

DATE IN 7/30/07	SUSPENSE 8/15/07	ENGINEER Will Jones	LOGGED IN 7/31/07	TYPE SWD	APP NO. pTDS0721251346
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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]

[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 \_\_\_\_\_

#### [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

[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.

TOM L. POWELL

Print or Type Name

Tom L. Powell

Signature

Manager, Reservoir Eng.

Title

7/3/07

Date

tpowell@edgepet.com

e-mail Address



EDGE PETROLEUM CORPORATION

July 3, 2007

Mr. William Jones  
New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RECEIVED  
2007 JUL 30 PM 12 08

Subject

Edge Petroleum Operating Company Inc  
Application for saltwater disposal  
Geronimo 28 State Com No. 1  
API 30-015-31829  
Section 28, T-17S R-28E  
Eddy County, NM

Dear Mr. Jones:

Attached, please find Edge Petroleum Operating Company, Inc's ("Edge") application to convert to injection and operate as a saltwater disposal well the Geronimo 28 State Com No. 1.

Attached in support of this application are two copies each of the following:

1. Administrative Application checklist.
2. Form C-108, Application for Authorization to Inject
3. Supporting documents for form C-108

If any further information is needed, please contact me at the letterhead address or by telephone, 713-427-8886.

Sincerely,

Tom L. Powell  
Manager, Reservoir Engineering  
Edge Petroleum Operating Company  
tpowell@edgepet.com

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ ☒ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ ☒ Yes \_\_\_\_\_ No
- II. OPERATOR: Edge Petroleum Operating Company  
ADDRESS: 1301 Travis Suite 2000, Houston TX, 77002  
CONTACT PARTY: Tom Powell PHONE: 713-427-8886
- 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 ☒ 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: Tom L. Powell TITLE: Manager Reservoir Engineering  
SIGNATURE: Tom L Powell III DATE: 7/3/07  
E-MAIL ADDRESS: tpowell@edgepet.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: \_\_\_\_\_

### 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.

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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

**III. Well Data.**

A. Well data for the proposed injection well:

1. Lease Name: Geronimo 28 State Com  
Well: No. 1  
API: 30-015-31829  
Location: Section 28, T-17-S, R-28-E  
1500 FSL + 1800 FEL
  2. Casing Strings  
Surface: 13-3/8" 48.0# H-40 ST+C casing  
Hole size: 17-1/2"  
Cement: 430 sacks  
Top Cement: surface (circulated)  
  
Intermediate: 9-5/8" 36.0# J-55 ST+C casing  
Hole size: 12-1/2"  
Cement: 955 sacks  
Top Cement: surface (circulated)  
  
Production: 5-1/2" 17.0# N-80 LT+C casing  
Hole size: 7-7/8"  
Cement: 1285 sacks  
DV tool: 5486 ft  
Top Cement: 2210 ft (CBL)
  3. Tubing to be used:  
Size: 2-7/8" 6.50# L-80  
Lining material: plastic lined  
Setting depth: 7900 ft
  4. Name, model, setting depth of packer to be used:  
Manufacturer: Weatherford  
Model: HD  
Setting Depth: 7900 ft
- B.
1. Name of injection formation: Cisco  
Field or Pool name: Undesignated
  2. Injection Interval: 7996 – 8380 ft overall
  3. Original purpose of well:  
The well was originally drilled as a Morrow gas producer.

4. Perforated intervals and method used to seal off perforations:

Lower Morrow	10,178 ft – 10,205 ft
Cast iron bridge plug set at	10,170 ft
20 ft cement, top at	10,150 ft

Middle Morrow	10,092 – 10,098 ft
Proposed isolation:	
Cast iron bridge plug	9,900 ft
35 ft cement, top at	9,865 ft

5. Depth and name of next higher and next lower oil or gas zone, if any:

Next higher:	Abo (oil)
	5624 ft

Next lower:	Morrow (Gas)
	9936 ft

**IV. This is not an expansion of an existing project**

**V. Attach map identifying all wells and leases within two miles of well and a one-half mile radius drawn around the well**

Map is attached.

**VI. Attach tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Include schematic of any plugged well showing all plugging detail.**

There are 3 wells within the area of review that penetrate the proposed injection zone. Below is a tabulation of data, and attached for reference is a schematic of each well.

**Well Name:** Geronimo 33 State No. 2  
**API:** 30-015-31373  
**Operator:** RKI Exploration and Production

**Well Location:** 660 FNL + 660 FEL, Section 33, T-17-S, R-28-E, Eddy County

**Well Type / Status:** Gas / producing

**Spud Date:** 11-26-2000

**Depth:** 10,600 ft

**Surface Casing:** 13-3/8" 54.5# set at 525 ft, cemented first stage with w/ 252 sks 35-65 Poz, tail with 180 sacks class C. Cement second stage with 180 sacks class C, tail with 68 sacks class C, circulated 15 sacks to pit.. Hole size 17-1/2"

**Intermediate Casing:** 9-5/8" 36# set at 2700 ft, cement with 625 sacks 35:65 Pox, tail with 270 sacks class C, circulated 100 sacks to pit. Hole size 12-1/4"

**Production Casing:** 5-1/2" 17#, set at 10,600 ft, cement 1<sup>st</sup> stage with 220 sacks 50/50 Poz class H, tail with 1260 sacks Pecos Valley lite, circ 15 sacks to pit. Cement 2<sup>nd</sup> stage with 700 sacks 50/50 Poz class H, tail with 50 sacks class C. Bumped plug. TOC 1756 ft (calculated)

**Completion:** Perf Lower Morrow 10454-10466, 10470-476 4 spf  
Set CIBP @ 10420 w/ 35 ft cmt to 10385'

Perf Morrow 10247-10253, 6 spf  
Set CIBP @ 10210 w/ 35 ft cmt to 10175'

Perf Morrow 10119 – 10130, 4 spf

DV = ?

OK

Set CIBP @ 10075' w/ 35 ft cmt to 10040'

Perf Atoka 9793 -9799, 6 spf  
Set CIBP @ 9730 w/ 35 ft cmt to 9695'

Perf Strawn 9505-9516  
Set CIBP @ 9450 w/ 35 ft cmt to 9415'

Perf Cisco 8599-8612, 8616-8620, 2 spf  
Set CIBP @ 8550 w/ 35 ft cmt to 8515'

Perf Wolfcamp 7287-7295, 7314-7329, 7346-7358  
Set CIBP @ 7250 w/ 35 ft cmt to 7215'

Perf Wolfcamp 7066-7074, 7143-7153, 7179-7188, 7198-  
7206 ft  
Acidize 5000 gal 15%. Frac 41816 gal + 42520# 20/40.  
Ran tubing.

