

**DOYLE HARTMAN**  
*Oil and Natural Gas Operator*

500 NORTH MAIN  
P.O. BOX 10426  
MIDLAND, TEXAS 79702

(432) 684-4011  
(432) 682-7616 FAX

April 5, 2019

**Via FedEx**

Modrall Sperling Roehl Harris & Sisk, PA  
500 Fourth Street NW, Suite 1000  
Albuquerque, New Mexico 87102  
Attn: Deana M. Bennett, Attorneys for Applicant

**Re: Certified Letter to Doyle Hartman, dated March 29, 2019, which  
Certified Letter was received by us on April 2, 2019,  
corresponding to Amended Application of NGL Water Solutions  
Permian, LLC for Approval of Salt Water Disposal Well in Unit  
A, Section 19, T25S, R36E, Lea County, New Mexico, Case No.  
16504**

Dear Ms. Bennet:

We are in receipt of your letter dated March 29, 2019, and your client's (NGL Water Solutions Permian, LLC's) amended and original salt water disposal well hearing applications in NMOCD Case No. 16504 (copies enclosed), which **original** hearing application statements Nos. 3 and 4 read as follows:

“(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 [34.7 bbl/min].”

“(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.”

In this regard, based on a potential salt water gradient of 0.51 psi/ft, and a proposed maximum wellhead disposal pressure of 3,120 psi, the bottom-hole injection pressure, at a well depth of 15,600', would be 11,076 psi, which top-perforation injection pressure equates to a corresponding bottom-hole injection gradient of 0.71 psi/ft, at 15,600', which injection gradient could be in excess of the rock fracture gradient of the Silurian-Devonian formation, thus resulting in potential substantial out-of-zone loss of disposal water.

In light of the very substantial proposed maximum water injection rate of 50,000 BWPD and substantial injection gradient, that has been proposed for the subject Cobra SWD No. 1 injection well, we believe that strong comprehensive operation and monitoring precautions need be taken at all times in regard to the drilling, completion, and ongoing operation of the proposed Cobra SWD No. 1 well, so as to prevent the Cobra SWD No. 1 bottom-hole injection pressures from exceeding the periodically-measured rock fracture gradient of the Silurian-Devonian formation injection zone, and so as to always contain the very substantial single-well Cobra SWD No. 1 water injection volumes to the Silurian-Devonian injection zone.

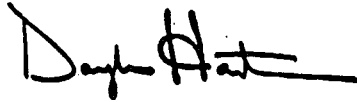
Thus, it is imperative that all casing strings (from the top to the bottom of the proposed injection well) be properly and adequately cemented with safely-sufficient cement volumes, and displaced into position at adequately high displacement rates, so as to ensure good in-place cement quality and fully protect against any behind-the-pipe upward migration of injection water.

Finally, it is also very important that NGL carefully ensure that the subject Cobra SWD No. 1 water disposal well is not situated within the vicinity of any geophysically-measured subsurface faults, which subsurface faulting (1) could be adversely disturbed in light of the very high proposed 50,000 BWPD disposal rate and enormous total future injection volume, and (2) could also act as an escape route for the very large volumes of water that are intended to be injected into the Silurian-Devonian zone.

Therefore, in regard to the foregoing, it is assumed that NGL will take all necessary prudent precautions so as to at all times avoid the potential serious operational problems discussed herein.

