### STATE OF NEW MEXICO

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

### OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 13,933

APPLICATION OF BURLINGTON RESOURCES OIL AND GAS COMPANY, LP, FOR APPROVAL OF A PILOT SEQUESTRATION INJECTION WELL PROJECT, SAN JUAN COUNTY, NEW MEXICO

### OFFICIAL EXHIBIT FILE

### **EXAMINER HEARING**

BEFORE: DAVID K. BROOKS, Jr., Legal Examiner RICHARD EZEANYIM, Technical Examiner

June 21st, 2007

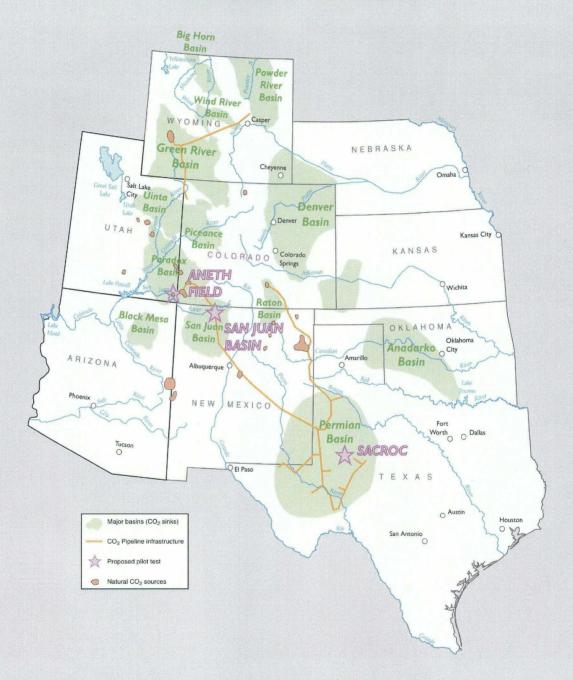
Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID K. BROOKS, Jr., Legal Examiner, and RICHARD EZEANYIM, Technical Examiner, on Thursday, June 21st, 2007, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

# **Burlington Resources**

Carbon Dioxide Sequestration Project Fruitland Coal Formation



NMOCD Case # 13933 June 21, 2007

## KELLAHIN & KELLAHIN Attorney at Law

W. Thomas Kellahin 706 Gonzales Road Santa Fe, New Mexico 87501

TELEPHONE 505-982-4285 FACSIMILE 505-982-2047 TKELLAHIN@COMCAST.NET

May 8, 2007

TO: NOTICE OF THE HEARING OF THE FOLLOWING NEW MEXICO OIL

**CONSERVATION DIVISION CASE:** 

Re: Application of Burlington Resources Oil & Gas Company LP for approval of

a Pilot Sequestration Injection Well Project, Basin Fruitland Coal Gas Pool

San Juan County, New Mexico

On behalf of Burlington Resources Oil & Gas Company LP, please find enclosed our application for approval of a Pilot Sequestration Injection Well Project that has been set for hearing on the New Mexico Oil Conservation Division Examiner's docket now scheduled for 8:15 a.m. on June 7, 2007. The hearing will be held in Porter Hall in the Division's offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico, 87505.

As an offsetting operator who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

Pursuant to the Division's Rule 1208.B, you are further notified that if you desire to appear in this case or to oppose the proposed risk charge (See Order R-11992), then you are required to file a Pre-Hearing Statement with the Division not later than 5:00 PM on Thursday, May 31, 2007, with a copy delivered to the undersigned. The Pre-Hearing Statement should include: the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and the identification of any procedural matters that are to be resolved prior to the hearing.

YII

V. Thomas Kellahin

### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT **OIL CONSERVATION DIVISION**

	-
CASE NO.	
Application of Burlington Resources Oil & Gas Company LP	3
for approval of a Pilot Sequestration Injection Well Project	45
within the Basin Fruitland Coal Gas Pool	

### APPLICATION

Burlington Resources Oil Gas Company LP ("Burlington"), a wholly owned subsidiary of ConocoPhillips Company, by its attorneys, Kellahin & Kellahin, applies to the New Mexico Oil Conservation Division ("Division") for an order approving a pilot sequestration injection well project within a project area consisting of all of Section 32, T31N R8W, including the drilling of an CO2 injection well at an unorthodox location 2500 feet FNL and 2665 feet FWL (Unit F) of Section 32 for injection within an interval from 3123 feet to 3148 feet into the Fruitland formation of Basin Fruitland Coal Gas Pool, for the purpose of testing the feasibility of disposal of carbon dioxide as a alternative to the current practice of venting carbon dioxide to the atmosphere and to test the feasibility of enhancing methane production from offset wells.

