ENGINEER

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



### BU 127 **ADMINISTRATIVE APPLICATION CHECKLIST**

.:	ation Acronyms [NSL-Non-Star	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE  s: ndard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] hhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
	[PC-Po	ol Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] ified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	-	PLICATION - Check Those Which Apply for [A]  Location - Spacing Unit - Simultaneous Dedication  / NSL NSP SD
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  WFX PMX SWD IPI EOR PPR
	[D]	Other: Specify
[2]	NOTIFICATI [A]	ION REQUIRED TO: - Check Those Which Apply, or □ Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators, Leaseholders or Surface Owner
	[C]	Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	[E]	For all of the above, Proof of Notification or Publication is Attached, and/or,
	[F]	Waivers are Attached
[3]		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE ATION INDICATED ABOVE.
	al is <b>accurate</b> a	<b>ΓΙΟΝ:</b> I hereby certify that the information submitted with this application for administrative and <b>complete</b> to the best of my knowledge. I also understand that <b>no action</b> will be taken on this quired 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 Reg. Clerk 5/24/10
i i i i i i i	. ype rame	Signature  Reg. Clerk  Title  Vitruar & bass pelicon  e-mail Address

BOPCO, L. P.

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

Poller Lake Unit # 127 30-015-29460 FAX (432) 687-0329

(432) 683-2277

May 24, 2010

Re:

Notice of Application for

Authorization to Convert to SWD

Poker Lake Unit #127 **Eddy County, New Mexico** 

File: 100-WF: PLU127.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 for Authorization to Convert for disposal purposes only into the Poker Lake Unit #127, located in Section 2, T25S, R30E, Eddy County, New Mexico. It is our intention to add perforations to the Delaware 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 Valerie Truax at the letterhead address, phone number or via email at vltruax@basspet.com

Sincerely,

Valerie Truax Regulatory Clerk

vlt

Attachments

STATE OF NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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

Form C-108 Revised June 10, 2003

# 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 : Valerie Truax 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 X 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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and</li> <li>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.).</li> </ol>
*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: Valerie Truax TITLE: Regulatory Clerk
	SIGNATURE: DATE: 05/24/2010
	E-MAIL ADDRESS: vltruax@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:

# III. Weli Data

1980' FSL & 660' FWL Poker Lake Unit 127 2 258 30E Lease name: Township: Footage: Section: Range: Well #: = Ä

Casing Info: 7

		يو	ō
Mothod	Menion	Circulated	Circulate
JOE	2	Surface	Surface
	27IS	14"	<u>.</u>
יפוסת	DOIE SIZE	14-3/4"	7
lo ome	dCKS CITIL	561	,370
	ני		****
Cot donth	oer debrii	947	3973
	,		တွင လ
١	ב	၁	VC-50 LT
io	casilig size	3-40 ST&	2# K55, V
١	ر ا	1-3/4" 42# WC-40 ST&C	8-5/8" 28# & 32# K55, WC-50 LT&C
		11-3/4	8-5/8"

Tubing to be used (size, lining material, setting depth): 8

3-1/2" 9.5# J-55 Seal Tite IPC tbg set @ 4,200".

Lokset Nickel Plated EXT/INT PC Pkr set @ 4,200'. Name, model, and depth of packer to be used: 4

Name of the injection formation and, if applicable, the field or pool name: Corral Canyon (Delaware formation).  $\widehat{-}$ മ്

The injection interval and whether it is perforated or open hole: 5 Additional Delaware perfs will be added from 4,268'-5,928' to create the overall injection interval.

State if the well was drilled for injection or, if not, the original purpose of the well: Drill & complete (Delaware formation) development well. 3

Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to 4

seal off such perforations:

The well currently is plugged with no open perfs.

