1		CTGW SIP
DATE IN	7-73-10 SUSPENS	SE ENGINEER W.D. LOGGED IN 7-23-10 TYPE TWD APP NO. 1020451888
· <u> </u>	 ·	NEW MEXICO OIL CONSERVATION DIVISION USE ONLY - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 - Engineering Divie, Santa Fe, NM 87505 - Engineering Divie, Santa Fe, NM 87505 - Engineering Bureau - - Engineering Divie, Santa Fe, NM 87505 - Engineering Divie, Santa Fe, NM 87505 - Engineering Bureau - - Engineering Divie, Santa Fe, NM 87505 - Engineering Bureau - - Engineering Divie, Santa Fe, NM 87505 - Engineering Bureau - - Engineering Divie, Santa Fe, NM 87505 - Engineering Bureau - - Engineering Bureau - - Engineering Bureau - - Engineering Divie, Santa Fe, NM 87505
		ADMINISTRATIVE APPLICATION CHECKLIST 30-015-29509
Т	HIS CHECKLIST IS M	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Appli	[DHC-Down [PC-Po	ndard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] nhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] ool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] lifted Enhanced Oil Recovery Certification] [PPR-Positive Production Perspanse]
[1]	TYPE OF AP [A]	PLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD STREMULTS - Stremult S-ord PLOT.
	Check [B]	Cone Only for [B] or [C]       Ste muss mathematical statematical sta
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery           WFX         PMX         SWD         IPI         EOR         PPR
	[D]	Other: Specify
[2]	NOTIFICAT [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

[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 Belt	Sandia	Belt	Regulatory Clerk	5-18-10
Print or Type Name	Signature		Title	Date

sjbelt@basspet.com 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

May 18, 2010

Re: Notice of Application for Authorization to Complete as SWD Well Poker Lake Unit #91 Eddy County, New Mexico File: 100-WF: PLU91.C108

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

**JEDT** 

Mr. Jones:

Enclosed please find BOPCO, L.P.'s <u>Application for Authorization to Re-Enter and</u> <u>Complete</u> for disposal purposes only into the Poker Lake Unit #91, Located in Section 12, T25S, R30E, Eddy County, New Mexico.

If additional information is required, please contact Sandra J. Belt at the letterhead address, phone number or via email at sibelt@basspet.com.

Sincerely,

Sandia J. Belt

Sandra J. Belt Sr. Regulatory Clerk

sjb Attachments

CC: BLM

STATE OF NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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

## **APPLICATION FOR AUTHORIZATION TO INJECT** PURPOSE : \_\_\_\_\_ X Disposal Storage Pressure Maintenance I. Secondary Recovery Application qualifies for administrative approval? \_\_\_\_\_Yes \_\_\_\_\_Yes \_No OPERATOR: BOPCO, L.P. П. ADDRESS : P O Box 2760 Midland Tx 79702 PHONE : (432)683-2277 CONTACT PARTY : Sandra J. Belt ext. 149 WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. III. Additional sheets may be attached if necessary. Is this an expansion of an existing project? \_\_\_\_\_ Yes \_\_\_\_ No IV. If yes, give the Division order number authorizing the project \_\_\_\_\_ Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle ٧. drawn around each proposed injection well. This circle identifies the well's area of review. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. VI. 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. Describe the proposed stimulation program, if any. IX. \*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. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering XII. 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. TITLE: Sr. Regulatory Clerk NAME: Sandra J. Belt ext. 149 Sandia J. Belt DATE: 05/18/2010 SIGNATURE:

E-MAIL ADDRESS: sjbelt@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. 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

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- 1) Lease name: Well #: Section: Township: Range: Footage:
- Poker Lake Unit 91 12 25S 300 FNL 330' FWL

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	700	Method
11-3/4" 42# WC-40 STC	1079	625	14-3/4"	Surface	Circulated
8-5/8" 32# J-55 WC50 LTC	4,070'	1,550		1,356	Temp Survey
5-1/2" 15.5# & 17# K55/LS&LTC	8,097	300	7-7/8"	6,280'	CBL
5-1/2" 15.5# & 17# K-55 DVTool	5,019'	400	.1/8"	4,250'	CBL

- Tubing to be used (size, lining material, setting depth): 2-7/8" 6.5# J-55 Seal Tite IPC tbg set @ 4,130'.
- Name, model, and depth of packer to be used: 5-1/2" Lokset Nickel Plated EXT/INT PC Pkr set @ 4,130'.
- Name of the injection formation and, if applicable, the field or pool name: Corral Canyon, (Delaware) NE (Delaware formation).

<u>ش</u>

- The injection interval and whether it is perforated or open hole: Perforated 4,180'-6,065'
- 3) State if the well was drilled for injection or, if not, the original purpose of the well: Drill & complete Corral Canyon (Delaware) NE pool; (Delaware formation) development well.
- 4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations:

Well was plugged 3-13-07 w/perfs of 6519-7750 plugged off w/a BP @ 6469 and 35' cement on top. A BP will be placed in the well @ 6100' w/35' cement on top w/a PBTD of 6065'

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: Lower: Bone Spring @ 7894' Higher: None <del>Ω</del>

BOPCO application for disposal- JRU 48

C-108 DATA

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 piugged well illustrating all plugging detail.