Sincerely yours,

DOYLE HARTMAN, OIL OPERATOR



Doyle Hartman

**Via FedEx**

NGL Water Solutions Permian, LLC  
1509 W Wall St, Suite 306  
Midland, Texas 79701  
Attn: Sarah Jordan, Regulatory Compliance Manager

**Via FedEx**

NMOCD  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505  
Attn: Christopher B. Weyand, Consulting Engineer

**Via FedEx**

Gallegos Law Firm  
460 St. Michaels Drive, Building 300  
Santa Fe, NM 87505  
Attn: J.E. Gallegos  
Michael Condon

**Via E-mail**

The Van Kirk Corporation  
10463 E Chinook Trail  
Parker, Colorado 80138  
Attn: Dr. Craig Van Kirk,  
Professor of Petroleum Engineering, Colorado School of Mines



MODRALL SPERLING

L A W Y E R S

March 29, 2019

**VIA CERTIFIED MAIL**

Deana M. Bennett  
[Deana.bennett@modrall.com](mailto:Deana.bennett@modrall.com)  
505-848-1834

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

**CASE NO. 16504**

**TO: AFFECTED PERSONS**

This letter is to advise you that NGL Water Solutions Permian, LLC ("NGL") has filed the enclosed amended application, which seeks an order approving disposal into the Silurian-Devonian formations through the **Cobra SWD #1** well. NGL filed the amended application to update the proposed location for drilling the well. 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.

Apart from the change in location, NGL made no other changes to its original application, also included with this letter. As set forth in its original application, 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.

This case is currently set for a hearing before a Division Examiner on April 18, 2019, starting at 8:15 a.m. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. As a pooled party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in the case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in the case at a later date.

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the

Modrall Sperling  
Roehl Harris & Sisk P.A.

500 Fourth Street NW  
Suite 1000  
Albuquerque,  
New Mexico 87102


PO Box 2168  
Albuquerque,  
New Mexico 87103-2168

Tel: 505.848.1800  
[www.modrall.com](http://www.modrall.com)

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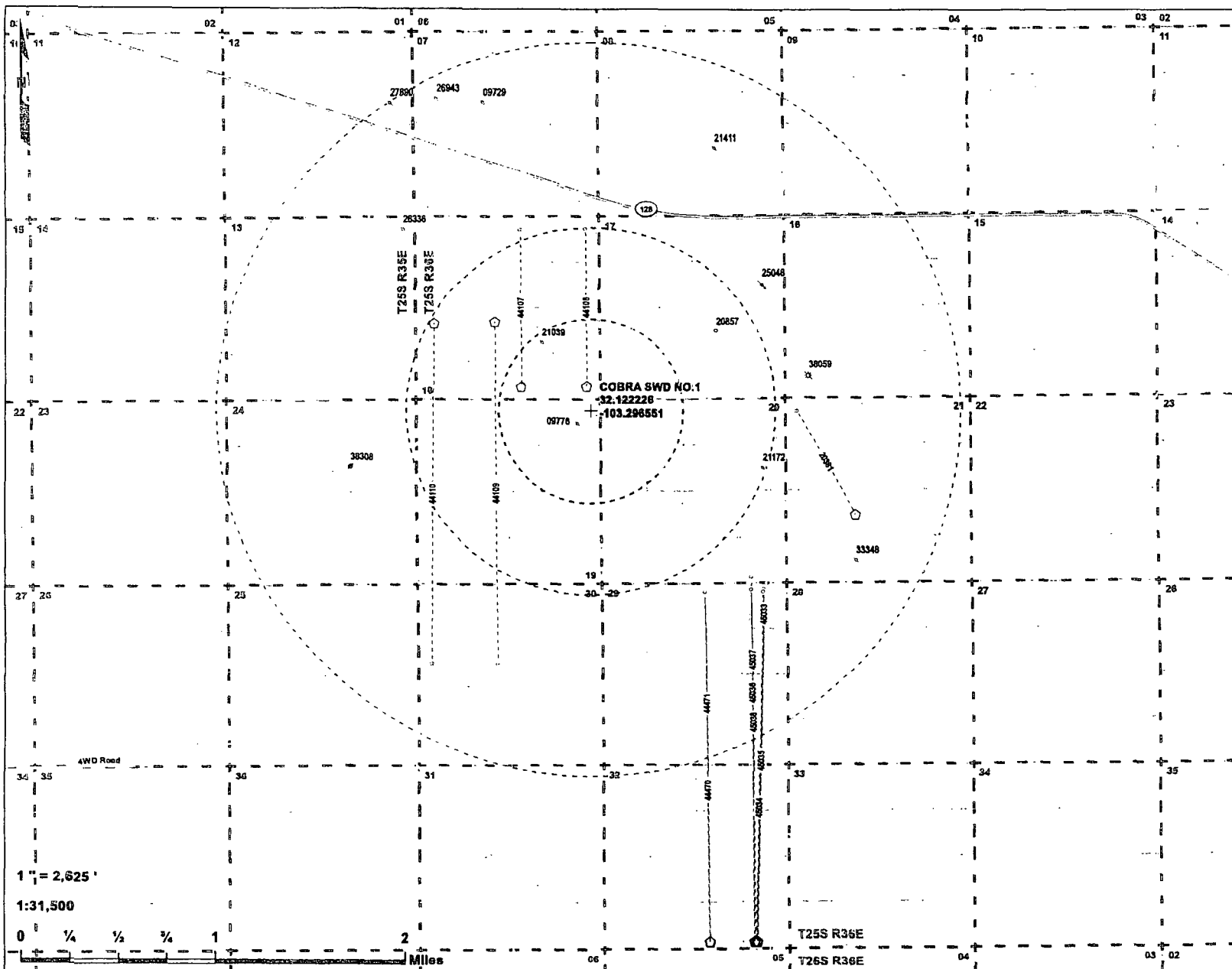
Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,

