

DATE IN 6/24/09	SUSPENSE	ENGINEER Jones	LOGGED IN 6/24/09	TYPE SWD	PTGW APP NO. 0917546016
-----------------	----------	----------------	-------------------	----------	-------------------------

RECEIVED

ABOVE THIS LINE FOR DIVISION USE ONLY

2009 JUN 24 PM 1 01

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



30-015-33929
Poker Lake Unit #227
BOPCO, L.P. 626073

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 _____

SWD-1064
SWD-1064-A
601796

- [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

Sent Letter General
7/17/09

[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.

Print or Type Name	Signature	Title	Date
e-mail Address			

BOPCO, L. P.
6 DESTA DRIVE, SUITE 3700 (79705)
P. O. BOX 2760
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

June 23, 2009

**Re: Notice of Application to Amend
Authorization SWD-1064
Poker Lake Unit #227
Eddy County, New Mexico
File: 100-WF: PLU227.C108**

Oil Conservation Division
Attention: William Jones
1220 S. St. Francis
Santa Fe, New Mexico 87505

Mr. Jones:

Enclosed please find BOPCO, L.P.'s application to amend Authorization SWD-1064 for the Poker Lake Unit #227, located in Section 30, T24S, R30E, Eddy County, New Mexico. It is our intention to plug back to the Upper Delaware and add perforations and to abandon the Lower Delaware injection perfs as shown on the attached well-bore sketch.

The subject well is on Federal land and a complete copy of the application has been sent to the BLM's Carlsbad office via Certified Mail. Please find a copy of the notice attached. I will provide a copy of the signed receipt card when it returns.

If additional information is required, please contact Ann Moore at the letterhead address, phone number or via email at camoore@basspet.com

Sincerely,



Ann Moore
Senior Regulatory Clerk

cam

Attachments

RECEIVED OCD
2009 JUN 24 A 11:13

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE : _____ Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: BOPCO, L. P.

ADDRESS : P. O. BOX 2760 Midland TX 79705

CONTACT PARTY : Ann Moore PHONE: (432)683-2277

III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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 AMENDMENT OF SWD-1064

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 geological data on the injection zone including appropriate lithologic detail, geological 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.)

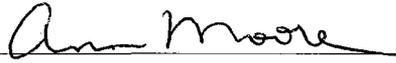
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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 source 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: Ann Moore TITLE: Sr. Regulatory Clerk

SIGNATURE:  DATE: 06/23/2009

E-MAIL ADDRESS: camoore@basspet.com

* If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal: September 13, 2006 Application for SWD-1064

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

2009 JUN 24 11:13
RECEIVED 0000

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, 1220 South St. Francis Dr., Santa Fe, NM 87505 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III. Well Data

A. 1) Lease name: **Poker Lake Unit**
 Well #: **227**
 Section: **30P**
 Township: **24S**
 Range: **30E**
 Footage: **330' FNL & 560' FEL**

2) Casing Info.

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
8-5/8" 32# J&K 55	540'	560	12-1/4"	Surface	CIRCULATED
7" 23# 180	3700'	485	7-7/8"	Surface	SQUEEZED
4-1/2" 11.6# 155	7605'	716	6-1/8"	Surface	PERF & SQUEEZE*

* 4-1/2" Perfed @ ~4830 above previous TOC @ 4840' determined by TS. Squeezed w/ additional 525 sxs Class C + additives & circulated to surface

3) Tubing to be used (size, lining material, setting depth):
2-3/8" 6.5# J-55 Seal tite PVC or similar @ 3750' if all proposed perforations are utilized.

4) Name, model, and depth of packer to be used:
Baker Lok-Set packer (plasti coated ID & nickel coated OD) @ 3750' if all proposed perforations are utilized.

B. 1) Name of the injection formation and, if applicable, the field or pool name:
The Delaware formation of the Nash Draw (Delaware/BS/Avalon) pool.

2) The injection interval and whether it is perforated or open hole:
Additional Delaware perfs will be added from 3800-4830' to create the overall injection interval.

3) State if the well was drilled for injection or, if not, the original purpose of the well:
The captioned well was drilled as a producer, but has been utilized as a disposal well since March of 2007. BOPCO, L.P. is seeking to add perfs in the Delaware to continue disposing of the PLU's produced water.

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BP's used to seal off such perforations:

The well is currently an SWD with Delaware perfs at 6968-7347'. Delaware perfs at 5450-5695' were squeezed on 8-22-07 w/ 100 sxs Thixotropic cmt & 100 sxs Class C + additives. Perfs @ 6200-6640' were squeezed on 10-23-07 with 100 sxs Thixotropic Cmt & 120 sxs Class C + additives. A CIBP will be set at 4950' & capped w/ 35' Class C to permanently abandon these lower squeezed perfs and the existing open perfs from 6968-7347'.

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:
 Higher: **None** Lower: **Bone Spring Lime @ 7373'**

C-108 DATA

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.

