P.O. BOX 8206 WICHITA FALLS TEXAS 76307-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORATION FAX (940) 716-5170

May 22, 2001

The State of New Mexico Oil Conservation Division 2040 Pacheco Street Santa Fe. New Mexico 87505

T. P. "A" State Unit SWD #1 (30-025-20739) Section 15, T10S-R36E

Lea County, New Mexico

### Gentlemen:

Enclosed is Cobra Oil & Gas Corporation's Application For Authorization to Inject for the above captioned well. The T. P. "A" State Unit SWD #1 was drilled as a Devonian producer and has since reached uneconomical status. Surface, intermediate and production casing strings remain intact. Upon approval, Cobra intends to begin disposal of produced Devonian water into the open hole interval from 12,313 feet-12,329 feet in this wellbore. Due to the high cost of trucking produced water to a disposal facility, this disposal well is critical to prolonging the producing life of the Lewis Unit #1 and Gainer Unit #1 wells by significantly reducing the operating costs associated with the trucking of the produced water.

Thank you for your consideration of this application. Should you require additional information, please advise.

Sincerely Yours,

Rory Edwards

Production Supervisor

RE:bas Enclosures M:/Wpfiles/Rory/LTR595

### APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Application qua	Secondary Recovery alifies for administrative approval?	Pressure	Maintenance No	XXX Disposal	Storage
II.	OPERATOR:_	COBRA OIL & GAS CORPORATI	ON		- <del></del>	· <del></del>
	ADDRESS:	P O BOX 3206; WICHITA FAI	LS, TEXAS	76307-8206		
	CONTACT PA	RTY: RORY EDWARDS			PHONE	940/716-510
Ш.	WELL DATA:	Complete the data required on the re sheets may be attached if necessary.		is form for each v	vell processed for inje	ction. Additiona
IV.	Is this an expan If yes, give the	nsion of an existing project: Yes  Division order number authorizing (	s XX No the project			
V.	Attach a map ti circle drawn ar	hat identifies all wells and leases with round each proposed injection well.	in two miles of This circle ide	any proposed injustifies the well's a	ection well with a on area of review.	e-half mile radius
VI.	Such data shall	tion of data on all wells of public recordinclude a description of each well's cof any plugged well illustrating all	type, construct	ion, date drilled,	h penetrate the propos location, depth, reco	ed injection zone rd of completion
VII.	Attach data on	the proposed operation, including:				
<b>•</b> ∨III.	<ol> <li>Proposed a</li> <li>Sources and reinjected p</li> <li>If injection attach a che studies, nea</li> <li>Attach appropriand depth. Giventers with total</li> </ol>	e system is open or closed; verage and maximum injection pression an appropriate analysis of injection produced water; and is for disposal purposes into a zone femical analysis of the disposal zone for the wells, etc.).  The geological data on the injection is the disposal concentrations of the concentrati	fluid and common productive formation water zone including ottom of all und 10,000 mg/1 c	of oil or gas at or (may be measur appropriate lithol derground sources or less) overlying	within one mile of t ed or inferred from a ogic detail, geologics of drinking water (a	the proposed well existing literature al name, thicknes equifers containin
IX.	•	es known to be immediately underly roposed stimulation program, if any.	mg the injectio	n inicival.		
* X.	•	riate logging and test data on the we	ell. (If well lo	gs have been file	d with the Division,	they need not b
* XI.		ical analysis of fresh water from two n or disposal well showing location of				g) within one mil
XII.		disposal wells must make an affirmati to evidence of open faults or any other king water.				
XIII.	Applicants mu	st complete the "Proof of Notice" see	ction on the re-	verse side of this	form.	
XIV.	Certification: knowledge and	I hereby certify that the information belief.	submitted wit	h this application	is true and correct	to the best of m
	NAME:	RORY EDWARDS	<del></del>	TITLE: _	PRODUCTION SUP	ERVISOR
	SIGNATURE:	1 Con Educas			<b>DATE</b> :05/22	1/03.
*		ation required under Sections VI, V			previously submitte	ed, it need not b

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

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and 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.

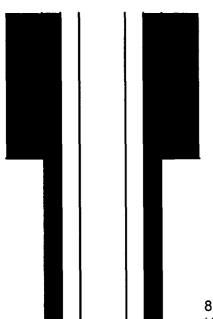
Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (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, PO Box 2088, Santa Fe, NM 87504-2088 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 in nearing of administrative applications within 15 days from the date this application was mailed to them.

# COBRA OIL & GAS CORPORATION T. P. "A" STATE UNIT SWD #1 UNIT M, 810' FSL & 660' FWL (SURFACE) SECTION 15, T10S-R36E LEA COUNTY, NEW MEXICO



13 3/8" casing set @ 320' with 350 sacks of cement Hole size: 17 1/2" - TOC @ surface by circ.