In support of its application Burlington states:

San Juan County, New Mexico

- (1) Burlington is the current operator of the Fruitland Coal Gas Pools wells within Section 32, T31N, R8W, San Juan County, New Mexico. See locator Map attached as Exhibit "A"
- (2) On June 2, 2005, Governor Richardson issued Executive Order EO-2005-033 establishing greenhouse gas emission reduction goals for New Mexico and called for the creation of the Climate Change Advisory Group.

- (3) This Advisory Group, consisting of about 40 representatives from tribes, industry, agriculture, universities and our national labs and environmental nonprofit groups, forwarded sixty-nine (69) recommendations covering the sectors of energy supply with the impact of implementing these recommendations expected to result in net saving's of \$2 billion to New Mexico's economy while reducing the equivalent of 267 million metric tons of carbon dioxide through the year 2020.
- (4) On December 28, 2006, Governor Richardson issued Executive Order EO-2006-69 expanding the reduction goals set forth for the state in Executive Order 2005-033 and implementing these progressive recommendations.
- (5) As part of this implementation, New Mexico Tech in partnership with United State Department of Energy (DOE) and members of the oil and gas industry, including Burlington, propose this pilot project to see if carbon dioxide currently produced as a waste byproduct of the production of gas from the Fruitland Coal formation can be re-injected and isolated in that formation, i.e. "sequestered."
- (6) Burlington, in cooperation with New Mexico Tech and the DOE, has agreed to operate this pilot project.
- (7) Section 32, T31N, R8W has been selected by Burlington as the proposed Pilot Project Area that currently contains 10 producing wells. See tabulation of current wells attached as Exhibit "B"
- (8) If approved, Burlington proposes to drill from one injection wellbore at a location 2500 feet FNL and 2665 feet FWL of this section, a location that would be unorthodox if it were a producing well in the Basin Fruitland Coal Gas Pool. See Division form C-102, attach as Exhibit "C"
- (9) In accordance with Division Rule 701, Burlington seeks a permit for the injection of carbon dioxide gas for storage in the Fruitland formation of the Basin Fruitland Coal Gas Pool and approval of its Division Form C-l08, See completed form C-108, attached as Exhibit "D"

- (10) Approval of a Pilot Project will afford an opportunity to:
  - a. Determine the optimum injection rate:
    - i. Maximum rate and corresponding pressure'
    - ii. Stabilized rate and pressure
    - iii. Permeability changes (coal swelling)
    - iv. Fracture gradients (over time)
  - b. Evaluate the sequestration potential:
    - i. Replacement ratio
    - ii. Injection conformance
    - ili. Gross adsorption capacity at varying pressures
- (11) Notice of this application and the requested hearing will to be sent to all operators of all wells within 1 mile of the outer boundaries of this pilot project area.
- (12) Approval of this application is in the best interests of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Burlington requests that this application be set for hearing before an Examiner of the Oil Conservation Division on June 7, 2007 and after notice and hearing as required by law, the Division enter its order approving this application.

