DATE IN 2.14.12	SUSPENSE	ENGINEER JKT	LOGGED IN 2.14.12	TYPE PMX	APP NO 1204538040

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

Linn Energy 269324

East Hobbs SA Unit #999

ADMINISTRATIVE APPLICATION CHECKLIST 30-025-39209

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

A-31-18S-39E

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

WFX-35

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☑ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

309540

[D] Other: Specify _____

RECEIVED OCD
2012 FEB 13 P 3:44

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

[A] ☑ Working, Royalty or Overriding Royalty Interest Owners

[B] ☑ Offset Operators, Leaseholders or Surface Owner

[C] ☑ Application is One Which Requires Published Legal Notice

perfs 4453'-4592'

890 psi

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Nancy Fitzwater	Nancy Fitzwater	Regulatory Compliance Supervisor	2-10-12
Print or Type Name	Signature	Title	Date

nfitzwater@linnenergy.com
e-mail Address

LINN
Energy
NASDAQ:LINE

LINN ENERGY, LLC.

600 Travis Street, Suite 5100
Houston, Texas 77002
Phone: (281) 840-4000
Fax: (281) 840-4001

February 10, 2012

New Mexico Oil Conservation Division
Engineering Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Attn: Will Jones

Re: LINN's Application for Authorization to Inject
East Hobbs San Andres Unit Well #999

Dear M. Jones;

Please find enclosed Linn Operating, Inc.'s Application for Authorization to Inject for the East Hobbs San Andres Unit Well #999.

If you need additional information please contact the undersigned at 281-840-4266 or by e-mail at nfitzwater@linnenergy.com

Sincerely,

LINN OPERATING, INC.

Nancy Fitzwater

Nancy Fitzwater
Regulatory Compliance Advisor

Attachment

Affidavit of Publication

State of New Mexico,
County of Lea.

I, CINDY BENTLE
ADMINISTRATIVE ASSISTANT
of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period

of 1 issue(s).
Beginning with the issue dated
January 26, 2012
and ending with the issue dated
January 26, 2012

ADMINISTRATIVE ASSISTANT
Sworn and subscribed to before me
this 27th day of
January, 2012

Notary Public

My commission expires
February 09, 2013
(Seal)

DORA A. YANEZ
NOTARY
PUBLIC
STATE OF NEW MEXICO

This newspaper is duly qualified to publish legal notices or advertisments within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said publication has been made.

LEGAL LEGAL

LEGAL NOTICE
JANUARY 26, 2012

LINN PROPOSES TO CONVERT THE EAST HOBBS SAN ANDRES UNIT WELL #999 TO SALT WATER INJECTION FOR WATERFLOOD PURPOSES. THE WELL IS LOCATED IN SECTION 31, T18S, R39E, BEING 990 FNL AND 990 FEL.

LINN PROPOSES TO INJECT INTO THE SAN ANDRES FORMATION AT A DEPTH OF 4453' TO 4592' WITH A MAXIMUM INJECTION PRESSURE OF 890 PSI AND A MAXIMUM RATE OF 2000 BPD.

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.
#27118

67107348 00086718
LINN ENERGY
600 TRAVIS STE 5100
HOUSTON, TX 77002

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

I. PURPOSE: XX Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? XX Yes _____ No

II. OPERATOR: LINN OPERATING, INC.

ADDRESS: 600 TRAVIS, SUITE 5100 HOUSTON, TEXAS 77002

CONTACT PARTY: NANCY FITZWATER PHONE: 281/840-4266

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? XX Yes _____ No
If yes, give the Division order number authorizing the project: R-11980-A

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: NANCY FITZWATER TITLE: REGULATORY COMPLIANCE SUPERVISOR

SIGNATURE: Nancy Fitzwater DATE: 2-10-12

E-MAIL ADDRESS: nfitzwater@linnenergy.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: Arena Resources submitted on 11/22/04 to add wells

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

Surface Owner and Offset Operator Notification Certification

I hereby certify that a copy of this application was sent to the surface owner of the land where the EHSAU #999 well is located, the offset operators within a one-half mile radius of the well and the unleased mineral owners. Notifications are listed below.

X Nancy Fitzwater, Nancy Fitzwater – Operations, LINN Operating, Inc.

Offset Operator

Plantation Operating, LLC
4700 West Sam Houston Parkway No.
Suite 140
Houston, Texas 77041

Surface Owner

Guy Williams (surface owner)
420 W. Gold
Hobbs, NM 88240

Mineral Interest Owners

John Boulware Hardvard, III, Trustee of the Harvard Mineral Trust
12289 Highway 158 East
Gardendale, TX 79758

Frank Stuart Ryburn, as Trustee of
The Susanna Moss Ryburn Hegemand Trust fbo Frances
Marion Ryburn IV and Eleanor Mills Ryburn
3520 Arrowhead Drive
Dallas, Texas 75204

Frank Massard, Jr.
5727 Warm Springs
Houston, Texas 75703

Barton Bros. Land & Ryalty Co.
P O Box 978
Hobbs, NM 88241-0978

Charlotte Carol Wright, Trustee of the
1991 Charlotte Carol Wright Trust udt dated 4-8-91
3120 Madeira
Costa Mesa, CA 92626

Geraldine Massad
707 NW 35th Place
Lawton, OK 73505

Joy N. Massad
1619 Sybil Lane
Tyler, TX 75703

Jean C. Massad
3459 FM 2767
Tyler, TX 75708

Brett C. Barton
2312 Coach Light Drive
Edmond, OK 73013

Roy G. Barton, Trustee of the Roy G. Barton, Sr. and
Opal Barton Revocable Trust
1919 No. Turner
Hobbs, NM 88240

Heidi C. Rivera
2214 No. Cielo
Hobbs, NM 88240

Jo Ann Leuszler, Trustee of the
Jo Ann Leuszler Revcable Trust dated 3-3-08
2455 Manchester Drive, #20
Oklahoma City, OK 73120

LINN Operating, Inc.
East Hobbs (San Andres) Field
Application for Authorization to Inject
NMOCD Form C-108

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
   a. Average 1250
   b. Maximum 2000
2. Whether the system is open or closed:
   a. Closed
3. Proposed average and maximum injection pressure;
   a. Average 600
   b. Maximum 890
4. Water will be re-injected produced water
5. NA

VIII. Geologic Data

A. Injection Zone

a. Name: San Andres Formation

b. Description: Injection will be into the San Andres formation within the field. The San Andres is a fine to coarsely crystalline dolostones, dolomitized grainstones, and dolomitic sandstones. The formation ranges in depth from 4441' to 4687' per the density neutron log dated 6-26-97 for the Carrie O. Davis #5 type well.. The total net pay in the productive wells range from 119 to 164 feet. Average porosity is 16.2% and average permeability is 11.8 md.

B. Fresh Water Sources: The State Engineer's Office reports fresh water production potential from the Ogallala formation. The bottom depth of ground water is reported to be 154' feet in Sec 31 T18S, R39E. There are 50 permitted water wells in the area of review and are listed on the attached table. There are no fresh water sources below the proposed injection interval.

IX. Proposed Stimulation Program: LINN proposes to acidize the well to clean out any scale and the perforations.

X. Logging and Test Data: LINN plans no wellbore changes that would require a log to be ran however if a log is obtained it will be filed with the NMOCD.

XI. Fresh Water Analysis

Attached are the fresh water analyses from two of the active water wells in the area.

XII. Disposal Well Statement

This section does not apply to this application. This is a waterflood enhancement well.

XIII. Proof of Notice

A copy of this application has been furnished to all surface owners and leasehold operators within the area of review.

