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

APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC FOR APPROVAL OF SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO

CASE NO. 16504

Table of Contents

Exhibits of Neel Duncan
On Behalf of NGL Water Solutions Permian, LLC

A

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

AMENDED APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC TO APPROVE SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO.

CASE NO. 16504

AMENDED APPLICATION

NGL Water Solutions Permian, LLC ("NGL"), OGRID No. 372338, through its undersigned attorneys, hereby submits this amended application to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, NGL states as follows:

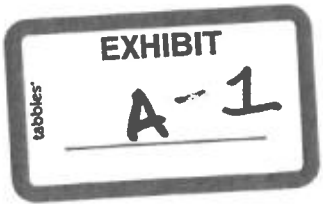
(1) NGL originally submitted its application proposing to drill the Cobra SWD #1 well on October 2, 2018.

(2) NGL is providing this amended application to update the proposed location for drilling the well.

(3) NGL proposes to drill the Cobra SWD #1 at a surface location 325 feet from the North line and 268 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(4) NGL is proposing this change in location to accommodate the operations of an offset oil and gas operator.

(5) Apart from the change in location, NGL makes no further changes to the NGL application currently filed with the Division.



(6) A revised plat, revised maps of the area of review, and a revised lists of wells and operators within the one-mile area of review are attached hereto in Attachment A.

(7) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

(8) This case has been continued to the April 18, 2019 docket.

WHEREFORE, NGL requests that, after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.

By: Deana M. Bennett

Deana M. Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 16504: Amended Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Cobra SWD #1 well a surface location 325 feet from the North line and 268 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. The target injection interval is the Silurian-Devonian formation at a depth of 15,600' - 17,261'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 6 miles west of Jal, New Mexico.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☑ AMENDED REPORT
Moved Location

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	97869	SWD; Devonian-Silurian

[4] Property Code	[5] Property Name	[6] Well Number
	COBRA SWD	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
372338	NGL WATER SOLUTIONS PERMIAN, LLC	3130.00'±

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	25 S	36 E	N/A	325'	NORTH	268'	EAST	LEA

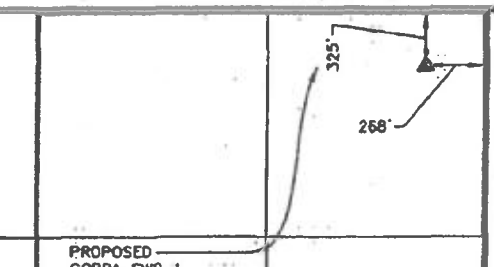
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]



PROPOSED
COBRA SWD 1

NMSP-E (NAD27)
N: 409,687.64'
E: 821,120.88'

NMSP-E (NAD83)
N: 409,748.03'
E: 862,308.11'
Lat: N32°07'20.01"
Long: W103°17'47.59"

SECTION
19

[17] OPERATOR CERTIFICATION

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

Signature — Date: 3/20/2019

John Moltz
Printed Name

john.moltz@lonquist.com
E-mail Address

[18] SURVEYOR CERTIFICATION

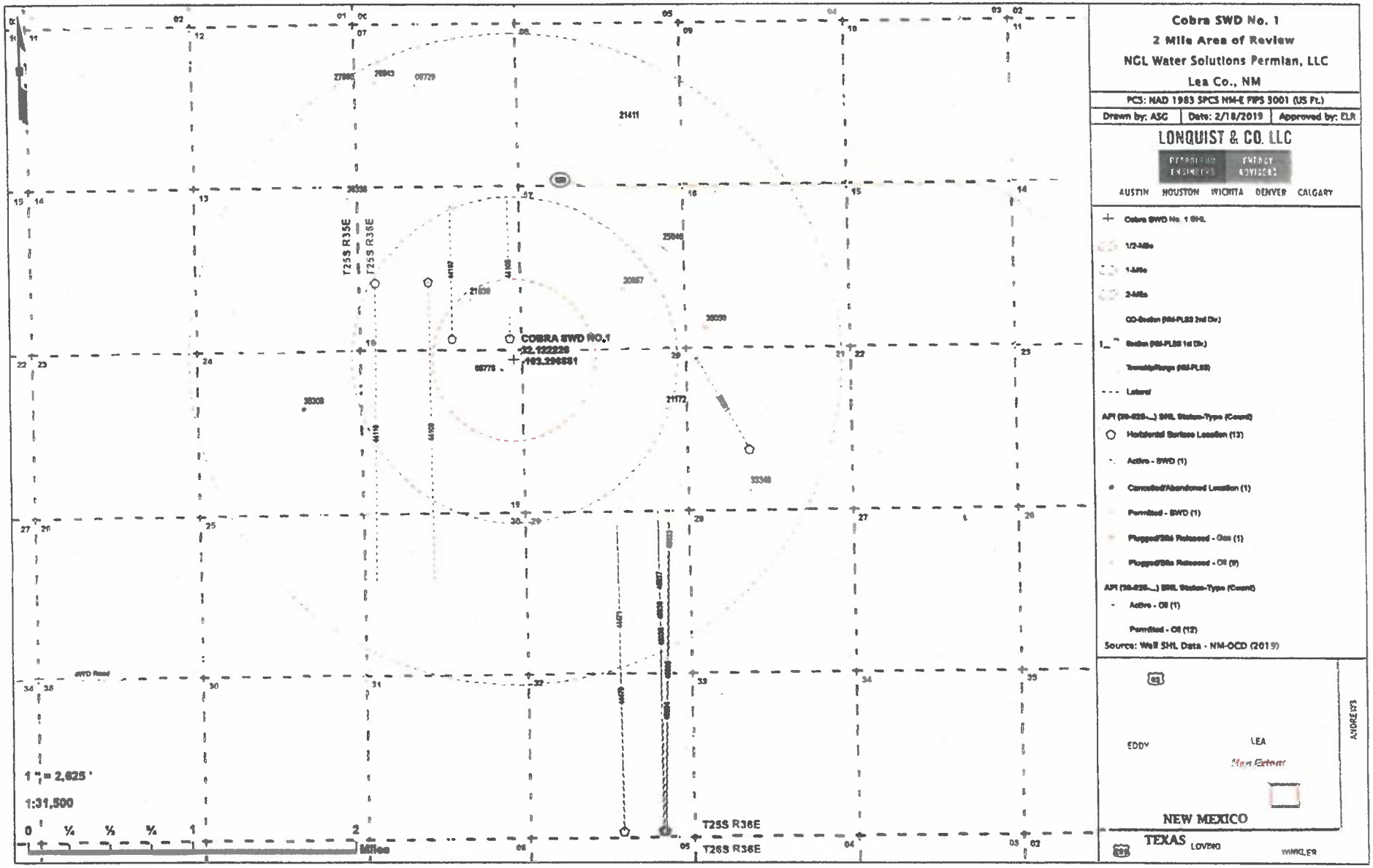
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

02/07/19
Date of Survey

Signature and Seal of Professional Surveyor: Billy W. Barr Jr. NEW MEXICO 25114 PROFESSIONAL SURVEYOR

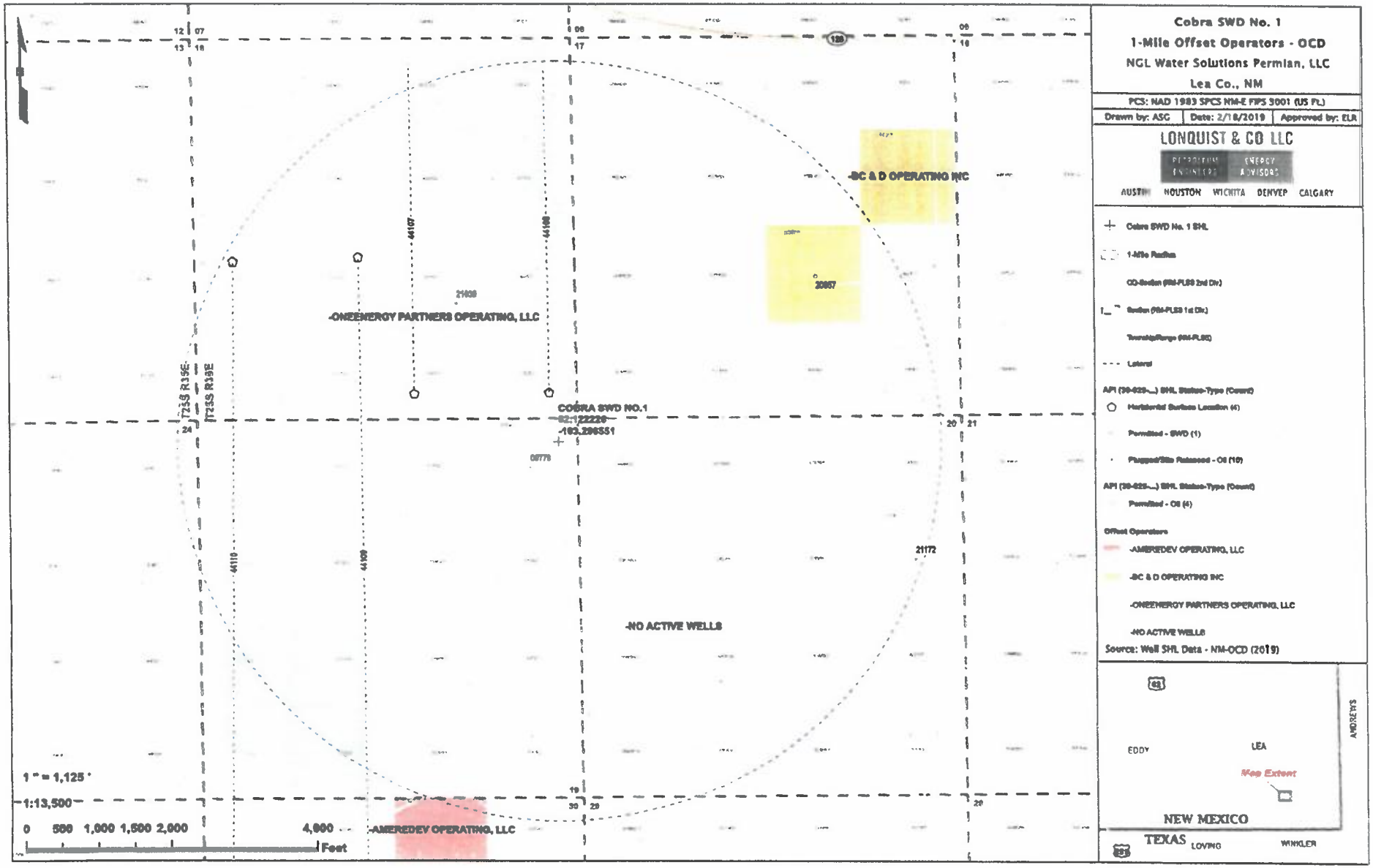
25114
Certificate Number

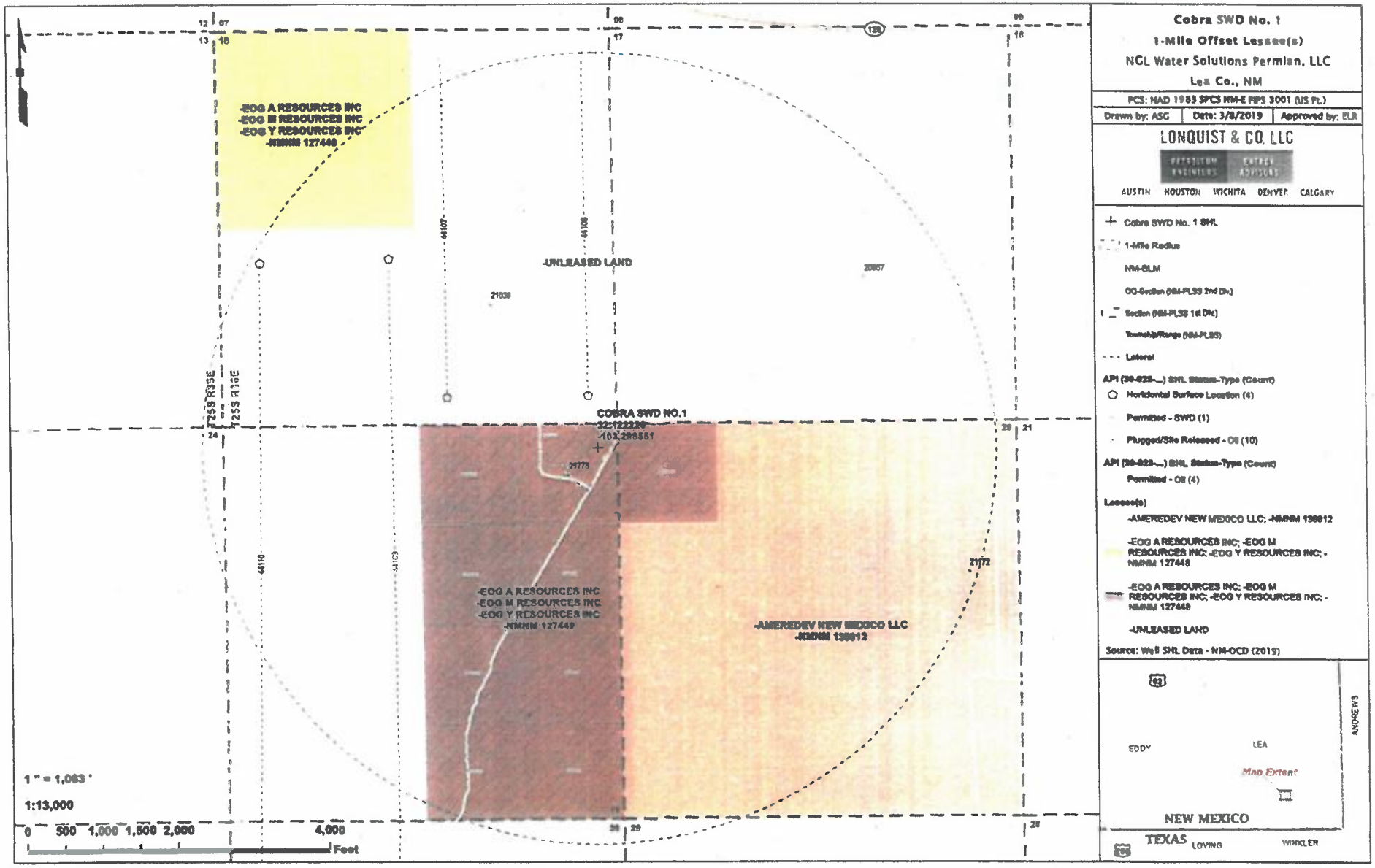
EXHIBIT
A


Cobra SWD No. 1
2 Mile Area of Review
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)
Drawn by: ASG
Date: 2/18/2019
Approved by: ELR
LONQUIST & CO. LLC
AUSTIN HOUSTON WICHITA DENVER CALGARY
Cobra SWD No. 1 SHL
1/2-Mile
1-Mile
2-Mile
Horizontal Surface Location (13)
Active - SWD (1)
Permitted - SWD (1)
Active - Oil (1)
Permitted - Oil (12)
Source: Well SHL Data - NM-OCD (2019)
COBRA SWD NO.1
32.122226
-103.296851
T25S R35E
T25S R36E
T25S R36E
T26S R36E
1 " = 2,625 '
1:31,500
0 ¼ ½ ¾ 1 2 Miles
EDDY
LEA
NEW MEXICO
TEXAS
LOVING
WINKLER
ANDREWS

Cobra SWD No. 1
1 Mile Area of Review List

API (30-025-...)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	DATE DRILLED
09778	PRE-ONGARD WELL #001	O	P	PRE-ONGARD WELL OPERATOR	3891	32.12124250000	-103.29780580000	1/1/1900
20857	WEST JAL B #001	S	N	BC & D OPERATING INC.	12275	32.12848280000	-103.28498080000	3/12/1964
21039	PRE-ONGARD WELL #001	O	P	PRE-ONGARD WELL OPERATOR	12950	32.12760160000	-103.30099490000	1/1/1900
21172	WEST JAL UNIT #001	O	P	TEXACO EXPLORATION & PRODUCTION INC	9999	32.11759570000	-103.28073880000	12/31/9999
44107	BRANDY FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12417500000	-103.30298600000	12/31/9999
44108	SHIFT FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12416500000	-103.29691400000	12/31/9999
44109	CONVERT FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12934600000	-103.30542500000	12/31/9999
44110	PINCH FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12923000000	-103.31103400000	12/31/9999


Cobra SWD No. 1
1-Mile Offset Operators - OCD
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US FL)
Drawn by: ASG
Date: 2/18/2019
Approved by: ELA
LONQUIST & CO LLC
AUSTIN HOUSTON WICHITA DENVER CALGARY
Cobra SWD No. 1 SHL
1-Mile Radius
Lateral
Horizontal Surface Location (4)
Permitted - SWD (1)
Permitted - Oil (4)
Offset Operators
-AMEREDEV OPERATING, LLC
-BC & D OPERATING INC
-ONEENERGY PARTNERS OPERATING, LLC
-NO ACTIVE WELLS
Source: Well SHL Data - NM-OCD (2019)
-BC & D OPERATING INC
-ONEENERGY PARTNERS OPERATING, LLC
COBRA SWD NO.1
-NO ACTIVE WELLS
-AMEREDEV OPERATING, LLC
T23S R35E
T23S R34E
1 " = 1,125 '
1:13,500
0 500 1,000 1,500 2,000 4,000
Feet
EDDY
LEA
Map Extent
NEW MEXICO
TEXAS
LOVING
WINKLER
ARIZONA


-EOG A RESOURCES INC
-EOG M RESOURCES INC
-EOG Y RESOURCES INC
-NMNM 127448
-UNLEASED LAND
COBRA SWD NO.1
-EOG A RESOURCES INC
-EOG M RESOURCES INC
-EOG Y RESOURCES INC
-NMNM 127449
-AMEREDEV NEW MEXICO LLC
-NMNM 138812
T25S R35E
T25S R36E
1" = 1,083 '
1:13,000
0 500 1,000 1,500 2,000 4,000
Feet
Cobra SWD No. 1
1-Mile Offset Lessee(s)
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)
Drawn by: ASG
Date: 3/8/2019
Approved by: ELR
LONQUIST & CO. LLC
AUSTIN HOUSTON WICHITA DENVER CALGARY
Cobra SWD No. 1 SHL
1-Mile Radius
NM-BLM
Section (NM-PLSS 1st Div.)
Lateral
Horizontal Surface Location (4)
Permitted - SWD (1)
Plugged/Site Released - Oil (10)
Permitted - Oil (4)
Lessee(s)
-AMEREDEV NEW MEXICO LLC; -NMNM 138812
-EOG A RESOURCES INC; -EOG M RESOURCES INC; -EOG Y RESOURCES INC; -NMNM 127448
-EOG A RESOURCES INC; -EOG M RESOURCES INC; -EOG Y RESOURCES INC; -NMNM 127449
-UNLEASED LAND
Source: Well SHL Data - NM-OCD (2019)
EDDY
LEA
Map Extent
NEW MEXICO
TEXAS
LOVING
WINKLER
ANDREWS

CASE NO. 16504: Amended Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Cobra SWD #1 well a surface location 325 feet from the North line and 268 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. The target injection interval is the Silurian-Devonian formation at a depth of 15,600' - 17,261'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 6 miles west of Jal, New Mexico.

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

APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC TO APPROVE SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO.

CASE NO. 16504

APPLICATION

NGL Water Solutions Permian, LLC ("NGL"), OGRID No. 372338, through its undersigned attorneys, hereby makes this application to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, NGL states as follows:

(1) NGL proposes to drill the Cobra SWD #1 well at a surface location 326 feet from the North line and 718 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(2) NGL seeks authority to inject salt water into the Silurian-Devonian formation at a depth of 15,600' - 17,261'.

(3) NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) NGL anticipates using an average pressure of 2,340 psi for this well, and it requests that a maximum pressure of 3,120 psi be approved for the well.

(5) A proposed C-108 for the subject well is attached hereto in Attachment A.

(6) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

EXHIBIT
tabbies
A-2

WHEREFORE, NGL requests that this application be set for hearing before an Examiner of the Oil Conservation Division on November 1, 2018; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: _____

Jennifer Bradfute
Deana Bennett
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 154: Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Cobra SWD #1 well a surface location 326 feet from the North line and 718 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. The target injection interval is the Silurian-Devonian formation at a depth of 15,600' - 17,261'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 6 miles west of Jal, New Mexico.

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

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

Applicant: NGL WATER SOLUTIONS PERMIAN LLC **OGRID Number:** 372338
Well Name: COBRA SWD #1 **API:** TBD
Pool: SWD; SILURIAN-DEVONIAN **Pool Code:** 96101

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐NSL ☐NSP(PROJECT AREA) ☐NSP(PRORATION UNIT) ☐SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐DHC ☐CTB ☐PLC ☐PC ☐OLS ☐OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐WFX ☐PMX ☒SWD ☐IPI ☐EOR ☐PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☐ Royalty, overriding royalty owners, revenue owners
C. ☒ Application requires published notice
D. ☒ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☒ Surface owner
G. ☐ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

3) **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.

CHRIS WEYAND
Print or Type Name

Signature

09/28/2018
Date

512-600-1764
Phone Number

CHRIS@LONQUIST.COM
e-mail Address

EXHIBIT
tabbies
A

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 ___X___ Disposal _____ Storage
Application qualifies for administrative approval? ___X___ Yes _____ No

II. OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC

ADDRESS: 1509 W WALL ST // STE 306 // MIDLAND, TX 79701

CONTACT PARTY: SARAH JORDAN PHONE: (432) 685-0005 x1989

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 ___X___ 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: Christopher B. Weyand TITLE: Consulting Engineer

SIGNATURE: _____ DATE: 10/1/2018

E-MAIL ADDRESS: chris@lonquist.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

Side 2

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.

NGL Water Solutions Permian, LLC

Cobra SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Cobra SWD
Well No.	1
Location	S-19 T-25S R-36E
Footage Location	326' FNL & 718' FEL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20"	13.375"	9.625"	7.625"
WT	0.500"	0.480"	0.545"	0.500"
ID	19.000"	12.415"	8.535"	6.625"
Drift ID	18.812"	12.259"	8.535"	6.500"
COD	21.00"	14.375"	10.625"	7.625"
Weight	106.5 lb/ft	68 lb/ft	53.5 lb/ft	39 lb/ft
Grade	J-55	HCL-80	P-110	Q-125
Hole Size	24"	17.5"	12.25"	8.5"
Depth Set	1,400'	5,400'	11,300'	15,600'

b. Cementing Program

Cement Information				
Casing String	Surface	Intermediate	Production	Liner
Lead Cement	HES Extenda Cem	Neocem	Neocem	Neocem
Lead Cement Volume	799	1,939	Stage 1: 533 sks Stage 2: 477 sks Stage 3: 733 sks	161
Tail Cement	Halcem	Halcem	Halcem	Halcem
Tail Cement Volume	1,060	2,013	Stage 1: 438 sks Stage 2: 295 sks Stage 3: 444 sks	178
Cement Excess	25%	60%	25%, 25%, 0%	10%
TOC	Surface	Surface	Surface	10,800'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information		
OD	7"	5.5"
WT	0.362"	0.304"
ID	6.276"	4.892"
Drift ID	7.875"	6.050"
COD	6.151"	4.653"
Weight	26 lb/ft	17 lb/ft
Grade	P-110 TCPC	P-110 TCPC
Depth Set	0' - 10,700'	10,700' - 15,580'

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and Full Inconel

B. Completion Information

1. Injection Formation: Devonian, Silurian, Fusselman, Montoya (Top 100')
2. Gross Injection Interval: 15,600' – 17,261'

   Completion Type: Open Hole
3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Yates-Seven Rivers	3,589'
Delaware	5,409'
Bone Spring	8,073'
Wolfcamp	11,145'
Strawn	11,567'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

   Average Volume: 40,000 BPD
   Maximum Volume: 50,000 BPD

2. Closed System

3. Anticipated Injection Pressure:

   Average Injection Pressure: 2,340 PSI (surface pressure)
   Maximum Injection Pressure: 3,120 PSI (surface pressure)

4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Delaware, Bone Spring, Wolfcamp, and Strawn formations.

5. The disposal interval is non-productive. No water samples are available from the surrounding area.

VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

A. Injection Zone: Siluro-Devonian Formation

Formation	Depth
Rustler	1,351'
Delaware	5,409'
Bone Spring	8,073
Wolfcamp	11,145'
Penn	11,269'
Strawn	11,567'
Atoka	11,789'
Morrow	12,449'
Mississippian Shale	13,889'
Woodford	15,217'
Devonian	15,570'
Fusselman	16,629'
Montoya	17,161'

B. Underground Sources of Drinking Water

Within 1-mile of the proposed Cobra SWD # 1 locations, there are three water wells. One of these has been reported of having a depth of 505 ft while the depths of the other two have not been reported. Water wells in the surrounding area have an average depth of 495 ft and an average water depth of 295 ft generally producing from the Santa Rosa. The upper Rustler may also be another USDW and will be protected.

IX. Proposed Stimulation Program

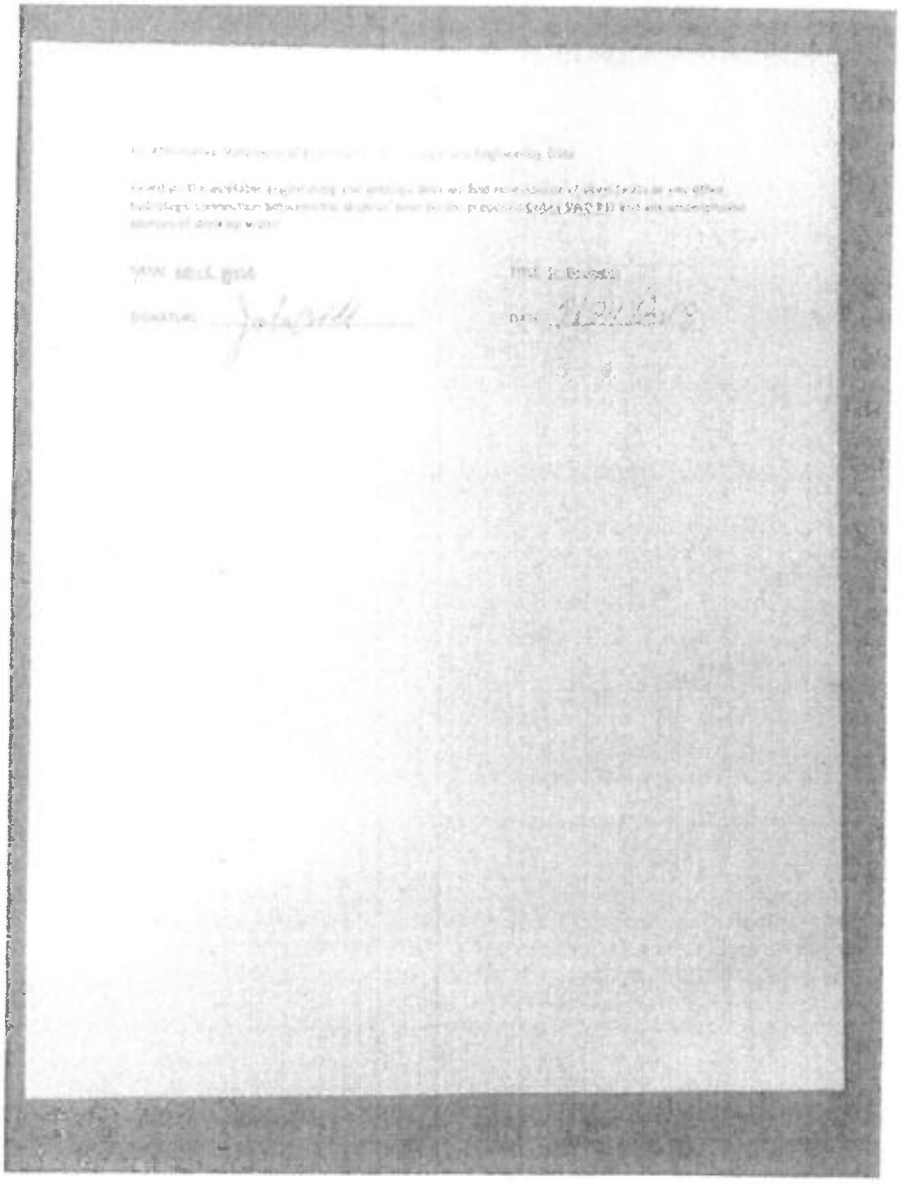
Stimulate with up to 50,000 gallons of acid.

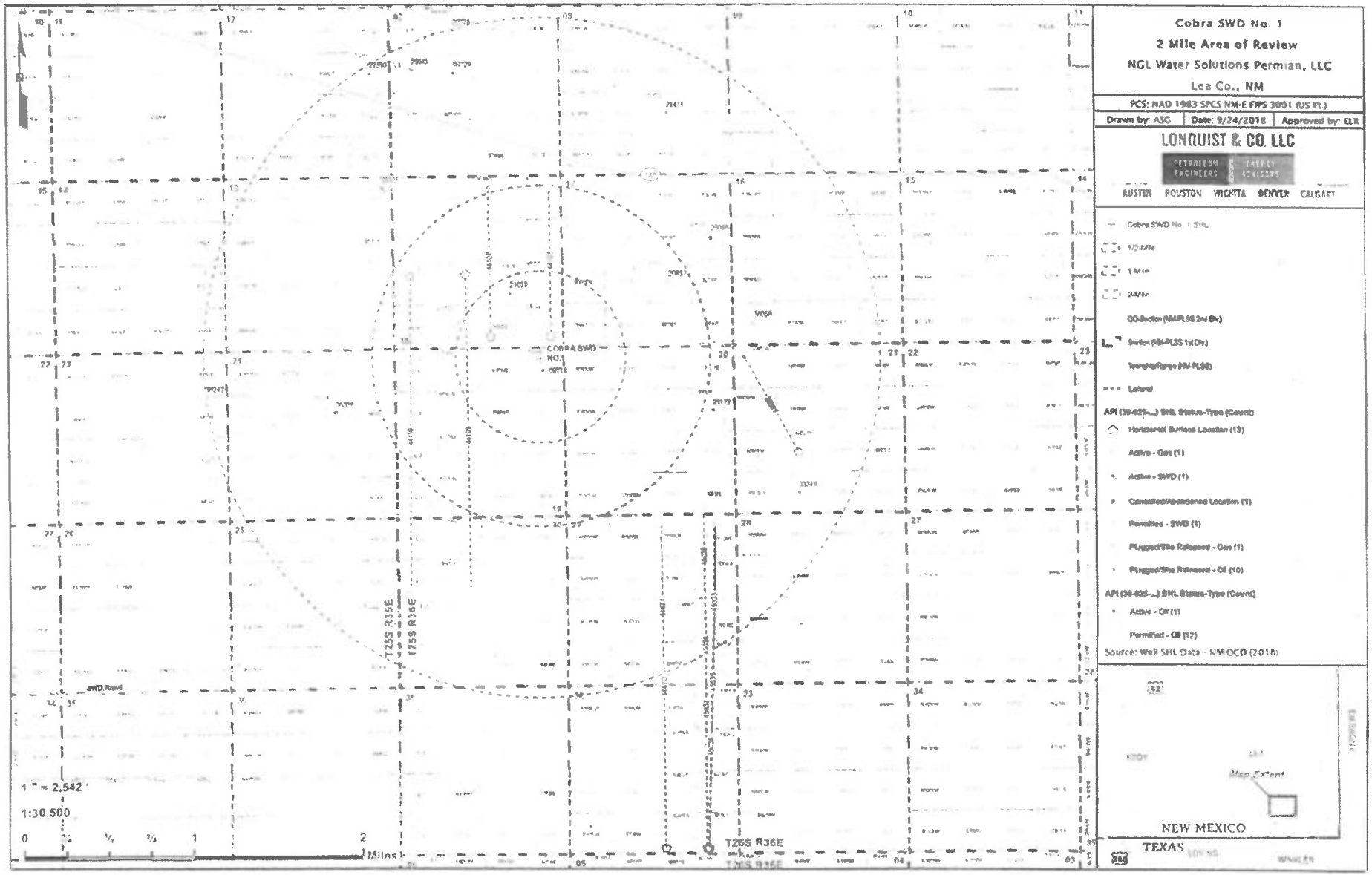
X. Logging and Test Data on the Well

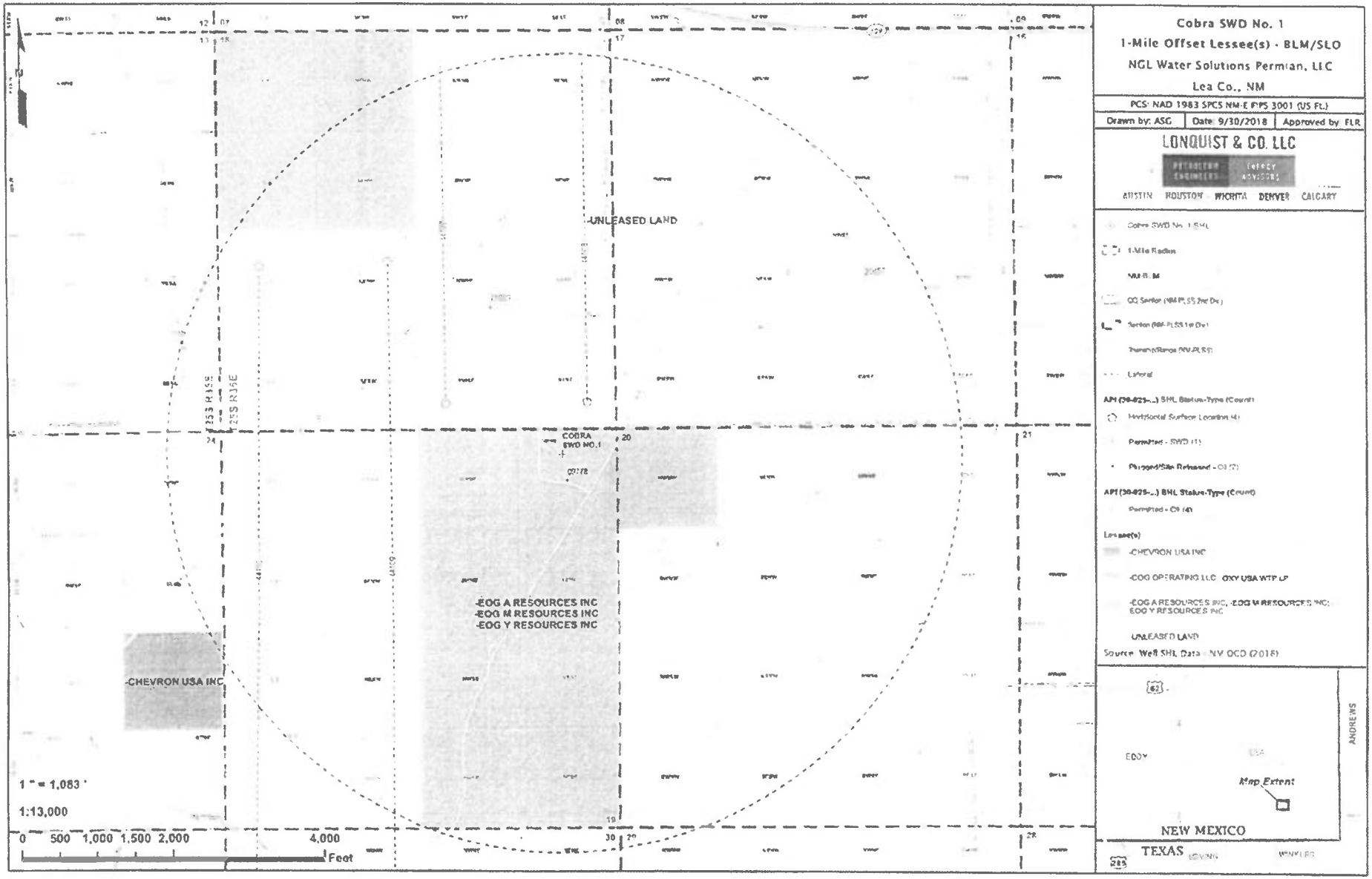
There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

There are three water wells that exist within one mile of the well location. If a sample can be obtained, analysis results will be provided as soon as possible. A map showing the three water wells and Water Right Summary from the New Mexico Office of the State Engineer for water well CP 01170 POD5 are attached.




Cobra SWD No. 1
2 Mile Area of Review
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US FT.)
Drawn by: ASG
Date: 9/24/2018
Approved by: ELR
LONQUIST & CO. LLC
PETROLEUM ENGINEERS
ENERGY ADVISORS
AUSTIN HOUSTON WICHITA DENVER CALGARY
Cobra SWD No. 1 SHL
1/2-Mile
1-Mile
2-Mile
QQ-Section (NM-PLSS 2nd Div.)
Section (NM-PLSS 1st Div.)
Township/Range (NM-PLSS)
Lateral
API (30-025-...) SHL Status-Type (Count)
Horizontal Surface Location (13)
Active - Gas (1)
Active - SWD (1)
Cancelled/Abandoned Location (1)
Permitted - SWD (1)
Plugged/Site Released - Gas (1)
Plugged/Site Released - Oil (10)
API (30-025-...) SHL Status-Type (Count)
Active - Oil (1)
Permitted - Oil (12)
Source: Well SHL Data - NM OCD (2018)
COBRA SWD NO.1
T25S R35E
T25S R36E
T26S R36E
SWD Road
1 " = 2,542 '
1:30,500
0 1/4 1/2 3/4 1 2 Miles
Map Extent
NEW MEXICO
TEXAS


Cobra SWD No. 1
1-Mile Offset Lessee(s) - BLM/SLO
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E (FIPS 3001) (US FT.)
Drawn by: ASG
Date: 9/30/2018
Approved by: FLR
LONQUIST & CO. LLC
AUSTIN HOUSTON WICHITA DENVER CALGARY
UNLEASED LAND
COBRA SWD NO.1
-EOG A RESOURCES INC
-EOG M RESOURCES INC
-EOG Y RESOURCES INC
-CHEVRON USA INC
-COG OPERATING LLC, OXY USA WTP LP
-EOG A RESOURCES INC, -EOG M RESOURCES INC, EOG Y RESOURCES INC
Source: Well SHL Data - NM OCD (2018)
1" = 1,083'
1:13,000
0 500 1,000 1,500 2,000 4,000
Feet
EDDY
ANDREWS
Map Extent
NEW MEXICO
TEXAS

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 01170 POD5	2	2	2	19	25S	36E	660687	3555164

Driller License:	1607	**Driller Company:**	DURAN DRILLING		
Driller Name:	DURAN, LUIS (TONY)				
Drill Start Date:	10/28/2014	**Drill Finish Date:**	11/04/2014	**Plug Date:**	
Log File Date:	02/19/2015	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	35 GPM
Casing Size:	8.00	**Depth Well:**	505 feet	**Depth Water:**	270 feet

Side 1

INJECTION WELL DATA SHEET

OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC

WELL NAME & NUMBER: Cobra SWD #1

WELL LOCATION: 326' FNL & 718' FEL (FOOTAGE LOCATION) | A (UNIT LETTER) | 19 (SECTION) | 25S (TOWNSHIP) | 36E (RANGE)

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24.000" Casing Size: 20.000"

Cemented with: 1,859 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulation

1st Intermediate Casing

Hole Size: 17.500" Casing Size: 13.375"

Cemented with: 3,952 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulation

2nd Intermediate Casing

Hole Size: 12.250" Casing Size: 9.625"

Cemented with: 2,950 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 339 sx.

or _____ ft^3

Top of Cement: 10,800'

Method Determined: Calculation

Total Depth: 17,621'

Injection Interval

15,600 feet to 17,261 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 7", 26 lb/ft, P-110, TCPC from 0'- 10,700' and 5.500", 17 lb/ft, P-110 TCPC from 10,700'- 15,580'
Lining Material: Duoline

Type of Packer: 7.625" x 5.5" TCPC Permanent Packer with High Temp Elastomer and Full Inconel

Packer Setting Depth: 15,580'

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

Additional Data

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

   If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Devonian, Silurian, Fusselman and Montova (Top 100')

3. Name of Field or Pool (if applicable): SWD; Silurian-Devonian

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. No, new drill

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
   Yates-Seven Rivers: 3,589'
   Delaware: 5,409'
   Bone Spring: 8,073'
   Wolfcamp: 11,145'
   Strawn: 11,567'

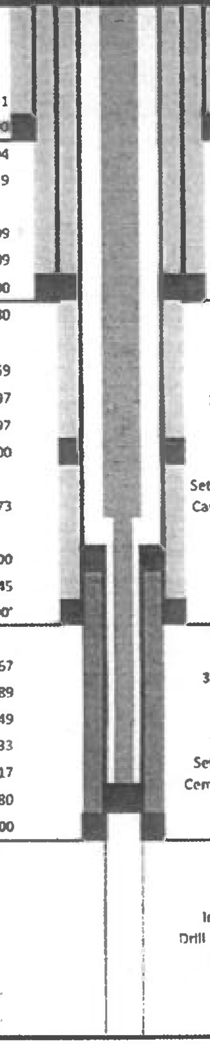
Cobra SWD No. 1

1 Mile Area of Review List

API (30-025-...)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	DATE DRILLED
20857	WEST JAL B #001	S	N	BC & D OPERATING INC.	12275	32.12848280000	-103.28498080000	3/12/1964
09778	PRE-ONGARD WELL #001	O	P	PRE-ONGARD WELL OPERATOR	3891	32.12124250000	-103.29780580000	1/1/1900
21039	PRE-ONGARD WELL #001	O	P	PRE-ONGARD WELL OPERATOR	12950	32.12760160000	-103.30099490000	1/1/1900
44107	BRANDY FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12417500000	-103.30298600000	12/31/9999
44108	SHIFT FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12416500000	-103.29691400000	12/31/9999
44109	CONVERT FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12934600000	-103.30542500000	12/31/9999
44110	PINCH FEE WCB #001H	O	N	ONEENERGY PARTNERS OPERATING, LLC	0	32.12923000000	-103.31103400000	12/31/9999

Cobra SWD #1: Offsetting Produced Water Analysis														
wellname	api	county	formation	ph	tds_mgL	sodium_mgL	calcium_mgL	iron_mgL	magnesium_mgL	manganese_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL	co2_mgL
BELL LAKE UNIT #009	3002520261	LEA	BONE SPRING		204652						130000	512	260	
THISTLE UNIT #071H	3002542425	Lea	BONE SPRING 1ST SAND	5.6	171476.3	55363.2	9140	40.4	1023	1.1	104576.4	244	560	770
BELL LAKE 19 STATE #004H	3002541517	Lea	BONE SPRING 2ND SAND	6.3		76378	6238	11	834	0	131397	159	670	200
BELL LAKE 19 STATE #003H	3002541516	Lea	BONE SPRING 2ND SAND	6.7		59599	7326	11	942	0.69	108190	171	680	230
SALADO DRAW 6 FEDERAL #001H	3002541293	Lea	BONE SPRING 3RD SAND	6.7	95604	31066	3196	10	394	0.5	59071	183	0	100
SALADO DRAW 6 FEDERAL #001H	3002541293	Lea	BONE SPRING 3RD SAND	7			3289	0.3	474.5	0.38		219.6		300
NORTH EL MAR UNIT #057	3002508440	LEA	DELAWARE		259554						163000	61	253	
GOEDEKE #002	3002508407	LEA	DELAWARE		293925						184000	85	210	
PRONGHORN AHO FEDERAL #001	3002526496	LEA	STRAWN	5.5			20.1	0	12.2		35.5	61.1	48.8	
SNAPPING 7 STATE #014H	3001542588	EDDY	WOLFCAMP	7.3	81366.4	26319.4	2687.4	26.1	326.7		50281.2		399.7	100

NGL	Cobra SWD Lea County NM Vertical Injection - Devonian, Silurian, Fusselman, Montoya	Location - Sec 23, Twn 29S, R 36E Drilling and Complete Cost - $10.65MM	AFE #	TD GL/KB	17,961 3,130	Directions to Site - Travel 6.5 miles from Jal NM along NM 128W. Turn left (south) and travel to location. Lat/Long: 32.12287, 103.29757



Geologic Tops (MD ft)	Section	Problems	Bit/BHA	Mud	Casing	Logging	Cement (HOLD)	Injection String
Rustler 1351 Surface TD - 1400	**Surface** Drill 24" 0' - 1400 Set and Cement 20" Casing	Loss Circulation Hole Cleaning Wellbore stability in the Red Beds Anhydrite in the Rustler	24" Tricone 9-5/8" x 8" MM 9 jts: 8" DC 21 jts: 5" HWDP 5 " DP to surface	Spud Mud MW<9.0	1400' of 20" 106.5# J55 STC Centralizers - bottom 2 joints and every 3rd jt thereafter, Cement basket at 200'	No Logs	Lead - 799sx of HES Extenda Cem, 13.7ppg, 4.5hrs TT Tail - 1060sx of Halcem 3hr TT 25% Excess 1000psi CSD after 10hrs	10700' of 7" P110 26# TCPC 4880' of 5-1/2" P110 17# TCPC Duoline Internally Coated Injection Tubing
Top of Salt 1494 Salado 1719 Base of Salt 3509 Delaware 5409 1st Int TD - 5400	**1st Intermediate** Drill 4000' of 17-1/2" Hole 1080' - 5280' Set and Cement 13-3/8" Casing	Seepage Losses Possible H2S Anhydrite Salt Sections	17-1/2" PDC 9-5/8" x 8" MM 9 jts: 8" DC 21 jts: 5" HWDP 5 " DP to surface		SM A Section Casing Bowl 5400' of 13-3/8" 68# HCL80 BTC Centralizers - bottom jt, every 3rd joint in open hole and 2 jt inside the surface casing	Mudlogger on site by 1400'	Lead - 1939 sx of Neocem 12.9ppg, 5hr TT Tail - 2013sx of Halcem, 14.8ppg 60% Excess 1000psi CSD after 10 hrs Cement to Surface	
ECP DV Tool - 5380 Bell Canyon 5459 Cherry Canyon - 5897 Brushy Canyon - 7197 DV Tool - 8000 Bone Spring - 8073 3rd Int Liner Top - 10,800 Wolfcamp - 11145 2nd Int TD - 11300'	**2nd Intermediate** Drill 5900' of 12-1/4" Hole 5400' - 11300' Set 9-5/8" Intermediate Casing and Cement in 3 Stages	Hard Drilling in the Brushy Canyon Seepage to Complete Loss Water Flows Some Anhydrite H2S possible Production in the Bone Spring and Wolfcamp Ballooning is possible in Cherry Canyon and Brushy if Broken Down	12-1/4" PDC 8" MM 9jts: 8" DC 8" Drilling Jars 21 jts: 5" HWDP 5" DP to Surface	8.5 ppg OBM High Vis Sweeps UBD/MPD usig ADA	10M B Section 11300' of 9-5/8" 53.5# P110 BTC **Special Drift to 8.535"** Externally Coat 3600' Between DV Tools DV tool at at 8000' ECP DV Tool 15' Inside Previous Casing Centralizers - bottom jt, 100' aside of DV tool, every 3rd joint in open hole and 5 within the surface casing	MWD GR Triple combo + CBL of 13-3/8" Casing	**Stage 3: 0% Excess** Lead 773sx Neocem 12.9 ppg Tail 444sx Halcem 14.8ppg 1000psi CSD after 10 hrs Cement to Surface **Stage 2: 25% Excess** Lead 447sx Neocem 12.9 ppg Tail 295sx Halcem 14.8ppg 1000psi CSD after 10 hrs **Stage 1: 25% Excess** Lead 553sx Neocem 12.9 ppg Tail 438sx Halcem 14.8ppg. 1000psi CSD after 10hrs	
Strawn - 11567 Atoka - 11789 Morrow - 12449 Miss Lst - 14733 Woodford - 15217 Perm Packer - 15580 3rd Int TD - 15600	**3rd Intermediate** Drill 4300' of 8-1/2" Hole 11300' - 15600' Set 7-5/8" Liner and Cement in Single Stage	High Pressure (up to 15ppg) and wellbore instability (fracturing) expected in the Atoka 150 target radius Hard Drilling in the Morrow Clastic	8-1/2" PDC 6-3/4" MM 9 jts: 6" DC 21 jts: 5" HWDP 5" DP to Surface	12.5 ppg OBM UBD/MPD using ADA	4800' of 7-5/8" 39# **Q125 - DTL (FJ4) TJ (Gas Tight)** VersaFlex Packer Hanger Centralizers on and 1 jt above shoe jt and then every 2nd jt.	MWD GR Triple combo, CBL of 9-5/8" Casing	Lead 161sx Neocem 12.9 ppg Tail 178sx Halcem 14.8ppg. 1000psi CSD after 10hrs 8hr TT 10% Excess 1000psi CSD after 10hrs	7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and full Inconel 925 trim
Devonian - 15,570 Fusselman - 16629 Montoya - 17,162' TD - 17,261'	**Injection Interval** Drill 1661' of 6-1/2" hole 15600' - 17261'	Chert is possible Loss of Circulation is expected H2S encountered on the Striker 3 well BHT estimated at 280F	6-1/2" PDC 4-3/4"MM 9 jts: 4-3/4" DC 4-3/4" Drilling Jars 18 jts: 4" FH HWDP 4" FH DP to Surface	Fresh Water - possible flows	Openhole completion	MWD GR Triple Combo with FMI, CBL of 7-5/8"	Displace with 3% KCl (or heavier brine if necessary)	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
NGL WATER SOLUTIONS PERMIAN, LLC 1509 W WALL ST, STE 306 MIDLAND, TX 79701	372338
	3. API Number TBD