Well Name	No.	API	Operator	Type	Location	Surface Casing	Construction Intermediate Casing	Production Casing	Tubing	Spud Date	Comp Date	TD	Perforations	Stimulation
Poker Lake Unit	241	30-015-34308	BOPCO	Producer	840° FSL& 2030°	11-3/4" 42# @530'	NONE	5-1/2" @ 7565', c/850	2-7/8" @ 7457'	2/15/2006	4/1/2006	7570'	7220-7425'	TI stimulation for all perfs 245m gals PW & 20000# 14/30 LiteProp
					FEL. S33 T23S-1980° FNL, 785'	13-3/8" 48# @680"	9-5/8" 36# @ 3492', CTS	SX TOC 2920' IS	7457'					TI stimulation for all perfs 275 gals
Poker Lake Unit	251H	30-015-34404	BOPCO	Producer	FEL S30 T24E	CTS. w/710 sxs	w/1425 sxs	SX w/ TOC @ 3860' by 6746'						PW, 1000# 30/50 Bauxite, 169234# 20/40 Ottawa, 47616# 20/40 SLC 2083# 14/30 LiteProp

FORZEWELL

VII. Attach data on the proposed operation, including:

- Proposed average and maximum daily rate and volume of fluids to be injected: **3,000 BWPD**
- Whether the system is open or closed: **closed**
- Proposed average and maximum injection pressure: **600 psi average, 760 psi maximum**
- Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water: **water will be produced from same reservoir (Delaware)**
- If injection is for disposal purposes into a zone not productive of oil & gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water: **n/a**

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 TDS 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:

Lithologic Detail: Sand, Shale, Lime Sequences
Geological Name: Delaware Mountain Group
Thickness: 3869'
Depth: 3504-7373'

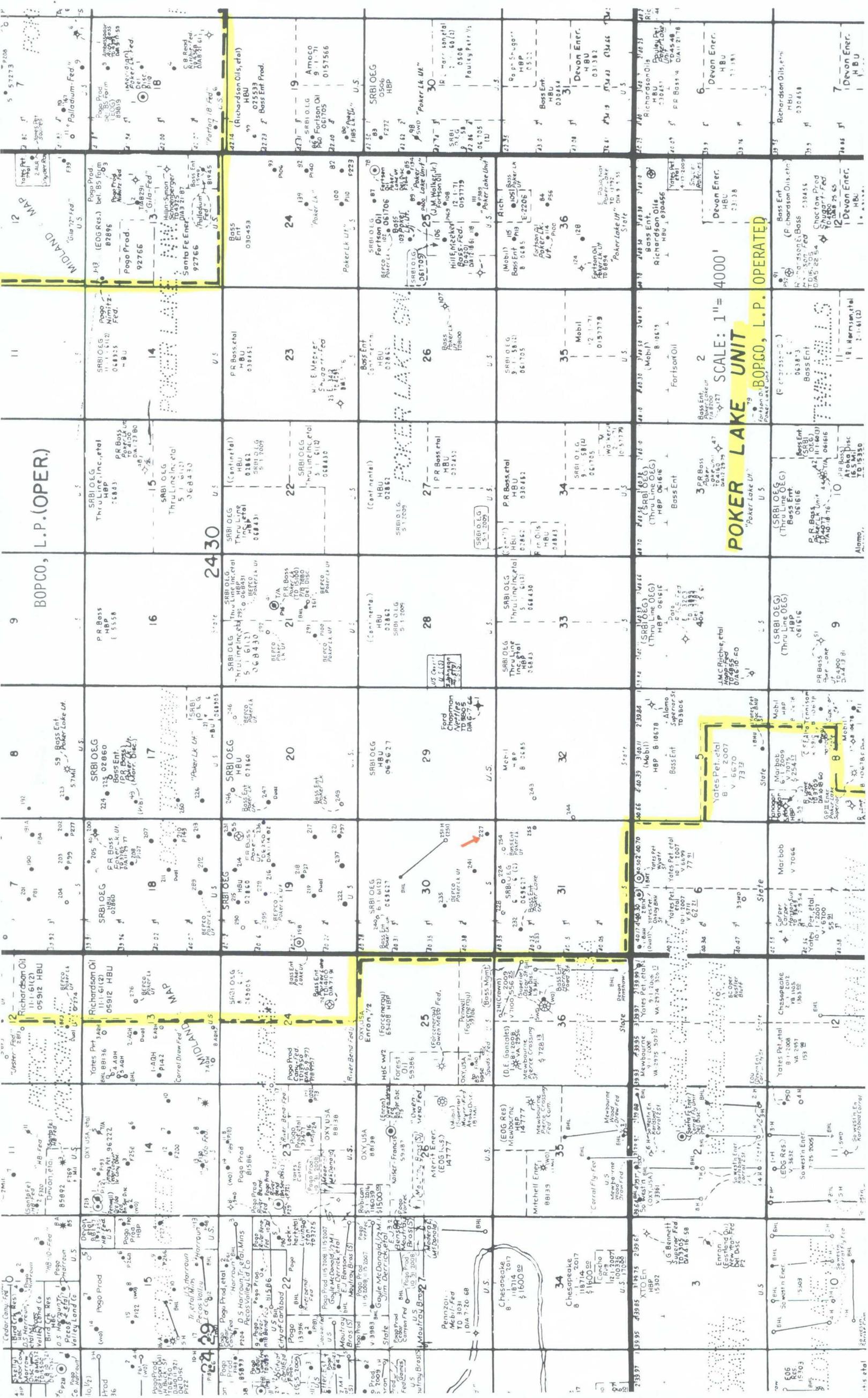
The Rustler Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 200-400'. No sources of fresh water are known to exist below the proposed disposal zone.