						noite atomotion						
Weli Name	No. API	Operator	Type	Location	Surface Casing	Intermediate Casing	Production Casing	Tubing	Date	Date	TD Perforations	stimulation
Federal-J.F.		Richardson &		660' FNL & FWL;	13-3/8" @ 3971; 61 & 72#;	13-3/8" @ 3971; 61 & 72#; 9-5/8" @ 10,073; 40 & 42#; 2545						
Harrison	1 30-015-04740	Bass Bass	Plugged Not Drilled	Sec. 12;T25S;R30E	6450 sxs	SXS	7" @ 16,626; 32#; 1975 sxs MA	AN	7/22/1952 1	10/27/1953	10/27/1953 16,705 12,220-12,360	NA
Shugart		Choctaw		1980' FNL& WL;	" @ 341' w/225 sxs	NA	AN	AN AN	3/1965	11965	4200' NA	AN
Federal	1 30-015-10524	Production Co.	Plugged	Sec. 12;T25S;R30E								
Attach data	Attach data on the proposed operation, including:	ration, including:										
1. Proposed	1. Proposed average and maximum daily rate and volume of fluids to be injected: 2,0	num daily rate and	' volume of fluiv	ds to be injected: 2,000	000 average, 2,500 maximum BWPD	m BWPD						
2. Whether	2. Whether the system is open or closed: closed	r closed: closed										
3. Proposed	d average and maxin	rum injection pres	sure: 836 psi	3. Proposed average and maximum injection pressure: 836 psi average, 836 psi maximum	mum							
4. Sources	4. Sources and an appropriate analysis of injection fluid and compatibility with	nalysis of injectior	fluid and com	npatibility with						·		
the receiving	g formation if other th	an reinjected prod	luced water: V	Vater will be produced	the receiving formation if other than reinjected produced water: Water will be produced from same reservoir (Delaware)	ielaware).						
5. If injection	n is for disposal purp.	oses into a zone r	not productive (	5. If injection is for disposal purposes into a zone not productive of oil & gas at or within one mile of the	ne mile of the							
proposed w	proposed well, attach a chemical analysis of the disposal zone formation water: In the	analysis of the dis	sposal zone fo	rmation water: in the pro	ocess of obtaining sampl	process of obtaining samples; will send results as soon as available.	is available.					
Attach appro	ppriate geologic data	on the injection zc	ne including a	ppropriate lithologic deta	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness,	ess,						
and depth.	and depth. Give the geologic name, and depth to bottom of all underground sources	me, and depth to t	ottom of all ur		of drinking water (aquifers containing	intaining						
waters with	waters with TDS of 10,000 mg/l or less) overlying the proposed injection zone as well	r less) overlying th	ni proposed in		as any such sources known							
to be immed	to be immediately underlying the injection interval:	injection interval:										
Lithologic D	Lithologic Detail: Sand, Shale											
Geological N	Geological Name: Delaware Mountain Group	itain Group										
Thickness:	3,805											
Depth:	4,088' - 7,893'											
The Rustler	r Formation is a kno	wn source of fre	sh water thro	ughout this geographi	The Rustier Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 938'-1255'	of Rustler is 938'-1255'.						
NO SOULCES	NO SOURCES OF THESH WAREF AFE KNOWN TO EXIST DEIOW THE PROPOSED DISPOSAL ZONE	Known to exist DA	siow the prop	osea aisposal zone.								
Describe the	Describe the proposed stimulation program, if any:	n program, if any:										
The new pe	rrfs will be perforate	d and acidized w	rith approxim	The new perts will be perforated and acidized with approximately 50 gallons 7-1/2% NEFE HCI per foot.	NEFE HCI per foot.							
Attach appro	priate logging and te	st data on the well	l. (If well logs h	lave been filed with the [	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)	e resubmitted.)						
Logs previc	Logs previously submitted.											
Attach a che	mical analysis of fres	h water from two (	or more fresh v	water wells (if available a	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any	: mile of any						
injection or d There is one	injection or disposal well showing location of wells and dates samples were taken. There is one stock-tank located in the NW 1/1 of Savinu 12	location of wells a	and dates sam	ples were taken.								
Applicants to	Apolicants for disposal wells must make an affimative statement that they have examir	make an affimativ	ve statement th	hat they have examined	ned available geologic and engineering data	ngineering data						

VIII.

۲Ï

Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults, 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. ,

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Applicant netery antimus that he has examined the available geologic and engineering data and most no evidence of open raurs, or other hydrologic connection between the disposal zone and any underground source of drinking water.

2

## PLUG AND ABANDON WELLBORE

LEASE				ELL #:	91	P&A'D (6/13/20	07)
			ELAWARE) FIEL				
		330 FWL, SEC	2 12, T25S, R30E				
COUNTY	EDDY		ST: NM	API	:	30-015-29509	· · ·
						KB:	3372.5
						GL:	3355.7
						SPUD DATE:	6/1/1997
						COMP DATE:	7/4/1997
511	RFACE CASI	NG			<b>-</b> 50 sys /	cmt 0' - 100' Perf, Sq	-
SIZE:	11-3/4"				50 373 (		<b>L</b> .
WT/GRD:	42#	WC-40 STC					
CSA:	1079'				,		
SX:	625		na national and a state of the		- 40 sxs (	cmt 1173' - 1340' TA	G
CIRC:	Yes	161 SXS					
TOC:	SURF				-	8" Csg @ 1312' Did	not pull cs
HOLE SIZE:	14-3/4"	1084'			Sqz cm	t	
SIZE:		SING					
WT/GRD:	<u>8-5/8"</u> 32#	WC50 LTC					
CSA:	4070'	WC50LTC					
SX:	1550				125 svs	cmt 3,731' - 4220' W	
CIRC:	No					Ciffe 5,751 - 4220 4	100, 140
TOC:	1356'	TS	The second secon				
HOLE SIZE:	11"	4072'		<b>↓</b>	- Cut 5-1/	2" Csg @ 4170' & Pi	ull
NOTE: CALIPER	INDICATES AVO	GHOLE SIZE 14-1/4			4250'	TOC (CBL)	
PRO	DUCTION CA	SING			25 sxs o	cmt 4872' - 5069'	
SIZE:	5-1/2"		<b>H</b>	<b>H</b>	5019'	DVT 5-1/2" 15.5#	K55 LTC
WT/GRD:	15.5# K55	0-5019'	!	11			
WT/GRD:	17# LS LTC	5019-8097'		" <b>"</b>	- TAG TC		
CSA:	8097'				6504'	PBTD 35' CMT CA	
SX: SX:	<u>440</u> 300	CLS "H" CLS "C"		<b>- 1</b>	6469 6280'	CIBP (3/14/2001) TOC (CBL) 1st Sta	
CIRC:	<u>No</u>	6280' CBL			6519'	PERF 6519-23' 1	
TOC:	4250'	CBL			6523'	1 CI (1 0515-25 1	SELO ELI
HOLE SIZE:	7-7/8"	8100'			6651'	PERF 6651-55' 1 3	SPF 0° PHS
					6655'		
					6721'	PERF 6721-25' 1 \$	SPF 0° PHS
					6725'		
					77.40		
					7740'	PERF 7740-50' '	
					7750'	2 JSPF 180°	PHSG
			T a start		7785'	5-1/2" MRKR JT	
					1100	J-1/Z WIKKKJI	
					8002'	PBTD	
	ι.			<b>D</b> i	8002 8017'	FC	
					8097'	5-1/2" 17# CSG	

TD: <u>8100'</u> LOGGER TD: 8128'

Updated:	3/9/2007
Author:	WHF
Engr:	MMM

.