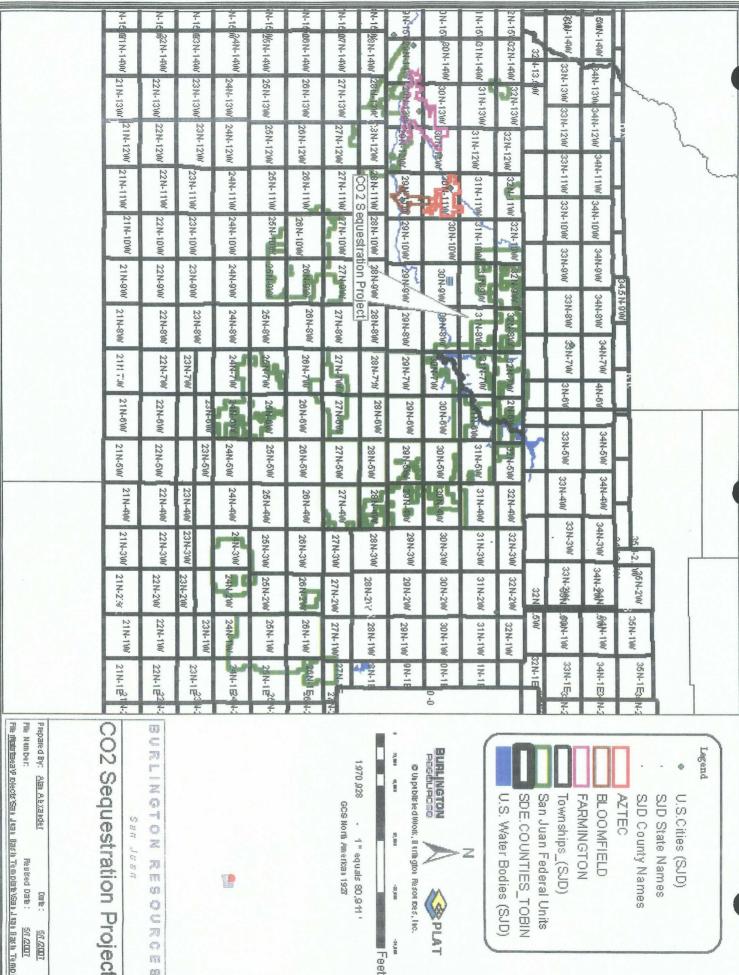
RESPECTFULLY SUBMITTED:

W. THÓMAS KELLAHIN KELLAHIN & KELLAHIN

706 Gonzales Road

Santa Fe, New Mexico 87501

(505) 982-4285



U.S.Cities (SJD)

SJD State Names

AZTEC

FARMINGTON BLOOMFIELD

Townships\_(SJD)

San Juan Federal Units SDE.COUNTIES\_TOBIN

U.S. Water Bodies (SJD)







0,00

Feet

GCS North American 1927 1" equals 80,911

OZ J. on 0 C 20 0 171 (0)

CO2 Sequestration Project

Reubed Date: 400 5/7/2007 SF /2007

# Exhibit B

API NUMBER	WELL NAME	WELL	WELL # CURRENT OPERATOR	FORMATION	C TW	SEC TWNSHP RANGE	LANGE	UN LTR
300452093400	EPNG COM A	2A	BURLINGTON RESOURCES O&G CO LP	MESAVERDE 32	318	ώ 	Ma	۵
300452687700		300	BURLINGTON RESOURCES O&G CO LP	FRUITLAND COAL 32	31N	·	W.	¥
300453192900		3008	BURLINGTON RESOURCES O&G CO LP	FRUITLAND COAL 32	31N	8	Marian	_
300452130400		10	<b>BURLINGTON RESOURCES O&amp;G CO LP</b>	MESAVERDE/DAKOTA 32			8W	ļi.
300451004400		2	BURLINGTON RESOURCES O&G CO LP	MESAVERDE 32			8W	≅
300452747900		τ-	CONOCOPHILLIPS COMPANY	FRUITLAND COAL 32			8W	ഗ
300452011300		36	CONOCOPHILLIPS COMPANY	MESAVERDE/DAKOTA 32			×.	0
300452403900	STATE COM-AL 36-E	36-E	CONOCOPHILLIPS COMPANY	MESAVERDE/DAKOTA 32			. M8	മ
300453288500	STATE COM-AL 36-F	36-F	CONOCOPHILLIPS COMPANY	MESAVERDE/DAKOTA 32	31N		8W	_
300453289700	STATE COM-AL 36-M	36-M	CONOCOPHILLIPS COMPANY	MESAVERDE/DAKOTA 32			8W	∢
300452170200		7-A	CONOCOPHILLIPS COMPANY	MESAVERDE 32	31N		8W	௳

<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

### State of New Mexico

Permit 51821

### Energy, Minerals and Natural Resources

Oil Conservation Division 1220 S. St Francis Dr.

