	-011	WW, Prouver (P)
DATE		ISE ENGINEER LOGGED IN 8/8// TYPE UP APP NO HARDST 16
		NEW MEXICO OIL CONSERVATION DIVISION USE ONLY - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
		ADMINISTRATIVE APPLICATION CHECKLIST
 Т	HIS CHECKLIST IS M	IANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
Applie	cation Acronym [NSL-Non-Sta [DHC-Dow [PC-Po [EOR-Qua	18: Indard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] Inhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] Inhole Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] Inlified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF A	PPLICATION - Check Those Which Apply for [A]
	[A]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD
	[A] Check [B]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[A] Check [B] [C]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR
	[A] Check [B] [C] [D]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR Other: Specify
[2]	[A] Check [B] [C] [D] NOTIFICAT [A]	Location - Spacing Unit - Simultaneous Dedication NSL NSP k One Only for [B] or [C] Commingling - Storage - Measurement DHC Storage - Measurement DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX WFX PMX SWD IPI EOR PPR Other: Specify TION REQUIRED TO: - Check Those Which Apply, or Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
[2]	[A] Check [B] [C] [D] NOTIFICAT [A] [B]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC DHC CTB PLC Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR Other: Specify Constrained TO: - Check Those Which Apply, or Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
[2]	[A] Check [B] [C] [D] NOTIFICAT [A] [B] [C]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR Other: Specify
[2]	[A] Check [B] [C] [D] NOTIFICAT [A] [B] [C] [D]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR Other: Specify
[2]	[A] Check [B] [C] [D] NOTIFICAT [A] [B] [C] [D] [E]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement DHC DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR Other: Specify Other: Specify

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[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.

Sandra J. Beht	Sandia	J.Belt	Si Reculat	tory Clerk	8-4-11
Print or Type Name	Signature	0	Title	d .	Date
			Sibelta	basspet.	20 m
			e-mail Address		

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432-683-2277

FAX: 432-687-0329

August 5, 2011

Re: Notice of Application for Authorization to Complete this well as a SWD Well ND "19" Federal SWD #1 Eddy County, New Mexico File: 100-WF: ND19FedSWD1.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 <u>Application for Authorization to Drill and Complete</u> this well for disposal purposes only into the ND 19 Federal SWD, #1 Located in Section 19, T24S, R30E, Eddy County, New Mexico.

The subject well is on Federal land and a complete copy of the application has been sent to the BLM's Carsbad office via Certified Mail, Cert #7160-3901-9846-4321-5476. 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 Sandra J. Belt at the letterhead address, phone number or via email at <u>sibelt@basspet.com</u>.

Sincerely. andra J. Belt

Sandra J. Belt Sr. Regulatory Clerk

sjb Attachments

CC: BLM

Oil Conservation Division 1220 South St. Francis Dr. SANTA FE, NEW MEXICO 87505

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APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE : Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: BOPCO, L.P.
	ADDRESS : P O Box 2760 Midland Tx 79702
	CONTACT PARTY : Sandra J. Belt ext. 149 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
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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and 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: <u>Sandra J. Belt</u> ext. 149 TITLE: <u>Sr. Regulatory Clerk</u>
	SIGNATURE: <u>Sandra J. Belt</u> DATE: 08/05/2011
	E-MAIL ADDRESS: sibelt@basspet.com

* If the information required under Sections VI, VHI, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal:

Side 2

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: $\beta + \beta = \beta = \beta$

- (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

Α.

Β.