8 5/8" casing set @ 4,200' with 1400 sacks of cement Hole size: 11" - TOC @ surface by circ.

Total depth - 12,329'. 5 1/2" casing set to depth of 12,313'. Cement w/230 sacks "H" Completed open hole from 12,313' - 12,329'

2 7/8" 6.5# L-80 Tubing lined with Freecom's Ceram-Kote PCF coating set @ 12,300' with a Baker Model "D" packer lined with PCF coating.

REENTRY OF P&A WELL DRILLED BY RALPH LOWE IN 1964. WELL P&A 4/79. DRILLED DIRECTIONALLY BY PETROLEUM DEVELOPMENT CORP. TO A BHL OF 966' FSL & 120' FEL, SEC. 16, T10S-R36E., 4/98. SOLD TO COBRA OIL & GAS CORPORATION FOR USE AS SALT WATER DISPOSAL WELL 4/01.

### **INJECTION WELL DATA SHEET**

	her type of tubing/casing seal if applicable				Model D packer at 12,300'.
<u>Ot</u>	her Data:				
1.	Is this a new well drilled for injection?		Yes	X	No
	If no, for what purpose was the well originally drilled	!?			Oil Production - Producer
2.	Name of injection formation Devonian	. •			
3.	Name of Field or Pool (if applicable)	Sout	h Cross	roads	- Devonian
4.	Has the well ever been perforated in any other zone intervals and give plugging detail, i.e., sacks of cerr	. ,			
	None				
5.	Give the names and depths of any over or underlying	ng oil	or gas a	zones	(pools) in this area.
	None		·		

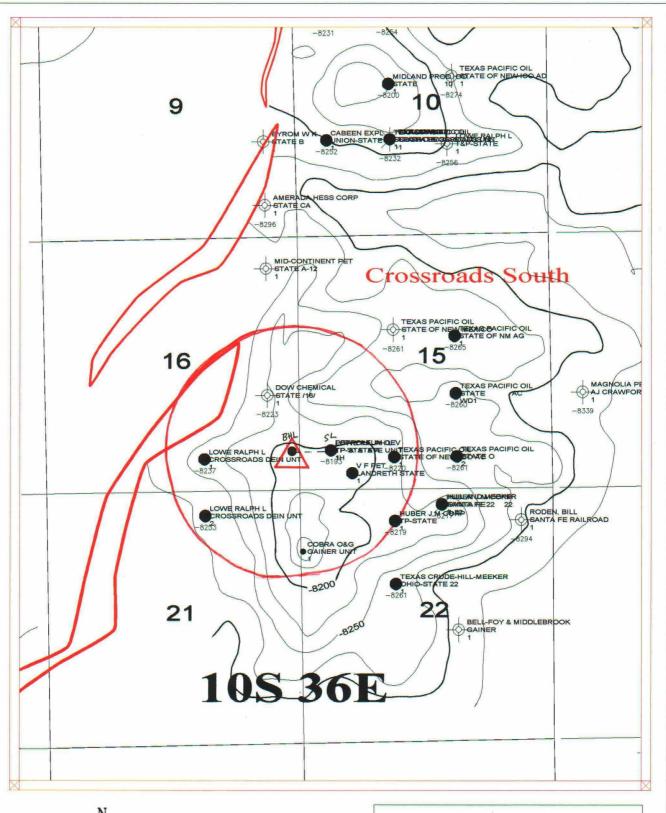
### Application for Authorization to Inject

Cobra Oil & Gas Corporation T. P. "A" State Unit SWD #1 810' FSL & 660' FWL Unit M, Section 15, T10S-R36E Lea County, New Mexico

- VI. Attached is a tabulation of all wells of public record that fall within the half (1/2) mile radius of the proposed salt water disposal well, The T. P. "A" State Unit SWD #1. There is one producing well, four plugged wells, and one T A well, along with one abandoned SWD well. The wells each have a good cement seal around their casing shoe to prevent any upward migration of the disposal water into any potable water zone. The T. P. "A" State Unit SWD #1 well was drilled as a Devonian test in 1964 and plugged and abandoned in March 1979. The well was reentered in October 1998 by Petroleum Development Corporation and directional drilled to the Devonian.
- VII. The proposed average daily injection rate for the subject well is 1,500 BWPD with a maximum daily rate of 7,500 BWPD. This will be a closed system with an average pressure of 500 psi/1,000 psi and a maximum pressure of 5,000 psi. Produced Devonian water will be injected in the proposed well. There should be no incompatibility concerns in injection of Devonian water into a former producing Devonian well.
- VIII. The disposal zone will be the Devonian Formation, a dolomite section. The open hole interval from 12,313 feet to 12,329 feet will be utilized as the disposal interval. The main source of drinking water in this area is the Cretaceous Formation, the base of which is approximately 180 feet. There are no known sources of drinking water underlying the injection interval.
- IX. The well will be stimulated with 1,000-2,000 gallons of 20% NEFE HCL, if required, after a pump-in test.
- X. Log is on file with the Division.
- XI. Attached is an analysis of the water from the nearest water well.
- XII. Cobra Oil & Gas Corporation has examined the available geologic and engineering data and can find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. The required "Proof of Notice" is attached.