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: 2

Higher: None

Lower: Bone Spring @ 7795'

# 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.

			500 gals 15% HCI acid w/ 2% KCI FW			
	Stimulation	NA		NA NA	A	A
	Perforations	NA	2-718" @ 8/21/1993 10/1/1993 8000' 6080'-7746' 7784'	NA	NA	NA
	OT.	4160'	8000.	NA A	N A	¥.
Spud Comp	Date	12/11/1979 NA 4150' NA	10/1/1993	NA	NA A	V.
pnds	Date	12/11/1979	8/21/1993	N A	NA	NA N
	Tubing	NA	2.7/8" @ 7784'	N A	NA	¥ Z
	Production Casing Tubing Date Date TD Perforations Stimulation	NA	5-1/2" @ 8003', 1020 sx	A A	AN	NA
Construction	Intermediate Casing	NA	@ 696' CTS, C/650 sx 8-5/8" @ 3965', C/2200 sx	NA	NA	NA
	Surface Casing	8-5/8" @ 712', C/200 sx, 200 Lite NA	13-3/8" @ 696' CTS, C/650 sx	NA	NA	NA
	Location	1980' FSL & 990' FEL, Sec 3, T25S, R30E	660' FSL & 660' FWL, Sec 2, T25S, R30E	1980' FSL & 1980' FWL, Sec 2, T25S, R30E	330' FSL & 660' FEL, Sec NA 3, T25S, R30E	2080' FSL & 1980' FEL, Sec 2, T25S, R30E
	Type	Р&А	Producer	Not Drilled	Not Drilled	Not Drilled
	Operator Type	BOPCO, LP	30-015-27438 BOPCO, LP	30-015-27668 Fortson Oil Co Not Drilled	30-015-29554 BOPCO, LP	30-015-28610 Fortson Oil Co Not Drilled
	Well Name No. API	47 30-015-23068 BOPCO, LP	30-015-27438	30-015-27668	30-015-29554	30-015-28610
	Š.	47	79	25	94	126
	Well Name	PLU	PLU	PLU	PLU	PLU

- VII. Attach data on the proposed operation, including:
- 1. Proposed average and maximum daily rate and volume of fluids to be injected: 1500 average, 2,500 BWPD
- 2. Whether the system is open or closed: closed
- 3. Proposed average and maximum injection pressure: 754 psi average, 854 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 (Delaware)

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 inmediately underlying the injection interval:

Lithologic Detail: Sand, Shale Sequences
Geological Name: Delaware Mountain Group
Thickness: 3773
Depth: 3998-7770

The Rustler Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 905'-1520' No sources of fresh water are known to exist below the proposed disposal zone.

Describe the proposed stimulation program, if any:

The new perfs will be perforated and acidized with approximately 50 gallons 7-1/2% NEFE HCl per foot.

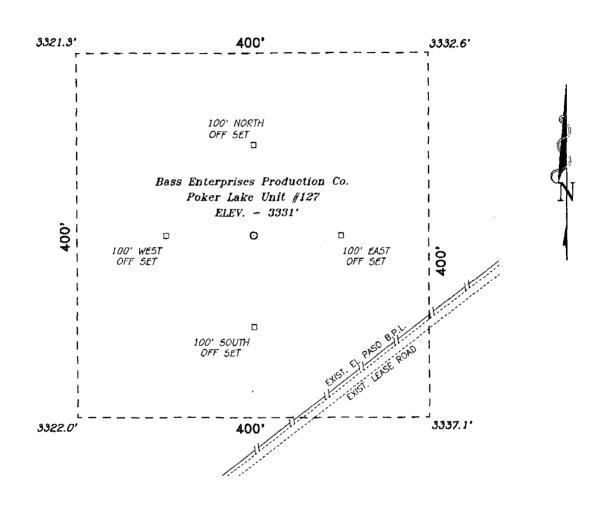
- Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
   Logs previously submitted.
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mite of any injection or disposal well showing location of wells and dates samples were taken.

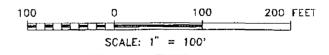
One stock tank located near PLU #91.

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.

