SWD 2/20/01 103846593

Midland, Texas 79708

Cert #2941

## BILL F. HALEPESKA

PETROLEUM ENGINEER

Texas #58052 P. O. Box 80064 915/694-5945

January 31, 2001

New Mexico Oil Conservation Division

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

Att: Mr. David R. Catanach

Re: Red Tank West Prospect U.S. 98191

Lea County, New Mexico

Application for Administrative Approval to Inject

Saltwater into the Aracanga Federal No. 1 Well, (30-025-3/650)

Located 330' FSL & 2310' FEL Section 4, T-23-S,

R-32-E, U. S. M.

#### Gentlemen:

Pogo Producing Company respectfully submits two (2) original Applications for Authorization to Inject (Form C-108) pertaining to the captioned well and requests that same be given Administrative Approval.

Persuant thereto, please find enclosed the following:

- (1) Copy of Notification Letter sent to all offset Leasehold Operators within one-half (1/2) mile radius of the proposed injection well and to the surface owner upon which well is located, along with copies of proof of mailing; and
- (2) Proof of Legal Publication.

Notice was originally published in area newspaper on August 30, 2000, and proper notices mailed to offset operators on Sept. 5, 2000. If you have any questions, please contact the undersigned.

Very truly yours,

Bill F. Halepeska, P.E.

Agent

## Enclosure(s)

cc w/encl.: New Mexico Oil Conservation Division Hobbs, New Mexico

#### BILL F. HALEPESKA

PETROLEUM ENGINEER Texas #58052 P. O. Box 80064 915/694-5945

GEOLOGIST Cert #2941 Midland, Texas 79708

The Tile

April 27, 2001

New Mexico Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87504 Att: Mr. David R. Catanach

Re: Red Tank West Prospect US - 98191

<u>Lea County, New Mexico</u>

Application for Approval to Inject Saltwater into the Aracanga Federal No. 1 Well, Located 330' FSL & 2310' FEL Section 4, T- 23-S, R-32-E, U. S. M.

Dear Mr. Catanach:

Per your request for updated water data to support the referenced Application, we respectfully submit the attached information. Two analyses of produced water from wells nearby plus a fresh water from windmill in adjoining section are included. (map also attached with location of fresh water source).

If you have further questions, please contact the undersigned.

Very truly yours,

Bill F. Halepeska, P.E.