4. Property Code	5. Property Name	6. Well No.
	COBRA SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	19	25S	36E	N/A	326'	NORTH	718'	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
-	-	-	-	-	-	-	-	-	-

9. Pool Information

Pool Name	Pool Code
SWD; Silurian-Devonian	96101

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	SWD	R	Private	3,130'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	17,261'	Siluro-Devonian	TBD	ASAP

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
295'	507'	1,900'

☐ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	24"	20"	106.5 lb/ft	1,400'	1,859	Surface
Intermediate	17.5"	13.375"	68 lb/ft	5,400'	3,952	Surface
Production	12.25"	9.625"	53.5 lb/ft	11,300'	2,950	Surface
Prod. Liner	8.5"	7.625"	39 lb/ft	15,600	339	10,800'
Tubing	N/A	7"	26 lb/ft	0' – 10,700'	N/A	N/A
Tubing	N/A	5.5"	17 lb/ft	10,700' – 15,580'	N/A	N/A

Casing/Cement Program: Additional Comments

See attached schematic.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	10,000 psi	8,000 psi	TBD – Schaffer/Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable. Signature:	OIL CONSERVATION DIVISION
	Approved By:
Printed name: Christopher B. Wegand	Title:
Title: Consulting Engineer	Approved Date: / Expiration Date:
E-mail Address: chris@lonquist.com	
Date: 9/28/2018 / Phone: (512) 600-1764	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	96101	SWD; Silurian-Devonian

4 Property Code	5 Property Name	6 Well Number
	COBRA SWD	1

7 OGRID No.	8 Operator Name	9 Elevation
372338	NGL WATER SOLUTIONS PERMIAN, LLC	3130.00'±

10 Surface Location

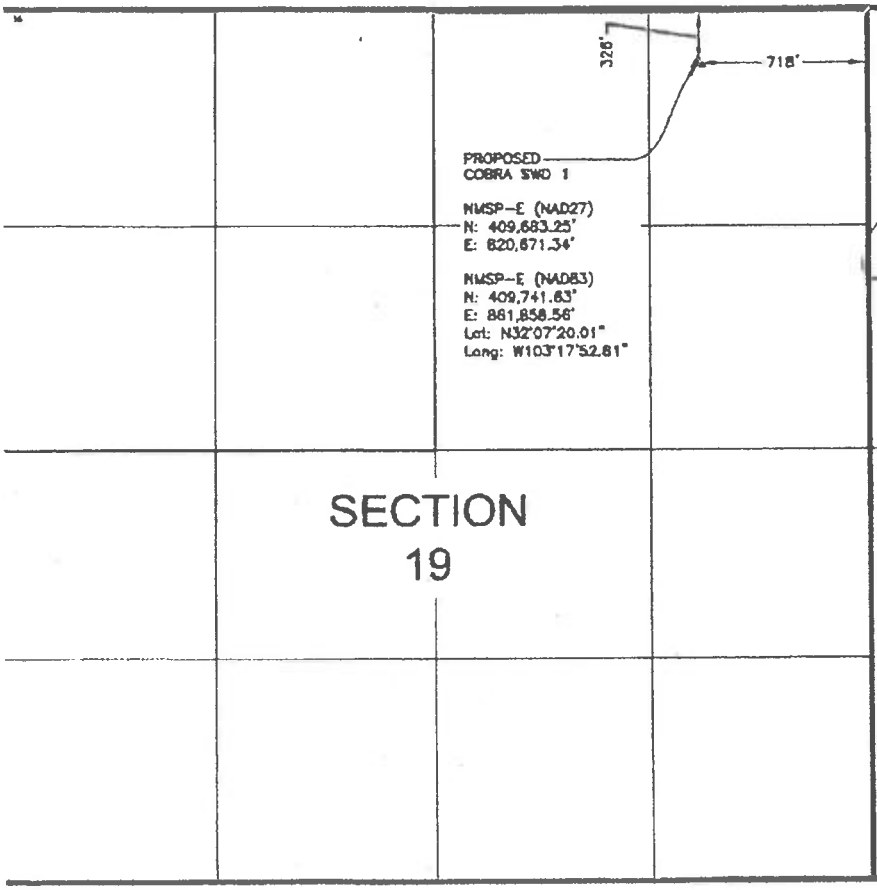
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	25 S	36 E	N/A	326'	NORTH	718'	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

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

9/28/2018
Signature Date

Chris Weyand
Printed Name

chris@lonquist.com
E-mail Address

18 SURVEYOR CERTIFICATION

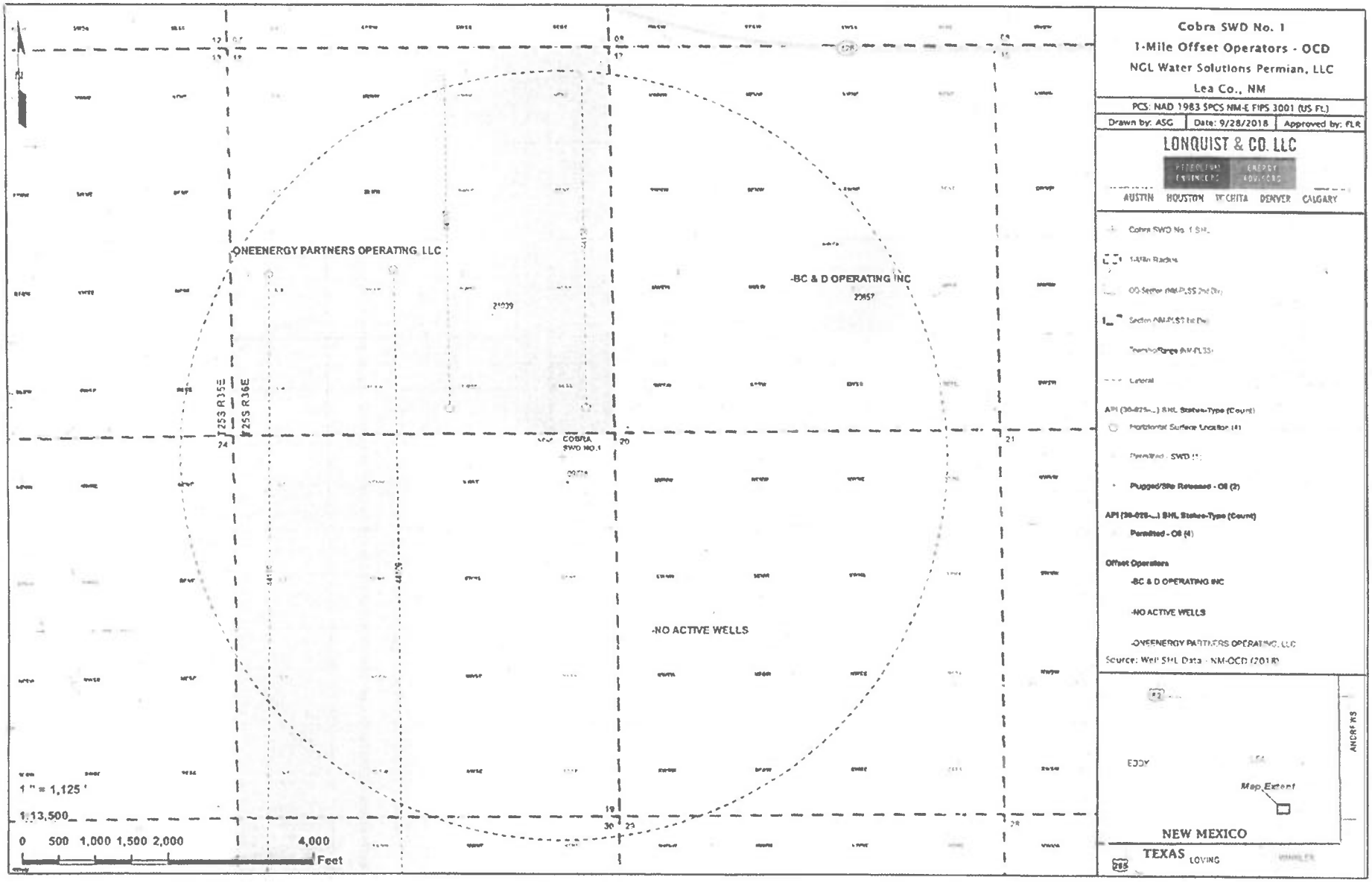
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

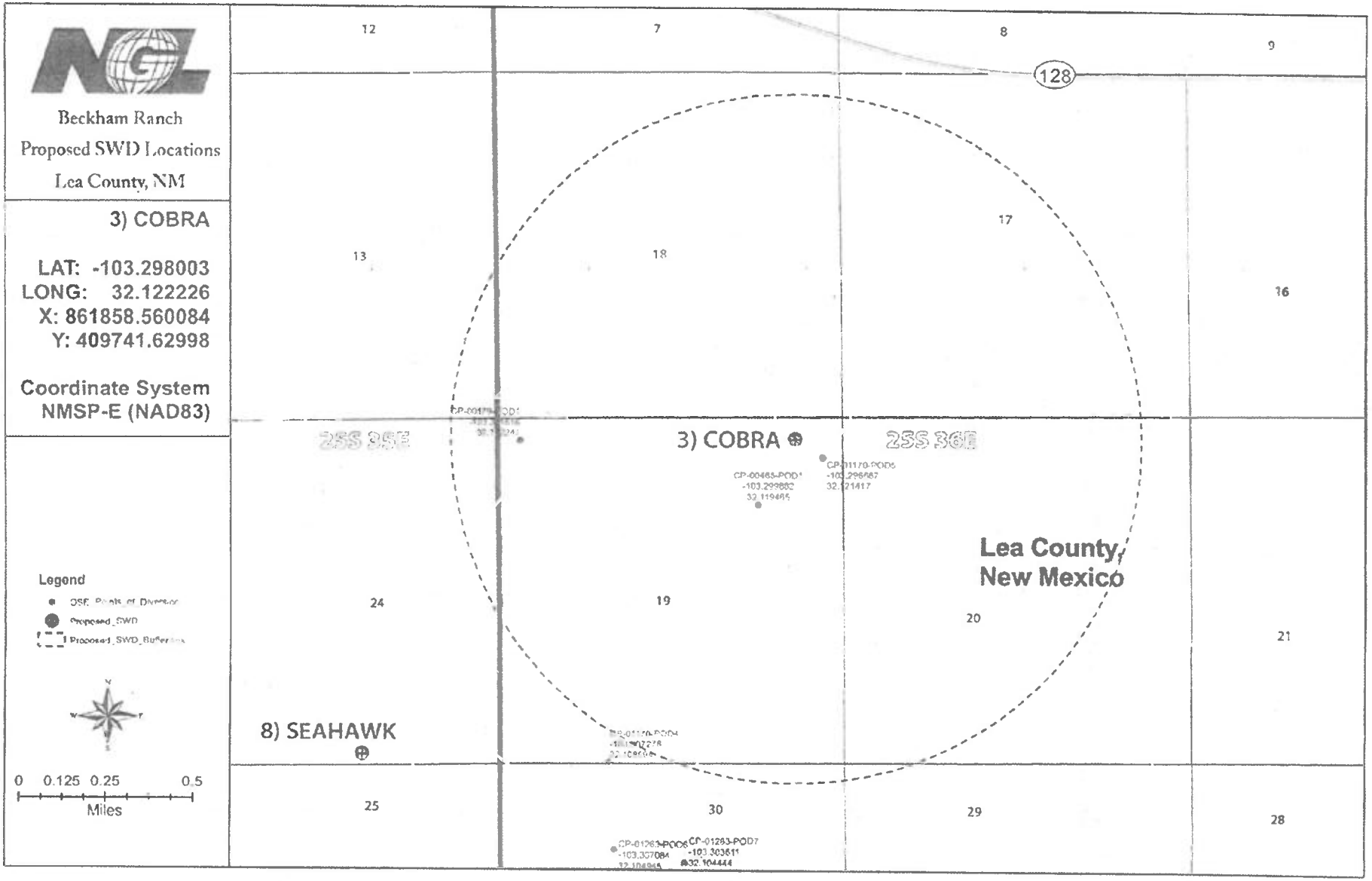
9/18/2018
Date of Survey

Signature and Seal of Professional Surveyor:

CODY A. CLARK
NEW MEXICO
23001
PROFESSIONAL SURVEYOR

23001
Certificate Number


Cobra SWD No. 1
1-Mile Offset Operators - OCD
NGL Water Solutions Permian, LLC
Lea Co., NM
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US FT)
Drawn by: ASG
Date: 9/28/2018
Approved by: FLR
LONQUIST & CO. LLC
AUSTIN HOUSTON WICHITA DENVER CALGARY
ONEENERGY PARTNERS OPERATING, LLC
-BC & D OPERATING INC
-NO ACTIVE WELLS
T25S R35E
T25S R36E
COBRA SWD NO.1
Offset Operators
-BC & D OPERATING INC
-NO ACTIVE WELLS
-ONEENERGY PARTNERS OPERATING, LLC
Source: Well SHL Data - NM-OCD (2018)
1 " = 1,125 '
1:13,500
0 500 1,000 1,500 2,000 4,000
Feet
EDDY
Map Extent
NEW MEXICO
TEXAS
LOVING


Beckham Ranch
Proposed SWD Locations
Lea County, NM
3) COBRA
LAT: -103.298003
LONG: 32.122226
X: 861858.560084
Y: 409741.62998
Coordinate System
NMSP-E (NAD83)
Legend
Proposed_SWD
0 0.125 0.25 0.5
Miles
12
7
8
9
128
13
18
17
16
24
19
20
21
25
30
29
28
25S 35E
25S 36E
3) COBRA
8) SEAHAWK
Lea County,
New Mexico

CASE NO. 16504 Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Cobra SWD #1 well a surface location 326 feet from the North line and 718 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. The target injection interval is the Silurian-Devonian formation at a depth of 15,600' - 17,261'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 6 miles west of Jal, New Mexico.

B

Attachments: Oct 15th correspondence

DATE IN 10/15/2013 SUSPENSE	ENGINEER PG	LOGGED IN 10/16/13	TYPE SWD	APP NO. PPRG1328950951

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

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]

BC & D Operating
30-025-25046
West Jal B Deep

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

Check One Only for [B] or [C]

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

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

[D] Other: Specify [SWD-1328] - Reapplication

[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 ✓ Potash ✓ (?)

[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.

Eddie W Seay	Eddie W Seay	Agent	10/1/2013
Print or Type Name	Signature	Title	Date

seay04@leaco.net
e-mail Address

EXHIBIT tabbies B-1

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X__Disposal _____Storage
Application qualifies for administrative approval? _____Yes _____No

II. OPERATOR: BC & D Operating, Inc.

ADDRESS: P.O. Box 302 Hobbs, NM 88241

CONTACT PARTY: Donnie Hill PHONE: 575-390-7626

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ____X__Yes _____No
If yes, give the Division order number authorizing the project: SWD - 1328

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: Donnie Hill TITLE: President

SIGNATURE: Donnie Hill DATE: 10/2/2013

E-MAIL ADDRESS: dhill@wellconsultant.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: Previously submitted when drilled

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

ATTACHMENT TO APPLICATION C-108

West Jal B Deep #1 (API 30-025-25046)
Unit H, Sect. 17, Tws. 25 S., Rng. 36 E.
Lea Co., NM

III. WELL DATA

A. 1) See injection well data sheets and attached schematics.
2) See injection well data sheets and attached schematics.
3) 4 1/2" coated tubing.
4) Baker Lock Set. Removed

B. 1) Injection formation is the Wolfcamp, Strawn, Atoka, Devonian and Fussleman.
2) Injection interval 11260′ to 16439′. 5139 original
3) Well was drilled as a producer.
4) The next higher producing zone is the Upper Bone Springs at approximately 7950′.
The next lower producing zone is the Ellenburger at approximately 18444′.

IV. NO.

V. MAP ATTACHED.

VI. LIST OF WELLS AND DATA ATTACHED.

VII. BC & D plans to pull existing equipment at the proposed well. Clean out all plugs down to approximately 17100′. Test casing for leaks. Run in hole and selectively perforate 7 and 5" casing from 11260′ to 16439′, acidize as needed. Go in hole with 4 ½" coated tubing and packer, and set at approximately 11160′ or 100 feet of top perforations. Load with packer fluid and run MIT as OCD requires and put on injection.

1) Plan to inject approximately 15,000 bpd of produced water from various sources of production.
2) Open system, commercial.
3) Average injection pressure should be approximately 0# to 3200# or whatever limit OCD allows.
4) Analysis attached, only ~~produced~~ water.
5) Produced water from various sources. Delaware, Bone Spring, WC Atoka/Strawn (Penn)

VIII. The proposed disposal formation is ~~Wolfcamp~~ Strawn, Atoka, Devonian and Fusselman which consists of porous fractual dolomite and carbonate.

The fresh water formation in the area is the Santa Rosa formation which ranges in thickness from 200′ to 600′. Analysis of water well attached.

IX. ACID AS NEEDED.

X. PREVIOUSLY SUBMITTED TO OCD.

XI. ATTACHED.

XII. I, Eddie W. Seay, have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zones and any underground source of drinking water pertaining to this well.

XIII. ATTACHED.

Side 1

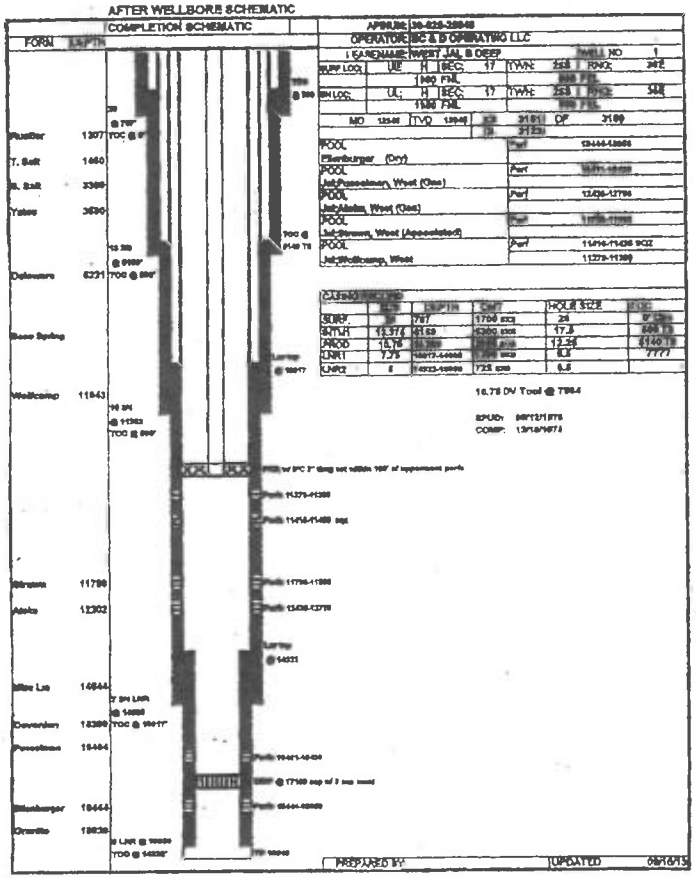
INJECTION WELL DATA SHEET

OPERATOR: BC + D Operating LLC

WELL NAME & NUMBER: West Jal B Deep #1

WELL LOCATION:	1980/N 660/E	H	17	25	36
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26 Casing Size: 20

Cemented with: 1700 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circ

Intermediate Casing

Hole Size: 17.5 Casing Size: 13.375

Cemented with: 5300 sx. *or* _____ ft³

Top of Cement: 590 Method Determined: TS

Production Casing

Hole Size: 12.25 Casing Size: 10.75

Cemented with: 2950 sx. *or* _____ ft³

Top of Cement: 5140 Method Determined: TS

Total Depth: 18945

LNR 1 7⅝ 1300 sx

LNR 2 5 750 sx

Injection Interval

11300 feet to 16439

(Perforated or Open Hole; indicate which)

~~Proposed 5139'~~
~~Proposed~~

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 4½ Lining Material: IPC

Type of Packer: Baker Loc Set

Packer Setting Depth: Approx 11280

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

Additional Data

1. Is this a new well drilled for injection? ____Yes X No

   If no, for what purpose was the well originally drilled? original drilled as producer (Dry) Approved for Fasselman SWD, but not converted

2. Name of the Injection Formation: Wolfcamp, Strawn, Atoka, Devonian and Fusselman

3. Name of Field or Pool (if applicable): Jal WC, Atoka, Strawn, Fusselman West

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.

   Ellenburger 18444 – 18888 - CIBP

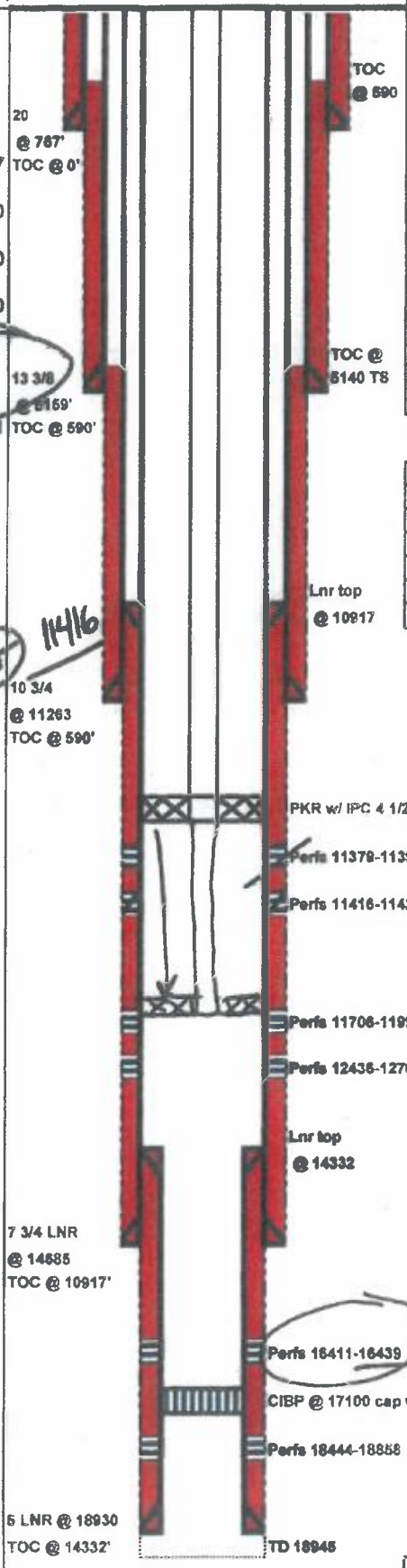
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

   Bone Springs is at 7950
   Ellenburger is at 18444

AFTER WELLBORE SCHEMATIC

COMPLETION SCHEMATIC

FORM	DEPTH
Rustler	1307
T. Salt	1460
B. Salt	3360
Yates	3590
Capitan	
Delaware	5221
Bone Spring	
Wolfcamp	10413
Strawn	11708
Atoka	12202
Miss Lm	14544
Devonian	15380
Fusselman	16404
Ellenburger	18444
Granite	18920



APINUM:	30-025-25046
OPERATOR:	BC & D OPERATING LLC
LEASENAME:	WEST JAL B DEEP
WELL NO.	1
SURF LOC:	UL: H SEC: 17 TWN: 25S RNG: 36E
	1980 FNL 660 FEL
BH LOC:	UL: H SEC: 17 TWN: 25S RNG: 36E
	1980 FNL 660 FEL
MD 18945	TVD 18945 KB 3151 DF 3150
	GL 3123

POOL Ellenburger (Dry)	Perf 18444-18858
POOL Jal;Fusselman, West (Gas)	Perf 16411-16439
POOL Jal;Atoka, West (Gas)	Perf 12436-12706
POOL Jal;Strawn, West (Associated)	Perf 11708-11995
POOL Jal;Wolfcamp, West	Perf 11416-11425 SQZ 11279-11399

CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF.	20	767	1700 sxs	26	0' Circ
INTM1	13.375	5159	5300 sxs	17.5	590 TS
PROD	10.75	11263	2950 sxs	12.25	~~5140 TS~~
LNR1	7.75	10917-14685	1300 sxs	9.5	????
LNR2	5	14332-18930	725 sxs	6.5	

10.75 DV Tool @ 7564

SPUD: 06/12/1975
COMP: 12/19/1975

Run CBL

Squeeze WC & lower packer to within 100 feet of top perfs at 11708ft

Per Conversation w/ D. Hill 02/04/2014

11708 x 0.2 = 2341 psi

Original

SWD - 1328
16411 - 16670

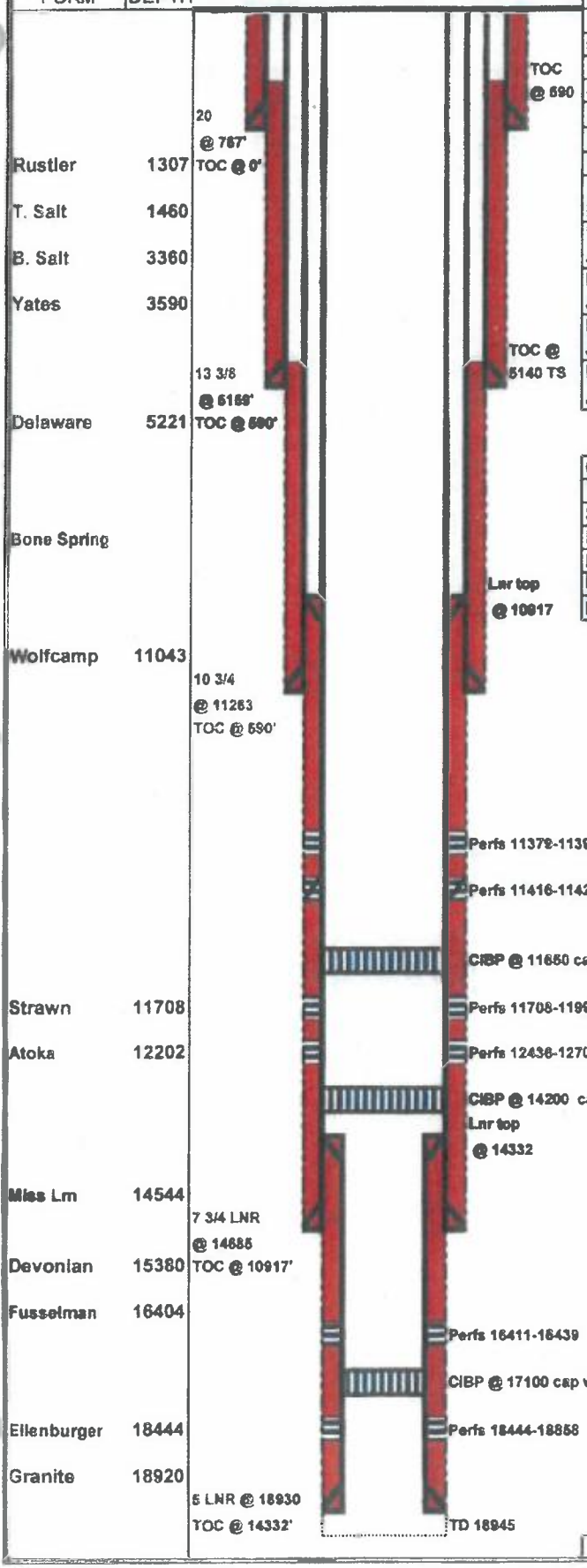
17065

PREPARED BY:

UPDATED 09/16/13

WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC



APINUM:	30-025-25046						
OPERATOR:	BC & D OPERATING LLC						
LEASENAME:	WEST JAL B DEEP					WELL NO.	1
SURF LOC:	UL: H	SEC: 17	TWN: 25S	RNG: 36E			
	1980 FNL		660 FEL				
BH LOC:	UL: H	SEC: 17	TWN: 25S	RNG: 36E			
	1980 FNL		660 FEL				
MD 18945	TVD 18945	KB 3151	DF 3150				
		GL 3123					

POOL	Perf	18444-18858
Ellenburger (Dry)		
POOL	Perf	16411-16439
Jal;Fusselman, West (Gas)		
POOL	Perf	12436-12706
Jal;Atoka, West (Gas)		
POOL	Perf	11708-11995
Jal;Strawn, West (Associated)		
POOL	Perf	11416-11425 SQZ
Jal;Wolfcamp, West		11279-11399

CASING RECORD

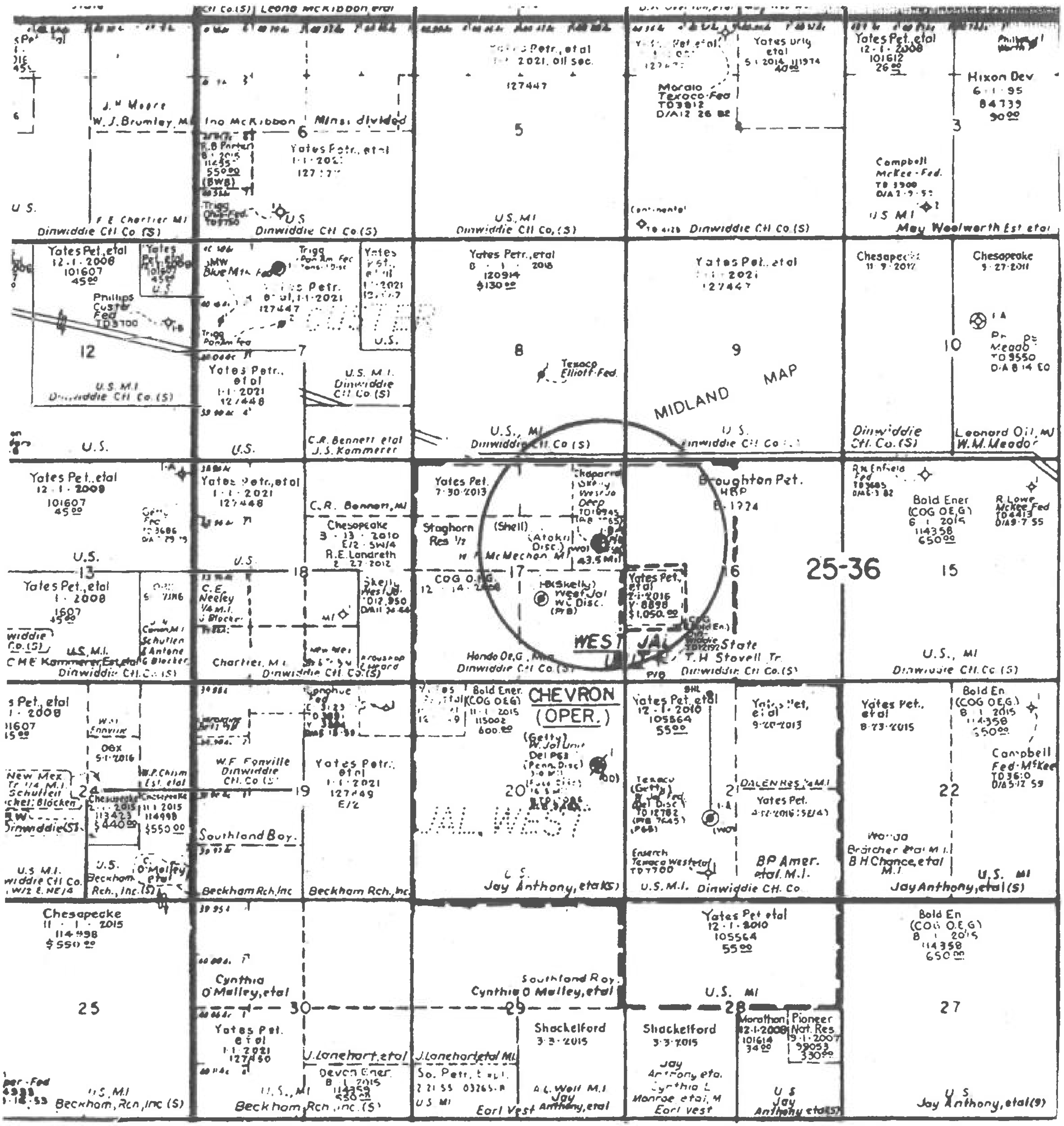
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF.	20	767	1700 sxs	26	0' Circ
INTM1	13.375	5159	5300 sxs	17.5	590 TS
PROD	10.75	11263	2950 sxs	12.25	5140 TS
LNR1	7.75	10917-14685	1300 sxs	9.5	10917
LNR2	5	14332-18930	725 sxs	6.5	14332

10.75 DV Tool @ 7564

Calculated

SPUD: 06/12/1975
COMP: 12/19/1975

PREPARED BY: | UPDATED 09/16/13



MIDLAND MAP
25-36
CHEVRON
(OPER.)
WEST JAL UNIT
JAL WEST
Yates Petr., etal
Yates Pet., etal
Dinwiddie Ctl Co (S)
Chesapeake
Bold Ener (COG O.E.G)
Staghorn Res 1/2
Broughton Pet.
Hixon Dev
Campbell McKee-Fed.
May Woolworth Est etal
Leonard Oil, MI W.M. Meador
C.R. Bennett etal J.S. Kammerer
Texaco Elliott Fed.
T.H. Stovell Tr.
Cynthia O'Malley, etal
Southland Roy.
Shackelford
Marathon
Pioneer Nat. Res.
Jay Anthony, etal (S)
Beckham Rch., Inc (S)
Earl Vest
Hondo O.E.G.
BP Amer. etal M.I.
U.S. MI

DISPOSAL WELL

API #	PROPERTY NAME	#	OPERATOR	TD	TYPE	STATUS	CO	LAND	U/L	SEC	TWN		RNG		N/S		E/W	
30-025-25046	WEST JAL B DEEP	1	BC&D OPERATING LLC	18945	I	A	Lea	P	H	17	25	S	36	E	1980	N	660	E

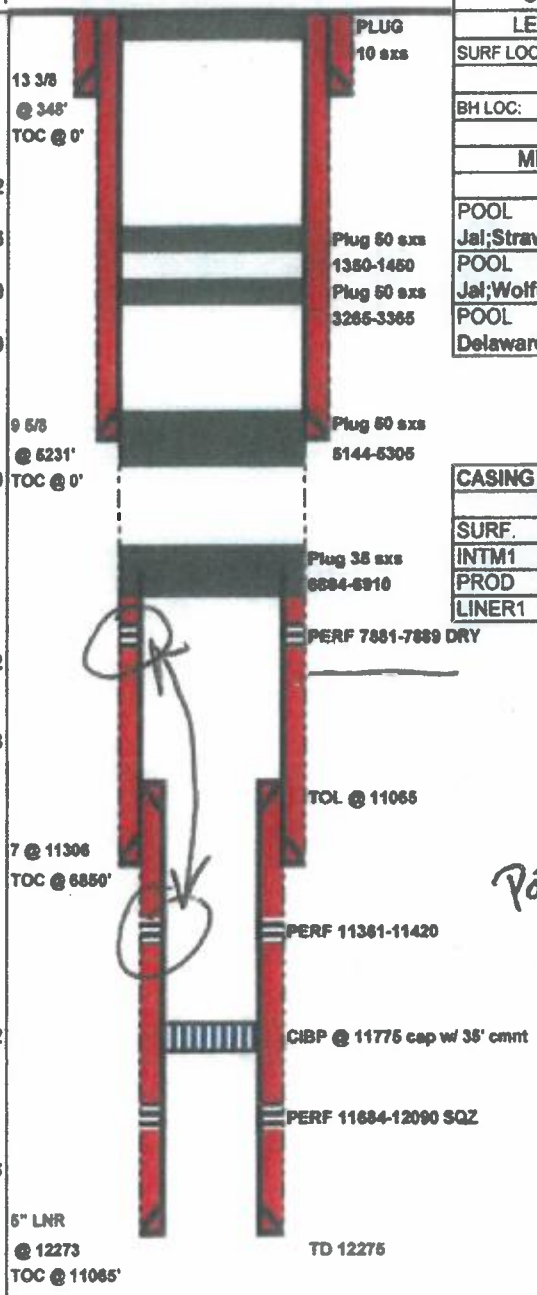
Wells within 1/2 mile penatrating proposed disposal interval.

(-1,-1)

API #	PROPERTY NAME	#	OPERATOR	TD	TYPE	STATUS	CO	LAND	U/L	SEC	TWN		RNG		N/S		E/W		Dist
30-025-20857	WEST JAL B	1	GETTY OIL COMPANY	12275	O	P	Lea	P	J	17	25	S	36	E	1980	S	1980	E	1866

WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC



FORM	DEPTH
Rustler	1252
T. Salt	1396
B. Salt	3320
Yates	3590
Delaware	5340
Bone Spring	7962
Wolfcamp	11053
Strawn	11572
Atoka	12238

APINUM:	30-025-20857						
OPERATOR:	GETTY OIL COMPANY						
LEASENAME:	WEST JAL B					WELL NO.	1
SURF LOC:	UL: J	SEC: 17		TWN: 25S		RNG:	36E
	1980 FSL			1980 FEL			
BH LOC:	UL: J	SEC: 17		TWN: 25S		RNG:	36E
	1980 FSL			1980 FEL			
MD 12275	TVD 12275	KB 3140		DF 3138			
		GL 3118					

POOL Jal;Strawn, West (Associated)	Perf 11684-12090 SQZ
POOL Jal;Wolfcamp, West	Perf 11361-11420
POOL Delaware (Dry)	Perf 7881-7889

CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF.	13.375	348	400 sxs	17.5	0' Circ
INTM1	9.625	5231	3155 sxs	12.25	0' Circ
PROD	7	11306	370 sxs	8.75	6850 est
LINER1	5	11065-12273	200 sxs	6.125	11065

SPUD: 03/12/1964
COMP: 05/16/1964
P&A: 10/31/1983

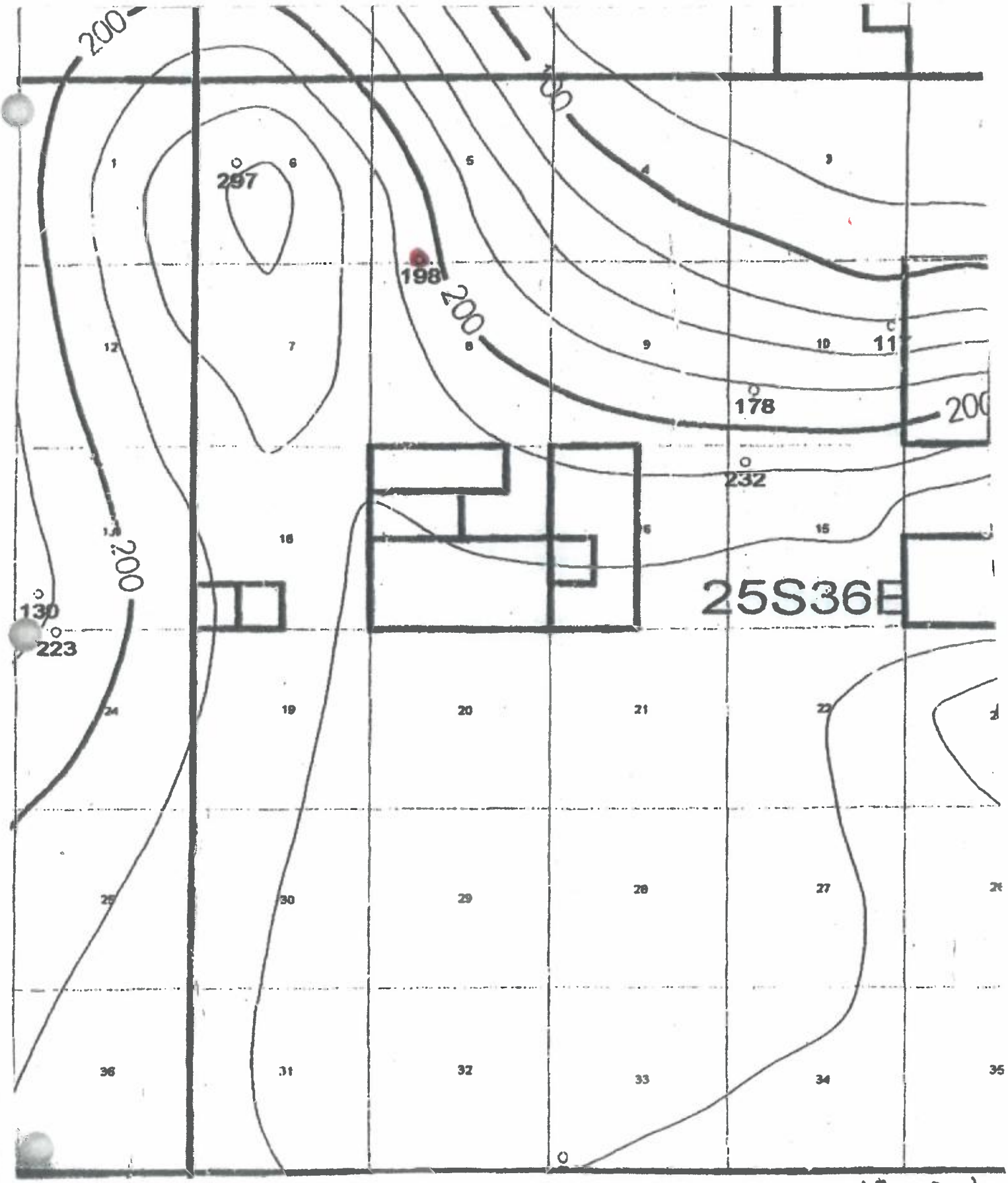
Potential for out of interval injection uphole between perfs

Remedial = remove WC from injection interval - squeeze BS perfs

PREPARED BY: | UPDATED 09/16/13

Water Sample Analysis

Pool	Location Section	Township	Range	Chlorides
North Justis Montoya	2	25S	37E	45440
North Justis McKee	2	25S	37E	58220
North Justis Fusselman	2	25S	37E	68533
North Justis Ellenburger	2	25S	37E	34151
Fowler Blinebry	22	24S	37E	116085
Skaggs Grayburg	18	20S	38E	84845
Warren McKee	18	20S	38E	85910
Warren Abo	19	20S	39E	91600
DK Drinkard	30	20S	39E	106855
Littman San Andres	8	21S	38E	38695
East Hobbs grayburg	29	18S	39E	6461
Halfway Yates	16	20S	32E	14768
Arkansas Junction San Andres	12	18S	36E	7171
Pearl Queen	28	19S	35E	114310
Midway Abo	17	17S	37E	38494
Lovinton Abo	31	16S	37E	22933
Lovington San Andres	3	16S	37E	4899
Lovington Paddock	31	16S	37E	93720
Mesa Queen	17	16S	32E	172530
Kemnitz Wolfcamp	27	16S	34E	49345
Hume Queen	9	16S	34E	124960
Anderson Ranch Wolfcamp	2	16S	32E	11040
Anderson Ranch Devonian	11	16S	32E	25702
Anderson Ranch Unit	11	16S	32E	23788
Caudill Devonian	9	15S	36E	20874
Townsend Wolfcamp	6	16S	36E	38695
Dean Permo Penn	5	16S	37E	44730
Dean Devonian	35	15S	36E	19525
South Denton Wolfcamp	26	15S	37E	54315
South Denton Devonian	36	15S	37E	34080
Medicine Rock Devonian	15	15S	38E	39760
Little Lucky Lake Devonian	29	15S	30E	23288
Wantz Abo	26	21S	37E	132770
Crosby Devonian	18	25S	37E	58220
Scarborough Yates Seven Rivers	7	26S	37E	3443(Reef)
Teague Simpson	34	23S	37E	114665
Teague Ellenburger	34	23S	37E	120345
Rhodes Yates 7 Rivers	27	26S	37E	144485
House SA	11	20S	38E	93365
House Drinkard	12	20S	38E	49700
South Leonard Queen	24	26S	37E	115375
Elliot Abo	2	21S	38E	55380
Scharb Bone Springs	5	19S	35E	30601
EK Queen	13	18S	34E	41890
East EK Queen	22	18S	34E	179630
Maljamar Grayburg SA	22	17S	32E	46079
Maljamar Paddock	27	17S	32E	115375
Maljamar Devonian	22	17S	32E	25418



Groundwater Map

CARDINAL Laboratories

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

Analytical Results For:

BC & D OPERATING P. O. BOX 302 HOBBS NM, 88241	Project: TOMMIE DINWIDDIE FWW #1 Project Number: NONE GIVEN Project Manager: DONNIE HILL Fax To: (575) 942-2005	Reported: 19-Sep-13 15:26

TOMMIE DINWIDDIE FWW #1

H302139-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories									
Inorganic Compounds									
Alkalinity, Bicarbonate	249	5.00	mg/L	1	3082302	AP	09-Sep-13	310.1	
Alkalinity, Carbonate	ND	0.00	mg/L	1	3082302	AP	09-Sep-13	310.1	
Chloride*	80.0	4.00	mg/L	1	3090904	AP	09-Sep-13	4500-Cl-B	
Conductivity	1060	1.00	uS/cm	1	3091004	AP	10-Sep-13	120.1	
pH*	7.50	0.100	pH Units	1	3091003	AP	10-Sep-13	9045	
Sulfate*	234	50.0	mg/L	5	3090903	AP	09-Sep-13	375.4	
TDS*	684	5.00	mg/L	1	3083008	AP	06-Sep-13	160.1	
Alkalinity, Total*	204	4.00	mg/L	1	3082302	AP	09-Sep-13	310.1	
Green Analytical Laboratories									
Total Recoverable Metals by ICP (E200.7)									
Calcium*	69.6	1.00	mg/L	1	B309142	JGS	17-Sep-13	EPA200.7	
Magnesium*	48.8	1.00	mg/L	1	B309142	JGS	17-Sep-13	EPA200.7	
Potassium*	7.41	1.00	mg/L	1	B309142	JGS	17-Sep-13	EPA200.7	
Sodium*	104	1.00	mg/L	1	B309142	JGS	17-Sep-13	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

OFFSET OPERATORS AND MINERALS

SURFACE OWNER
Dinwiddie Cattle Co.
P.O. Box 374
Roswell, NM 88202

MINERALS - LEASED
Yates Petroleum
105 S. Fourth St.
Artesia, NM 88210

OFFSET OPERATOR
NONE

OFFSET SURFACE & MINERALS
U.S. - BLM
620 E. Green St.
Carlsbad, NM 88220

POTASH AREA
Intercontinental Potash Corp.
600 W. Bender
Hobbs, NM 88240

Intrepid Potash
220 Red Cloud
Carlsbad, NM 88220

BC & D OPERATING, INC.