1) Lease name:	ND "19" Federal SWD
Well #:	1
Section:	19
Township:	T24S
Range:	30E
Footage:	516' FNL & 705' FEL

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
30", 157.68#, X52, PE	80		36"	Surface	Circulated
20, 94#, J-55, BTC	750	1575	26"	Surface	Circulated
13-3/8", 68#, HC55, BTC	3,485	2,725	17-1/2"	Surface	Circulated
9-5/8", 53.50#, L-80, LT&C **	11.000	1.475	17-1/4"	Surface	Circulated
7-5/8", 39#, HCL-80, FJ	10,700-15,575	5,625	8-1/2"	TO T.O.L.	Circulated
**DV Tool @ 5.500'	, .,.,	.,			

- Tubing to be used (size, lining material, setting depth):
 4-1/2" 12.75#, L-80, RTS-8 IPC tbg set @15,500'.
- 4) Name, model, and depth of packer to be used:
 4-1/2" Baker FA Lokset Nickel Plated EXT/INT PC Pkr set @ 15,500'.
- 1) Name of the injection formation and, if applicable, the field or pool name: **Devonian**
 - 2) The injection interval and whether it is perforated or open hole: Open hole from 15,572 - 16,275 O.H.
 - 3) State if the well was drilled for injection or, if not, the original purpose of the well: Newly drilled well for injection.
 - Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations: NA
 - 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: Bone Spring - 7,282' Lower: None

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 wells type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

There are not wells that penetrate the proposed injection zone.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected: 20,000 average, 25,000 maximum BWPD

2. Whether the system is open or closed: closed

3. Proposed average and maximum injection pressure: 3,114 psi average, 2,000 psi maximum

4. 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 (Devonian).

5. 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 Carbonate
 Geological Nam Devonian
 Thickness: 703'
 Depth: 15.572 - 16.275'

The Rustler Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 148-540'. No sources of fresh water are known to exist below the proposed disposal zone.

IX. Describe the proposed stimulation program, if any:

The open hole section from 15,572-16,275' will be acidized with approximately 50 gallons 15% NEFE HCI per foot for a total of 35,150 gallons.

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 will be submitted. This will be a newly drilled well.

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, however, there is a stock tank (livestock watering) in Section 19. This stock tank is getting water from a water well in Sec. 7 approximately 2 miles north at well #158.

XII. Applicants for disposal wells must make an affimative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydology 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.

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:

July 8	,	2011
July 9		2011
July 10		2011

That the cost of publication is **\$126.02** and that payment thereof has been made and will be assessed as courticosts.

el

Subscribed and sworn to before me this

13th day of Jul Shiley medurell

My commission expires <u>Marshap</u> 15 Notary Public



_	
1	July 8, 9, and 10, 2011
	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 a permit sto! dispose of produced salt water into, ak porous forma- tion not productive of oil or gas.
J	The applicant proposes to dispose of pro- duced water into the ND *19" Federal SWD #1 (Devonian SWD #1 (Devonian Formation). The pro- posed disposal well is to focated 9 miles East of Malaga, New Mex- ico in Section -19, T245, R30E, and Ed- dy County, New Mex- ico. The produced salt water will be dis- posed at a subsurface depth of 15,572' 16,275';
	Any questions con- cerning this applica- tion should be direct- ed to Sandra J. Belt, 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 hear- ing with the Oil Con- servation: Division, 1220 Starts Fe, New Mexico 87505 within 15 days.

RECEIVED

JUL 1 5 2011

BOPCO WTD PRODUCTION

03/29/2005 15:41 9

ROB COCHRAN CONSULTING, INC.

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COST EFFECTIVE OPERATIONS THROUGH CHEMICAL PROGRAM OPTIMIZATION

ROS COCHRAN

P.O. BOX 2154 Midland, Texas 79702 DILFIELD & INDUSTRIAL CONSULTANT

DFFICE: (432) 520-5810 Home: (432) 694-9870 Mobile: (432) 557-7877

WATER ANALYSIS REPORT _____ Report for : Michael Lyon Date sampled : 3-24-05 Date reported : 3-29-05 cc : Bass Enterprises cc ; Escudero Field, lease or well : PLU 213 cc : Escudero County : Eddy State : New Mexico Company : Bass Enterprises Formation : Address : Midland Texas Depth : Submitted by ; Mike Rippee Service Engineer : Larry Rippee Poker Lake Unit #213 CHEMICAL COMPOSITION ; mg/L Delaware Chloride (C1) 118000 Iron (Fe) 45 Total Hardness 8600 Calcium (Ca) 1523 Magnesium (Mg) 1166 Bicarbonates (HCO3) 597 Carbonates (CO3) 0 Sulfates (SO4) 2120 Hydrogen sulfide (H2S) 0 73896 Sodium (Na) Total dissolved solids 197304 Specific Gravity 1.121 Density (#/gal.) 9.342 6.90 pH CaCO3 Stability Index : CaSO4 Sol. @ 82 F = 6066