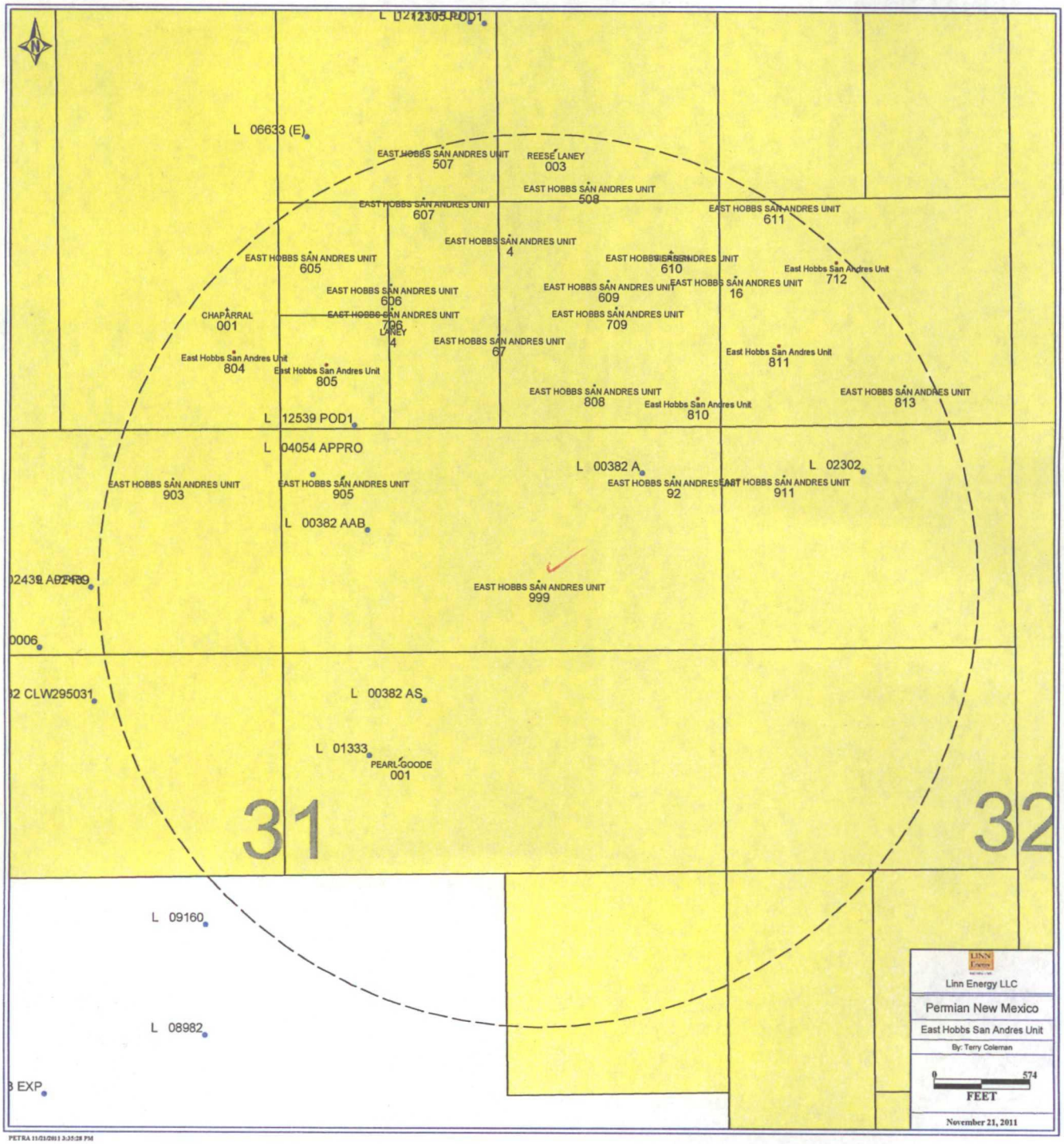
Form C-108 Sect. III.A.

LINN OPERATING, INC. - INJECTION WELL DATA- APPLICATION FOR AUTHORIZATION TO INJECT

											Surface Casing			Production Casing			Injection String & Packer			
Lease Name	Well #	API Number	Unit	Section	Township	Range	Footage		Footage		Size	Depth	Sxs Cmt	Size	Depth	Sxs Cmt	OD, in.	Depth ft	Packer	Depth
EAST HOBBS SAN ANDRES UNIT	999	30025392090000	A	31	18S	39E	990	FNL	990	FEL	8-5/8	1899	930	5-1/2	4620	755	2.875	4410	Arrowset 1-X	4410

Form C-108 Sect. III.B.

Lease Name	Well #	API Number	Unit	Section	Township	Range	Footage		Footage		Formation Name	Injection Interval	Perf or OH	Original Purpose	Other Intervals	Isolation Method
EAST HOBBS SAN ANDRES UNIT	999	30025392090000	A	31	18S	39E	990	FNL	990	FEL	San Andres	4453' - 4592	Perf	Oil Producer	None	



PETRA 11/21/2011 3:35:28 PM

Side 1

INJECTION WELL DATA SHEET

OPERATOR: LINN OPERATING, INC.

WELL NAME & NUMBER: EAST HOBBS SAN ANDRES UNIT WELL NO. 999

WELL LOCATION:	990 FNL 990 FEL	A	31	18S	39E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

See Attached

WELL CONTRUCTION DATA

Surface Casing

Hole Size: 12.25 Casing Size: 8.625

Cemented with: 930 sx

Top of Cement: Surf Method Determined: Circ

No Intermediate Casing

Production Casing

Hole Size: 7.875 Casing Size: 5.5

Cemented with: 755 sx

Top of Cement: Surf Method Determined: Circ

Injection Interval

4453' feet to 4592'

Perforated

Wellbore Diagram

Lease & Well No.	East Hobbs San Andres Unit #999	Former Name	
Field Name	East Hobbs (San Andres)	County & State	Lea County, New Mexico
Location	990' FNL & 990' FEL; T: 18S R: 39E Sec: 31	API No.	30-025-39209

K.B. Elevation	3,604'
D.F. Elevation	
Ground Level	

Surface Casing					
Size (OD)	8 5/8"	Weight	24&32#	Depth	1,899'
Grade	J-55	Sx. Cmt.	950 sx	TOC @	Surface

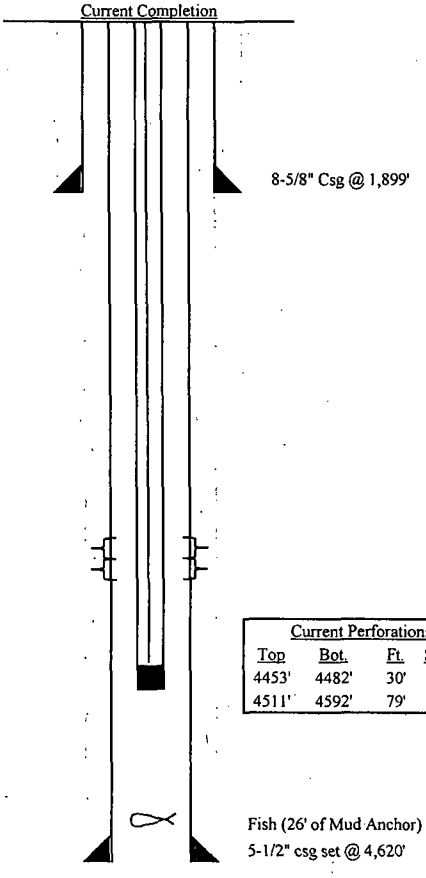
Intermediate Casing					
Size (OD)	n/a	Weight		Depth	
Grade		Sx. Cmt.		TOC @	

Production Casing					
Size (OD)	5 1/2"	Weight	15.5#	Depth	4,620'
Grade		Sx. Cmt.	750 sx	TOC @	Surface