September 2013

RE: West Jal B Deep #1
Unit H, Sect. 17, T. 25 S., R. 36 E.
API 30-025-25046

Dear Sir:

In accordance with the Rules and Regulations of the Oil Conservation Division of the State of New Mexico, you are being provided a copy of the C-108, Application for Authorization to Inject into the above captioned well.

Any questions about the permit can be directed to Eddie W. Seay, (575)392-2236. Any objections or request for hearing must be filed with the Oil Conservation Division within fifteen (15) days from the date received. The OCD address is 1220 S. Saint Francis Drive, Santa Fe, NM 87504, (505)476-3440.

Thank you,

Eddie W. Seay

Eddie W. Seay, Agent
Eddie Seay Consulting
601 W. Illinois
Hobbs, NM 88242
(575)392-2236
seay04@leaco.net

7012 3050 0000 7665 3292

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ 2.24
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.89

Postmark Here
OCT 2 2013

Sent To
Dinwiddie Cattle Co.
Street, Apt. No.; or PO Box No.
P.O. Box 374
City, State, ZIP+4
Roswell, NM 99202

PS Form 3800, August 2006 See Reverse for Instructions

7012 1640 0000 2270 8796

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ 2.24
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.89

Postmark Here
OCT 2 2013

Sent To
U.S. - BLM
Street, Apt. No.; or PO Box No.
620 E. Green St.
City, State, ZIP+4
Carlsbad, NM 88220

PS Form 3800, August 2006 See Reverse for Instructions

7012 1640 0000 2270 8819

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ 2.24
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.89

Postmark Here
OCT 2 2013

Sent To
Intrepid Potash
Street, Apt. No.; or PO Box No.
220 Red Cloud
City, State, ZIP+4
Carlsbad, NM 88220

PS Form 3800, August 2006 See Reverse for Instructions

7012 1640 0000 2270 8802

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ 2.24
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.89

Postmark Here
OCT 2 2013

Sent To
Intercontinental Potash Corp.
Street, Apt. No.; or PO Box No.
600 W. Bender
City, State, ZIP+4
Hobbs, NM 88240

PS Form 3800, August 2006 See Reverse for Instructions

7012 3050 0000 7665 3308

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
OFFICIAL USE

Postage	$ 2.24
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 7.89

Postmark Here
OCT 2 2013

Sent To
Yates Petroleum
Street, Apt. No.; or PO Box No.
105 S. Fourth St.
City, State, ZIP+4
Artesia, NM 88210

PS Form 3800, August 2006 See Reverse for Instructions

LEGAL NOTICE

Pursuant to the rules and regulations of the Oil Conservation Division of the State of New Mexico, BC & D Operating, Inc., Box 302, Hobbs, NM 88241, is filing a C-108, Application for Salt Water Disposal. The well being applied for is the West Jal B Deep #1, API 30-025-25046, located in Unit H, Section 17, Township 25 South, Range 36 East, Lea Co., NM. The injection formations are the Wolfcamp, Strawn, Atoka, Devonian and the Fusselman from 11260′ to 16439′ below surface. Expected maximum injection rate is 15,000 bpd., and the expected maximum injection pressure is 3200 psi or what the OCD allows. Any questions about the application can be directed to Eddie W. Seay, (575)392-2236, or any objection or request for hearing must be directed to the Oil Conservation Division, (505)476-3440, 1220 South Saint Francis Drive, Santa Fe, NM 87504, within fifteen (15) days.

Affidavit of Publication

State of New Mexico,
County of Lea.

I, DANIEL RUSSELL
PUBLISHER
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
October 02, 2013
and ending with the issue dated
October 02, 2013

Daniel Russell

PUBLISHER
Sworn and subscribed to before me
this 2nd day of
October, 2013

Gussie Black

Notary Public

My commission expires
January 29, 2015
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-15

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 NOTICE
October 2, 2013

Pursuant to the rules and regulations of the Oil Conservation Division of the State of New Mexico, BC & D Operating, Inc., Box 302, Hobbs, NM 88241, if filing a C-108, Application for Salt Water Disposal. The well being applied for is the West Jal B Deep #1, API 30-025-25046, located in Unit H, Section 17, Township 25 South, Range 36 East, Lea Co., NM. The injection formations are the Wolfcamp, Strawn, Atoka, Devonian and the Fusselman from 11280' to 16439' below surface. Expected maximum injection rate is 15,000 bpd., and the expected maximum injection pressure is 3200 psi or what the OCD allows. Any questions about the application can be directed to Eddie W. Seay, (575)392-2236, or any objection or request for hearing must be directed to the Oil Conservation Division, (505)476-3440m 1220 South Saint Francis Drive, Santa Fe, NM 87504, within fifteen (15) days.
#28475

02100660 00123542
EDDIE/RENA SEAY
EDDIE SEAY CONSULTING
601 W. ILLINOIS
HOBBS, NM 88240

October 9, 2013

NMOCD Engineering
ATTN: Phillip R. Goetze
1220 S. St. Francis Dr.
Santa Fe, NM 87502

RE: BC & D Operating, Inc.
C-108 Application
West Jal B Deep #1

Mr. Goetze:

Find within Application for SWD. This well was previously approved as a SWD in the Fusselman, see copy of Permit attached SWD-1328, but was never converted.

Also, I am attaching a geological explanation of the Santa Rosa, which I know is a concern for this area.

Should you need anything further, please let me know.

Thanks,

Eddie W Seay

Eddie W. Seay, Agent
Eddie Seay Consulting
601 W. Illinois
Hobbs, NM 88242
575-392-2236
seay04@leaco.net

SANTA ROSA SANDSTONE

The Santa Rosa Sandstone consists primarily of red, white, gray or greenish-gray varies from a fine grain to coarse grain sandstone. In the vicinity of the West Jal B Deep # 1 well occurs at depth around 700 to 850'. In this area the Santa Rosa is of minor hydrological significance and there are no Santa Rosa water wells in the vicinity of the West Jal B Deep well #1. Consequently, the Santa Rosa water quality in this area is not known. However, over southern Lea County it yields small quantities of water, with some reports of wells producing 100 gpm. Santa Rosa water in the southern part of the county usually has high sulfate content.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

Administrative Order SWD-1328
April 20, 2012

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of 19.15.26.8B NMAC, Unified Operating, LLC seeks an administrative order to utilize its West Jal B Deep Well No. 1 (API 30-025-25046) located 1980 feet from the North line and 660 feet from the East line, Unit letter H of Section 17, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, for produced water disposal purposes.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Unified Operating, LLC, is hereby authorized to utilize its West Jal B Deep Well No. 1 (API 30-025-25046) located 1980 feet from the North line and 660 feet from the East line, Unit letter H of Section 17, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) into the Fusselman formation through perforations from 16411 feet to 16670 feet through lined tubing and a packer set less than 100 feet above the permitted disposal interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the proposed disposal interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC.

The wellhead injection pressure on the well shall be limited to **no more than 3282 psi.** In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

JAMI BAILEY
Director

JB/wvjj

cc: Oil Conservation Division – Hobbs

C-108 Review Checklist: Received 10/16/13 Add. Request: [Economics / HC potential; inactive status; WC removal from injection] Reply Date: ______ Suspended: ______ [Ver 13]

PERMIT TYPE: WFX / PMX / (SWD) Number: 1482 Permit Date: 06/10/14 Legacy Permits/Orders: SWD - 1328 [Injection 11411' to 16670' only]

Well No. 1 Well Name(s): West Jal B Deep

API : 30-0 25-25046 Spud Date: 06/12/1975 New or Old: Old (*UIC Class II Primacy 03/07/1982*)

Footages 1980 FNL / 660 FEL Lot — or Unit H Sec 17 Tsp 25S Rge 36 E County Lea

General Location: ~6mi west of Jal on NM128 Pool: [Jal; Wolfcamp West / ~~Jal; Atoka, West~~ / Jal; Fusselman / Jal; Strawn] Pool No.: 4 pools (see map)

BLM 100K Map: Jal Operator: BC&D Operating OGRID: 256770 Contact: E. Seay (C-108)

COMPLIANCE RULE 5.9: Total Wells: 3 Inactive: (2) Fincl Assur: Yes Compl. Order? No IS 5.9 OK? allowed Date: 06/10/2014
[Per D. Sanchez - approval of SWD allowed for 5.9 compl]

WELL FILE REVIEWED ✓ Current Status: P&A - former Atoka/Strawn/Fusselman producer - well plugged

WELL DIAGRAMS: NEW: Proposed ◯ or **RE-ENTER:** Before Conv. ✓ After Conv. ✓ Logs in Imaging: DIL/DLL; CNL-FDC; PML-ML/BCS

Planned Rehab Work to Well: Drill out CIBPs at 11650 and 14200; Use existing perfs + add perfs

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __ or Existing ✓ Surface	26 / 20	0 to ~~590~~ 767		1700	Cir to Surface
Planned __ or Existing ✓ (Interm)/Prod	17 1/2 / 13 3/8	0 to 5159	None	5300	Temp Survey / 590'
Planned __ or Existing __ Interm/Prod	12 1/4 / 10 3/4	0 to 11263	None	2950	Temp Survey / 5140
Planned __ or Existing __ Prod/(Liner)	9 1/2 / 7 3/4	10917 to 14605	None	1300	- Calc. to TOL (Cir?)
Planned __ or Existing (Liner)	6 1/2 / 5	14332 to 18930	None	725	- Calc. to TOL (Cir?)
Planned __ or Existing ✓ OH / (PERF)	Both liners	11708 to 16439	Inj Length (4731)		

Injection Stratigraphic Units:	Depths (ft) * WC removed	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.			—
Confining Unit: Litho. Struc. Por.	∅	Wolfcamp - Canyon/Cisco	
Proposed Inj Interval TOP:	11708	Strawn	11708
Proposed Inj Interval BOTTOM:	16439	Fusselman	16404
Confining Unit: Litho. Struc. Por.	∅	Montoya	—
Adjacent Unit: Litho. Struc. Por.		Simpson	—

Completion/Operation Details:

Drilled TD 18945 PBTD CIBP at 17,100

NEW TD —— NEW PBTD Same

NEW Open Hole ◯ or NEW Perfs ✓

Tubing Size 4 1/2 in. Inter Coated? Yes

Proposed Packer Depth —— ft

Min. Packer Depth 11608 (100-ft limit)

Proposed Max. Surface Press. 3200 psi

Admin. Inj. Press. 2342 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P No Noticed? Yes BLM Sec Ord No WIPP No Noticed? NA SALT/SALADO T: 1460 B: 3360 CLIFF HOUSE NA

FRESH WATER: Aquifer Capitan, Santa Rosa ... not required Max Depth ≈600 shallow **HYDRO AFFIRM STATEMENT** By Qualified Person ✓

NMOSE Basin: Capitan CAPITAN REEF: thru ✓ adj ◯ NA ◯ No. Wells within 1-Mile Radius? ∅ FW Analysis ✓ for well N of West 321B

Disposal Fluid: Formation Source(s) BS / Delaware / WC / Penn Analysis? Info provided - Go-Tech On Lease ◯ Operator Only ◯ or Commercial ● Only

Disposal Int: Inject Rate (Avg/Max BWPD): 15000 Protectable Waters? No Source: Historical System: Closed ✓ or Open ◯

HC Potential: Producing Interval? No Formerly Producing? Yes Gas - Atoka/Fuss/Strawn - depleted Method: Logs/DST/(P&A)/Other / Production History 2-Mile Radius Pool Map ✓

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 1 Horizontals? ∅

Penetrating Wells: No. Active Wells ∅ Num Repairs? — on which well(s)? —— Diagrams? ——

Penetrating Wells: No. P&A Wells 1 Num Repairs? (1) on which well(s)? [Has open perfs in WC & BS - remedial required if ...] Diagrams? Yes

NOTICE: Newspaper Date 10/2/2013 Mineral Owner Fee Surface Owner Fee N. Date 10/2/13

RULE 26.7(A): Identified Tracts? Yes Affected Persons: BLM / SLO / Yates N. Date 10/2/13

Permit Conditions: Issues: AOR well open perfs; calc. TOC for liners

Add Permit Cond: WC removed from injection interval - squeeze WC perfs in well;

West Jal B Deep #1

API 30-025-25046 County, Lea

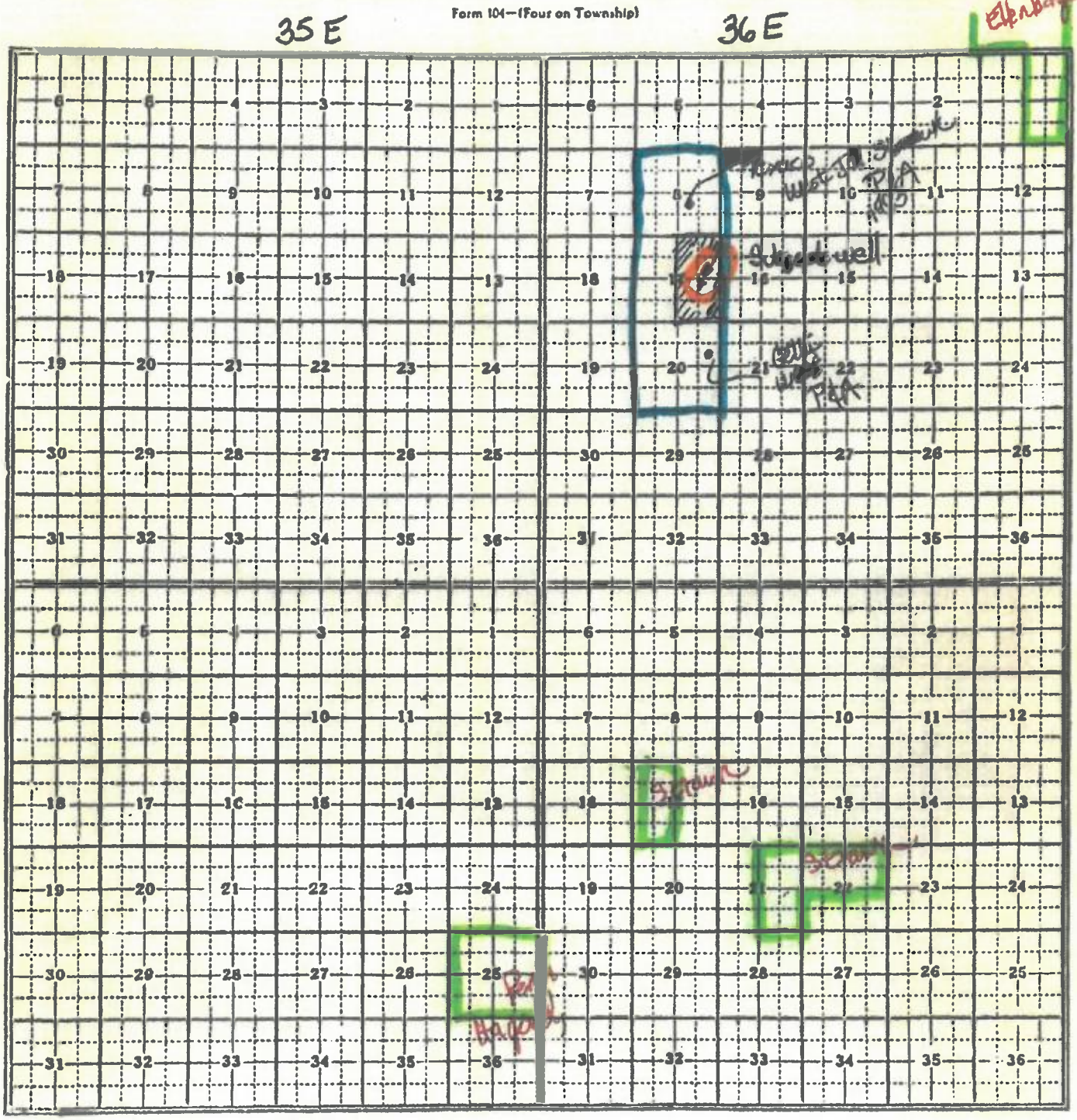
Township 25S Range 35E

Township 26S Range 35E

Township 25S Range 36E

Township 26S Range 36E

Form 104—(Four on Township)



Jal; Wolfcamp, West
Jal; Atoka, West
Jal; Fusselman West Gas - Associated - No producers
Jal; Strawn, West
No Devonian pools

Production Summary Report
API: 30-025-25046
[312747] WEST JAL B DEEP #001
Printed On: Friday, January 31 2014

			Production				Injection				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	2883	217	30	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	1702	318	31	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	1623	93	30	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	3359	390	31	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	2047	90	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	1605	84	28	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	2886	90	31	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	7892	92	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	1664	0	31	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1229	95	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	1639	91	31	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	1681	239	31	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	2904	834	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	2260	558	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	1802	465	30	0	0	0	0	0
1998	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	1758	345	28	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	1465	267	31	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	1182	242	28	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	1153	243	31	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	1720	399	25	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	1754	445	31	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1313	145	25	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	1188	28	16	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	1066	3	31	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	1381	0	30	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	1532	0	31	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	1511	0	30	0	0	0	0	0
1999	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	962	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	2086	42	26	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	1635	0	29	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	1450	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	1313	0	30	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	1734	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1496	0	30	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	3254	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	3184	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	1606	0	30	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	1364	0	31	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	1154	0	30	0	0	0	0	0
2000	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	1472	0	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	1532	453	31	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	0	0	0	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	0	0	0	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	1065	450	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	1355	394	31	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	812	0	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	82	820	0	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	849	0	31	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	852	0	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	693	0	31	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	6	1070	117	30	0	0	0	0	0
2001	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	56	2255	642	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	1008	0	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	741	0	28	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	803	0	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	681	0	30	0	0	0	0	0

Production Summary Report
API: 30-025-25046
[312747] WEST JAL B DEEP #001
Printed On: Friday, January 31 2014

			Production				Injection				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
1992 Cum	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	4117	547927	3936	99	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	20	5307	0	28	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	3055	0	24	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	2169	0	26	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	3551	0	30	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	2783	0	31	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	3123	0	30	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	2798	0	31	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	17	3166	0	28	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	98	2320	0	30	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	66	4945	0	31	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	3	3753	0	30	0	0	0	0	0
1993	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	96	4814	0	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	5	3743	815	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	101	2773	0	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	1	2625	0	30	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	May	19	3314	0	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	15	4897	1290	30	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	4296	0	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	5	4238	0	29	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	6	3876	0	30	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	7	3846	0	31	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	12	3249	780	30	0	0	0	0	0
1994	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	8	3122	775	31	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	3361	1023	31	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	2840	924	28	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	2098	990	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	2959	0	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	May	1	2918	609	24	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1882	3	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	2247	73	31	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	2373	138	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	2063	0	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	2981	248	31	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	2614	889	30	0	0	0	0	0
1995	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	2512	636	31	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	2521	730	24	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	2206	836	29	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	1740	811	30	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	1784	687	25	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	2252	461	31	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	2259	75	30	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	2136	10	31	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	1917	18	31	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	1699	22	30	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	1	2837	389	30	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	1854	161	30	0	0	0	0	0
1996	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	1975	128	31	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	4	2318	309	30	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	1666	81	28	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	1695	93	31	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	2580	324	30	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	May	3780	1723	84	31	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1613	355	30	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	2172	126	31	0	0	0	0	0
1997	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	1689	102	31	0	0	0	0	0

Production Summary Report
API: 30-025-25046
[312747] WEST JAL B DEEP #001
Printed On: Friday, January 31 2014

		Production					Injection				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
2002	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	904	216	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	626	0	30	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	716	0	29	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	884	0	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	1671	0	30	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	1572	0	31	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	972	0	30	0	0	0	0	0
2002	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	840	0	31	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	953	0	31	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	631	0	28	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	691	0	31	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	610	0	30	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	642	0	31	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	1556	0	30	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	1078	993	25	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	848	1031	25	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	795	830	29	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	873	673	25	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	690	467	28	0	0	0	0	0
2003	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	808	460	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Jan	0	801	227	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Feb	0	647	174	29	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Mar	0	692	100	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Apr	0	711	203	30	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	May	0	497	120	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Jun	0	440	35	30	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Jul	0	441	30	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Aug	0	621	0	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Sep	0	773	0	30	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Oct	0	944	0	31	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Nov	0	896	33	30	0	0	0	0	0
2004	[33810] JAL;STRAWN, WEST (ASSOC)	Dec	0	261	136	17	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Jan	0	3987	1578	9	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Feb	0	524	495	22	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Mar	0	702	23	31	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Apr	0	522	0	30	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	May	0	544	0	31	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Jun	0	181	0	30	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Jul	0	79	0	31	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Aug	0	0	0	31	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Sep	0	0	0	0	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Oct	0	0	0	0	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Nov	0	0	0	0	0	0	0	0	0
2005	[79160] JAL;FUSSELMAN, WEST (GAS)	Dec	0	0	0	0	0	0	0	0	0
2006	[33813] JAL;WOLFCAMP, WEST	Aug	0	1048	0	31	0	0	0	0	0
2006	[33813] JAL;WOLFCAMP, WEST	Sep	0	916	0	30	0	0	0	0	0
2006	[33813] JAL;WOLFCAMP, WEST	Oct	0	779	0	31	0	0	0	0	0
2006	[33813] JAL;WOLFCAMP, WEST	Nov	0	357	0	30	0	0	0	0	0
2006	[33813] JAL;WOLFCAMP, WEST	Dec	0	486	0	30	0	0	0	0	0
2006	[79160] JAL;FUSSELMAN, WEST (GAS)	Jan	0	0	0	0	0	0	0	0	0
2006	[79160] JAL;FUSSELMAN, WEST (GAS)	Feb	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Jan	0	8	0	30	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Feb	0	141	0	14	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Mar	0	78	0	19	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Apr	0	49	0	30	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	May	0	0	7	31	0	0	0	0	0

Production Summary Report
API: 30-025-25046
[312747] WEST JAL B DEEP #001
Printed On: Friday, January 31 2014

			Production				Injection				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
2007	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2007	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2008	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2009	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2010	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2011	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0

Production Summary Report
API: 30-025-25046
[312747] WEST JAL B DEEP #001
Printed On: Friday, January 31 2014

		Production					Injection				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBLS)	Days P/I	Water(BBLS)	Co2(MCF)	Gas(MCF)	Other	Pressure
2012	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0
2012	[33813] JAL;WOLFCAMP, WEST	Dec	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Jan	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Feb	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Mar	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Apr	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	May	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Jun	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Jul	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Aug	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Sep	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Oct	0	0	0	0	0	0	0	0	0
2013	[33813] JAL;WOLFCAMP, WEST	Nov	0	0	0	0	0	0	0	0	0

Inactive Well List

Total Well Count: 3 Inactive Well Count: 3
Printed On: Tuesday, February 04 2014

District	API	Well	ULSTR	OCD Unit	OGRID	Operator	Lease Type	Well Type	Last Production	Formation/Notes	Status	TA Exp Date
1	30-025-11873	G W SHAHAN #002	B-33-25S-37E	B	25670	BC & D OPERATING INC.	P	G	07/2011	RET TO PROD 10/05/2009		
1	30-025-07281	PEOPLES SECURITY #001	L-23-16S-38E	L	25670	BC & D OPERATING INC.	P	O	08/2009	SAN ANDRES, 04/11/07 PUT BK ON PROD		
1	30-025-25046	WEST JAL B DEEP #001	H-17-25S-36E	H	25670	BC & D OPERATING INC.	P	G	04/2007	FUSSELMAN		

WHERE Ogrid:25670, County:All, District:All, Township:All, Range:All, Section:All, Production(months):15, Excludes Wells Under ACOI, Excludes Wells in Approved TA Period

Inactive Well List

Total Well Count: 3 Inactive Well Count: 3
Printed On: Wednesday, May 14 2014

District	API	Well	ULSTR	OCD Unit	OGRID	Operator	Lease Type	Well Type	Last Production	Formation/Notes	Status	TA Exp Date
1	30-025-11873	G W SHAHAN #002	B-33-25S-37E	B	25670	BC & D OPERATING INC.	P	G	07/2011	RET TO PROD 10/05/2009		
1	30-025-07281	PEOPLES SECURITY #001	L-23-16S-38E	L	25670	BC & D OPERATING INC.	P	O	08/2009	SAN ANDRES, 04/11/07 PUT BK ON PROD		
1	30-025-25046	WEST JAL B DEEP #001	H-17-25S-36E	H	25670	BC & D OPERATING INC.	P	G	04/2007	FUSSELMAN		

WHERE Ogrid:25670, County:All, District:All, Township:All, Range:All, Section:All, Production(months):15, Excludes Wells Under ACOI, Excludes Wells in Approved TA Period

Returned to production
Confirmed by Hobbs

Complete SWD Conversion per D. Sanchez to resolve IW status

State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order SWD-1482
June 10, 2014

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, BC & D Operating, Incorporated (the "operator") seeks an administrative order to re-enter and re-complete its West Jal B Deep Well No. 1 with a location of 1980 feet from the North line and 660 feet from the East line, Unit letter H of Section 17, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico, for produced water, commercial disposal purposes. The subject well was previously approved for injection into the Silurian Fusselman formation under Administrative Order SWD-1328 approved April 20, 2012.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, BC & D Operating, Incorporated (OGRID 25670), is hereby authorized to utilize its West Jal B Deep Well No. 1 (API 30-025-25046) with a location of 1980 feet from the North line and 660 feet from the East line, Unit letter H of Section 17, Township 25 South, Range 36 East, NMPM, Lea County, for commercial disposal of oil field produced water (UIC Class II only) through perforations into an interval consisting of the Strawn, Atoka, Mississippian, Devonian, and Fusselman formations from 11708 feet to 16439 feet. Injection will occur through internally-coated, 4 ½-inch or smaller tubing and a packer set within 100 feet of the permitted interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application with the following stipulations.

operator shall squeeze cement the open perforations located from 11379 feet to

EXHIBIT
tabbies
B-2

11399 feet that are located in the Wolfcamp formation. Accordingly, the packer set and tubing shall be lowered to be within 100 feet of the upper peroration 11708 feet.

The operator shall run a cement bond log following the cement squeeze of the perforations showing the cement placement for the 7 ¾-inch and 5-inch liners. The operator shall supply the Division's district I office with a copy prior to commencing injection.

The operator of this well shall run an injection survey (tracer/temperature or equivalent) of the injection interval within two (2) years after commencing disposal into this well. The operator will supply both the Division district I office and Santa Fe Bureau office with a copy of each survey log. If the Division does not receive of the log within the prescribed time period, then this disposal permit shall be terminated ipso facto.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2342 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district I office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.

JAMI BAILEY
Director

JB/prg

cc: Oil Conservation Division – Hobbs District Office


C

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

APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC FOR APPROVAL OF SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO

CASE NO. 16504

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative of NGL Water Solutions Permian LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was provided under a notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 28th day of May, 2019 by Deana M. Bennett.

OFFICIAL SEAL
Karlene Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02/27/2021

Notary Public

My commission expires:_____

Cobra

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
1	9314 8699 0430 0057 4719 49	The Ohio State University P.O. Box 182646 Columbus OH 43210	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
2	9314 8699 0430 0057 4719 56	West Texas A & M University, formerly West Texas State University 2501 4th Ave. Canyon TX 79016	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
3	9314 8699 0430 0057 4719 63	Beverly B. Blair 2635 Bamboo Dr. Lake Havasue Cty AZ 86403	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
4	9314 8699 0430 0057 4719 70	Nancy I. Farmer 5136 E. 35th St. Tulsa OK 74135	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
5	9314 8699 0430 0057 4719 87	Marilyn Burke Salter 20031 82nd Ave., West Edmonds WA 98026	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
6	9314 8699 0430 0057 4719 94	J. L. Burke, III 8928 Meadowknoll Dr. Dallas TX 75243	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
7	9314 8699 0430 0057 4720 07	Doyle Hartman 500 N. Main St. #2 Midland TX 79701	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
8	9314 8699 0430 0057 4720 14	Estate of Judkins T. Walton, dec'd Janet Walton, possible widow 5602 Camden, Midland TX 79707	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
9	9314 8699 0430 0057 4720 21	St. Joseph Residence, Inc. PO Box 580460, Tulsa OK 74158	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
10	9314 8699 0430 0057 4720 38	8 Way Oil & Gas, Inc. 214 West Texas, Suite 900 Midland TX 79701	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
11	9314 8699 0430 0057 4720 45	Kassandra Dawn Dittmer 464 S 150 E., Ivins, UT 84728 Ivins UT 84728	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
12	9314 8699 0430 0057 4720 52	Nathan Allen Dittmer 464 S 150 E., Ivins, UT 84728 Ivins UT 84728	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
13	9314 8699 0430 0057 4720 69	Geneva Louise Magaro 3535 Westphalia Rd. Mattituck NY 11952	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
14	9314 8699 0430 0057 4720 76	Helen Hudgens Ferrell 1824 Rain Tree, Flagstaff AZ 86004	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice

NEW MEXICO 87102 ALBUQUERQUE MAR 29 2019

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
15	9314 8699 0430 0057 4720 83	James Albert Watts 7211 Herrington, NE #172 Belmont MI 49306	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
16	9314 8699 0430 0057 4720 90	Rowena Lynn Doss Oclon 11n322 N. Gale St. Elgin IL 60120	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
17	9314 8699 0430 0057 4721 06	Oil Conservation Division District IV 1220 South St. Francis Drive Santa Fe NM 87505	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
18	9314 8699 0430 0057 4721 13	Oil Conservation Division District I - Hobbs 1625 N. French Drive Hobbs NM 88240	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
19	9314 8699 0430 0057 4721 20	NGL WATER SOLUTIONS PERMIAN, LLC 1509 W Wall St., Ste. 306 Midland TX 79701	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
20	9314 8699 0430 0057 4721 37	BUREAU OF LAND MGMT 301 Dinosaur Trail Santa Fe NM 87508	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
21	9314 8699 0430 0057 4721 44	ONEENERGY PARTNERS OPERATING, LLC 2929 ALLEN PARKWAY SUITE 200 Houston TX 77019	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
22	9314 8699 0430 0057 4721 51	BC & D OPERATING INC 1008 WEST BROADWAY Hobbs NM 88240	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
23	9314 8699 0430 0057 4721 68	CHEVRON USA INC 6301 DEAUVILLE Midland TX 79706	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
24	9314 8699 0430 0057 4721 75	EOG Y RESOURCES INC 105 S 4TH ST Artesia NM 88210	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
25	9314 8699 0430 0057 4721 82	EOG M RESOURCES INC 105 S 4TH ST Artesia NM 88210	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
26	9314 8699 0430 0057 4721 99	EOG A RESOURCES INC 105 S 4TH ST Artesia NM 88210	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
27	9314 8699 0430 0057 4722 05	EOG RESOURCES INC PO Box 2267 Midland TX 79702	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
28	9314 8699 0430 0057 4722 12	AMEREDEV NEW MEXICO LLC 5707 Southwest Parkway Bldg. 1, Suite 275 Austin TX 79702	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
29	9314 8699 0430 0057 4722 29	ENERGEN RESOURCES CORPORATION 605 Richard Arrington Jr. Blvd. Birmingham AL 35203	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
30	9314 8699 0430 0057 4722 36	ONEENERGY PARTNERS OPERATING LLC 2929 Allen Parkway, Suite 200 Houston TX 77019	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
31	9314 8699 0430 0057 4722 43	BC OPERATING CO P.O. Box 50820 Midland TX 79710	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
32	9314 8699 0430 0057 4722 50	MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston TX 77056	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
33	9314 8699 0430 0057 4722 67	KEW DRILLING 4925 Greenville Avenue, Suite 500 Dallas TX 75206	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
34	9314 8699 0430 0057 4722 74	Blackbeard Resources, LLC 201 W Wall St. Midland TX 79701	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
35	9314 8699 0430 0057 4722 81	KEW Drilling 4925 Greenville Ave #500 Dallas TX 75206	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
36	9314 8699 0430 0057 4722 98	Resonance Resources Energy, LLC 9337B Katy Frwy #315 Houston TX 77024	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
37	9314 8699 0430 0057 4723 04	Lilis Energy, Inc One Riverway Ste #1700 Houston TX 77002	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
38	9314 8699 0430 0057 4723 11	Cristyn B. Casey 412 Rockwood Ln. Allenspark CO 80510	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
39	9314 8699 0430 0057 4723 28	Hycook Corporation 1719 1 Natl Bldg Oklahoma City OK 73111	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
40	9314 8699 0430 0057 4723 35	CBR Oil Properties, LLC P.O. Box 1518 Roswell NM 88202	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
41	9314 8699 0430 0057 4723 42	Norman L. Stevens P.O. Box 1 Hondo NM 88336	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
42	9314 8699 0430 0057 4723 59	Flag-Redfern Oil Corporation 1200 Wall Towers W Midland TX 79701	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
43	9314 8699 0430 0057 4723 66	Lynne C. Dittmer 3169 N. Redwood Rd Walkerton IN 46574	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
44	9314 8699 0430 0057 4723 73	Randall Properties P.O. Box 187 Midland TX 79702	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
45	9314 8699 0430 0057 4723 80	John A. Dittmer 3525 W. Ottowa St. Crawfordsville IN 47933	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
46	9314 8699 0430 0057 4723 97	Rosalind Marie Doss 1635 Maple Ln. Apt. 4 Elgin IL 60123	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
47	9314 8699 0430 0057 4724 03	Donald Woods 714 Center St. Ruidoso NM 88345	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
48	9314 8699 0430 0057 4724 10	Lilis Energy, Inc 300 E. Sonterra Blvd., Suite 1220 San Antonio TX 78258	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
49	9314 8699 0430 0057 4724 27	Chaparrel Oil, LLC 701 Cedar Lake Blvd Oklahoma City OK 73114	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
50	9314 8699 0430 0057 4724 34	CIE Bristol Acquisitions, LP 2100 Utica Ave., #175 Tulsa OK 74114	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
51	9314 8699 0430 0057 4724 41	Geneva Louise Magaro 21 Pond Lane Hastings on Hudson NY 17607	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
52	9314 8699 0430 0057 4724 58	Helen Hudgens Ferrell 4935 E. Verkamp Dr. Flagstaff AZ 86004	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
53	9314 8699 0430 0057 4724 65	James Albert Watts 7211 Herrington Ave. NE Belmont MI 49306	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
54	9314 8699 0430 0057 4724 72	Brenda Katherine Erwin 430 Mitchell Road Greenfield TN 38230	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
55	9314 8699 0430 0057 4724 89	Michelle Lorraine Erwin 2620 Cty. Road 224 Water Valley MS 38965	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
56	9314 8699 0430 0057 4724 96	Rowena Lynn Doss Oclon 11n322 Gale Str. Elgin IL 60123	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
57	9314 8699 0430 0057 4725 02	Catholic Charities Diocese of Tulsa ATTN: Laurie Perkins 2450 N. Harvard Ave. Tulsa OK 74115	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
58	9314 8699 0430 0057 4725 19	Barbara Dawn Cromartie 155 Ocean Lane Drive, Apt. 1003 Key Biscayne FL 33149	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
59	9314 8699 0430 0057 4725 26	Starr C. Miller 2839 Hillcrest Circle Naperville IL 60564	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice

ALBUQUERQUE NEW MEXICO 87101 MAR 29 2019 USPS

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
60	9314 8699 0430 0057 4725 33	Brad Daniel Wofford, III 16 Cordova Street Saint Augustine FL 32084	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
61	9314 8699 0430 0057 4725 40	Rosalind Allen Wofford 16 Cordova Street Saint Augustine FL 32084	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
62	9314 8699 0430 0057 4725 57	Kathleen A. Smith 2683 Antioch Road Perry OH 44081	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
63	9314 8699 0430 0057 4725 64	James L. Bowers 631 N. Central Ave. Chicago IL 60644	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
64	9314 8699 0430 0057 4725 71	Edward A. Bowers 4405 Bradley Lane Arlington TX 76017	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
65	9314 8699 0430 0057 4725 88	Ellen Blanford 4335 Bradley Lane Arlington TX 76017	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
66	9314 8699 0430 0057 4725 95	Brenda Sue Bowers-Shafer Hc 67 Box 218 Nogal NM 88341	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
67	9314 8699 0430 0057 4726 01	Rebecca Stitt 3415 Merlin Dr. Clearwater FL 33761	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
68	9314 8699 0430 0057 4726 18	Vivian Smith Jones 2086 Old Train Road Deltona FL 32738	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
69	9314 8699 0430 0057 4726 25	Margaret Joyce Couls 6902 Marbach Road Apt 206 San Antonio TX 78227	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
70	9314 8699 0430 0057 4726 32	Robert Dixon Smith 1242 Brightwell Dr. Holiday FL 34690	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
71	9314 8699 0430 0057 4726 49	Quinton C. Smith 300 Lee Str. Oldsmar FL 34677	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
72	9314 8699 0430 0057 4726 56	Michael E. McCarley 510 Surrey Street Wilmington NC 28401	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
73	9314 8699 0430 0057 4726 63	Susan Rebecca McCarley 6707 McCalley Court Wilmington NC 28411	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
74	9314 8699 0430 0057 4726 70	Robert A. McCarley 3377 Zacharys Path SE Bolivia NC 28422	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED
03/29/2019

Firm Mailing Book ID: 163925

Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
75	9314 8699 0430 0057 4726 87	Hampton Lee Smith 5948 Covered CreeK Lane, No. L Jacksonville FL 32277	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
76	9314 8699 0430 0057 4726 94	Clifton J. Smith 6404 Mitford Road Jacksonville FL 32210	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
77	9314 8699 0430 0057 4727 00	Richard A. Whittington 561 Nightingale Dr. Indialantic FL 32903	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
78	9314 8699 0430 0057 4727 17	Steven R. Fine 6314 E. 76th Place Tulsa OK 74136	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
79	9314 8699 0430 0057 4727 24	YMO, LLC ATTN: Deborah Falcon or Laura Melancon, Managers 1461 Addie Gail Lane Lake Charles LA 70605	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
80	9314 8699 0430 0057 4727 31	Billi Orr Willauer 124 Kensington Dr. Spartanburg SC 29306	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
81	9314 8699 0430 0057 4727 48	Babbs Orr Brown 209 Nautical Way Greenwood SC 29649	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
82	9314 8699 0430 0057 4727 55	Mary Frances Orr Gibbs 6314 Gill Creek Road Columbia SC 29206	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
83	9314 8699 0430 0057 4727 62	Theodore Arthur Dittmer 1458 Friendship Lane W. Colorado Springs CO 80904	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
84	9314 8699 0430 0057 4727 79	Robin Dawn Dittmer 464 S. 150 E Ivins UT 84738	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
85	9314 8699 0430 0057 4727 86	Kassandra Dawn Dittmer 464 S. 150 E. Ivins UT 84738	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
86	9314 8699 0430 0057 4727 93	Nathan A. Dittmer 4601 N. Hwy 91 Cedar City UT 84721	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
87	9314 8699 0430 0057 4728 09	D.Y. Thompson C/O Richard A. Counts 104 Earls Ct. Lynchburg VA 24503	$1.60	$3.50	$1.60	87806-0003	$0.00 Notice
		Totals:	$139.20	$304.50	$139.20		$0.00
						Grand Total:	$582.90

List Number of Pieces Listed by Sender: 87

Total Number of Pieces Received at Post Office:

Postmaster: Name of receiving employee:

Dated:

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID: 163925
Generated: 5/28/2019 12:19:08 PM

USPS Article Number	Date Created	Name 1	Name 2	Address	City	State	Zip	Mail Status	Service Options	Mail Delivery Date
9314869904300057472809	2019-03-29 7:44 AM	D.Y. Thompson C/O Richard A. Count		104 Earls Ct.	Lynchburg	VA	24503	To be Returned	Return Receipt - Electronic	
9314869904300057472793	2019-03-29 7:44 AM	Nathan A. Dittmer		4601 N. Hwy 91	Cedar City	UT	84721	To be Returned	Return Receipt - Electronic	
9314869904300057472786	2019-03-29 7:44 AM	Kassandra Dawn Dittmer		464 S. 150 E.	Ivins	UT	84738	To be Returned	Return Receipt - Electronic	
9314869904300057472779	2019-03-29 7:44 AM	Robin Dawn Dittmer		464 S. 150 E	Ivins	UT	84738	Delivered	Return Receipt - Electronic	04-27-2019
9314869904300057472762	2019-03-29 7:44 AM	Theodore Arthur Dittmer		1458 Friendship Lane W.	Colorado Springs	CO	80904	Lost	Return Receipt - Electronic	
9314869904300057472755	2019-03-29 7:44 AM	Mary Frances Orr Gibbs		6314 Gall Creek Road	Columbia	SC	29206	Delivered	Return Receipt - Electronic	04-04-2019
9314869904300057472748	2019-03-29 7:44 AM	Babbs Orr Brown		209 Nautical Way	Greenwood	SC	29649	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472731	2019-03-29 7:44 AM	Bill Orr Willauer		124 Kensington Dr.	Spartanburg	SC	29306	Delivered	Return Receipt - Electronic	04-09-2019
9314869904300057472724	2019-03-29 7:44 AM	YMO, LLC ATTN: Deborah Falconer	Laura Melancon, Managers	1461 Addie Gail Lane	Lake Charles	LA	70605	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472717	2019-03-29 7:44 AM	Steven R. Fine		6314 E. 76th Place	Tulsa	OK	74136	To be Returned	Return Receipt - Electronic	
9314869904300057472700	2019-03-29 7:44 AM	Richard A. Whittington		561 Nightingale Dr.	Indialantic	FL	32903	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472694	2019-03-29 7:44 AM	Clifton J. Smith		6408 Mitford Road	Jacksonville	FL	32210	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472687	2019-03-29 7:44 AM	Hampton Lee Smith		5948 Covered Creek Lane, No. 1	Jacksonville	FL	32277	Delivered	Return Receipt - Electronic	05-16-2019
9314869904300057472670	2019-03-29 7:44 AM	Robert A. McCarley		3377 Zacherys Path SE	Bolivia	NC	28422	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472663	2019-03-29 7:44 AM	Susan Rebecca McCarley		6707 McCarley Court	Wilmington	NC	28411	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472656	2019-03-29 7:44 AM	Michael E. McCarley		510 Surrey Street	Wilmington	NC	28401	Delivered	Return Receipt - Electronic	05-07-2019
9314869904300057472649	2019-03-29 7:44 AM	Quenton C. Smith		300 Lee Str.	Oldsmar	FL	34677	Delivered	Return Receipt - Electronic	04-11-2019
9314869904300057472632	2019-03-29 7:44 AM	Robert Dixon Smith		1242 Brightwell Dr.	Holiday	FL	34690	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472625	2019-03-29 7:44 AM	Margaret Joyce Couls		6902 Marbach Road Apt 206	San Antonio	TX	78227	Lost	Return Receipt - Electronic	
9314869904300057472618	2019-03-29 7:44 AM	Vivian Smith Jones		2086 Old Train Road	Deltona	FL	32738	Delivered	Return Receipt - Electronic	04-29-2019
9314869904300057472601	2019-03-29 7:44 AM	Rebecca Stitt		3435 Merlin Dr	Clearwater	FL	33761	Lost	Return Receipt - Electronic	
9314869904300057472595	2019-03-29 7:44 AM	Brenda Sue Bowers-Shafer		Hc 67 Box 218	Nogal	NM	88341	Delivered	Return Receipt - Electronic	04-04-2019
9314869904300057472588	2019-03-29 7:44 AM	Ellen Blanford		4335 Bradley Lane	Arlington	TX	76017	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472571	2019-03-29 7:44 AM	Edward A. Bowers		4405 Bradley Lane	Arlington	TX	76017	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472564	2019-03-29 7:44 AM	James L. Bowers		633 N. Central Ave.	Chicago	IL	60644	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472557	2019-03-29 7:44 AM	Kathleen A. Smith		2683 Antioch Road	Perry	OH	44081	Delivered	Return Receipt - Electronic	04-23-2019
9314869904300057472540	2019-03-29 7:44 AM	Rosalind Allen Wofford		16 Cordova Street	Saint Augustine	FL	32084	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472533	2019-03-29 7:44 AM	Brad Daniel Wofford, III		16 Cordova Street	Saint Augustine	FL	32084	Delivered	Return Receipt - Electronic	04-10-2019
9314869904300057472526	2019-03-29 7:44 AM	Starr C. Miller		2839 Hillcrest Circle	Naperville	IL	60564	Lost	Return Receipt - Electronic	
9314869904300057472519	2019-03-29 7:44 AM	Barbara Dawn Cromartie		155 Ocean Lane Drive, Apt 1005	Key Biscayne	FL	33149	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472502	2019-03-29 7:44 AM	Catholic Charities Diocese of Tulsa	ATTN: Laurie Perkins	2450 N. Harvard Ave.	Tulsa	OK	74115	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472496	2019-03-29 7:44 AM	Rowena Lynn Doss Oclon		11n322 Gale Str.	Elgin	IL	60123	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472489	2019-03-29 7:44 AM	Michelle Lorraine Frwin		2620 Cty. Road 224	Water Valley	MS	38965	Delivered	Return Receipt - Electronic	04-11-2019
9314869904300057472472	2019-03-29 7:44 AM	Brenda Katherine Erwin		430 Mitchell Road	Greenfield	TN	38230	Delivered	Return Receipt - Electronic	04-08-2019
9314869904300057472465	2019-03-29 7:44 AM	James Albert Watts		7211 Herrington Ave. NE	Belmont	MI	49306	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472458	2019-03-29 7:44 AM	Helen Hudgens Ferrell		4935 E. Verkamp Dr.	Flagstaff	AZ	86004	To be Returned	Return Receipt - Electronic	
9314869904300057472441	2019-03-29 7:44 AM	Geneva Louise Magaro		21 Pond Lane	Hastings on Hudson	NY	17607	Delivered	Return Receipt - Electronic	04-29-2019
9314869904300057472434	2019-03-29 7:44 AM	CIE Bristol Acquisitions, LP		2100 Utica Ave., #175	Tulsa	OK	74114	To be Returned	Return Receipt - Electronic	
9314869904300057472427	2019-03-29 7:44 AM	Chaparrel Oil, LLC		701 Cedar Lake Blvd	Oklahoma City	OK	73114	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472410	2019-03-29 7:44 AM	Lilis Energy, Inc		300 E. Sonterra Blvd., Suite 1220	San Antonio	TX	78258	Lost	Return Receipt - Electronic	
9314869904300057472403	2019-03-29 7:44 AM	Donald Woods		714 Center St.	Ruidoso	NM	88345	To be Returned	Return Receipt - Electronic	
9314869904300057472397	2019-03-29 7:44 AM	Rosalind Marie Doss		1635 Maple Ln. Apt. 4	Elgin	IL	60123	Delivered	Return Receipt - Electronic	04-22-2019
9314869904300057472380	2019-03-29 7:44 AM	John A. Dittmer		3525 W. Ottowa St.	Crawfordsville	IN	47933	Delivered	Return Receipt - Electronic	04-15-2019
9314869904300057472373	2019-03-29 7:44 AM	Randall Properties		P.O. Box 187	Midland	TX	79702	Delivered	Return Receipt - Electronic	04-04-2019
9314869904300057472366	2019-03-29 7:44 AM	Lynne C. Dittmer		3169 N. Redwood Rd	Walkerton	IN	46574	To be Returned	Return Receipt - Electronic	
9314869904300057472359	2019-03-29 7:44 AM	Flag-Redfern Oil Corporation		1200 Wall Towers W	Midland	TX	79701	Delivered	Return Receipt - Electronic	04-15-2019
9314869904300057472342	2019-03-29 7:44 AM	Norman L. Stevens		P.O. Box 1	Hondo	NM	88336	Delivered	Return Receipt - Electronic	04-24-2019
9314869904300057472335	2019-03-29 7:44 AM	CBR Oil Properties, LLC		P.O. Box 1538	Roswell	NM	88202	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472328	2019-03-29 7:44 AM	Hycook Corporation		1719 1 Natl Bldg	Oklahoma City	OK	73111	To be Returned	Return Receipt - Electronic	
9314869904300057472311	2019-03-29 7:44 AM	Cristyn B. Casey		412 Rockwood Ln.	Allenspark	CO	80510	To be Returned	Return Receipt - Electronic	
9314869904300057472304	2019-03-29 7:44 AM	Lilis Energy, Inc		One Riverway Ste #1700	Houston	TX	77002	Delivered	Return Receipt - Electronic	04-09-2019
9314869904300057472298	2019-03-29 7:44 AM	Resonance Resources Energy, LLC		9337B Katy Frwy #315	Houston	TX	77024	Delivered	Return Receipt - Electronic	04-03-2019
9314869904300057472281	2019-03-29 7:44 AM	KEW Drilling		4925 Greenville Ave #500	Dallas	TX	75206	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472274	2019-03-29 7:44 AM	Blackbeard Resources, LLC		201 W Wall St.	Midland	TX	79701	Delivered	Return Receipt - Electronic	05-06-2019
9314869904300057472267	2019-03-29 7:44 AM	KEW DRILLING		4925 Greenville Avenue, Suite 500	Dallas	TX	75206	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472250	2019-03-29 7:44 AM	MARATHON OIL PERMIAN LLC		5555 San Felipe St.	Houston	TX	77056	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472243	2019-03-29 7:44 AM	BC OPERATING CO		P.O. Box 50820	Midland	TX	79710	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472236	2019-03-29 7:44 AM	OMEENERGY PARTNERS OPERATING LLC		2929 Allen Parkway, Suite 200	Houston	TX	77019	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472229	2019-03-29 7:44 AM	ENERGEN RESOURCES CORPORATION		605 Richard Arrington Jr. Blvd.	Birmingham	AL	35203	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472212	2019-03-29 7:44 AM	AMEREDEV NEW MEXICO LLC		5707 Southwest Parkway Bldg. 1, Suite 275	Austin	TX	78702	To be Returned	Return Receipt - Electronic	
9314869904300057472205	2019-03-29 7:44 AM	EOG RESOURCES INC		PO Box 2267	Midland	TX	79702	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472199	2019-03-29 7:44 AM	EOG A RESOURCES INC		105 S 4TH ST	Artesia	NM	88210	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472182	2019-03-29 7:44 AM	EOG M RESOURCES INC		105 S 4TH ST	Artesia	NM	88210	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472175	2019-03-29 7:44 AM	EOG Y RESOURCES INC		105 S 4TH ST	Artesia	NM	88210	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472168	2019-03-29 7:44 AM	CHEVRON USA INC		6301 DEAUVILLE	Midland	TX	79706	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472151	2019-03-29 7:44 AM	BC & O OPERATING INC		1008 WEST BROADWAY	Hobbs	NM	88240	Lost	Return Receipt - Electronic	
9314869904300057472144	2019-03-29 7:44 AM	ONEENERGY PARTNERS OPERATING, LLC		2929 ALLEN PARKWAY SUITE 200	Houston	TX	77019	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472137	2019-03-29 7:44 AM	BUREAU OF LAND MGMT		301 Dinosaur Trail	Santa Fe	NM	87508	To be Mailed	Return Receipt - Electronic	
9314869904300057472120	2019-03-29 7:44 AM	NGL WATER SOLUTIONS PERMIAN, LLC		1509 W Wall St., Ste. 306	Midland	TX	79701	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472113	2019-03-29 7:44 AM	Oil Conservation Division District I - Hobbs		1625 N. French Drive	Hobbs	NM	88240	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472106	2019-03-29 7:44 AM	Oil Conservation Division District IV		1220 South St. Francis Drive	Santa Fe	NM	87505	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472090	2019-03-29 7:44 AM	Rowena Lynn Doss Oclon		11n322 N. Gale St.	Elgin	IL	60120	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472083	2019-03-29 7:44 AM	James Albert Watts		7211 Herrington, NE #172	Belmont	MI	49306	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472076	2019-03-29 7:44 AM	Helen Hudgens Ferrell		1824 Rain Tree,	Flagstaff	AZ	86004	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472069	2019-03-29 7:44 AM	Geneva Louise Magaro		3535 Westphalia Rd	Mattituck	NY	11952	To be Returned	Return Receipt - Electronic	
9314869904300057472052	2019-03-29 7:44 AM	Nathan Allen Dittmer		464 S 150 E., Ivins, UT 84738	Ivins	UT	84738	Delivered	Return Receipt - Electronic	04-04-2019
9314869904300057472045	2019-03-29 7:44 AM	Kassandra Dawn Dittmer		464 S 150 E., Ivins, UT 84738	Ivins	UT	84738	Delivered	Return Receipt - Electronic	04-04-2019
9314869904300057472038	2019-03-29 7:44 AM	B Way Oil & Gas, Inc.		214 West Texas, Suite 900	Midland	TX	79701	Lost	Return Receipt - Electronic	
9314869904300057472021	2019-03-29 7:44 AM	St. Joseph Residence, Inc.		PO Box 580460,	Tulsa	OK	74158	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057472014	2019-03-29 7:44 AM	Estate of Judkins T. Walton, dec'd	Janet Walton, possible widow	5602 Camden,	Midland	TX	79707	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057472007	2019-03-29 7:44 AM	Doyle Hartman		500 N. Main St. #2	Midland	TX	79703	Delivered	Return Receipt - Electronic	04-02-2019
9314869904300057471994	2019-03-29 7:44 AM	J. L. Burke, III		8928 Meadowknoll Dr.	Dallas	TX	75243	Delivered	Return Receipt - Electronic	04-08-2019
9314869904300057471987	2019-03-29 7:44 AM	Marilyn Burke Salter		20031 82nd Ave.,	West Edmonds	WA	98026	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057471970	2019-03-29 7:44 AM	Nancy I. Farmer		5136 E. 35th St.	Tulsa	OK	74135	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057471963	2019-03-29 7:44 AM	Beverly B. Blau		2635 Bamboo Dr.	Lake Havasue City	AZ	86403	Delivered	Return Receipt - Electronic	05-16-2019
9314869904300057471956	2019-03-29 7:44 AM	West Texas A & M University, formerly West Texas	State University	2501 4th Ave.	Canyon	TX	79016	Delivered	Return Receipt - Electronic	04-01-2019
9314869904300057471949	2019-03-29 7:44 AM	The Ohio State University		P.O. Box 182646	Columbus	OH	43210	Delivered	Return Receipt - Electronic	04-11-2019