				San	ta Fe	e, NIVI	875(	15		
AP	PLICATIO			FO DRILL, RE- ne and Address	ENTE	ER, DEE	PEN.	, PLUGBA		R ADD A ZONE D Number
	BURLIN		•	OIL & GAS COM	PANY I	í Þ				.538
	DORLI			H STREET	1 / 11 1 1	L/I				
		FAR	MINGTO	N, NM 87402					3. API	Number
	4. Property Cod	le	· ·	5. Pro	perty Na	me		<u> </u>		6. Well No.
	6979			EPN	G COM	I A				001
				7. Surfa	ce Lo	cation				
UL - L	ot Section	Township	Range		t From	N/S Li	ne	Feet From	E/W Line	County
F	32	31N	08W	F 2	500	N		2665	w	SANDOVAL
				8. Pool	Inform	nation			<u> </u>	
BASIN	FRUITLAND	COAL (GA	S)	0. 1 001		RACION				71629
				Additional V	Vell In	ıformati	ion			
9. W	ork Type	10. Well	Type	11. Cable/I		IIVI IIIULI		Lease Type	13. G	round Level Elevation
	w Well	СО						State		6321
14	l. Multiple	15 Propo	sed Depth	16. Гоп	mation		<u> </u>	7. Contractor		18. Spud Date
	N	1 -	257	Fruitlan				7. Contractor		10. Space
			.37			1 .	<u>.                                    </u>	····		to nearest surface water
L	Depth to Ground v 101	vater		Distance from n	earest fre > 1000	sn water we	11		Distance	> 1000
it: Lin	er: Synthetic	12	mils thick	Clay Pit Volume		bbls D	rilling M	lethod:	L	1000
	sed Loop System		<u>-</u>						Diesel/Oil-b	oased Gas/Air G
			19.	Proposed Casin	g and	Cement	Prog	ram		
Туре	Hole Size	Casing T		Casing Weight/ft		etting Dep		Sacks of	Cement	Estimated TOC
Surf	12.25	9.62		32.3		200		16	2	0
Intl	8.75	7		20		3080		45	2	0
Prod	6.25	5.5		15.5		3257		0		3050
			Casin	g/Cement Progr	am: A	dditiona	ıl Cor	nments		
A 7" Re	eliant Series Mo will be 2-7/8"	odel M Mec 6.4# J-55.		t Single String Retri					will be set	t @ approx. 3040'.
			P	roposed Blowou	t Prev	ention P	rogra	am		
	Type		Wo	king Pressure		To	est Pre			Manufacturer
	DoubleRam			2000			2000			Schafer
	DoubleRam			2000			200	0	1	Schafer
best of m	y knowledge and	belief.		ue and complete to the		OII	CO	NSERV <i>A</i>	ATION I	DIVISION
NMOCE	certify that the guidelines, a proved plan	drilling pit w general pern	ill be constri nit 🗷, or an	ected according to (attached) alternative		proved By	:			
	Name: Electro	onically file	d by Juani	a Farrell	Title					
	Regulatory Spe		<del>-</del>		App	proved Da	te:		Expiratio	n Date:
Email .	Address: juani	ta.r.farrell@	conocophi	llips.com						
Date: 5	5/4/2007		Phone: 50	5-599-3419						



Form C-102 Permit 51821

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV

1220 S. St Francis Dr., Santa Fe, NM 87505

Section

UL - Lot

# State of New Mexico Energy, Minerals and Natural Resources

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

I. API Number	2. Pool Code 71629		l Name AND COAL (GAS)
4. Property Code	1	rty Name	6. Well No.
6979		COM A	001
7. OGRID No.	•	tor Name	9. Elevation
14538		S OIL & GAS COMPANY LP	6321

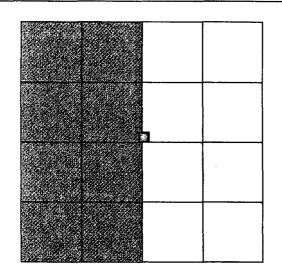
10. Surface Location

Lot Idn Feet From N/S Line Feet From E/W Line County

F	32	31N	08W		2500	N	2665	W	SANDOVAL		
11. Bottom Hole Location If Different From Surface											
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County		

	.	,p	Aunge	20110		1,40	, inc	1001110111	J. W. Billio	county
12. Dedicated Acre 320.00	es	13. Jo	oint or Infill		14. Consolidation	Code			15. Order No.	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



Range

Township

### **OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By: Juanita Farrell Title: Regulatory Specialist Date: 5/4/2007

### SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Glen W. Russell Date of Survey: 2/23/2007 Certificate Number: 15703



## Permit Comments

Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP, 14538

API:

EPNG COM A #001 Well:

Created By	Comment	Comment Date
PLCLUGSTON	This is a CO2 injection well. We will be submitting a C108 permit and taking this well to hearing for approval. We have entered in to a partnership with the NM Tech and the Department of Energy on the project. And the project will run for a year.	4/18/2007
PLCLUGSTON	Will be using a uncement liner for the production casing on this well.	4/25/2007
PLCLUGSTON	The pit sundry will be submitted after the APD is approved	4/25/2007

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

### Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

### APPLICATION FOR AUTHORIZATION TO INJECT

	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 30 <sup>th</sup> 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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*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: Palsy Chist DATE:
* Pleas	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. e show the date and circumstances of the earlier submittal:



- 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.