Agent

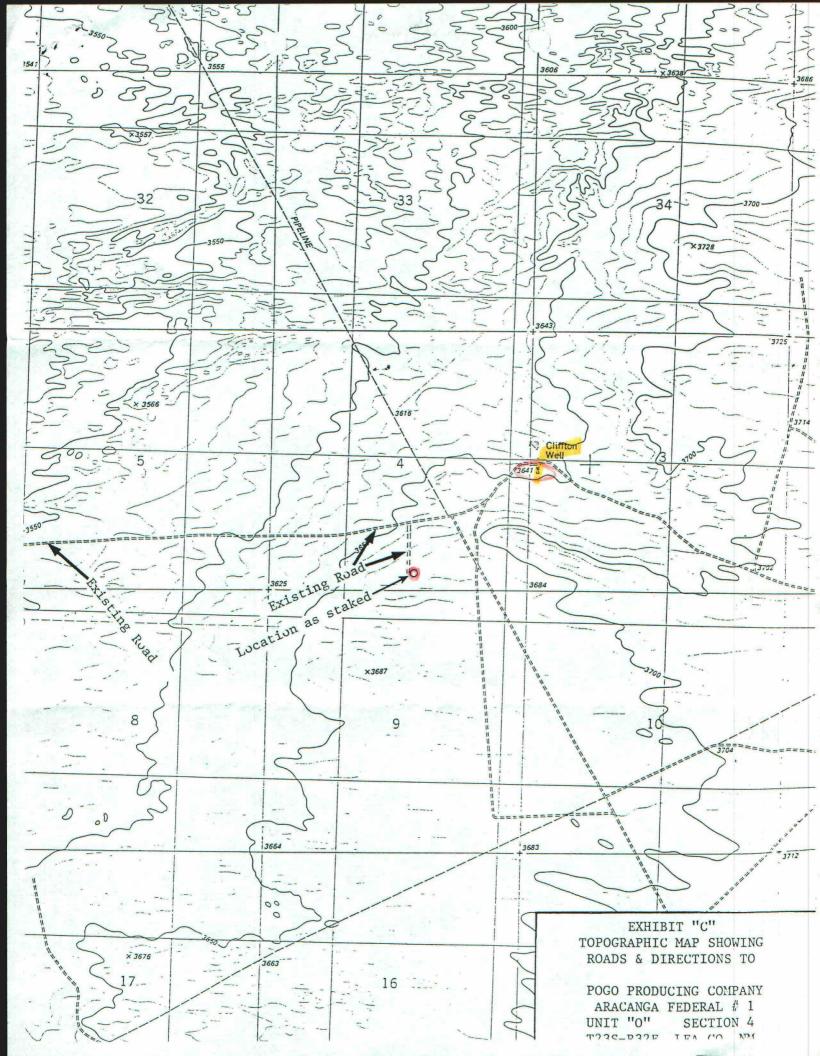
# **Endura Products Corp.**

P.O. Box 3394 Midland, Texas 79706 Phone (915) 684-4233 \* Fax (915) 684-4277

#### WATER ANALYSIS

Date: 04/24/01 Sampling Point/Date Company: Pogo Pr Lease: Aracang Loc: ラミころ DISSOLVED SOLI	e: Submer oducing Co ga Federal 、てこわち、R	Code: W-28421 State: New Mexico County: Lea Well: Fresh H2O Well					
<u>CATIONS</u>		mg/l	me	1			
Sodium, Na+ (Calc.	,	322	14	4			
Total Hardness as C	•	48		0			
Calcium, Ca++		20		1			
Magnesium, Mg++		17		1			
Barium, Ba++		0		0			
Iron (Total) Fe+++*	•	1	•	0			
<u>ANIONS</u>							
Chlorides, Cl-		100		3			
Sulfate, SO4-		400	;	8			
Carbonate, CO3-		0	1	0			
Bicarbonates, HCO3-		293	:	5			
Sulfide, S-*		0		0			
Total Dissolved Solids (Calc.)		1,153					
OTHER PROPERT	<u>TES</u>						
pH*		7.264					
Specific Gravity, 60	)/60 F.	1.000					
Turbidity		7					
SCALING INDICIES							
TEMP, F.	CA CO3	CASO4*2H2O	CA SO4	BA SO4			
	<u> </u>			_			
80	-0.6528	-1.7659	-1.9078	-27.7429			
120	-0.4217	-1.7842	-1.7457	-27.9500			
160	-0.1810	-1.7448	-1.5337	-28.0616			

#### **PERFORATIONS**



### **Endura Products Corp.**

P.O. Box 3394 Midland, Texas 79706 Phone (915) 684-4233 \* Fax (915) 684-4277

#### WATER ANALYSIS

	Point/Date: Pogo Proc		.: Greg Archer Wellhead 12/05/00			0
DISSOLV	ED SOLID	<u>S</u>				
CATIONS			mg/l		me/l	
Sodium, Na+ (Calc.) Total Hardness as Ca++ Calcium, Ca++ Magnesium, Mg++ Barium, Ba++		94,599 16,400 12,400 2,439	620			
Iron (Total) Fe+-+*		23	1			
<u>ANIONS</u>						
Chlorides, Cl- Sulfate, SO4- Carbonate, CO3-			175,000 250 0	4,930 5 0		
Bicarbonates, HCO3-			122		2	
Sulfide, S-*		294.933	0			
Total Dissolved Solids (Calc.)		284,833				
OTHER P	ROPERTIE	E <u>S</u>				
pH* Specific Gravity, 60/60 F. Turbidity		5.271 1.182 110				
			SCALING INDICIES			
TEMP, F.	<u>.</u>	CA CO3	CASO4*2H2O	CA SO4		BA SO4
80	)	0.2103	-0.3937	-0.7604		-29.4963
120	)	0.7646	-0.4066	-0.5928		-29.6314
160	)	1.6023	-0.4231	-0.4367		-29.8381
PERFORATIONS Middle Cherry Canyon: 6242 to 6252						