IX. Describe the proposed stimulation program, if any:
The new perfs will be perforated and acidized with approximately 50 gallons 7-1/2% NEEF HCl per foot.

X. Attach appropriate logging and test data on the well (If well logs have been filed with the Division, they need not be resubmitted).
Logs previously submitted.

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.
No known fresh water wells within one mile of proposed well.

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 hydrology connection between the disposal zone and any underground sources of drinking water.
Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults, or other hydrologic connection between the disposal zone and any underground source of drinking water.



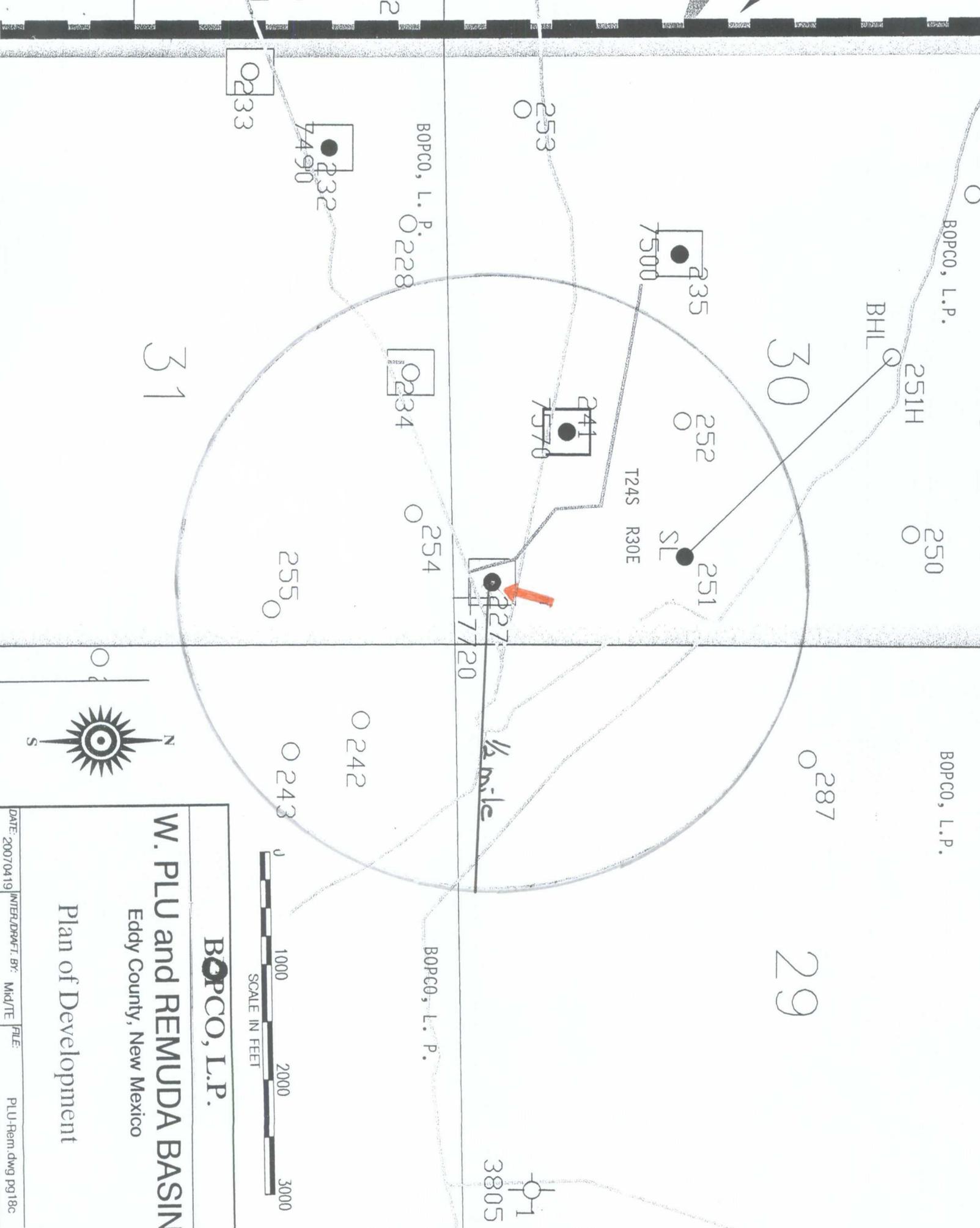
BOPCO, L.P. (OPER.)

MIDLAND

MIDLAND

SCALE: 1"= 4000'
OPERATED BY BOPCO, L.P.

Map annotations including owner names (e.g., Richardson Oil, Bass Ent, Devon Ener.), acreage (e.g., 20.35, 1.11), and section numbers (7-36). Specific annotations include 'SRBIOEG', 'Thru Line Inc. et al', 'Poker Lake Unit', and 'BOPCO, L.P. (OPER.)'.



BOPCO, L.P.