SECTION 2, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N.M.P.M., NEW MEXICO. EDDY COUNTY,





### BASS ENTERPRISES PRODUCTION CO.

REF: Poker Lake Unit No. 127 / Well Pad Topo

THE POKER LAKE UNIT No. 127 LOCATED 1980' FROM THE SOUTH LINE AND 660' FROM THE WEST LINE OF SECTION 2, TOWNSHIP 25 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 7119 Drawn By: 5.C. NICHOLS 7119CC.DWG 0ate: 03-05-97 Disk: SCN #34

Survey Date:

Sheet

Sheets

0 * 4 . 0 0 0 0 0	B 7 7 22	Jase 1873 1875 1875 1875 1875 1875 1875 1875 1875	60 00 00	Rich	Richi	5 KBI O. 1 61	T.	9114
27.31 - 3 5.86 5.05 5.10 6.05 6	2 00 22 0	7104 31	130 F DE Boss'a UM5549  131 F 6	Recharded Dils, et al. 1919. 1	48.38 Pichardon Oil, ctol	7-1	U 5 SPR 0 LG 7 - 1 - 61(1) 043 87	19 of 19 - IRL Harrisonetal
POKETLK UP. S PIO 5223  SEED OLG POKETK UP. S PIO 5223	Bass (**	#" TO POOL	BOPCO L. P. 03138	Bass Ent  Bass Ent  (R. chardson Oils, tha)  R. chardson See  R. chardson Fee  Charles 25 A Chardson Fred  Charles 25 A Chardson Fred  (Charles 25 A Chardson Fred  Charles 25 A Chardson Fred  (Charles 25 A Charles End  (Charles 25 A Char		R J Kerr HBU 03/381	0 15 SABLOLG 2 - 1 - 6 (2) 0 53 0 19	R.L. Harrisanetal
23   HULE Merker   Supplement	26 Bass & 407 France (c. 2)	2-8	Boss Ent. 2  A service Correction	(E.portus (B. 1987)	BassEnt.etal/2   U   S.   Weitherdoon Oil   2   1   6   12     96.8   13	14	20 00 00 00 00 00 00 00 00 00 00 00 00 0	MIOLA 23
22	P.R. Bass ctal   P.R.	34	POKER LA	(5RB) OEG (Thru Line OEG) (Bass Err, Solid Bass (R) (State Color C	\$ \$\times \text{ \text{\tinx}\text{\tinx}\text{\texi\text{\texi}\tint{\text{\text{\text{\text{\text{\texit{\texitit{\text{\texi}\text{\text{\texit{\texit{\tet{\text{\text{\texi}\text{\texit{\texi{\texi{\texi{\texi{\t	15 - 6 9 8000 Entranella	Richardson Cil NB P 063815	22
21 PW 'PR BOSS    PR P PR P PR P PR P PR P PR P P P P P	See of a see	7000	A Control of the Cont		2 2 2	16 899 - 25	R cno-dsan ();  M 8	2 Horrison Flor
20. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	(2.7)	5 - 2 - 7 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	tes Pet, etal	Heber Holls (Fig. 1997)  1. September Holls (Fig. 1997)  1. Se	And the second of the second o	م مستوده	7. Fee	Conf Fed   100   1
20 19 20 20 20 20 20 20 20 20 20 20 20 20 20	61 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40.03 7	40.47 7 35wp	Marbob Ma	24: 100 100 100 100 100 100 100 100 100 10		Software on the software of th	<u> </u>
Proportion  Propor	Course Margar Feet.  Course Ma	rtes 9	0. 5. 0. 6. 0. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 0. 6. 0. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 6. 0. 0. 6. 0. 0. 6. 0. 0. 6. 0. 0. 6. 0. 0. 6. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	Chesopeake 2 - 2012 78 1035 363 20 8HI	Ster 14	Scoolly Fed."		EGG Rev. /2 P. 1920/7 12-1920/7 100340 32500 3un

#### **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 Current-Argus, newspaper Carlsbad а 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 and advertisements may 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:

May 13

2010

That the cost of publication is \$65.71 and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

day of

My commission Expires on

**Notary Public** 

OFFICIAL SEAL
STEPHANIE DOBSON
Notary Public
State of New Mexico
My Comm. Expired 12 ( )

May 13, 2010

#### NOTICE OF APPLICATION FOR SALT WATER DISPOSAL WELL PERMIT

The applicant proposes to dispose of produced water or other oil and gas waste into the Poker Lake Unit #127 (De I a wa re Formation). The maximum injection pressure will be 854 psi and the maximum rate will be 2500 bbls produced water/day. The most was a constant of the maximum rate will be 1500 bbls produced water/day. The maximum rate will be 1500 bbls produced water/day. The maximum rate will be 1500 bbls produced water/day. The maximum rate will be 1500 bbls produced water/day. The maximum rate will be 1500 bbls produced water will be 1500 bbls. The produced salt water a subsurface depth of 4768-5978e.