6282 to 6294 6320 to 6340

### Endura Products Corp.

P.O. Box 3394 Midland, Texas 79706 Phone (915) 684-4233 \* Fax (915) 684-4277

#### **WATER ANALYSIS**

Sampling Poil Company: P	1/06/2000 Endura Reint/Date: OGO Producing Co. ovington A Federal	p.: Greg Archer Wellhead /1-6-00		W-19442 New Mexi Lea 34	co
DISSOLVED	SOLIDS				
<u>CATIONS</u>		mg/l		me/l	
Sodium, Na+ (Calc.)		71,783		3,121	
Total Hardne	4.	28,080		0	
Calcium, Ca++		23,520		1,176	
Magnesium, Mg++		2,780		232	
Barium, Ba++		0		0	
Iron (Total) I	16+++*	30		2	
<u>ANIONS</u>					
Chlorides, Cl	ļ <u>-</u>	160,000		4,507	
Sulfate, SO4	-	1,025		21	
Carbonate, C	CO3-	0		0	
Bicarbonates	, HCO3-	171		3	
Sulfide, S-*		0		0	
Total Dissolv	ved Solids (Calc.)	259,309			
OTHER PRO	<u>OPERTIES</u>				
pH*		5.700			
•	vity, 60/60 F.	1.178			
Turbidity	,	561			
		SCALING INDICIES			
TEMD E	CA CO3	CASO4*2H2O	CA SO4		BA SO4
TEMP, F.	CA CO3	<u>CASO4*2H2O</u>	<u>CA 304</u>		<u>DA 304</u>
80	0.9981	0.4645	0.1080		-29.4950
120	1.5416	0.4558	0.2797		-29.6351
160	2.3635	0.4382	0.4347		-29.8441

PERFORATIONS LOWER DELAWARE



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 16, 2002

POGO Producing Company C/O Bill F. Halepeska PE P.O. Box 80064 Midland, TX 79708

Attention: Mr. Halepeska:

Re: Extension of Administrative Order SWD-796

Dear Mr. Halepeska:

As per your request on behalf of POGO Producing Company received in this office May 4, 2002, and for the reasons outlined in your letter, a one-year extension in which to convert to injection the Aracanga Federal Well No. 1, approved by Division Order No. SWD-796, is hereby granted.

The injection authority for this well shall expire on April 18, 2003, if the operator has not commenced injection operations.

Sincerely,

For Wrotenbery (2005)

Director

cc:

Oil Conservation Division – Hobbs Bureau of Land Management-Carlsbad File SWD-796

#### BILL F. HALEPESKA

PETROLEUM ENGINEER Texas #58052 P. O. Box 80064 915/694-5945 GEOLOGIST Cert #2941 Midland, Texas 79708

May 02, 2002

New Mexico Oil Conservation Division

1220 South St. Francis Drive Santa Fe, New Mexico 87505 Att: Mr. David R. Catanach

> Re: Aracanga Federal Well No. 1 (API No. 30-025-31650) Sec. 4, TWP 23S, R 32E, Lea County, New Mexico Application for Approval to Inject Approved April

18, 2001. Authority Expired April 18, 2002

#### Gentlemen:

Per our earlier conversation, Pogo Producing Company respectfully requests an extension of 180 days for the referenced Approval. ROW authority for required saltwater transfer lines has been received from the BLM and work to convert the well to injection should commence in a short time.

If you have any questions, please contact the undersigned.

Very truly yours,

Bill F. Halepeska, P.E.

Agent