**8/31/2001**

IPP 35 Bopd +82 Mcfd + 86 Bwpd, 43.6 API



**Well Name:** OXY Sparky Federal No. 1  
**API:** 30-015-32074

**Operator:** OXY USA WTP Limited Partnership

**Well Location:** 1830 FNL + 1980 FWL, Section 28, T-17-S, R-28-E,  
Eddy County

**Well Type / Status:** Gas / producing

**Spud Date:** 2-16-2002

**Depth:** 10,300 ft

**Surface Casing:** 13-38" 48# H-40 LT+C set at 460 ft. Cement w/ 200 sacks  
"H w/ 10% A10 + 1% CaCl<sub>2</sub> + 1/4# CF + 10# LCM,  
followed by 200 sacks "C" w/ 2% CaCl<sub>2</sub>, circ 84 sx.  
Hole size 17-1/2"

**Intermediate Casing:** 9-5/8" 36# K-55 LT+C set at 2330 ft, cement with 563  
sacks Poz 35-65 "C" w/ 2% CaCl<sub>2</sub> + 5# LCM + 1/4# CF,  
followed by 200 sacks "C w/ 2% CaCl<sub>2</sub>, circulated 100  
sacks to pit.  
Hole size 12-1/4"

**Intermediate Casing:** 7" 26# L-80 set at 8700 ft, cement with 350 sacks 35-65  
Poz "C" w/ 6% gel, 0.5% FL-52, 0.25% cellofalke, 8#  
LCM-1, followed by 150 sacks "H + 0.3% FL-52.  
Hole size 8-3/4".

Shot 4 squeeze holes at 7950', squeezed w/ 100 sacks "C"  
+ 0.10% A-10 and 2% NaCl, followed by 50 sacks "C" w/  
0.5% BA-10, 0.1% sodium metasilicate, 0.2% CD-32,  
0.2% R-3, followed by 50 sacks "C" neat. Ran temp  
survey, did not see TOC. ✓

Shot 4 squeeze holes at 7700', could not pump in. ✓  
Ran CBL, found TOC @ 4480 ft. ✓

Shot 4 squeeze holes at 4450 ft, squeeze w/ 450 sacks  
50/50 poz class "C" w/ 0.1% bentonite, 1% NaCl, 0.5%  
BA-10, 0.1% sodium metasilicate, followed by 375 sacks  
15:61:11 poz class "C" w/ 0.5% FL-25, 0.5% FL-52, 0.3%  
sodium metasilicate, 3% KCL. Circ 245 sacks. ✓

OK

Production liner: 4-1/2" 11.6#, HCP-110 set at 10,600 ft, top liner at 8363 ft, cement with 190 sacks 15:61:11 "H" with 1% BA61, 2# Gilsonite, 0.7% FL-25, 0.7% FL-52, 2% KCL, 0.4% SMS. Found cement at 8344 when drilling out. TOC from CBL 8660 ft. ✓

Hole size 6-1/8".

Completion: Perf Lower Morrow 10116-10134, 73 holes,  
**7/1/2002**  
IPF 2878 Mcfd + 13 Bopd + 0 Bwpd, 795 psi FTP, 22/64"

**Well Name:** Geronimo 27 State Com No. 2  
**API:** 30-015-31716

**Operator:** Dominion Oklahoma Texas E+P Inc.

**Well Location:** 990 FSL + 660 FWL, Section 27, T-17-S, R-28-E,  
Eddy County

**Well Type / Status:** dry / plugged

**Spud Date:** 5/1/2001

**Depth:** 10,610 ft

**Surface Casing:** 13-3/8" 48# H-40 ST+C set at 440 ft, cemented with w/  
250 sks 35-65 Poz class "C", tail with 180 sacks class "C",  
circulated 35 sacks to pit..  
Hole size 17-1/2"

**Intermediate Casing:** 9-5/8" 36# J-55 set at 2700 ft, cement with 670 sacks 35:65  
Pox, tail with 285 sacks class C, circulated 135 sacks to pit.  
Squeezed shoe w/ 100 sacks RFC and 100 sacks class "C".  
Hole size 12-1/4"

**Production Casing:** 5-1/2" 17#, N-80, S-95 set at 10,603 ft, cement 1<sup>st</sup> stage  
with 250 sacks 50/50 Poz class H, tail with 625 sacks TXI  
lightweight. Open DV tool at 5481', circulate 10 bbls ✓  
cement. Cement 2<sup>nd</sup> stage with 710 sacks 50/50 Poz class  
H, tail with 50 sacks class C. TOC 2186 ft (CBL). ✓  
Hole size 7-7/8" OK

**Completion:** Perf Morrow 10144-10154', 10160-10165', 10378-10384'  
4 spf. Set CIBP @ 10100 w/ 35 ft cmt to 10065'.

Perf Atoka 9856-9872'. Set CIBP @ 9800 w/ 35 ft cmt to 9765'. ✓

Perf Wolfcamp 7860-7898'. Set CIBP @ 7830 w/ 35 ft cmt to 7795'. ✓

Perf Wolfcamp 7168-7180'. SI pending evaluation.  
Proceeded with abandonment.

Abandonment:

Set CIBP @ 7110 w/ 35 ft cmt to 7075'.

Circ w/ 10# mud.

Spot 25 sack cement plug at 5370', calc top plug at 5117'.

Spot 25 sack cement plug at 3370', calc top plug at 3117'.

Spot 25 sack cement plug at 2750', tag top plug at 2474'.

Cut 5-1/2" casing at 2062' and pull.

Spot 30 sack cement plug at 2112', tag top plug at 1989'.

Spot 40 sack cement plug at 490', tag top plug at 330'.

Spot 20 sack cement plug at 60' to surface.

Install dry hole marker.

**Well P+A 11-1-2004.**

**VII. Attach data on proposed operation.**

1. Proposed average daily rate: 2000 Bwpd  
Proposed maximum daily rate: 5000 Bwpd
2. System will be closed system
3. Proposed average injection pressure: 500 psi ✓  
Proposed maximum injection pressure: 0.2 psi/ft (1600 psi @ 7996 ft)
4. Sources of water will be produced water from shallow reservoirs in the Red Lake area; Abo, Yeso/Glorieta, San Andres, Premier, Grayburg, Queen formations. An analysis of the water is attached.
5. An analysis of the disposal zone formation water is attached, taken from nearby SWD well applications for wells which inject into the same interval. ✓

**VIII. Attach appropriate geologic data on the injection zone.**

The proposed injection zone is the Pennsylvanian aged Cisco formation, also known as the Canyon, at a depth of 7969 ft (top marker). This is a predominately limestone interval, with some dolomite streaks, that has peak porosity of 20% over a 411 ft gross interval. The base of the porous interval of interest is 8380 ft. Within the area of review, drilling operations in this zone typically encounter lost circulation, and formations tests have been non-productive of oil or gas. ✓

**Give geologic name and depth to bottom of all underground sources of drinking water.**

In the area of review, fresh water occurs down to a depth of approximately 150 ft. No known fresh water sources are underlying the injection interval.