# COBRA OIL & GAS CORPORATION OFFSET WELLS TO THE T. P "A" #1 STATE UNIT SWD WITHIN A ONE-HALF MILE RADIUS

WELL	LOCATION	SURFACE CASING	INTERMEDIATE CASING	PRODUCTION CASING		STATUS
Cobra Oil & Gas Corp. Gainer Unit #1 Spud 11/97	Section 22, T10S-36E Unit D 1,294' FNL & 39' FWL	13 3/8" @ 398' Cement w/415 sacks TOC @ surface by circ.	8 5/8" @ 4,265' Cement w/1,900 sacks TOC @ surface by circ.	5 1/2" @ 12,213' Cement w/700 sacks TOC @ 9,830' by CBL	12,230'	Producing open hole 12,213' - 12,230' Schematic attached
Cobra Oil & Gas Corp. T. P. "A" State Unit SWD #1 Reentry 10/98	Section 15, T10S-R36E Unit M (Surface ) 810' FSL & 660' FWL Section 16, T10S-R36E Unit P (Bottom hole) 966' FSL & 120' FEL	13 3/8" @ 320' Cement w/350 sacks TOC @ surface by circ.	8 5/8" @ 4,200' Cement w/1,400 sacks TOC @ surface by circ.	5 1/2" @ 12,313' Cement w/230 sacks	Shut in 12,329' to SWD Scheme	Shut in pending recompletion to SWD Schematic attached
Ralph Lowe Crossroads Devonian Unit #2 Spud 4/1964	Section 21, T10S-R36E Unit B 510' FNL & 1,980' FEL	13 3/8" @ 335' Cement w/350 sacks TOC @ surface by circ.	8 5/8" @ 4,978' Cement w/2,150 sacks TOC @ surface by circ.	5 1/2" @ 12,291' cement w/400 sacks TOC @ 9,810' by Temp.	12,313'	Plugged and abandoned - 4/79 Schematic attached
V-F Petroleum, Inc. Landreth State #1 Spud 7/77	Section 15, T10S-R36E Unit M 330' FSL & 1,100' FWL	12 3/4" @ 398' Cement w/450 sacks TOC @ surface by circ.	8 5/8" @ 4,299' Cement w/925 sacks	5 1/2" @ 12,235' Cement w/1,450' sacks TOC @ 9,830' by CBL	12,239'	No record found of P&A - TA Schematic attached
Ralph Lowe Crossroads Devonian Unit #1 Spud 1/64	Section 16, T10S-R36E Unit O 660' FSL & 1,980' FEL	13 3/8" @ 341' Cement w/340 sacks TOC @ surface by circ.	8 5/8" @ 4,195' Cement w/1,550 sacks TOC @ surface by circ.	5 1/2" @ 12,335' Cement w/100 sacks	12,425'	Well converted to SWD in 1969 Temporarily Abandoned Schematic attached
Texas Pacific Coal & Oil Co. State "AC" #1 Spud 5/62	Section 15, T10S-R36E Unit F 660' FSL & 1,980' FWL	13 3/8" @ 360' Cement w/350 sacks TOC @ surface by circ.	9 5/8" @ 4,270' Cement w/1,600 sacks TOC @ surface by circ.	7" @ 12,253' Cement w/200 sacks	12,341'	Well plugged and abandoned 5/74 Schematic attached
Dow Chemical Company State 16 #1 Spud 5/79	Section 16, T10S-R36E Unit I 1,980' FSL & 660' FEL	13 3/8" @ 398' Cement w/475 sacks TOC @ surface by circ.	8 5/8" @ 4,225' Cement w/1,725 sacks TOC surface by circ	5 1/2" @ 5,050' cement w/300 sacks TOC @ 3,411' - Temp	12,405'	Dry Hole - P&A 8/79 Schematic attached
J. M. Huber Corporation T. P. State "22" #1 Spud 2/62	Section 22, T10S-R36E Unit C 660' FNL & 1,980' FWL	13 3/8" @ 313' Cement w/250 sacks TOC @ surface by circ.	8 5/8" @ 4,208' Cement w/250 sacks	5 1/2" @ 12,249' Cement w/500 sacks	12,260'	Well P&A 5/1969 Schematic attached