Any questions concerning this application should be directed to Valerie Truax, Regulatory A d ministrative Assistant BOPCO. L.P., P.O. Box 2760, Midland, Texas 79702-2760, (432) 683-2277.

Interested parties must file objections or requests for hearing with the Olivision, 1220 S. SFrancis Dr., Santa Fe, New Mexico 87505 within 15 days.

RECEIVED

MAY 2.0 2010

**BOPCO WTD PRODUCTION** 

#### PROPOSED SWD

LEASE:	: POKER LAKE UNIT			WELL	_ #: _ <sub>_</sub>	127	
FIELD:	POKER LAKE (DELA	AWARE)					
		L, SECTION 2, T25S,	R30E				
COUNTY:			NM		API:	30-015-29460	
						KB: 22221	
						<b>KB</b> : 3333'	
						<b>GL</b> : 3349	
						SPUD DATE: 3/30/1997	
						P&A DATE: 4/23/1997	
			#A 300 ES	888 BBS 568	<del></del>		
SURFACE CAS							
SIZE: WT/GRD:	11-3/4" 42# WC-40	_ <b>_</b>					
CSA:	947'	 11-3/4" @ 947'					
SX:	561 sxs CI C	_					
CIRC:	Y	_					
TOC:	SURF						
HOLE SIZE:	14-3/4" 0-949'	_					
INTERMEDIAT							
SIZE: WT/GRD:	8-5/8" 32 & 28# WC-50 & K-55	_					
CSA:	3973'						
SX:	1370 sxs CI C	<del></del>					
CIRC:	Y	<del>-</del>					
TOC:	SURF	_					
HOLE SIZE:	11" 947-3973'						
DDODLICTION	CAONO						
<b>PRODUCTION</b> SIZE:	7"	8-5/8" @ 3973'					
WT/GRD:	26# J-55 Flush Out	_ 0-5/0 @ 55/5	7111				
CSA:	6100'	_					
SX:	429 sxs Cl C	_		7 <b>1</b>	4200' - Lokset	Nickel Plated Ext/Int Pkr	
CIRC:	Υ		=   =	===			
TOC:	SURF	_	=  -	Ej=	Injection Interv	al - 4268' - 5928'	
HOLE SIZE:	7-7/8" 3973-7992'	_	=[=	<b>=</b>  =			
TUBING: 3 1/2":	9.5# J-55 SEAL TITE IPC	<i>ര</i> 4200'					
	515 5 55 5E/(E 1112 II 5	@ 1200					
		7" @ 6100'	St TIA	<b>4</b> 4			
					6200' - 6300' 0	Samant Plus	
			I	1	25 sxs Cl C	zemem riug	
					,		
			i	i			
			i	i			
			!	ļ			
			-	-			
			i	i			
			J	i			
			ļ	ļ			
			-	1			
				. i	one Covince DI	7700L 7000L	
		7-7/8" HOLE 3973-7992'	ļ	i B	one Springs Pli 100 eve Class	ug: 7700' - 7990' H cmt, WOC & TAG	
		7 770 TIOLE 3013-1332			100 3/3 01855	Tromit, WOO & TAG	
			PBTD: <u>77</u>	00'			
			TD: 79	92'			
						Updated: _	4/12/2010
						Author: _	crm
						Engr: _	ccc