**IX. Describe the proposed stimulation program, if any.**

It is proposed to perforate and acidize the formation with 50 gal/ft of 15% HCL at 3-5 BPM, diverting with ball sealers.

**X. Attach appropriate logging and test data on the well.**

The complete well logs for this well are on file with the Division. Attached for reference is an excerpt of the 1" porosity log.

**XI. Attach chemical analysis of fresh water from two or more fresh water wells within 1 mile.**

No fresh water wells are producing within one mile of the proposed injection well.

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

We have examined the available geologic and engineering data and find no evidence of open faults or other hydrologic connection between the disposal zone and any underground sources of drinking water.

**XI. Applicants must complete the "Proof of Notice" section.**

**XIV. Proof of Notice**

Attached with this application is the list of leasehold operators within one-half mile, and the surface owner. The proof of notice to these entities and proof of publication is also included.

Surface Owner: State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87504-1148

List of Leasehold operators within one-half mile

SDX Resources Inc.  
P. O. Box 5061  
Midland, TX 79704

Marbob Energy Corporation  
P. O. Box 227  
Artesia, NM 88211

Oxy USA, Inc  
P. O. Box 4294  
Houston, TX 77210

Judah Oil LLC  
1805 Jacobs  
Artesia, NM 88210

RKI Exploration and Production  
3817 Northwest Expressway  
Suite 950  
Oklahoma City, OK 73112

BP America  
P. O. Box 22048  
Tulsa, OK 74121

Hanson Energy  
P. O. Box 1348  
Artesia, NM 88210

Edge Petroleum  
Geronimo St. 1.  
Proof of Notice  
p. 4 of 4

## Affidavit of Publication

NO. 19824

STATE OF NEW MEXICO

County of Eddy:

GARY D. SCOTT being duly

sworn, says: That he is the PUBLISHER of The

Artesia Daily Press, a daily newspaper of general  
circulation, published in English at Artesia, said county  
and county and state, and that the here to attached

### Legal Notice

was published in a regular and entire issue of the said  
Artesia Daily Press, a daily newspaper duly qualified  
for that purpose within the meaning of Chapter 167 of  
the 1937 Session Laws of the state of New Mexico for  
1 Consecutive week/days on the same  
day as follows:

First Publication July 8, 2007

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

Fifth Publication \_\_\_\_\_

Subscribed and sworn to before me this

16th Day of July 2007

Amanda K. Lamb  
Notary Public, Eddy County, New Mexico

My Commission expires April 5, 2011

## Copy of Publication:

### LEGAL NOTICE

Edge Petroleum Operating Company, Inc., 1301 Travis Suite 2000, Houston, TX 77002, has filed form C-108, Application for Authorization to Inject, with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Geronimo 28 State Com No. 1 is located 1500 ft FSL, 1800 ft FEL, Section 28, Township 17S, Range 28 East, Eddy County, New Mexico. Disposal water is from wells in the Red Lake area that produce from the Abo, Yeso/Glorieta, San Andres, Premier, Grayburg, and Queen formations. The water will be injected into the Cisco formation at a depth of 7,996 - 8,380 ft with a maximum surface pressure of 1600 psi and a maximum rate of 5000 Bwpd.

All interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505, within 15 days of the date of this publication. Addition information can be obtained by contacting Tom Powell, Edge Petroleum Operating Company Inc., 1301 Travis Suite 2000, Houston, TX 77002, or (713) 427-8886.

Published in the Artesia Daily Press, Artesia,

N.M. July 8, 2007.

Legal 19824



Edge Petroleum  
Gerardo St. 1  
Proof of Notice  
p. 3 of 4

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<p>A. Received by (Please Print Clearly) B. Date of Delivery 7-9-07</p> <p>C. Signature X <i>V. McCloud</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
1. Article Addressed to:  BP America P. O. Box 22048 Tulsa, OK 74121		3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
2. Article Number (Copy from service label) 7001 2510 0000 3479 3224		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999		Domestic Return Receipt 102595-00-M-0952	

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<p>A. Received by (Please Print Clearly) B. Date of Delivery WARREN HANSON 7-9-07</p> <p>C. Signature X <i>Warren Hanson</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
1. Article Addressed to:  Hanson Energy P. O. Box 1348 Artesia, NM 88210		3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
2. Article Number (Copy from service label) 7001 2510 0000 3479 3224		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, July 1999		Domestic Return Receipt 102595-00-M-0952	

EDGE PETROLEUM  
GERONIMO ST 1  
Proof of Notice  
P. 1 of 4

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87504-1148

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

X

SK

☐ Agent  
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label)

7001 2510 0000 3479 3293

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

SDX Resources, Inc.  
P. O. Box 5061  
Midland, Texas 79704

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

Bonnie Atwater

7-9-07

C. Signature

X

Bonnie Atwater

☒ Agent  
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☒ No

3. Service Type

☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label)

7001 2510 0000 3479 3286

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Marbob Energy Corporation  
P. O. Box 227  
Artesia, NM 88211

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery

Tiffany Baker

7-13-07

C. Signature

X

Tiffany Baker

☐ Agent  
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2.

7001 2510 0000 3479 3279

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

Edge Petroleum  
Geronimo St  
Proof of Notice  
P. 2 of 4

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Oxy USA, Inc.  
P. O. Box 4294  
Houston, Texas 77210

**COMPLETE THIS SECTION ON DELIVERY**

- A. Received by (Please Print Clearly) *James S. Bora* B. Date of Delivery *JUL 9 2007*
- C. Signature *[Signature]* ☐ Agent ☒ Addressee
- D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

3. Service Type  
☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number *7001 2510 0000 3479 3262*

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Judah Oil, LLC  
1805 Jacobs  
Artesia, NM 88210

**COMPLETE THIS SECTION ON DELIVERY**

- A. Received by (Please Print Clearly) *Joshua Campbell* B. Date of Delivery *7-9-07*
- C. Signature *[Signature]* ☐ Agent ☒ Addressee
- D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

3. Service Type  
☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number *7001 2510 0000 3479 3255*

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

RKI Exploration and Production  
3817 Northwest Expressway  
Suite 950  
Oklahoma City, OK 73112

**COMPLETE THIS SECTION ON DELIVERY**

- A. Received by (Please Print Clearly) *E. Olsen* B. Date of Delivery *7-9-07*
- C. Signature *[Signature]* ☒ Agent ☐ Addressee
- D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