Well History

12/6/08 - Spud Well; Set 8-5/8" csg @ 1,899'; Cmtd w/ 950 sx cmt; Circ 161 sx to pit
12/23/08 - TD well @ 4,620'; Set 5-1/2" csg @ 4,620'; Cmtd w/ 750 sx cmt; Circ 89 sx to pit
12/27/08 - RIH w/ bit & tag @ 4,580'; Drld out cmt & wiper plug to 4,618';
12/28/08 - Perf'd f/ 4,548 - 92' & 4,511 - 34' @ 1 spf (79 holes total); RIH w/ pkr & set same @ 4,405'; Acdz perfs w/ 7,000 gals 20% NEFE HCl + 120 BS; 14 Swab runs - slight oil cut and gas blow; POH w/ Pkr; Perf'd P1 zone f/ 4,453 - 82' @ 1 spf (30 holes total); RIH w/ RBP & pkr, set same @ 4,500 & 4,344' respectively; Acdz P1 2,000 gals 20% NEFE HCl + 45 BS;
1/6/09 - RIH w/ PC Pump and put well on production
2/10/09 - POH w/ PC pump; RIH w/ Pkr & set same @ 4,500' isolating P1 perfs on backside and P2, P3, P4 below Pkr; Swabbed and made all H2O; RIH w/ RBP & set same @ 4,500'; Swabbed 1 run and POH w/ RBP; RIH w/ rod pump
2/26/09 - POH w/ rod pump & RIH w/ PC pump
12/7/09 - RIH w/ Pkr & set same @ 4,414'; Pmpg 1600 bbls polymer into perfs; Swabbed all H2O Pmpd 370 lbs Acrolein prior to shutting well in;
1/6/10 - RIH w/ PC pump and place well on production
2/25/10 - Chgd out PC pump
3/9/10 - POH w/ rotor and tbg parted and can not fish; RIH w/ freepoint and could not get through tbg; RIH w/ jet cutter and cut tbg @ 4,521'; RIH w/ spear and POH w/ fish; 26' of mud anchor left in hole; tried to fish 1 time and did not fish (26' of mud anchor); RIH wl TAC & put well on production
6/9/10 - POH w/ tbg (prtd 15 stands down); RIH w/ overshot and sheered TAC; POH w/ tbg; RIH w/ PC pump

Formation Record	Depth
Anhydrite	
Top of Salt	
Base of Salt	2,950'
Yates	2,998'
7 Rivers	3,235'
Queen	3,779'
Grayburg	4,161'
San Andres	4,446'



Tubing Detail: (5/18/10)
144 jts: 2-7/8", 6.5#, J-55 Tbg (4,498')
TAC @ 4,514'
PC Pump Intake @ 4,516'

Rod Detail (5/18/10)
179, 7/8" rods

Current Perforations:				
Top	Bot.	Ft.	Shots	
4453'	4482'	30'	30	P1
4511'	4592'	79'	-	P2, P3, P4

Plug Back Depth	4,618'
Total Depth	4,620'

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.875" Lining Material: None

Type of Packer: Arrowset 1-X

Packer Setting Depth: 4410'

Other Type of Tubing/Casing Seal (if applicable): NA

1. Is this a new well drilled for injection? ____ Yes XXX No
   If no, for what purpose was the well originally drilled? A producing oil well.

2. Name of the Injection Formation: San Andres

3. Name of Field or Pool (if applicable): Hobbs;San Andres, East (32300) √

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e.. sacks of cement or plug(s) used. NA

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: the underlying oil zone is the Glorietta, however this well does not penetrate this zone
   the overlying oil zone is the Grayburg with top @ 4161'

WATER WELL DATA REPORT

OBTAINED FROM: NM STATE ENGINEER'S OFFICE - WATER ADMINISTRATION TECHNICAL ENGINEERING RESOURCE SYSTEM

USE	OWN_LNAME	OWN_FNAME	WELL_NUMBE	TWS	RNG	SEC	QTR_4TH	QTR_16TH	QTR_64TH	LEGAL	START_DATE	FINISH_DAT	DEPTH_WELL	DEPTH_WATE
DOM	BINGHAM	DARRELL G.	L 04054 REPAR	18S	39E	31	2	1	1		9/9/1980 0:00	9/12/1980 0:00	148	105
PRO	PRIMARY FUELS	INC.	L 09999	18S	39E	31	3	4		70' FSL 1980' FWL.	5/6/1988 0:00	5/10/1988 0:00	164	110
PRO	STONE DRILLING CO.		L 02302 APPRO	18S	39E	32	1	1	2				86	30
STK	SCHUBERT	GARY M.	L 10144	18S	39E	32	3	2			9/5/1990 0:00	9/5/1990 0:00	150	70
DOM	SICKLER	JACK	L 08862 EXP 1	18S	39E	31	3						0	0
DOM	FOLLIS	BETTY	L 06714 EXP	18S	39E	31	3			E.10 AC. OF E.100 AC OF SW1/4			0	0
DOM	GASSAWAY	L. W.	L 06605 EXP	18S	39E	31	1	1	1				0	0
DOM	FORE	OLLIE T.	L 02439 APPRO	18S	39E	31	1	2	3		1/1/1953 0:00	1/3/1953 0:00	135	60
PRO	DAVIDSON DRILLING CO.		L 01333	18S	39E	31	2	3			1/1/1952 0:00	1/2/1952 0:00	123	55
DOM	QUIROZ	PAULINO G.	L 09453 EXP	18S	39E	31	3			PT OF S1/2.			0	0
DOM	GONZALEZ	RAUL C.	L 08565	18S	39E	31	3	3	2		10/27/1981 0:00	10/30/1981 0:00	140	95
DOM	SICKLER	JACK	L 08862 EXP 2	18S	39E	31	3						0	0
DOM	OWEN	TERRY L.	L 10006	18S	39E	31	1				7/6/1988 0:00	7/18/1988 0:00	120	79
DOM	CUNNINGHAM	ROBERT	L 08698	18S	39E	31	3	4			3/12/1982 0:00	3/18/1982 0:00	150	100
DOM	BAKER	H. L.	L 07676	18S	39E	31	4	3	3	N 308995 E OF S.W COR. OF LEA 446.7 E -N466.7-S-466,7 TO BE 500 A.C. M/L	6/16/1977 0:00	6/25/1977 0:00	125	0
DOM	VILLALOBOS	GUILLERMO	L 09160	18S	39E	31	3	2	2		4/17/1983 0:00	4/18/1983 0:00	151	73
DOM	HUGHES	MARTIN	L 04096 APPRO EXP	18S	39E	29				NORTH OF THE NORTHEAST CORNER OF LOT ONE (1)			0	0
DOM	SCHUBERT GARY		L 10298	18S	39E	32	3	3	3		11/20/1992 0:00	11/20/1992 0:00	180	68
DOM	RAMIREZ ARTURO		L 10331	18S	39E	31	3			WELL WILL BE DRILLED AT 125 SANDY LANE - EAST ON MARLAND STREET			0	0
DOM	BINGHAM	DARRELL G.	L 04054 APPRO	18S	39E	31	2	1	1		1/25/1959 0:00	1/26/1959 0:00	100	65
DOM	QUIROZ	PAULINO G.	L 10692	18S	39E	31	3						0	0
DOM	MANN	GEORGE A.	L 06891 EXP	18S	39E	31	3	3	4				0	0
PRO	CACTUS DRILLING COMPANY		L 06633 (E)	18S	39E	30	4	1	3				0	0
DOM	MANNING	EARL	L 06713 EXP	18S	39E	31	3			E.10 AC. OF E. 100 AC. OF			0	0
DOM	KING	JOHN	L 08982	18S	39E	31	3	2	4				0	0
DOM	ROBERTS	JIMMY	L 11356	18S	39E	30	2	3	4		7/30/2002 0:00	7/30/2002 0:00	238	0
IRR	GASSAWAY	W L	L 00382	18S	39E	31	1	3	2			9/10/2003 0:00	261	0
IRR	GASSAWAY	W L	L 00382 S	18S	39E	31	1	1	2				0	0
DOM	ROBLES	MARGARITA	L 10973	18S	39E	31	3	3	1		8/13/1999 0:00	8/13/1999 0:00	158	103
PRO	STONE DRILLING CO.		L 02302	18S	39E	32	1	1	2				86	30
DOM	FORE	OLLIE T.	L 02439	18S	39E	31	1	2	3		1/1/1953 0:00	1/3/1953 0:00	135	60
DOM	BINGHAM	DARRELL G.	L 04054	18S	39E	31	2	1	1		9/9/1980 0:00	9/12/1980 0:00	148	105
IRR	LOVE	KEVIN & KARA	L 04053	18S	39E	31	4	3	2				160	0
IRR	WILLIAMS	GUY AND SHERRY	L 00382 A	18S	39E	31	2	2	2				0	0
IRR	WILLIAMS	GUY AND SHERRY	L 00382 AS	18S	39E	31	2	3	2				0	0
IRR	GASSAWAY	W L	L 00382 EXPLORE	18S	39E	31	1	3	2		9/8/2003 0:00	9/10/2003 0:00	261	0
IRR	HASTON	LARRY W. AND KATHERINE A.	L 00382 AAB	18S	39E	31	2	1					160	0
DOM	GONZALEZ	RAUL C.	L 08565 POD2	18S	39E	31	3	3	2				0	0
COM	GASSAWAY	W L	L 00382 B	18S	39E	31	1	1	3				150	0
COM	GASSAWAY	W L	L 00382 BS	18S	39E	31	1	1	1				261	0
COM	GASSAWAY	W L	L 00382 B EXPLORE	18S	39E	31	1	1	1		3/27/2004 0:00	3/27/2004 0:00	258	0
DOM	OWEN	VERA M.	L 11611	18S	39E	31	1	3	2		5/20/2004 0:00	5/20/2004 0:00	253	0
			L 00382 CLW295031	18S	39E	31	1	4	1				0	0
IRR	LOVE	KEVIN & KARA	L 04053 EXPLORE	18S	39E	31	4	4	1		4/29/2004 0:00	5/3/2004 0:00	280	154
DOM	RAINES	JEFF	L 11634	18S	39E	30	2	3	4		6/7/2004 0:00	6/7/2004 0:00	234	0
			L 00382 CLW309231	18S	39E	31	1	1	1				130	0
DOM	BUIE	SHERI	L 12305 POD1	18S	39E	30	4	2	1				0	0
DOM	MORENO	BLANNCA	L 12412 POD1	18S	39E	31	3	4	3		6/8/2009 0:00	6/8/2009 0:00	204	0
DOM	HASTON	KATHY	L 12539 POD1	18S	39E	31	2	1	1		4/6/2010 0:00	4/6/2010 0:00	248	0
DOM	HOLDRIDGE	JANIE	L 12711 POD1	18S	39E	30	4	1	2				0	0