## PROPOSED RE-ENTER

LEASE	: PC	OKER LAKE UN	IIT WELL #:		91 RE-ENTER
FIELD	NE CORRA	L CANYON (DE	LAWARE) FIELD		
LOCATION	1: 360' FNL &	330' FWL, SEC	12, T25S, R30E		
COUNTY	: EDDY		_ST: <u>NM</u> AF	1:	30-015-29509
					KB: 3372.5
	IRFACE CASI	NG			GL: 3355.7
SIZE: VT/GRD:	<u>11-3/4"</u> 42#	WC-40 STC			SPUD DATE: 6/1/1997 COMP DATE: 7/4/1997
SA:	<u>42#</u> 1079'	WC-40 310			P&A'D : 6/13/2007
SX:	625				FRAD: 0/13/2007
CIRC:	Yes	161 SXS			
FOC:	SURF	1010/10		Cut 8-5	/8" Csg @ 1312' Did not pull cs
HOLE SIZE:	14-3/4"	1084'		Sqz cm	·
	-				
	RMEDIATE CA	SING			
SIZE:	8-5/8"			Dun E d	/2" csg to tie into
NT/GRD:	32#	WC50 LTC			csg @ 4170'.
CSA: SX:	<u>4070'</u> 1550				
	_				
CIRC: FOC:	<u>No</u> 1356'	TS			
HOLE SIZE:		4072'		4130'	PKR/EOT
	R INDICATES AV	G HOLE SIZE 14-1/4			ed Inj Perfs - 4,180' - 6,065
	DUCTION CA		- 2	4250'	TOC (CBL)
SIZE:	5-1/2"		i 🔶 🔶 į	5019'	DVT 5-1/2" 15.5# K55 LTC
NT/GRD:	<u>15.5# K55</u>	0-5019'	=		
NT/GRD:	17# LS LTC	5019-8097'			
CSA: SX:	<u>8097'</u> 440	CLS "H"		6065'	TOP OF CMT PLUG
SX:	300	CLS "C"		6100'	CIBP w/ 35' CMT CAP
CIRC:	No	6280' CBL		0100	
FOC:	4250'	CBL		6504'	PBTD 35' CMT CAP (3/14/200
HOLE SIZE:	7-7/8"	8100'		6469'	CIBP (3/14/2001)
				<sup>∽</sup> 6280'	TOC (CBL) 1st Stage
	TUBING			6519'	PERF 6519-23' 1 SPF 0° PH
-7/8" J-55 Seal	Tite IPC tbg set @	9 4,130'		6523'	
-1/2" Lokset Nic	kel Plated EXT/IN	IT PC pkr @ 4,130'		6651'	PERF 6651-55' 1 SPF 0° PHS
				6655'	
				0704	
				6721' 6725'	PERF 6721-25' 1 SPF 0° PHS
				6725'	
				7740'	PERF 7740-50' "V" SAND
				7750'	2 JSPF 180° PHSG
					2001110011100
				7785'	5-1/2" MRKR JT
				8002'	PBTD
				8017'	FC
				8097'	5-1/2" 17# CSG

TD: 8100' LOGGER TD: 8128'

Updated:	3/22/2010
Author:	MJR
Engr:	CCC

Form 3160-5 CCD-ARTESIA							
(April2004)	UNITEDSTATES		FORMAPPROVED OM B No. 1004-0137 Expires. March 31, 2007				
-047 All	EPARTMENT OF THE INTERIOR UREAU OF LAND MANAGEMENT						
			5. Lease Serial No. NMNM 030456				
Do not use thi	NOTICES AND REPORTS OF s form for proposals to drill or f II. Use Form 3160-3 (APD) for st	to re-enter an	6. If Indian, Allottee or Tribe Name				
SUBMIT IN TRI	PLICATE - Other instructions or	n reverse side.	7. If Unit or CA/Agreement, Name and/or No.				
1. Type of Well							
	Gas Well Other	JIII - 3 2007	8. Well Name and No.				
2 NameofOperator			POKER LAKE UNIT #91				
BEPCO, L.P.	21 . Di	CD-ARTESIA	9. API Well No. 30-015-29509				
3a. Address P.O. BOX 2760 MIDLANE		683-2277	10. Field and Pool, or Exploratory Area				
······································	., T., R., M., or Survey Description)		CORRAL CANYON, NE. (DELAWARE)				
360' FNL & 330' FWL, SE			11. County or Parish, State				
LAT. 32.15 LONG -103.8			EDDY COUNTY NEW MEXICO				
12. CHECK AP	PROPRIATE BOX(ES)TO INDICATE	NATURE OF NOTICE, R	EPORT, OR OTHER DATA				
TYPEOF SUBMISSION TYPEOF ACTION							
	Acidize Deepen	Production (St	art/Resume) Water Shut-Off				
Noticeof Intent	AlterCasing FractureT	Č Š	Well Integrity				
X Subsequent Report	Casing Repair New Cons	struction Recomplete	Other				
	Change Plans X Plug and A	Abandon Temporarily At	pandon				
Final Abandonment Notice	Convert to Injection PlugBack	Water Disposal					
following completion of the invitesting has been completed. Findetermined that the site is ready 06-04-2007 MIRU MAYO MIX W/30 SACKS SALT PUH TO 5069' AND SPOT TERRY WILSON WITH RIH W/5-1/2" JET CUTT SPOT 125 SXS. CLASS WITNESS. RIH AND TA 5/8" CSG. ATTEMPTED PRESSURED UP TO 800 CALLED TERRY WILSO PERFED 8-5/8" CSG AT 8/5'8" CSG FULL OF CE DUG OUT CELLAR AND FILL IN CELLAR AND C	Noted operations. If the operation results in a multiple dependence of the operation of the operating of the operation of the	Itiple completion or recompletion all requirements, including recta ND TAG TOC @ 6504' CEMENT PLUG FROM BING. CSG FROM 4170'. 4220. CALLED TERR H TUBING AND RIH W 0,000 # BUT NO SUCC SXS CLASS C NEAT TNESS. ASS C NEAT CEMEN CULATED PLUGGING	T AND CIRCULATED TO SURFACE.				
ANN MOORE		Title PRODUCTION	CLERK				
Signature A	Moore	Date 06/18/2007					
<u>~~~~</u>	THIS SPACE FOR FEDERAL	OR STATE OFFICE	NEPEDTED END DECOND				
	ACCEPTED FO		AUDEPTEDTON NEWWY				
Approved by		Title	Date				
certify that the applicant holds lega	attached. Approval of this notice does not warr I or equitable title to those rights the abject to conduct operations thereon.	2007 Office	JUN 3 0 2007				
Title 18 U.S.C. Section 1001 and Tit States any false fictitious or fraud	le 43 U.S.C. Section 1 12-make 12 crime for a	person knowingly and willful highler willfare jurisdiction.	y to make to any genarious a dency of the United				
(Instructions on page 2)	le 43 U.S.C. Section 1 (12, male) it a crime fir as Julent statements or representations as to any NMOCD-District	II ARTESIA	BURFAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE				

#### DRILLING NOTES:

03-07-97 Arch Survey on location 460' FNL & 330' FWL.

03-22-97 BLM moved location 100' N & re-staked location @ 360' FNL & 330' FWL.

03-27-97 Arch Survey on location 360' FNL & 330' FWL.

**SURFACE CSG:** CMT 11-3/4" CSG W/ 385 SX CLS C + 4% GEL + 2% CACL<sub>2</sub> + 1/2 PPS CELLOPHANE LEAD (13.5 PPG, YLD 1.74) + 240 SX CLS C + 2% CACL<sub>2</sub> TAIL (14.8 PPG, YLD 1.32). BUMP PLUG @ 10:37 AM. CIRC 161 SX (50 BBLS) TO PIT. FLOATS HELD.

**INTERMEDIATE CSG:** (NOTE: FLUID CALIPER INDICATES AVG HOLE SIZE 14-1/4") CMT 8-5/8" CSG W/ 1400 SX LEAD (12.4 PPG, 2.14 YLD) + 150 SX TAIL (14.8 PPG, 1.32 YLD). BUMPED PLUG @ 7:30 PM ON 6/11/97. FLOATS HELD. **DID NOT CIRC CMT TO SURFACE.** TOC @ 1356' TS (FIELD EST). NOTE: BGH notified Gene Hunt w/BLM concerning lack of cmt rets. Per call w/Joe Lara & Jim Amos, will run TS & either 1" top out or perf & sqz if TOC not above 880' (200' fill inside 11-3/4" csg). NOTE: WRD spoke w/ Joe Lara w/ BLM on 6/12/97 concerning cmt top out. Top out will be deferred until well is P&A'd (perf & sqz or cut & salvage csg).