 $\begin{array}{rcl} 86 \ F &= & .67 \\ 86 \ F &= & .9 \\ 122 \ F &= & 1.16 \\ 140 \ F &= & 1.45 \\ 176 \ F &= & 2.12 \end{array}$

CaSO4 Sol. @ 82 F = 6066 CaSO4 Present = 3004

Comments: Carbon dioxide = 420 Resistivity: .0467 Ohm-meters @70°F

		- J. U.J 133	j U.S.	U.S. U.S.			- _
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<u>EROPOSED WELLBORE DIAGRAM</u>



From:	Jones, William V., EMNRD
Sent:	Wednesday, August 10, 2011 3:54 PM
То:	'Belt, Sandra J.'; Cruz, Carlos
Cc:	Ezeanyim, Richard, EMNRD; Gray, Darold, EMNRD; Dade, Randy, EMNRD; Kautz, Paul, EMNRD; Sanchez, Daniel J., EMNRD
Subject:	Disposal application from BOPCO, LP: proposed ND 19 Fed SWD #1 (30-015-NA) Devonian open hole

Hello Sandra,

Just received this and looked it over.

All generally seems fine, but as usual I have a couple requests...

- a. There were no notices sent out except to the BLM as surface owner of the well site. Is BOPCO the lessee (or controller of each lease) of all lands at Devonian depths within ½ mile of this location?
- b. Would you let me know what your geologists predict as
 - a. the top of the Devonian
 - b. the bottom of the Devonian (or the top of the Silurian?)
 - c. the top and bottom of the Salado in this area.
- c. You sent a Delaware water analysis. Is this the only formation that will contribute waste waters to be disposed into this well? If there are others, please send a water analysis from each.
- d. Would you please ask your geologists to send a quick writeup on the prospective for the Devonian in this area how confident are they that it is not productive? Sometimes there are deeper faults that could thrust it up, etc.
- e. Will there be a mudlogging crew while drilling the Devonian? Or how else will it be evaluated?

Another note... I checked the inactive wells for BOPCO, L.P. and it stands as 5 inactive out of about 414 operated wells. 5 is the limit for operators of this size. Be sure you let your folks know that if any new well shows up on this list, it will preclude approval of any disposal applications.

Thank You,

Will Jones	•		
New Mexico			
Oil Conservation Division		• •	
Images Contacts		 	

From:	Belt, Sandra J. [SJBelt@BassPet.Com]
Sent:	Wednesday, August 10, 2011 4:02 PM
То:	Jones, William V., EMNRD
Cc:	Cruz, Carlos
Subject:	RE: Disposal application from BOPCO, LP: proposed ND 19 Fed SWD #1 (30-015-NA) Devonian open hole

Thanks Will. We had 6 wells on it; one is plugged and was taken off; another has been plugged but hasn't been removed yet; I sent a completion in on one and 1 other is fixing to be converted to a disposal well. So hopefully all will be taken care of in a week or so. I will get your questions answered and back to you as soon as I can. Have a good one.

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Wednesday, August 10, 2011 4:54 PM
To: Belt, Sandra J.; Cruz, Carlos
Cc: Ezeanyim, Richard, EMNRD; Gray, Darold, EMNRD; Dade, Randy, EMNRD; Kautz, Paul, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Disposal application from BOPCO, LP: proposed ND 19 Fed SWD #1 (30-015-NA) Devonian open hole

Hello Sandra,

Just received this and looked it over.

All generally seems fine, but as usual I have a couple requests...