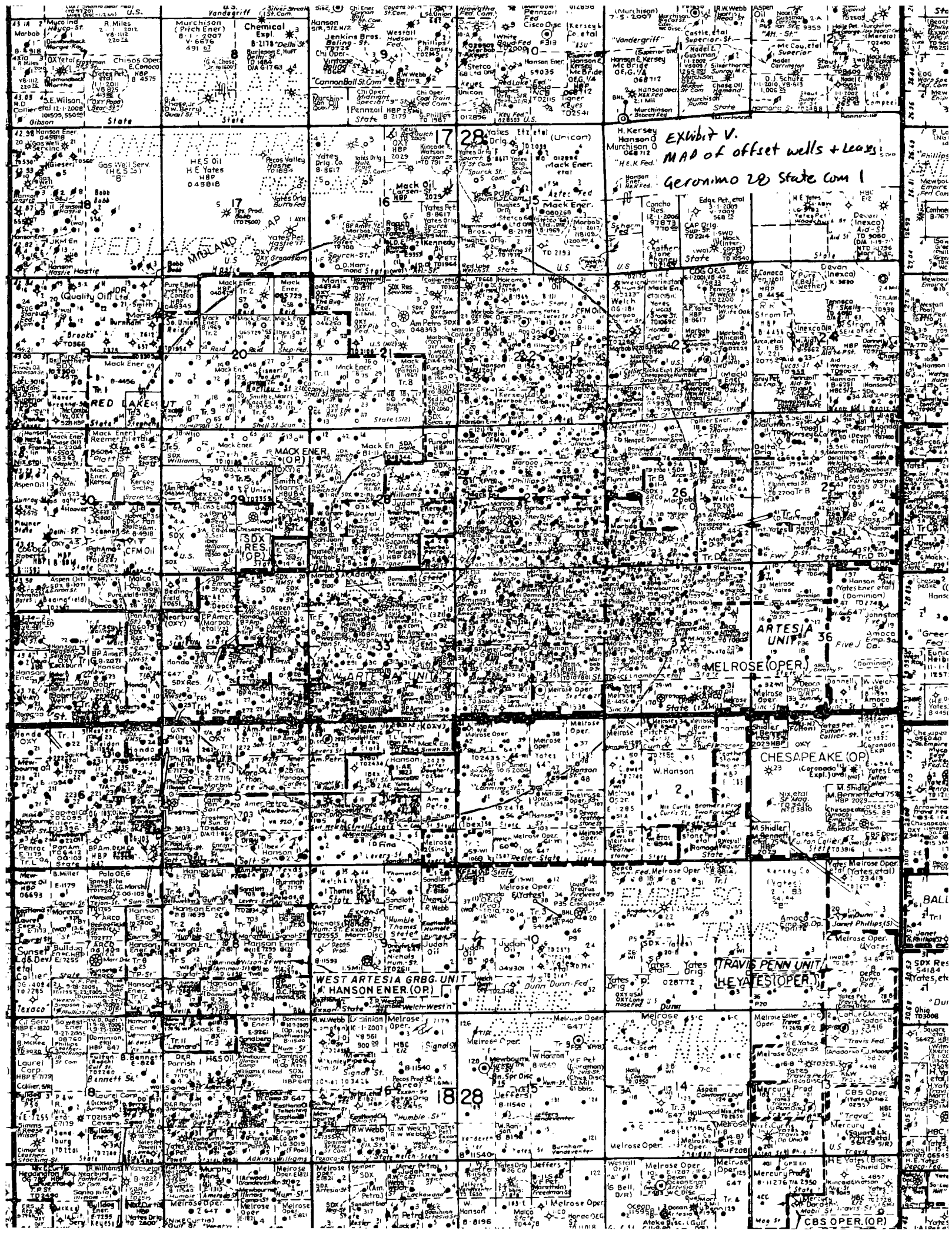
3. Service Type  
☒ Certified Mail ☐ Express Mail  
☐ Registered ☒ Return Receipt for Merchandise  
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number *7001 2510 0000 3479 3248*

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952





# EDGE PETROLEUM CORPORATION CURRENT WELLBORE DIAGRAM

## WELL SUMMARY

*Exhibit III, pg 1*

API: 30-015-31829  
 LEASE: GERONIMO 28 STATE COM  
 WELL: NO. 1  
 AREA: EDDY CO., NM  
 FIELD: Empire (Penn)

OPERATOR: EDGE PETROLEUM OPERATING COMPANY  
 SURF LOC: NWSE SECTION 28, T17S, R28E  
 BHL: 1500 FSL + 1800 FEL  
 X:  
 Y:

SPUD: 7/1/2001  
 TD: 7/27/2001  
 ELEV. 3,684'  
 KB: 3,705'

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
			40'	40'		PRESET	20" Conductor		
			450'	450'			13-3/8", 48# H-40, STC	SPUD MUD	
		Seven Rivers	694'	694'			430 sx, circ cement		
		Queen	1263'	1263'					
		San Andres	1979'	1979'			TOC @ 2,210' (CBL)		
STRAIGHT HOLE			2700'	2700'			9 5/8" 36# J-55, STC		
		KOP					955 sx, circ cement		
		Glorieta	3376'	3376'		5486'	DV Tool		
		Yeso	3474'	3474'					
		Tubb	4974'	4974'					
		Abo	5624'	5624'					
		Wolfcamp	6950'	6950'					
		BTBR	7580'	7580'					
		Cisco	7969'	7969'					
		Strawn	9490'	9490'					
		Atoka	9830'	9830'			2-3/8", 4.7#, P-110, EUE 8RD		
		Morrow	9936'	9936'		10,053'	EOT - PLS Packer		
		Middle Morrow Perfs - 10,092'-098' w/ 3-1/8" guns, 6spf, 0.42" EHD, 39.56" penetration Acidized w/ 3,000 gal, 7-1/2% Morrow Mix HCL. Frac'd with 30,000# 20/40 Carbo prop					CIBP - 10,170 w/ 20' cmt. TOC - 10,150'		
		Lwr Morrow, 10178-10205', natural completion - Isolated							
		TD	10,488'	10,488'		10,413'	5-1/2", 17#, N-80, LTC 1285 sx  PBTD		

# EDGE PETROLEUM CORPORATION - PROPOSED WELLBORE DIAGRAM

## WELL SUMMARY

Exhibit III, pg 2

API: 30-015-31829  
 LEASE: GERONIMO 28 STATE COM  
 WELL: NO. 1  
 AREA: EDDY CO., NM  
 FIELD: Empire (Penn)

OPERATOR: EDGE PETROLEUM OPERATING COMPANY  
 SURF LOC: NWSE SECTION 28, T17S, R28E  
 BHL: 1500 FSL + 1800 FEL  
 X:  
 Y:

SPUD: 7/1/2001  
 TD: 7/27/2001  
 ELEV: 3,684'  
 KB: 3,705'