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, 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
May 17, 2019
and ending with the issue dated
May 17, 2019.

Publisher

Sworn and subscribed to before me this 17th day of May 2019.

Circulation Clerk

My commission expires
October 29, 2022
(Seal)

OFFICIAL SEAL
Amity E. Hipp
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: 10/29/22

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

GAL LEGA LEGAL

LEGAL NOTICE
MAY 17, 2019

CASE NO. 16504: Notice to all affected parties, as well as the heirs and devisees of THE OHIO STATE UNIVERSITY; WEST TEXAS A & M UNIVERSITY, FORMERLY WEST TEXAS STATE UNIVERSITY; BEVERLY B. BLAIR; NANCY I. FARMER; MARILYN BURKE SALTER; J. L. BURKE, III; DOYLE HARTMAN; ESTATE OF JUDKINS T. WALTON, DEC'D JANET WALTON; ST. JOSEPH RESIDENCE, INC.; 8 WAY OIL & GAS, INC.; KASSANDRA DAWN DITTMER; NATHAN ALLEN DITTMER; GENEVA LOUISE MAGARO; HELEN HUDGENS FERRELL; JAMES ALBERT WATTS; ROWENA LYNN DOSS OCLON; BUREAU OF LAND MGMT; ONEENERGY PARTNERS OPERATING, LLC; BC & D OPERATING INC; CHEVRON USA INC; EOG Y RESOURCES INC; EOG M RESOURCES INC; EOG A RESOURCES INC; EOG RESOURCES INC; AMEREDEV NEW MEXICO LLC; ENERGEN RESOURCES CORPORATION; ONEENERGY PARTNERS OPERATING LLC; BC OPERATING CO; MARATHON OIL PERMIAN LLC; KEW DRILLING; BLACKBEARD RESOURCES, LLC; RESONANCE RESOURCES ENERGY, LLC; LILIS ENERGY, INC; CRISTYN B. CASEY; HYCOOK CORPORATION; CBR OIL PROPERTIES, LLC; NORMAN L. STEVENS; FLAG-REDFERN OIL CORPORATION; LYNNE C. DITTMER; RANDALL PROPERTIES; JOHN A. DITTMER; ROSALIND MARIE DOSS; DONALD WOODS; CHAPARREL OIL, LLC; CIE BRISTOL ACQUISITIONS, LP; BRENDA KATHERINE ERWIN; MICHELLE LORRAINE ERWIN; CATHOLIC CHARITIES DIOCESE OF TULSAATTN: LAURIE PERKINS; BARBARA DAWN CROMARTIE; STARR C. MILLER; BRAD DANIEL WOFFORD, III; ROSALIND ALLEN WOFFORD; KATHLEEN A. SMITH; JAMES L. BOWERS; EDWARD A. BOWERS; ELLEN BLANFORD; BRENDA SUE BOWERS-SHAFER; REBECCA STITT; VIVIAN SMITH JONES; MARGARET JOYCE COULS; ROBERT DIXON SMITH; QUINTON C. SMITH; MICHAEL E. MCCARLEY; SUSAN REBECCA MCCARLEY; ROBERT A. MCCARLEY; HAMPTON LEE SMITH; CLIFTON J. SMITH; RICHARD A. WHITTINGTON; STEVEN R. FINE; YMO, LLC ATTN: DEBORAH FALCON OR LAURA MELANCON, MANAGERS; BILLI ORR WILLAUER; BABBS ORR BROWN; MARY FRANCES ORR GIBBS; THEODORE ARTHUR DITTMER; ROBIN DAWN DITTMER; KASSANDRA DAWN DITTMER; NATHAN A. DITTMER; D.Y. THOMPSON C/O RICHARD A. COUNTS that NGL Water Solutions Permian, LLC, 1509 W. Wall Street. Suite 306, Midland, Texas 79701 has filed an amended application for hearing along with a C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for approval of salt water disposal well in Lea County, New Mexico. In its amended application, NGL seeks an order approving disposal into the Silurian-Devonian formation through the Cobra SWD #1 well a surface location 325 feet from the North line and 268 feet from the East line of Section 19, Township 25 South, Range 36 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. The target injection interval is the Silurian-Devonian formation at a depth of 15,600' - 17,261'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 6 miles west of Jal, New Mexico. This case is currently set for a public hearing by the State of New Mexico, through its Oil Conservation Division, at 8:15 a.m. on May 30, 2019, to consider this application.

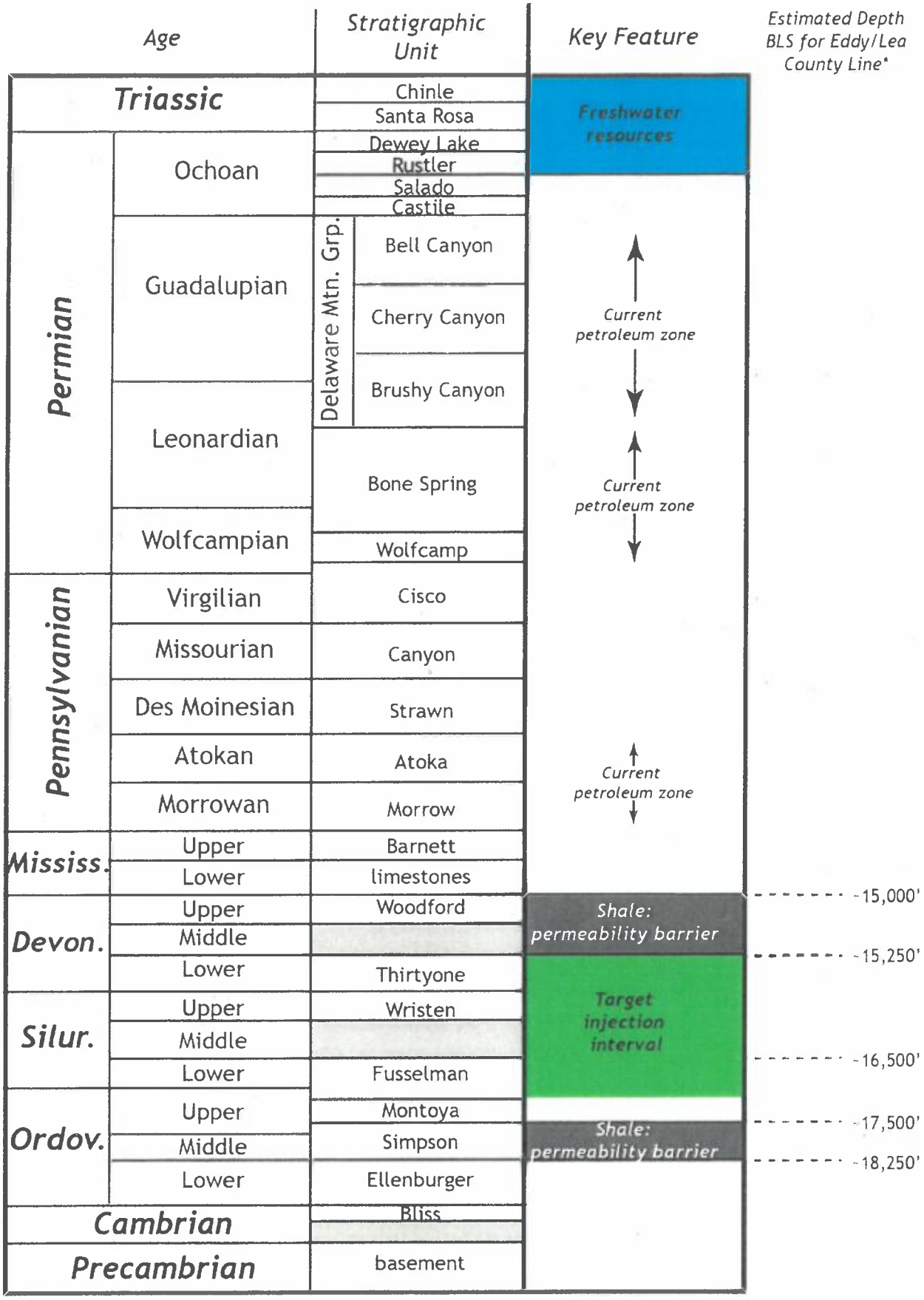
CASE NO. 20150: Notice to all affected parties, as well as the heirs and devisees of NEW MEXICO STATE LAND OFFICE; BUREAU OF LAND MGMT; EOG RESOURCES INC; LETA T. DILLON FAMILY LIMITED PARTNERSHIP C/O JAMES PATRICK KNIGHT; CENTENNIAL RESOURCE PRODUCTION, LLC that NGL Water Solutions Permian, LLC, 1509 W. Wall Street. Suite 306, Midland, Texas 79701 has filed an amended application for hearing along with a C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for approval of salt water disposal well in Lea County, New Mexico. In its amended application, NGL seeks an order approving disposal into the Silurian-Devonian formation through the Maverick SWD #1 well at a surface location 1086 feet from the South line and 151 feet from the East line of Section 29, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. NGL seeks authority to inject salt water into the Silurian-Devonian formation at a depth of 16,615' to 18,265'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles northwest of Jal, NM. This case is currently set for a public hearing by the State of New Mexico, through its Oil Conservation Division, at 8:15 a.m. on May 30, 2019, to consider this application.

CASE NO. 16506: NOTICE TO ALL AFFECTED PARTIES, AS WELL AS THE HEIRS AND DEVISEES OF NEW MEXICO STATE LAND OFFICE; BUREAU OF LAND MGMT; EOG RESOURCES INC; FORTIS MINERALS II, LLC; YATES BROTHERS, A PARTNERSHIP; EOG RESOURCES, INC.; EOG RESOURCES Y, INC.; EOG RESOURCES M, INC.; EOG RESOURCES A, INC.; EOG RESOURCES ASSETS LLC; CENTENNIAL RESOURCE PRODUCTION, LLC; NOVO OIL AND GAS NORTHERN DELAWARE, LLC; BLACK MOUNTAIN OPERATING LLC; JETSTREAM OIL AND GAS PARTNERS, LP; ENERGEN RESOURCES CORPORATION; COG OPERATING, LLC; SUGARBERRY OIL & GAS CORPORATION; FREDERICKSBURG ROYALTY, LTD.; MARATHON OIL PERMIAN LLC; ADVANCE ENERGY PARTNERS, LLC; MRC PERMIAN COMPANY; PEGASUS RESOURCES, LLC; TAP ROCK RESOURCES, LLC; AGS OG HOLDINGS #2 INC; AGS OG HOLDINGS INC; MIDWEST RES 2006-1 O&G INCOME; MIDWEST RES 98-1 O&G INCOME LP; MIDWEST RES 99-1 O&G INCOME LP; AGS OG VENTURES INC; AGS OG 2005 LLLP; TE-RAY RESOURCES INC that NGL Water Solutions Permian, LLC, 1509 W. Wall Street. Suite 306, Midland, Texas 79701 has filed an amended application for hearing along with a C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for approval of salt water disposal well in Lea County, New Mexico. In its amended application, NGL seeks an order approving disposal into the Silurian-Devonian formation through the Harpoon SWD #1 well at a surface location 900 feet from the South line and 150 feet from the West line of Section 27, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. NGL seeks authority to inject salt water into the Silurian-Devonian formation at a depth of 16,960' to 18,850'.NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 16.3 miles northwest of Jal, New Mexico. This case is currently set for a public hearing by the State of New Mexico, through its Oil Conservation Division, at 8:15 a.m. on May 30, 2019, to consider this application.

#34170

ALBUQUERQUE, NM

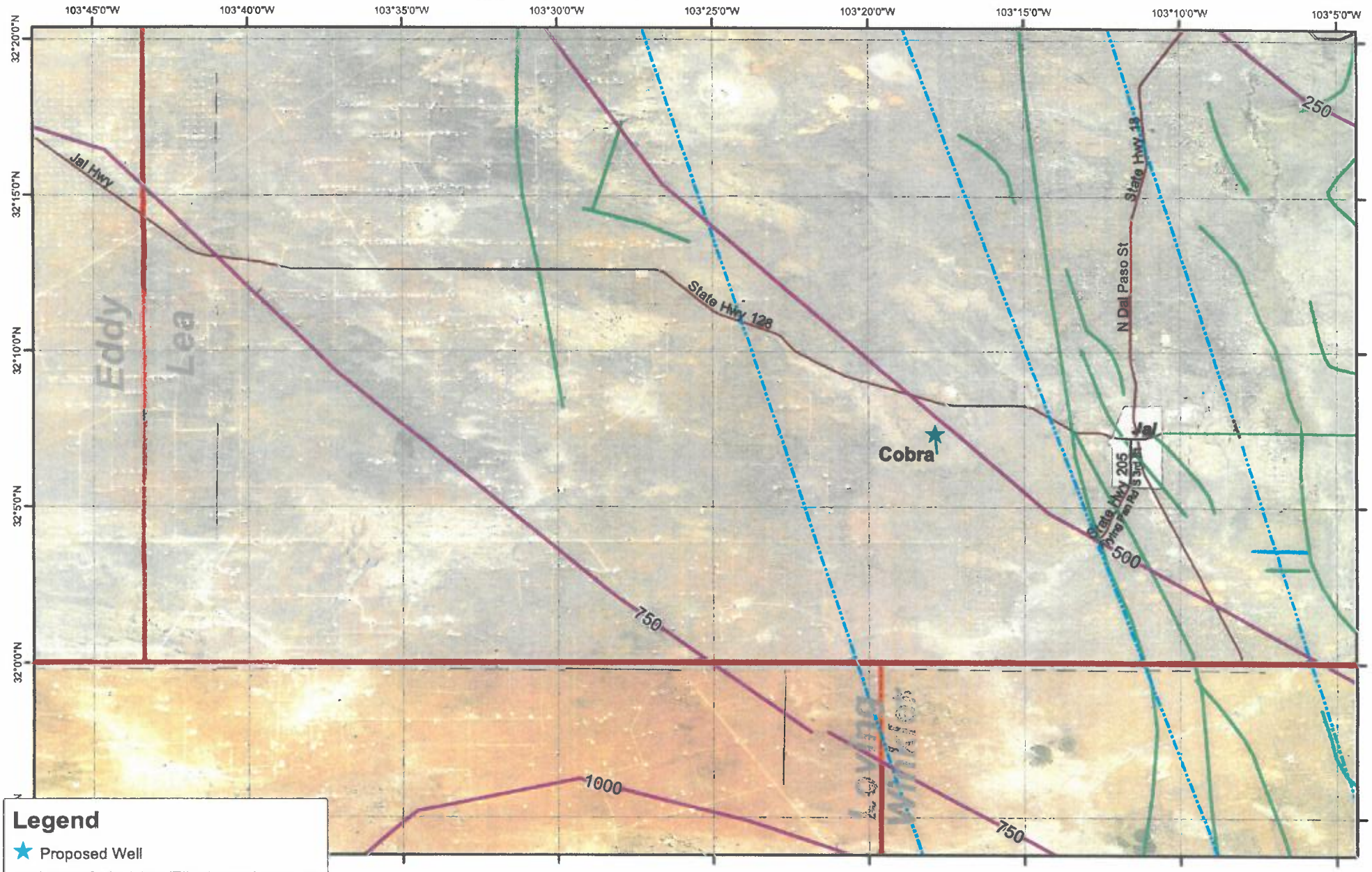
Exhibits of Dr. Kate Zeigler
On Behalf of NGL Water Solutions Permian, LLC



Stratigraphic chart for the Delaware Basin from Broadhead (2017).

* Based on data from 30-025-25046 West Jal B Deep #001 (17-25S-36E).

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Lower Ordovician (Ellenburger) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

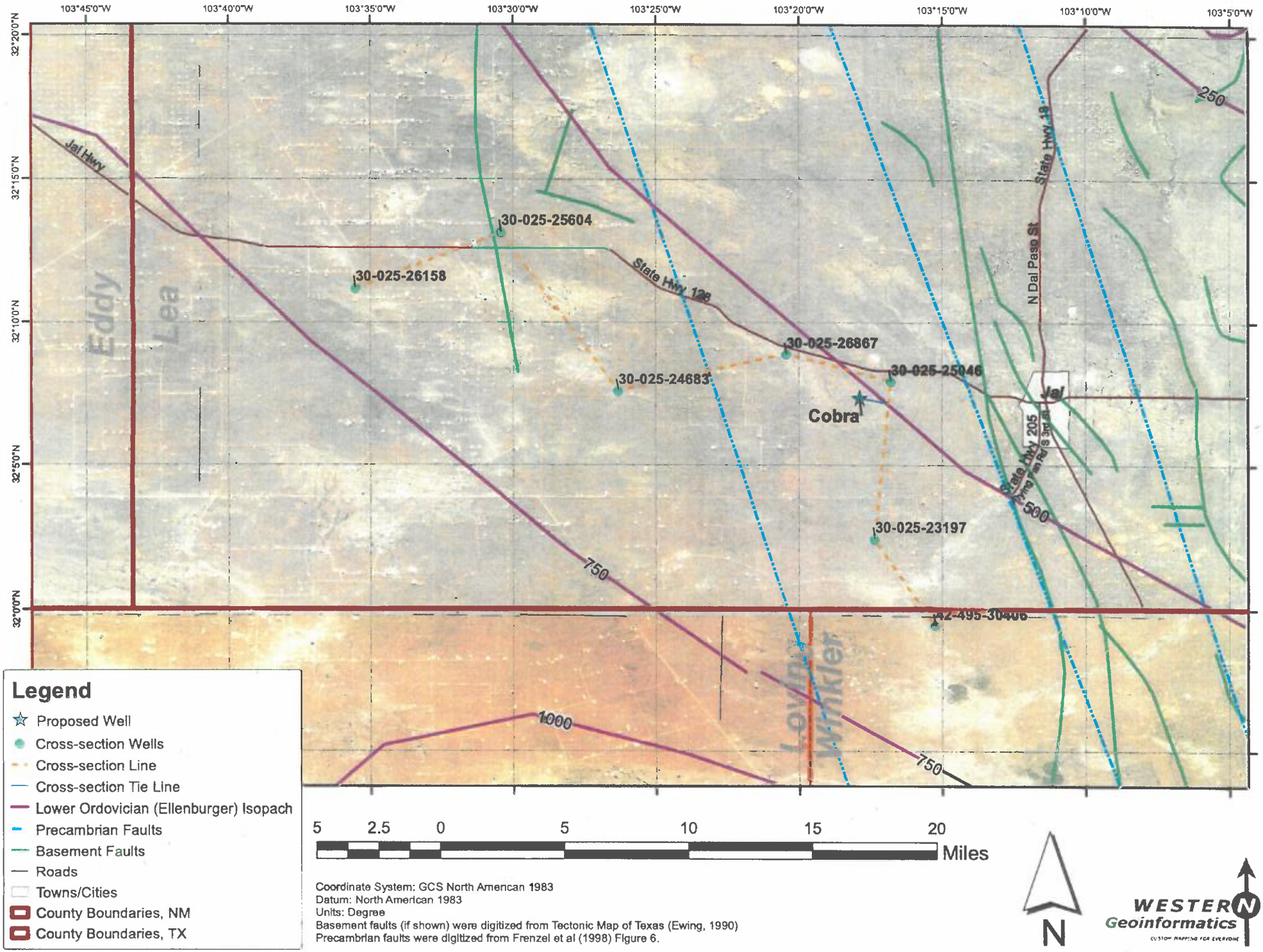
5 2.5 0 5 10 15 20 Miles

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (If shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

N

WESTERN Geoinformatics

Isopach, Faults, and Well Location



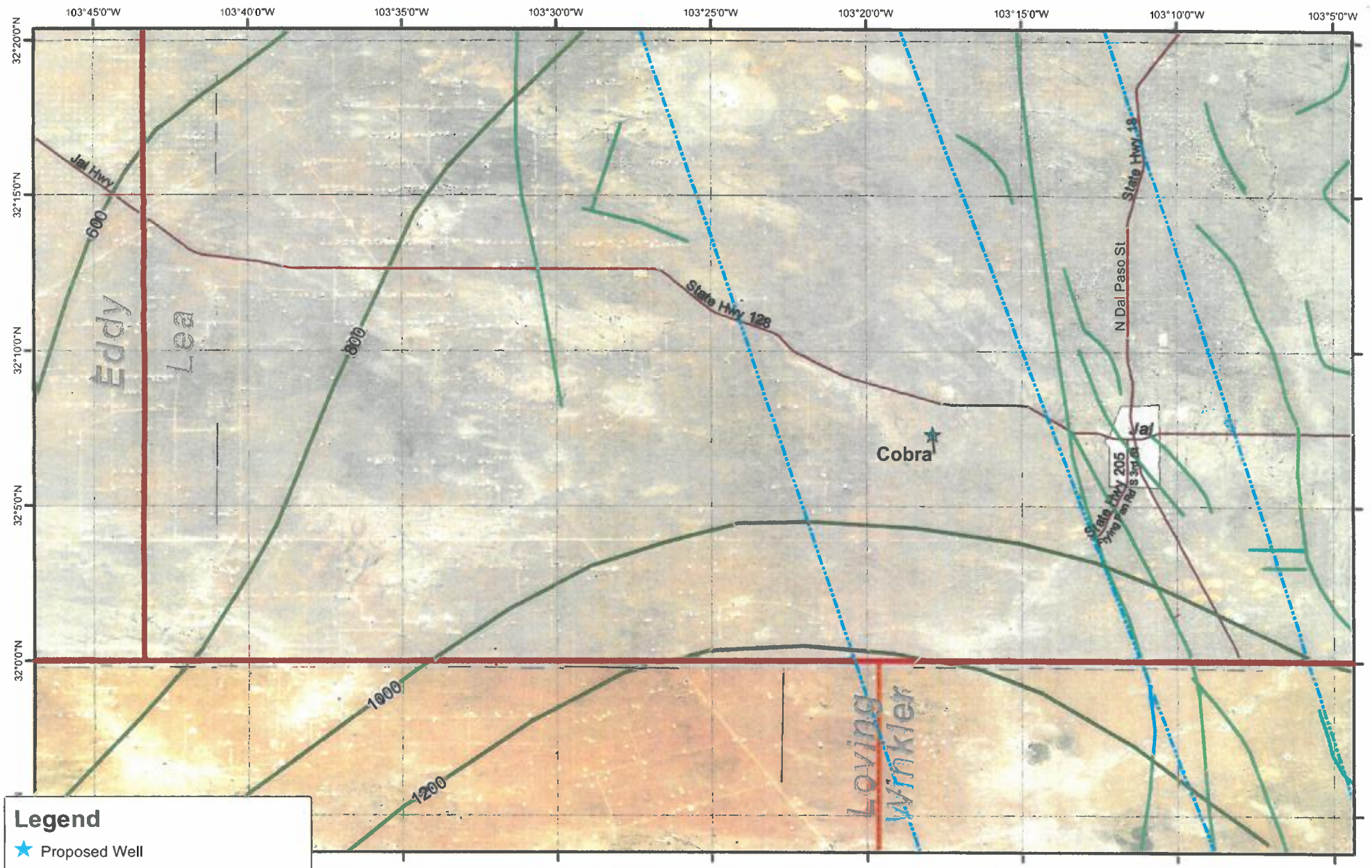
Legend

- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Lower Ordovician (Ellenburger) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Middle Ordovician (Simpson) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

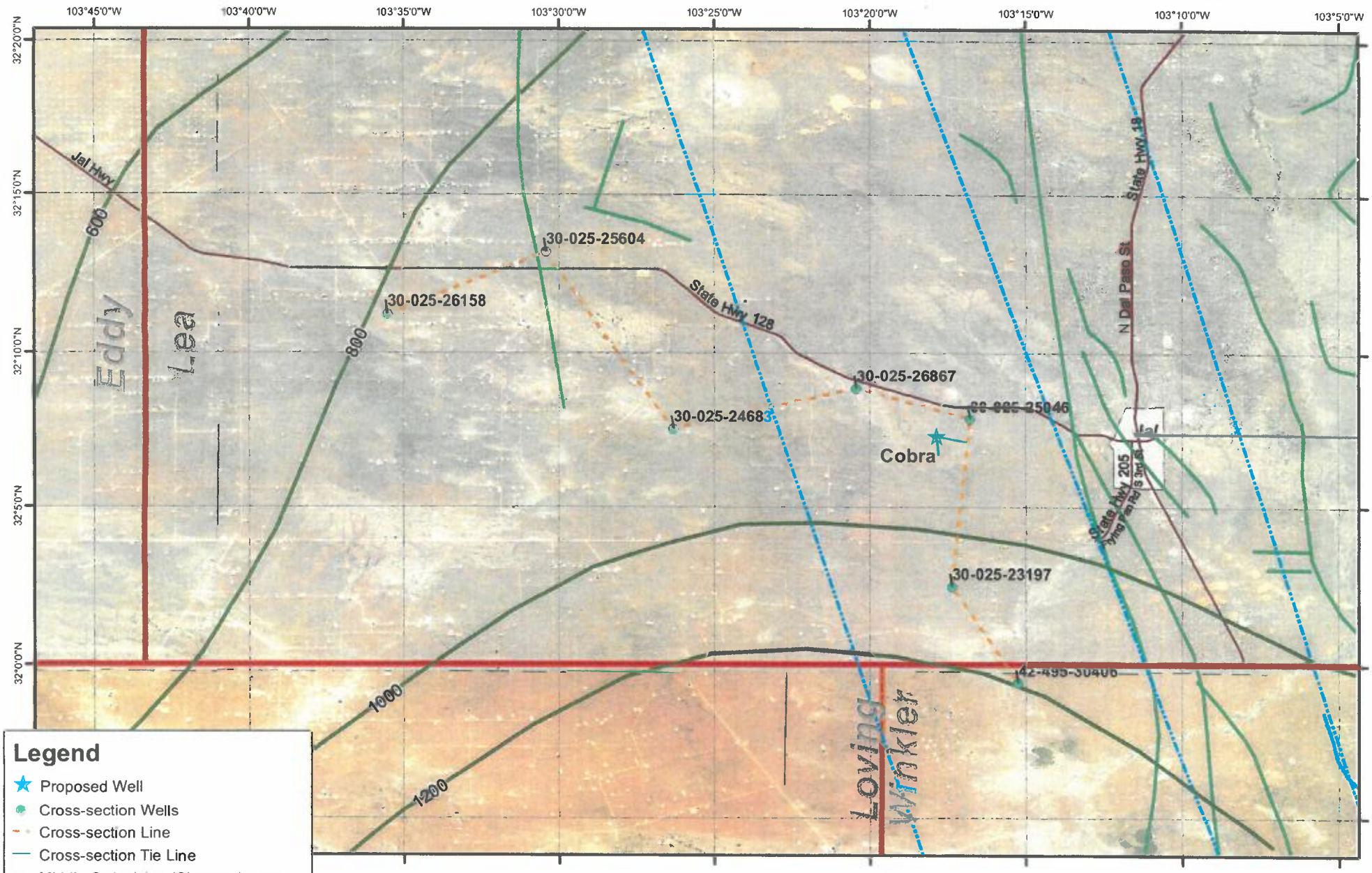
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Middle Ordovician (Simpson) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

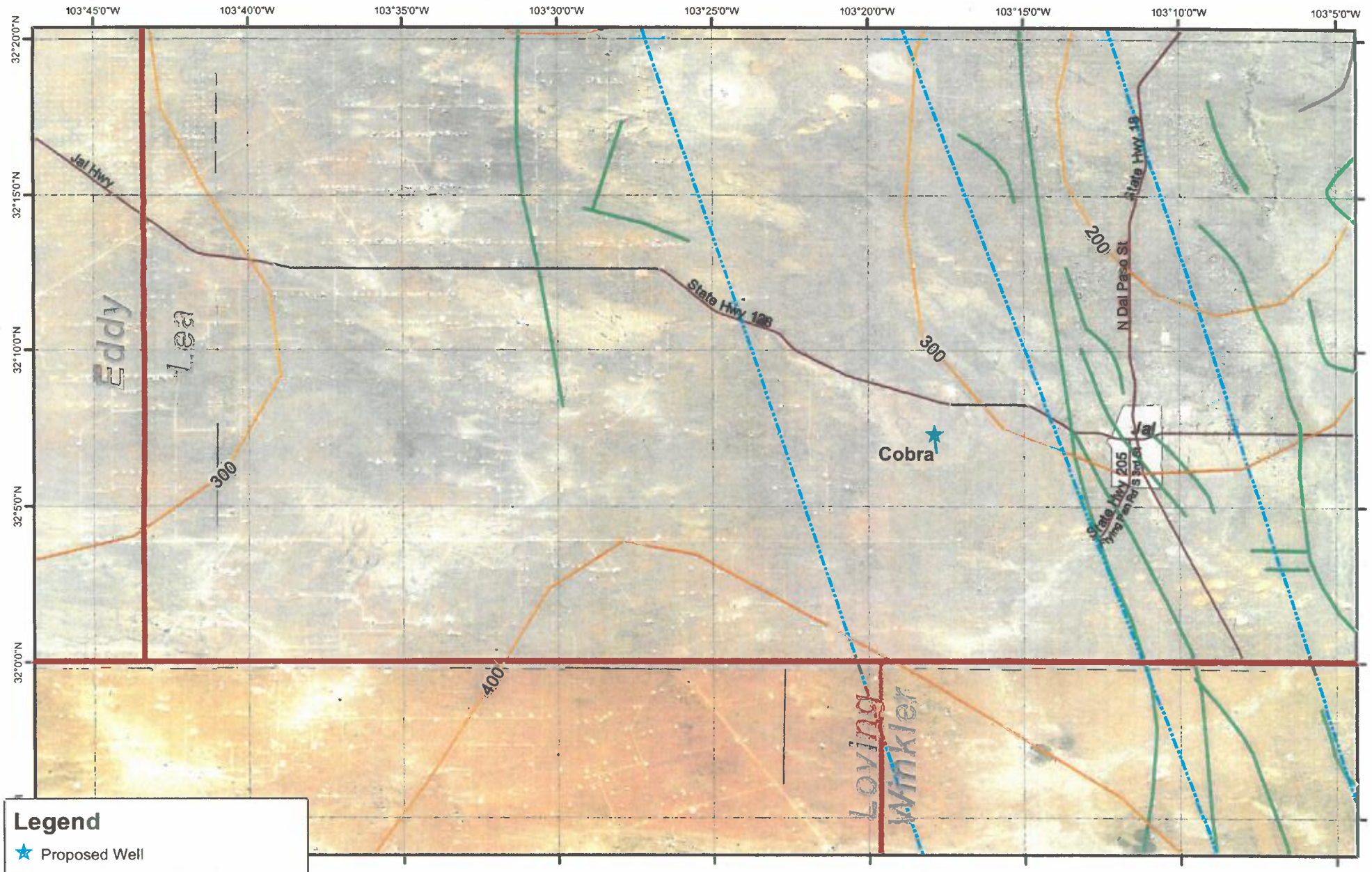
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Upper Ordovician (Montoya) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

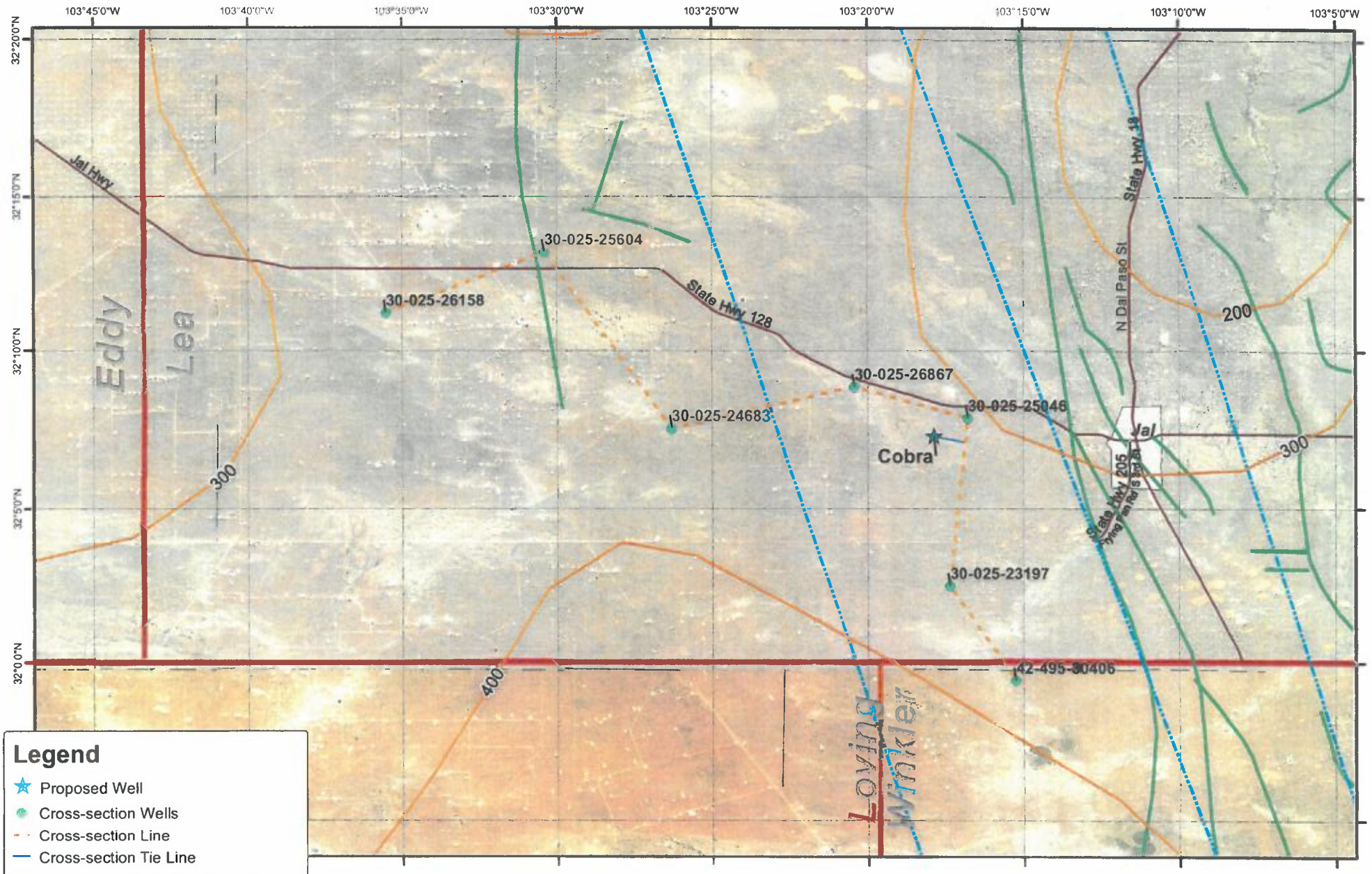
5 2.5 0 5 10 15 20 Miles

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

N

WESTERN Geoinformatics

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Upper Ordovician (Montoya) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

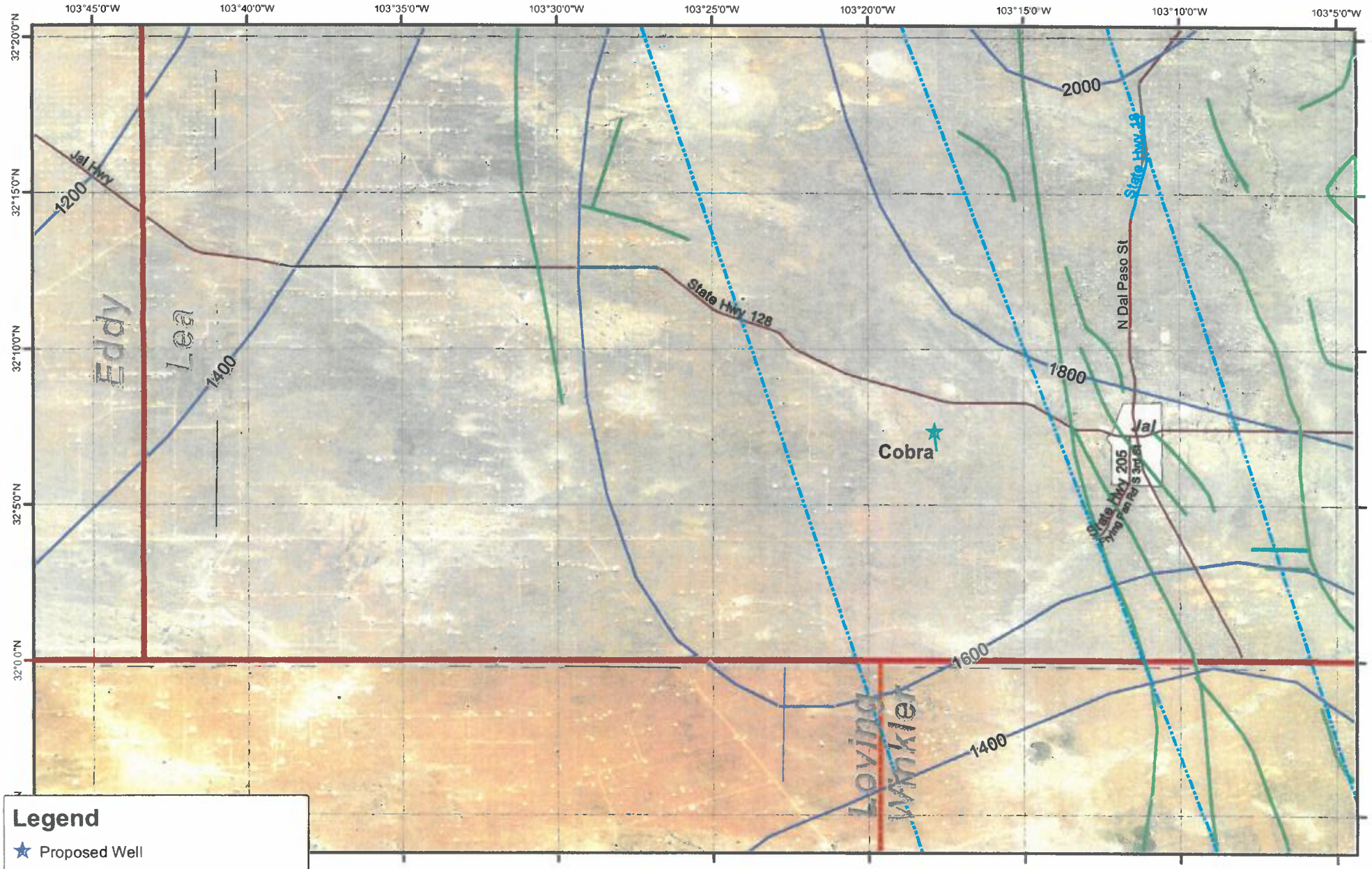
5 2.5 0 5 10 15 20 Miles

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (If shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

N

WESTERN Geoinformatics

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Sil/Dev (Wristen/Fusselman) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