#### CURRENT

LEASE:	POKER L	AKE UNIT				WELL	_ #:	127
FIELD:	POKER LA	AKE (DELA	WARE)					
LOCATION:	1980' FSL	& 660' FWI	, SECTION 2, T	25S, R	R30E			
COUNTY:		EDDY		ST:	NN		AF	PI: 30-015-29460
								KB: 3333'
								<b>GL</b> : 3349
								SPUD DATE: 3/30/1997
								P&A DATE: 4/23/1997
SURFACE CAS	SING		•			I	Cmt F	Plug 100sxs @ Surf - 185'
SIZE:	11-3/4"							
WT/GRD:	42#	WC-40						
CSA: SX:	947'		11-3/4" @	947				
CIRC;	561 Y	<u>C</u>		ļ				
TOC:	SURF			Ī				
HOLE SIZE:	14-3/4"	0-949'		j				
MITCHACOLLE	E 0401110			İ				
INTERMEDIATI	E CASING 8-5/8"			l Î			4	
WT/GRD:	32 & 28# W	C-50 & K-55		j				
CSA:	3973'	_						
SX:	1370		•	i i				
CIRC; TOC:	Y			ļ				
HOLE SIZE:	SURF 11"	947-3973'	•	į				
TIOLE GIZE.		347-3973		ĺ				
PRODUCTION	CASING			i				
SIZE:			8-5/8" @ 3	973'			Cmt Plug:	100 sxs @ 3850 - 4100'
WT/GRD: CSA:								
SX:			•		 			
CIRC:			•		į	į		
TOC:					-	ļ		
HOLE SIZE:	7-7/8"	3973-7992'			1	i		
					i	i		
					ļ.	!		
					i	i i		
					i	i		
					!	!		
					1	1		
					í	i		
					ļ		Cmt Plug:	260 sxs @ 5600 - 6200'
					i	i		
					[	- !	•	
					1	i		
					i	į		
					ļ	ļ		
					ì	í		
					İ	İ	Cmt Plug:	100 sxs @ 6488 - 6755'
			7-7/8" hole 3973-79	992'	1			
					į	į		

TD:

7992'

 Updated:
 4/12/2010

 Author:
 crm

 Engr:
 CCC

47 LEASE: **POKER LAKE UNIT** WELL #: FIELD: NASH DRAW (DELAWARE) LOCATION: 1980' FSL & 990' FEL, SEC 3, T25S, R30E COUNTY: EDDY ST: NM API: 30-015-23068 KB: P & A'd SURFACE CASING GL: 3324 **SPUD DATE: 12/11/1979** SIZE: 8-5/8" COMP DATE: WT/GRD: 24# K55 **CSA** 710' SX: 200 Halco Lite 20' Cmt Plug / 20 sx cmt SX: 200 Class C CIRC: N SURF by TopOut TOC: **HOLE SIZE:** 12 1/4" 0-710 INTERMEDIATE CASING SIZE: WT/GRD: **CSA** SX: 710' 8-5/8" 24# CSG SX: 12-1/4" HOLE CIRC: TOC: Cmt plug/ 50 sx cmt **HOLE SIZE:** 7-7/8" 710-4160' 744' Cmt plug/ 50 sx cmt 3990' 7-7/8" Hole 4160'

TD: 4160'

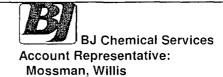
 Updated:
 12/16/2009

 Author:
 ezg

 Engr:
 CC

**Analytical Laboratory Report for:** 





# **Production Water Analysis**

Listed below please find water analysis report from: POKER LAKE UNIT, Fresh Water Well 91

freshunter stock tank near PW91

Lab Test No: Specific Gravity: 1.002

2010120071

Sample Date:

04/22/2010

340' FNL +330' FWL

Sec 12, +255, R30E

TDS: pH:

730

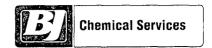
7.60

Cations:	mg/L	as:
Calcium	109	(Ca <sup>++</sup> )
Magnesium	29.00	(Mg <sup>++</sup> )
Sodium	78	(Na <sup>+</sup> )
Iron	0.50	(Fe <sup>++</sup> )
Potassium	5.0	(K <sup>+</sup> )
Barium	0.46	(Ba <sup>++</sup> )
Strontium	1.31	(Sr <sup>++</sup> )
Manganese	0.03	(Mn <sup>++</sup> )
Anions:	mg/L	as:
Bicarbonate	146	(HCO³)
Sulfate	240	(SO <sub>4</sub> =)
Chloride	120	(CI)
Gases:		(=-,
Carbon Dioxide	50	(CO <sub>2</sub> )
Hydrogen Sulfide	17	$(H_2S)$