CE: 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.

Side 1

OPERATOR:

BURLINGTON RESOURCES OIL & GAS, LP

RANGE R08W WELL CONSTRUCTION DATA TOWNSHIP T31N Surface Casing SECTION 32 UNIT LETTER EPNG COM A INJ#1 FOOTAGE LOCATION WELL LOCATION: 2500' FNL & 2665' FWL, WELLBORE SCHEMATIC WELL NAME & NUMBER:

See attached wellbore schematic

 Hole Size:
 8-3/4"
 Casing Size:
 7" set @ 3080"

 Cemented with:
 452 sx
 or
 ft³

 Top of Cement:
 SURFACE
 Method Determined: CIRCULATED.

 Production Casing

Method Determined: CIRCULATED

Top of Cement: SURFACE

Cemented with: 162 sx

Intermediate Casing

 $ft^3$ 

9-5/8"set @ 200'

Casing Size:

12-1/4"

Hole Size:

or

 Hole Size:
 6-1/4"
 Casing Size:
 5-1/2" 3050" - 3257

 Cemented with:
 NONE
 or
 ft³

 Top of Cement:
 N/A
 Method Determined:
 ...

 Total Depth:
 3257'
 ...
 PBTD:
 3257'

Injection Interval

7524' feet To 7868'

(Perforated or Open Hole; indicate which)

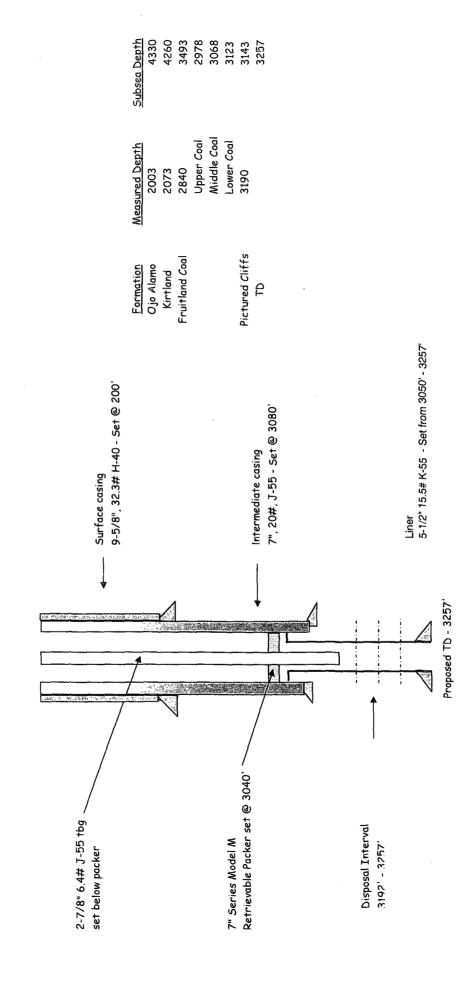
# INJECTION WELL DATA SHEET

Tul	Tubing Size _	2-7/8" 6.4# J-55	Lining Material:	K-55 LTC casing
Туј	Type of Packer Packer Setting	Type of Packer: 7" Reliant Series Model M Mechancial set Single String Retrievable packer from Baker Oil Tools Packer Setting Depth: 3040'	ncial set Single String Retrievable p —	acker from Baker Oil Tools
Otk	Other Type of	Tubing/Casing Seal (if applicable): W-7" seal bore	ble): W-7" seal bore	
		<u>Ād</u>	Additional Data	
1.	Is this a ne	Is this a new well drilled for injection?	XX Yes	oN
	If no, for v	If no, for what purpose was the well originally drilled?	inally drilled?	
7, 4	Name of the	Name of the Injection Formation:	Fruitland Coal	
. 4.	Has the we	Has the well ever been perforated in any other zone(s)? No	other zone(s)? No	
	List all suc	List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.	e plugging detail, i.e. sacks of	cement or plug(s) used.
5.	Give the ninjection z	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 – To	or gas zones underlying or overlying the proposed Fruitland Coal – Top @ 2842'; Pictured Cliffs – Top @ 3192'	ing the proposed tured 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