**PRODUCTION CSG:** CMT CSG W/ 1<sup>ST</sup> STG 440 SX + CLS H + 1.4 GPS D155 + 0.05 GPS D604 + 0.02 GPS M-45 + 3% SALT + 0.3% D13 (WT 14.0 PPG, YLD 1.66). PLUG DOWN @ 9:36 AM ON 6/21/97. DROP OPENING BOMB. <u>OPEN DVT @ 5019</u>' & CIRC. 2<sup>ND</sup> STG 100 SX 35/65 POZ C + 6% GEL + 1/4 PPS CELLOPHANE LEAD (WT 12.8, YLD 1.85) FOLLOWED BY 200 SX CLS C NEAT TAIL (WT 14.8 PPG, YLD 1.32). PLUG DOWN @ 2:25 PM ON 6/21/97. TOC 4220' (TS). 06/30/97 RAN RBL/GR/CCL FOUND TOC 6280' 1<sup>ST</sup> STG & 4250' 2<sup>ND</sup> STG

#### INITIAL COMPLETION: 06/27/1997-07/03/1997

DOC 4974-5019'. DO DVT @ 5019'. RIH to **PBTD** @ **8002'**. Ran RBL-GR-CCL log from 7900-7600, 6900-6000', 5100-4700', 4300-4000'. Found TOC @ 6280'(1<sup>st</sup> stg) & 4250 (2<sup>nd</sup> Stg).

**06/30/97 PERF 7740-50'** "**V**" **SAND 2 JSPF 180° PHSG**. **FRAC** w/ 33,000 gls YF130 + 147,730# 20/40 Brady Sd + 500# 20/40 RCS. Screened out extrmly fast on RCS. Rvrs clean to PBTD @ 8002'. Set Lufkin 640 PU w/ Ajax DP-80 Gas engine. POP @ 144" SL X 8.5 SPM. Flowline to PLU #79 btry.

IP: 07/24/97 52 BOPD+52 MCFGPD+186 BWPD.

### WORKOVER SUMMARY:

07/1997 CLEAN OUT & PROP-LOK

01/1998 COMPLETE 115 SZ, JRU 13 & LR "A"

- 03/1998 DO CIBP & COMMINGLE ALL ZONES
- 04/1998 SUMP PUMP

03/2001 TA WELL

### CLEAN OUT SAND & PROP-LOK: 07/15/1997-07/18/1997

Tag sand fill @ 7739' FS (263' entry). POH w/tbg. CO fill to PBTD @ 8002'. Re-tag top of fill @ 7957' (45' of entry). CO to PBTD @ 8002'. Pmp 5 bbls Prop-Lok w/25 BS. POP.

COMPLETE 115 SZ, JRU 13 & LR "A"F & FRAC: 01/27/1998-01/31/1998

01/27/98 Set CIBP @ 7650'.

PERF 6519-23, 6651-55 W/1 SPF @ 0° PHSG. PERF 6721-25 W/1 SPF @ 0° PHSG. Frac 6519-6725 w/28,000 gls. SFG 2500 + 101,000# 16/30 Brady sd + 53,000# 12/20 RCS. POP. AWO: 2/8/98 55 BO, 274 BW, 56 MCFG.

## DO CIBP @ 7650' & COMMINGLE ALL ZONES: 03/17/1998-03/20/1998

Tag top of fill @ 6760'(35' below bottom perf) w/575' of entry since 1/31/97. DO CIBP @ 7650'. CO to PBTD @ 8015' (ORIGINAL PBTD 8002' – POSSIBLE FILL TO 8015'). RIH w/tbg. rods, & pump. Place well on prod. AWO: 3/25/98 22 BO, 168 BW, 17 MCFG.