### Cobra Oil & Gas Corporation

Gainer Unit Lea County, New Mexico

j. cartwright	Scale 1:24000.	05/21/2001



South Permian Basin Region 10520 West I-20 East Odessa, TX 79765 (915) 498-9191 Lab Team Leader - Shella Hernandez (915) 495-7240

### Water Analysis Report by Baker Petrolite

Company:

**COBRA OIL AND GAS** 

Sales RDT: 33112

Region:

PERMIAN BASIN

:BAKER PETROLITE

Account Manager: RUSSELL KENNEDY (915) 634-6844

Area:

BIG SPRING, TX

Sample #:

165075

Lease/Platform:

**KANCHER** 

Analysis ID #:

18651

Entity (or well #):

WATER WELL

Analysis Cost:

\$40.00

Formation:

UNKNOWN

Sample Point:

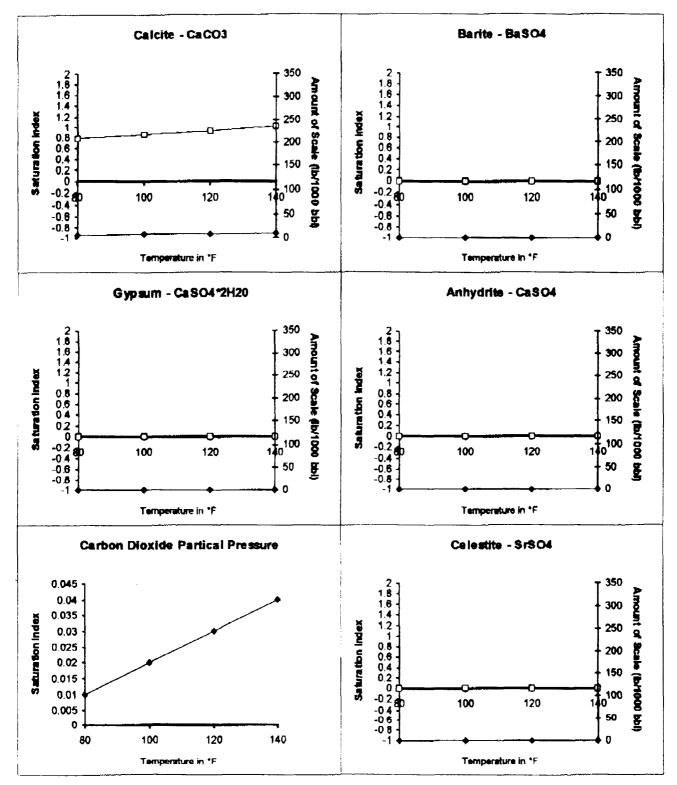
**WATER WELL** 

	Summary		An	lysis of Sa	mple 166075 @ 75 °F		
Sampling Date:	4/19/01	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/1/01	Chloride:	33.0	0.93	Sodium:	0.0	0.
Analyst:	MARILYN BRANNON	Bicarbonate:	183.0	3.	Magnesium:	19.0	1,56
		Carbonate:	2.0	9.07	Calcium:	44.0	2.2
TDS (mg/l or g/m3): 291.8 Density (n/cm3, forma/m3): 1		Sulfate:			Strontlum:	2.0	9.86