- a. There were no notices sent out except to the BLM as surface owner of the well site. Is BOPCO the lessee (or controller of each lease) of all lands at Devonian depths within ½ mile of this location?
- b. Would you let me know what your geologists predict as
 - a. the top of the Devonian
 - b. the bottom of the Devonian (or the top of the Silurian?)
 - c. the top and bottom of the Salado in this area.
- c. You sent a Delaware water analysis. Is this the only formation that will contribute waste waters to be disposed into this well? If there are others, please send a water analysis from each.
- d. Would you please ask your geologists to send a quick writeup on the prospective for the Devonian in this area how confident are they that it is not productive? Sometimes there are deeper faults that could thrust it up, etc.
- e. Will there be a mudlogging crew while drilling the Devonian? Or how else will it be evaluated?

Another note... I checked the inactive wells for BOPCO, L.P. and it stands as 5 inactive out of about 414 operated wells. 5 is the limit for operators of this size. Be sure you let your folks know that if any new well shows up on this list, it will preclude approval of any disposal applications.

Thank You,

<u>Will Jones</u>
New Mexico
Oil Conservation Division
Images Contacts

From: Sent:	Belt, Sandra J. [SJBelt@BassPet.Com] Thursday, September 01, 2011 6:53 AM
То:	Jones, William V., EMNRD
Cc:	Cruz, Carlos
Subject:	RE: Disposal application from BOPCO, LP: proposed ND 19 Fed SWD #1 (30-015-NA) Devonian open hole

Good morning Will. I believe we have all the data that you need for the disposal application. I will be forwarding you an *e*-mail from our Geologist, Brian Pregger with the rest of the information. Please let me know of anything further you might need and I will get it to you. Thanks and you have a nice day.

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Wednesday, August 10, 2011 4:54 PM
To: Belt, Sandra J.; Cruz, Carlos
Cc: Ezeanyim, Richard, EMNRD; Gray, Darold, EMNRD; Dade, Randy, EMNRD; Kautz, Paul, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Disposal application from BOPCO, LP: proposed ND 19 Fed SWD #1 (30-015-NA) Devonian open hole

Hello Sandra,

Just received this and looked it over.

All generally seems fine, but as usual I have a couple requests...

- a. There were no notices sent out except to the BLM as surface owner of the well site. Is BOPCO the lessee (or controller of each lease) of all lands at Devonian depths within ½ mile of this location? Per Andy Morrison, land dept., BOPCO is the only one within the ½ mile radius.
- b. Would you let me know what your geologists predict as
 - a. the top of the Devonian
 - b. the bottom of the Devonian (or the top of the Silurian?)
 - c. the top and bottom of the Salado in this area. Brian Pregger E-mail sent separately.
- c. You sent a Delaware water analysis. Is this the only formation that will contribute waste waters to be disposed into this well? If there are others, please send a water analysis from each. Per Carlos Cruz the Delaware and Avalon only.
- d. Would you please ask your geologists to send a quick writeup on the prospective for the Devonian in this area how confident are they that it is not productive? Sometimes there are deeper faults that could thrust it up, etc. Brian Pregger E-mail sent separately.
- e.
- f. Will there be a mudlogging crew while drilling the Devonian? Or how else will it be evaluated? Per Carlos Cruz -Yes – mud logger from surface to T.D. (every 10').

Another note... I checked the inactive wells for BOPCO, L.P. and it stands as 5 inactive out of about 414 operated wells. 5 is the limit for operators of this size. Be sure you let your folks know that if any new well shows up on this list, it will preclude approval of any disposal applications. Brian Pregger - E-mail sent separately.

Thank You,

Will Jones New Mexico Oil Conservation Division Images Contacts

From:	Belt, Sandra J. [SJBelt@BassPet.Com]				
Sent:	Thursday, September 01, 2011 6:54 AM				
То:	Jones, William V., EMNRD				
Cc:	Cruz, Carlos				
Subject:	FW: BOPCO ND 19 Federal SWD #1 Info for BLM				

Will, here is the rest of the information you requested. Have a nice day.

From: Pregger, Brian
Sent: Monday, August 29, 2011 1:40 PM
To: Belt, Sandra J.
Subject: BOPCO ND 19 Federal SWD #1 Info for BLM

Sandra:

The requested information pertaining to the geology of the proposed BOPCO ND 19 Federal SWD #1 well is summarized below.