#### **BOPCO LP**

Lab Test No: 2010120071

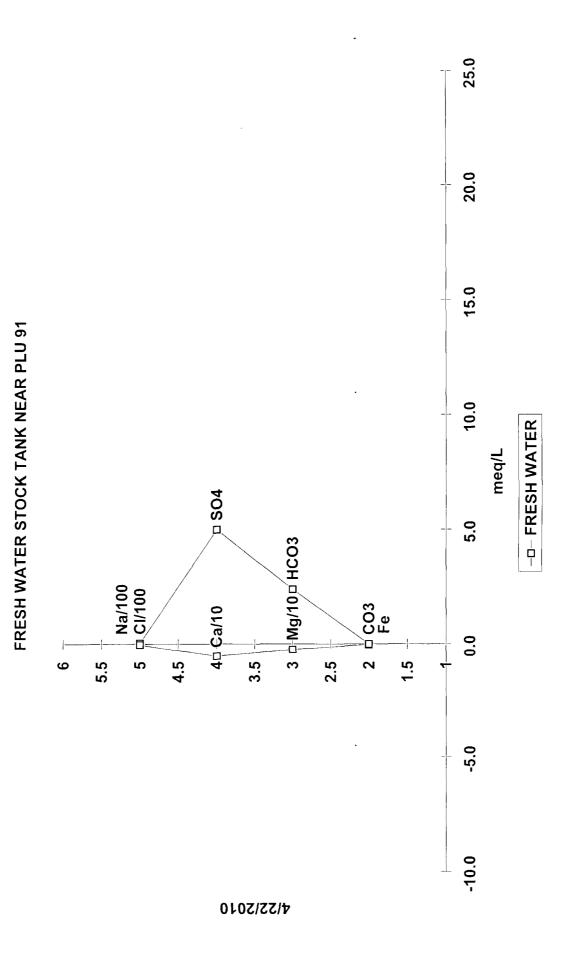
# DownHole SAT<sup>™</sup> Scale Prediction @ 100 deg. F



Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	1.50	0.21
Strontianite (SrCO3)	0.05	-4.75
Anhydrite (CaSO4)	0.04	-1079.08
Gypsum (CaSO4*2H2O)	0.06	-967.16
Barite (BaSO4)	9.05	0.70
Celestite (SrSO4)	0.03	-85.60
Siderite (FeCO3)	14.31	0.58
Halite (NaCl)	0.00	-426942.47
Iron sulfide (FeS)	328.85	0.42

#### Interpretation of DHSat Results:

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.



FOLD AND TEAR HERE

	2. Article Number	COMPLETE THIS SECTION ON DELIVERY	
	-	A. Received by (Please Print Clearly) B. Date of Delivery	
		C. Signature	_;
		X Agent Addresse	e
	7160 3901 9846 3454 5889	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No	
	3. Service Type CERTIFIED MAIL		ì
	4. Restricted Delivery? (Extra Fee)		i
	Article Addressed to:     Article Addressed to:		=
LINE 1•	620 E. Green	nd Management  e Street  1 88220-6292  Durf	
	PS Form 3811, January 2005	Domestic Return Receipt	

PECEIVED OCD

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

71 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3901 9846 3454 5889

72 La 3

Notion receipt signed by BLM

for delivery of SWD application puckage

for BEU122 +PU127

From:

Jones, William V., EMNRD

Sent:

Monday, June 07, 2010 2:22 PM

To:

'Truax, Valerie L.'; 'Cruz, Carlos'

Cc:

Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD; 'Wesley\_Ingram@blm.gov'

Subject:

Disposal applications from BOPCO, L.P.: PLU #79 and #127 Delaware

#### Hello Valerie and Carlos:

Rule 5.9 inactive wells are fine now.... I have these two permits roughed out, but saw a couple things.