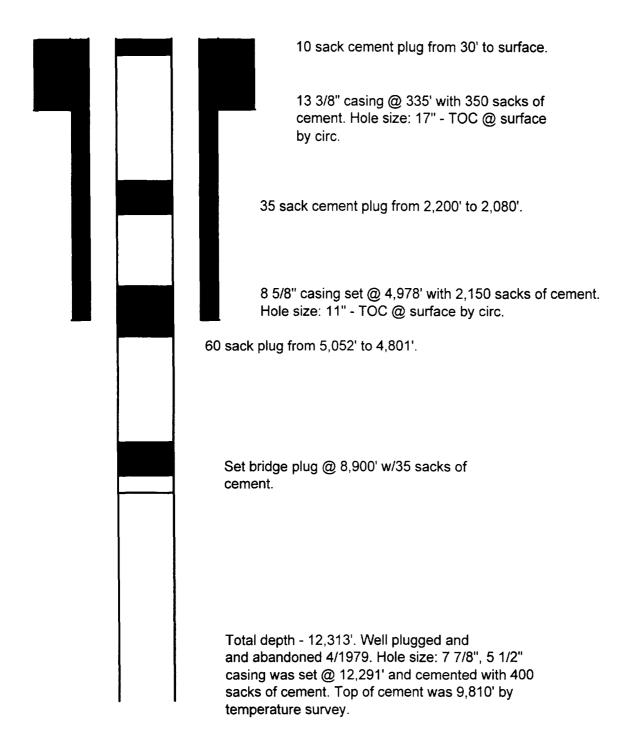


### Scale Predictions from Baker Petrolite

Analysis of Sample 165075 @ 75 °F for COBRA OIL AND GAS, \$/1/61

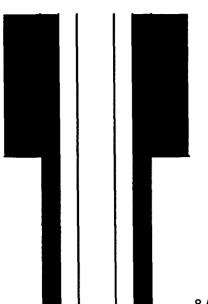


# RALPH LOWE CROSSROADS DEVONIAN UNIT #2 UNIT B, 510' FNL & 1,980' FEL SECTION 21, T10S-R36E LEA COUNTY, NEW MEXICO



WELL ORIGINALLY DRILLED BY MARALO, INC. AS THE C. DEVONIAN #2 WELL IN 4/1964.

# COBRA OIL & GAS CORPORATION GAINER UNIT #1 UNIT D, 1,294' FNL & 39' FWL SECTION 22, T10S-R36E LEA COUNTY, NEW MEXICO

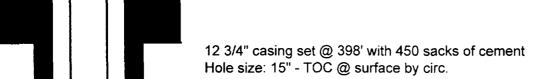


13 3/8" casing set @ 398' with 415 sacks of cement Hole size: 17 1/2" - TOC @ surface by circ.

8 5/8" casing set @ 4,265' with 1900 sacks of cement Hole size: 12 1/4" - TOC @ surface by circ.

Total depth - 12,230'. 5 1/2" casing set @ 12,213' with 700 sacks of cement. TOC @ 9,830' - CBL. Completed open hole @ 12,213' - 12,230'.

### V-F PETROLEUM, INC. LANDRETH STATE #1 UNIT M, 330' FSL & 1,100' FWL SECTION 15, T10S-R36E LEA COUNTY, NEW MEXICO

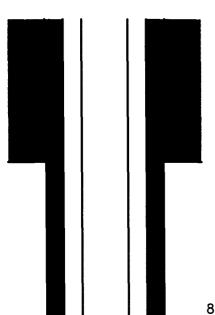


8 5/8" casing set @ 4,299' with 925 sacks of cement Hole size: 11".

Total depth - 12,239'. 5 1/2" casing set @ 12,235' with 1,450 sacks of cement. TOC @ 9,830' - CBL. Completed open hole @ 12,235' - 12,239'.

NO RECORD OF P&A FOUND. WELL TA

### RALPH LOWE CROSSROADS DEVONIAN UNIT #1 UNIT O, 660' FSL & 1,980' FEL SECTION 16, T10S-R36E LEA COUNTY, NEW MEXICO



13 3/8" casing set @ 341' with 340 sacks of cement Hole size: 17" - TOC @ surface by circ.

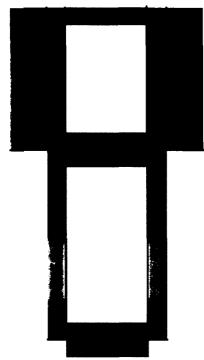
8 5/8" casing set @ 4,195' with 1550 sacks of cement Hole size: 11" - TOC @ surface by circ.

Original total depth - 12,341'. 5 1/2" casing set @ 12,335' with 100 sacks of cement.
TOC @ ' Completed 12,274' - 12,286'.

Reenter and deepen to 12,425' - 1/69. Run 531' 4" liner, top 11,789' to 12,320'. Cement w/50 sacks. Convert to SWD in Devonian open-hole, 12,335' to 12,425'.

\*\* WELL CURRENTLY TA.

# TEXAS PACIFIC COAL & OIL COMPANY STATE "AC" #1 UNIT F, 660' FSL & 1,980' FWL SECTION 15, T10S-R36E LEA COUNTY, NEW MEXICO



Set 10 sack cement plug at surface.

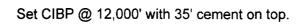
Set 100' cement plug @ 333'.

13 3/8" casing set @ 360' with 350 sacks of cement Hole size: 17" - TOC @ surface by circ.

9 5/8" casing set @ 4,270' with 1600 sacks of cement Hole size: 11" - TOC @ surface by circ.

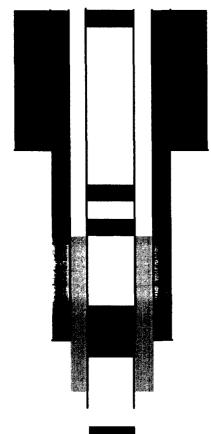
Set 100' cement plug at 4,259'.

Cut off 7" casing @ 4,500'. Spot 100' cement plug at top of cutoff.



