

A. (3) Tubing will be - 2-7/8" 6.4# J-55

A. (4) Packer Placement - 7" Reliant Series Model M Mechanical set Single
String Retrievable packer from Baker Oil Tools & will be set @
approximately 3073'.

B. (1) Disposal zone will be Basin Fruitland Coal
B. (2) Disposal interval will be 3123' - 3148'
B. (3) The original purpose will be the CO2 Sequestration Project
B. (4) Fruitland Coal

IV. Is this an expansion of an existing project? YES XX NO
If yes, give the Division order number authorizing the Project: N/A

V. Attach a map that identifies all wells and leases with 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.

See Attachment B (wells) & C (leases)

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 plugged detail. (See completion reports on wells within area of review - Attachment D).

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected: Anticipate maximum injection rate is 2 MMCFD with an average of 1.5 MMCFD. Duration will be for one year.
2. Whether the system is open or closed: The system will be closed.
3. Proposed average and maximum injection pressure: Anticipate average injection pressure at the surface is 1000 psi with a maximum of 1135 psi. Plans for completion include continuous surface monitoring of Downhole pressure. In this instance the average Downhole injection pressure would be 1550 psi with a maximum of 1995 psi.
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water: The injected CO₂ will be supplied by Kinder Morgan. The purity of the CO₂ is in excess of 95% with 4% N₂.
5. If injection is for disposal purposes into a zone not productive of oil or gas within one mile of the proposed well, attached a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). The injection zone is productive of hydrocarbons.

VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to the 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.

The proposed injection zones are permeable coal intervals within the Upper Cretaceous Fruitland Formation (Basin Fruitland Coal Pool). The proposed test is expected to encounter three separate coal bearing packages between depths of 2978 to 3165. The test is expected to penetrate 26' of net coal in a Lower Coal interval with average bulk density of 1.55 g/cc, 15' of net coal in a Middle Coal interval with average bulk density of 1.62 g/cc, and 12' of net coal in an Upper Coal interval with average bulk density of 1.57 g/cc. Estimated formation tops:

Formation	Measured Depth	Subsea Depth
Ojo Alamo		2003 +4330
Kirtland		2073 +4260
Fruitland Coal		2840 +3493
Upper Coal		2978 +3355
Middle Coal		3068 +3265
Lower Coal		3123 +3210

Pictured Cliffs
TD

3190 +3143
3255 +3078

Two water wells have been drilled within a 2 mile radius of the proposed test according to review of records from the New Mexico Office of the State Engineer. A well located in NE/4 of Section 30-T31N-R8W was drilled by El Paso Natural Gas in October 1952 to a depth of 1021' and reportedly encountered water bearing sand between depths of 475' to 546' and 703' to 720'. Casing was set to 828', but the well was plugged and abandoned by November 1953. No water sample analysis data is available. The Pump Mesa Water Well #1, located in SE/4SW/4 of Section 32-T31N-R8W, was drilled by El Paso Natural Gas in 1975 for use as a water supply well for drilling and workover operations. It was drilled and cased to a total depth of 2003'. Casing is believed to be perforated in sand intervals between depths of 546' to 1934'. Those perforations from 1862' to 2034' are placed in Ojo Alamo sand. All perforations higher in the wellbore are placed in Tertiary age sands. All water samples from the Pump Mesa Water Well #1 have total dissolved solid concentrations greater than 10,000 mg/l.

There are no existing drinking water source wells located within a two mile radius of the proposed test. No existing underground drinking water sources are located below the Fruitland Formation within a two mile radius of the proposed location.

- IX. Describe the stimulation program, if any: The well will be cased to the top of the lower coal interval and completed open-hole. There is no planned stimulation.
- X. Attach appropriate logging and test data on the well. (if well logs have been filed with the Division, they need not be resubmitted). All logs and test data for the injection well will be submitted to the New Mexico Oil Conservation Division.
- 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).

The Pump Mesa Water Well #1, located in SE/4SW/4 of Section 32-T31N-R8W, was drilled by El Paso Natural Gas in 1975 for use as a water supply well for drilling and workover operations. It was drilled and cased to a total depth of 2003'. Casing is believed to be perforated in sand intervals between depths of 546' to 1934'. Those perforations from 1862' to 2034' are placed in Ojo Alamo sand. All perforations higher in the wellbore are placed in Tertiary age sands. Water samples from the Pump Mesa Water Well #1 have total dissolved solid concentrations greater than 10,000 mg/l. Water sample analyses from this well are attached. No other water wells are known to exist within one mile of the proposed test.

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.

Available geologic and engineering data has been reviewed and there is no evidence of any hydrologic connection between the proposed injection zone and known underground sources of drinking water.

XIII. PROOF of NOTICE (newspaper affidavit of publication and interested party certified mailing proof). The newspaper affidavit of publication and the interested party certified mailing will be taken care of by our attorney since this well has to go to hearing for approval. The hearing notification and publication takes precedence over the C108 notification per our landman.