W. PLU and REMUDA BASIN

Eddy County, New Mexico

Plan of Development

DATE: 20070419 | INTER/DRAFT BY: Mnd/TE | FILE: PLU-Rem.dwg pg18c

LEASE: POKER LAKE UNIT

WELL #: 227

FIELD: NASH DRAW DELAWARE

LOCATION: 330' FSL & 560' FEL, SECTION 30, T24S, R30E

COUNTY: EDDY

ST: NM

API: 30-015-33929

KB: 3237'
GL: 3217'
SPUD DATE: 8/14/2005
COMP DATE: 10/1/2005

CURRENT

SURFACE CASING

SIZE:	8-5/8"	
WT/GRD:	32# K55	0-454'
WT/GRD:	32# J55	454-540'
CSA:	540'	
SX:	510	PREM+
SX:	50	PREM+
CIRC:	N	
TOC:	53'	
TOC:	SURF	TOP OUT
HOLE SIZE:	12-1/4"	0-636'

INTERMEDIATE CASING

SIZE:	7"	
WT/GRD:	23#	L-80FL4S
CSA:	3700'	
SX:	285	INTERFILL A
SX:	100	PREM+
SX:	100 (1")	PREM+
CIRC:	Y (via 1")	
TOC:	1570'	TS
TOC:	SURF (1")	SQZD
HOLE SIZE:	7-7/8"	636-3720'

PRODUCTION CASING

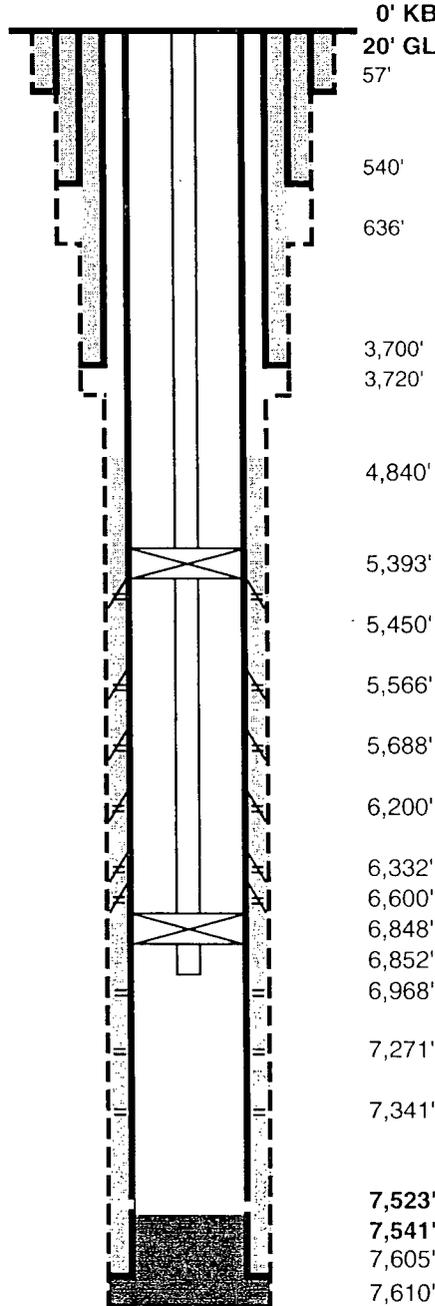
SIZE:	4-1/2"	
WT/GRD:	11.6#	J55
CSA:	7605'	
SX:	270	PREM+ W/N2
CIRC:	NO	
TOC:	4840' KB	TS
HOLE SIZE:	6-1/8"	3720-7610'

TUBING DATA

(163 JTS) 2-3/8" 4.7# J-55 Seal Tite IPC TBG
2-3/8" NPL IPC PIN - PIN EUE 8RD
LOKSET NICKEL PLATED EXT/INT PC PKR
PKR @ 5403-5407'

PERFORATION DATA

09/05 PERF 7271-87' LBC Y, 7341-47' LBC Z
 F/ "Y" & "Z" 30kg PW PAD+94kg PW W/ 10k#
 14/30 LP+1kg 7-1/2% HCL ACID+3kg PW FLUSH
 PERF 6968-91' "U" F/ 29.8kg PW PAD+94kg
 PW W/ 10k# 14/30 LP+4.2kg PW FLUSH



0' KB	
20' GL	
57'	16" CONDUCTOR
540'	8-5/8" 32# K55/J55 CSG
636'	12-1/4" HOLE
3,700'	7" 23# L80 CSG
3,720'	7-7/8" HOLE
4,840'	TOC (TS) KB (4820' GL)
5,393'	Pkr
5,450'	Sqzd PERF 5450-82' 8/22/07
5,566'	Sqzd PERF 5566-90' 8/22/07
5,688'	Sqzd PERF 5688-95' 8/22/07
6,200'	Sqzd PERF 6200-34' 10/23/07
6,332'	Sqzd PERF 6332-42' 10/23/07
6,600'	Sqzd PERF 6600-40' 10/23/07
6,848'	Pkr
6,852'	EOT
6,968'	PERF 6968-91' MBC U 1 JSPF 0° PHSG
7,271'	PERF 7271-87' LBC Y 1 JSPF 0° PHSG
7,341'	PERF 7341-47' LBC Z 2 JSPF 0° PHSG
7,523'	FC
7,541'	PBTB TAG
7,605'	4-1/2" 11.6# J55 CSG
7,610'	6-1/8" HOLE (7614' LOG)