Accepted for record NMOCD

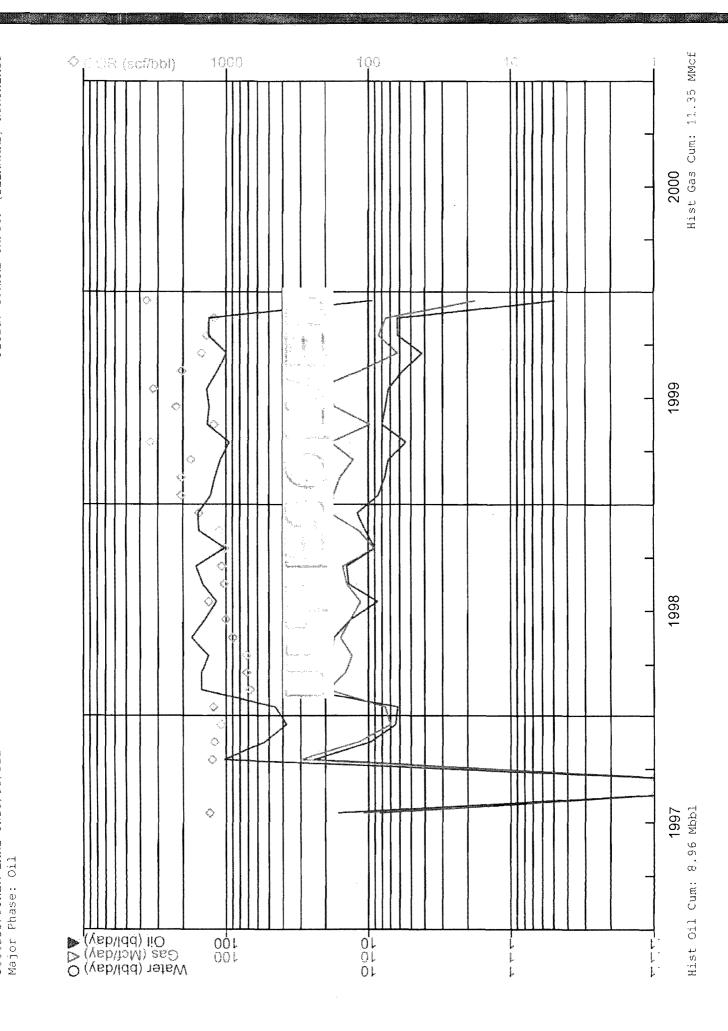
I:\WELLHISTORY\W30-015-29509.DOC KRA

Page 2

3/13/2007

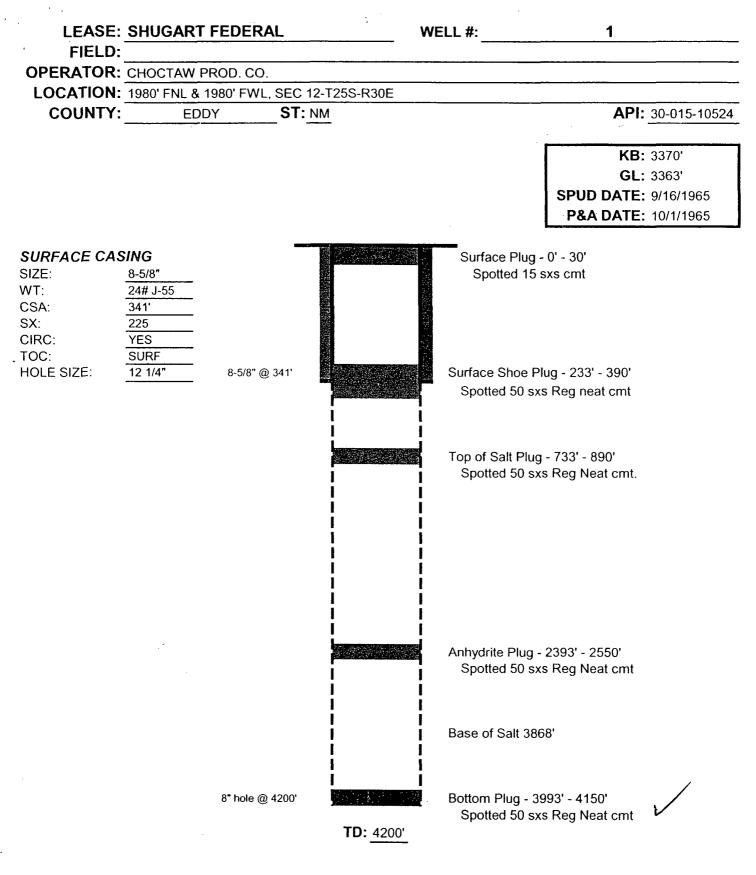
1000353/POKER LAKE UNIT/91/DEL Major Phase: Oil

Field: CORRAL CANYON (DELAWARE) NORTHEAST



ан Тал (1997) 24 - 59 - 1997 24 - 59 - 1997 24 - 59 - 1997 24 - 50 - 1997 24 - 50 - 1997 24 - 50 - 1997 25 - 1997 26 - 1997 26 - 1997 27 - 1997 26 - 1997 27 - 1997 27 - 1997 28 - 1997 28 - 1997 29 - 1997 20 - 1997	Marth (19 4 )1316 (1912) Pitchardine (19 4 )1316 (1912) Pitchardine (19 4 )1316 (1912) Pitchard (19 4 )1316 (1912) Bass Ent (10 0 0	ويندخله للإ أراكه وسريشيا	XTO E X80 0503 X80 X80 X80 X80 X10 X10 X10 X10 X10 X10 X10 X10 X10 X1	(, (Amoa) (	618 Sinks Joi Venture 61-1 Venture 61-1 16348
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н на сооза н но	Devon File Devon Devon Bile Covor	ier -	n Oils, etal 1480 177	srei o.c. Ны осса – – – 20 – – – – 1 5-1-7 1 5-1-7 1 0:57756 1 0:57756	552140 3-5-61(2) 552140
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M 1915 M 1915	Rain Julia 2013 Richer Glandolla 1943 R. R. Basta R. Bast	Refords and Dis, et al HBU Dosess M Torvon Ener- M 1 11115 M 1 1115 M 1 115 M 1 1	R:	r 2 - 1 - 61(4) 2 - 1 - 61(4) 6 - 19	л SRBIOEG Н 8 U 9 в 1 в 3 в
					17.94 17.14
Bass Ent. 6"19 - 1051) Prov. Lt Bass Ent. 6"19 - 1051) Prov. Lt Bass Entrange After Lt. 613 15 - 138 15 - 138 1		Parting Control Contro	Richergian Ois, etal 1990 194455 13 1 8 J. Kerr 1 80130 1 0 2 2 0 1 0 0 0 0	24	5481 0.64 P.R.B.065 2 + 5421 069079
35	tria fraid facto for a transformer Fortsonfore the transformer tra		Victoridae Oil 2-1-1010 142-5 Algrow 14 Algrow 14 2-1- Algrow 14 2-1- Algrow 14 14 1- 14 14 14 14 14 14 14 14 14 14 14 14 14	Richardion Gl 2.1 (11 01213 NAP NIDLAND RL.Martine, 11 2.1 (10 1 2.1 (10) 1 2.1 (1	Richardsan Oil A E F 063819
НВИ Н НВИ 0:2462 1 0:10413 КАЙ ОНА НВИ 1 0:1143 0:1145	POKER Late U	(1581) OEGS (1581) OEGS Bess Err Bess Err Bess Err Bess Frank (1583) (1	10 - 61 - 61 - 61 - 61 - 61 - 61 - 61 -	Richardwn Oll 10115 10115 10117 1	R.(chardson (G) 4.8 h 1.0 1.5 h 0.65875 1.0 1.0 1 0.65875 Alama
и на предесси и на предеси и		(Thru Line OEG) (Thru Line OEG) Lever 45 Lever 45 Lever 9 1 an 9 Torbiom Torbiom	16 16 16 16 16 16 16 16 16 16 16 16 16 1	Richarda Nar Anno Bisars Anno Bisars Anno Parisas Primiran Billar Second 1 Mill	Richardhan Oil 6 6 - (2) 0 5 0 3

## **CURRENT WELLBORE DIAGRAM**



UPDATED:	4/8/2010
AUTHOR:	crm
ENGINEER:	CCC

## CURRENT WELLBORE DIAGRAM

	J. F. HARRISON I	FEDERAL Well No.	:		1		
	660' FNL & 660' FWL, S	FC 12 T-25-S R30F					
		St: <u>NM</u>	<u> </u>			API: <u>3</u>	0-015-04749
						KB: 3 GL: Spud Date: 7 mpl. Date: 1	/22/1952
Surface Csg. Size: Wt Grd. Set @: Sxs cmt: Circ:	13-3/8" 61 & 72 J-55 3971' 6450 SX		- Mud lader		/9" Ccc/	X: Y: Lat: ° Long: °	
TOC:	Surface		, 3971'	13-3/8"	Csg		
Hole Size:						201	-
<i>Intermediate</i> Size: Wt	<u>9-5/8"</u> 40 & 42			w5	108	3105'	
Grd Set @:	10,073'		563	867	ale	3PST WAB	
Sxs Cmt: Circ: TOC:	2540 sx		6153-	73 Pe	sf 13		
Hole Size:			7,250	Perf & Sqz			
Production C Size:	Csg. 7"		1,200	i ch a oqi	-		
Wt Grd	32		8,450	Perf & Sqz	<u>r</u>		
Set @:	16,626		9,560'	BP w/ 2 s>	cmt		
Stage 1:	1975 sx		9,850	7"	Top of	Liner	
Circ: Stage 2:		<u>N</u> 1	10,025' 10,073'	9-5/8"	Csg		
Circ: TOC: Hole Size: <i>Tubing</i>			11,930' 12,112' 12,220-40' 12,250-80' 12,315-30' 12,360	Perfs			
			16,282' 16,626 16,705'	Cmt plug/ 7"	75 sx Csg		
		PBTD:12,343				Updated:	2/24/2010
		TD: 16,705				Author:	ezg
		TD:				Engr:	CC