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
			40'	40'		PRESET	20" Conductor		
			450'	450'			13-3/8", 48# H-40, STC	SPUD MUD	
		Seven Rivers	694'	694'			430 sx, circ cement		
		Queen	1263'	1263'					
		San Andres	1979'	1979'			TOC @ 2,210' (CBL)		
STRAIGHT HOLE			2700'	2700'			9 5/8" 36# J-55, STC		
		KOP					955 sx, circ cement		
		Glorieta	3376'	3376'					
		Yeso	3474'	3474'		5486'	DV Tool		
		Tubb	4974'	4974'					
		Abo	5624'	5624'					
		Wolfcamp	6950'	6950'			2-7/8", 6.5#, L-80, EUE 8RD Internally plastic lined		
		BTBR	7580'	7580'		7900'	EOT - Packer		
		Cisco	7969'	7969'					
	Proposed injection interval 7996-8380 overall								
		Strawn	9490'	9490'					
		Atoka	9830'	9830'					
		Morrow	9936'	9936'					
	Middle Morrow Perfs - 10,092'-098' w/ 3-1/8" guns, 6spf, 0.42" EHD, 39.56" penetration Acidized w/ 3,000 gal, 7-1/2% Morrow Mix HCL. Frac'd with 30,000# 20/40 Carbo prop								
	Lwr Morrow, 10178-10205', natural completion - Isolated								
		TD	10,488	10,488'		10,413'	5-1/2", 17#, N-80, LTC 1285 sx PBTD		

## EDGE PETROLEUM CORPORATION

## WELL SUMMARY

Exhibit VI, p5.1

API: 30-015-31373  
 LEASE: GERONIMO 33 STATE  
 WELL: NO. 2  
 AREA: EDDY CO., NM  
 FIELD: Empire (Wolfcamp)

OPERATOR: RKI Exploration and Production  
 SURF LOC: NENE SECTION 33, T17S, R28E  
 660 FNL + 660 FEL  
 X:  
 Y:

SPUD: 11/26/2000  
 TD: 12/28/2000  
 ELEV. 3679'  
 KB: 3693'

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
			525'	525'		17-1/2"	13-3/8", 54.5#	SPUD MUD	
STRAIGHT HOLE		Seven Rivers	700'	700'			432 sx, circ cement		
		Queen	1274'	1274'		12-1/2"			
		San Andres	2020'	2020'			TOC @ 1756 ft		
			2700'	2700'			9 5/8" 36#		
		KOP					895 sx, circ cement		
		Glorieta	3499'	3499'		7-7/8"			
		Yeso							
		Tubb	5115'	5115'					
		Abo	5804'	5804'					
		Wolfcamp	6980'	6980'			2-7/8" Tbg @ 7218'		
		Wolfcamp, 7066-7074', 7143-7153', 7179-7188', 7198-7206'							
		Acidize 5000 gal 15%, Frac 41816 gal + 42520 # 20/40							
		8/31/2001 IPP 35 Bopd + 82 Mcfd + 86 Bwprd 43.6 API							
							CIBP - 7,250' w/ 35' cmt. TOC - 7,215'		
		Wolfcamp, 7287-7295', 7314-7329', 7346-7358'							
		BTBR	7620'	7620'					
		Cisco	7970'	7970'			CIBP - 8,550' w/ 35' cmt. TOC - 8,515'		
		Cisco, 8599-8612, 8616-8620', 2 spf							
		Strawn	9506'	9506'			CIBP - 9,450' w/ 35' cmt. TOC - 9,415'		
		Strawn, 9505-9516							
		Atoka	9836'	9836'			CIBP - 9,730 w/ 35' cmt. TOC - 9,695'		
		Atoka, 9793-9799, 6 spf							
		Morrow	10000'	10000'			CIBP - 10,075 w/ 35' cmt. TOC - 10,040'		
		Morrow, 10119-10130, 4 spf							
							CIBP - 10,210 w/ 35' cmt. TOC - 10,175'		
		Morrow, 10247-10253, 6 spf							
							CIBP - 10,420 w/ 35' cmt. TOC - 10,385'		
		Lwr Morrow, 10454-10466', 10470-476, 4 spf							
							5-1/2", 17#, 1460 sxs 1st stage circ 15 sx 800 sx 2nd stage		
		TD	10,600'	10,600'		7,215'	PBTD		



## EDGE PETROLEUM CORPORATION

## WELL SUMMARY

Exhibit VI, pg 2.

API: 30-015-32074  
 LEASE: SPARKY FEDERAL  
 WELL: NO. 1  
 AREA: EDDY CO., NM  
 FIELD: Empire (Penn)

OPERATOR: OXY USA WTP Limited Partnership  
 SURF LOC: SWNE SECTION 28, T17S, R28E  
 1830 FNL + 1980 FWL  
 X:  
 Y:

SPUD: 2/16/2002  
 TD: 3/25/2002  
 ELEV. 3,638'  
 KB: 3,656

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
			40'	40'		PRESET	20" Conductor		
			460'	460'		17 1/2"	13-3/8", 48# H-40, STC	SPUD MUD	
STRAIGHT HOLE		Seven Rivers	602'	602'			400 sx, circ 84 sx cement		
		Queen	1252'	1252'		12 1/4"			
		San Andres	1962'	1962'			9 5/8" 36# K-55, LTC		
			2,230'	2,230'					
STRAIGHT HOLE	Perf 4450' 4 spf squeeze w/ 825 sx, circ 245 sx	Glorieta	3338'	3338'			763 sx, circ 100 sx cement		
		Yeso	3419'	3419'					
		Tubb	4892'	4892'					
		Abo	5510'	5510'					
		Wolfcamp	6920'	6920'					
	Perf 7700' 4 spf could not pump in	BTBR	7550'	7550'					
		Cisco	7900'	7900'					
						8 3/4"			
							8,363' Top 4-1/2" liner TOC @ 8,660' (CBL)		
							8700 ft losing 100-120 BPH		
			8,700'	8,700'			7" 26# L-80 displaced w/ nitrified mud		
						350 sx "C" 35:65 poz w/ 6% gel, FB 150 sx "H"			
		Strawn	9337'	9337'		6 1/8"			
		Atoka	9657'	9657'			2-3/8", 4.7# L-80 tbg		
		Morrow	9870'	9870'					
						10,051'	Model WL packer		
	L. Morrow, 10116-10134', natural completion IPF 7/1/2002: 2878 Mcfd, 13 Bopd, 0 Bwpd, 795# FTP, 22/64"					10,135'	EOT		
							4-1/2", 11.6#, HCP-110 liner 190 sx "H"		
		TD	10,300'	10,300'		10,260'	PBTD		