PBTD: 7541' (7521' GL)
 TD: 7610'
7614' LOG

Updated: 10/30/2007
 Author: ezg
 Engr: CCC

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn, on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

June 12	2009
June 13	2009
June 14	2009
	2009

That the cost of publication is **\$127.91** and that payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

Subscribed and sworn to before me this

16th day of June, 2009
Stephanie Dobson

My commission expires 1/25/2010
Notary Public



June 12, 13,
and 14, 2009
NOTICE OF APPLI
CATION FOR SALT
WATER DISPOSAL
WELL PERMIT

BOPCO, L.P. has ap
plied to the New
Mexico Oil Conserva
tion Division for an
amendment to the
permit to dispose of
produced salt water
or other oil and gas
waste into a porous
formation productive
of oil or gas.

The applicant pro
poses to dispose of
produced water or
other oil and gas
waste into the Poker
Lake Unit #227 (Del
aware Formation).
The proposed disposal
well is located 33 miles
southeast of Carlsbad,
New Mexico in Sec
tion 30, T24S, r 30 E,
Eddy County, New
Mexico. The produced
salt water will be dis
posed of at a subsurface
depth of 3784'-4836'.

Any questions con
cerning this applica
tion should be di
rected to Ann Moore,
Senior Regulatory
Clerk, BOPCO, L.P.,
P.O. Box 2760, Mid
land, Texas 79702-
2760, (432) 683-2277.

Interested parties
must file objections or
requests for hearing
with the Oil Conserva
tion Division, 1220 S.
St Francis Dr., Santa
Fe, New Mexico 87505
within 15 days.

WAST Different?

RECEIVED
JUN 22 2009
BOPCO WTD PRODUCTION

2. Article Number

7160 3901 9846 3455 1781

3. Service Type **CERTIFIED MAIL**

4. Restricted Delivery? (Extra Fee) Yes

1. Article Addressed to:

LINE 1-

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

PS Form 3811, January 2005

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

Agent
 Addressee

X

D. Is delivery address different from item 1?
If YES, enter delivery address below:

Yes
 No

Thank you for using Return Receipt Service

FOLD AND TEAR HERE

US Postal Service

**Certified
Mail
Receipt**

*Domestic Mail Only
No Insurance
Coverage Provided*

Postage

\$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees

\$

Postmark
Here

RETURN RECEIPT REQUESTED

7160 3901 9846 3455 1781

Sent To:

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

PLU 227
SWD
Amendment

6-23-09

Certified Mail Receipt

2

PS Form 3800, January 2005

US Postal Service

7160 3901 9846 3455 1781

POST RETURN ADDRESS FOR VENDOR USE
CERTIFIED MAIL

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF RETURN ADDRESS FOLD AT DOTTED LINE

Received by (Please Print Clearly) **A. Orsuel**
Signature *A. Orsuel*
B. Date of Delivery
 Agent
 Addressee
D. Is delivery address different from item #1? Yes
If YES, enter delivery address below: No

7160 3901 9846 3455 1781

3. Service Type **CERTIFIED MAIL**

4. Restricted Delivery? (Extra Fee) Yes

1. Article Addressed to:

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292



PS Form 3811, January 2005

Domestic Return Receipt

7160 3901 9846 3455 1781

US Postal Service
Certified Mail Receipt
Domestic Mail Only
No Insurance
Coverage Provided

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark Here

Sent To:
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

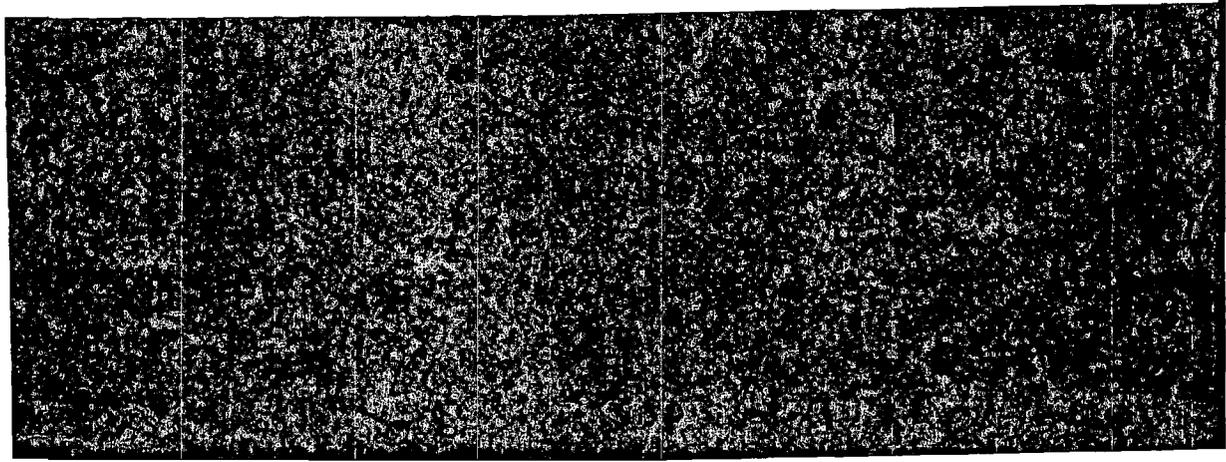
PLU 227
SWD
Amendment

6-23-09

PS Form 3800, January 2005

US Postal Service

Certified Mail Receipt



Jones, William V., EMNRD

From: Moore, Ann [CAMoore@BassPet.Com]
Sent: Wednesday, July 22, 2009 7:31 AM
To: Jones, William V., EMNRD
Cc: Cruz, Carlos
Subject: RE: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)
Attachments: WELL BORE. PLU 251H.pdf; PLU 227 formation tops.doc