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ARTESI	A OFFICE COPY	Budget Bureau 42-R358. Approval expires 12-81-5
(Fub 1051)		Land Office Las Cruces
1954	(SUBMIT IN TRIPLICATE)	Land Office Las 014005
NAY 24 10	UNITED STATES	Unit Poker Lake
ETJ DISTRICT ENUS	GEOLOGICAL SURVEY	
4	TICES AND REPORTS OF	
NOTICE OF INTENTION TO DRILL.	SUBSEQUENT REPORT OF WATER	
NOTICE OF INTENTION TO TEST WATER SHUT	i i	1
<b>\$</b>	AIR WELL SUBSEQUENT REPORT OF REDRI	
	SUBSEQUENT REPORT OF ABANE ASING	
NOTICE OF INTENTION TO ABANDON WELL.	<b>X</b> <sup>1</sup>	
	BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHE	P. DATA)
W/4, Section 12 T- (Is see, and Sec. No.) "Wildcat" (Field) The elevation of the derrick floor	Eddy (( ounty or Subdivision,	New Maxi co (State or Territory)
	DETAILS OF WORK	
20" casing set @ 557'; 13-3/ 7" casing set @ 9850' to 16, Nell drilled to a total dept Set cast iron bridge plug in at 7560' and dumped 2 sacks 9-5/8" casing have been sque	th of 16,705' - Plugged tack to of cement on type. All testing sezed off w/cement. After pulli ll be spotted in the top of 9-5	asing set @ 10,073'; 16,282' w/75 sacks ca " magnesium bridge pl perforations in 7" and ng the 9-5/8" casing
38001 100 sacks of coment wi	be placed in the 13-3/8" casing	at the surface.
3800); 100 sacks of cement wi Iwenty sacks of cement will	be placed in the 13-3/8" casing	at the surface.
3800', 100 sacks of cement wi Fwenty sacks of cement will	be placed in the 13-3/8" casing	at the surface.
3800), 100 sacks of coment wi Fwenty sacks of coment will Between the plugs is mud lad	be placed in the 13-3/8" casing	at the surface. 
380X); 100 sacks of coment wi Iwenty sacks of coment will Between the plugs is mud lad	be placed in the 13-3/8" casing	at the surface. 

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Title Assistant Division Manager

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دین ۲۰۰۰ ۲ ٠

	Concept Inform					
State	General Inform			Final Status		
County	: EDDY			Final Status	:	D&A-OG
Field	: EDDY : EDDY			Drill Total Depth	:	16705
Operator Name	: RICHARDSON	P. DACC		Log Total Depth	. 4L	
Lease Name	: JF HARRISON			True Vertical Dep	om :	
Well Number		FEDERAL		Caud Data		UU 24 1052
API Number	-	0		Spud Date	:	JUL 24, 1952
Regulatory API	: 3001504749000	0		Comp Date	:	MAY 22, 1954
Init Lahee Class	· : WF			II-l- D'		
Final Lahee Class	: WF : WF			Hole Direction	:	VERTICAL
Permit Number	. Wr			Reference Elevati Ground Elevation		3378 DF
Geologic Province	· · PERMIAN BA	21NI		KB Elevation		
Formation at TD	: 000UNKWN			KD Elevation	•	
Oldest Age Pen	: 309	UNKN		DIFFERENTIATE	n	
Township	: 25 S	DEVO	INIAN UN	Section		12 850
Range	: 30 E			Spot		12 SEC
Base Meridian	: NEW MEXICO			Spor	:	
Dase menutan	. NEW MEATCC					
	Additional Loc	ation Inform	ation			
Footage Location	: 660 FNL 6	50 FWL CO	ONGRESS	SECTION		
Latitude	: 32.1503700			Latitude (Bot)	:	
Longitude	: -103.8404200			Longitude (Bot)	:	
Lat./Long. Source	: TS					
	Production Te	sts				
Тор	Base Top			Oil	Prod	Test
Test Form	Form Dept		Choke	GOR Grav	Method	Method
001	12320		0110110	0.011 0101	PERF	FLOWING
002	12220		40/64		PERF	FLOWING
003	12220				PERF	FLOWING
004	12320		32/64		PERF	FLOWING
005	12320		64/64		PERF	GAS LIFT
006	9380				PERF	SWABBING
007	9380	9400			PERF	SWABBING
008	9423	9430			PERF	SWABBING
009	9460	9530			PERF	SWABBING
010	7652	2 7662			PERF	SWABBING
011	7652	2 7662			PERF	SWABBING
012	7665	7670			PERF	SWABBING
013	7665				PERF	SWABBING
014	7663				PERF	SWABBING
015	7665				PERF	SWABBING
016	7710				PERF	SWABBING
017	6153				PERF	SWABBING
018	6435	6595			PERF	UNDESIGNATED
019						UNDESIGNATED
020	6435				PERF	SWABBING
021	6530				PERF	SWABBING
022	6435	6515			PERF	SWABBING
	Production Shutoff					
Shutoff Test Tumo	Top Base P	-				
Test Type 002 UNDG	Depth Depth	Depth				
		12345		·		
003 UNDG		12345				

.

004	UNDG				123	45					
005	UNDG				123						
006	UNDG					60					
008	UNDG					60					
010	UNDG					75					
011	UNDG					575					
012	UNDG					575					
013	UNDG					75					
014	UNDG					75					
014	UNDG					75					
016											
	UNDG					75					
017	UNDG					30					
020	UNDG					66					
021	UNDG					66					
022	UNDG		<b>n</b> 1			23					
		0.11	Produc	tion Volun							
æ		Oil	~		Cond			Gas		Wtr	
Test	Amount	Unit	Desc	Amount	Unit	Desc	Amount	Unit Desc	Amount	Unit	Desc
001	5	BBL					750	MCFD			
002							125	MCFD			
003	15	BBL									
004	14	BBL					75	MCFD			
005	5	BBL					24	MCFD			
006											
007											
008											
009											
010											
011											
012									25	BBL	
013										~~	
014											
015											
016											
017									165	BBL	
018									105	DDL	
019							•				
020											
021											
022											
_			Produc	tion Pressu	ire						
Test	FTP	SIT		FCP	SICP						
001			-								
002											
003											
004	350										
004	550										
012											
012											
020											
021											
022											