- a. For our records, let me know how you know this upper Delaware is non-productive? Send some records of testing it or a quick log analysis. Forgive me if I have asked for this before. If you don't have any evidence, we may have you swab test it to confirm it is wet and to get a water sample from the upper Delaware.
- b. Ask your Geo to pick tops of the members of the Delaware in this area mainly tops of Bell Canyon, Cherry Canyon, Brushy Canyon.
- c. Fortson Oil Co. seems to have wells planned in this area but I don't see any notice to them for the #127 well.

  Send proof of notice or send a waiver.

sout 2 6/11/10

Lthought BOPCO was the operator of this Poker Lake Unit – or is this a co-op?

Will Jones

New Mexico

Oil Conservation Division

**Images Contacts** 

From: Jones, William V., EMNRD Sent: Friday, May 07, 2010 11:42 AM

**To:** 'Truax, Valerie L.'; 'Cruz, Carlos'

Cc: Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD; Dade, Randy, EMNRD; 'Wesley Ingram@blm.gov'

Subject: Disposal application from BOPCO, L.P.: PLU #79 30-015-27438 Delaware

#### Hello Valerie and Carlos:

Just reviewed your application and have the following questions and comments:

- a. The resulting permit will have three special conditions:
  - a. Set CIBP/Cmt at about 6000 feet to plug back the well over the former producing interval.
  - b. Check bradenhead 8-5/8 5-1/2 inch for any problems repair if anything shows up.
  - c. Reenter/Replug or Re-Enter/Converttodisposal offsetting well PLU #127 (Please send in the C-108 or Reenter Sundry)
- b. Division Rule 5.9 number of inactive wells are too many for BOPCO LP so I cannot release this permit. We only check the OCD web site, but Daniel Sanchez mentioned you may be working on repairing some wells, however, cannot release this permit until the number of wells are 5 or less. If you have done work and need to submit paperwork talk to the Artesia district office about that and let me know when the following link shows 5 wells or less:

 $\frac{http://www.emnrd.state.nm.us/OCD/OCDPermitting/Report/Stats/InactiveWellList.aspx?Production=15\&Operator=260737\&ACO=Exclude\&TA=Exclude$ 

#### Action items from BOPCO:

Send in your intentions on the PLU #127 (C-108 application or Sundry to Replug) And let me know when the OCD web site only shows 5 wells or less.

From:

Truax, Valerie L. [VLTruax@BassPet.Com]

Sent:

Thursday, June 10, 2010 3:01 PM

To: Subject: Jones, William V., EMNRD FW: BEU 122.....SWD conversion

#### Carlos,

Well	T/BeC	T/CC	T/BrC
PLU 79	4070	4895	6262
PLU127	4033	4879	6227
BEU	No BC sand present, however		
122	T/ Delaware is 4188	4330	5600

Hope this helps.

Jack D. Deans Geologist BOPCO, L.P. 201 Main St., Ste. 2900 Fort Worth, TX 76102 817-390-8564 jdeans@basspet.com

From: Ludwick, Larry

Sent: Wednesday, June 09, 2010 8:41 AM

**To:** Cruz, Carlos **Cc:** Deans, Jack

Subject: RE: BEU 122.....SWD conversion

Carlos,

We don't have las data for either the BEU 122 or the PLU 127 on our database; do you have? If not, I can probably get from data service that we use but may take a few days.

Jack,

Could you provide tops for Bell Canyon, Cherry Canyon, & Brushy Canyon for following wells; Midland needs for permitting SWD recompletions.

PLU 79; 30-015-27438 PLU 127; 30-015-29460 BEU 122; 30-015-27454

Larry Ludwick BOPCO, L.P.

#### **Petrophysical Specialist**

Work: 817-339-7024 Cell: 817-692-0907

Email: <u>lludwick@basspet.com</u>

From: Cruz, Carlos

**Sent:** Tuesday, June 08, 2010 4:18 PM

To: 'Ludwick, Larry'

Subject: BEU 122.....SWD conversion

Larry,

Can we get some log analysis and tops on the BEU 122 as well? We are permitting this well for SWD also.