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	r: Burlington Resources Oil & Gas, LP r phone Number: (505) 326-9700 r address: 3401 East 30 <sup>th</sup> Street Farmington, New Mexico 87402
		Patsy Clugston, Regulatory Specialist 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
	A. (2)	Section 32, T31N R8W - <b>See Exhibit A (plat)</b> <u>Surface Casing - 9-5/8", 32.3 ppf, H-40 ST&amp;C casing</u> <u>Intermediate - 7", 20# J-55 ST&amp;C casing</u> <u>Production Casing - 5-1/2", 15.5 ppf, K-55 LTC casing</u>
	A. (3) A. (4)	Tubing will be - 2-7/8" 6.4# J-55  Packer Placement - 7" Reliant Series Model M Mechanical set Single String Retrievable packer from Baker Oil Tools & will be set @ approximately 3040'.
	B. (1) B. (2) B. (3) B (4)	Disposal zone will be Basin Fruitland Coal Disposal interval will be 3192' - 3257' The original purpose will be the CO2 Sequestration Project Fruitland Coal
		rpansion of an existing project? YES <u>XX</u> NO the Division order number authorizing the Project: <u>N/A</u>

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:

<b>Formation</b>	Measured Depth	Subsec	Depth
Ojo Alamo	2003	+4330	•
Kirtland	2073	+4260	
Fruitland C	loal	2840	+3493
	Upper Coal	2978	+3355
	Middle Coal	3068	+3265
	Lower Coal	3123	+3210

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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.



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Form C-192 Ravised October 12, 2013

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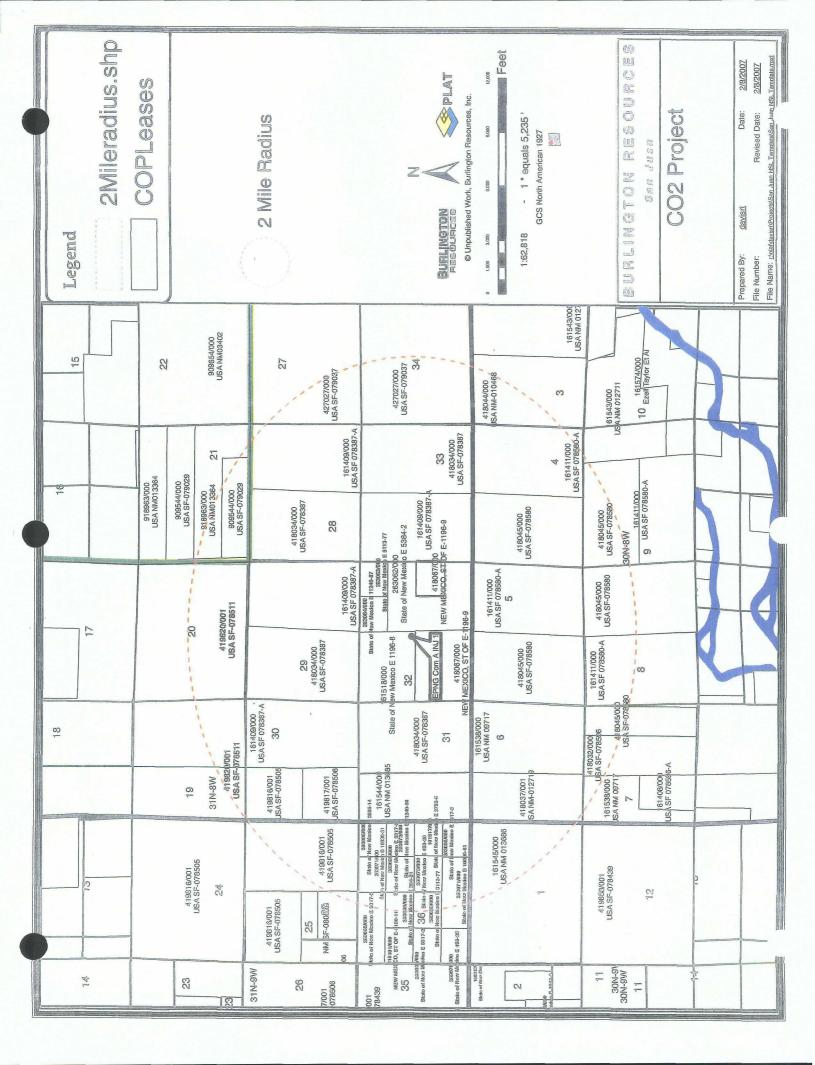
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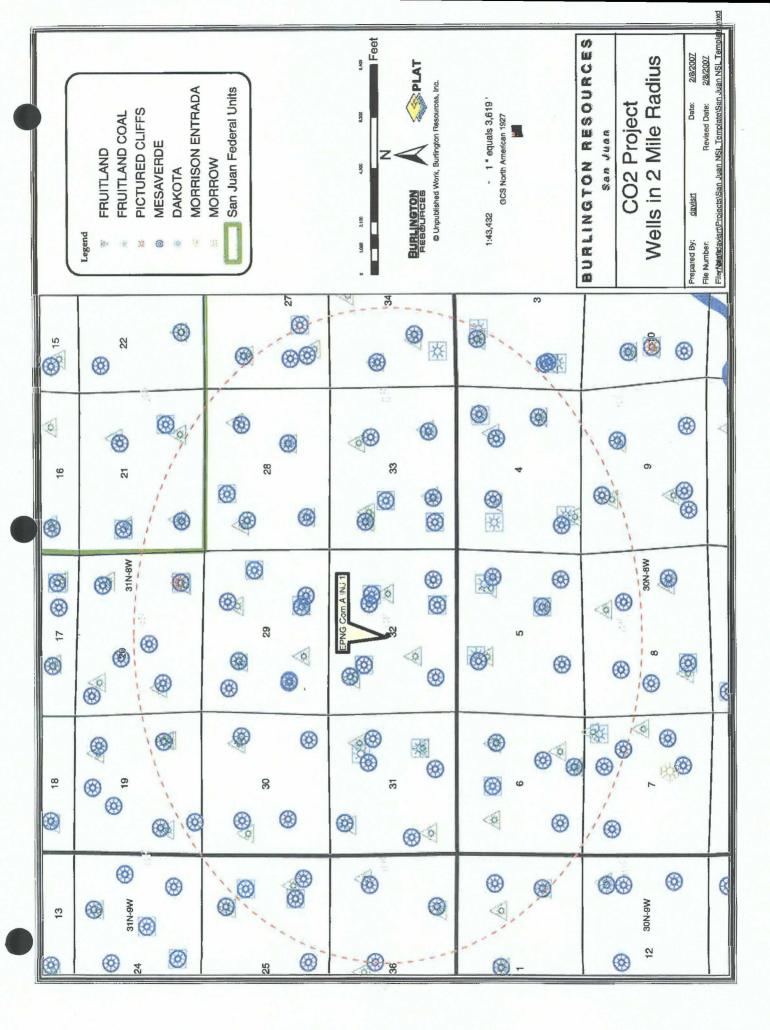
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AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