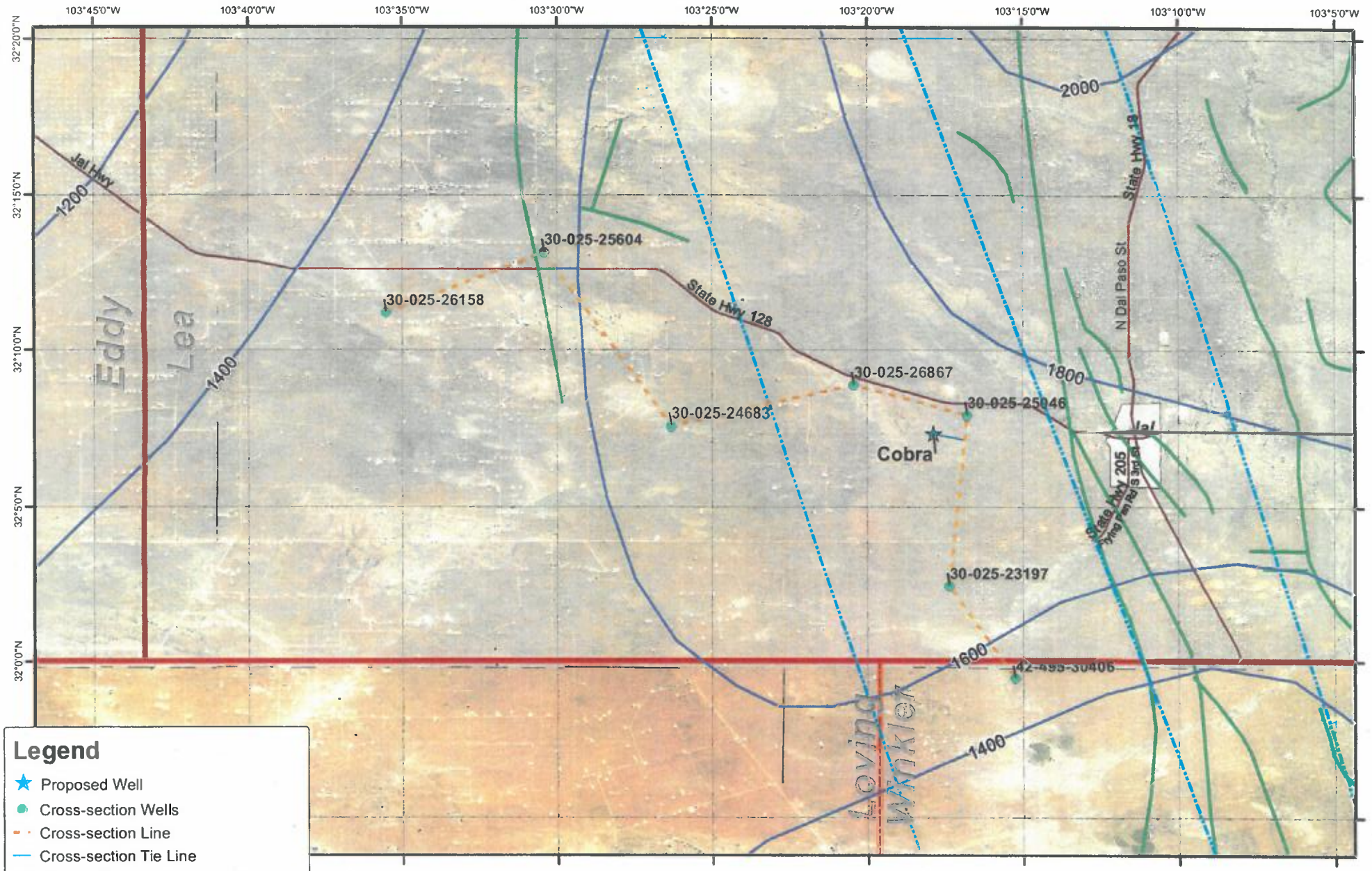
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Sil/Dev (Wristen/Fusselman) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

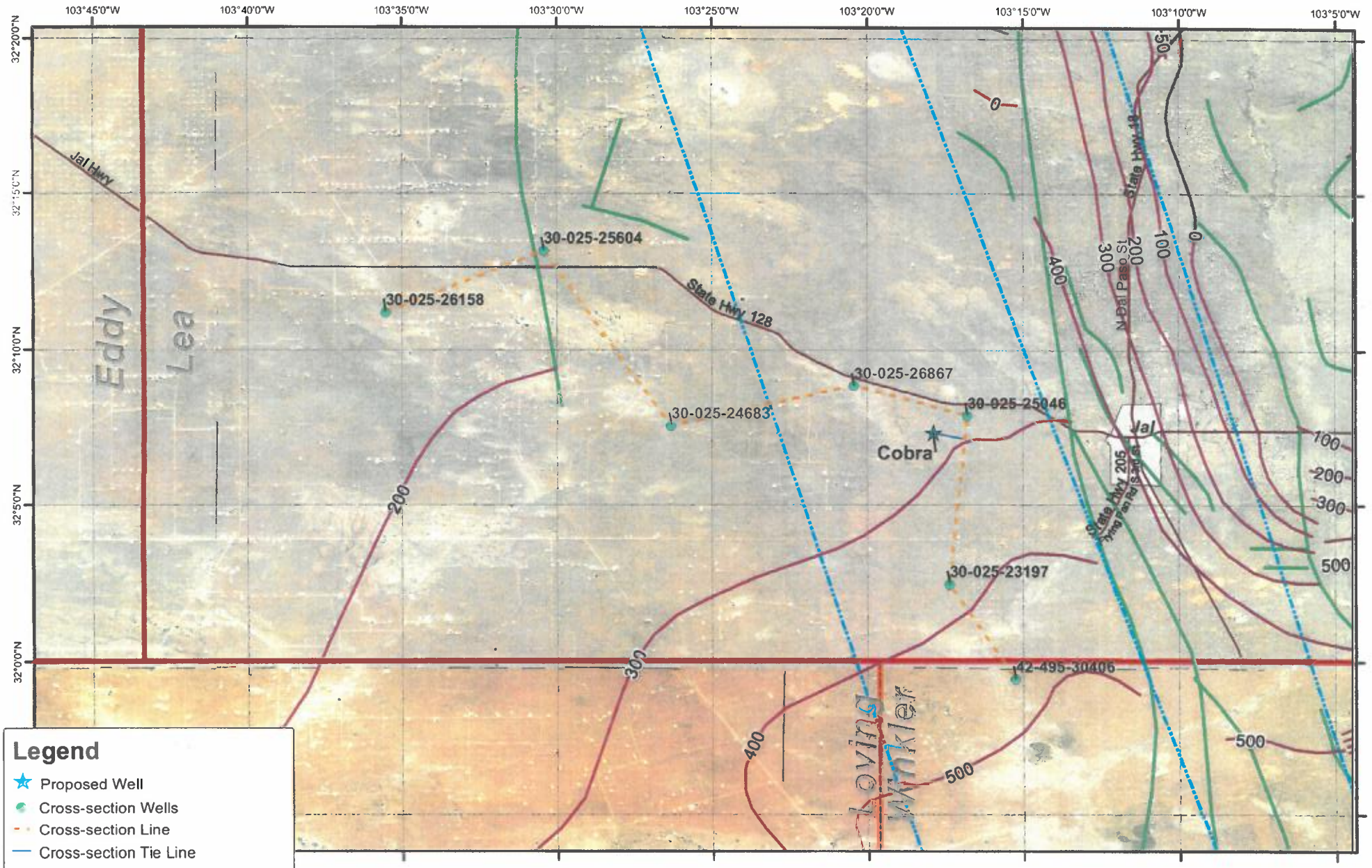
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Late Devonian (Woodford) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

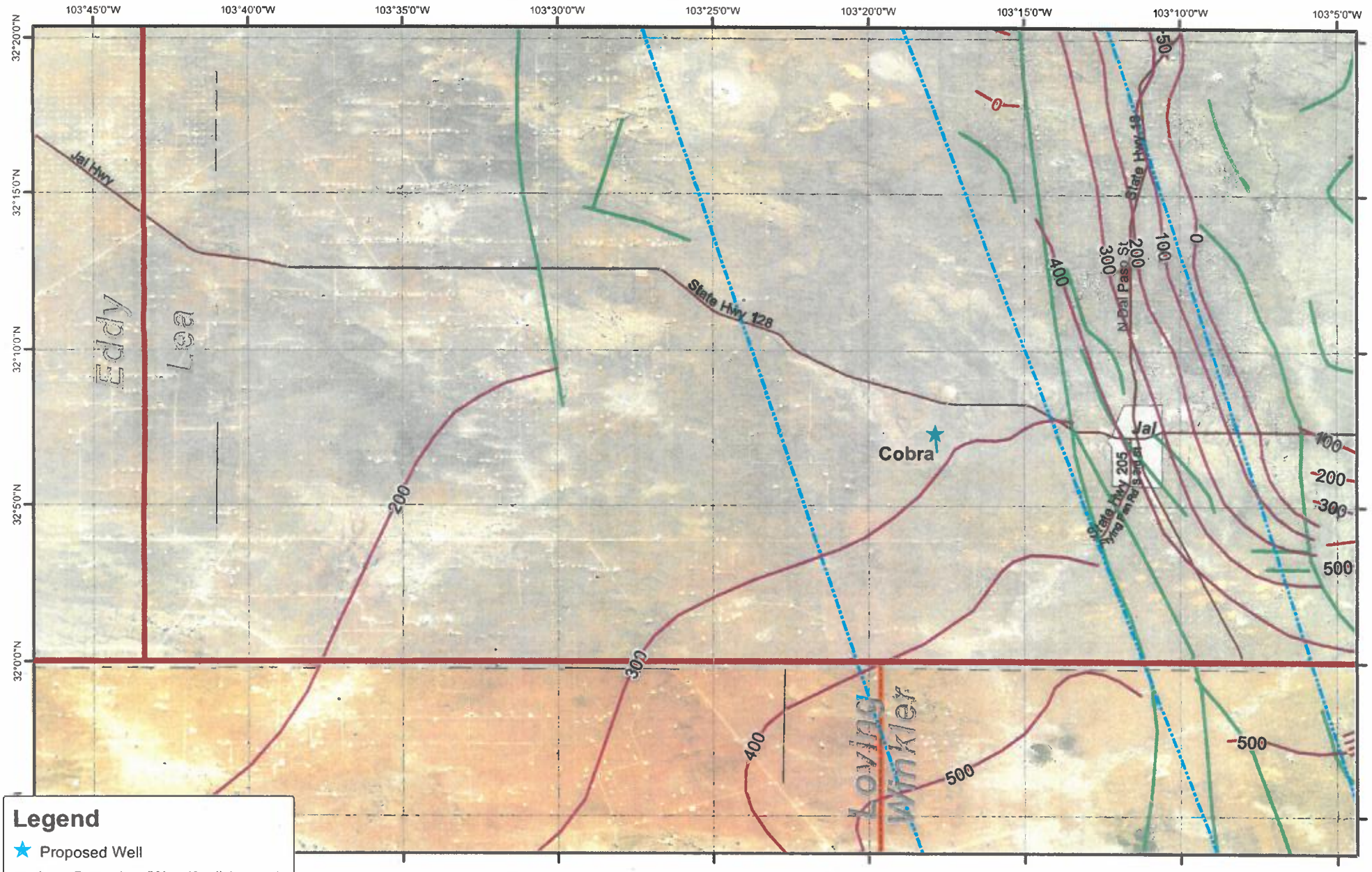
5 2.5 0 5 10 15 20 Miles

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

N

WESTERN Geoinformatics

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Late Devonian (Woodford) Isopach
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

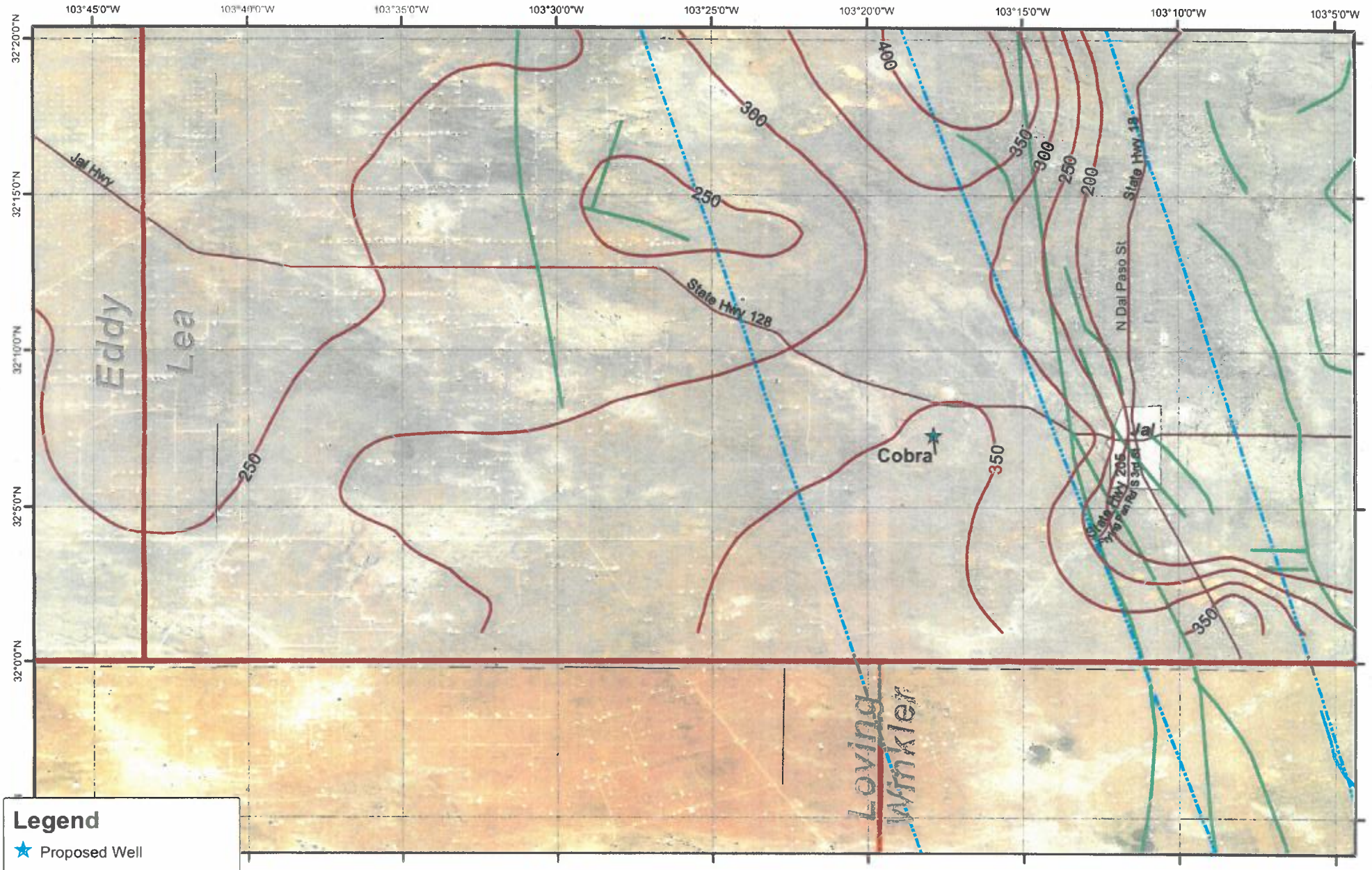
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics

Isopach, Faults, and Well Location



Legend

- Proposed Well
- Mississippian (Barnett) ISO
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

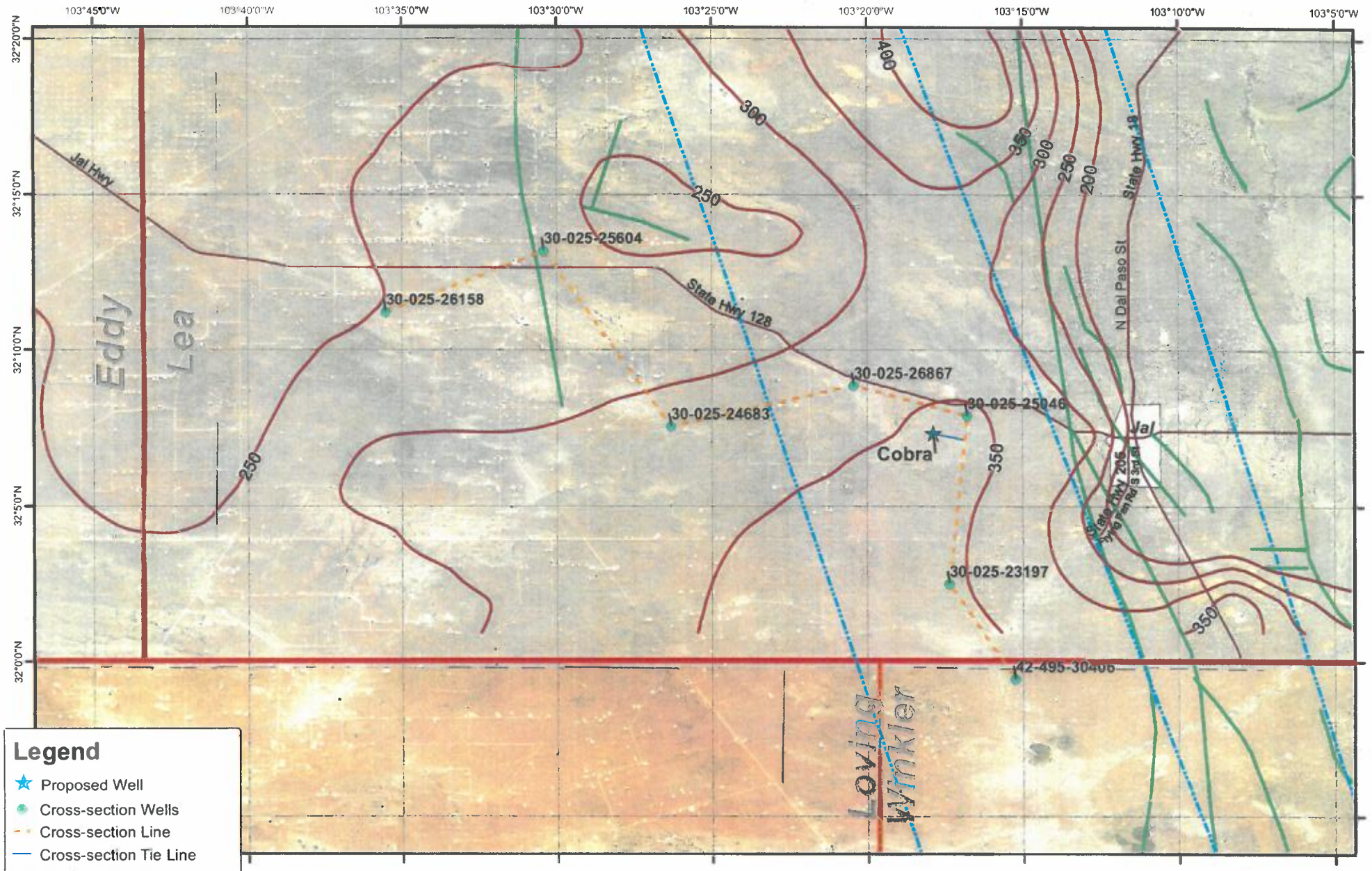
5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE

Isopach, Faults, and Well Location



Legend

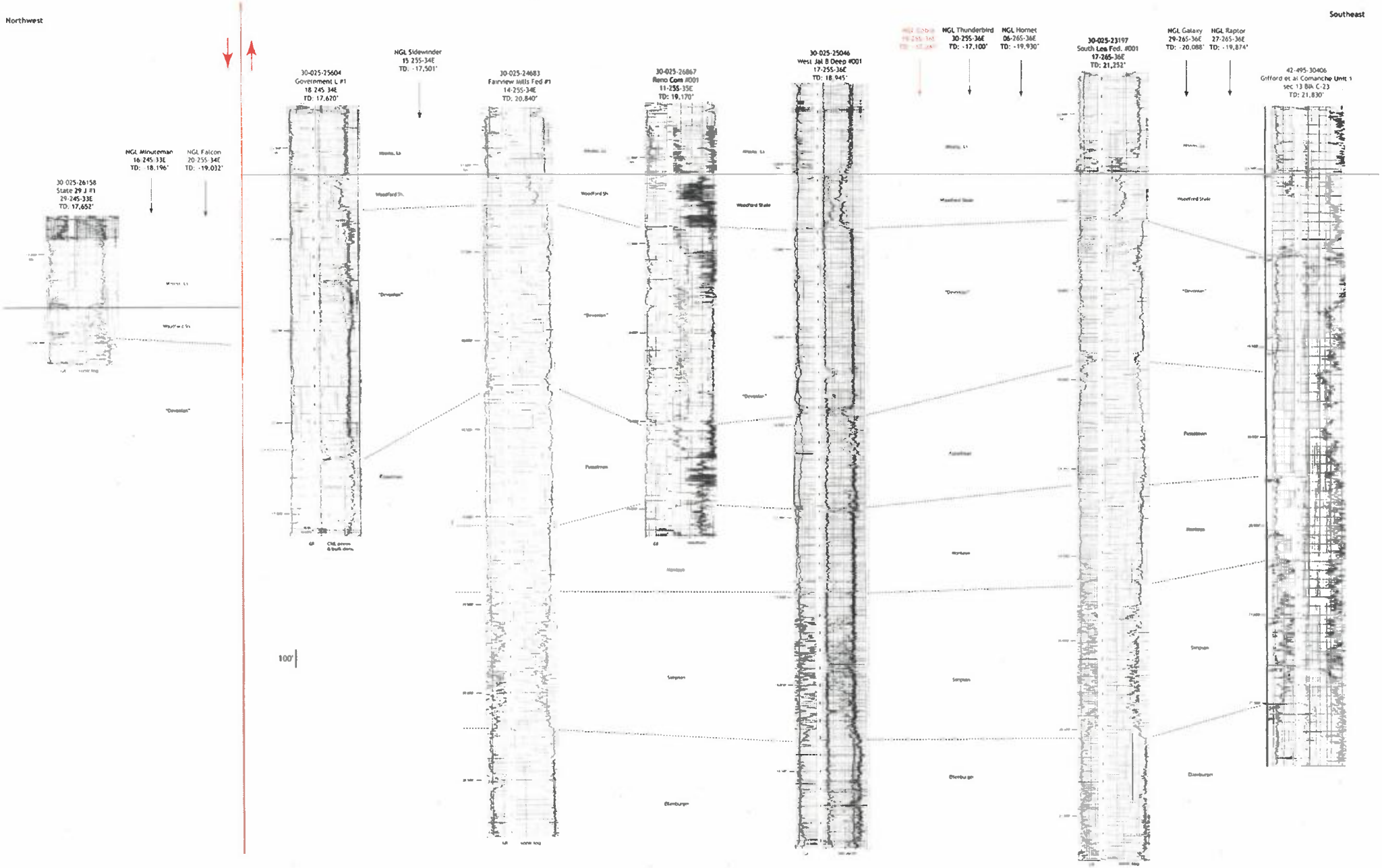
- Proposed Well
- Cross-section Wells
- Cross-section Line
- Cross-section Tie Line
- Mississippian (Barnett) ISO
- Precambrian Faults
- Basement Faults
- Roads
- Towns/Cities
- County Boundaries, NM
- County Boundaries, TX

5 2.5 0 5 10 15 20 Miles

N

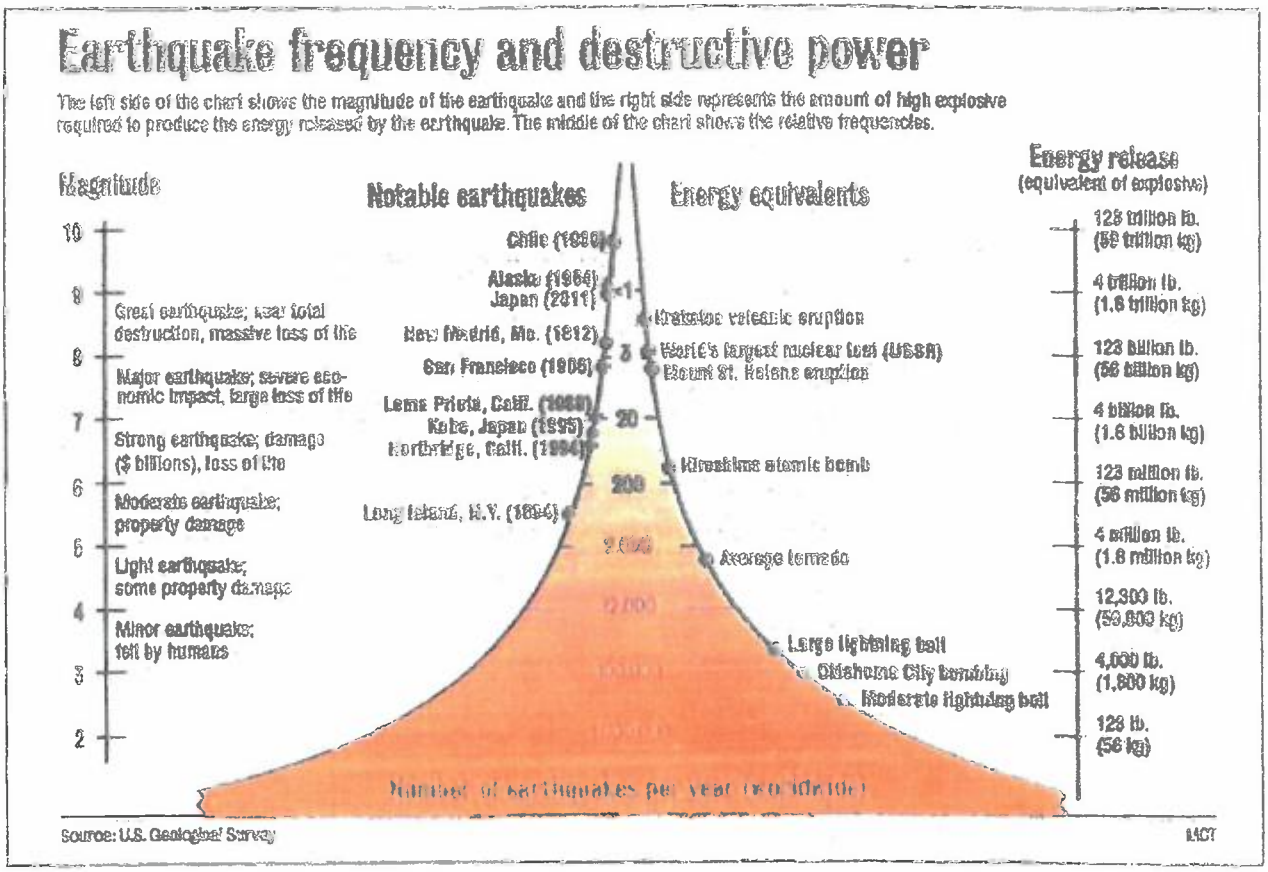
Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

WESTERN Geoinformatics
CUSTOM MAPPING FOR EVERYONE


Northwest
Southeast
30-025-26158
State 29 J #1
29-24S-33E
TD: 17,652'
NGL Minuteman
16-24S-33E
TD: 18,196'
NGL Falcon
20-25S-34E
TD: ~19,032'
30-025-25604
Government L #1
18 24S 34E
TD: 17,620'
NGL Sidewinder
15 25S-34E
TD: ~17,501'
30-025-24683
Fairview Mills Fed #1
14-25S-34E
TD: 20,840'
30-025-26867
Reno Com #001
11-25S-35E
TD: 19,170'
30-025-25046
West Jal B Deep #001
17-25S-36E
TD: 18,945'
NGL Thunderbird
30-25S-36E
TD: ~17,100'
NGL Hornet
06-26S-36E
TD: ~19,930'
30-025-23197
South Lea Fed. #001
17-26S-36E
TD: 21,252'
NGL Galaxy
29-26S-36E
TD: ~20,088'
NGL Raptor
27-26S-36E
TD: ~19,874'
42-495-30406
Gifford et al Comanche Unit 1
sec 13 Blk C-23
TD: 21,830'
100'

Exhibits of Todd Reynolds On Behalf of NGL Water Solutions Permian, LLC


A



B

Seismic Catalog Analysis Within 50 km of Cobra SWD Well

Prepared for NGL-Permian
by
GeoEnergy Monitoring Systems
April 23, 2019

Analysis is based on NMT seismic catalogs, unpublished catalogs and USGS catalogs for the time period 2010-2017 selecting events within 50 km of the Cobra SWD well. Additionally, seismic monitoring through March 31, 2019 from the three NGL seismic stations installed at Striker 2, Striker 3 and Striker 6 SWD wells on September 6, 2018. NGL/GeoEMS installed a seismic monitor at the Salty Dog SWD well (SDOG) in Texas just across New Mexico border on March 28, 2019 that will help constrain locations in southeastern NM.

Striker Two (STR2), Sand Dunes well, Lat/Long: 32.2072820/-103.7557370
Striker Three (STR3), Gossett well, Lat/Long: 32.2551110/-104.0868610
Striker Six (STR6), Madera well, Lat/Long: 32.2091150/-103.5359570
Salty Dog (SDOG), Salty Dog well, Lat/Long: 32.22531/ -103.045212

Figure 1 shows seismic station locations with estimated detection levels for M 1.0 (green circles) and M 1.5 (red circles) along with NGL-Permian stations (yellow pushpins). **Figure 2** shows seismicity listed in Table 1 shown as red circles and additional regional stations from TexNet and NMT (green pushpins). These regional stations are used along with the 3 Striker SWD seismic stations for regional monitoring.

The USGS reports no events in the vicinity since 2010. New Mexico Tech runs a seismic network (SC) north of the wells for the DOE Waste Isolation Plant (only short-period vertical components). There are a total of seven seismic events in this time period ranging in magnitude from 1.0 to 3.1. Since the seismic deployment, there have been event detections listed in Table 2 having preliminary locations using available regional data (**Figure 3**). Due to the small magnitudes, the signal-to-noise levels are low so the locations have large uncertainty and there is little constraint on depth.

Table 1: Seismicity Within 50 km of Striker SWD Wells 2010-2017

Date	Origin Time GMT	Latitude	Longitude	Depth (km)	Magnitude
20111227	23:10:37	32.37	-103.95	NaN	1.6
20120318	10:57:22	32.281	-103.892	5.0	3.1
20170211	14:34:27	32.29	-103.92	NaN	1.5
20170302	11:38:53	32.37	-103.88	NaN	1.7
20170325	22:46:01	32.13	-103.77	NaN	1
20170503	17:47:21	32.082	-103.023	5.0	2.6
20170814	01:09:56	32.39	-103.56	NaN	1.2

EXHIBIT
tabbies
B

Table 2. New Mexico Area Reporting Period Seismicity (km units)

Date	Origin Time (GMT)	Lat	Long	Depth	Loc Error	M	(+/-)
09/10/18	23:35:43.942	32.1793	-103.5283	1	5.58	1.25	0.23
09/14/18	06:57:47.614	32.1540	-103.5030	1	5.58	1.11	0.41
09/15/18	16:48:21.041	32.1630	-103.5211	1	5.37	1.50	0.00
10/13/18	22:07:22.259	32.0998	-103.4560	6	5.64	1.60	0.12
11/18/18	09:04:52.707	32.2526	-103.7853	5	3.77	1.75	0.20
12/09/18	18:51:00.805	32.3634	-103.8510	1	2.09	1.44	0.08
01/03/19	09:15:48.809	32.2761	-103.6732	6	5.64	1.63	0.00
01/03/19	23:05:33.122	32.2599	-103.7654	4	5.51	1.60	0.25
01/04/19	09:45:38.943	32.2346	-103.7798	4	4.34	1.98	0.38
01/09/19	10:18:54.389	32.2255	-103.7166	5	2.80	1.47	0.41
01/27/19	07:33:47.127	32.2219	-103.7220	5	3.53	1.72	0.31
02/19/19	09:35:15.109	32.2443	-103.6898	1	4.17	1.20	0.00

Figure 1. Striker SWD wells seismic station locations and existing NGL-Permian seismic stations (yellow pushpins). Green and red circles around stations show approximate detection levels for ML 1.0 and 1.5, respectively.

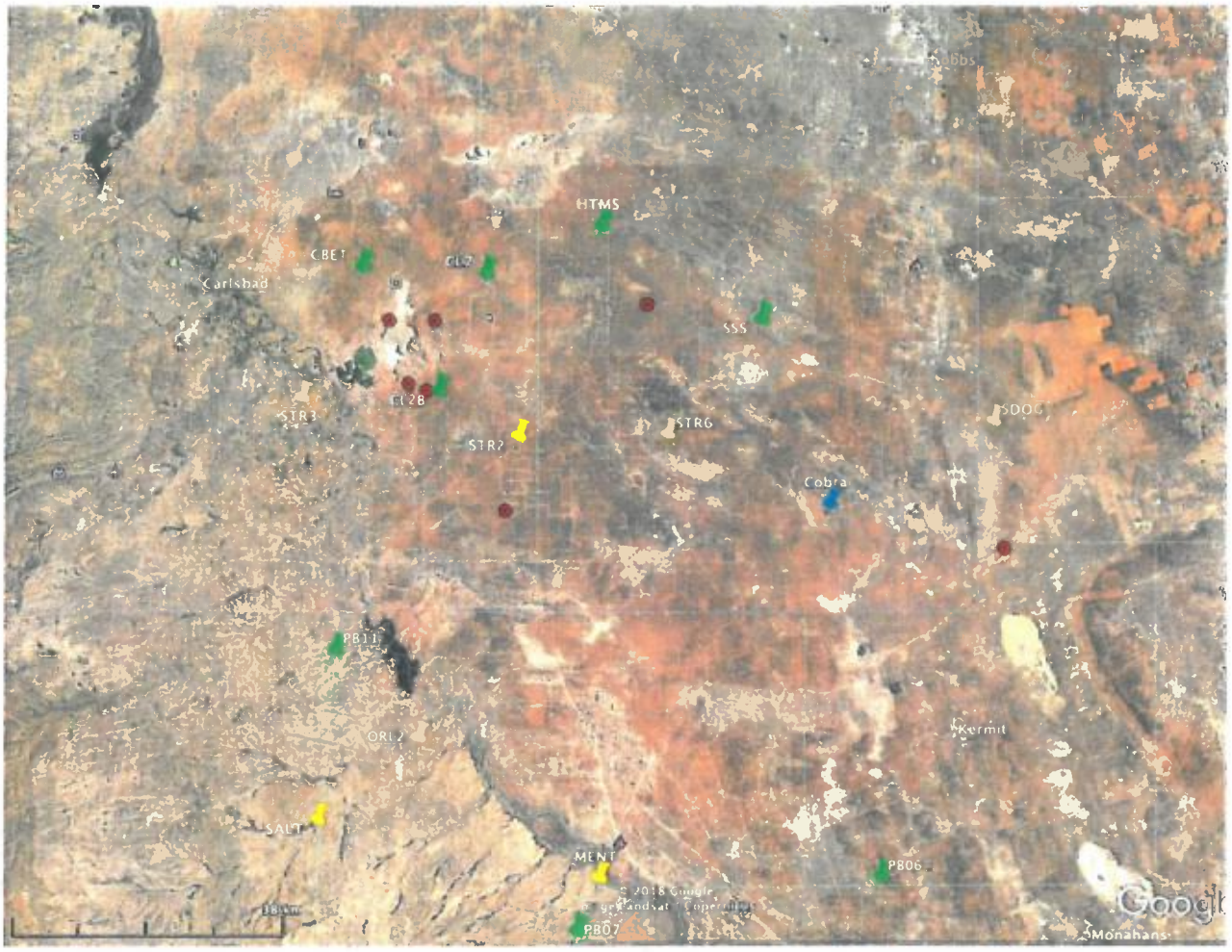


Figure 2. Striker SWD wells seismic station locations (yellow push pins) and existing NGL-Permian seismic stations (yellow pushpins). Other regional seismic stations run by TexNet and New Mexico Tech are shown as green pushpins. Historic seismicity listed in Table 1 shown as red circles. Cobra SWD well shown as blue pushpin.

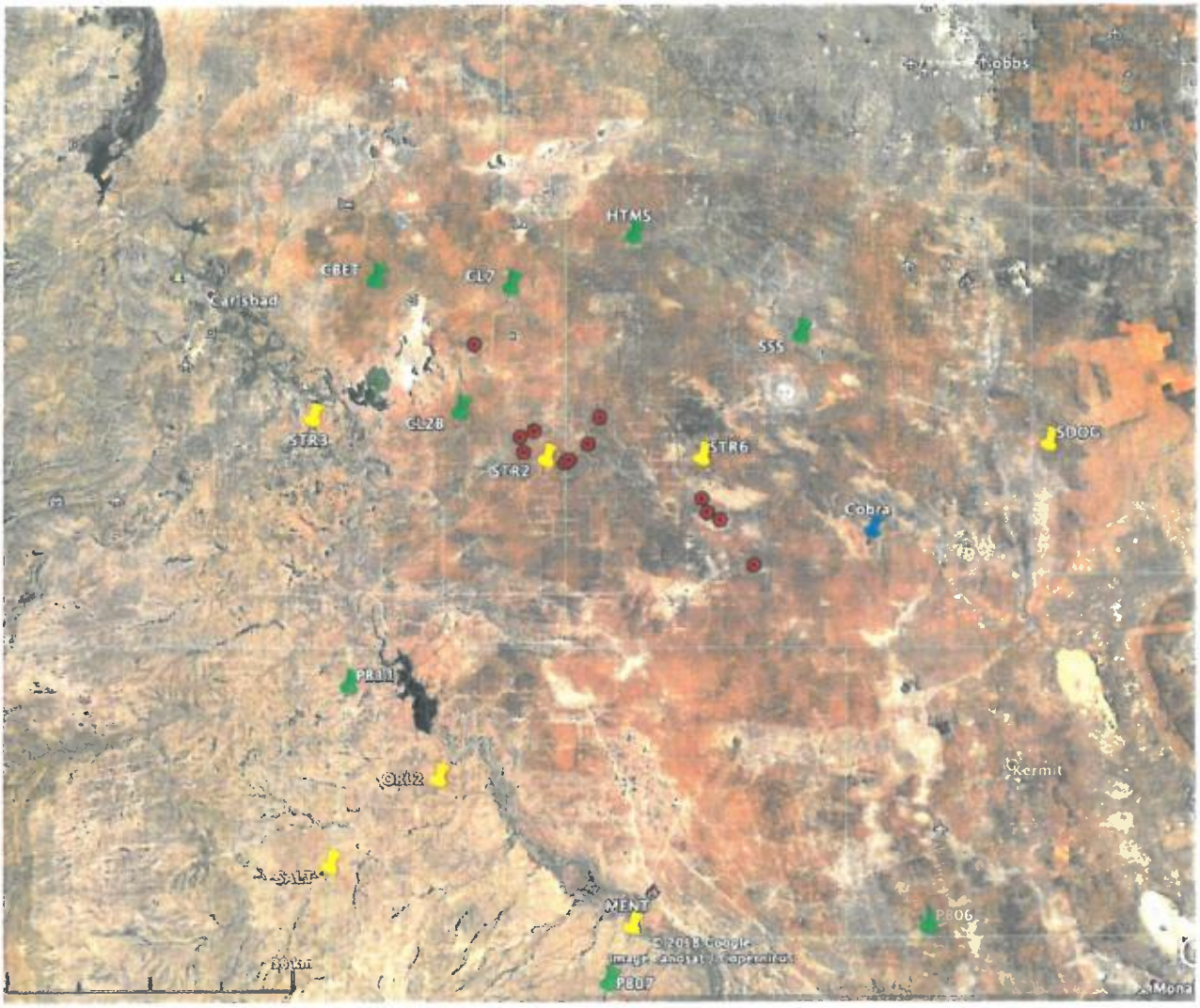
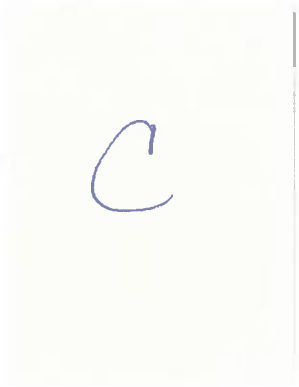


Figure 3. Seismic events in between September 6 2018 and March 31, 2019 as red circles (Table 2). Seismic stations as yellow (NGL) or green (NMT and TexNet) pushpins. Cobra SWD well shown as blue pushpin.


C

FTI™
PLATT SPARKS

Texas Registered Engineering Firm No F - 16381

May 28, 2019

RE: Application for Fluid Injection or Disposal Permit
NGL Water Solutions Permian, LLC
Cobra SWD #1
Lea County, New Mexico

FSP Analysis (Fault slip potential)

I have reviewed the geology and seismic activity near the Cobra SWD #1 and I would conclude that this well does not pose a risk related to seismicity in this area. The Area of review (AOR) and subject well are shown on **(FSP Exh. 2)** in relation to the historical earthquake events in the area. (USGS) (None within the AOR).

** The FSP software used for this analysis was jointly developed by Stanford University, Exxon Mobil and XTO Energy as a tool for estimating fault slip potential resulting from fluid injection.*

FSP Methodology

- FSP input variables were determined from nearby Deep injection wells in the review area and published data. (**FSP Exh.1**)
- Stress gradients and pore pressure gradients were derived from testing and published papers (**FSP Exh.1**).
- Fault slip potential (FSP) was analyzed in the area of review shown on **FSP Exh.2.** The analysis integrates all of the proposed well locations as well as any existing injection wells in order to fully assess the pressure implications of injection in the area and the potential for slip along existing faults. Historical USGS earthquake events are denoted by the "blue" bulls-eye symbols (none in the AOR).
- Azimuth direction of Shmax was derived from Snee/Zoback 2018. (**FSP Exh.3**)
- Viscosity and density of the formation fluid was derived from temperature and salinity values at the mid-point injection depth (**FSP Exh.4**)

925-A Capital of Texas Highway, South | Austin, TX 78746
512.327.6930 telephone | 512.327.7069 fax | ftiplattsparks.com

- The wells input into the FSP model and the potential faults in the area are shown on **FSP Exh. 5.**
    - Existing injection wells are projected into the future at the last reported injection volume and then held constant.
    - The subject well is tested at the proposed maximum injection rate and held constant for 20 years. If the ΔP at the well exceeds the allowed injection pressure, then the modelled injection rates are decreased over time to stay within the allowed maximum injection pressure. This analysis is important because the model should represent realistic injection values over the life of the model and arbitrarily using the permitted rate over the life of the well does not reflect the reality that as the reservoir pressure increases the well's ability to inject fluid may be reduced.
    - The Subject well is denoted in the model as follows:
        - Co – Cobra SWD #1
    - Also included in the model are existing SWD injection wells as follows:
        - 1 – 3002525046
        - 2 – 3002527085
        - 3 – 3002542355
        - 8 – 3002543360
        - And these other pending NGL well locations
        - Ga - Galaxy SWD #1
        - Ra – Raptor SWD #1
        - Th – Thunderbolt SWD #1
- **FSP Exh.6** shows the geomechanical properties of the possible faults (with segment numbers).
- **FSP Exh.7** shows the pressure to slip, ΔP, at each possible fault segment.
- **FSP Exh.8** shows the probability of fault slip for each fault segment and shows that a ΔP 3,500 psi increase at segment F12 shows a 10% probability of fault slip. The model

calculates a ΔP increase of 195 psi at F12 by 2045 thus the calculated pressures remain well below the 10% probability level. (See FSP Exh. 12)

- **FSP Exh.9 - FSP Exh.11** show the calculated pressures at the possible fault segments as of 1/1/2025, 1/1/2035, and 1/1/2045. Note that by 2045 none of the faults have reached pressures that would initiate fault slip.
- **FSP Exh.12** shows the pressure recap for all of the modelled fault segments as of 2045 and the corresponding pressures required to cause fault slip. Also shown are the sources of the fault segments included in the model and the depths where fault displacement can be demonstrated.

FSP Analysis (Findings and Conclusions)

The N-S faults and fault trends in this area of review are not optimally oriented to slip. The orientation of the faults requires significant pressure changes (ΔP +4,300 psi) based on the fixed input parameters the ΔP increase at the most critical fault only reaches 195 psi by 2045.

This model assumes constant injection rates over the next +25 years which is not a typical scenario as SWD wells tend to decrease injection volumes over time as the well ages and disposal demand decreases in the area. If injection volumes are lower over time than the modelled values, then the risk for fault slip is lowered.

In the event seismicity should occur in the future, the wells closest to the faults (proposed and existing) should be the wells considered for modification or reduction of injection rates. At this time there is no evidence to support rate reduction for any of the existing or proposed wells.

Should you have any questions, please do not hesitate to call me at (512) 327-6930 or email me at todd.reynolds@ftiplattsparks.com.