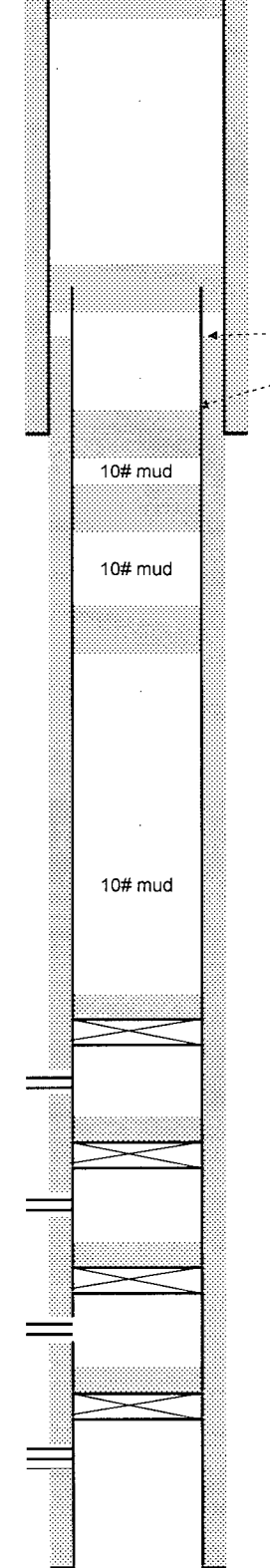
**EDGE PETROLEUM CORPORATION**  
**WELL SUMMARY**

*Exhibit VI, pg 3*

API: 30-015-31716  
LEASE: GERONIMO 27 STATE COM  
WELL: NO. 2  
AREA: EDDY CO., NM  
FIELD:

OPERATOR: DOMINION  
SURF LOC: SWSW SECTION 28, T17S, R28E  
990 FSL + 660 FWL  
X:  
Y:

SPUD: 5/1/2001  
TD: 5/27/2001  
ELEV. 3,684'  
KB: 3,705'

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
			440'	440'		60' spot 20 sx plug to surface  17 1/2"	430 sx, circ cement 13-3/8", 48# H-40, STC	SPUD MUD	
		Seven Rivers  Queen  San Andres	737'  1310'  2027'	737'  1310'  2027'		490' spot 40 sx plug, tag @ 330'  12 1/4"  2,112 spot 30 sx plug, tag @ 1989'  2062' cut off 5-1/2"  TOC @ 2,186' (CBL)  2,750 spot 25 sx plug, tag @ 2474' 9 5/8" 36# J-55			
STRAIGHT HOLE			2700	2700					
		Glorieta  Tubb   Abo    Wolfcamp  Wolfcamp perms 7,168' - 7,180' 2 SPF Acidize 1500 gal 15% BTBR  Wolfcamp perms 7,860' - 7,898 Cisco Strawn Atoka  Atoka perms 9,866-9,872' Acidize 750 gal 15% w/ 10% MEOH + clay control Frac 132 BBL 70Q w/ 21000# 20/40 Morrow Morrow perms 10,144-10,154'; 10,160'-10,165'; 10,378'-10,384'; 4spf Acidize 1500 gal 15% w/ 10% MEOH + clay control  TD	3490'  5060'   5664'    6976'  7586'  7950' 9480' 9750'    10100'  10,610'	3490'  5060'   5664'    6976'  7586'  7950' 9480' 9750'    10100'  10,610'		955 sx, circ cement Sqzd shoe w/ 325 sxs  3,370 spot 25 sx plug, calc top 3117'  5,370 spot 25 sx plug, calc top 5117'  DV Tool @ 5481'  7 7/8"    CIBP - 7,110 w/ 35' cmt. TOC - 7,075'  CIBP - 7,830 w/ 35' cmt. TOC - 7,795'  CIBP - 9,800 w/ 35' cmt, TOC 9765'  CIBP - 10,100 w/ 35' cmt. TOC - 10,065'  5-1/2", 17# N-80, S-95 1635 sx (1st stage 875 sx, 2nd stage 760 sx)			





P.O. BOX 98  
MIDLAND, TX. 79702  
PHONE (432) 683-4521

## Martin Water Laboratories, Inc.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
FAX (432) 682-8819

## RESULT OF WATER ANALYSES

TO: Mr. Daniel Hurd LABORATORY NO. 706-68 (pg 3)  
1301 Travis, Suite 200, Houston, TX 77062 SAMPLE RECEIVED 7-11-06  
RESULTS REPORTED 7-19-06

COMPANY Edge Petroleum LEASE Red Lakes  
FIELD OR POOL \_\_\_\_\_  
SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY Eddy STATE NM

## SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Well 36 "A" #2 on 7-7-06  
NO. 2 Well 36 "A" #3 on 7-7-06  
NO. 3 Well 36 "C" #1 on 7-7-06  
NO. 4 Well 36 "C" #2 on 7-7-06

## REMARKS:

## CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1325	1.1325	1.1255	1.1305
pH When Sampled				
pH When Received	6.90	6.90	6.90	6.90
Bicarbonate as HCO <sub>3</sub>	708	708	476	695
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	8,400	9,600	8,400	8,800
Calcium as Ca	2,480	2,560	2,360	2,200
Magnesium as Mg	535	778	608	802
Sodium and/or Potassium	82,927	82,425	76,548	78,025
Sulfate as SO <sub>4</sub>	3,695	3,801	4,024	3,472
Chloride as Cl	130,675	130,675	120,732	123,573
Iron as Fe	2.2	1.2	28.7	4.4
Barium as Ba	0	0	0	0
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	221,019	220,946	204,747	208,767
Temperature °F.				
Carbon Dioxide, Calculated	149	149	100	146
Dissolved Oxygen,				
Hydrogen Sulfide	64.0	42.0	37.0	53.0
Resistivity, ohms/m at 77° F.	0.054	0.054	0.058	0.056
Suspended Oil				
XXXXXXXXXXXX Corrosiveness	Severe	Severe	Severe	Severe
XXXXXXXXXXXX Barium Sulfate Scaling Tendency	None	None	None	None
CaCO <sub>3</sub> S.I. @ 77° F. (Stiff-Davis)	1.08	1.09	0.74	0.92
CaCO <sub>3</sub> S.I. @ 122° F. (Stiff-Davis)	1.81	1.82	1.42	1.62
Calcium Sulfate Scaling Tendency	None	None	None	None

Results Reported As Milligrams Per Liter

## Additional Determinations And Remarks

CaCO<sub>3</sub> S.I. - A positive fig. signifies a scaling potential proportionate to the magnitude of the number, and a negative fig. signifies no scaling potential.