William:

In answer to your questions:

1. See attached formation tops for the PLU 227 ✓
2. See attached well-bore sketch with the top of the Lamar and Bell Canyon marked. ✓
3. BOPCO, L. P. does not plan to test the upper Delaware for hydrocarbons as our petro-physical analysis of these zones indicates that they are wet. ✓
4. The PLU 68 is producing from the upper Delaware at 4376-88' and is approximately 7 miles away. ✓
5. The newspaper article was done based on the initial information my supervisor gave me. When he chose the actual perfs, they were slightly different, but within the overall interval I had advertised. ✓

Ann Moore
Senior Regulatory Clerk
BOPCO, L. P.
(432) 683-2277
camoore@basspet.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Friday, July 17, 2009 6:17 PM
To: Moore, Ann
Cc: Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD
Subject: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

Hello Ann,

Questions primarily for your geologist:

- 1) Send formation tops from the Rustler top to the Bone Spring
- 2) The offsetting horizontal well has a reported cement top that is lower than BEPCO's planned perforations in the subject well. Please send a well bore diagram of the horizontal well showing cement placement and casing and mark the TVD top of the Delaware on the diagram. Is BEPCO willing to lower the planned injection perforations or squeeze cement the Horizontal well?
- 3) How does BEPCO plan to test the upper Delaware in the subject well for hydrocarbon productivity? Or how do you know it does not need to be tested?
- 4) Is there any offsetting production in this upper Delaware? How far away?
- 5) Why does the Newspaper Notice include slightly different proposed intervals than the application?

Thank You,

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

Jones, William V., EMNRD

From: Moore, Ann [CAMoore@BassPet.Com]
Sent: Wednesday, July 22, 2009 8:14 AM
To: Jones, William V., EMNRD
Cc: Cruz, Carlos
Subject: RE: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

William:

I forgot the second part of your 2nd question. We will exclude the perms at 3800-30', that correlate to the TOC in PLU 251H, The top set of perms will be 4044-64'.

Ann Moore
Senior Regulatory Clerk
BOPCO, L. P.
(432) 683-2277
camoore@basspet.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Friday, July 17, 2009 6:17 PM
To: Moore, Ann
Cc: Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD
Subject: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

Hello Ann,

Questions primarily for your geologist:

- 1) Send formation tops from the Rustler top to the Bone Spring
- 2) The offsetting horizontal well has a reported cement top that is lower than BEPCO's planned perforations in the subject well. Please send a well bore diagram of the horizontal well showing cement placement and casing and mark the TVD top of the Delaware on the diagram. Is BEPCO willing to lower the planned injection perforations or squeeze cement the Horizontal well?
- 3) How does BEPCO plan to test the upper Delaware in the subject well for hydrocarbon productivity? Or how do you know it does not need to be tested?
- 4) Is there any offsetting production in this upper Delaware? How far away?
- 5) Why does the Newspaper Notice include slightly different proposed intervals than the application?

Thank You,

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

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been

Poker Lake Unit #227 SWD – Formation Tops

T/Rustler – 60'

T/Salt – 630'

Lamar – 3504'

T/ Bell Canyon – 3538'

T/Cherry Canyon – 4438'

T/ Brushy Canyon – 5715'

T/ Bone Spring Lime – 7374'

T/ Avalon – 7398'

LEASE: POKER LAKE UNIT WELL #: 251H HORIZONTAL
 FIELD: NASH DRAW (DELAWARE)
 LOCATION: SL: 1980' FSL & 785' FEL, SECTION 30, T24S, R30E
BHL: 1626.6' FNL & 2275' FEL, SECTION 30, T24S, R30E
 COUNTY: EDDY ST: NM API# 30-015-34404

****CURRENT****

SEE HORIZONTAL SKETCH

HORIZONTAL KOP 6737'

KB: 3197.5
 GL: 3180.3
 SPUD DATE: 7/8/2006
 COMP DATE: 11/15/2006

SURFACE CASING
 SIZE: 13-3/8"
 WT/GRD: 48# H-40
 SET @: 680'
 SX CMT: 360 LT PREM+
 SX CMT: 350 PREM+
 CIRC: YES 403 SX
 TOC: SURF
 HOLE SIZE: 17-1/2" 0-680'