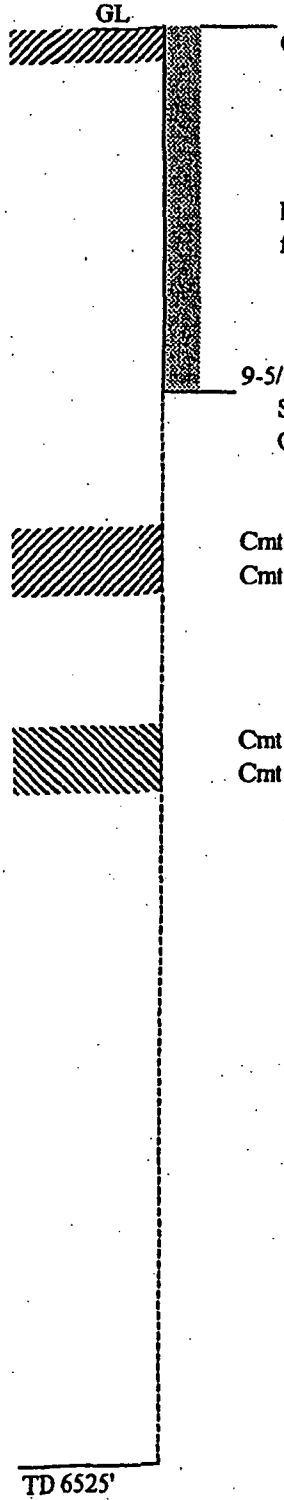
Form C-108 Sect. VI

LINN OPERATING, INC. - TABULATION OF DATA ON WELLS IN REVIEW AREA - APPLICATION FOR AUTHORIZATION TO INJECT

				Total		Surface Casing			Intermediate Casing			Production Casing			Upper	Lower					
Operator	Well Name	Well #	API Number	Depth	PBTD	Size	Depth	Sxs Cmt	Size	Depth	Sxs Cmt	Size	Depth	Sxs Cmt	Perf	Perf	Status	Unit	Section	Township	Range
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	706	30025079570000	4456	4456	7-5/8	1797	800				5-1/2	4405	500	4432	4456	Oil	O	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	709	30025079580000	4459	4459	7-5/8	1820	800				5-1/2	4404	500	4435		Oil	P	30	18S	39E
STANOLND OIL CO	PEARL-GOODE	1	30025079590000	6525		9-5/8	494	350							4425	4460	P&A	G	31	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	910	30025079610000	4460	4459	7-5/8	7830	700				5-1/2	4429	200	4425	4460	Oil	A	31	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	911	30025079650000	4468	4468	7-5/8	1854	700				5-1/2	4429	250	4421	4468	Oil	D	32	18S	39E
ENERQUEST RESOURCES L L C	LANEY	4	30025248000000	3831	3831	8-5/8	361	250				4-1/2	3827	200	3784	3798	P&A	O	30	18S	39E
ANTWEIL MORRIS R	VIERSEN	610	30025290570000	7961	7961	9-5/8	1876	800	7	1890	875	5-1/2	4750	750	4514	4618	Oil	P	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	611	30025340130000	4710	4710	8-5/8	1920	775				5-1/2	4710	615	4488	4645	Oil	M	29	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	507	30025345130000	4623	4623	8-5/8	1828	930				5-1/2	4623	485	4658	4610	Oil	J	30	18S	39E
FOSSIL FUELS INC	REESE LANEY	3	30025345790000	not	drilled												NA	I	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	606	30025346120000	4700	4615	8-5/8	1925	825				5-1/2	4615	485	4499	4603	Oil	O	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	609	30025349960000	4700	4626	8-5/8	1910	845				5-1/2	4623	485	4576	4607	Oil	P	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	608	30025368310000	4700	4620	8-5/8	1825	920				5-1/2	4620	1180	4508	4602	Oil	P	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	711	30025368930000	4700	4620	8-5/8	1930	920				5-1/2	4620	1120	4516	4614	Oil	M	29	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	707	30025368950000	4700	4616	8-5/8	1918	920				5-1/2	4616	1065	4515	4592	Oil	O	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	808	30025375270000	4700	4615	8-5/8	1873	350				5-1/2	4615	1066	4430	4582	Oil	P	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	508	30025375280000	4700	4610	8-5/8	1855	900				5-1/2	4610	1110	4435	4581	Oil	I	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	607	30025378180000	4700	4610	8-5/8	1864	950				5-1/2	4610	950	4437	4586	Oil	O	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	813	30025391980000	4615	4610	8-5/8	1899	1030				5-1/2	4615	835	4452	4590	Oil	N	29	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	999	30025392090000	4800	4620	8-5/8	1899	930				5-1/2	4615	755	4453	4592	Oil	A	31	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	905	30025079600000	4452	4452	7	1876	200				4-1/2	4339	100	4433	4600	Inj	B	31	18S	39E
ARENA RESOURCES INC	EAST HOBBS SAN ANDRES UNIT	903	30025079620000	4502	4502	9-5/8	309	200				5-1/2	4502	200	4459	4465	P&A	C	31	18S	39E
WESTERN RESERVES OIL	CHAPARRAL	1	30025249660000	3850	3826	8-5/8	364	275				4-1/2	3850	250	3792	3812	P&A	N	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	605	30025378170000	4700	4564	8-5/8	1864	500				5-1/2	4610	1000	4442	4600	Oil	O	30	18S	39E
LINN OPERATING INC	EAST HOBBS SAN ANDRES UNIT	610	30025290570001	7961	7961	9-5/8	1876	800	7	1890	875	5-1/2	4750	750	4489	4618	Oil	P	30	18S	39E

WELLBORE SCHEMATIC ☐ Proposed ☒ Actual

Well Name & No.: PEARL GOODE #1 Operator: STANOLIND OIL & GAS CO.
Location: 1980' FNL & 1980 FEL, SEC. 31, T-18-S, R-39-E
County: Lea State: NM API #: 30-025-07959
GR Elev: 3,602 + KB of _____ ft = 3,602 ft KB Elevation



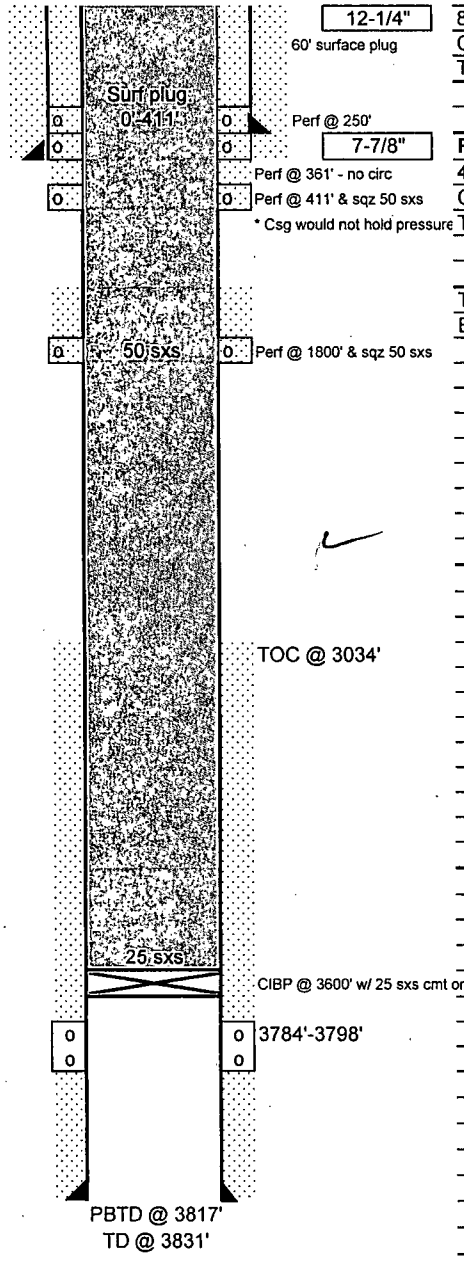
WELL HISTORY:

Spud 1/3/52
Rig Rlse. P&A'd well - 4/7/1952

Plugging Information is from State Reports.

Wellbore Schematic

Well Name:	Laney 4			Date Prepared:	3-Jan-12 K. Murphy
Location:	Lea County, NM			Last Updated:	
	C-31-18S-39E	330 FNL	1980 FWL	Spud Date:	
API #:	30-025-24800			RR Date:	
				Spud Date to RR Date:	
Elevations:	GROUND:	3605'		Completion Start Date:	
	KB:			Completion End Date:	
Depths (KB):	PBTD:	3817'		Completion Total Days:	
	TD:	3831'		Co-ordinates:	



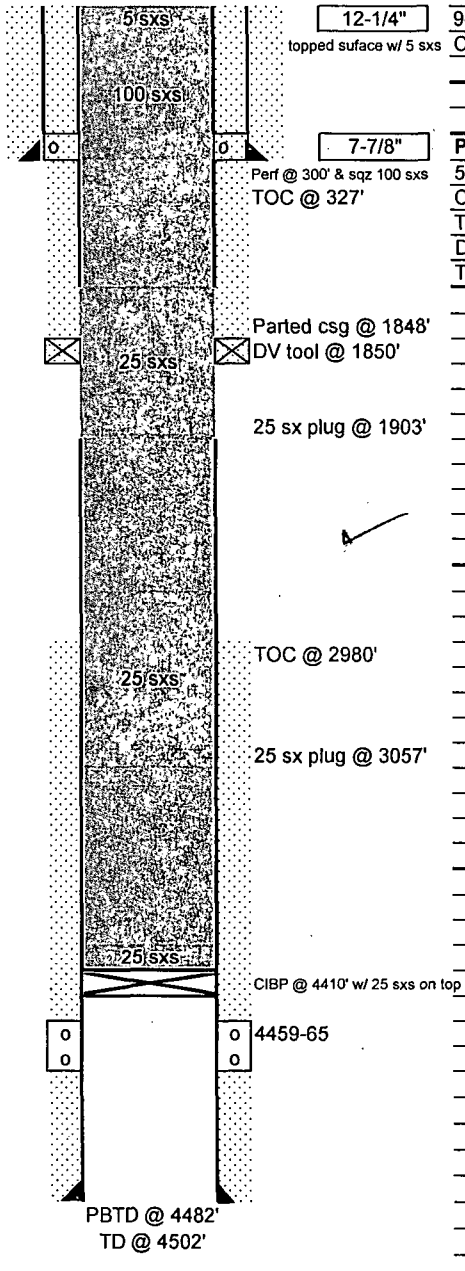
Surface Casing
8-5/8", 32# csg set @ 361'
Cmt w/ 250 sxs
TOC @ surf

Production Casing
4-1/2", 10.5# set @ 3827'
Cmt w/ 200 sxs
TOC @ 3,034'

Top of Salt - 1959'
Base of Salt - 2820'

Wellbore Schematic

Well Name:	EHSAU 903			Date Prepared:	3-Jan-12 K. Murphy
Location:	Lea County, NM			Last Updated:	
	C-31-18S-39E	330 FNL	1980 FWL	Spud Date:	12-Sep-53
API #:	30-025-07962			RR Date:	
				Spud Date to RR Date:	
Elevations:	GROUND:	3594'		Completion Start Date:	
	KB:	3605'		Completion End Date:	
Depths (KB):	PBTD:	4482'		Completion Total Days:	
	TD:	4502'		Co-ordinates:	



Surface Casing

9-5/8", 36#, 8rd csg set @ 309'
Cmt w/ 200 sxs

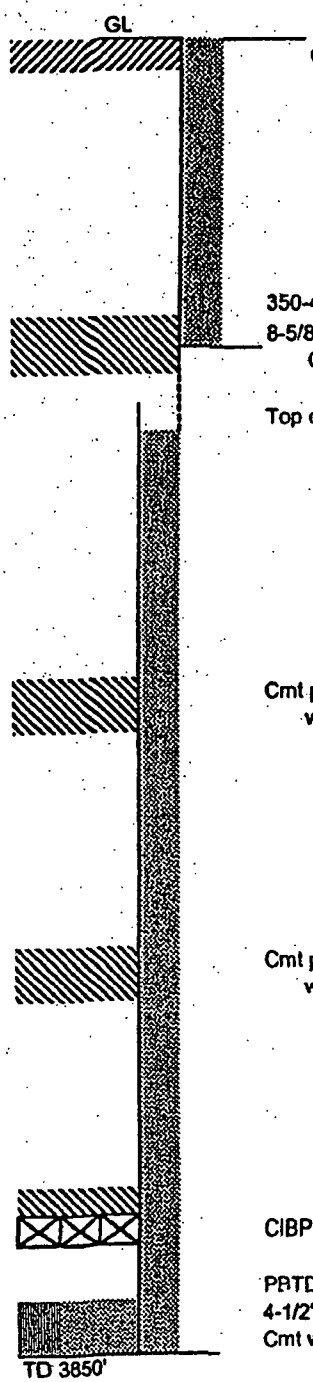
Production Casing

5-1/2", 15.5#, J-55 set @ 4502'
Cmt w/ 200 sxs
TOC @ 2980' (calc)
DV tool @ 1850', cmt w/ 200 sxs
TOC @ 327' (calc)

WELLBORE SCHEMATIC

☐ Proposed ☒ Actual

Well Name & No.: CHAPPARRAL #1 Operator: WESTERN RESERVES OIL COMPANY
Location: 2310' FWL & 660 FSL, UNIT "N", SEC. 30, T-18-S, R-39-E
County: Lea State: NM API #: 30-025-24966
GR Elev: 3,610 + KB of 10 ft = 3,620 ft KB Elevation



WELL HISTORY:

Spud 2/6/75
Rig Rlse. P&A'd well - 3/1/75

Plugging Information is from State Reports.

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 11, 2012

BOB AKIN

LINN OPERATING

2130 W. BENDER

HOBBS, NM 88240

RE: EAST HOBBS & ANDRES EASHU

Enclosed are the results of analyses for samples received by the laboratory on 01/10/12 9:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LINN OPERATING
BOB AKIN
2130 W. BENDER
HOBBS NM, 88240
Fax To: (575) 738-1740

Received:	01/10/2012	Sampling Date:	01/04/2012
Reported:	01/11/2012	Sampling Type:	Water
Project Name:	EAST HOBBS & ANDRES EASHU	Sampling Condition:	** (See Notes)
Project Number:	4108 DESOTO	Sample Received By:	Jodi Henson
Project Location:	HOBBS, NM		

Sample ID: QUIROZ, PAULUNO (H200046-01)

Chloride, SM4500Cl-B **mg/L** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**8.00**	4.00	01/10/2012	ND	100	100	100	3.92	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Linn Energy - Hobbs	**BILL TO**
Project Manager:	P.O. #:
Address:	Company:
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name: Hobbs East & Anders EASHU	State: Zip:
Project Location: 4108 Desoto	Phone #:
Sampler Name:	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	
H20004															
-1	Quiroz, Paulino		1	✓									1/4/12		✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date:	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time:		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By: Jackie Rolnee	Date: 1-10-12 Time: 9:00	Received By: Jodi Henson	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	19° C	Sample Condition Cool: ☐ Yes ☑ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 11, 2012

BOB AKIN

LINN OPERATING

2130 W. BENDER

HOBBS, NM 88240

RE: EAST HOBBS & ANDRES EASHU

Enclosed are the results of analyses for samples received by the laboratory on 01/10/12 8:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LINN OPERATING
BOB AKIN
2130 W. BENDER
HOBBS NM, 88240
Fax To: (575) 738-1740

Received:	01/10/2012	Sampling Date:	01/05/2012
Reported:	01/11/2012	Sampling Type:	Water
Project Name:	EAST HOBBS & ANDRES EASHU	Sampling Condition:	** (See Notes)
Project Number:	2024 N WAYLON DR	Sample Received By:	Celey D. Keene
Project Location:	HOBBS, NM		

Sample ID: BULE, SHERI (H200044-01)

Chloride, SM4500Cl-B **mg/L** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**72.0**	4.00	01/10/2012	ND	100	100	100	3.92	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Linn Energy
Project Manager:	Bob Anderson
Address:	
City:	State: Zip:
Phone #:	Fax #:
Project #:	Project Owner:
Project Name:	East Hobbs & Andres EASHU
Project Location:	2024 N. Waylon Dr.
Sampler Name:	

BILL TO

P.O. #:	
Company:	Linn Energy
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cl-
H20000 44 -1	Burke, Sheri		1	✓									1/5/12		✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date:	Received By:	
	Time:		
Relinquished By:	Date: 1-10-12	Received By:	
Jacobe Racine	Time: 8:55		
Delivered By: (Circle One)	Sample Condition: Cool ☐ Yes ☑ No	Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	19°C		CDK

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
Paul Cowen 575 631 4007

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION COMMISSION

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

See Also Order No. R-11980
R-11980-B

CASE NO. 13041

APPLICATION OF ENERQUEST RESOURCES, L.L.C. FOR APPROVAL OF A WATERFLOOD PROJECT AND QUALIFICATION OF THE PROJECT AREA FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE ENHANCED OIL RECOVERY ACT, LEA COUNTY, NEW MEXICO.

CASE NO. 13042

APPLICATION OF ENERQUEST RESOURCES, L.L.C. FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO.

ORDER NO. R-11980-A

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION:

These cases came on for hearing before the Oil Conservation Commission on September 12, 2003, at Santa Fe, New Mexico, and the Commission having carefully considered the applications and the evidence and arguments of counsel both in support thereof and in opposition thereto; now, on this 14th day of November, 2003,

FINDS:

1. Due public notice has been given, and the Commission has jurisdiction of these cases and the subject matter.

2. In Case No. 13042, EnerQuest seeks (a) statutorily unitization, pursuant to NMSA 1978 Sections 70-7-1 through 70-7-21, as amended ("the Statutory Unitization Act"), of 920 acres, more or less, located in portions of Sections 29 through 32, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico ("the Unit Area"), for the purpose of instituting a pressure maintenance project within the East Hobbs-San Andres Pool, to be called the East Hobbs San Andres Unit, and (b) approval of the Unit Agreement and the Unit Operating Agreement, which were submitted as applicant's Exhibits 4 and 5, respectively, in this case.

3. In Case No. 13041, EnerQuest seeks approval to institute a pressure maintenance project by the injection of water into the San Andres formation, East Hobbs-San Andres Pool, initially through four injection wells shown on Exhibit "A" attached to this order. EnerQuest further seeks provisions allowing for the administrative approval of additional injection wells in succeeding phases of operation. EnerQuest further seeks to qualify the proposed project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5, as amended).

4. Cases No. 13041 and 13042 were consolidated at the hearing for the purpose of testimony. Because the cases involve the same property and subject matter, a single order is being entered disposing of both cases.

5. EnerQuest initially filed applications for statutory unitization of the proposed Unit Area and for a secondary recovery project on February 26, 2002. On April 12, 2002, the "Key Family Group" and on April 29, 2002, "Lynx Operating Company," both being or representing working interest owners of properties in the Unit Area, filed motions to dismiss based on EnerQuest's failure to make a good faith effort to secure voluntary participation in the proposed unitization.

6. By Order No. R-11781 issued June 7, 2002, in Cases No. 12845 and 12846, the Division found that EnerQuest had not made a good faith effort to secure voluntary unitization as required by the Statutory Unitization Act, and the Division dismissed both cases.

7. By Order No. R-11980, entered on July 9, 2003, the Division denied both applications. These cases are now before the Commission pursuant to the application of EnerQuest Resources, L.L.C. ("EnerQuest") for *de novo* review.

8. The proposed Unit Area consists of 920 acres, more or less, in Lea County, New Mexico, described as follows:

TOWNSHIP 18 SOUTH, RANGE 39 EAST, NMPM

Section 29:	SW/4, SW/4 NW/4
Section 30:	S/2, S/2 N/2
Section 31:	N/2 N/2
Section 32:	N/2 NW/4

9. The proposed vertical extent ("Unitized Formation") of the unit is that interval extending from 50 feet above the top of the San Andres formation to a point 50 feet below the base of the P-5 marker in the San Andres formation. This interval specifically occurs between 4441 feet and 4687 feet in the density-neutron log dated June 26, 1997, for the Carrie O. Davis Well No. 5 (API No. 30-025-34013) located 1310 feet from the South line and 330 feet from the West line (Unit L) of Section 29, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico.

10. EnerQuest presented the testimony of land specialist, M. Craig Clark, as follows:

(a) EnerQuest has been purchasing interests in this proposed unit area since 1996 and prepared a waterflood feasibility study in the fall of 2000. In early 2002, a proposed unit agreement and unit operating agreement were prepared and circulated to the owners in the proposed Unit Area. Following the Division order signed on June 7, 2002 dismissing the first application, EnerQuest continued to purchase working interests, conducted three working interest owner meetings and seven technical committee meetings, negotiated with other working interest owners and formulated a new plan pursuant to the recommendation of the working interest owners' technical committee.

(b) The proposed Unit contains twelve separate tracts owned by numerous parties. Eleven of the tracts, comprising 840 acres, are in private ownership. One tract, comprising 80 acres, is State of New Mexico public land currently under lease. EnerQuest is the operator of all but one of the tracts and owns approximately 45% of the combined working interest in the Unit Area. Approximately 88% of the working interest and 69% of the royalty interest were committed to the Unit at the time of the hearing.

11. EnerQuest presented the testimony of petroleum engineer, Roy C. Williamson, as follows:

(a) The San Andres formation consists of five geologically distinct zones, identified as P-1 through P-5. The best San Andres intervals for secondary recovery would be the P2 through P4 zones. As depicted on a net thickness isopach map (Exhibit 10), this interval is quite thick in the center of the field, especially in Tracts 5 through 8 (as identified on ownership map admitted as Exhibit 3), and portions of Tracts 1 and 12, and feathers out to the north, south, east and west.

(b) The tracts with greater net thickness should contribute relatively more reserves and present a better target for secondary recovery than the edge tracts. However, even though the edge tracts are thinner, all tracts within the unit area will probably contribute to secondary production.

(c) The proposed secondary recovery operation is feasible, and the proposed Unit Area can be efficiently and effectively operated under the proposed unit plan of development.

(d) The secondary recovery operation would be initiated with four injection wells and be implemented rapidly in phases until the entire unitized area is swept by injection wells.

(e) The estimated remaining primary gross production from the Unit Area amounts to approximately 921,000 barrels of oil and 1.2 billion cubic feet (bcf) of gas, having a total discounted present value of approximately $7 million.

(f) The estimated future gross production from the Unitized Formation of the Unit Area if the proposed secondary recovery operation is implemented is approximately 9.7 million barrels of oil and 3 bcf of gas, having a total discounted present value of approximately $81 million dollars; resulting in additional gross production of 8.8 million barrels of oil and 1.8 bcf of gas, having a discounted present value of approximately $74 million dollars.

(g) The P-1 zone has been affected by natural water encroachment such that it has, to a large extent, already become water saturated, and minimal additional production can be expected from water injection into this zone. The P-5 zone is wet and therefore unproductive.

(h) The conclusion that the P-1 has already been, in effect, waterflooded is based on the much higher rate of recovery evidenced by historical production from the P-1 zone (24.9% versus 2.8% for the P-2 through P-4 zones), and on observed water-oil ratios from P-1 production, which have increased dramatically and progressively since 1991.

(i) Because of the water saturation that has already occurred in the P-1 zone, historical production prior to 1997, which was almost entirely from the P-1 zone, is not a valid indicator of the extent of reserves remaining under particular tracts that can be economically recovered by water injection operations.

(j) As part of the waterflood feasibility study, a complete rock study was prepared by an independent consultant, all logs and cores were analyzed, and composite projections of water saturation and relative permeability were developed for the P1 zone and for the P2 through P4 zones. The resulting projections support the conclusion that minimal additional oil can be recovered from the P1 zone by water injection operations, and that significant additional production from the P2 through P4 zones is probable.

(k) EnerQuest's proposed tract participation formula consists of: Acreage (2.5%) + Recent 12 Months (December 2001 through

November 2002) Production (97.5%). In the witness's opinion, this formula allocates unit production on a fair, reasonable and equitable basis.

(l) Unitized management of this pool is necessary to effectively implement and carry on the proposed secondary recovery operations.

(m) EnerQuest is proposing a 200% nonparticipation penalty, to apply to parties unitized by order who elect not to participate in subsequent operations.

(n) Each of the four proposed injection wells will inject an average of 500 barrels (maximum of 750 barrels) of produced water per day. No fresh makeup water will be used.

(o) The average injection pressure is expected to be 600 psig, and will not exceed a maximum of 890 pounds psig or 0.2 psig per foot of depth to the depth of the uppermost perforation in each injection well, whichever is less.

(p) The fresh water interval in this area consists of the Ogallala fresh water sands located from 50 to 200 feet deep. Active and plugged and abandoned wells within the area of review (1/2 mile) of each proposed initial injection well have adequate cement to isolate the injection interval and to protect fresh water, and no remedial work is required on these wells to enable EnerQuest to safely operate the project. The proposed injection operation will not pose a threat to any freshwater supplies.

(q) The estimated additional costs of operation of the unit pursuant to the proposed secondary recovery plan are $7.1 million in project costs and an additional $17.9 million in additional operating costs, to generate additional production of 8.8 million barrels of oil, together with associated gas, having a total discounted present value of approximately $74 million.

(r) Although the projected 7 to 1 ratio of secondary reserves to primary reserves from the P2 through P4 zones may be unusually high, it reflects the extremely low rate of recovery (2.8%) experienced with primary production from those zones.

12. Lowe Partners, LP ("Lowe"), owner of a 4.25% overriding royalty interest in Tract 10, and Rocket Oil and Gas Company, L.P., appeared through counsel in opposition to the application.

13. Lowe presented the testimony of petroleum engineer, Richard A. Gill, as follows:

(a) Lowe does not oppose the proposed secondary recovery operation, but objects to the participation formula proposed by EnerQuest as not being fair, reasonable and equitable.

(b) Lowe proposes a two-phase allocation formula, as follows:

Phase I: Last 12 Months Production (97.5%) + Acreage (2.5%)
(Phase I would last until total remaining primary reserves are produced.)

Phase II: Estimated Ultimate Recovery (97.5%) + Acreage (2.5%)

(c) Most of the wells in the Unit Area were drilled and have produced since the 1950's, or were drilled subsequent to 1997. The wells drilled after 1997 are basically all P2 through P4 producers. Everything prior to that time was P1 production.

(d) Production to date from the P1 zone has been over 5.5 million barrels of oil, and there are maybe 100,000 to 150,000 barrels of primary reserves remaining in the P1 zone.

(e) The future secondary performance under unitized operations can be predicted by the total primary production from the entire San Andres interval. The overall secondary to primary recovery ratio if P1 primary production is included, based on EnerQuest's estimates of secondary production, is 1.2 to 1.3 to 1, a ratio that is reasonable to expect based on other San Andres waterflood operations, as distinguished from the 7 to 1 ratio predicted by EnerQuest for the P2 through P4 zones only.

(f) Almost all of the past production from Tract 10 is from the P1 interval.

(f) The only well remaining on Tract 10 may be below the limit of economic production, so that Lowe will likely receive no more income from its overriding royalty if secondary recovery operations are not implemented. Lowe will likely receive ultimate revenues of $12,000 to $14,000 from unit production under the formula proposed by EnerQuest.

14. Lowe also presented a letter from James R. Small of Small GeoServices, Inc. to the Division written March 25, 2003. In this letter, Mr. Small objected to the proposed formula for tract participation, in particular the 97.5% emphasis on current production levels. Mr. Small pointed out that the wells on his minerals are approximately 40 years old and currently at low production levels but have significant cumulative production. Mr. Small did not specify in his letter the acreage or tracts his minerals are under, but the schedule of ownership supplied by EnerQuest shows James R. Small to own an overriding royalty in Tracts 1, 2, 9, 10, and 11, all "edge" tracts on which are located only older wells that, according to Mr. Gill's testimony, produced primarily from the P1 zone. Mr. Small did not appear at the hearing or offer any evidence.

15. The unitized management, operation and further development of the East Hobbs-San Andres Pool in the proposed Unit Area is reasonably necessary in order to effectively carry on the proposed secondary recovery project, which will substantially increase the ultimate recovery of oil and gas from this pool, and delays in implementing this project are detrimental to ultimate recovery from this reservoir. No party opposes the implementation of the secondary recovery project or the unitization of the Unit Area.

16. The exclusion of past production from the P1 San Andres zone as a factor in the unit allocation formula is the only point of disagreement between the applicant and the owners who have appeared or presented objections to the applications in these cases.

17. Based on the relatively high percentage of recovery achieved in the P1 zone compared to the other San Andres zones in the Unit Area, and the extremely high water/oil ratios encountered in recent P1 production, it is reasonable to conclude that the P1 zone has been subjected to natural waterflooding already, and that water injection will result in minimal incremental production from that zone.

18. The vast majority of historical production from the Unit Area was from the P1 zone. Since that zone contains very little recoverable secondary reserves, a unit allocation formula such as that proposed by Lowe, based principally on historical primary production, would not be fair, reasonable and equitable.

19. Since production in the P2 through P4 zones was recently established, current production, as reflected in the allocation formula proposed by EnerQuest, is a reasonable indicator of the extent of P2 through P4 reserves underlying the respective tracts in the Unit Area. Such formula will also take account of remaining P1 reserves, since the formula includes recent P1 production.

20. There is a general correlation between recent production from the respective tracts and the net thickness of the P2 through P4 production interval, as reflected in the isopach map prepared by EnerQuest's engineering witness (Exhibit 10).

21. Since production from the P1 zone and production from the P2 through P4 zones have not been separately measured, a more accurate estimate of recoverable P2

through P4 reserves underlying each of the separate tracts in the Unit Area cannot practicably be made at this time.

22. Accordingly, the Commission concludes that the participation formula proposed by EnerQuest and contained in the proposed Unit Agreement allocates the produced and saved, unitized hydrocarbons to the separately owned tracts in the Unit Area on a fair, reasonable and equitable basis.

23. The other provisions of the proposed Unit Agreement and Unit Operating Agreement, including but not limited to the provision for a 200% risk charge to be recovered out of the interest of working interest owners who decline to participate in subsequent operations and providing for overhead charges of $3,500 per month while drilling and $350 per month while producing, are likewise fair and reasonable.

24. The statutory unitization of the Unitized Formation within the Unit Area in accordance with the plan embodied in the Unit Agreement and the Unit Operating Agreement will prevent waste and protect correlative rights.

25. The proposed unitized method of secondary recovery operations within the Unit Area is feasible and will result with reasonable probability in the recovery of substantially more oil and gas from the unitized portion of the pool than would otherwise be recovered.

26. The estimated additional costs of the proposed operations will not exceed the estimated value of the additional oil and gas recovered plus a reasonable profit.

27. Statutory unitization and adoption of applicant's proposed unitized method of operation will benefit the working interest and royalty interest owners within the proposed Unit Area, and will prevent waste and protect correlative rights of all parties.

28. EnerQuest has made a good faith effort to secure voluntary unitization of the Unitized Formation within the Unit Area.

29. The proposed Unit Agreement and Unit Operating Agreement contain satisfactory provisions with respect to all of the matters required by NMSA 1978 Section 70-7-7, as amended.

30. EnerQuest has obtained preliminary approval of the proposed unit from the Commissioner of Public Lands for the State of New Mexico.

31. The proposed plan for unit operations set forth in the Unit Agreement and the Unit Operating Agreement have been approved in writing by persons who, under this order, will be required initially to pay at least seventy-five percent (75%) of the costs of the unit operations.

32. The proposed pressure maintenance project should be approved, and the project should be governed by Division Rules No. 701 through 708.

33. The evidence presented demonstrates that:

(a) the application for approval of the proposed secondary recovery project has not been prematurely filed either for economic or technical reasons;

(b) the area affected by the proposed project has been so depleted by primary operations that it is prudent to apply secondary recovery techniques to maximize the ultimate recovery of crude oil from the East Hobbs-San Andres Pool; and

(c) the proposed secondary recovery project meets all the criteria for certification by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

IT IS THEREFORE ORDERED THAT:

1. The application of EnerQuest for the statutory unitization of the Unitized formation within the Unit Area, to be known as the East Hobbs San Andres Unit, is hereby approved pursuant to the Statutory Unitization Act, NMSA 1978, Sections 70-7-1 through 70-7-21, as amended.

2. The Unit Area shall consist of 920 acres, more or less, in Lea County, New Mexico, described as follows:

TOWNSHIP 18 SOUTH, RANGE 39 EAST, NMPM
Section 29: SW/4, SW/4 NW/4
Section 30: S/2, S/2 N/2
Section 31: N/2 N/2 ~ A, B, C, & D
Section 32: N/2 NW/4

3. The Unitized Formation shall be that interval extending from 50 feet above the top of the San Andres formation to a point 50 feet below the base of the P-5 marker in the San Andres formation. This interval specifically occurs between 4441 feet and 4687 feet in the density-neutron log dated June 26, 1997, for the Carrie O. Davis Well No. 5 (API No. 30-025-34013) located 1310 feet from the South line and 330 feet

~ Chesapeake well

from the West line (Unit L) of Section 29, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico.

4. The Unit Agreement and the Unit Operating Agreement, which were admitted in evidence at the hearing as Exhibits 4 and 5, respectively, are hereby incorporated by reference into this order.

5. This order shall not become effective unless and until the plan for unit operations prescribed hereby has been approved in writing by the owners of at least seventy-five percent of the production or proceeds thereof that will be credited to interests which are free of costs, such as royalties, overriding royalties and productions payments, and the Division has made a finding in a supplemental order that the plan for unit operations has been so approved. When persons owning the required percentage of interest in the Unit Area have approved the plan for unit operations, the interests of all persons in the Unitized Formation as to the Unit Area are unitized whether or not such persons have approved the plan of unitization.

6. The applicant shall notify the Division Director in writing of any removal of the applicant as unit operator or substitution as unit operator of any other working interest owner within the Unit Area. In the event a person other than EnerQuest assumes operation of the unit established hereby, such person shall comply with all the terms and provision of this order.

7. The unit established hereby shall terminate upon the plugging and abandonment of the last well in the Unit Area completed in the Unitized Formation.

8. EnerQuest is hereby authorized to institute a pressure maintenance project within the Unit Area by the injection of produced water into the Unitized Formation of the East Hobbs-San Andres Pool through the four wells shown on Exhibit "A" attached to this order located in Section 30, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico.

9. No fresh water shall be used as make-up water or otherwise injected.

10. EnerQuest shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

11. Injection into each of the wells shown on Exhibit "A" shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or casing shoe. The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

12. The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 890 pounds psig or 0.2 psig per foot of depth to the depth of the uppermost perforation in the injection well, whichever is less.

13. The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

14. The Division Director may administratively authorize additional injection wells within the Unit Area as provided in Division Rule 701.F(3).

15. Prior to commencing injection operations, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

16. The unit operator shall give advance notice to the supervisor of the Division's Hobbs District Office of the date and time (i) injection equipment will be installed, and (ii) the mechanical integrity pressure test will be conducted on the proposed injection wells, so that these operations may be witnessed.

17. The unit operator shall immediately notify the supervisor of the Division's Hobbs District Office of any failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

18. The unit operator shall conduct injection operations in accordance with Division Rules No. 701 through 708, and shall submit monthly progress reports in accordance with Division Rules No. 706 and 1115.

19. The injection authority granted herein for each well shown on Exhibit "A" shall terminate one year after the date of this order if the unit operator has not commenced injection operations into the well; provided, however, the Division, upon written request, may grant an extension for good cause.

20. The pressure maintenance project authorized by this order shall be known as the East Hobbs San Andres Unit Pressure Maintenance Project.

21. The East Hobbs San Andres Unit Pressure Maintenance Project is hereby certified as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5). The project area shall initially comprise the entire East Hobbs San Andres Unit, described in Ordering Paragraph No. (1); provided however, the project area and/or the producing wells eligible for the

enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the unit operator in its demonstration of a positive production response.

22. To be eligible for the EOR tax rate, the unit operator shall advise the Division of the date and time water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

23. At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the unit operator must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

24. Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

LORI WROTENBERY, CHAIR

JAMI BAILEY, MEMBER

ROBERT LEE, MEMBER

SEAL

Exhibit "A"
Division Order No. R-11980-A

East Hobbs San Andres Unit Pressure Maintenance Project
Approved Injection Wells

Well Name and Number	API Number	Location
East Hobbs Unit No. 604W	not yet assigned	Unit O - Section 30-18S-39E
East Hobbs Unit No. 605W	not yet assigned	Unit O - Section 30-18S-39E
East Hobbs Unit No. 606W	not yet assigned	Unit P - Section 30-18S-39E
East Hobbs Unit No. 607W	not yet assigned	Unit P - Section 30-18S-39E

See Also Orders No. R-11980
R-11980-A

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

CASE NO. 13042

APPLICATION OF ENERQUEST RESOURCES, L.L.C. FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO.

ORDER NO. R-11980-B

SUPPLEMENTAL ORDER OF THE OIL CONSERVATION DIVISION

BY THE DIVISION:

This case was referred for consideration by Examiner William V. Jones on the request of EnerQuest Resources, L.L.C. for approval of consents to unitization.

NOW, on this 27th day of February, 2004, the Division Director, having considered the record and the recommendations of the Examiner,

FINDS THAT:

(1) The Division has jurisdiction of this case and the subject matter.

(2) Oil Conservation Commission Order No. R-11980-A, entered on November 14, 2003, approved the application of EnerQuest Resources, L.L.C. for unitization of the East-Hobbs San Andres Unit Area pursuant to the Statutory Unitization Act, NMSA 1978, §§ 70-7-1 through 70-7-21, as amended.

(3) Order paragraph 5 of Order No. R-11980-A provides:

> "This order shall not become effective unless and until the plan for unit operations prescribed hereby has been approved in writing by the owners of at least seventy-five percent of the production proceeds thereof that will be credited to interests which are free of costs, such as royalties, overriding royalties and productions payments, and the Division has made a finding in a supplemental order that the plan for unit operations has been so approved. When persons owning the required percentage of interest in the Unit Area have approved the plan for unit operations, the interests of all persons in the Unitized Formation as to the Unit Area are

unitized whether or not such persons have approved the plan of unitization."

(4) On February 9, 2004, EnerQuest Resources, L.L.C. filed an affidavit with attached copies of ratifications approving the plan for unit operations by the owners of more than seventy-five percent of the working interest in the Unit Area and from the owners of more than seventy-five percent of the production proceeds that will be credited to interests that are free of costs in the East Hobbs San Andres Unit Area.

IT IS THEREFORE ORDERED THAT:

(1) All ratification provisions of the New Mexico Statutory Unitization Act, NMSA 1978, §§ 70-7-1 through 70-7-21, as amended, and Commission Order No. R-11980-A have been fully complied with and the interests of all persons in the Unitized Formation in the Unit Area are unitized whether or not such persons have approved the plan of unitization.

(2) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY
Director

SEAL