Regards,

Todd W. Reynolds – Geologist/Geophysicist

Managing Director, Economics/FTI Platt Sparks

Todd W. Reynolds

FTI Platt Sparks

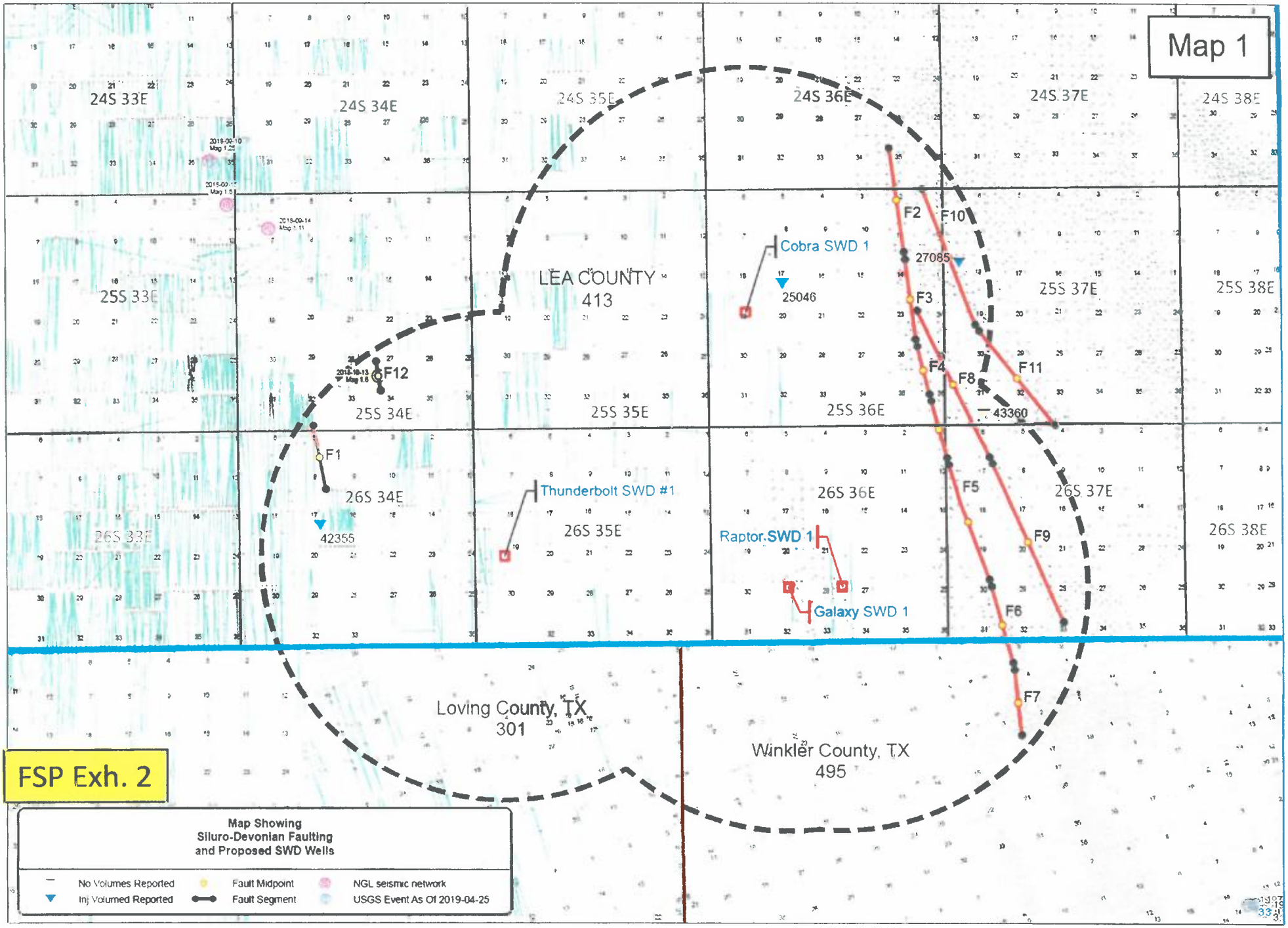
512.327.6930 office

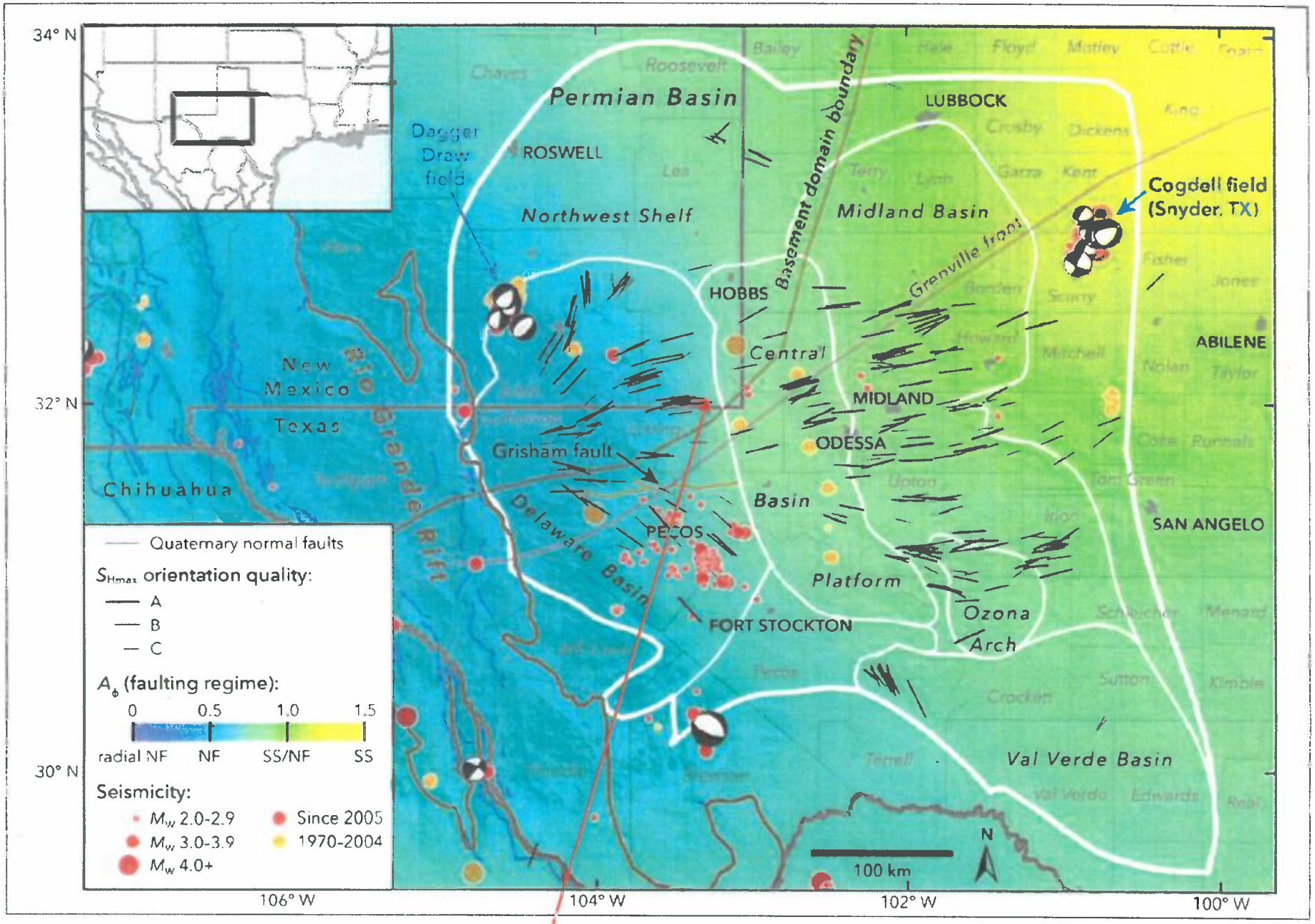
FTI™
PLATT SPARKS

FSP DATA WORKSHEET (General information and Input data)

		Comments	Variance (+/-)
Well	Cobra SWD #1		
Operator	NGL Water Solutions Permian, LLC		
API			
Top Injection Depth (ft)	15600		
Base Injection Depth(ft)	17261		
Mid injection Depth(ft)	16431		
Mid Injection Depth(m)	5008		
Injection Formation(s)	Siluro-Devonian, Fusselman		
Est Water Resistivity (@75 F)	0.1	*SPE 1982 (W. Texas & SE New Mexico)*	
Est Formation Temp (F)	212	*Temp graphs (UTPB 2006)*	
Est Formation Temp (C)	100	*Temp graphs (UTPB 2006)*	
Est Formation Salinity (ppt)	22	*Log charts (Schlumberger)*	
Density (kg/m3)	1000	*Calculated*	40
Viscosity (Pa.s)	0.0003	*Calculated*	0.00005
Compressibility-Formation (1/Pa)	8.70E-10	*Estimated*	
Compressibility-Fluid (1/Pa)	4.57E-10	*Estimated*	
Aquifer thickness (ft)	831		50
Porosity (%)	5		2
Perm (mD)	20		4
Vertical stress grad. (psi/ft)	1.1	*Calculated from density log*	0.05
Min. Horiz. Stress grad. (psi/ft)	0.67	*Determined from A Phi parameter (0.6)*	0.02
Max. Horiz. Stress grad. (psi/ft)	0.92	*Determined from A Phi parameter (0.6)*	0.02
Initial Pore Pressure grad. (psi/ft)	0.46	*Normal saltwater pore pressure gradient*	0.01
Azimuth of Max Horiz Stress (deg)	75	*From Snee/Zoback*	5
Fault Orientation (deg)	Dependent on Fault		5
Fault Dip (deg)	85		5
Friction of Coefficient	0.6	*typical for pre-existing fault/facture*	0.02
Max Injection pressure @ 0.20 psi/ft	3120		
Max Injection rate (bbls/day)	40000		

FSP Exh. 1


Map 1
24S 33E
24S 34E
24S 35E
24S 36E
24S 37E
24S 38E
25S 33E
25S 34E
25S 35E
25S 36E
25S 37E
25S 38E
26S 33E
26S 34E
26S 35E
26S 36E
26S 37E
26S 38E
LEA COUNTY
413
Loving County, TX
301
Winkler County, TX
495
Cobra SWD 1
25046
27085
43360
Thunderbolt SWD #1
42355
Raptor SWD 1
Galaxy SWD 1
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
FSP Exh. 2
Map Showing
Siluro-Devonian Faulting
and Proposed SWD Wells
No Volumes Reported
Inj Volumed Reported
Fault Midpoint
Fault Segment
NGL seismic network
USGS Event As Of 2019-04-25
Date Saved: 2019-05-28 2:41:05 PM
Path: P:\11428\11428_58\Maps\2019-0515\FSP_SiluroDevonian.mxd
16,000
24,000
Feet
FTI
PLATT S PARKS



FSP Exh. 3

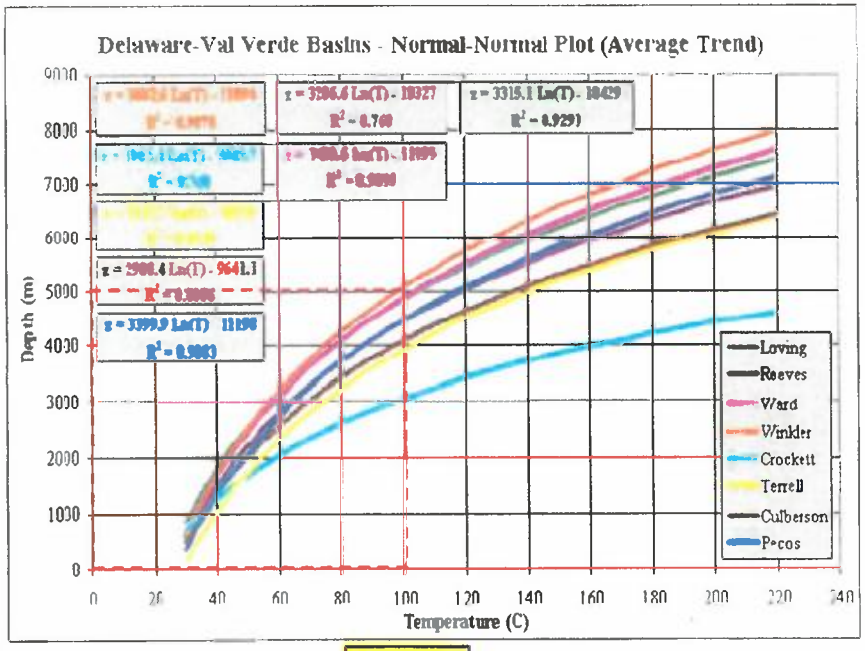
Stress Data Inputs

75

Azimuth S_{hmax}

Subject Area

Determination of Density and Viscosity



A

100 (C)

SEAWATER DENSITY & VISCOSITY CALCULATOR

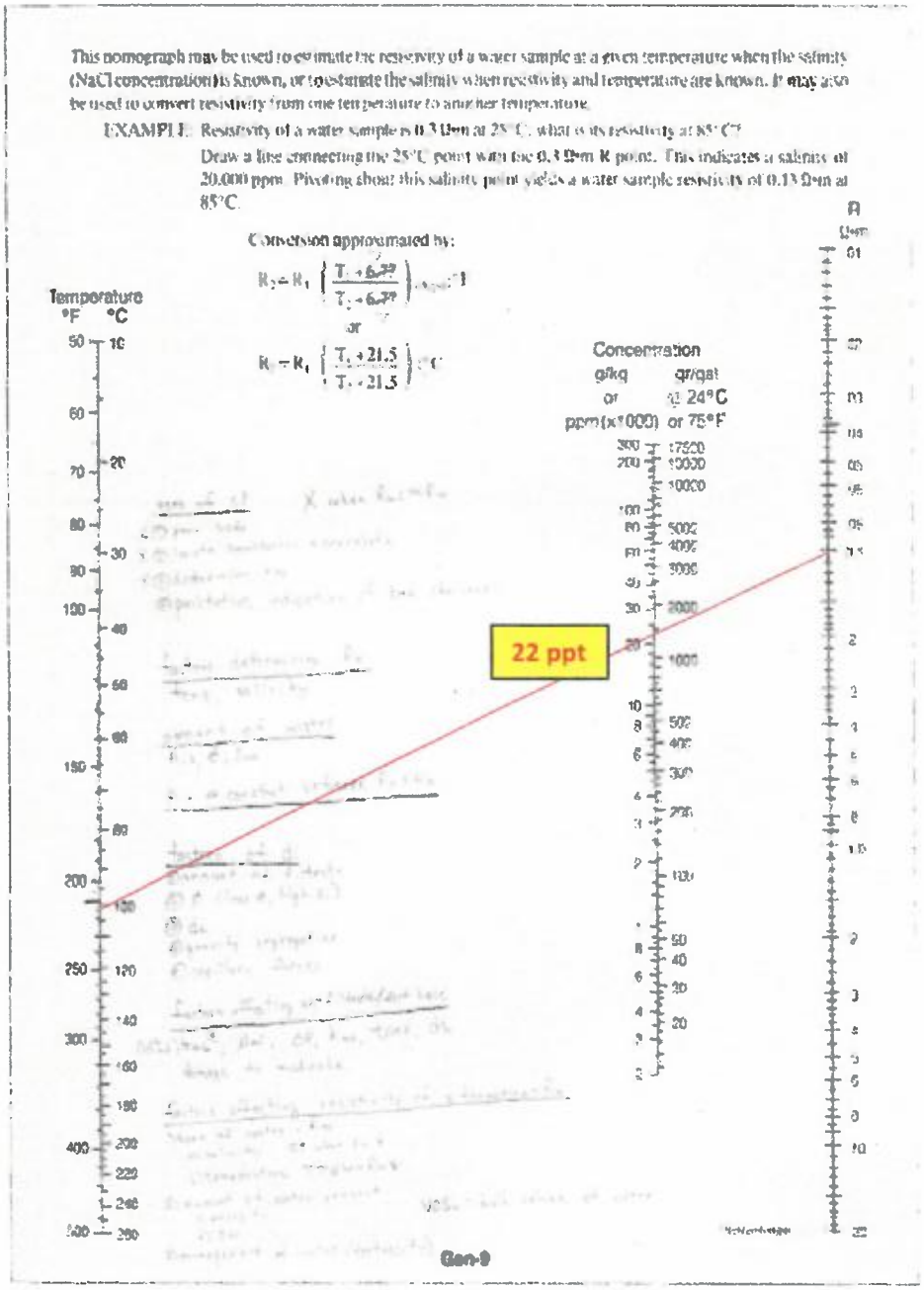
Please enter the values of salinity and temperature of the effluent or ambient water (p=1atm):

Salinity:	**Sal =**	**22.00**	**ppt**	for ρ: 0 ≤ Sal ≤ 160 ppt for μ: 0 ≤ Sal ≤ 130 ppt
Temperature:	**T =**	**100.00**	**°C**	10 ≤ T ≤ 180 °C
Density.	**ρ =**	**974.664**	**kg/m³**	
Dynamic Viscosity:	**μ =**	**0.298**	***10⁻³ kg/m s**	
Kinematic Viscosity:	**ν =**	**0.306**	***10⁻⁶ m²/s**	

source

ttouny (2002) Fundamentals of Sea Water Desalination (Appendix A: Thermodynamic Properties)

Resistivity Nomograph for NaCl Solutions



FSP Exh. 4

Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

MODEL INPU... | GEOMECHANICS | PROB. GEOMECH | HYDROLOGY | PROB. HYDRO | INTEGRATED

Fault Selector:

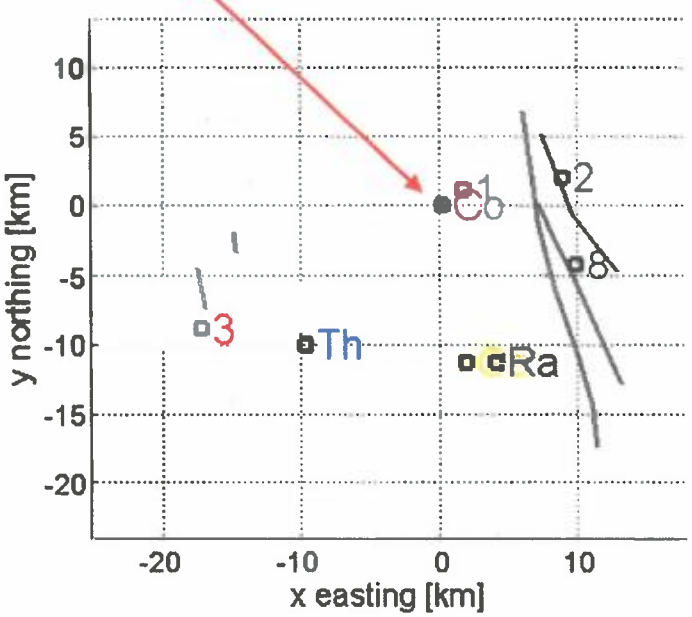
- All Faults
- Fault #1
- Fault #2
- Fault #3
- Fault #4
- Fault #5
- Fault #6
- Fault #7
- Fault #8
- Fault #9
- Fault #10
- Fault #11
- Fault #12
- Fault #13
- Fault #14

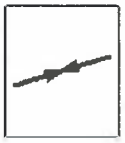
Calculate

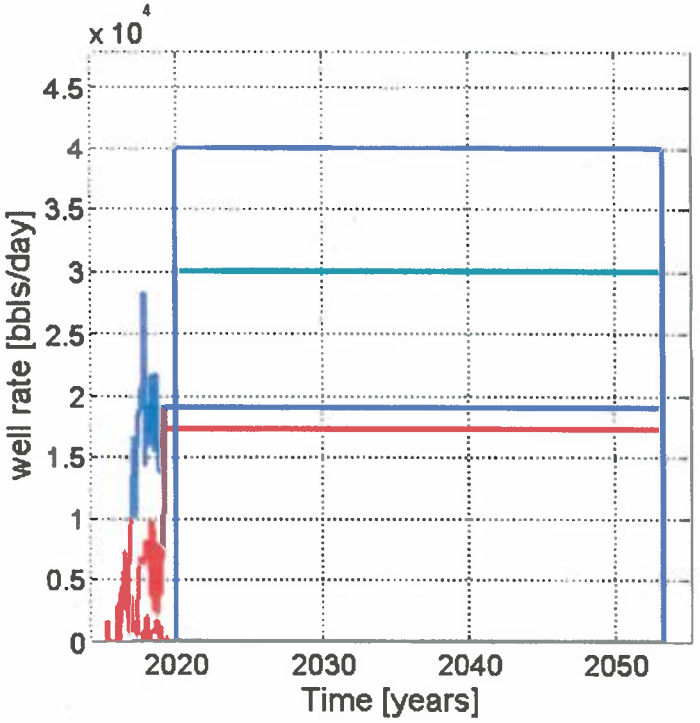
Stress Regime: Normal Faulting

Select Well: All

Subject well: Cobra #1







Subject Well input at 40,000 bbls/day beginning rate
7 other injection wells in area of study

FSP Exh. 5

Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

MODEL INPUTS | GEOMECHAN... | PROB. GEOMECH | HYDROLOGY | PROB. HYDRO | INTEGRATED

Fault Selector

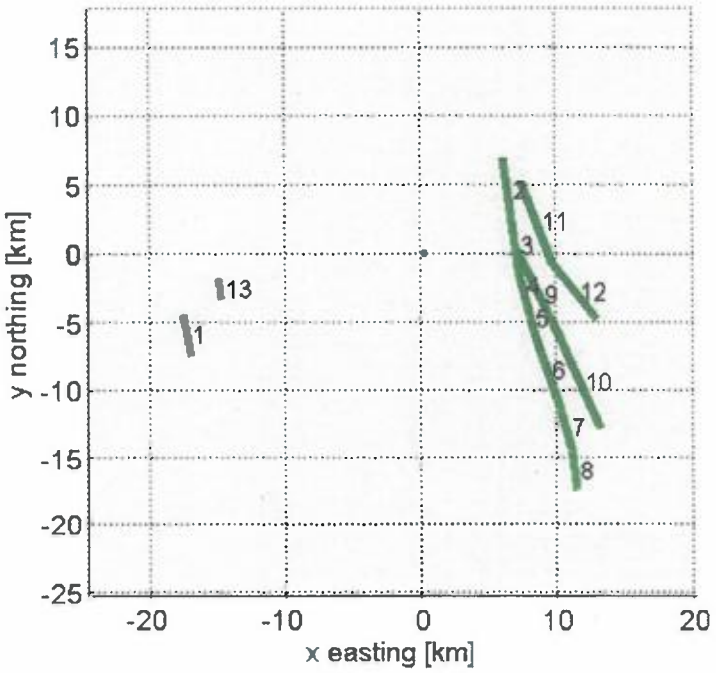
All Faults
Fault #1
Fault #2
Fault #3
Fault #4
Fault #5
Fault #6
Fault #7
Fault #8
Fault #9
Fault #10
Fault #11
Fault #12
Fault #13
Fault #14

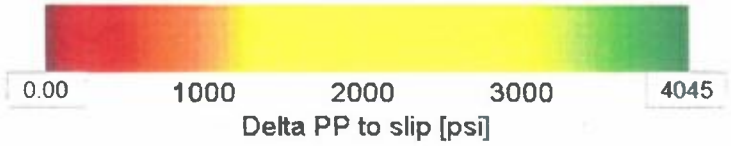
Calculate

a) Fault Number

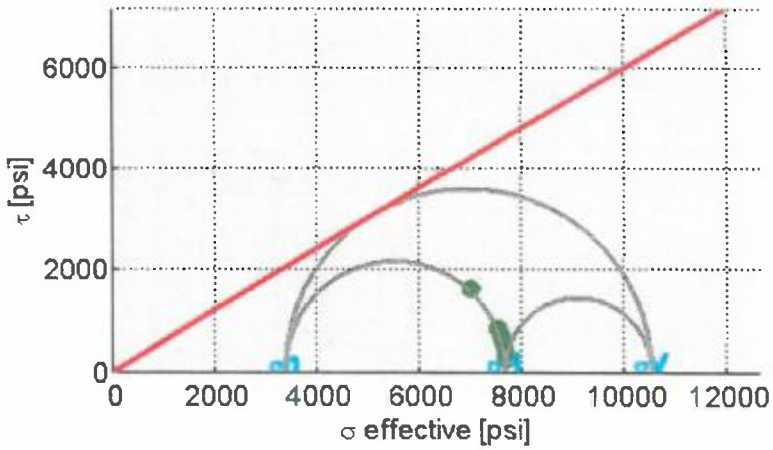
Help

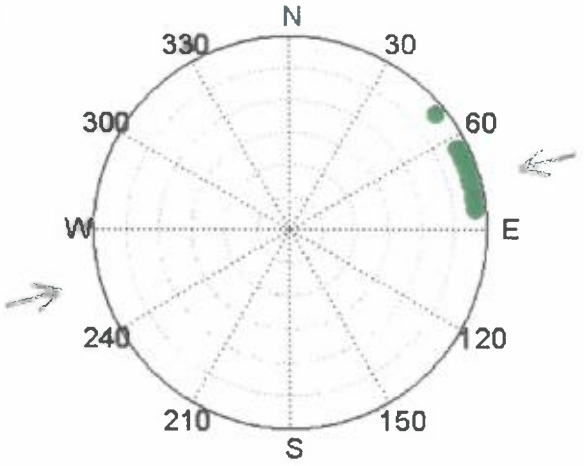
Fault segment numbers





Stress Regime: Normal Faulting





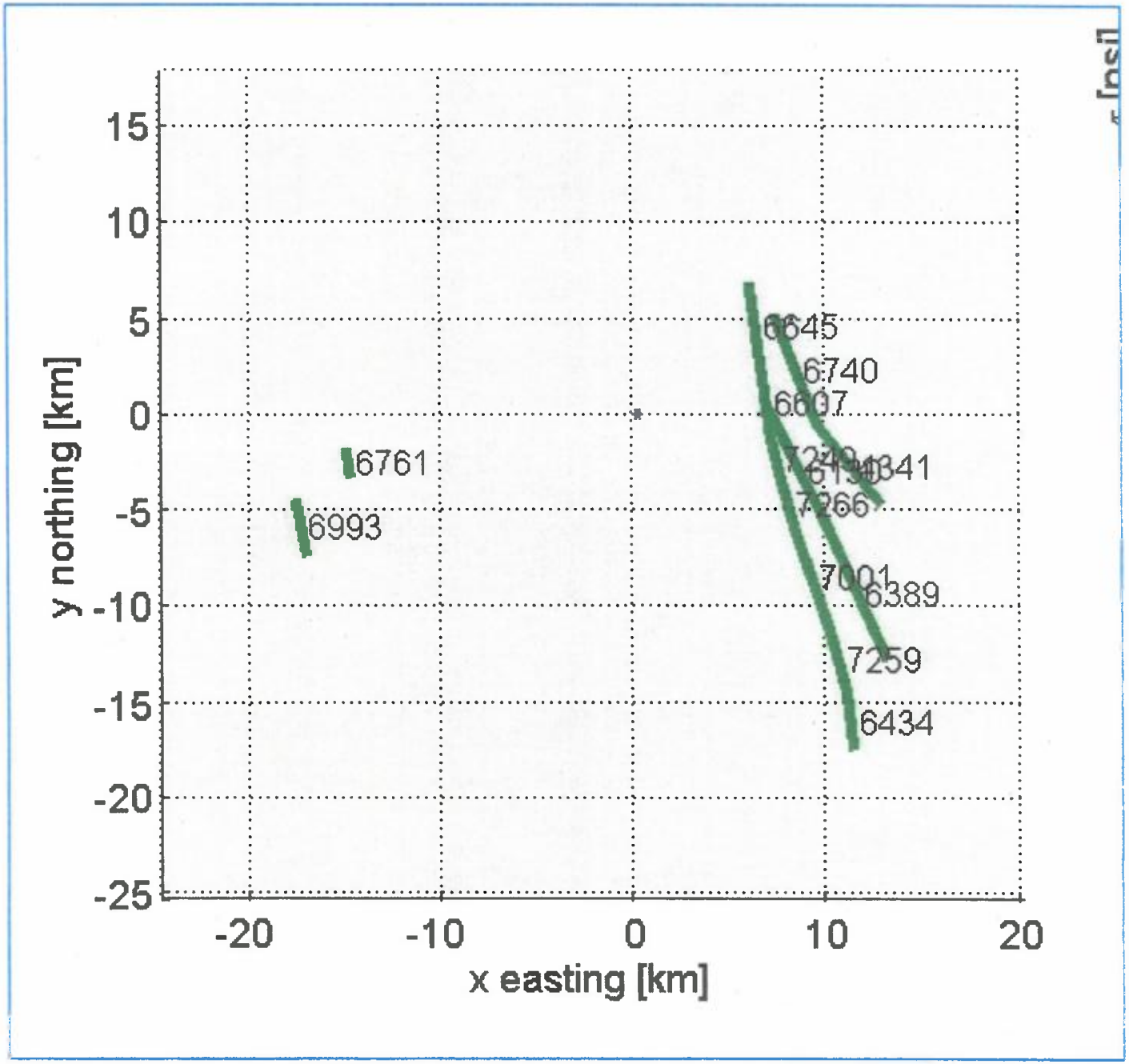
Stereonet Show: Fault Normals

FSP Exh. 6

Calculated Pore Pressure to Slip

ΔP

At each fault segment



FSP Exh 7

Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

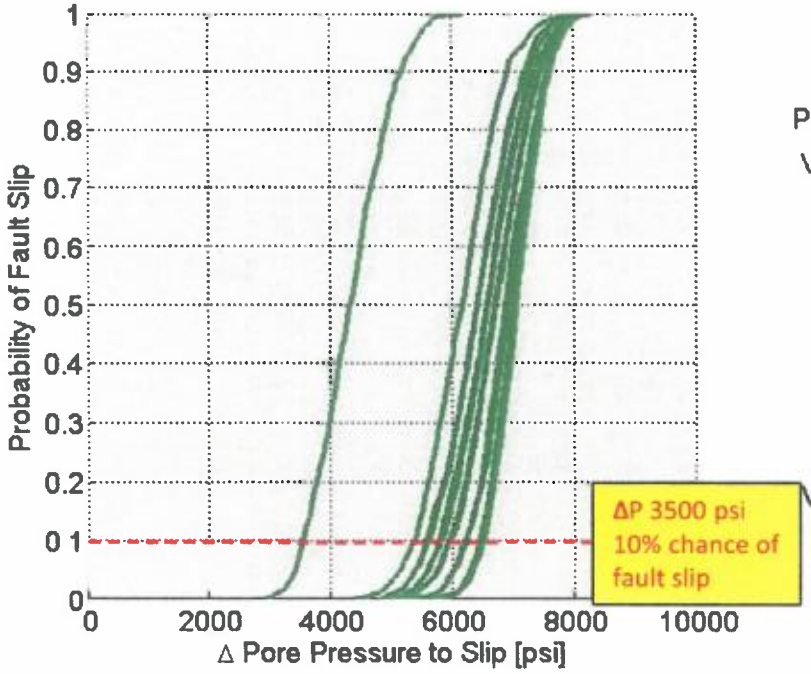
MODEL INPUTS | GEOMECHANICS | PROB. GEOM... | HYDROLOGY | PROB. HYDRO | INTEGRATED

Fault Selector:

All Faults
Fault #1
Fault #2
Fault #3
Fault #4
Fault #5
Fault #6
Fault #7
Fault #8
Fault #9
Fault #10
Fault #11
Fault #12
Fault #13
Fault #14

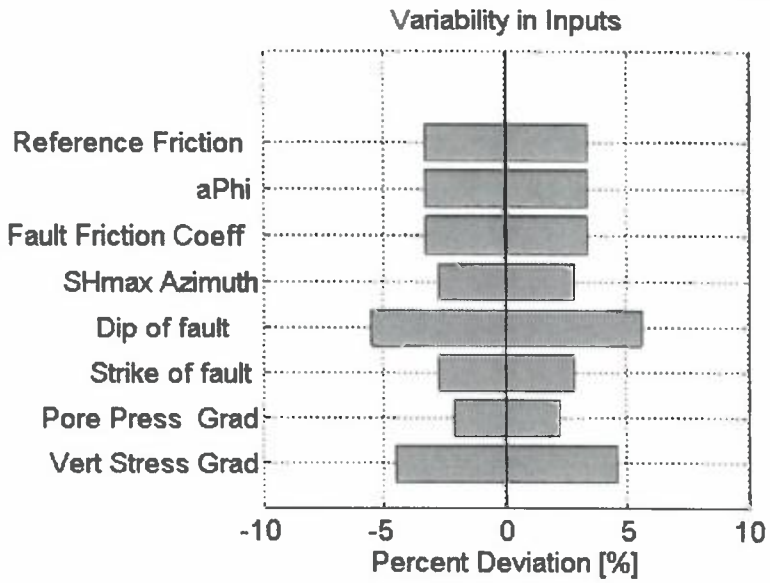
Calculate

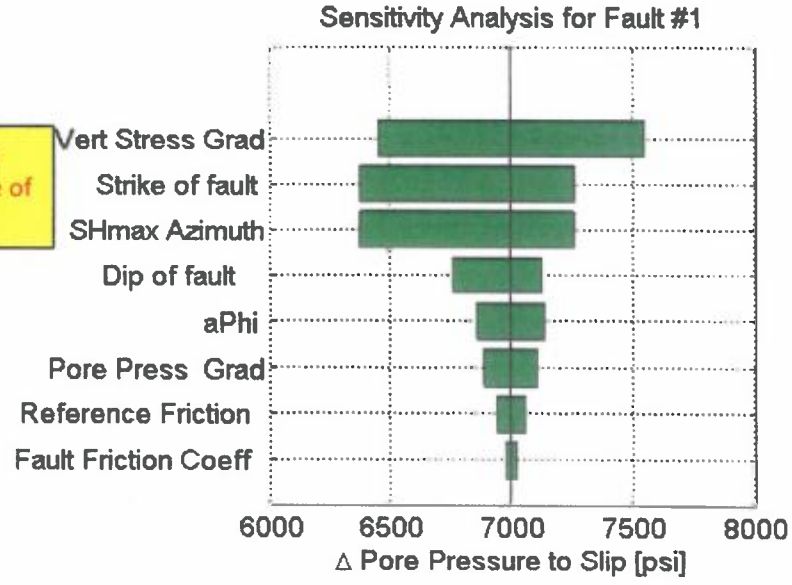
Load Distributions | Run Analysis



Max Delta PP [psi]: 10000

Export CDF data | Show Input Distributions





FSP Exh. 8

Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

MODEL INPUTS | GEOMECHANICS | PROB. GEOMECH | HYDROLOGY | PROB. HYDRO | INTEGRATED

Export

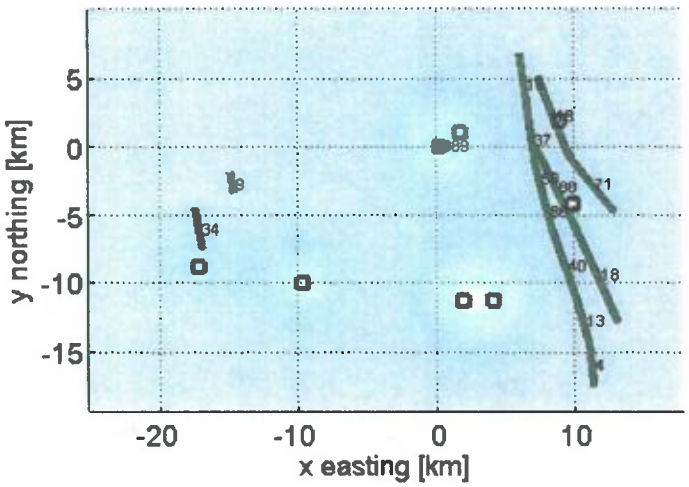
Fault Selector:

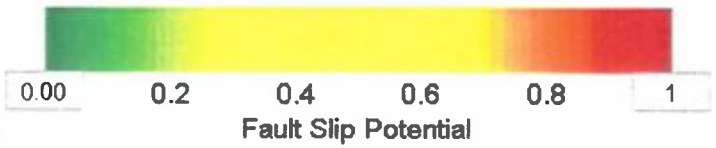
All Faults
Fault #1, 0.00 FSP
Fault #2, 0.00 FSP
Fault #3, 0.00 FSP
Fault #4, 0.00 FSP
Fault #5, 0.00 FSP
Fault #6, 0.00 FSP
Fault #7, 0.00 FSP
Fault #8, 0.00 FSP
Fault #9, 0.00 FSP
Fault #10, 0.00 FSP
Fault #11, 0.00 FSP
Fault #12, 0.00 FSP
Fault #13, 0.00 FSP
Fault #14, 0.00 FSP

Calculate

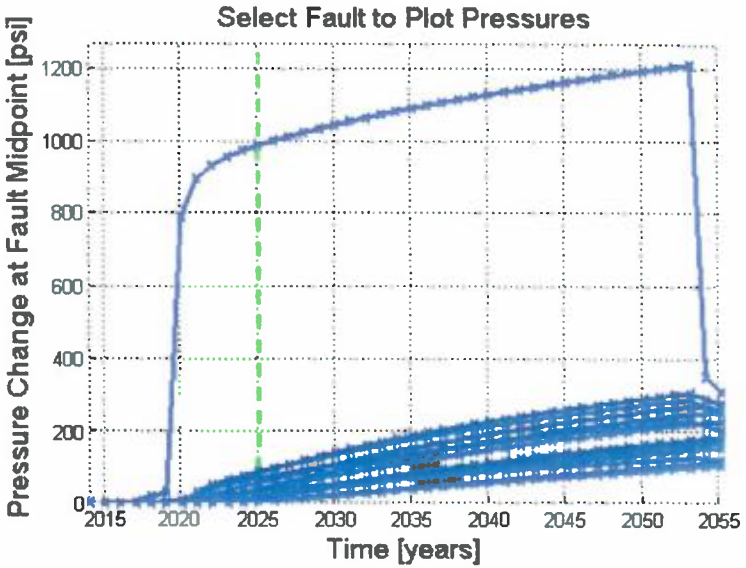
b) PP Change at fault [psi]

Summary Plots

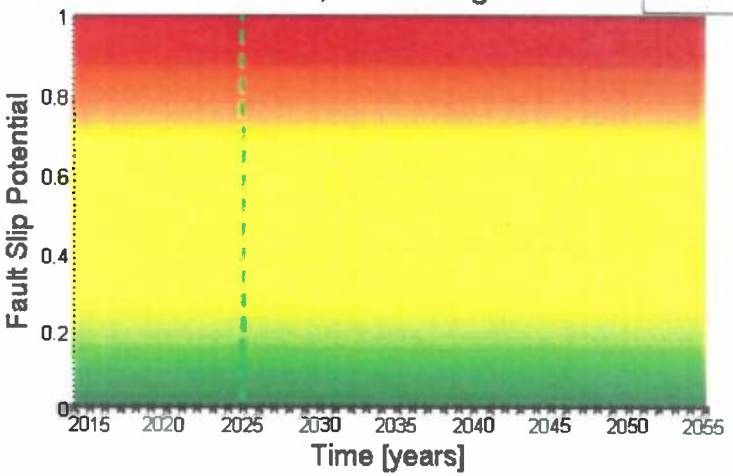




Year: 2025



Export



FSP Exh. 9

Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

MODEL INPUTS | GEOMECHANICS | PROB. GEOMECH | HYDROLOGY | PROB. HYDRO | INTEGRATED

Fault Selector:

All Faults
Fault #1, 0.00 FSP
Fault #2, 0.00 FSP
Fault #3, 0.00 FSP
Fault #4, 0.00 FSP
Fault #5, 0.00 FSP
Fault #6, 0.00 FSP
Fault #7, 0.00 FSP
Fault #8, 0.00 FSP
Fault #9, 0.00 FSP
Fault #10, 0.00 FSP
Fault #11, 0.00 FSP
Fault #12, 0.00 FSP
Fault #13, 0.00 FSP
Fault #14, 0.00 FSP

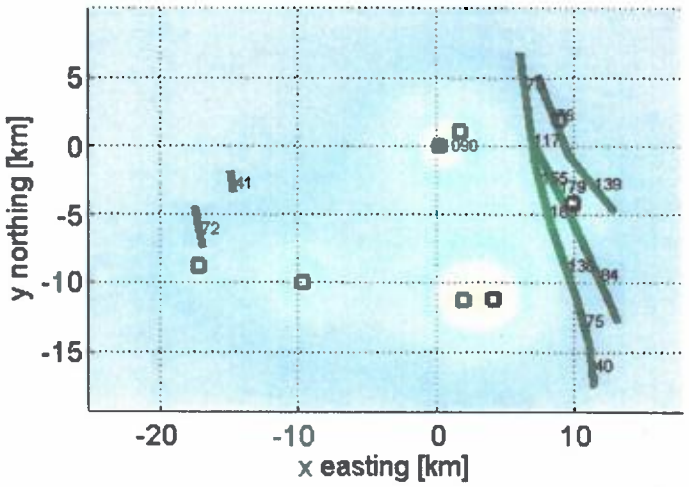
Calculate

FSP Exh. 10

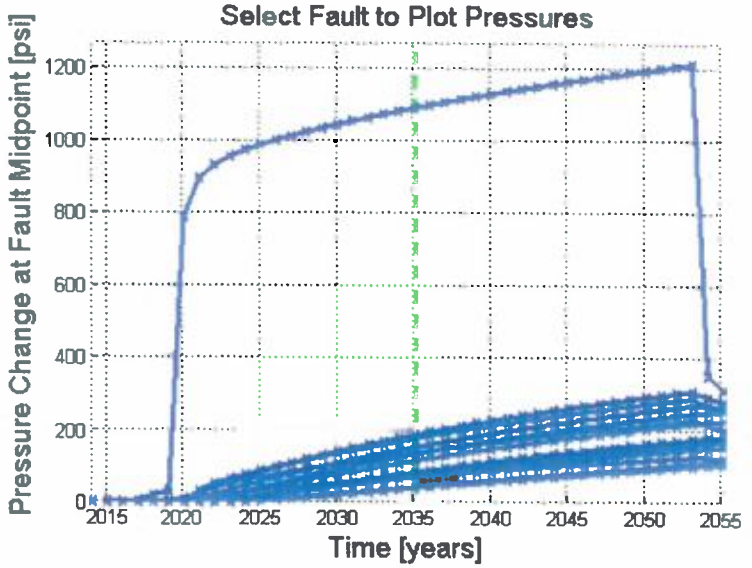
Export

b) PP Change at fault [psi]

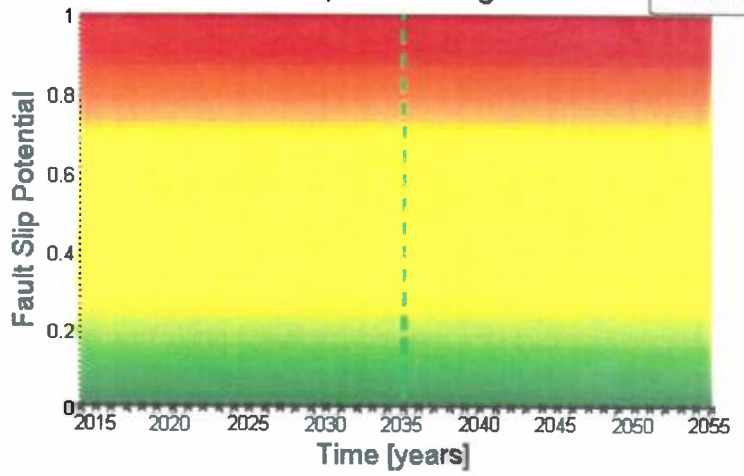
Summary Plots



Year: 2035



Export



Fault Slip Potential v1.07

File Data Inputs Export Image Zoom

Fault Slip Potential

MODEL INPUTS | GEOMECHANICS | PROB. GEOMECH | HYDROLOGY | PROB. HYDRO | INTEGRATED

Fault Selector:

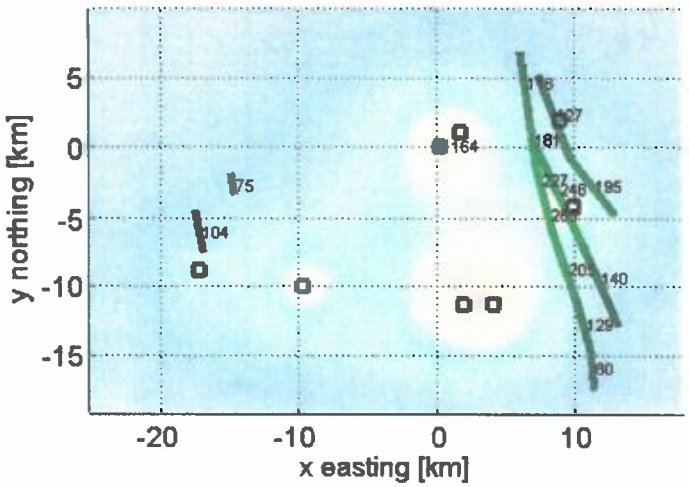
All Faults
Fault #1, 0.00 FSP
Fault #2, 0.00 FSP
Fault #3, 0.00 FSP
Fault #4, 0.00 FSP
Fault #5, 0.00 FSP
Fault #6, 0.00 FSP
Fault #7, 0.00 FSP
Fault #8, 0.00 FSP
Fault #9, 0.00 FSP
Fault #10, 0.00 FSP
Fault #11, 0.00 FSP
Fault #12, 0.00 FSP
Fault #13, 0.00 FSP
Fault #14, 0.00 FSP

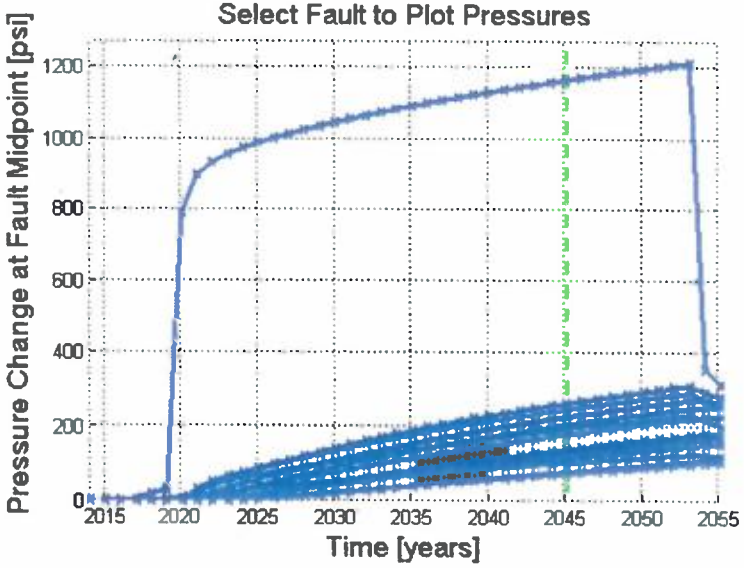
Calculate

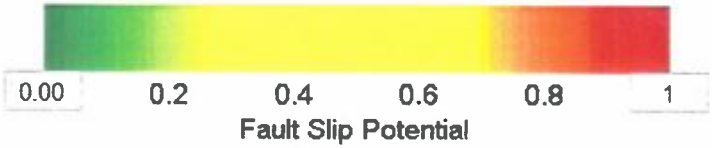
Export

b) PP Change at fault [psi]

Summary Plots

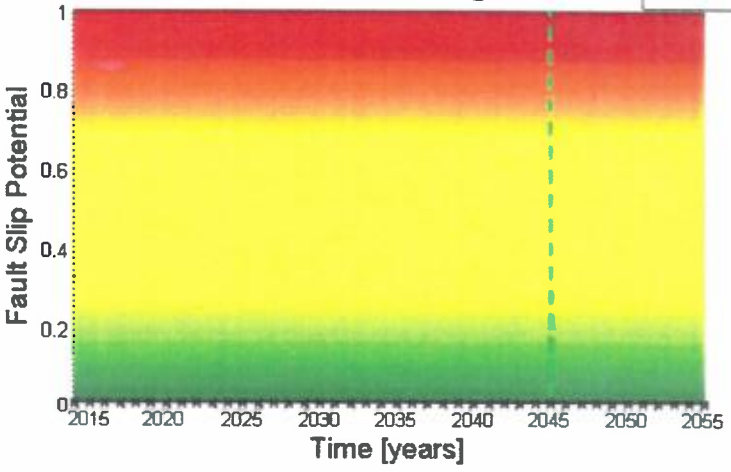






Year: 2045

Export



FSP Exh. 11

Table 1

FSP ANALYSIS WITH SUBJECT WELL

Fault Segment	Fault Source	ΔP to slip	ΔP at 2045
F1	BEG (Basement)	6,993	104
F2	BEG (Basement)	6,645	116
F3	BEG (Basement)	6,607	181
F4	BEG (Basement)	7,249	227
F5	BEG (Basement)	7,266	265
F6	BEG (Basement)	7,001	205
F7	BEG (Basement)	7,259	129
F8	BEG (Basement)	6,434	80
F9	BEG (Basement)	6,130	248
F10	BEG (Basement)	6,389	140
F11	BEG (Basement)	6,740	127
F12	BEG (Basement)	4,341	195
F13	BEG (Basement)	6,761	75
F14	BHP at well	NA	1,164

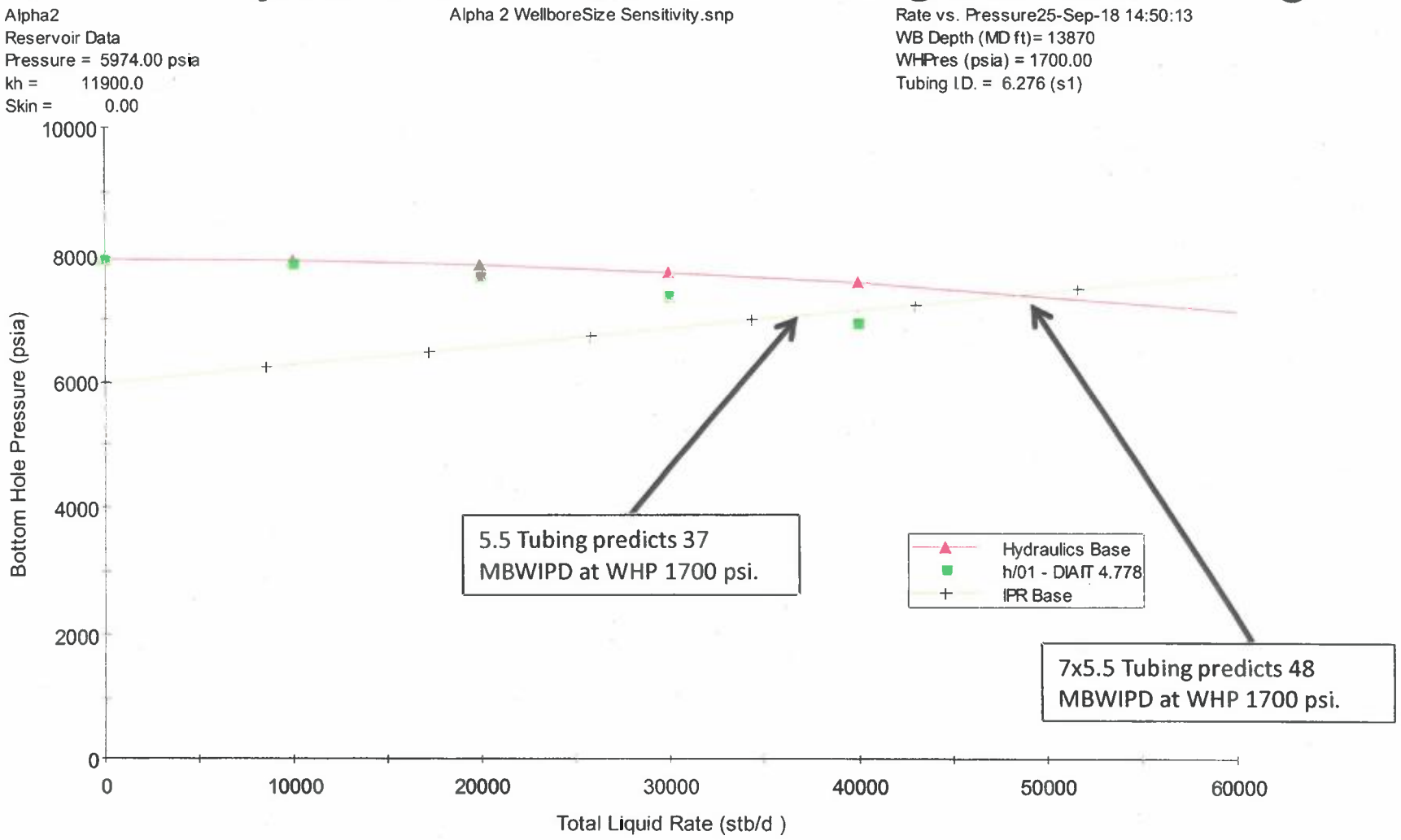
FSP Exh. 12

4

Exhibits of Scott Wilson
On Behalf of NGL Water Solutions Permian, LLC

NGL Water Solutions, LLC

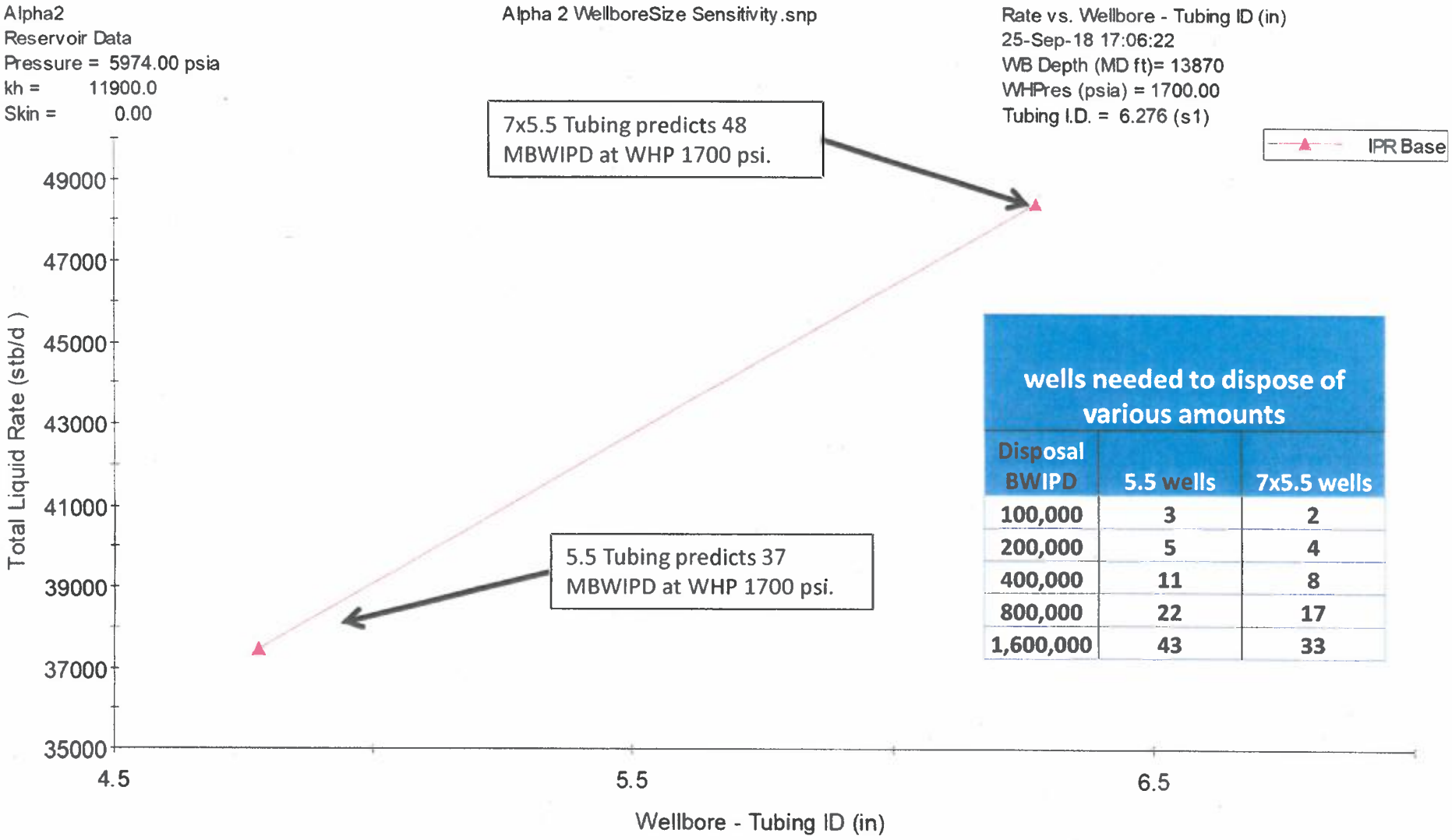
Typical Wellbore Hydraulics Models predict a 30% increase in maximum injection rate between 5.5 tubing and 7x5.5 tubing.