Original total depth - 12,341'. 7" casing set @ 12,253' with 200 sacks of cement. Completed 12,274' - 12,286'

### THE DOW CHEMICAL COMPANY STATE "16" #1 UNIT I, 1,980' FSL & 660' FEL SECTION 16, T10S-R36E LEA COUNTY, NEW MEXICO



Set 10 sack cement plug @ surface.

13 3/8" casing set @ 398' with 475 sacks of cement Hole size: 17 1/2" - TOC @ surface by circ.

Set 30 sack cement plug from 2,115' - 2,365'

Set 30 sack cement plug from 2,550' - 2,800'

8 5/8" casing set @ 4,225' with 1725 sacks of cement Hole size: 11" - TOC @ surface by circ.

Set 5 1/2" casing @ 5,050' with 300 sacks cement. TOC @ 3,411' (Temp Surv.)

Set 95 sack cement plug @ 5,200' Set 60 sack cement plug @ 5,630'

Set 50 sack cement plug @ 7,770'

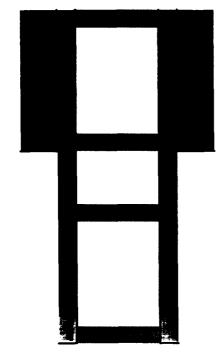
Set 40 sack cement plug @ 9,020'

Set 40 sack cement plug @ 11,160'

Set 30 sack cement plug @ 12,225'

Total depth - 12,405'. DRY HOLE!

J. M . HUBER CORPORATION T. P. STATE "22" #1 UNIT C, 660' FNL & 1,980' FWL SECTION 22, T10S-R36E LEA COUNTY, NEW MEXICO



Set 10 sack cement plug @ surface.

Set 25 sack cement plug @ 301'.

13 3/8" casing set @ 313' with 250 sacks of cemen Hole size: 17 1/2" - TOC @ surface by circ.

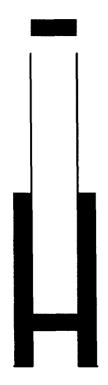
Set 25 sack cement plug @ 747'

8 5/8" casing set @ 4,208' with 250 sacks of cement Hole size: 11" -

Set 25 sack cement plug @ 4,127'

Shoot off 5 1/2" casing @ 4,900' and pull.

Set 25 sack cement plug @ 4,688'



Total depth - 12,260'. 5 1/2" casing set to depth of 12,249'. Cement w/500 sacks "H" Completed open hole from 12,245' - 12,260' 3/1962.

Set 25 sack cement plug @ 12,000'

Plug And Abandon 5/1969.



PO. BOX 8:206 WICHITA FF.LLS, TEXAS 76307-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORATION FAX (940) 716-5170

May 22, 2001

The State of New Mexico Oil Conservation Division 2040 Pacheco Street Santa Fe, New Mexico 87505

RE:

T. P. "A" State Unit SWD #1 Section 15, T10S0R36E Lea County, New Mexico

### Gentlemen:

On May 22, 2001, Cobra Oil & Gas Corporation mailed to Headington Royalty, Inc. and Warren Resources, Inc., offset leasehold operators and Tom Gainer, surface owner, copies of the Application For Authorization to Inject for the above captioned proposed disposal well. Cobra Oil & Gas Corporation is also a leasehold operator in the area within a half-mile radius of the proposed disposal well. The only other acreage within the radius of review is open state land.

Should you require additional information, please advise.

Sincerely,

Rory Edwards

**Production Supervisor** 

Tony Edwards

RE/bas

Enclosures
Wpfiles/rory/ltr594



P.O. BOX 8206 WICHITA FALLS, TEXAS 76307-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORA\*\*ION FAX (940) 716-5170

May 22, 2001

Tom Gainer
Box "L"
McDonald, New Mexico 88262

Re: T. P. "A" State Unit SWD #1
 Section 15, T10S-R36E
 Lea County, New Mexico

Dear Mr. Gainer:

Cobra Oil & Gas Corporation is making application to the New Mexico Oil Conservation Division to utilize the T. P. "A" State Unit SWD #1 for disposal of produced Devonian water from Cobra's Lewis and Gainer wells. In accordance with regulation 701.B(2), as the surface owner of the land on which the well is located, a copy of the disposal application is being furnished to you.

If you should have any objection to this application, you must file the objection or request for a hearing with the Oil Conservation Division, 2040 Pacheco Street, Santa Fe, New Mexico, 87505, within fifteen (15) days from the date this application was mailed to you.