P.O. BOX 98  
MIDLAND, TX. 79702  
PHONE (432) 683-4521

## Martin Water Laboratories, Inc.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
FAX (432) 682-8819

## RESULT OF WATER ANALYSES

TO: Mr. Daniel Hurd LABORATORY NO. 706-68 (pg 4)  
1301 Travis, Suite 200, Houston, TX 77062 SAMPLE RECEIVED 7-11-06  
RESULTS REPORTED 7-19-06

COMPANY Edge Petroleum LEASE Red Lakes  
FIELD OR POOL \_\_\_\_\_

SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY Eddy STATE NM

## SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Well 36 "C" #3 on 7-7-06

NO. 2 \_\_\_\_\_

NO. 3 \_\_\_\_\_

NO. 4 \_\_\_\_\_

## REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1310			
pH When Sampled				
pH When Received	6.90			
Bicarbonate as HCO <sub>3</sub>	769			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	9,600			
Calcium as Ca	2,440			
Magnesium as Mg	851			
Sodium and/or Potassium	81,376			
Sulfate as SO <sub>4</sub>	3,485			
Chloride as Cl	129,255			
Iron as Fe	2.5			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	218,174			
Temperature °F.				
Carbon Dioxide, Calculated	161			
Dissolved Oxygen				
Hydrogen Sulfide	64.0			
Resistivity, ohm-cm at 77° F.	0.055			
Suspended Oil				
Filtrable Solids as mg/l				
Corrosiveness	Severe			
Volume Filtered, ml				
Barium Sulfate Scaling Tendency	None			
CaCO <sub>3</sub> S.I. @ 77° F. (Stiff-Davis)	1.07			
CaCO <sub>3</sub> S.I. @ 122° F. (Stiff-Davis)	1.77			
Calcium Sulfate Scaling Tendency	None			
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks				
CaCO <sub>3</sub> S.I. - A positive fig. signifies a scaling potential proportionate to the magnitude of the number, and a negative fig. signifies no scaling potential.				
In comparing these results with our formation water records in the Red Lake field, we find that all of the wells tested except 28 "N" #2 show characteristics that are compared to San Andres. The water from 28 "N" #2 has a much higher total hardness, calcium, magnesium, and chloride and a substantially lower sulfate than would be expected from a San Andres water in this field.				

Form No. 3

By 



# Water Analysis

Date: 2/24/2005

2401 Sivley, Artesia NM 88210

Phone (505) 746-3140 Fax (505) 746-2293

## Analyzed For

Company	Well Name	County	State
Westall	State G#1	Eddy	New Mexico

## Sample Source

Sample #

1

## Formation

Canyon

## Depth

Specific Gravity	1.050	SG @ 60 °F	1.051
pH	6.30	Sulfides	Not Tested
Temperature (°F)	65	Reducing Agents	Not Tested

## Cations

Sodium (Calc)	in Mg/L	9,518	in PPM	9,056
Calcium	in Mg/L	5,600	in PPM	5,328
Magnesium	in Mg/L	240	in PPM	228
Soluble Iron (FE2)	in Mg/L	300.0	in PPM	285

## Anions

Chlorides	in Mg/L	24,000	in PPM	22,835
Sulfates	in Mg/L	2,000	in PPM	1,903
Bicarbonates	in Mg/L	185	in PPM	176
Total Hardness (as CaCO3)	in Mg/L	15,000	in PPM	14,272
Total Dissolved Solids (Calc)	in Mg/L	41,844	in PPM	39,813
Equivalent NaCl Concentration	in Mg/L	38,410	in PPM	36,546

## Scaling Tendencies

\*Calcium Carbonate Index 1,038,464

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

\*Calcium Sulfate (Gyp) Index 11,200,000

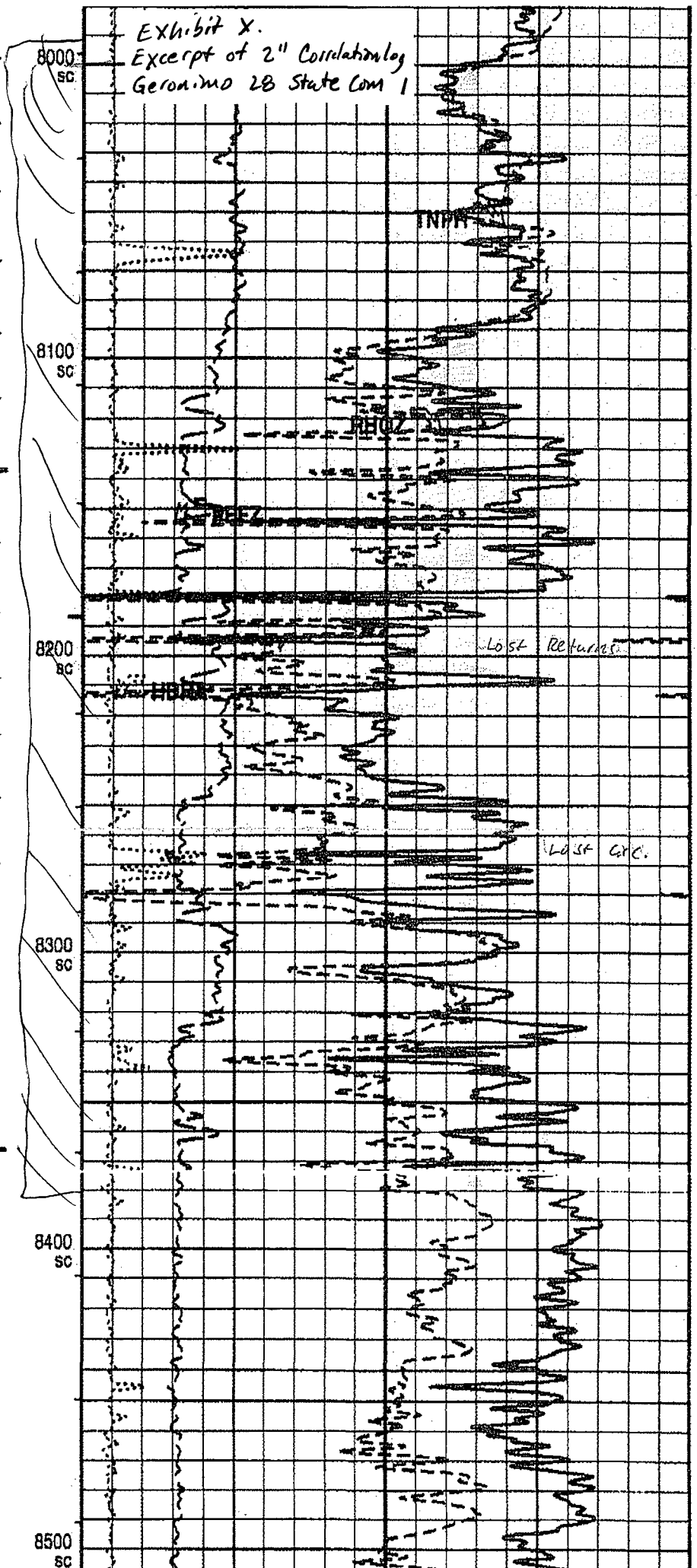
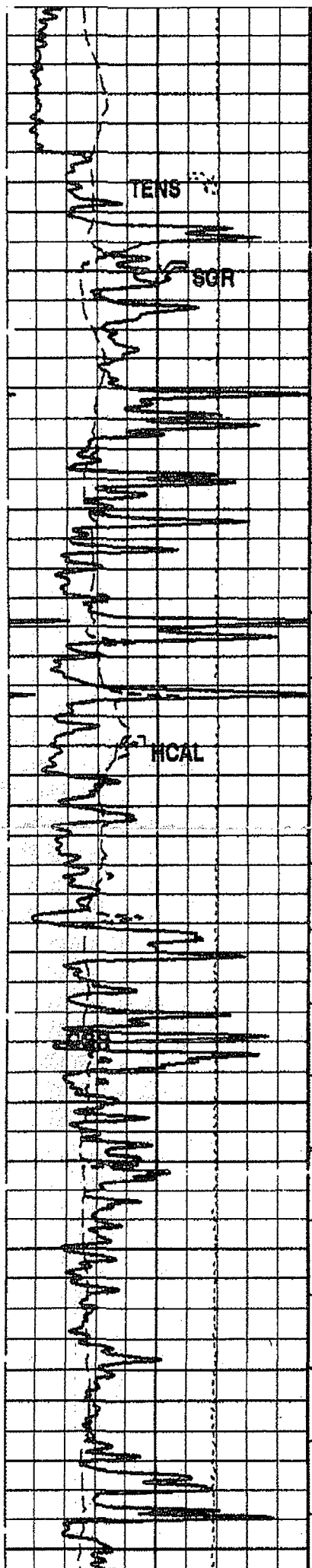
Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks FAX 677-2361