NGL Water Solutions, LLC

Exh. A2

Increased injection rate per well equates to fewer injectors.



wells needed to dispose of various amounts		
Disposal BWIPD	5.5 wells	7x5.5 wells
100,000	3	2
200,000	5	4
400,000	11	8
800,000	22	17
1,600,000	43	33

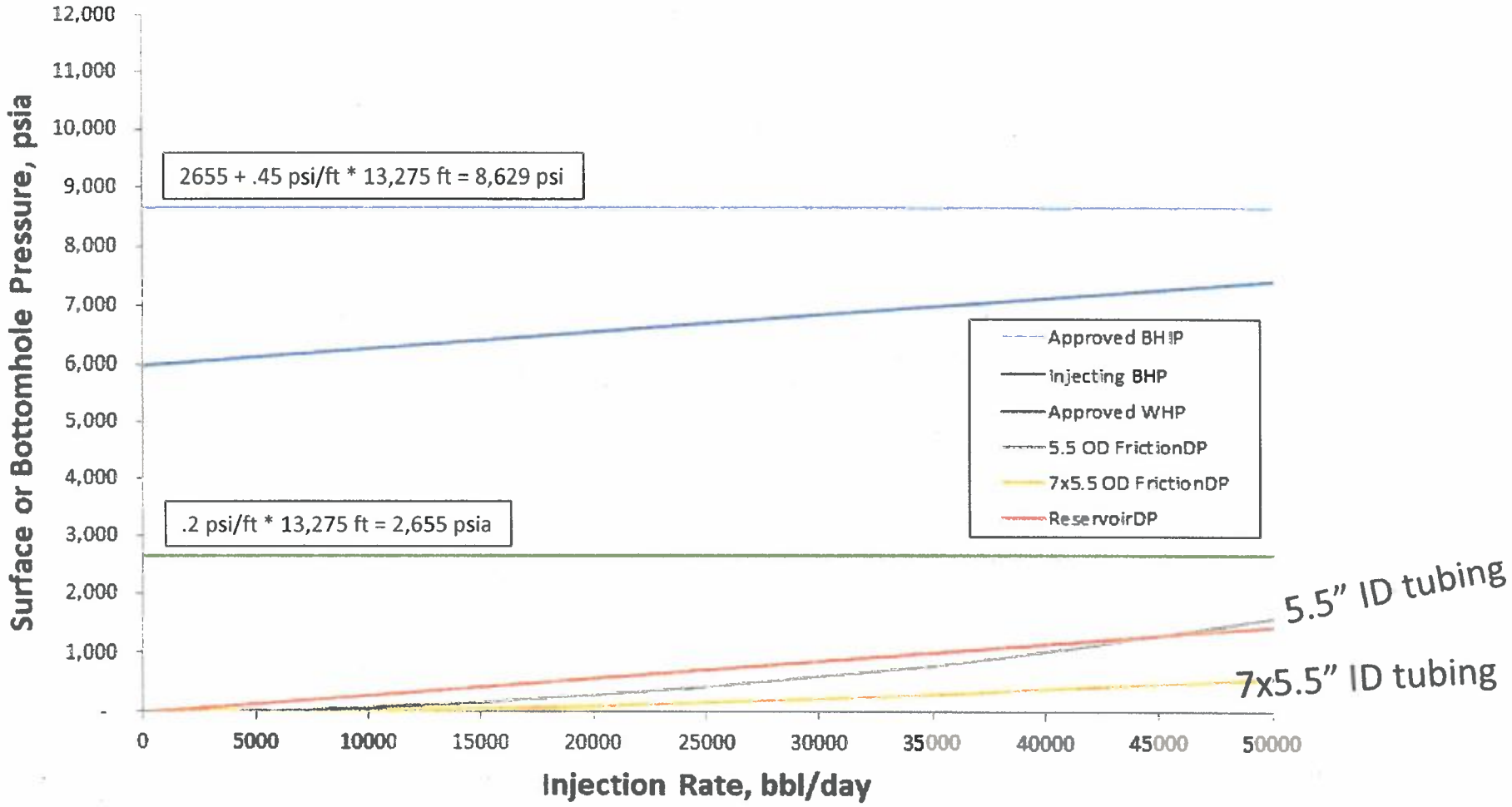
Exh. A3

NGL Water Solutions, LLC

Increasing tubing size will decrease friction losses and conserve horsepower.

2 example tubing sizes and their impact on friction losses.

Pressure losses at various injection rates

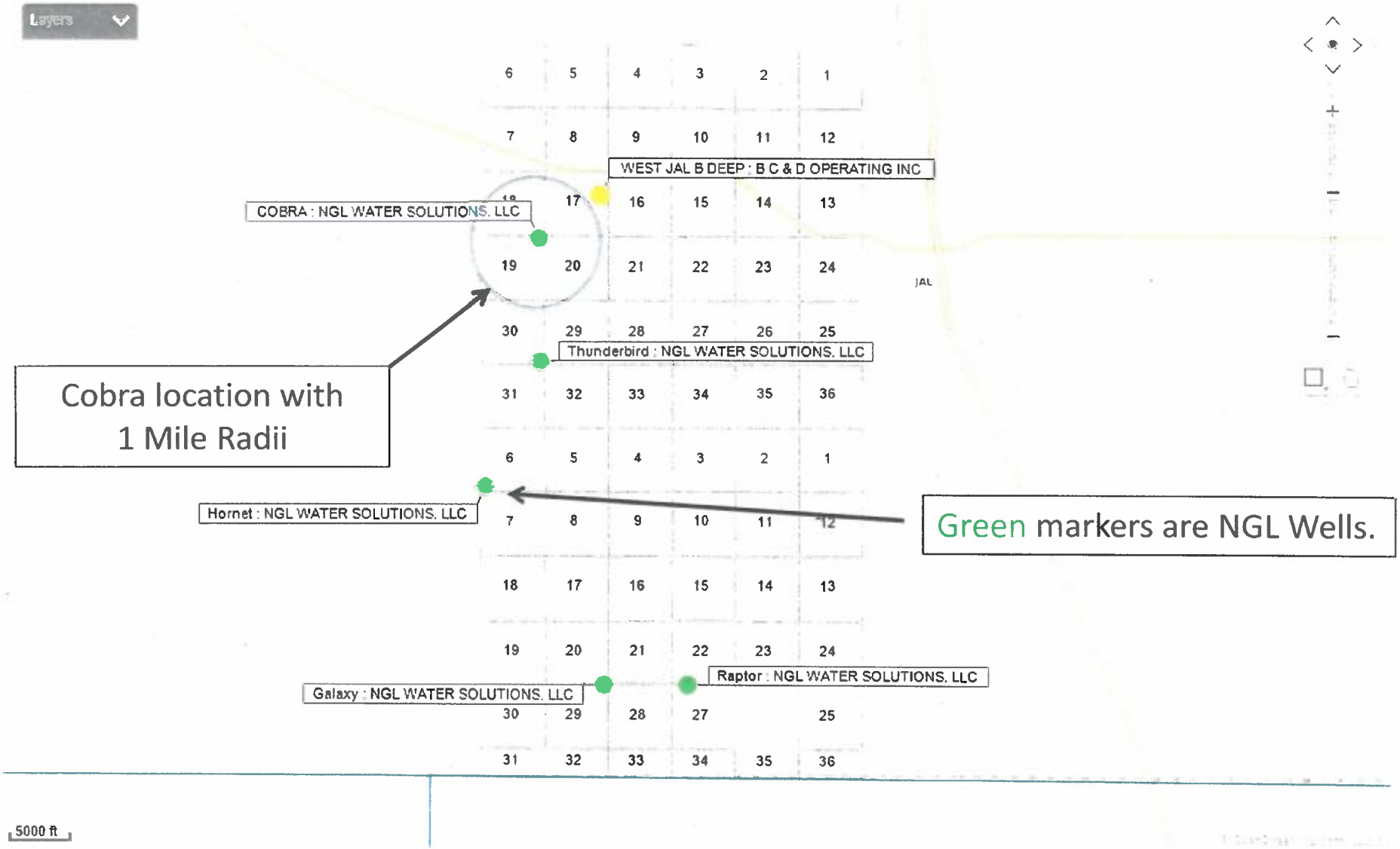


5/28/2019

NGL Water Solutions, LLC

Exh. A4

Wells injecting water into the Devonian formation in the area.
Area is roughly 25 miles (E-W) by 18 miles (N-S)



Cobra location with
1 Mile Radii

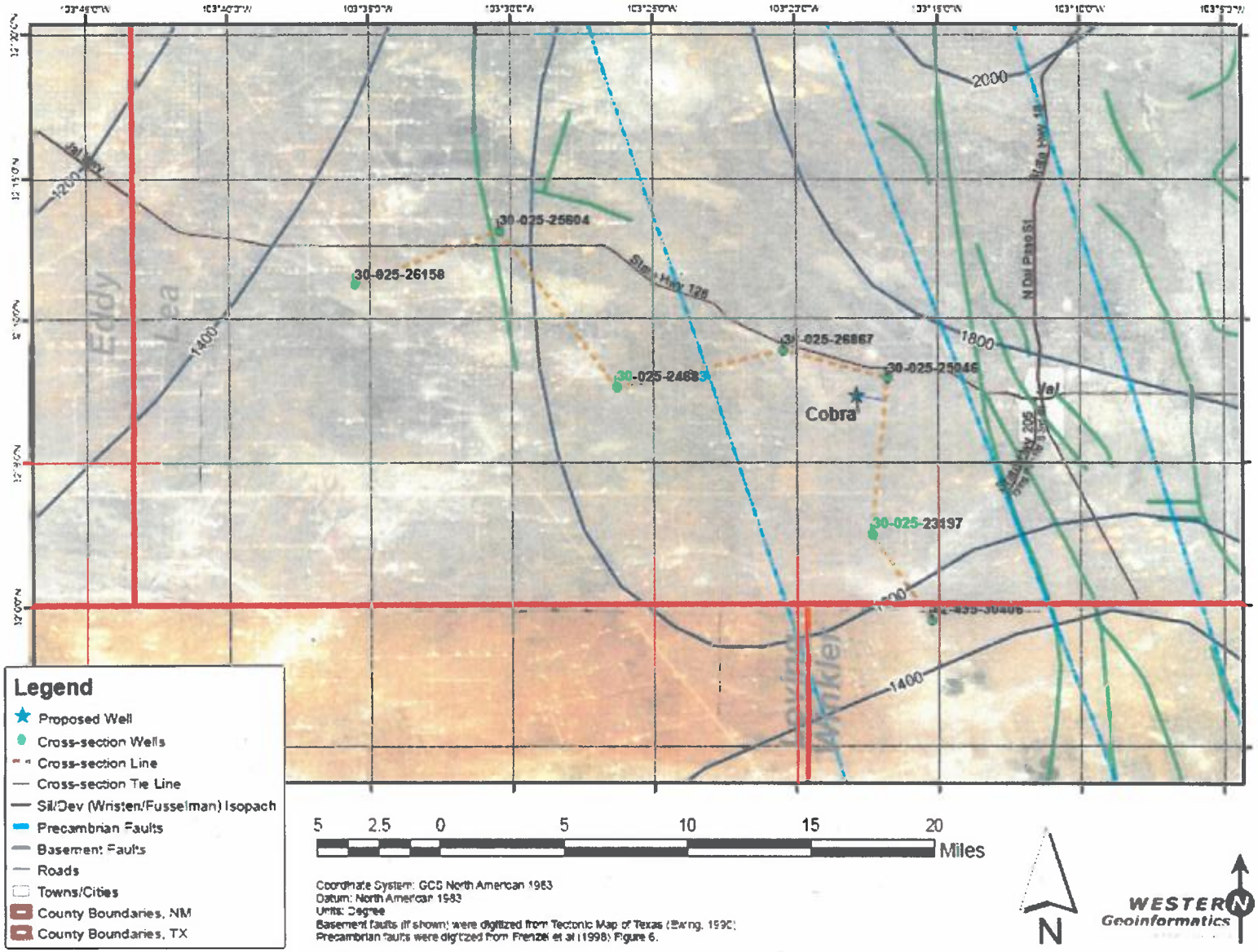
Green markers are NGL Wells.

NGL Water Solutions, LLC

Exh. A5

Sil/Dev Thickness at Cobra is 1700 feet

Isopach, Faults, and Well Location



Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990).
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

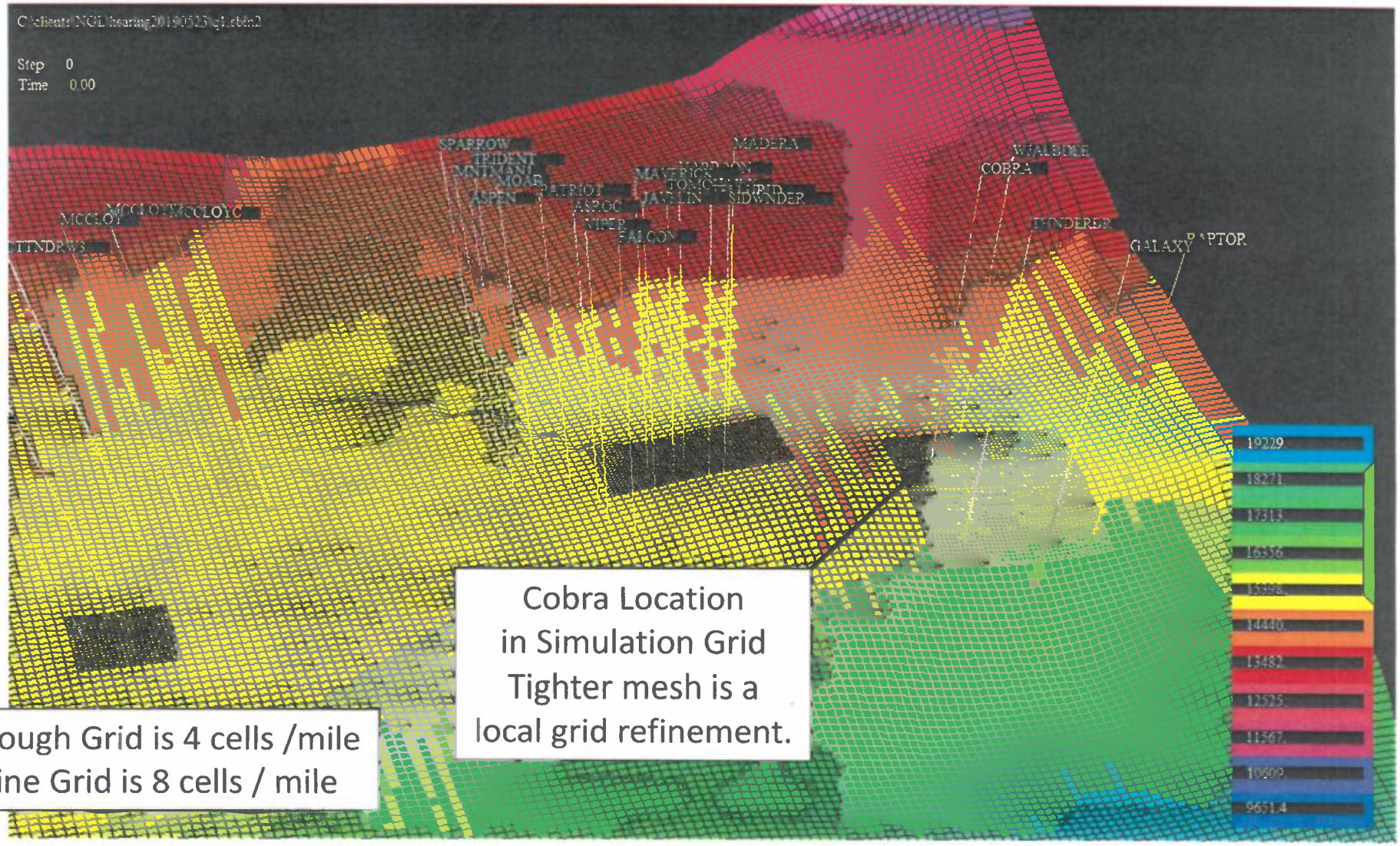
NGL Water Solutions, LLC

Exh. A6

Simulation Grid matches Structure and Thickness

Reservoir Simulation grid incorporates the NGL proposed wells and the close offsets.

Observation wells are placed in grid corners to monitor the large scale pressure distribution.

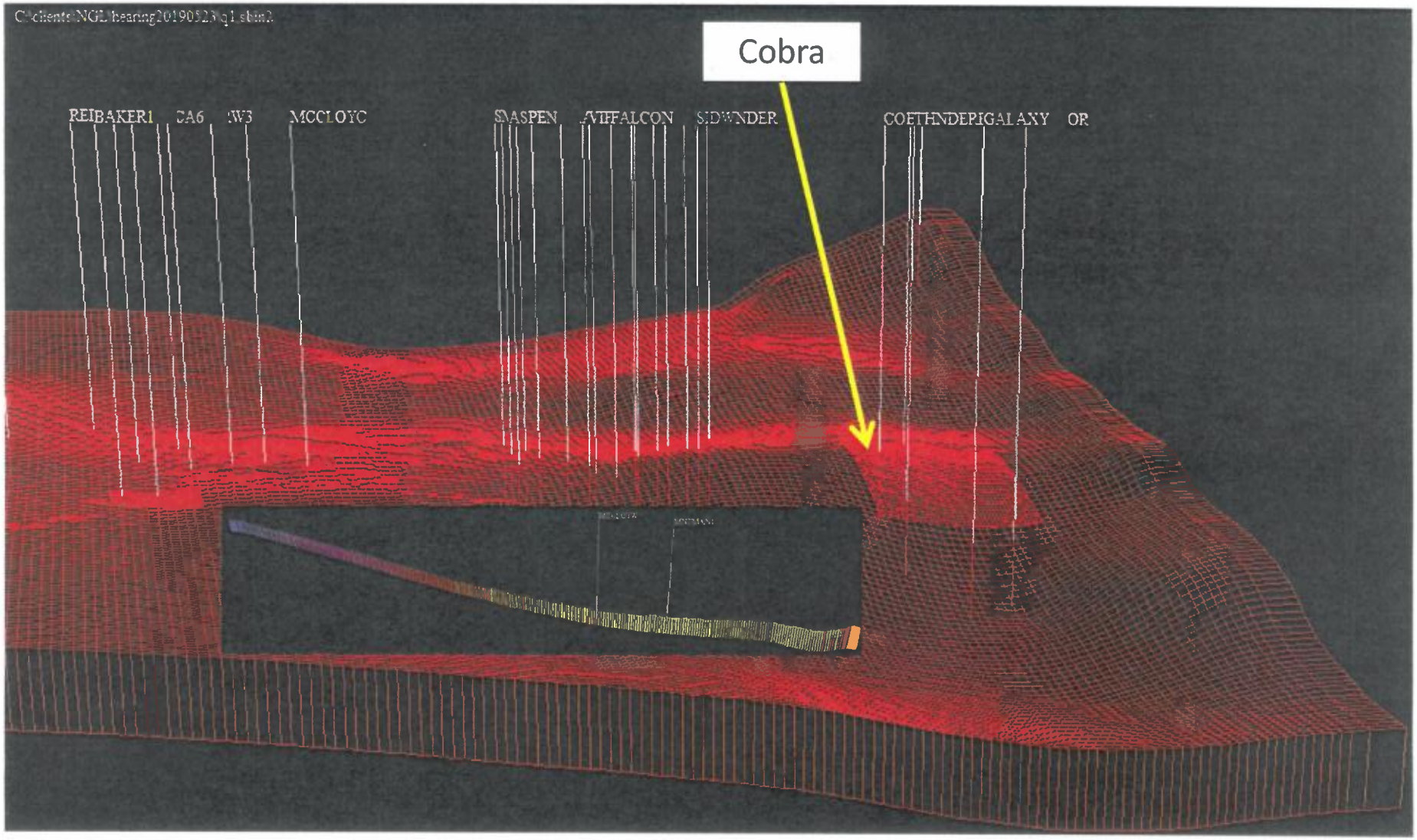


Exh. A7

NGL Water Solutions, LLC

3D view of grid shows Structural Relief.

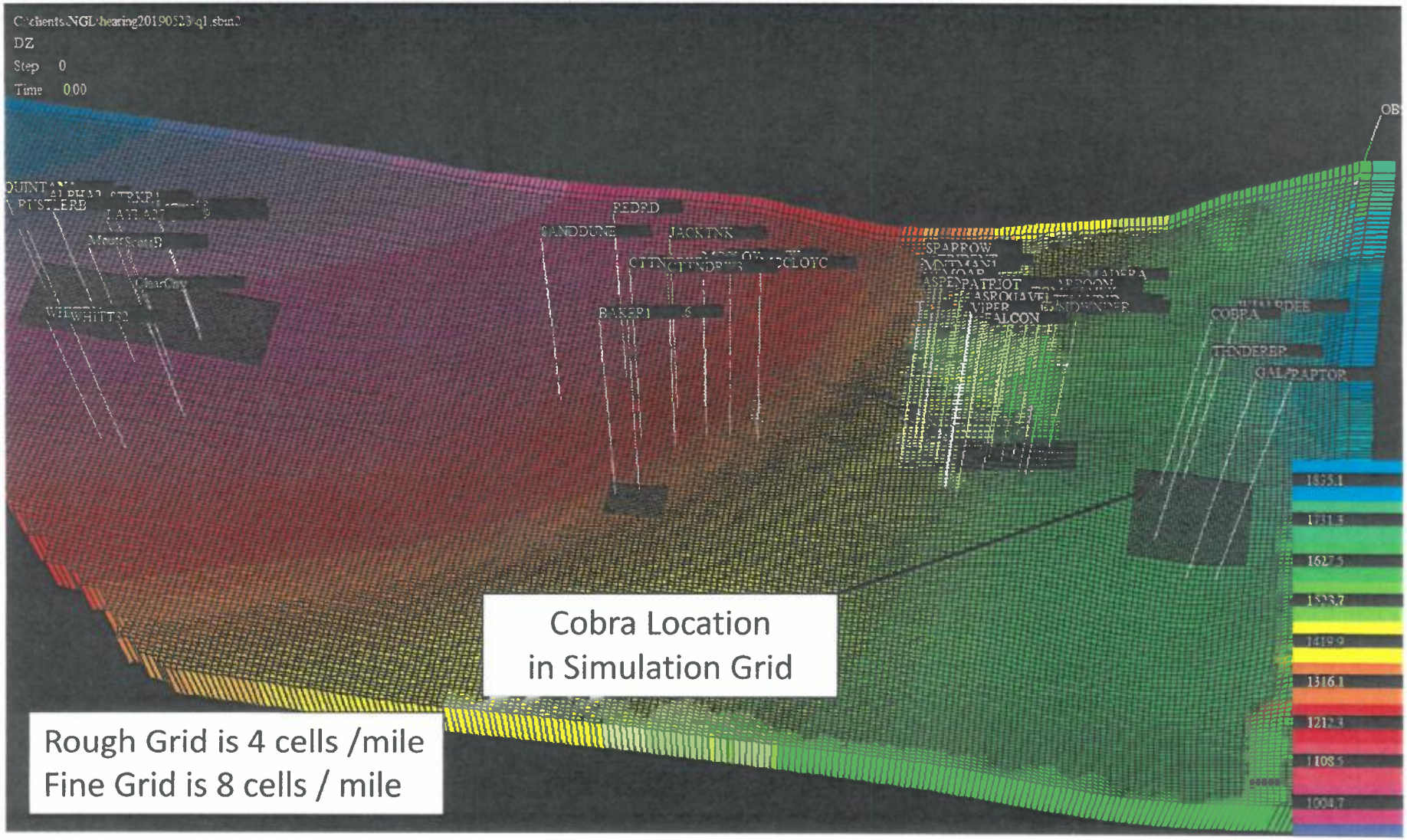
Thickness is accurate but not easy to see at this aspect ratio.



Exh. A8

NGL Water Solutions, LLC

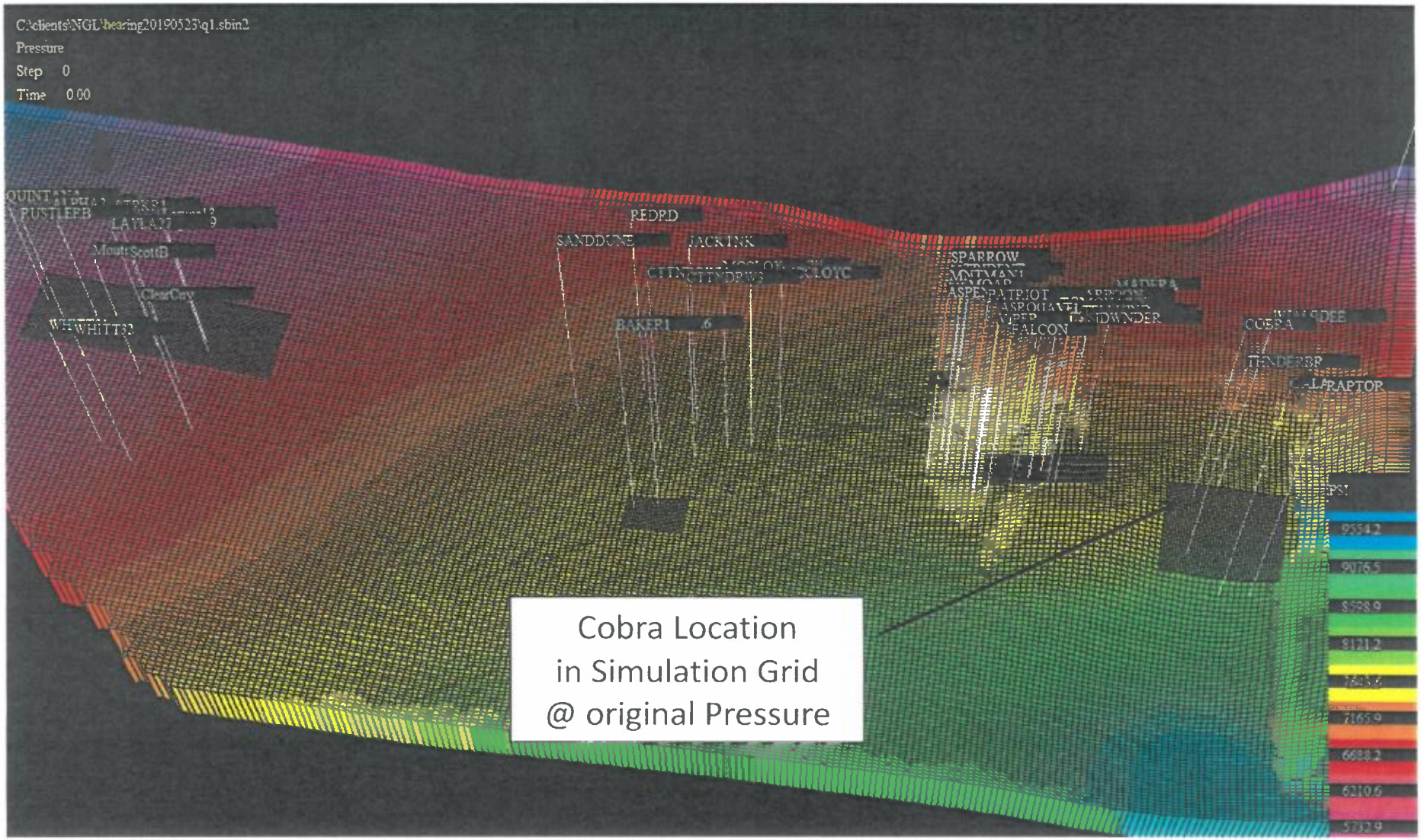
Light Blue color to the North East represents the thickest Sil/Dev.



NGL Water Solutions, LLC

Exh. A9

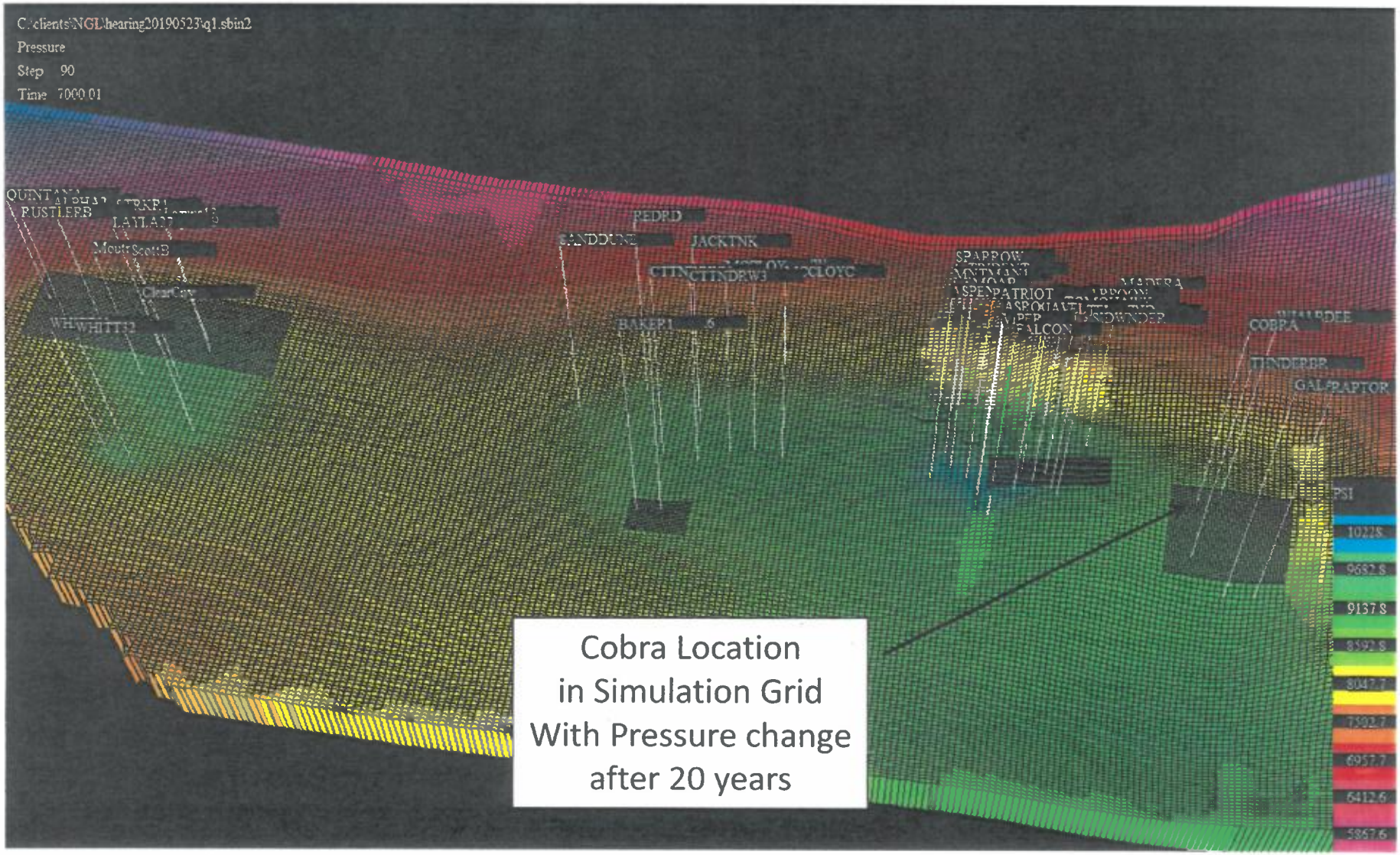
Initial pressure is equilibrated by the model based on grid cell depth, fluids(water) and capillary pressure.



NGL Water Solutions, LLC

Exh. A10

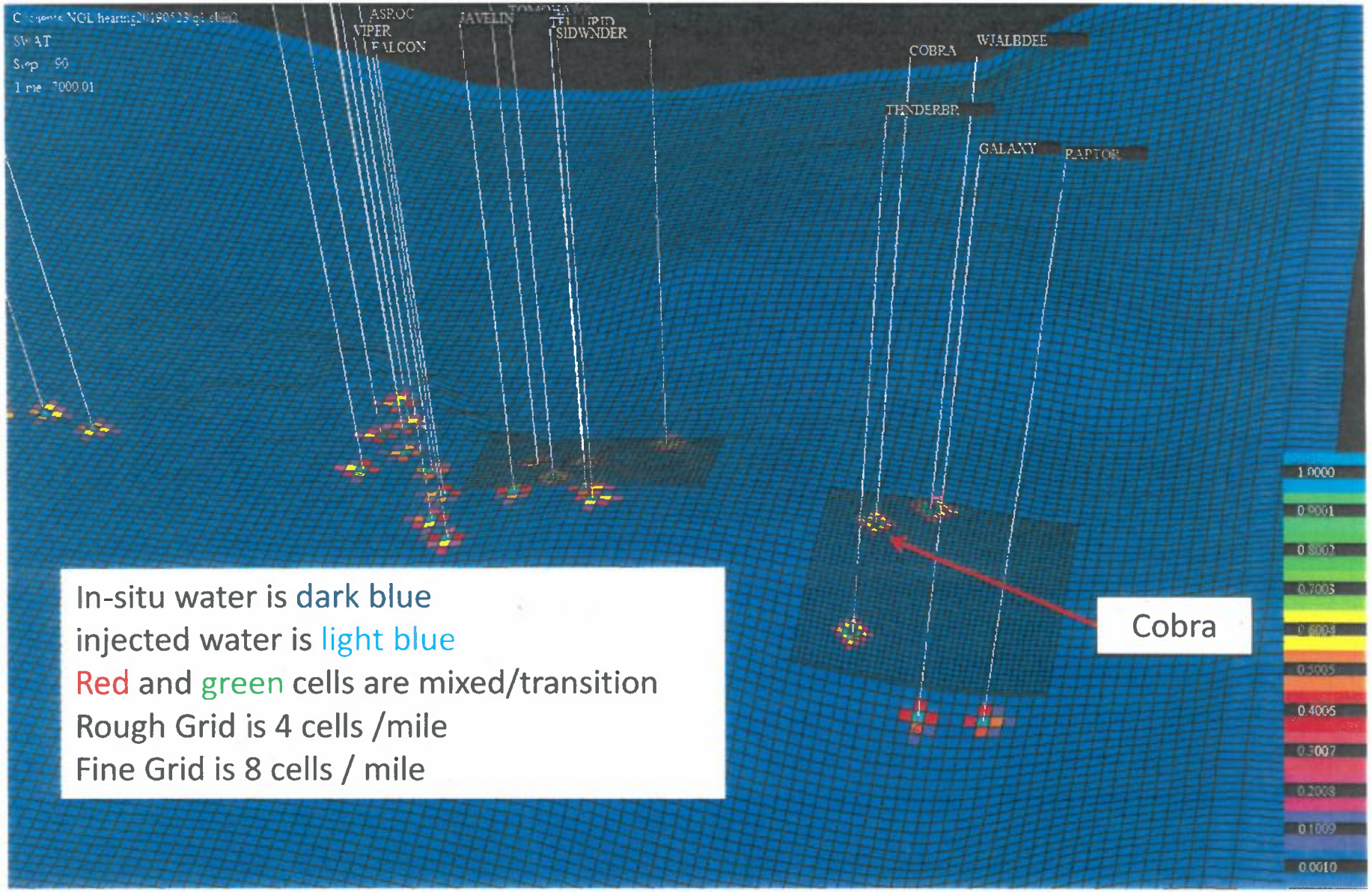
Pressure at 20 years is affected by original pressure, injected volumes, and the ability of the reservoir to dissipate pressure.



Exh. A11

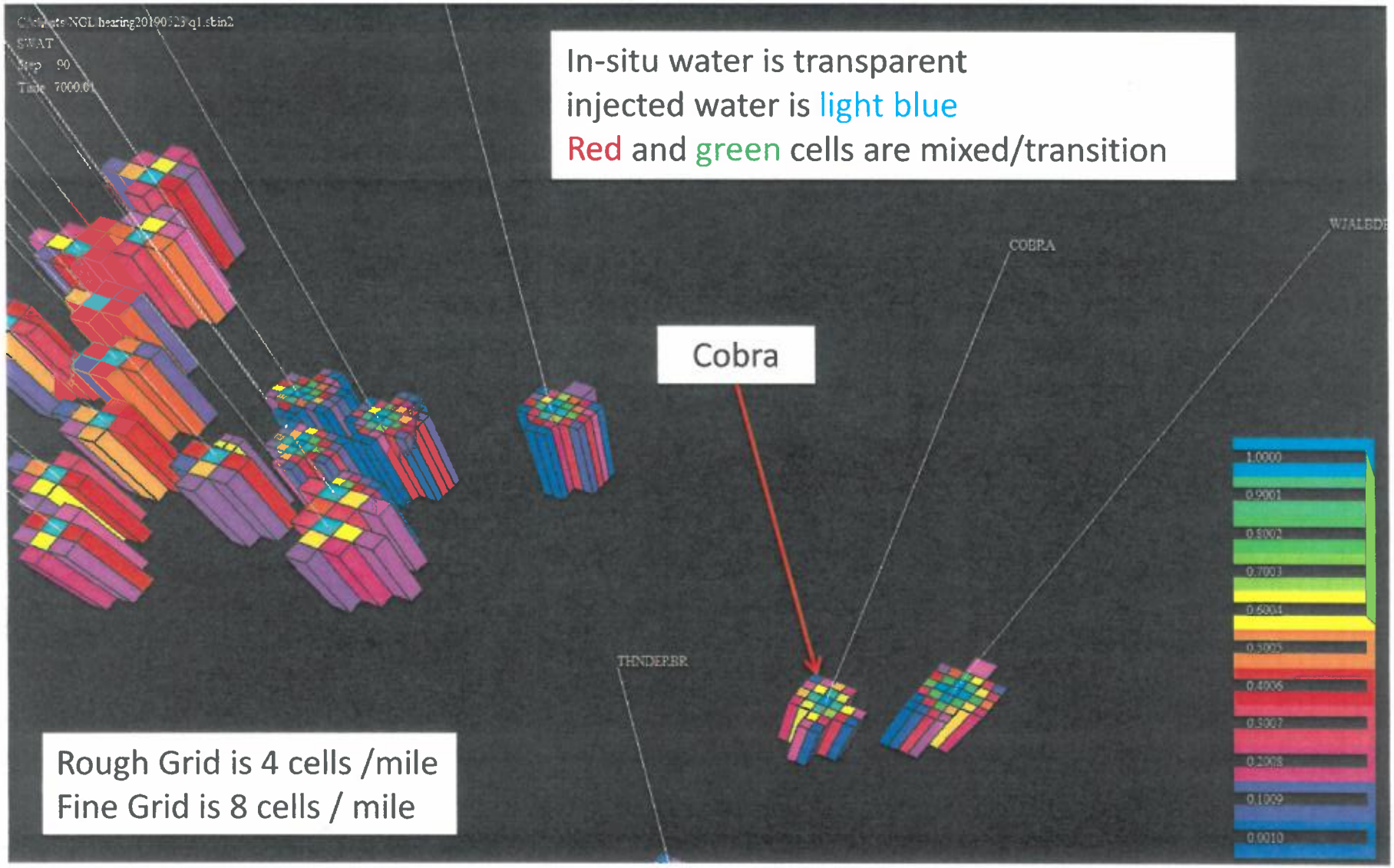
NGL Water Solutions, LLC

Large scale saturation profiles after 20 years of injection.



NGL Water Solutions, LLC

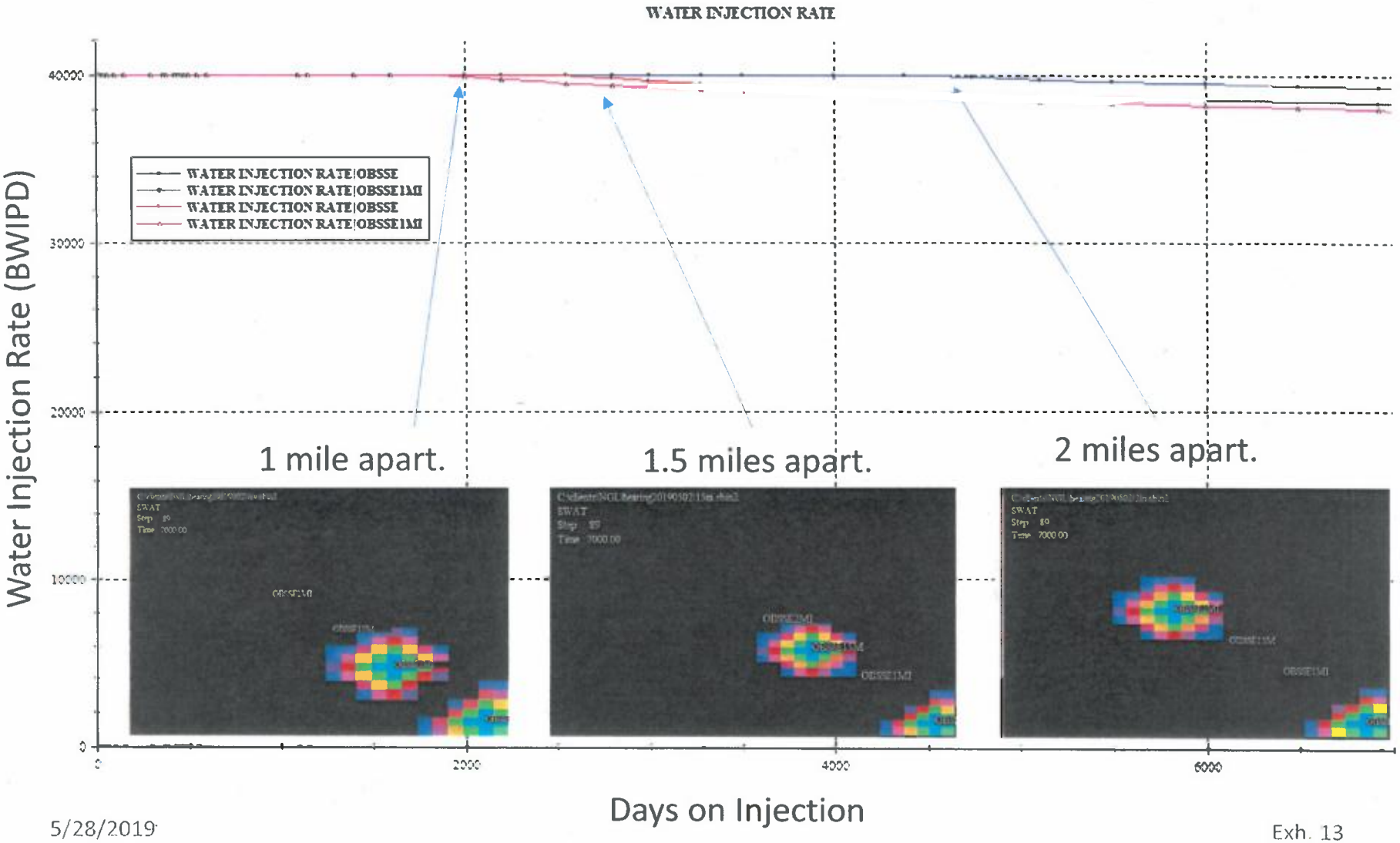
Detailed saturation profiles after 20 years of injection.