Sincerely Yours,

J

Rory Edwards Production Supervisor

RE:bas Enclosures LTR596



P.O. BOX 8206 WICHITA FALLS, TEXAS 76:07-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORATION FAX (940) 716-5170

May 22, 2001

Headington Royalty, Incorporated 7557 Rambler Road, #1150 Dallas, Texas 75231

Re: T. P. "A" State Unit SWD #1 Section 15, T10S-R36E Lea County, New Mexico

Dear Gentlemen:

Cobra Oil & Gas Corporation is making application to the New Mexico Oil Conservation Division to utilize the T. P. "A" State Unit SWD #1 for disposal of produced Devonian water from Cobra's Lewis and Gainer wells. In accordance with regulation 701.B(2), as the offset leasehold owner of the land on which the well is located, a copy of the disposal application is being furnished to you.

If you should have any objection to this application, you must file the objection or request for a hearing with the Oil Conservation Division, 2040 Pacheco Street, Santa Fe, New Mexico, 87505, within fifteen (15) days from the date this application was mailed to you.

Sincerely Yours,

Tony Edwards

Rory Edwards

Production Supervisor

RE:bas Enclosures LTR597



P.O. BOX 8206 WICHITA FALLS, TEXAS 76307-8206 TELEPHONE (940) 716-5100 PRODUCTION FAX (940) 716-5110 WELL LOG FAX (940) 716-5180 LAND FAX (940) 716-5210 ACCOUNTING FAX (940) 716-5150 EXPLORATION FAX (940) 716-5170

May 22, 2001

Warren Resources, Incorporated 489 5<sup>th</sup> Avenue, 32<sup>nd</sup> Floor New York, New York 10017

Re: T. P. "A" State Unit SWD #1 Section 15, T10S-R36E Lea County, New Mexico

Dear Gentlemen:

Cobra Oil & Gas Corporation is making application to the New Mexico Oil Conservation Division to utilize the T. P. "A" State Unit SWD #1 for disposal of produced Devonian water from Cobra's Lewis and Gainer wells. In accordance with regulation 701.B(2), as the offset leasehold owner of the land on which the well is located, a copy of the disposal application is being furnished to you.

If you should have any objection to this application, you must file the objection or request for a hearing with the Oil Conservation Division, 2040 Pacheco Street, Santa Fe, New Mexico, 87505, within fifteen (15) days from the date this application was mailed to you.

Sincerely Yours,

Mary Educado

Rory Edwards

Production Supervisor

RE:bas Enclosures LTR598

### **APPLICATION FOR AUTHORIZATION TO INJECT**

I.	PURPOSE: Application qua	Secondary Recovery alifies for administrative approval?		e Maintenance No	XXX Disposal	Storage
II.	OPERATOR:_	COBRA OIL & GAS CORPORATI	ON			<del></del>
	ADDRESS:	P O BOX 8206; WICHITA FAL	LS, TEXAS	76307-8206		
	CONTACT PA	ARTY: RORY EDWARDS			PHONE	940/716-5100
III.	WELL DATA:	Complete the data required on the resheets may be attached if necessary.		is form for each w	vell processed for inje	ction. Additional
IV.	Is this an expan	nsion of an existing project: Yes Division order number authorizing t	XX No he project		·	
V.		hat identifies all wells and leases with round each proposed injection well.				e-half mile radius
VI.	Such data shall	tion of data on all wells of public recordinclude a description of each well's cof any plugged well illustrating all	type, construc	tion, date drilled,	n penetrate the propos location, depth, reco	ed injection zone. rd of completion,
VII.	Attach data on	the proposed operation, including:				
	<ol> <li>Whether the</li> <li>Proposed at</li> <li>Sources and reinjected p</li> <li>If injection attach a che</li> </ol>	verage and maximum daily rate and verage and maximum injection pressured an appropriate analysis of injection produced water; and is for disposal purposes into a zone remical analysis of the disposal zone for the wells, etc.).	ire; fluid and com	patibility with the	within one mile of t	he proposed well,
*VIII.	and depth. Giv	riate geological data on the injection a we the geologic name, and depth to be tall dissolved solids concentrations of ses known to be immediately underlyi	ottom of all und 10,000 mg/1	derground sources or less) overlying	of drinking water (a	quifers containing
IX.	Describe the pr	roposed stimulation program, if any.				
* X.	Attach appropr resubmitted.)	riate logging and test data on the we	ill. (If well lo	gs have been file	d with the Division,	they need not be
* XI.	Attach a chemi of any injection	ical analysis of fresh water from two n or disposal well showing location o	or more fresh f wells and da	water wells (if av tes samples were	ailable and producing taken.	g) within one mile
XII.		disposal wells must make an affirmative o evidence of open faults or any other king water.				
XIII.	Applicants mus	st complete the "Proof of Notice" sec	ction on the re-	verse side of this	form.	
- <b>XIV.</b>	Certification: I knowledge and	I hereby certify that the information l belief.	submitted wit	h this application	is true and correct	to the best of my
	NAME:	RORY EDWARDS			PRODUCTION SUP	
	SIGNATURE:	- Tlay Eduars			DATE:05/22	/01
*		tion required under Sections VI, VI lease show the date and circumstance			previously submitte	xd, it need not be

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

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and 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;
- 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, PO Box 2088, Santa Fe, NM 87504-2088 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 101 nearing of administrative applications within 15 days from the date this application was mailed to them.