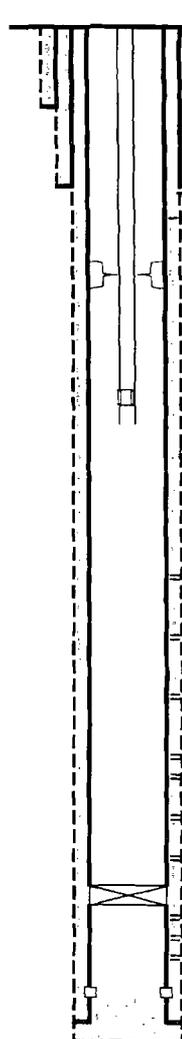
INTERMEDIATE CASING
 SIZE: 9-5/8"
 WT/GRD: 36# K-55
 SET @: 3492'
 SX CMT: 1000 HALCO PREM
 SX CMT: 250 PREM / C
 SX CMT: 175 HALCO PREM C
 CIRC: N
 TOC: SURF THRU 1" TOPOUT
 HOLE SIZE: 12-1/4" 680-3492'

PRODUCTION CASING
 SIZE: 5-1/2"
 WT/GRD: 15 5# J55 0-5746'
 WT/GRD: 17# J55 5746-9239'
 SET @: 9239'
 SX CMT: 460 PREM+
 SX CMT: 450 PREM
 CIRC: N
 TOC: 3877' TS (KB)
 HOLE SIZE: 8-3/4" 3492-9240'

TUBING DATA
 (197 jts) 2-7/8" tbg, TAC @ 6136.53', (17 jts)
 2 7/8" tbg, SS tbg sub, SN @ 6670.5', Perf sub,
 2 7/8" Mud anchor w/ BP&C

PERFORATION DATA
 SEE HISTORY FOR DETAILS ON PERFS & STIMULATIONS

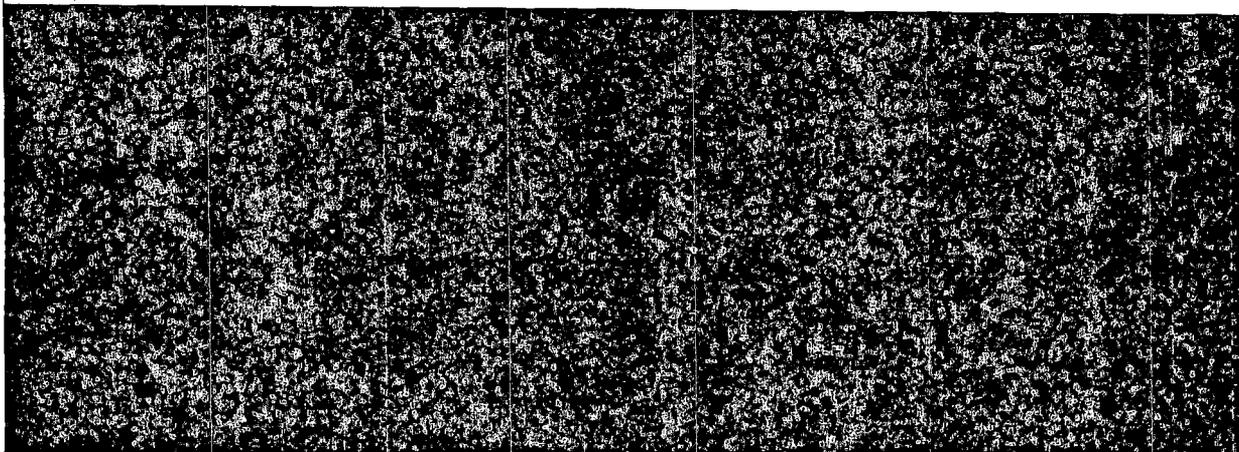
VERTICAL HOLE 0 - 6737' MID :: @ 6737' 12" / 100FT CURVE TO 7453' 90° BEND NORTH WEST TO 9240'



17.2' GL
 0' KB
 680' 13-3/8" 48# CSG 17-1/2" HOLE
 T/Lamar 3468'
 3492' 9-5/8" 36# CSG 12-1/4" HOLE
 T/Bell Canyon 3494'
 3877' TOC (TS) KB
 6137' TAC
 5745.9' 5-1/2" 15.5# LTC
 5746' 5-1/2" 17# LTC X BTC XO (19)
 6672' SN
 6,706' EOT
 6737' HORIZONTAL KOP
 NOTE: POSSIBLE CSG LK BLW 7028' IN BEND BETWEEN VERTICAL & LATERAL
 7,888' PERF 7888-92' STG 4B 6 JSPF 60° PHSG (24 HOLES) REPERF 48XL(24 HOLES TTL 48 HOLES)
 8,008' PERF 8008-12' LBC (STG 4) 6 JSPF 60° (24 HOLES)
 8,358' PERF 8358-62' LBC 6 JSPF 60° PHSG (24 SHOTS)
 8,758' PERF 8758-62' LBC 6 SPF 60° PHSG (24 HOLES)
 8,762'
 8,986' PERF 8,986-90' LBC 6 JSPF 60° PHSG (24 HOLES) REPERF TTL 48 HOLES
 8,990' BOTTOM OPEN PERF INTERVAL
 9,060' 10K CIBP
 PERFS BELOW CIBP
 9,139' PERF 9139-43' LBC (out of zone) 6 SPF 60° PHSG (24 HOLES)
 9,143'
 9,146' PERF 9,146-50' LBC 6 SPF 60° PHSG (24 HOLES) REPERF TTL 48 HOLES
 9,158' PBD (FC)
 9,239' 5-1/2" 17# J-55 BTC
 9,240' 8-3/4" HOLE (LOG)

PBD: 9060' (CIBP)
 TD: 9240'

Updated: 12/23/2008
 Author: ezg
 Engr: CC



Jones, William V., EMNRD

From: Moore, Ann [CAMoore@BassPet.Com]
Sent: Thursday, July 23, 2009 9:56 AM
To: Jones, William V., EMNRD
Subject: RE: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

William:

Thank you for the suggestion, but the problem with the well was not a need for more pressure. The problem is that the current disposal interval and the perms we have squeezed in the past, are in communication with our Horned Toad 36 State #1H producing well in T25S, R29E, Sec. 36. We are trying to utilize the well-bore for disposal with what we have to work with.