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BURLINGTON RESOURCES OIL & GAS COM, LP C108 ITEM VI - Well Tabulation in Review Area EPNG COM A INJ #1 - CO2 Sequestration Project . State Com K #7 P:A 10/14/88 103/4" 32# Saz hole 240' cur Retainer TOC 2295 DV @3217 3311 7" 20/23# (435sx)

## KELLAHIN & KELLAHIN Attorney at Law

W. THOMAS KELLAHIN 706 GONZALES ROAD SANTA FE, NEW MEXICO 87501 TELEPHONE 505-982-4285 FACSIMILE 505-982-2047 TKELLAHIN@COMCAST.NET

June 4, 2007

VIA FACSIMILE 476-3462

Mr. Mark E. Fesmire, Director Oil Conservation Division 1220 South Saint Francis Drive Santa Fe, New Mexico 87505

Re:

Request to Continue NMOCD Case 13933

Application of Burlington Resources Oil & Gas Company LP for approval of Pilot Sequestration Injection Well Project

(Codex 1525-34 Well #1) (Sec 32, T31N, R8W)

San Juan County, New Mexico

Dear Mr. Fesmire:

On behalf of Burlington Resources Oil & Gas Company LP, the applicant, please continue the referenced case from the June 7, 2007 hearing docket to the June 21, 2007 hearing docket.

W/Thomas Kellahin

Facsimile:

**Burlington Resources** 

Attn: Alan Alexander Fax: 713-624-5460

Ocean Munds-Dry, Esq. Attorney for BP Fax: 505-983-6043

RETURN SOLATE

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RETURN FOR DATE

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RECEIPT FOR CERTIFIED MAIL

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