Report # 1732

INT DISPOSAL ZONE  
1177.5





**Jones, William V., EMNRD**

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**From:** Jones, William V., EMNRD  
**Sent:** Wednesday, August 08, 2007 12:21 PM  
**To:** 'tpowell@edgepet.com'  
**Cc:** Ezeanyim, Richard, EMNRD; Arrant, Bryan, EMNRD  
**Subject:** SWD Application on behalf of Edge Petroleum: Geronimo 28 State Com #1 30-015-31829

Hello Tom:

Was a pleasure reviewing this application. Very nice to have a reservoir engineer prepare these. After reviewing, the following are requests or comments:

- 1) Please send a copy of the CBL run on this well to the Hobbs District office for inclusion into the OCD imaged log files - Artesia does not have a log scanner.
- 2) The permit will require a plug to be set within 200 feet of the lowermost injection interval.

If no protests are received, we will release this permit on August 15, 2007.

Thanks Again,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

8/8/2007

Submit 3 Copies to Appropriate

District Office

DISTRICT I

1625 n. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, NM 87505

Form C-103

Revised March 25, 1999

WELL API NO.

30-015-31829

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

B-4575 B-4575  
636-E-135, B-1111, E-7075, 647

7. Lease Name or Unit Agreement Name:

Geronimo "28" State Com

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other ☐

2. Name of Operator

Louis Dreyfus Natural Gas Corp.

3. Address of Operator

14000 Quail Springs Parkway - Suite 600 - Oklahoma City, OK 73134

8. Well No.

1

9. Pool name or Wildcat

Empire Morrow South

4. Well Location

Unit letter J 1500' feet from the South line and 1800' feet from the East line.

Section 28 Township 17S Range 28E NMPM Eddy County

10. Elevation (Show whether DR, RKB, RT, Gr, etc.)  
3684'

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☒

OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

7/31/01 ran 248 jts 5 1/2", 17#, P 110 & N80 csg, set at 10,488', cemented 1st stage lead w/375 sks 50:50 Poz H, tailed w/300 sks PV lite. Plug down @ 1700, WOC, drop bomb & circ 60 sx to reserve. Cemented 2nd stage w/610 sx 50:50 Poz. Plug down @ 2200. Rig released, WOCU.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Carla Christian*

TITLE Regulatory Technician

DATE 08/01/01

Type or print name

Carla Christian

Telephone No.

405-749-5263

(This space for State use)

ORIGINAL SIGNED BY TIM W. CUM  
DISTRICT II SUPERVISOR

AUG 1 8 2001

APPROVED BY

TITLE

DATE

Conditions of approval, if any:

# Injection Permit Checklist 2/8/07

**SWD Order Number** 1694 **Dates:** Division Approved \_\_\_\_\_ District Approved \_\_\_\_\_

**Well Name/Num:** GERONIMO 28 State Com #1 **Date Spudded:** 7/01

**API Num:** (30-) 015-31829 **County:** EDDY

**Footages** 1500 FSL / 1800 FEL **Sec** 28 **Tsp** 17 S **Rge** 28 E

**Operator Name:** EDGE PETROLEUM OPERATING COMPANY INC. **Contact** Tom L. Powell

**Operator Address:** 301 TRANSY SUITE 2000, HOUSTON TX 77002

**Current Status of Well:**

**Planned Work:**

**Inj. Tubing Size:** 27/80 7900

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	17 1/2 13 5/8		430	CIRC
Intermediate	12 1/2 9 5/8		955	CIRC
Production	7 7/8 5 1/2		1285	2210' CBL
Last DV Tool		5486 (CIRC below)		
Open Hole/Liner				
Plug Back Depth				

**Diagrams Included (Y/N):** Before Conversion ☒ After Conversion ☒

**Checks (Y/N):** Well File Reviewed ☒ ELogs in Imaging ☒

Intervals:	Depths	Formation	Producing (Yes/No)
<del>Salt/Potash</del>	???		
<del>Capitan Reef</del>			
<del>Cliff House, Etc.</del>			
Formation Above			
Top Inj Interval	7996' ex	CISCO Canyon	
Bottom Inj Interval	8380		
Formation Below			

NICE w/BPS

1599 PSI Max. WHIP

NO Open Hole (Y/N)

NO Deviated Hole (Y/N)

**Fresh Water:** Depths: 0-150 Wells(Y/N) NO Analysis Included (Y/N): NO Affirmative Statement ☒

**Salt Water Analysis:** Injection Zone (Y/N/NA) ☒ DispWaters (Y/N/NA) ☒ Types: ABO, 1/20 FLOR/SA, PRENIA, CBL, QN

**Notice:** Newspaper(Y/N) \_\_\_\_\_ Surface Owner SLP Mineral Owner(s) \_\_\_\_\_

**Other Affected Parties:** SDX, Mould, OXY, JUDAH, RKE, BP Amer., Hanson

**AOR/Repairs:** NumActiveWells 2 Repairs? 1 Producing in Injection Interval in AOR NO

**AOR Num of P&A Wells** 1 **Repairs?** 1 **Diagrams Included?** ☒ **RBDMS Updated (Y/N)** \_\_\_\_\_

**Well Table Adequate (Y/N)** ☒ **AOR STRs:** Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ **UIC Form Completed (Y/N)** ☒

**New AOR Table Filename** \_\_\_\_\_ **Sec** \_\_\_\_\_ **Tsp** \_\_\_\_\_ **Rge** \_\_\_\_\_ **This Form completed** 8/8/07

**Conditions of Approval:** Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ **Data Request Sent** \_\_\_\_\_

See CIBP close to bottom perf  
Send copy of CBL

**AOR Required Work:** \_\_\_\_\_

**Required Work to this Well:** \_\_\_\_\_