### Application for Authorization to Inject

Cobra Oil & Gas Corporation
T. P. "A" State Unit SWD #1
810' FSL & 660' FWL
Unit M, Section 15, T10S-R36E
Lea County, New Mexico

- VI. Attached is a tabulation of all wells of public record that fall within the half (1/2) mile radius of the proposed salt water disposal well, The T. P. "A" State Unit SWD #1. There is one producing well, four plugged wells, and one T A well, along with one abandoned SWD well. The wells each have a good cement seal around their casing shoe to prevent any upward migration of the disposal water into any potable water zone. The T. P. "A" State Unit SWD #1 well was drilled as a Devonian test in 1964 and plugged and abandoned in March 1979. The well was reentered in October 1998 by Petroleum Development Corporation and directional drilled to the Devonian.
- VII. The proposed average daily injection rate for the subject well is 1,500 BWPD with a maximum daily rate of 7,500 BWPD. This will be a closed system with an average pressure of 500 psi/1,000 psi and a maximum pressure of 5,000 psi. Produced Devonian water will be injected in the proposed well. There should be no incompatibility concerns in injection of Devonian water into a former producing Devonian well.
- VIII. The disposal zone will be the Devonian Formation, a dolomite section. The open hole interval from 12,313 feet to 12,329 feet will be utilized as the disposal interval. The main source of drinking water in this area is the Cretaceous Formation, the base of which is approximately 180 feet. There are no known sources of drinking water underlying the injection interval.
- IX. The well will be stimulated with 1,000-2,000 gallons of 20% NEFE HCL, if required, after a pump-in test.
- X. Log is on file with the Division.
- XI. Attached is an analysis of the water from the nearest water well.
- XII. Cobra Oil & Gas Corporation has examined the available geologic and engineering data and can find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. The required "Proof of Notice" is attached.

### Affidavit of Publication

STATE OF NEW MEXICO	)
	) ss.
COUNTY OF LEA	)
Joyce Clemens being first duly says that she is Advertisting Di DAILY LEADER, a daily newsp tion published in the English I County, New Mexico; that said relished in such county continuous period in excess of Twenty-six (prior to the first publication of the hereinafter shown; and that said duly qualified to publish legal in Chapter 167 of the 1937 Session Mexico.	rector of THE LOVINGTON aper of general paid circula- anguage at Lovington, Lea newspaper has been so pub- sly and uninterruptedly for a (26) consecutive weeks next he notice hereto attached as id newspaper is in all things ofices within the meaning of
That the notice which is hereto  Legal Notice	attached, entitled
was published in a regular an	d entire issue of THE LOV-
INGTON DAILY LEADER and	not in any supplement there-
of, for one (1) day	, beginning with the issue of
April 26 , 200	1 and ending with the issue
of April 26	, 2001.
And that the cost of publishing \$14.94 which Court Costs.  Subscribed and sworn to before April 2001	e me this 27th day of
Debbie Schilling	ung

Notary Public, Lea County, New Mexico My Commission Expires June 22, 2002 LEGAL NOTICE NOTICE OF PRODUCED WATER DISPOSAL WELL

Cobra Oil & Gas Corporation, 2201 Kell Blvd., Wichita Falls, Texas 76308-1000, (940) 716-5100, contact Rory Edwards, is making application for a produced water disposal well with the New Mexico Conservation Division. The well, known as the T. P. 'A"
State Unit SWD #F. Stocated
810' FSL & 660' FEL, Section
15, T10S-R365, Lea County, New Mexico. Disposal will be into the Devonian Formation, open hole, from 12,313' to 12,329'. Maximum rate is anticipated to be 3,000 BWPD with a maximum pressure of 5,000 psig. Interested parties must file objections or request for hearing with the New Mexico Oil Conservation Division, 2040 Pacheco Street. Santa Fe, New Mexico 87505, within fifteen (15) days of this notice.

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## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor

Chris Williams

Supervisor, District 1

Jennifer A. Salisbury
Cabinet Secretary

6/12/01

Lori Wrotenbery
Director
Oil Conservation Division

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501
RE: Proposed:  MC DHC NSL NSP SWD WFX PMX
Gentlemen:
I have examined the application for the:
Cohra Vila Gas Corp TPA State 1-M 15-105-360 Operator Lease & Well No. Unit S-T-R Ap; #30.025-20736
and my recommendations are as follows:
Grenroads Devonian Unit #2 not glugged Juperly Mary
Yours very truly,