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			Produ	ction Bottom Ho	le								
Test	Pre	ess	Temp	Depth	Time								
020			· ·	1									
021	•												
			Prod	uction Treatmen	t								
Test	Тор	Base		Meas Amount	T/P	PSI	Inj	Туре	Nbr	Agent	Add		
002	12320		1600	GAL			5	FRAC		SAND			
002	12320		1000	GAL				ACID					
007	9380		2000	GAL				FRAC					
009	9460		6000	GAL				FRAC					
011	7652		5000	GAL				FRAC					
013	7665	7670	3000	GAL				FRAC		SAND			
013	7665		3000	GAL				FRAC		SAND			
015	7665		1000	GAL				ACID					
016	7710		3000	GAL				FRAC					
016	7710		5000	GAL				FRAC					
019	7710		3000	GAL				FRAC					
022	6435		1000	GAL				FRAC					
022	0.55	0515		ction Perforation	,								
Test	Тор	Base	Туре	Method	Top F	orm	Base	Form	Status	Coun	t	Density	Per
001	12320		. ) ף•	PERF	1001		13 40 4		C	coun	•	Bonony	
002	12220			PERF					C				
002	12250			PERF					Č				
002	12315			PERF					č				
003	12220			PERF					U				
005	12320			PERF									
005	12320	12335		PERF									
006	9380			PERF									
006	9380			PERF									
007	9380			PERF									
008	9425	9430		PERF					С				
009	9460			PERF					C				
010	7652	7662		PERF					C				
011	7652	7662		PERF					C				
012	7665	7670		PERF					С				
013	7665	7670		PERF					U				
014	7665	7670		PERF									
015	7665	7670		PERF									
016	7710	7716		PERF					С				
017	6153	6173		PERF					Č				
018	6435	6490		PERF					č				
018	6500	6515		PERF					Ĉ				
018	6530	6560		PERF					Ċ				
018	6575	6595		PERF					C				
			Fe	ormations									
							Тор	T (	`op	Base	Bas	se	
Form C	ode	Form Nan	ne				Depth			Depth	TV	D Source	e Lithology
453DLI	LM	BLACK L	IME /DE	LAWARE LM/			4060	)				LOG	•
453DL	WR	DELAWA	ARE				4090	1				LOG	
452BSF	PG 1	BONE SP	RING				7880	)				LOG	
409PSL	V I	PENNSY	LVANIAI	N			13720	)				LOG	
359MS	SP 1	MISSISSI	PPIAN				15885					LOG	

,

359MPL	.M M	ISSISSIPPIA	N LM		16075	5		LOG
319WDF	FSH W	OODFORD	/SH/		16475	5		LOG
309DVN	JN D	EVONIAN	~ ~ ~		16622	2		LOG
			Core Data		-			
Formatio	on	Top Depth	Base Depth	Recovered	Туре	Show		
		5677	5687	10 FT	CONV			
		5688	5708	20 FT	CONV	WET		
		6163	6212	30 FT	CONV			
		6305	6325	14 FT	CONV			
		6327	6347	20 FT	CONV			
		6395	6401	6 FT	CONV	OIL		
		6745	6753	8.5 FT	CONV			
		7069	7094	25 FT	CONV			
		7253	7265	12 FT	CONV			
		7265	7268	3 FT	CONV	FLRN		
		7268	7274	6 FT	CONV	FLRN		
		7274	7278	4 FT	CONV			
		7299	7349	50 FT	CONV			
		7423	7448	19 FT	CONV	FLRN		
		7474	7499	25 FT	CONV			
		7499	7520	21 FT	CONV			
		7560	7586	26 FT	CONV	FLRN		
		7673	7698	25 FT	CONV			
		7698	7723	25 FT	CONV			
		7723	7727	4 FT	CONV			
		7727	7738	11 FT	CONV			
		7754	7766	12 FT	CONV			
		7767	7773	6.5 FT	CONV	FIRN		
		8120	8140	20 FT	CONV			
		8893	8918	20 FT 21 FT	CONV			
		9139	9153	12 FT	CONV	GAS		
		9155	9167	12 FT	CONV	UNS		
		9172	9180	0 FT	CONV			
		9172	9205	25 FT	CONV			
		9206	9203	1.5 FT	CONV			
		9200	9208	5 FT	CONV			
		9211	9210	5 1 1	CONV			
			Formation '	Tests				
		T	Daat T		- n			
π.	<b>TP</b>	Тор		op To	-			
Test	Туре	Depth	•	orm Chok	<u>e</u> Cho	ke Show		7
001	DST	5638	5708					<u>,</u>
002	DST	6150	6212					C
003	DST	6225	6327					
004	DST	6379	6401					
005	DST	7212	7299					
006	DST	7428	7520					
007	DST	7544	7586					
008	DST	7644	7673					
009	DST	7669	7723					
			essure and Tin					
		Hydro	Init Flow	Final Flow		Shut-in	Open Time	Shut-in Time
Test	Init	Final	Init Final	Init Final	Init	Final	Init Final	Init Final
					4 of 5			

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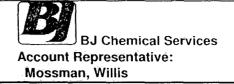
# PI/Dwights PLUS on CD Well Summary Report

001	70	118	308	120	15
002	40	315	1885	180	30
003	260	650	1375	120	30
004	435	2660		240	
005	30	130	1380	270	30
006	880	1760	0	42	
007	95	130	225	60	15
008	590	1035	2400	60	
009	65	195	360	240	

007					0	5	1)5	500	2
			Pipe	Recovery					
Test	Amount	Unit	Desc	Rec Type	Rec M	lethod			
001	125	FT	М		PIPE				
001		FT	O&GC	M	PIPE				
002	105		М		PIPE				
002	180		SOGC	KWB	PIPE				
002	90	FT	SMCX	W	PIPE				
002	180		XW		PIPE				
003	480		Μ		PIPE				
003	180		GCM		PIPE				
003	270		HGCM		PIPE				
003	450		HO&G	СМ	PIPE				
004			Μ		PIPE				
004			SGCM		PIPE				
004	3640		GCMC		PIPE				
005	96	FT	SO&G	СМ	PIPE				
005		FT	GCM		PIPE				
005		FT	GXWC	СM	PIPE				
005	45	FT	GCM		PIPE				
006			SGCM		PIPE				
007	265	FT	VSO&	GCM	PIPE				
008	450		М		PIPE				
008			GCOC		PIPE				
008	630		HGOC		PIPE				
008	270		SXWC		PIPE				
009		FT	SGOCI		PIPE				
009	174		HO&G		PIPE				
009	174	FT	GOCX	W	PIPE				
				Casing Da	ta				
	Size	Base	Depth	Cement					
	20 IN		557		SACK				
	13 3/8 IN		3971	4979	SACK				
	9 5/8 IN		10076	2711	SACK				
				Liner Dat:	1				
	Size	Туре		Cement		Top I	Depth	Base Depth	
	7 IN	-78-			SACK		9850	16626	
	•								

Analytical Laboratory Report for:

## **BOPCO LP**



# **Production Water Analysis**

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

Lab Test No: Specific Gravity:	2010120071 1.002	Sample I	Date:	04/22/2010
TDS: pH:	730 7.60			
Cations:		mg/L	as:	
Calcium	ι.	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⁺) ́	
Barium		0.46	(Ba <sup>⁺⁺</sup> )	
Strontium		1.31	(Sr <sup>++</sup> )	
Manganese		0.03	(Mn <sup>⁺⁺</sup> )	
Anions:	- <u>in</u>	mg/L	as:	
Bicarbonate		146	(HCO <sub>3</sub> )	
Sulfate		240	(SO, ¯)	
Chloride		120	(CI)	
Gases:			()	
Carbon Dioxide		50	(CO <sub>2</sub> )	
Hydrogen Sulfide	2	17	(H <sub>2</sub> S)	