Top of Devonian: 15,572' MD -12,365' SS Top of Silurian Fusselman: 16,442' MD -13,235' SS

Top of Rustler: 297' MD +2,910' SS Top of Salado Formation (BLM): 417' MD +2,790' SS Top of salt: 753' MD +2,454' SS Base of Salado (top of Castile): 1,965' MD +1,242' SS Base of Castile (top of Lamar): 3,469' MD -262' SS

Seismic mapping indicates that the top of the Devonian in the area of the proposed ND 19 Federal SWD #1 well is characterized by monoclinal dip to the ESE, and no structural closure exists in which hydrocarbons would be trapped. Four wells within a six mile radius of the subject well have penetrated the Devonian; no hydrocarbons were found in the Devonian in these wells. These wells are:

Mobil Corral Draw Unit No. 11980' FSL & 1980' FWL, Sec 14, T25S-R 29ERichardson and Bass Harrison Federal No. 1660' FNL & 660' FWL, Sec 12, T25S-R 30ESkelly Cedar Canyon No. 1770' FSL & 770' FEL, Sec 9, T24S-R 29ETexaco Remuda Basin 24 State No. 1750' FSL & 1900' FWL, Sec 24, T23S-R 29E

Brian H. Pregger BOPCO, L.P. 201 Main St., Suite 2900 Fort Worth, TX 76102

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bpregger@basspet.com 817-390-8662

	Injection Permit Checklis WFXPMX # WellsWell Name(s): N API Num: 30-0 15 - NA Footages 516 FWL/7 General Location: 9 Mic OperatorBPCO OGRID: 260737 RUL	t (11/15/2000) SWD D 19 Feb Spud I Spud I E, of M L, P, E 5.9 Compliance (Wells	Permit Date 9/2/ Swort 1 Date: it A Sec 19 TSD ALAGA (2 Surger 4	New/Old: 245 7 MC Contact	tr (UIC primacy Marc Rge <u>30E</u> Count Sw fwi Sw fwi Sur J. Sur OK 15 5.9 Of	$\frac{1}{1}$	1	
	Well File Reviewed Current	Status:	<u> </u>			æ		
	Planned Work to Well:	-				·	,	
	Diagrams: Before Conversion	After Conversion	_ Elogs in Imaging File:	Nac	r Well	Determination		
	Well Details:	HolePipe	Depths	Tool	Sx or Cf	Method		
	NewExistingSurface	36 30	80					
•	New_Existing	26 20	750		1575	CIRC	,	
	New_Existing	958		5000	1475	erre		
	New_Existing Liner	8/2 7.5/8	10700-15505		5625	cité		
	NewExisting OpenHole							
	Depths/Formations:	Depths, Ft.	Formation	Tops?				
Ú.	Formation(s) Above	75572	DEV	~			,	
	Injection TOP:	15575	par	Max. PSI	3114 OpenHole	Perfs		
1Ch	Injection BOTTOM:	1625	Dar	Tubing Size	4 12 Packer Depth	15500		
7-		1642	SILVRIAN	~		,		
instre.	Formation(s) Below							
19 up	Capital Pools(Petash?		Noticed?	Salado Top	Bot 297-417	Chiff House?		
311	Fresh Water: Depths: 148-3	Formation _R	wells?	- <u>O</u> An	alysis?Affirmative	Statement		
	Disposal Fluid Analysis?	Sources: DEL	AVALON					
	Disposal Interval: Analysis?		al/Testing 45	TRA	P, OTHERS	cre wet		
	Notice: Newspaper Date 7	Surface Owner	Bim		Mineral Owner(s)			
6 -			Balan	f ana				
6	RULE 26.7(A) Affected Persons	- Ong	Vere f	Tere_				
	AOR: Maps? Well List? Producing in Interval? NO Wellbore Diagrams?							
	Active Wells O Repai	rs? WhichWells?						
	P&A Wells Repai	rs? Which Wells?				······		
	Issues:				Request Sent	Reply:		