NGL Water Solutions, LLC

Exh. A13

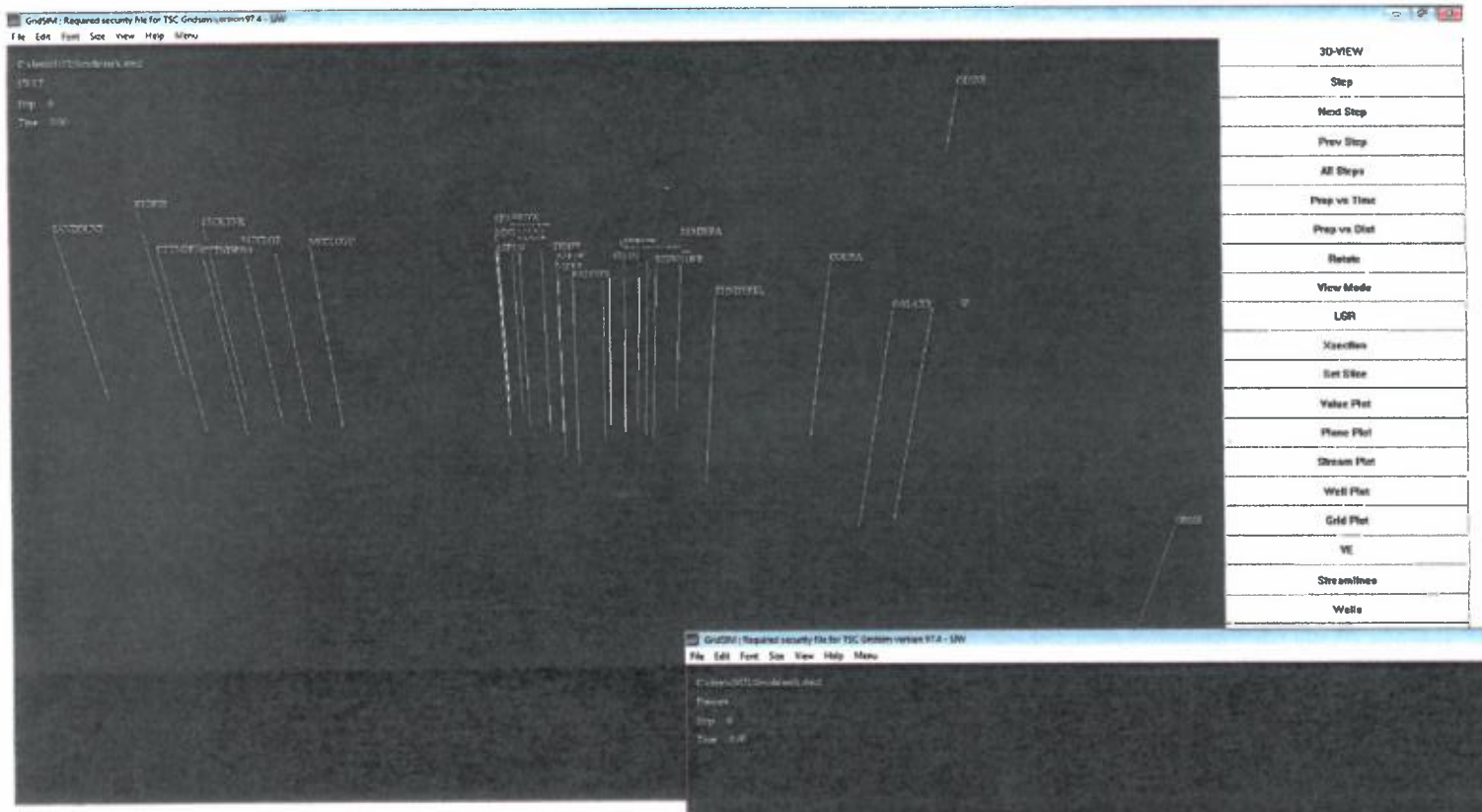
Typical wells showing interference when spaced 1, 1.5, and 2 miles apart.
Closer spacing causes rates to fall, but not significantly.



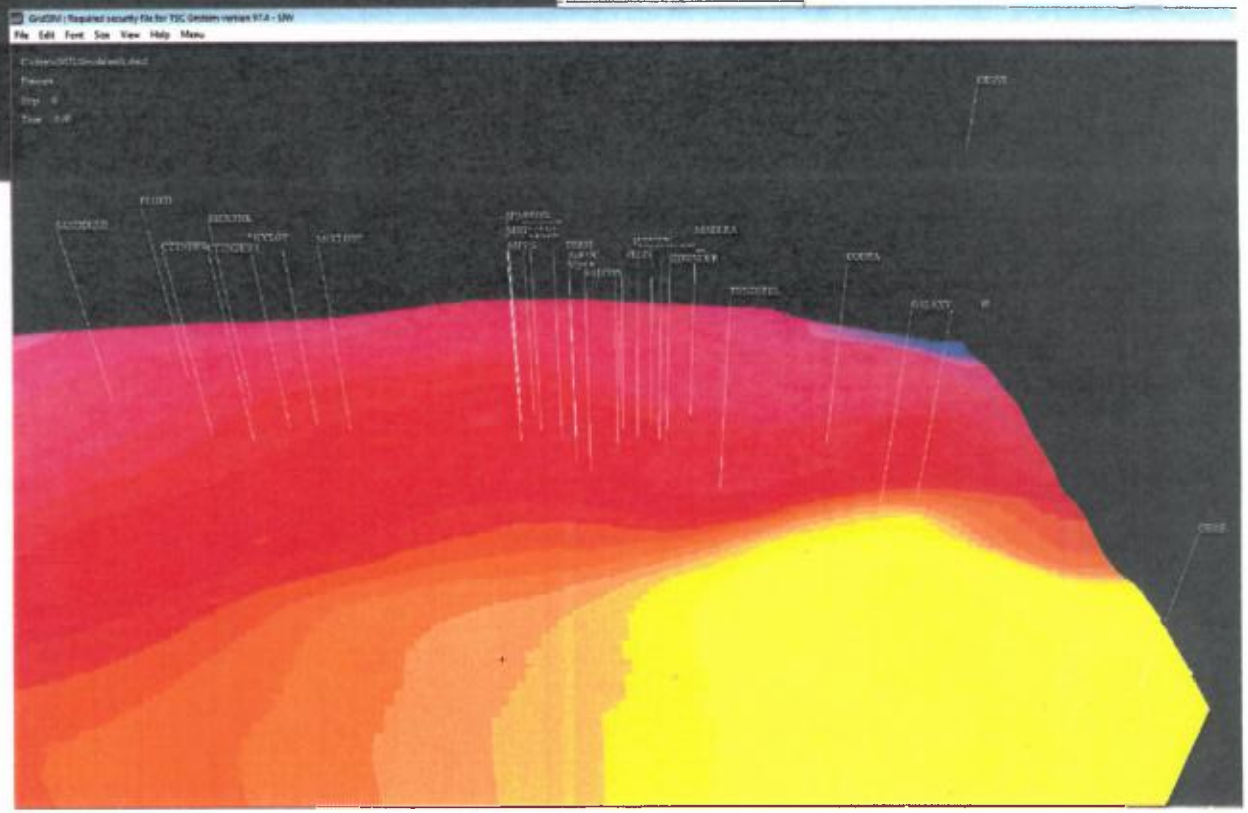
5/28/2019

Exh. 13

Exh. A14



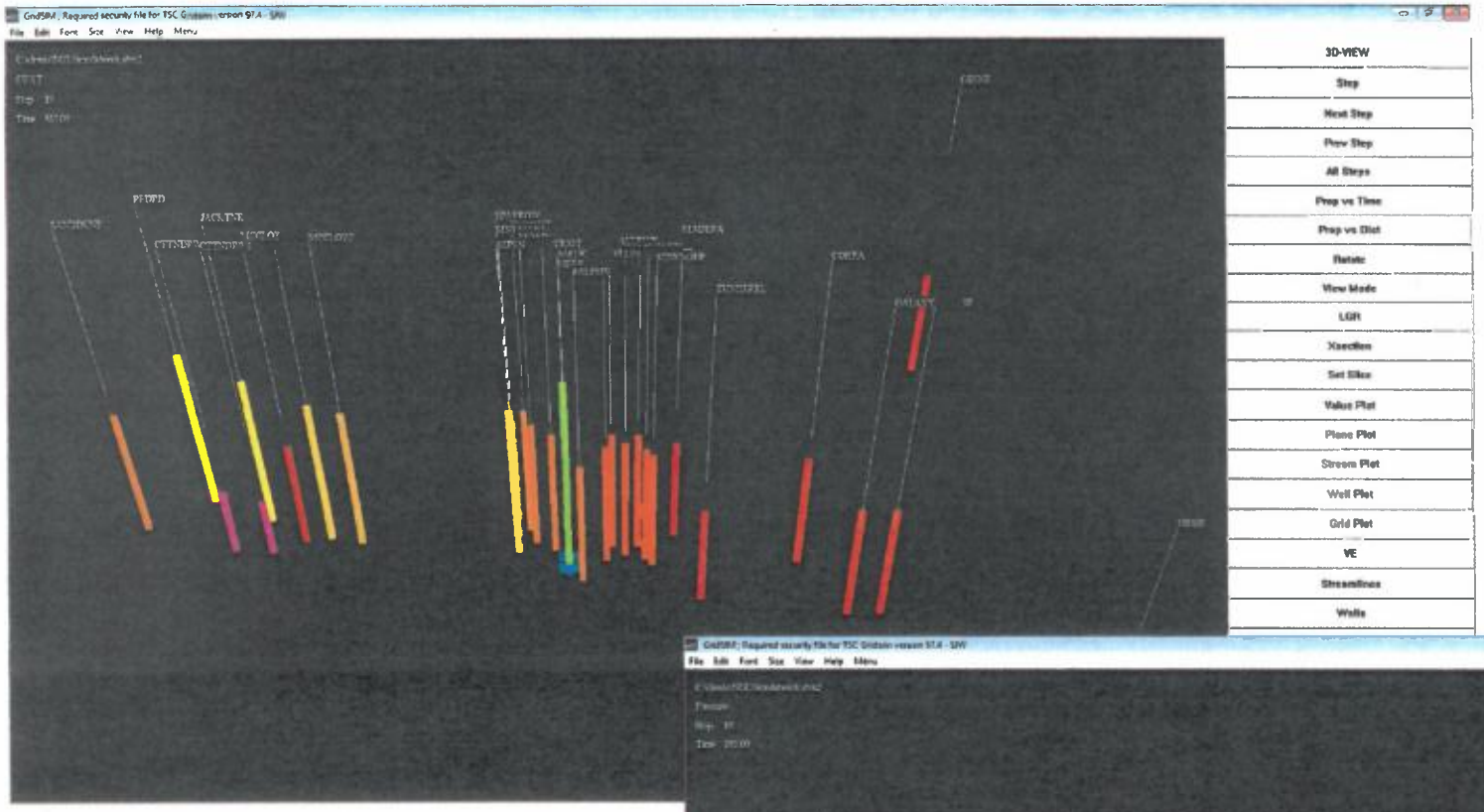
2019
(0 years)



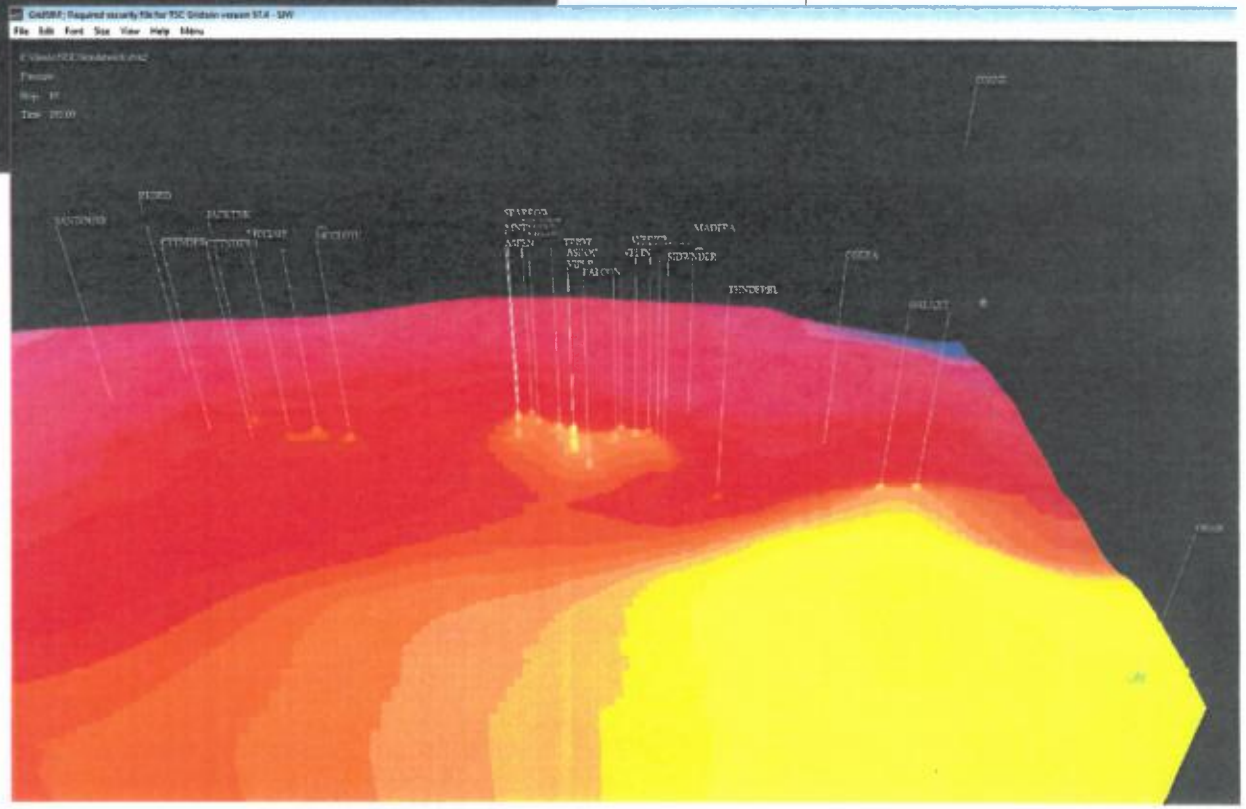
Water movement & Pressure

5/28/2019

Exh. A15



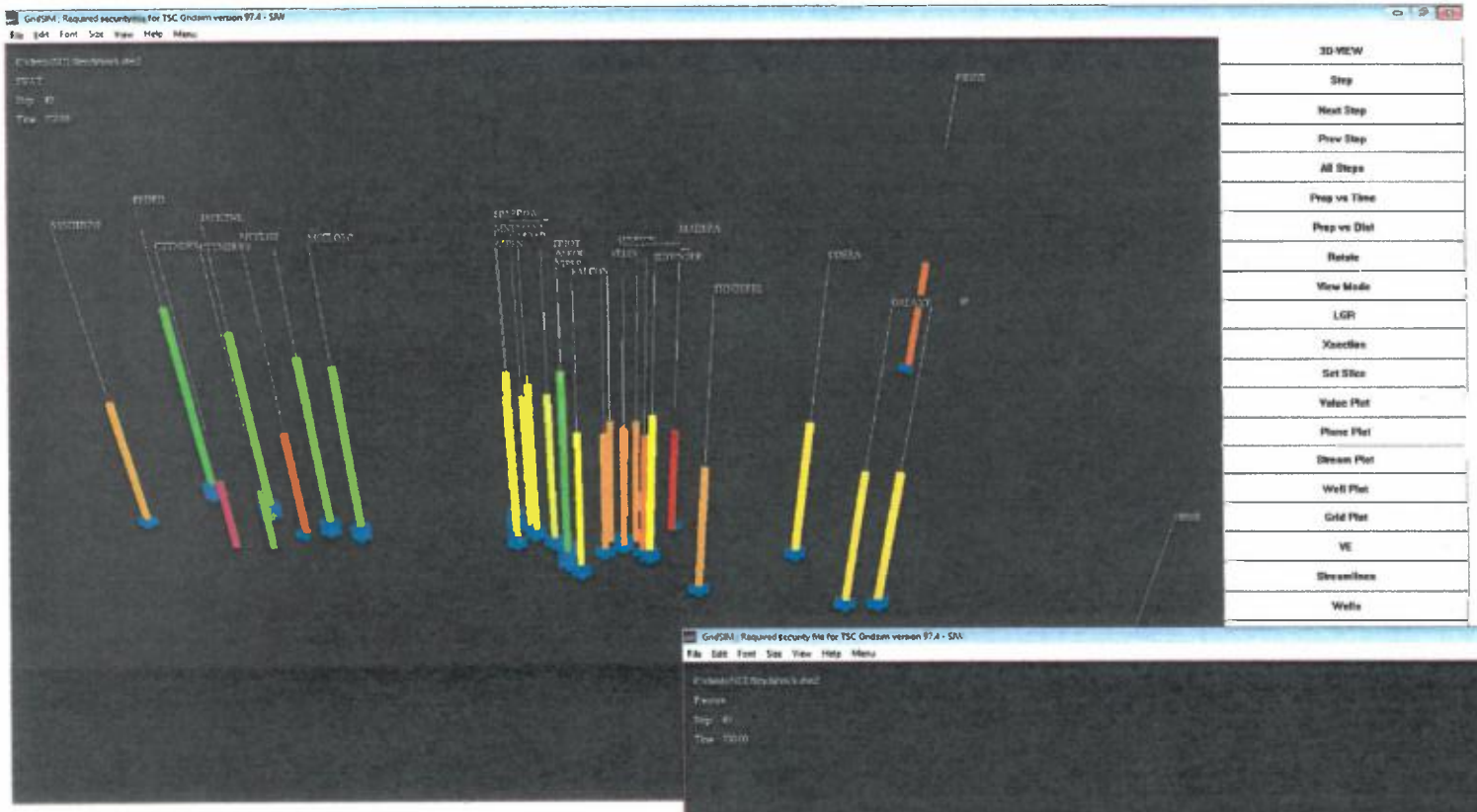
2020 (1 year)



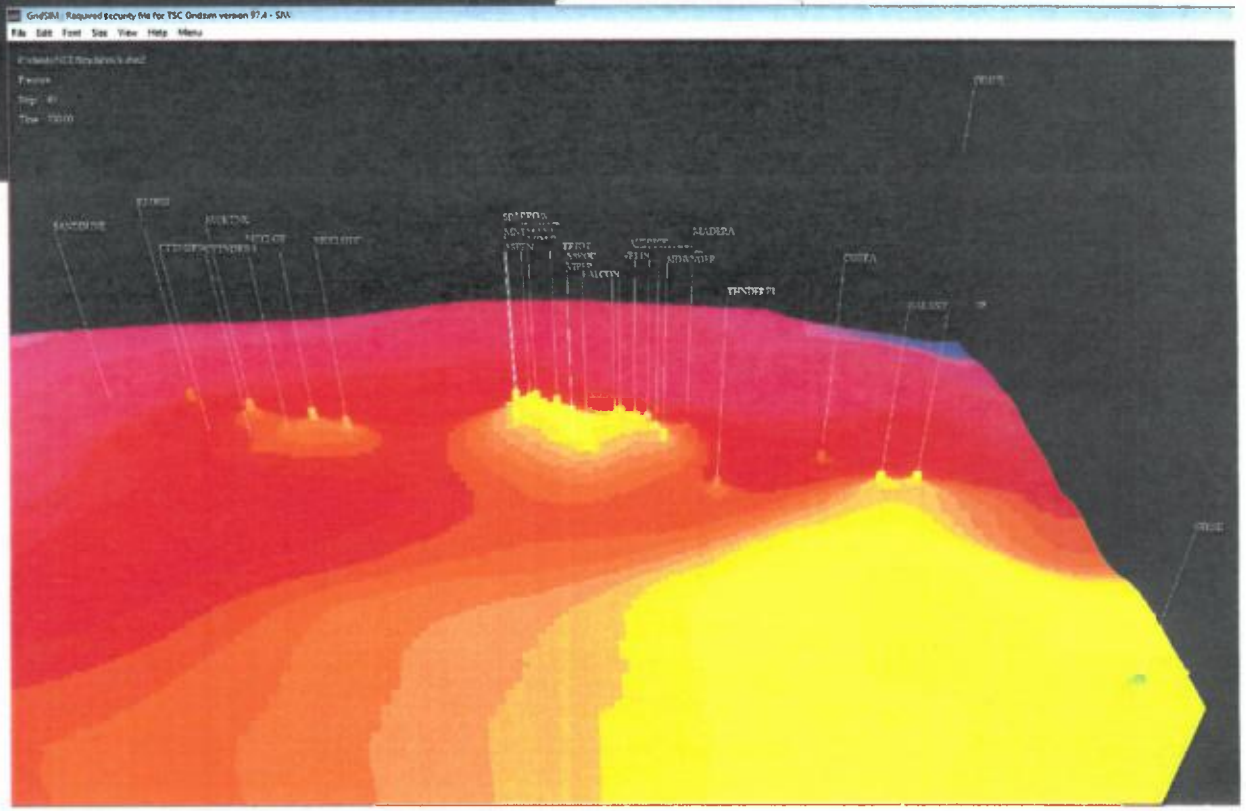
Water movement & Pressure

5/28/2019

Exh. A16



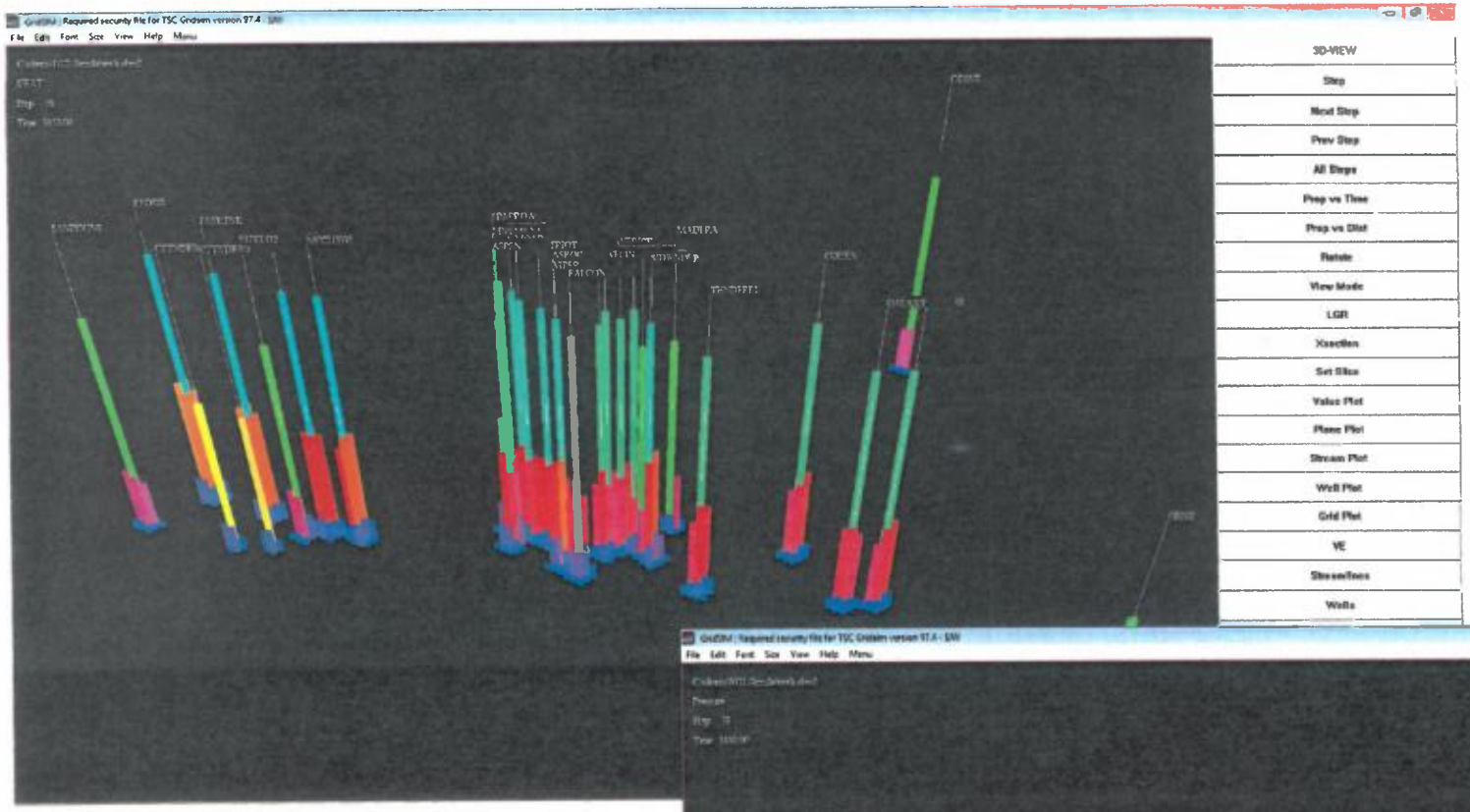
2021
(2 years)



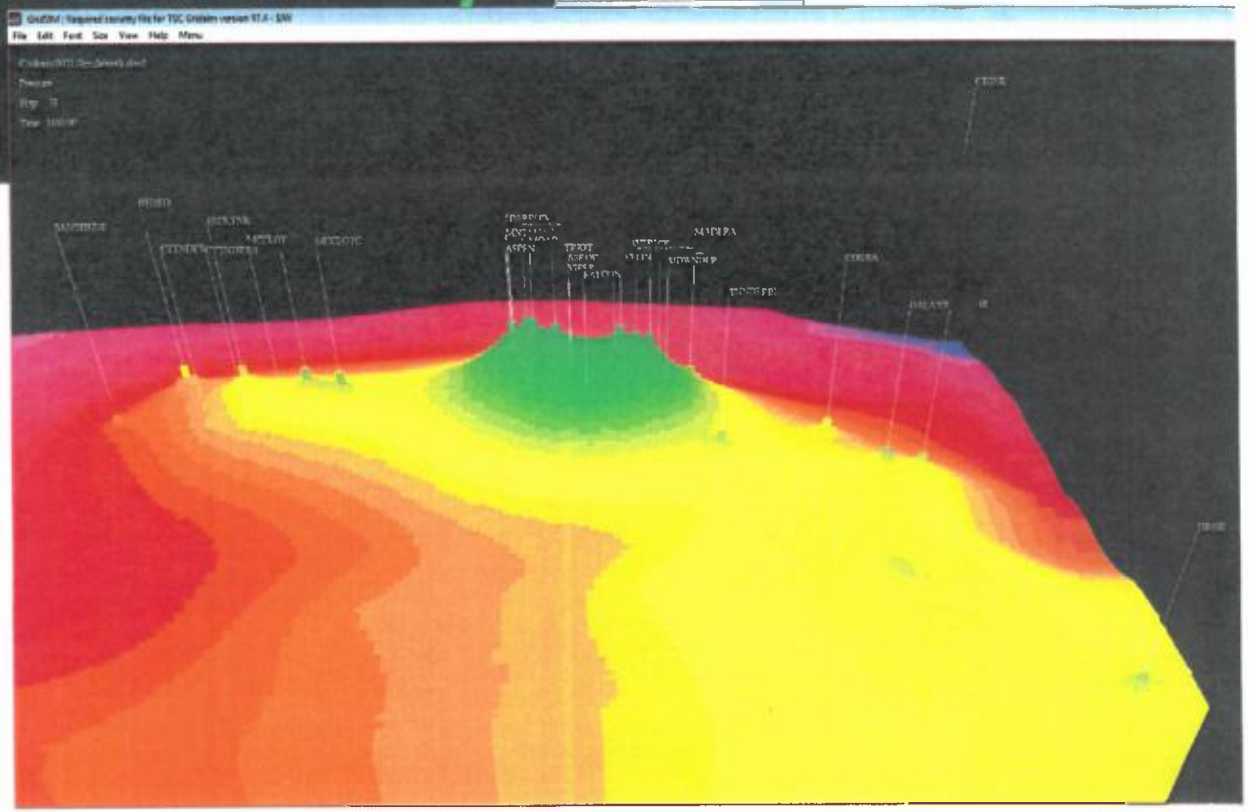
Water movement & Pressure

5/28/2019

Exh. A17



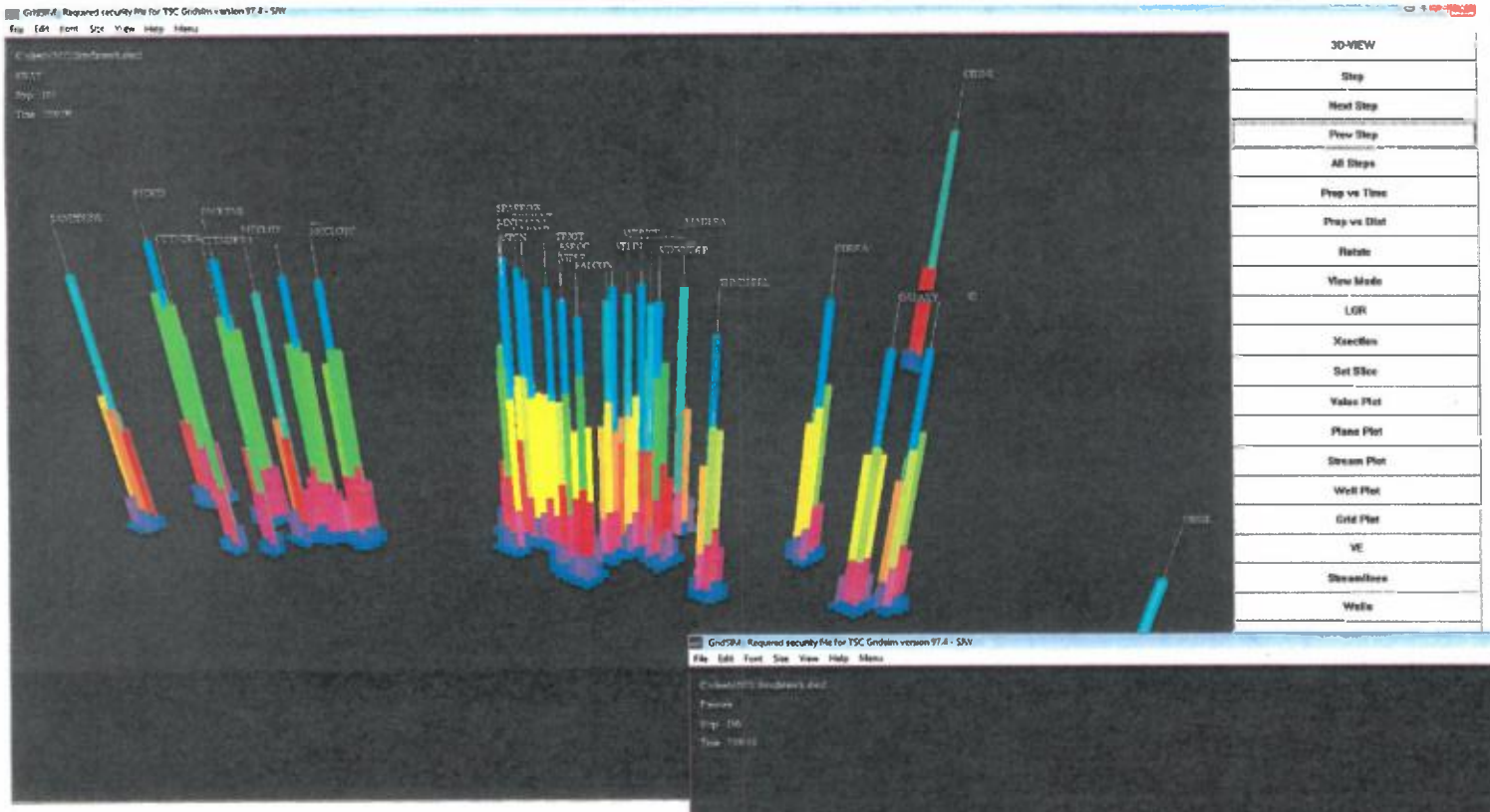
2029 (10 years)



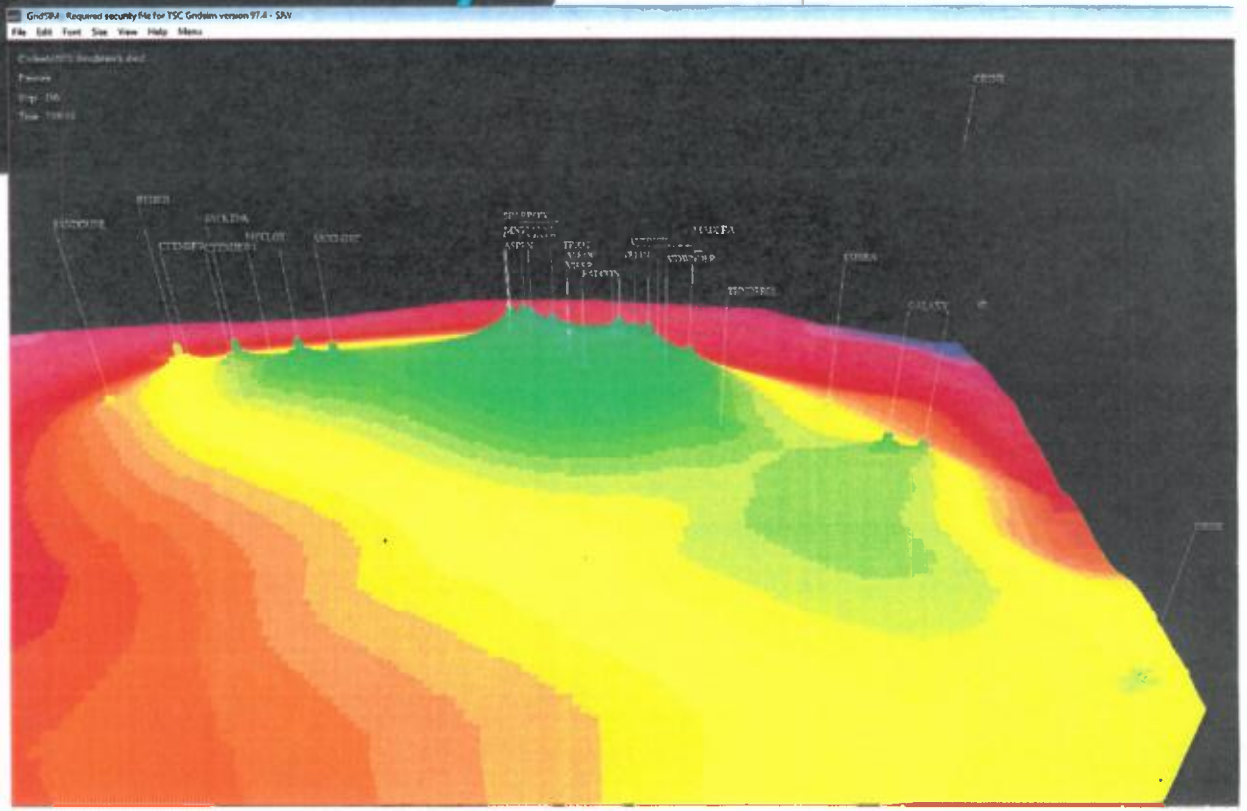
Water movement & Pressure

5/28/2019

Exh. A18



2039
(20 years)

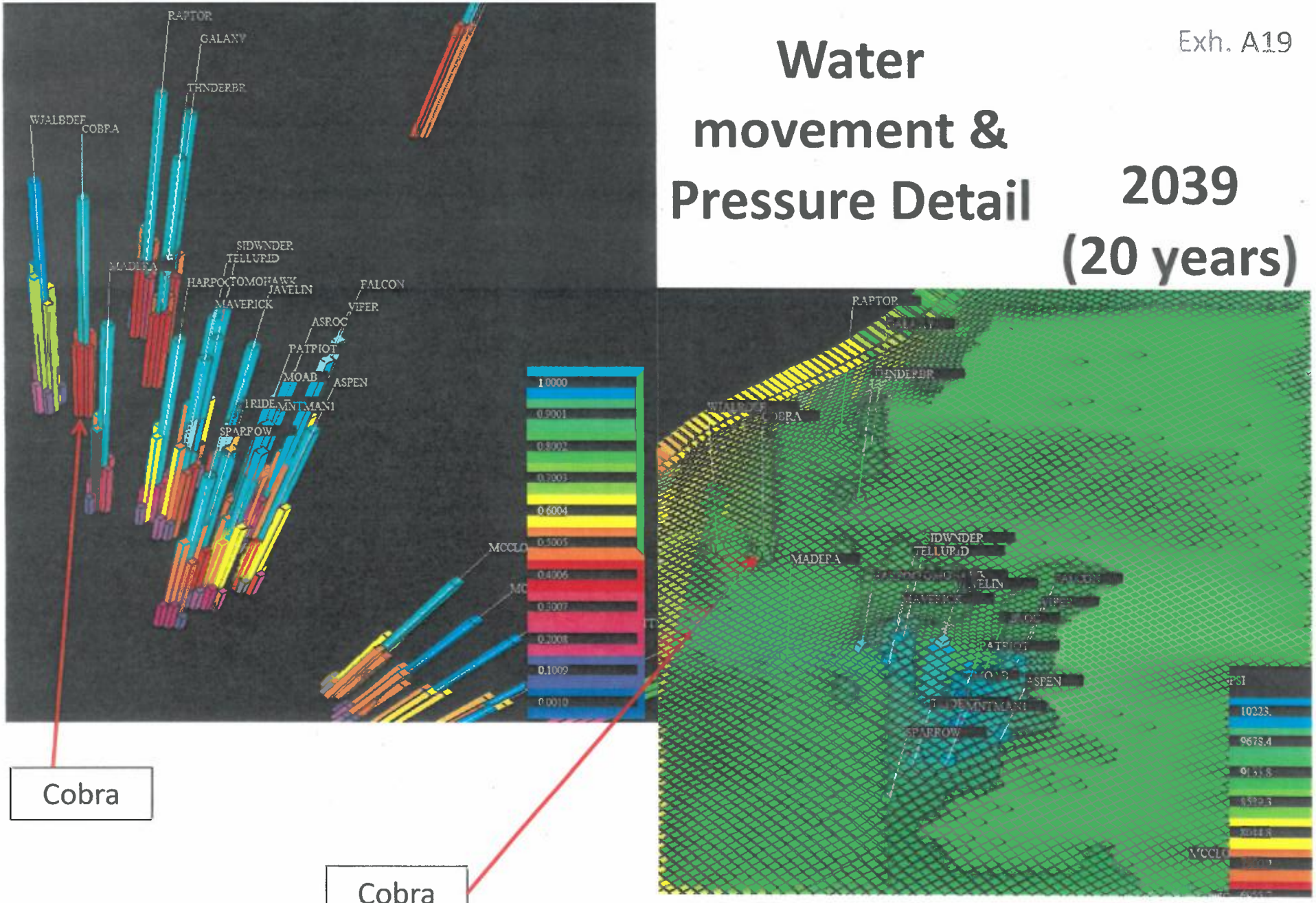


Water movement & Pressure

5/28/2019

Water movement & Pressure Detail

2039 (20 years)



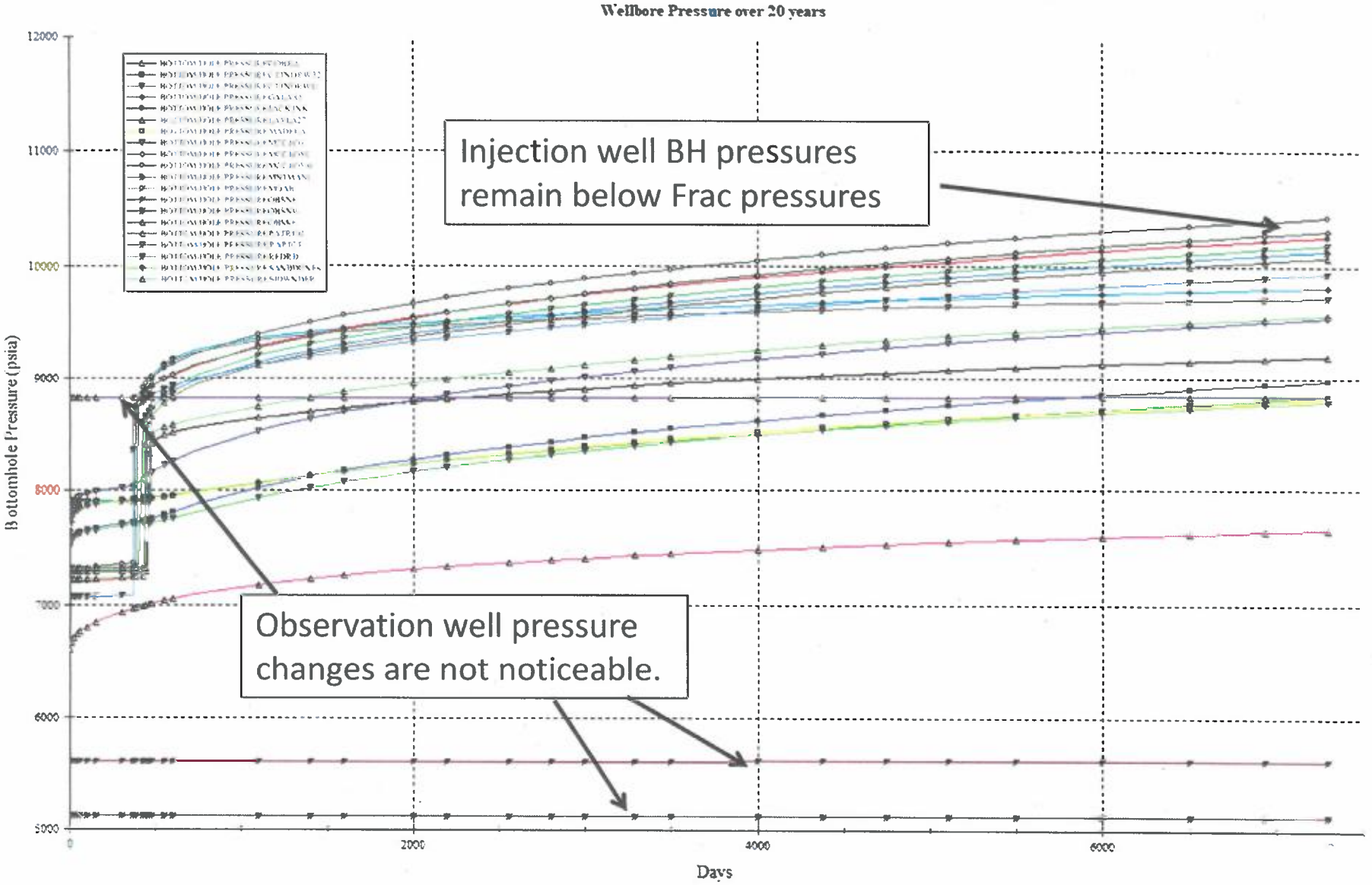
Cobra

Cobra

NGL Water Solutions, LLC

Exh. A20

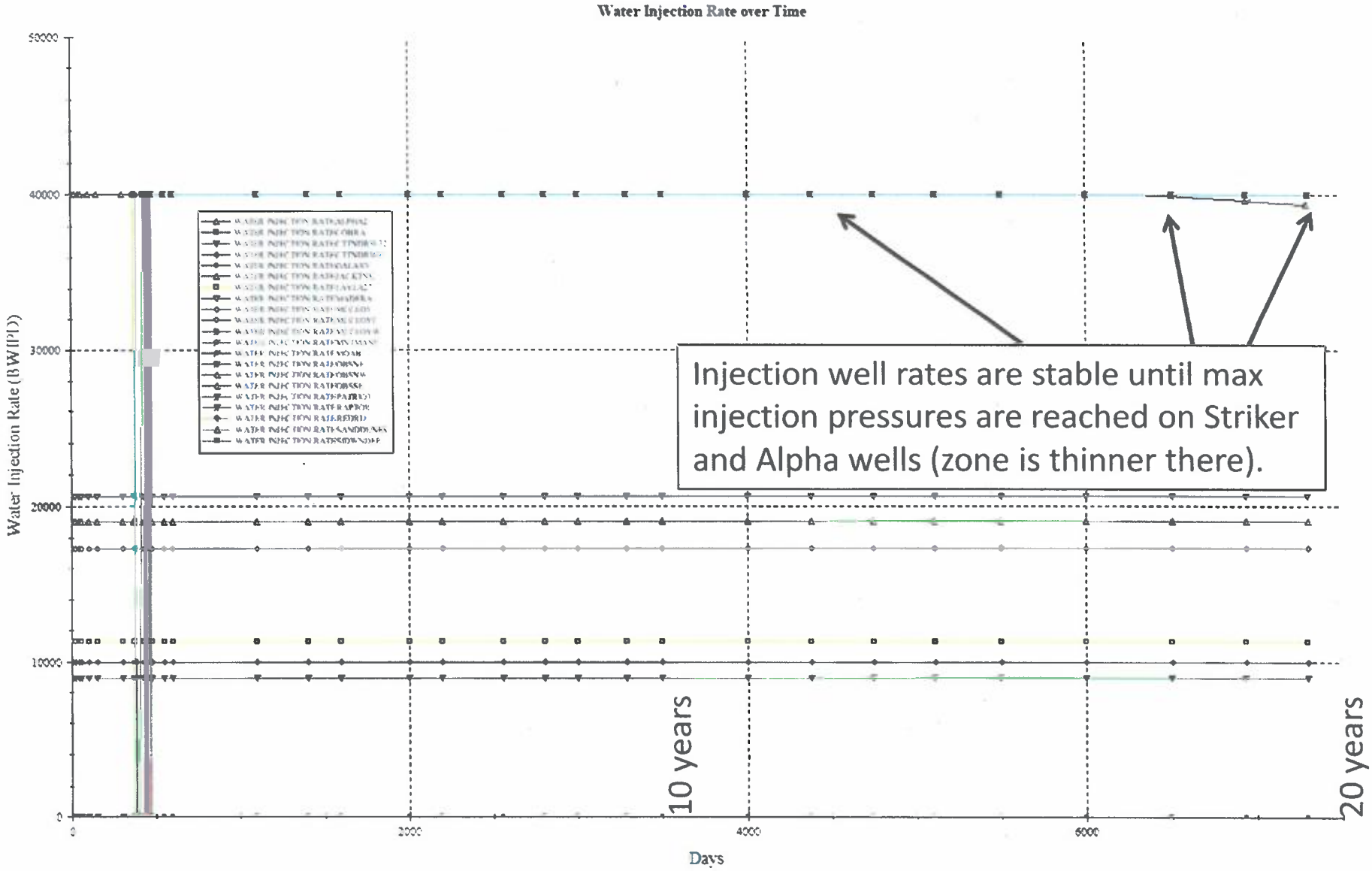
Simulation predictions for individual wells over time



NGL Water Solutions, LLC

Exh. A21

Simulation predictions for individual wells over time



NGL Water Solutions, LLC

Exh. A22

Simulation predictions for individual wells over time