A handwritten signature in cursive script, reading "Deana M. Bennett", is written over a horizontal line.

Deana M. Bennett

*Attorneys for Applicant*



**Cobra SWD No. 1**

**2 Mile Area of Review**

**NGL Water Solutions Permian, LLC**

**Lea Co., NM**

PCS: NAD 1983 5PCS NM-E FIPS 3001 (US Ft.)

Drawn by: ASG    Date: 2/18/2019    Approved by: ELR

**LONQUIST & CO. LLC**

PEPETUUM  
ENGINEERS    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 (20-025-...) SHL Status-Type (Count)**

Horizontal Surface Location (13)

Active - SWD (1)

Cancelled/Abandoned Location (1)

Permitted - SWD (1)

Plugged/Site Released - Gas (1)

Plugged/Site Released - Oil (9)

**API (20-025-...) SHL Status-Type (Count)**

Active - Oil (1)

Permitted - Oil (12)

**Source: Well SHL Data - NM-OCD (2019)**

821

EDDY

LEA

**Map Extent**

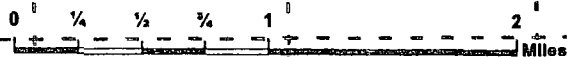
**NEW MEXICO**

**TEXAS**   LOVING   WINKLER

**ANDREWS**

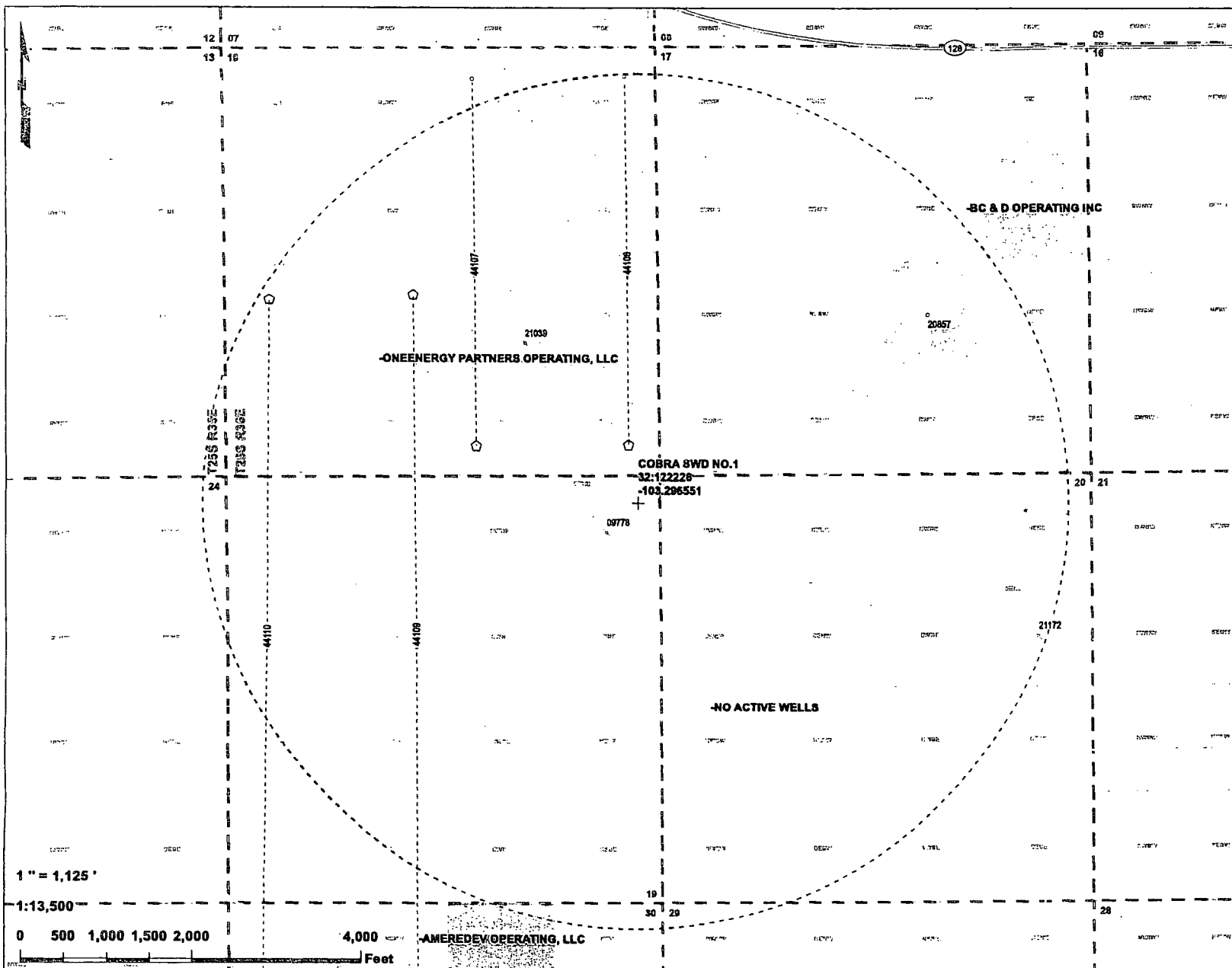
1" = 2,625'

1:31,500



**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**

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PCS: NAD 1983 5PCS NM-E FIPS 3001 (US FL.)

Drawn by: ASG    Date: 2/18/2019    Approved by: ELR

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**LONGQUIST & CO. LLC**

**PRODUCTION ENGINEERS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

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+ Cobra SWD No. 1 SHL  
 □ 1-Mile Radius  
 ○ 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 (4)  
 □ Permitted - SWD (1)  
 □ Plugged/Sha Released - OS (10)

API (30-025-...) SHL Status-Type (Count)  
 □ Permitted - OS (4)

**Offset Operators**  
 □ AMEREDEV OPERATING, LLC  
 □ BC & D OPERATING INC  
 □ ONEENERGY PARTNERS OPERATING, LLC  
 □ NO ACTIVE WELLS

Source: Well SHL Data - NM-OCD (2019)

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89  
 EDDY    LEA  
 Map Extent  
 NEW MEXICO  
 TEXAS    LOVING    WINKLER  
 89  
 ANDREWS