Please let me know if you need anything else.

Ann Moore
Senior Regulatory Clerk
BOPCO, L. P.
(432) 683-2277
camoore@basspet.com

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, July 21, 2009 12:54 PM
To: Moore, Ann
Cc: Warnell, Terry G, EMNRD
Subject: RE: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

Ann:
Forgot the following question:

Has Bepco considered running a Step Rate Test to obtain an increased disposal pressure limit? This could potentially enable Bepco to dispose of enough water that the expensive recompletion to an upper interval would not be necessary.

Regards,

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

From: Jones, William V., EMNRD
Sent: Friday, July 17, 2009 5:17 PM
To: 'Moore, Ann'
Cc: Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD
Subject: Disposal application from BEPCO LP to use the upper delaware in 30-015-33929 (Poker Lake Unit #227)

Hello Ann,

Questions primarily for your geologist:

- 1) Send formation tops from the Rustler top to the Bone Spring
- 2) The offsetting horizontal well has a reported cement top that is lower than BEPCO's planned perforations in the subject well. Please send a well bore diagram of the horizontal well showing cement placement and casing and

Injection Permit Checklist (7/17/09)

Case 1064-B R- SWD WFX PMX IPI Permit Date 7/17/09 UIC Qtr (JAS)
 # Wells 1 Well Name: Poker Lake UNIT # 227
 API Num: (30-) 1015-33929 Spud Date: 8/14/05 New/Old: N (UIC primacy March 7, 1982)
 Footages 330 FSL/560 FEL Unit P Sec 30 Tsp 24S Rge 30E County Eddy
 Operator: BEPCO, L.P. Contact Conn Moore
 OGRID: 260737 RULE 5.9 Compliance (Wells) _____ (Finan Assur) _____

Operator Address: PO. BOX 2760, MIDLAND, TX 79705

Current Status of Well: Lower Del inj Well

Planned Work to Well: PLUG BACK, SQZ CMT, Perf ACIDIZE Planned Tubing Size/Depth: 2 3/8

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing Surface	<u>12 1/4 8 5/8</u>	<u>540</u>	<u>580</u>	<u>CIRC</u>
Existing Intermediate	<u>7 7/8 7"</u>	<u>3700</u>	<u>485</u>	<u>SQZ</u>
Existing Long String	<u>6 7/8 4 1/2</u>	<u>7605</u>	<u>716</u>	<u>Will Perf/SQZ</u>

Current 4840 TOP well set THIS

DV Tool _____ Liner _____ Open Hole _____ Total Depth 4950 CIBPC

Well File Reviewed _____

Diagrams: Before Conversion After Conversion Elogs in Imaging File: _____

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)	<u>3504</u>	<u>DEL TOP</u>	<u>4438</u>
Injection.....	<u>4044</u>	<u>Upper Del</u>	<u>7609</u>
Interval TOP:	<u>4044</u>	<u>Upper Del</u>	<u>7609</u>
Injection.....	<u>4830</u>	<u>Upper Del</u>	<u>7609</u>
Interval BOTTOM:	<u>4830</u>	<u>Upper Del</u>	<u>7609</u>
Below (Name and Top)	<u>7373</u>	<u>BS</u>	<u>5715</u>

Non-commercial TOP chary C.

Sensitive Areas: Capitan Reef Cliff House Salt Depths 630-3504

..... Potash Area (HFTT-P) _____ Potash Lessee _____ Noticed? _____

Fresh Water: Depths: 200-400 Wells None Analysis? _____ Affirmative Statement

Disposal Fluid Sources: Del game Analysis? _____

Disposal Interval Production Potential/Testing/Analysis Analysis: ?

Notice: Newspaper (Y/N) Surface Owner BLM Mineral Owner(s) _____

RULE 26.7(A) Affected Parties: Bepeco operator of Poker Lake UNIT

Area of Review: Adequate Map (Y/N) and Well List (Y/N) _____

Active Wells 2 Num Repairs _____ Producing in Injection Interval in AOR _____

..P&A Wells 0 Num Repairs _____ All Wellbore Diagrams Included? _____

Questions to be Answered:

TOPS down to BS.
STRUCTURE of TOP of DEL
How will they Test for Production?

Required Work on This Well: SQZ CMT to raise CMT TOP Request Sent _____ Reply: _____

AOR Repairs Needed: _____ Request Sent _____ Reply: _____

_____ Request Sent _____ Reply: _____

CAR offset Horiz well. CMT TOP Too Low monitor Breakhead

3502 / 7600
4094 / 2085