API# 30-015-27454

Permitted interval: 4670'-6800'

Thanks,

Carlos Cruz BOPCo, L.P. Division Production Superintendent (432)683-2277 office (432)238-9443 cell

From: Sent:

Truax, Valerie L. [VLTruax@BassPet.Com] Thursday, June 10, 2010 3:48 PM Jones, William V., EMNRD beu #79

To: Subject:

Well	T/BeC	T/CC	T/BrC
PLU 79	4070	4895	6262
PLU127	4033	4879	6227
BEU 122	No BC sand present, however	4330	5600

From: Truax, Valerie L. [VLTruax@BassPet.Com]

**Sent:** Thursday, June 24, 2010 12:31 PM

To: Jones, William V., EMNRD

**Subject**: PLU 127 **Attachments**: Exxon.pdf

Hey, Will, I know you wanted me to contact you if I heard a response from Exxon before the 28<sup>th</sup>. Sorry, but I will be gone tomorrow and Monday, so I figured I'd get with you today. See attached letter I sent to Exxon informing them of their need to contact the OCD within 15 days with any objections (they received the packet on the 14<sup>th</sup> of June). I also sent them a form to sign if they have no objections. I have not received the signed waiver; however, the letter clearly states the 15 day deadline, which happens to be tomorrow. I would assume it is safe to move on in the approval process, if the OCD has not heard from Exxon by tomorrow? How does that sound to you? Valerie

#### BOPCO, L. P.

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

(432) 683-2277

FAX (432) 687-0329

June 10, 2010

Re:

Application to Inject Fluid Poker Lake Unit #127 Eddy County, New Mexico

File: 100-WF: PLU127 Offsetownerltr

Exxon Mobile Corp c/o Mr. Bill Duncan P.O. Box 4358 Houston, TX 77210

#### Gentlemen:

This letter and attached copy of our injection well application is to notify you, as offset operator, that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to inject fluid into a non productive zone of oil and gas in the subject wellbore.

If you should have any questions or require additional information, please contact Valerie Truax at the above letterhead address, phone number or via email at vltruax@basspet.com. Any objections or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days of this letter's date. Please sign and return the enclosed Waiver Request if there are no objections.

vlt

Attachments

Wille 1.65 H 1930

Sincerely,

Valerie Truax

Regulatory Administrative Assistant

e R rells Well Name: _	_swo_1222_x	=1/		
•			IPI Permit D	Date O ( Qur A M )
•	Donald		6 PLU+	+ 127
Num: (20 ) 019-	4			UIC primacy March 7, 1982)
	/			County EDDY
		Sec Est	•	A 0
erator: Bor Co	), Lite		Contact	Voleriel may
RID.	RULE 5.9 Compliance (\	Wells) 43	85 (Finan Assu	r) O C IS 5.9 OK?
		1		` / Pe
erator Address: _6	Posta D1	ine, Sur	E3700 M	PLONTX 79705
P	> <b>/</b> _		,	
rent Status:				V 0.10
nned Work to Well:	_		Planned Tu	bing Size/Depth: 3 /2 (5)
	Sizes	Setting	Cement	Cement Top and Determination
victing C Surface	11.34		5x or C1	Method
		<del></del>	1370	Confi
	7/~"		1/25	7
	•	· /	eT	otal Depth
Il File Reviewed				
grams: Before Convers	ionAfter Conversion	Elogs in Ima	ging File:	
Intervals:	Depths	Formation	Producing (Yes/No)	GENERAL LOCATION
Above (Name and Top)				Corrol Conyon words POK-or lok
			·	marke POKE 2 Gol
-	4268			854 PSI Max. WHIP
Injection	5928			Open Hole (Y/N)
	7795	Bono Sta		
		•		Deviated Hole?
nsitive Areas: Capitan	Reef	Cliff House	Salt Depths	
Potash Area (R-111-P)		Potash Les	see	Noticed?
sh Water: Depths: 9	05-1920 Wells		Analysis?	Affirmative Statement
posal Fluid Sources:	Del			Analysis?
posal Interval Product	ion Potential/Testing/Anal	lysis Analysis:	Del	
	_			-
ian: Novenanor(V/N)	Surface Owner	BIM	Minoral Ou	mor(o)
			willerat Ow	MC(5)
LE 26.7(A) Affected Pa	rties:			
	rent Status:	RID:	RID:	RID: