MONTGOMERY
& ANDREWS
LAW FIRM

Seth C. McMillan
Cell: (505) 986-2519
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www.montand.com

March 28, 2016

HAND-DELIVERED

Mr. David Catanach, Director
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87501

Re: NMOCD Case No. 15442: Application of BC Operating, Inc. for Authorization to Inject, Eddy County, New Mexico

Dear Mr. Catanach:

Please be advised that BC Operating, Inc. has resolved the objection interposed by Devon Energy to the referenced SWD application. A copy of attorney Gary Larson's March 22, 2016 email indicating the withdrawal of Devon's objection is enclosed as Exhibit A to this letter.

Furthermore, please be advised that BC Operating has received and reviewed Anchor Helm's March 17, 2016 email on behalf of the State Land Office recommending changes to BC Operating's application. That email is enclosed herewith as Exhibit B. In response to the SLO's concerns, BC Operating has amended its C-108. BC Operating's amended C-108 is enclosed with this letter. For sake of reference, a courtesy copy of the original C-108 is also enclosed as Exhibit C.

Finally, a hearing is set for March 31, 2016 in this matter. In light of the above and enclosed, BC Operating asks that its Application for examiner hearing be dismissed and the matter referred back to the Engineering and Geological Services Bureau for administrative approval.

REPLY TO:
325 Paseo de Peralta
Santa Fe, New Mexico 87501
Telephone (505) 982-3873 • Fax (505) 982-4289

Post Office Box 2307
Santa Fe, New Mexico 87504-2307

Very truly yours,

Seth C. McMillan
J. Scott Hall

SCM:bw
Encls.

cc Phillip Goetze, NMOCD Santa Fe
BC Operating, Inc.

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: _____Secondary Recovery _____Pressure Maintenance ___xxx__Disposal _____Storage
Application qualifies for administrative approval? ___xxx_____Yes _____No

II. OPERATOR: _____NADEL AND GUSSMAN PERMIAN, LLC_____

ADDRESS: _____601 N. MARIENFELD SUITE 508 MIDLAND TX 79701_____

CONTACT PARTY: _____JASON GOSS_____PHONE: ___432-682-4429___

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 ___XXX__No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: ___JASON GOSS_____TITLE: ___ENGINEER_____

SIGNATURE: _____DATE: ___3/24/2016_____

E-MAIL ADDRESS: _____jgoss@naguss.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: _____

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.

Side 1

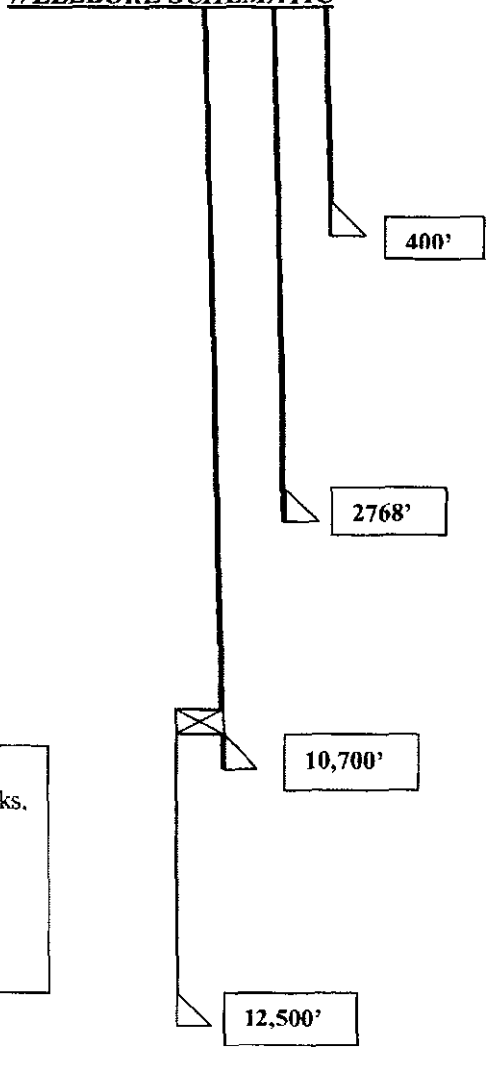
INJECTION WELL DATA SHEET

OPERATOR: NADEL AND GUSSMAN PERMIAN, LLC

WELL NAME & NUMBER: GRANDE STATE #1 API 30-015-31910

WELL LOCATION:	660' FNL, 1980' FWL	C	32	23S	29E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



4.5" 13.5# P110 liner, 6.15" hole, cemented to top of liner w/ 295 sacks, circulated 55 sacks off of liner top. Top of liner is 10,277'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13-3/8"

Cemented with: 375 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

Hole Size: 12.25 Casing Size: 9-5/8"

Cemented with: 1425 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 1420 sx. *or* _____ ft³

Top of Cement: 5650' Method Determined: CBL

Total Depth: SURFACE

Injection Interval

3,380 feet to 4,900

PERFORATED

INJECTION WELL DATA SHEET

Tubing Size: 3.5", 9.3#, J-55 Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection Packer

Packer Setting Depth: 50ft above top perf

Other Type of Tubing/Casing Seal (if applicable): NONE

Additional Data

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

   If no, for what purpose was the well originally drilled? ATOKA GAS WELL, BONE SPRING OIL WELL, TD 12,500 VERTICAL WELL

2. Name of the Injection Formation: DELAWARE GROUP-BELL CANYON

3. Name of Field or Pool (if applicable): SWD BELL CANYON

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.

   YES. ATOKA 12,278' – 12,282'. PLUG BACK: CIBP SET AT 12,250 WITH 35' OF CEMENT. ATOKA PERFS: 12,122 – 12,140', PLUGGED BACK W/ 25 SACK PLUG AT 11,804 -12,154. SET PLUG AT LINER TOP 100 SACKS. BONE SPRINGS PERFS 7968-8052.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

   BELOW: DELAWARE 6500', BONE SPRING 1ST SAND 7600, BONE SPRING 2ND SAND 7968, WOLFCAMP 10,970, ATOKA 12,122

   ABOVE: NONE

III. WELL DATA

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

Grande State #1, Sec. 32-T23S-R29E, 660' FNL & 1980' FWL, Eddy County, New Mexico

(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.

Casing Size	Setting Depth	Sacks of Cement	Hole Size	Top of Cement	Determined
13-3/8"	400'	375	17-1/2"	Surface	Circulate
9-5/8"	2,768'	1,425	12-1/4"	Surface	Circulate
7"	10,277'	1,193	8-3/4"	5,650'	CBL
4.5"	10,277-12,500	295	6-1/8"	10,277	Circ. off liner top

(3) A description of the tubing to be used including its size, lining material, and setting depth.

3-1/2" OD, Internally Plastic Coated Tubing set @ 3,330'

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Weatherford Arrow set 1X injection packer, nickel plated with on/off tool

Set within 50-100 feet above top Delaware perforations

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.

Delaware – Lower Bell Canyon to Upper Cherry Canyon

Pool Name: SWD (Bell Canyon)

(2) The injection interval and whether it is perforated or open-hole.

3,380' to 4,900' (Perforated)

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

The well was originally drilled as an Atoka gas 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.

Atoka Perfs, 12,278' – 12,282', plugged back, CIBP set at 12,250' with 35' of Cement

Atoka perfs, 12,122'-12,410', 25 sack plug at 11,804 – 12,154'

Bone Spring Perfs: 7968-8052

(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. Next Higher: None / Next Lower: Delaware 6,450'

Additional Questions on C-108

VII.

1. **Proposed average and maximum daily rate and volume of fluids to be injected;**
   Average 500-1000 BWPD, Max 10,000 BWPD

2. **Whether the system is open or closed;**
   Open System

3. **Proposed average and maximum injection pressure;**
   Average 400 PSI, Max 675 PSI

4. **Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,**
   Bone Spring and Wolfcamp produced water. Water is compatible

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.). Attached**

***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.**

The proposed disposal interval is located in the Delaware Mountain Group – Lower Bell Canyon to Upper Cherry Canyon Formation. Injection interval consists of sandstone and shale. This Permian age horizon is 4,000' thick. The top of the Delaware formation is at a depth of about 2,600' with the base at a depth of about 6,600' at the top of the Bone Spring Lime. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the base of the Rustler/top of salt at 375'.

IX. Describe the proposed stimulation program, if any.

15,000 gallons 15% HCl acid job with packer

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.

Nadel and Gussman Permian, L.L.C. has reviewed and examined available geologic and engineering data in the area of interest for the Grande State #1 SWD and have found no evidence of faults or other hydrologic connections between the Delaware disposal zone and the underground sources of drinking water.

Jason Goss, Engineer

Seth McMillan

From: Gary Larson <glarson@hinklelawfirm.com>
Sent: Tuesday, March 22, 2016 10:18 AM
To: Jones, William V, EMNRD (WilliamV.Jones@state.nm.us); Goetze, Phillip, EMNRD (Phillip.Goetze@state.nm.us); McMillan, Michael, EMNRD (Michael.McMillan@state.nm.us); Brooks, David K, EMNRD
Cc: 'Davidson, Florene, EMNRD' (florene.davidson@state.nm.us); aholm@slo.state.nm.us; Seth McMillan
Subject: Case 15442

Gentlemen,

This is to notify you that Devon Energy Production Company L.P. is withdrawing its objection to BC Operating's application in Case 15442. I've previously informed Seth McMillan, counsel for BC Operating, of Devon's withdrawal of its objection to the application.

Gary

Gary W. Larson,
Partner
Hinkle Shanor LLP
218 Montezuma
Santa Fe, New Mexico 87501
(505) 982-4554 telephone
(505) 982-8623 facsimile
glarson@hinklelawfirm.com

EXHIBIT
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A

Seth McMillan

From: J. Scott Hall
Sent: Thursday, March 17, 2016 11:26 AM
To: Seth McMillan
Subject: FW: BC Operating - Grande State #1 SWD Proposed Plugback

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From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Thursday, March 17, 2016 10:42 AM
To: Gary Larson (glarson@hinklelawfirm.com); J. Scott Hall
Cc: Jones, William V, EMNRD; McMillan, Michael, EMNRD; Davidson, Florene, EMNRD; Holm, Anchor E.; Brooks, David K, EMNRD; Lowe, Leonard, EMNRD
Subject: FW: BC Operating - Grande State #1 SWD Proposed Plugback

RE: Case No. 15442; Submitted Statement of the State Land Office

Gentlemen:

The State Land Office has provided the following written comments assessing the latest C-108 application for this proposed disposal well. The SLO is not a protestant in this case, but is an "affected person" based on the original application filed for administrative review. OCD does consider these comments relevant and has made this document part of the case record. This notification is to provide your clients the opportunity to review SLO input for consideration in the upcoming case. Please contact me with any questions regarding this matter. PRG

Phillip R. Goetze, PG
Engineering and Geological Services Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Direct: 505.476.3466
e-mail: phillip.goetze@state.nm.us

From: Holm, Anchor [mailto:aholm@slo.state.nm.us]
Sent: Thursday, March 17, 2016 9:55 AM
To: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Cc: Martin, Ed <emartin@slo.state.nm.us>; Warnell, Terry G. <twarnell@slo.state.nm.us>
Subject: BC Operating - Grande State #1 SWD Proposed Plugback

Phil,

EXHIBIT
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B

Yesterday, I received the revised copy of the C-108 SWD Application for the Grande State #1 (30-015-31910) by BC Operating. Their Proposed SWD interval is from 2,780' to 4,900'. In this wellbore the bottom of salt was recorded at a depth of **2600'**, which must be protected from solution by disposed produced waters. Typically, a minimum buffer of at least 300 feet is desired by the State Land Office in order to protect the surface Trust Lands from potential subsidence caused by salt water disposal.

Therefore, the State Land Office recommends that the top of injection be lowered to a depth of **at least 2,900'.** Also, in the well located on the same lease about ½ mile east of the proposed SWD, the bottom of salt was reported at 2,775'. This suggests that a **top of injection of 3,075'** may be more prudent.

An additional concern is the construction of the Grande State #1 wellbore. It did not have the annulus outside the 7" casing cemented above 5,650'. The 9-7/8" surface casing was set at 2,768', only a short distance below the bottom of Salt reported in the subject wellbore. However, the offset well having a top of salt reported at 2,775', which is deeper than the surface casing setting depth in the Grande State #1 wellbore.

Therefore, the State Land Office recommends that the proposed cement squeeze of this annulus be modified from a target top of cement at a depth of 2,266' to a requirement to **circulate cement to surface**. The reasoning is that the cement job at the shoe of the surface casings in this area frequently do not fully protect the salt from being dissolved by SWD operations. By placing additional hydraulic head on the surface casing shoe during the squeeze cement job, the strength of the seal at the shoe will be significantly improved.

Respectfully,

Anchor E. Holm
Geoscientist/Petroleum Engineering Specialist
Oil Gas & Minerals Division
505.827.5759
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
aholm@slo.state.nm.us
nmstatelands.org

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: ____ Secondary Recovery ____ Pressure Maintenance ___xxx__ Disposal ____ Storage
Application qualifies for administrative approval? ___xxx___ Yes ____ No

II. OPERATOR: ____NADEL AND GUSSMAN PERMIAN, LLC____

ADDRESS: ____601 N. MARIENFELD SUITE 508 MIDLAND TX 79701____

CONTACT PARTY: ____JASON GOSS____ PHONE: ___432-682-4429___

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 ___XXX__ 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.

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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.

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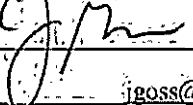
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: JASON GOSS TITLE: ENGINEER

SIGNATURE:  DATE: 8/4/2015

E-MAIL ADDRESS: jgoss@naguss.com

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

EXHIBIT
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C

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.

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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.

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(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.

Additional Questions on C-108

VII.

1. **Proposed average and maximum daily rate and volume of fluids to be injected;**
   Average 500-1000 BWPD, Max 10,000 BWPD

2. **Whether the system is open or closed;**
   Open System

3. **Proposed average and maximum injection pressure;**
   Average 400 PSI, Max 580 PSI

4. **Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,**
   Bone Spring and Wolfcamp produced water. Water is compatible

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.). Attached**

***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.**

The proposed disposal interval is located in the Delaware Mountain Group – Bell Canyon to Upper Cherry Canyon Formation. Injection interval consists of sandstone and shale. This Permian age horizon is 4,000' thick. The top of the Delaware formation is at a depth of about 2,600' with the base at a depth of about 6,600' at the top of the Bone Spring Lime. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the base of the Rustler/top of salt at 375'.

IX. Describe the proposed stimulation program, if any.

15,000 gallons 15% HCL acid job with packer

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.

Nadel and Gussman Permian, L.L.C. has reviewed and examined available geologic and engineering data in the area of interest for the Grande State #1 SWD and have found no evidence of faults or other hydrologic connections between the Delaware disposal zone and the underground sources of drinking water.

Jason Goss, Engineer

III. WELL DATA

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

Grande State #1, Sec. 32-T23S-R29E, 660' FNL & 1980' FWL, Eddy County, New Mexico

(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.

Casing Size	Setting Depth	Sacks of Cement	Hole Size	Top of Cement	Determined
13-3/8"	400'	375	17-1/2"	Surface	Circulate
9-5/8"	2,768'	1,425	12-1/4"	Surface	Circulate
7"	10,277'	1,193	8-3/4"	5,650'	CBL
4.5"	10,277-12,500	295	6-1/8"	10,277	Circ. off liner top

(3) A description of the tubing to be used including its size, lining material, and setting depth.

3-1/2" OD, Internally Plastic Coated Tubing set @ 2,750'

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Weatherford Arrow set 1X injection packer, nickel plated with on/off tool
Set within 50-100 feet above top Delaware perforations

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.

Delaware – Bell Canyon to Upper Cherry Canyon
Pool Name: SWD (Bell Canyon)

(2) The injection interval and whether it is perforated or open-hole.

2,780' to 4,900' (Perforated)

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

The well was originally drilled as an Atoka gas 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.

Atoka Perfs, 12,278' – 12,282', plugged back, CIBP set at 12,250' with 35' of Cement
Atoka perfs, 12,122'-12,410', 25 sack plug at 11,804 – 12,154'
Bone Spring Perfs: 7968-8052

(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. Next Higher: None / Next Lower: Delaware 6,450'

Side 1

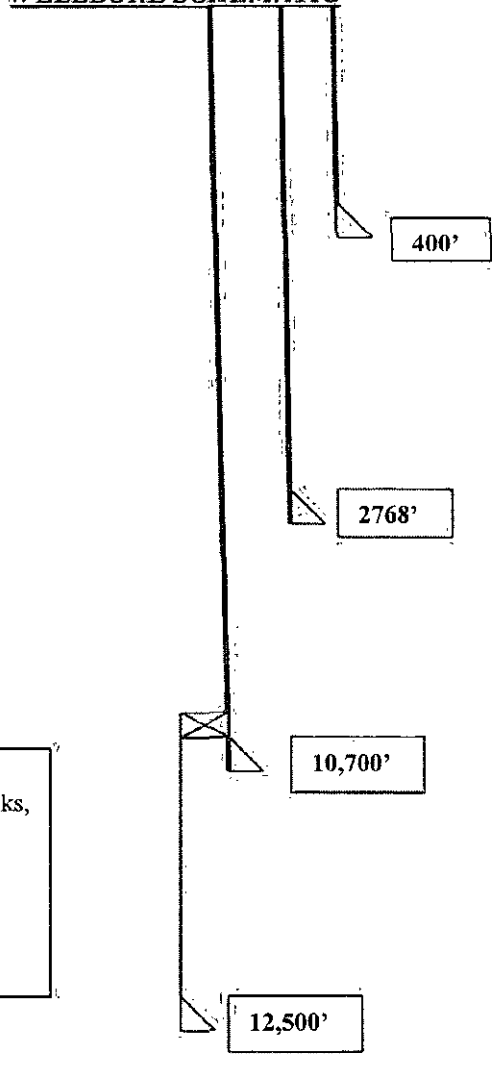
INJECTION WELL DATA SHEET

OPERATOR: NADEL AND GUSSMAN PERMIAN, LLC

WELL NAME & NUMBER: GRANDE STATE #1 API 30-015-31910

WELL LOCATION:	660' FNL, 1980' FWL	C	32	23S	29E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



4.5" 13.5# P110 liner, 6.15" hole, cemented to top of liner w/ 295 sacks, circulated 55 sacks off of liner top. Top of liner is 10,277'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13-3/8"

Cemented with: 375 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

Hole Size: 12.25 Casing Size: 9-5/8"

Cemented with: 1425 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

Hole Size: 8-3/4" Casing Size: 5-1/2"

Cemented with: 1420 sx. *or* _____ ft³

Top of Cement: 5650' Method Determined: CBL

Total Depth: SURFACE

Injection Interval

2,780-4,900 feet to _____

PERFORATED

INJECTION WELL DATA SHEET

Tubing Size: 3.5", 9.3# J-55 Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection Packer

Packer Setting Depth: 50ft above top perf

Other Type of Tubing/Casing Seal (if applicable): NONE

Additional Data

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

   If no, for what purpose was the well originally drilled? ATOKA GAS WELL, BONE SPRING OIL WELL, TD 12,500 VERTICAL WELL

2. Name of the Injection Formation: DELAWARE GROUP-BELL CANYON

3. Name of Field or Pool (if applicable): SWD BELL CANYON

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.

   YES. ATOKA 12,278' – 12,282'. PLUG BACK: CIBP SET AT 12,250 WITH 35' OF CEMENT. ATOKA PERFS: 12,122 – 12,140', PLUGGED BACK W/ 25 SACK PLUG AT 11,804 -12,154. SET PLUG AT LINER TOP 100 SACKS. BONE SPRINGS PERFS 7968-8052.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

   BELOW: DELAWARE 6500', BONE SPRING 1ST SAND 7600, BONE SPRING 2ND SAND 7968, WOLFCAMP 10,970, ATOKA 12,122

   ABOVE: NONE

LEGAL NOTICE

Nadel and Gussman Permian, L.L.C., 601 N. Marienfeld, Suite 508, Midland, TX 79701 has filed a form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to utilize its Grande State #1 (API – 30-015-31910) as a Salt Water Disposal well. Grande State #1 is located at 660' FNL and 1980' FWL, Unit Letter C, Section 32, Township 23 South, Range 29 East, Eddy County, New Mexico. The well will dispose of water produced from oil and gas wells into the Delaware Formation at 2,780' to 4,900' at a maximum rate of 10,000 barrels of water per day at a maximum pressure of 580 psi.
Interested parties must file objections or requests for hearing with the Oil Conservations Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.
Additional information can be obtained by contacting Jason Goss, Nadel and Gussman Permian, LLC, at (432) 682-4429.

Published in the Artesia Daily Press, Artesia, N.M., August 6, 2015 Legal No. 23597.

Grande State #1 – Proposed Conversion Procedure

Plan to plug back well to complete in Delaware as Injector pending NMOCD disposal approval.

1. Pull production tubing.
2. Wireline set CIBP at 7,868'and dump 35ft cement. Uppermost perf (2nd BS Sand 7,968-8052')
3. Shoot squeeze holes at 5600'. Set cement retainer at 5500' and squeeze cement into annulus with a minimum height of 2,000'.
4. Perforate Delaware 2780-4900' and stimulate for injection.
5. Set packer at 2730 with injection tubing and run OCD integrity test.

Formation Tops

Rustler	375
Salado/ Top Salt	600'
Base Salt	2600'
Delaware Mountain Group / Bell Canyon	2790'
Cherry Canyon	3900'
Brushy Canyon	4900'
Bone Spring Lime	6500'
Bone Spring 1st Sand	7540'
Bone Spring 2nd Sand	8300'

Bone Spring

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Impact Chemical***

Well Number:	Kyle 34 Fed #2H WH	Sample Temp:	70
Lease:	Nadel & Gussman	Date Sampled:	4/10/2015
Location:		Sampled by:	Sherry Hogue
Date Run:	4/21/2015	Employee #:	
Lab Ref #:	15-apr-w68267	Analyzed by:	GR

Dissolved Gases

			Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide	(H2S)		3.40	16.00	.21
Carbon Dioxide	(CO2)		230.00	22.00	10.45
Dissolved Oxygen	(O2)	**NOT ANALYZED**			

Cations

Calcium	(Ca++)		10,886.16	20.10	541.60
Magnesium	(Mg++)		1,742.16	12.20	142.80
Sodium	(Na+)		56,575.73	23.00	2,459.81
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		1.53	27.50	.06
Strontium	(Sr++)	**NOT ANALYZED**			

Anions

Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		146.64	61.10	2.40
Sulfate	(SO4=)		320.00	48.80	6.56
Chloride	(Cl-)		111,021.99	35.50	3,127.38
Total Iron	(Fe)		46.91	18.60	2.52
Total Dissolved Solids			180,974.52		
Total Hardness as CaCO3			34,358.26		
Conductivity MICROMHOS/CM			209,000		

pH 5.200 Specific Gravity 60/60 F. 1.126

CaSO4 Solubility @ 80 F. 21.88MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-.704	100.0	-.304	130.0	.446
80.0	-.604	110.0	.016	140.0	.446
90.0	-.304	120.0	.016	150.0	.876

Impact Chemical

Delaware

Impact Water Analysis Analytical Report

Company:	Nadel & Gussman	Location:	Mosaic 34 Federal 1
Source :	WH	Date Sampled:	May 7, 2015
Number :	43546	Account Manager:	David Garcia
County:		Foreman:	

	ANALYSIS	mg/L		EQ. WT:		MEQ/L
1.	pH	5.74				
2.	Specific Gravity 60/60 F	1.212				
3.	Hydrogen Sulfide	3.4 PPM				
4.	Carbon Dioxide	720.0 PPM				
5.	Dissolved Oxygen	ND				
6.	Hydroxyl (OH^-)	0	/	17.0	=	0.00
7.	Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8.	Bicarbonate (HCO_3^-)	49	/	61.1	=	0.80
9.	Chloride (Cl^-)	179,959	/	35.5	=	5,069.27
10.	Sulfate (SO_4^{-2})	140	/	48.8	=	2.87
11.	Calcium (Ca^{+2})	28,720	/	20.1	=	1,428.86
12.	Magnesium (Mg^{+2})	4,529	/	12.2	=	371.23
13.	Sodium (Na^+)	75,276	/	23.0	=	3,272.85
14.	Barium (Ba^{+2})	1.75				
15.	Total Iron (Fe)	18.61				
16.	Manganese	9.55				
17.	Strontium	1,105.00				
18.	Total Dissolved Solids	289,808				
19.	Resistivity @ 75 °F (calculated)	0.027 Ω-m				

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.9490
@ 100 °F	-0.6390
@ 120 °F	-0.3790
@ 140 °F	-0.0190
@ 160 °F	0.3310

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.4092
@ 90 °F	0.5418
@ 110 °F	0.3990
@ 130 °F	0.3896
@ 150 °F	0.3893

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		0.80	65
$CaSO_4$	68.07		2.87	195
$CaCl_2$	55.50		1,425.19	79,098
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		371.23	17,678
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		3,272.85	191,331

Analyst: Tamara Davault Date: May 8, 2015

Wolfcamp

Impact Water Analysis Analytical Report

Company:	Nadel & Gussman	Location:	El Presidente St. #3H
Source :	Wellhead	Date Sampled:	July 15, 2015
Number :	45813	Account Manager:	David Garcia
County:		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	6.70				
2. Specific Gravity 60/60 F	1.067				
3. Hydrogen Sulfide	10.2	PPM			
4. Carbon Dioxide	120.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	244	/	61.1	=	3.99
9. Chloride (Cl^-)	57,987	/	35.5	=	1,633.44
10. Sulfate (SO_4^{-2})	664	/	48.8	=	13.61
11. Calcium (Ca^{+2})	2,792	/	20.1	=	138.91
12. Magnesium (Mg^{+2})	389	/	12.2	=	31.92
13. Sodium (Na^+)	34,045	/	23.0	=	1,480.21
14. Barium (Ba^{+2})	2.71				
15. Total Iron (Fe)	7.92				
16. Manganese	0.51				
17. Strontium	594.40				
18. Total Dissolved Solids	96,727				
19. Resistivity @ 75 °F (calculated)	0.082	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.3041
@ 100 °F	0.0059
@ 120 °F	0.2659
@ 140 °F	0.6259
@ 160 °F	0.9759

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.2391
@ 90 °F	0.2384
@ 110 °F	0.2406
@ 130 °F	0.2438
@ 150 °F	0.2469

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		3.99	323
$CaSO_4$	68.07		13.61	926
$CaCl_2$	55.50		121.31	6,733
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		31.92	1,520
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		1,480.21	86,533

Analyst: Sylvia Garcia Date: July 17, 2015

WELLS INSIDE AREA REVIEW OF GRANDE STATE #1

**** 1 well inside area of review that penetrate the Delaware Formation**

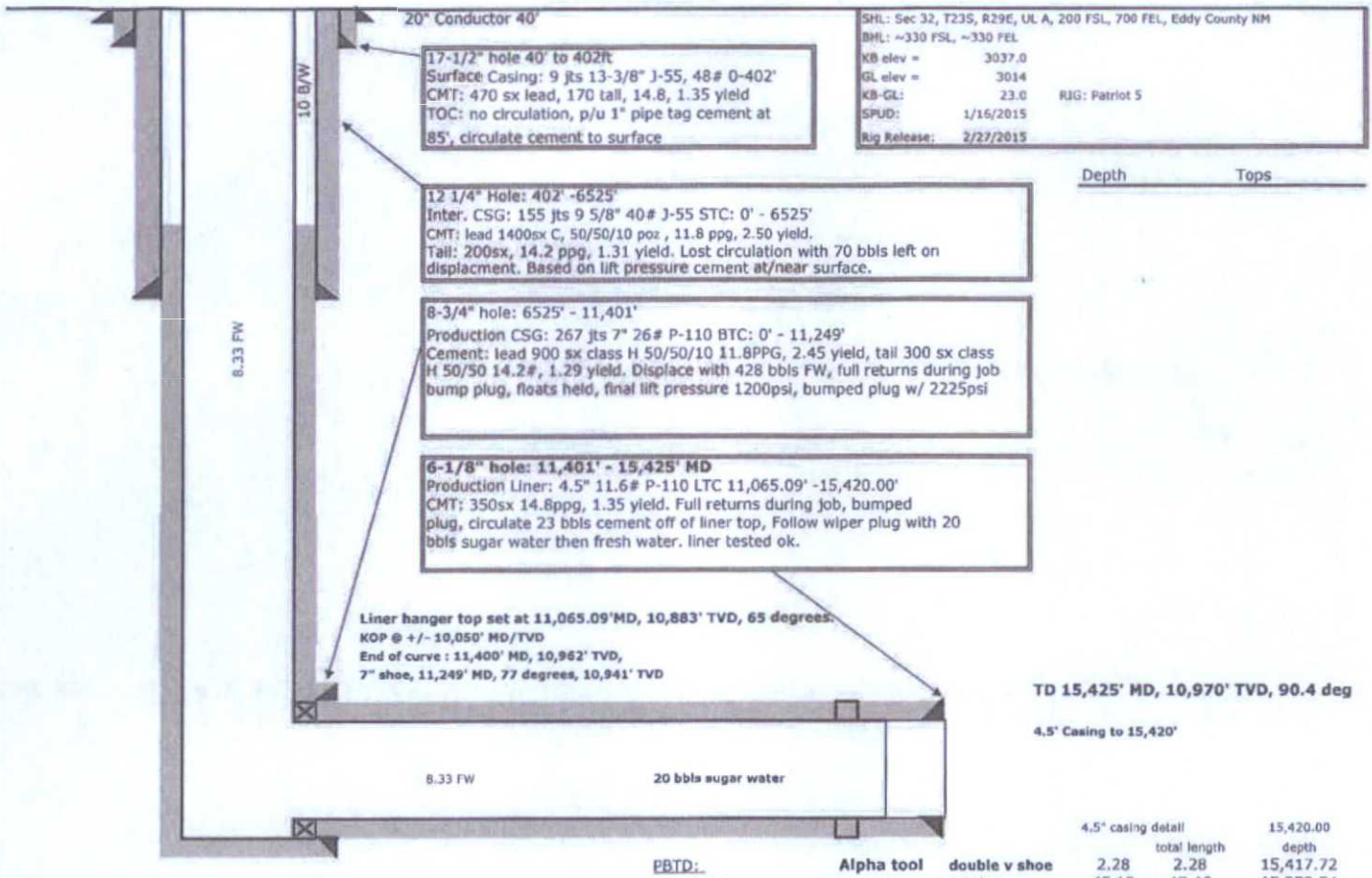
Well	Type	Date drill	Location	Depth	Completion	Status	
Macho Grande State #2H	Horizontal Oil well	1/17/2015	T-23-S, R-28-E, Sec 32 200' FNL, 700' FEL UL A, Eddy Co. NM	15,425' MD 10,970' TVD	Wolfcamp 10,970'	Active see diagram	Nadel and Gussman Permian, LLC

NADEL & GUSSMAN PERMIAN

Macho Grande State #2H
Wellbore Diagram as Drilled

Wolfcamp A
Eddy County New Mexico
API # 30-015-42659

6/10/2015



SHL: Sec 32, T23S, R29E, UL A, 200 FSL, 700 FEL, Eddy County NM
BHL: ~330 FSL, ~330 FEL

KB elev =	3037.0	
GL elev =	3014	
KB-GL:	23.0	RIG: Patriot 5
SPUD:	1/16/2015	
Rig Release:	2/27/2015	

Depth	Tops

4.5" casing detail

			total length	15,420.00 depth
	double v shoe	2.28	2.28	15,417.72
	1 Joint	45.18	47.46	15,372.54
	Float Collar	1.85	49.31	15,370.69
	1 Joint	45.18	94.49	15,325.51
PBTD	Landing Collar	1.48	95.97	15,324.03
	3 Joints	135.50	231.47	15,188.53
	Alpha tool	3.75	235.22	15,184.78
	32 joints	1445.31	1680.53	13,739.47
	4.5" mkr	9.91	1690.44	13,729.56
	23 joints	992.73	2683.17	12,736.83
	4.5" marker	9.81	2692.98	12,727.02
	39 joints	1639.81	4332.79	11,087.21
Liner	Spacer nipple	5.9	4338.69	11,081.31
	combo collar	1.46	4340.15	11,079.85
	flex lock	14.76	4354.91	11,065.09
	zxp liner top pkr	20.75	4375.66	11,044.34
	total	4375.66		

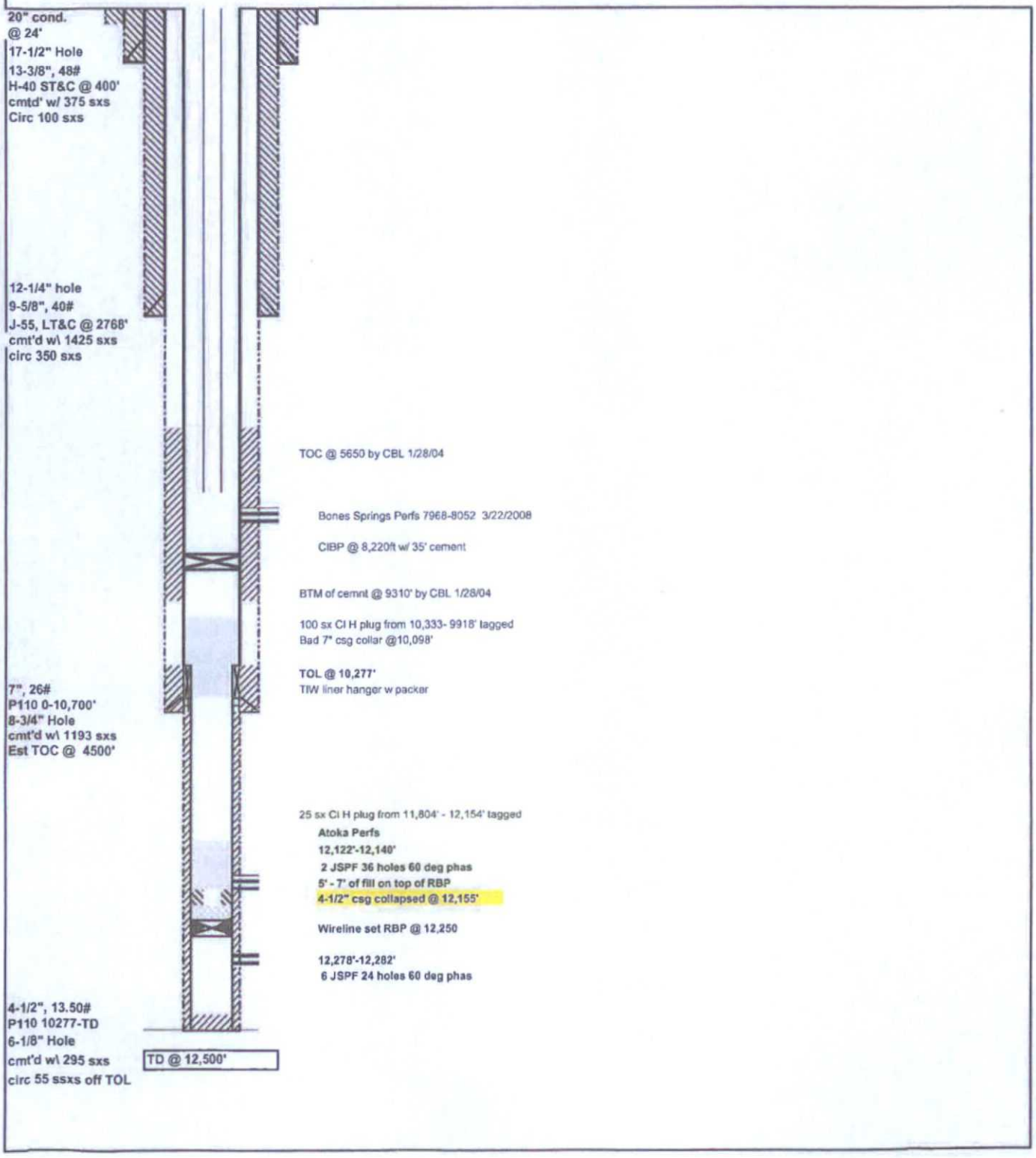
Nadel & Gussman Permian, L.L.C.

LEASE:	Grande State
FIELD:	Laguna Salado (Atoka)
LOCATION:	660 FNL 1980 FWL
SPUD DATE:	11/5/2003

WELL NO.:	1
COUNTY:	Eddy
LEGAL:	Sec. 32 T 23 S R 29 E
DRAWN BY:	JSG
DATE:	8/4/2015

API #:	30 - 015 - 31910
STATE:	New Mexico
GL:	2993'
DF:	3008'
KB:	3009' (17 ' AGL)

Grande State Well No. 1



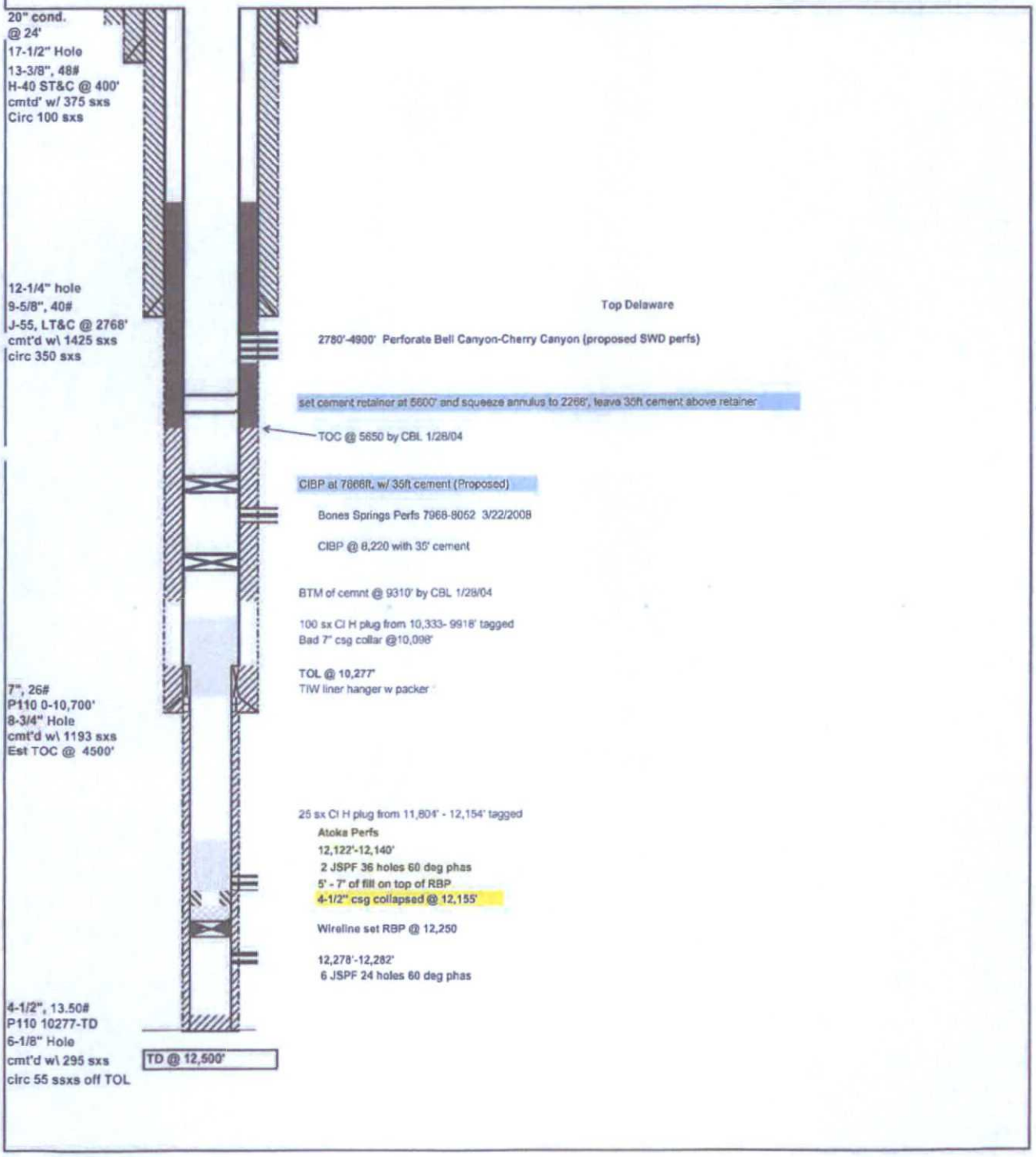
KEM 8/4/2015

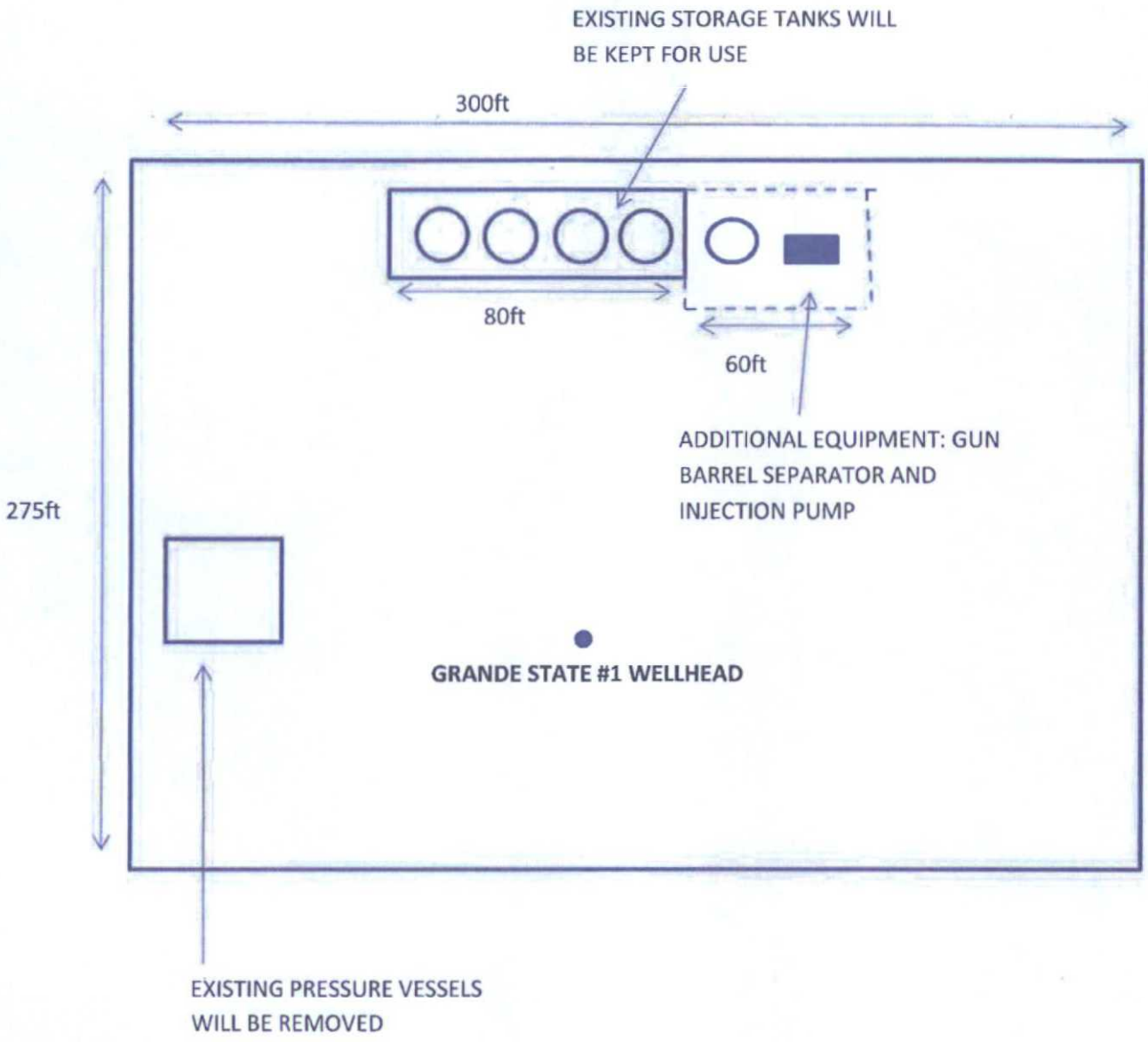
Nadel & Gussman Permian, L.L.C.

LEASE:	Grande State	WELL NO.:	1	API #:	30 - 015 - 31910
FIELD:	Laguna Salado (Atoka)	COUNTY:	Eddy	STATE:	New Mexico
LOCATION:	660 FNL 1980 FWL	LEGAL:	Sec. 32 T 23 S R 29 E	GL:	2993'
SPUD DATE:	11/5/2003	DRAWN BY:	JSG	DF:	3008'
		DATE:	8/6/2015	KB:	3009' (17 ' AGL)

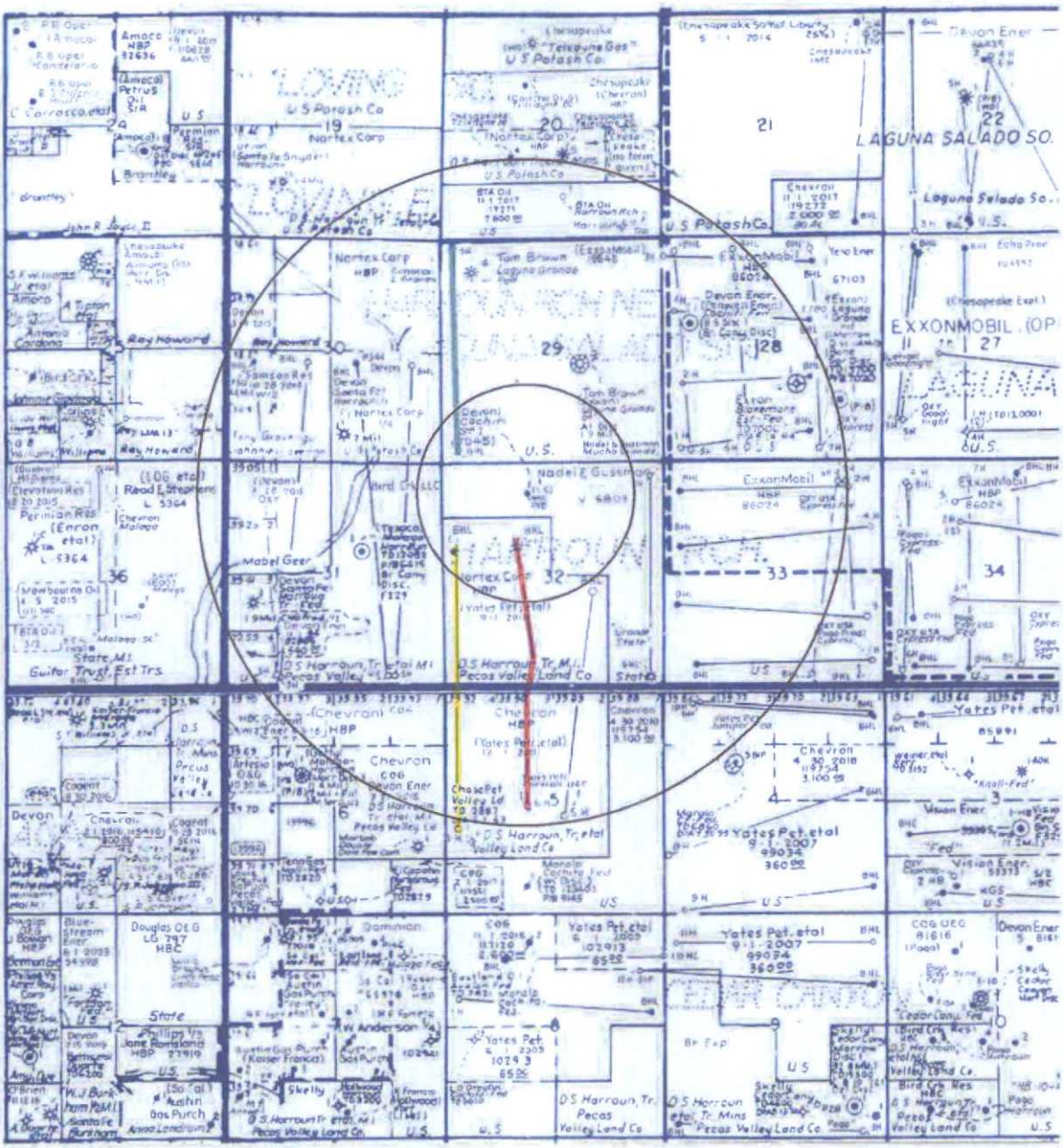
Grande State Well No. 1

Proposed Injection





EXISTING GRANDE STATE #1 - PAD



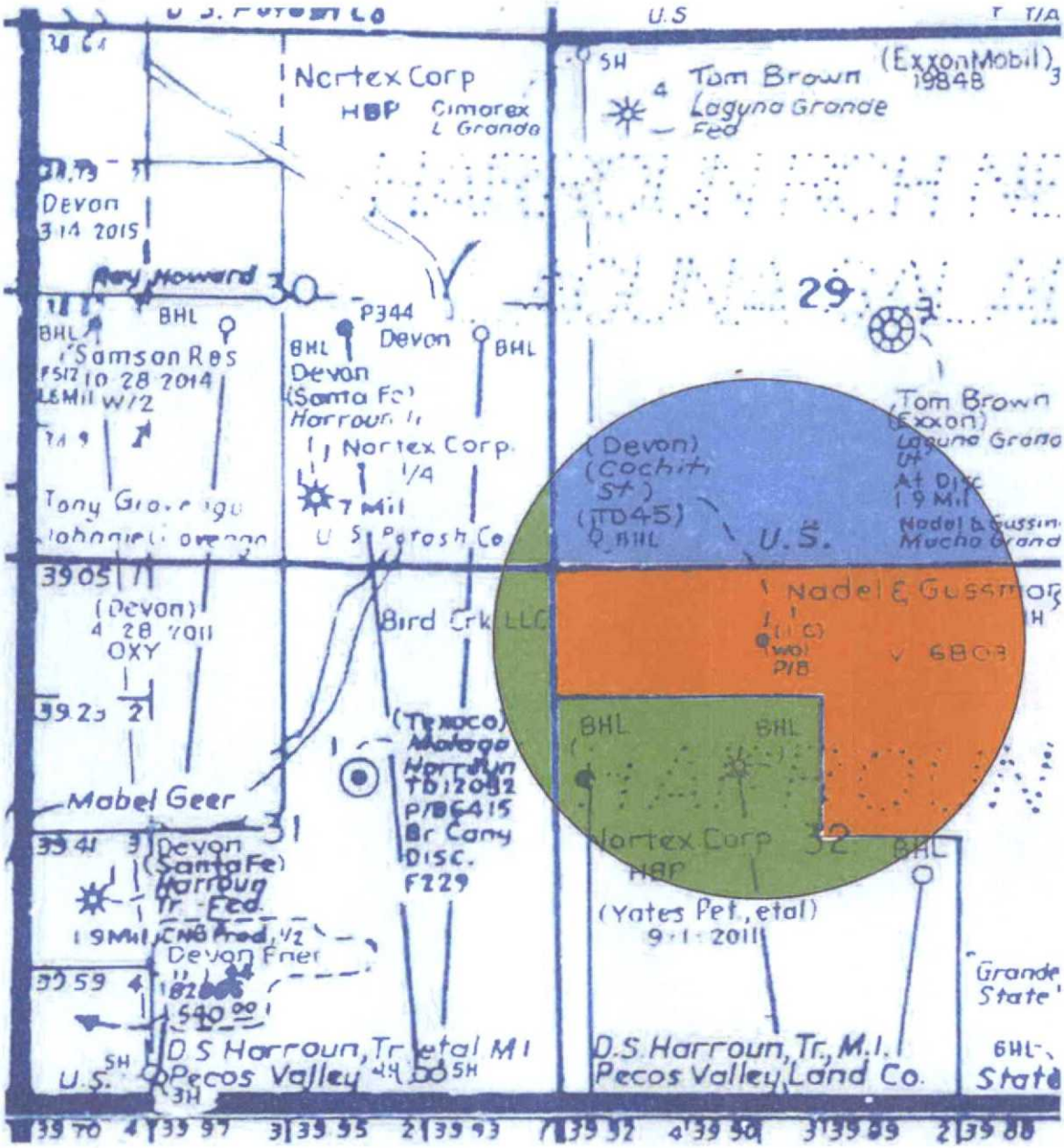
Section 29-T23S-R29E:

- **Laguna Grande 29 Federal #5H (Permitted not drilled)**
  Cimarex Energy Co.
  600 N. Marienfeld, Suite 600
  Midland, TX 79701

Section 5-T24S-R29E:

- **Chevron BOT #1H**
  Yates Petroleum Corporation
  105 South Fourth Street
  Artesia, NM 88210

- **Chevron BOT #6H**
  Yates Petroleum Corporation
  105 South Fourth Street
  Artesia, NM 88210



Section 32-T23S-R29E:

- **V0-6803**
  Nadel and Gussman Permian, L.L.C.
  601 N. Marienfeld, Suite 508
  Midland, TX 79701

- **Fee**

Section 29-T23S-R29E:

- **NMNM 19848**
  Exxonmobil Oil Corporation
  P.O. Box 4358
  Houston, TX 77210-4358

Section 30-T23S-R29E:

- **Fee**

Section 31-T23S-R29E:

- **Fee**