## **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.

Analytical Laboratory Report for:

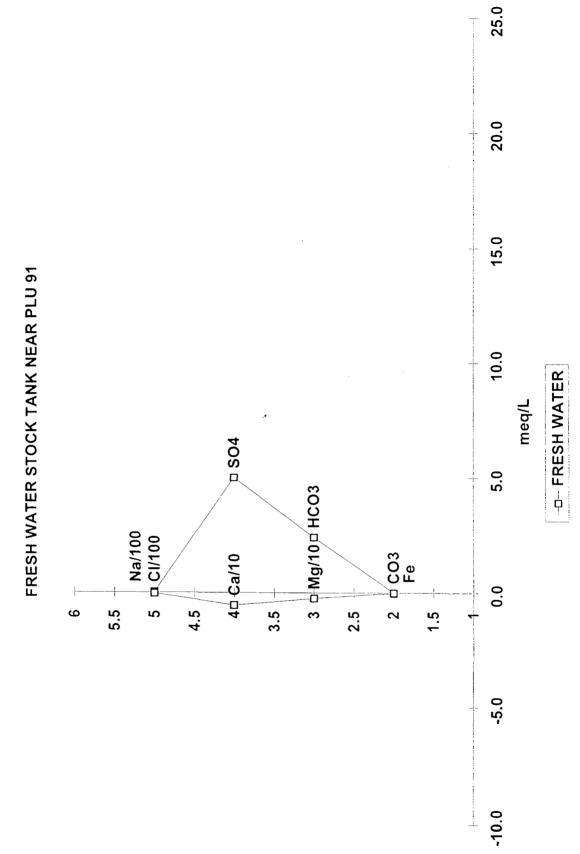
## **BOPCO LP**

BJ Chemical Services Account Representative: Mossman, Willis

# **Production Water Analysis**

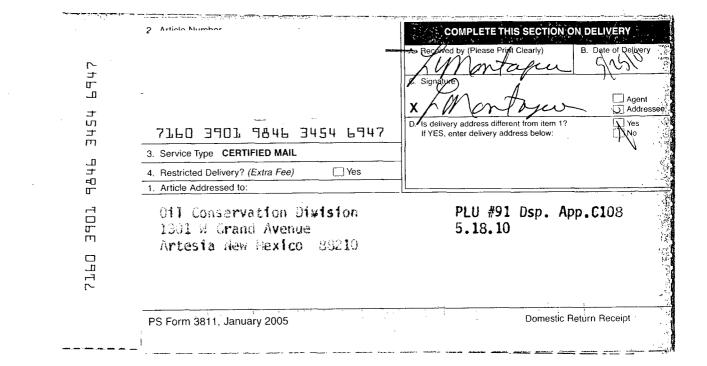
Listed below please find water analysis report from: POKER LAKE UNIT, Fresh Water Well 91

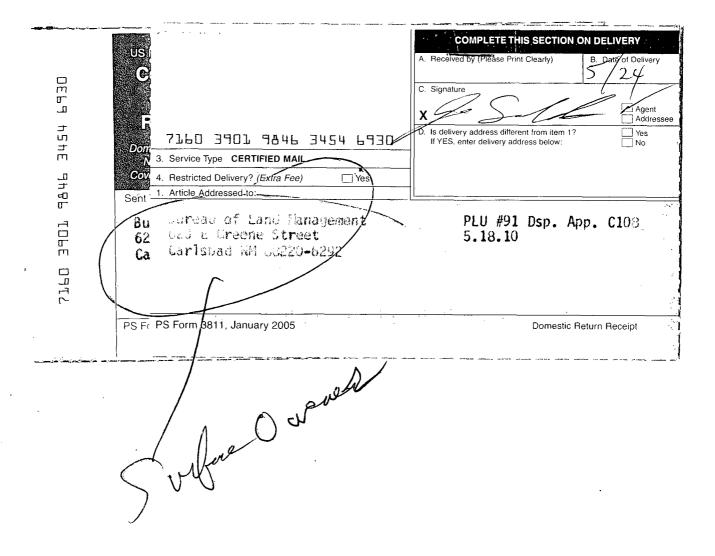
Lab Test No: Specific Gravity:	2010120071 1.002	Sample E	Date:	04/22/2010
TDS: pH:	730 7.60			
Cations:		mg/L	as:	
Calcium Magnesium Sodium Iron		109 29.00 78 0.50	(Ca <sup>**</sup> ) (Mg <sup>***)</sup> (Na <sup>*</sup> )	
Potassium Barium Strontium Manganese Anions:		5.0 0.46 1.31 0.03 mg/L	(Fe <sup>++</sup> ) (K <sup>+</sup> ) (Ba <sup>++</sup> ) (Sr <sup>++</sup> ) (Mn <sup>++</sup> ) as:	
Bicarbonate Sulfate Chloride Gases:		146 240 120	(HCO₃) (SO₄) (CI)	
Carbon Dioxide Hydrogen Sulfide	;	50 17	(CO <sub>2</sub> ) (H <sub>2</sub> S)	



4/22/2010

US Postal Service s Postage Certified ហ ហ Certified Fee Mall -0 Ĵ Return Receipt Fee (Endorsement Required) Receipt ា ហ Postmark Here Restricted Delivery Fee (Endorsement Required) т н Domestic Mail Only No Insurance Coverage Provided 94 G \$ **Total Postage & Fees** Sent To: TOLE PLU #91 Newspaper Noti Carlsbad Current Argus 4.7.10 ATTIN: KATITY KOCADECEL P 0 Dox 1028 7160 Carlsbad NM 88220 PS Form 3800. January 2005 US Postal Service **Certified Mail Receipt** 2 COMPLETE THIS SECTION ON DELIVERY 2 Received by (Please Print Clearly) B. Date of Delivery Signatur Ċ. Agent ] Addressee Đ. delivery ent fr 7160 3901 9846 3454 6855 If YES, ente address 3. Service Type CERTIFIED MAIL 4. Restricted Delivery? (Extra Fee) 🗌 Yes 1. Article Addressed to: PLU #91 Newspaper brice omlated Carrot mays 4.7.10 مستغرف ومدين المرسلية والمراد والمراد and and -PO Form 3811, January 2005 Domestic Return Receipt £7.3





## 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. newspaper 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 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:



April 14

2010

That the cost of publication is \$62.01 and that payment thereof has been made and will be assessed as court costs.

el

Subscribed and sworn to before me this

day of

My commission Expires on

Notary Public



RECEIVED APR 30 2010 BOPCO WTD PRODUCTION

PLU == 91 <u>Dap Permit App 8-17-10</u> W; N; idere is a copy of the newspaper dipping, la miler 2 mile plat. Weare in the process of gretting the loyr production tolg. Please let me know if I need to provide more documents. Thanks for your help. Dandia Belt 

Subscribed and sworn to before me this

ay of Upr. SNO My commission Expires on 125 DU14

Notary Public

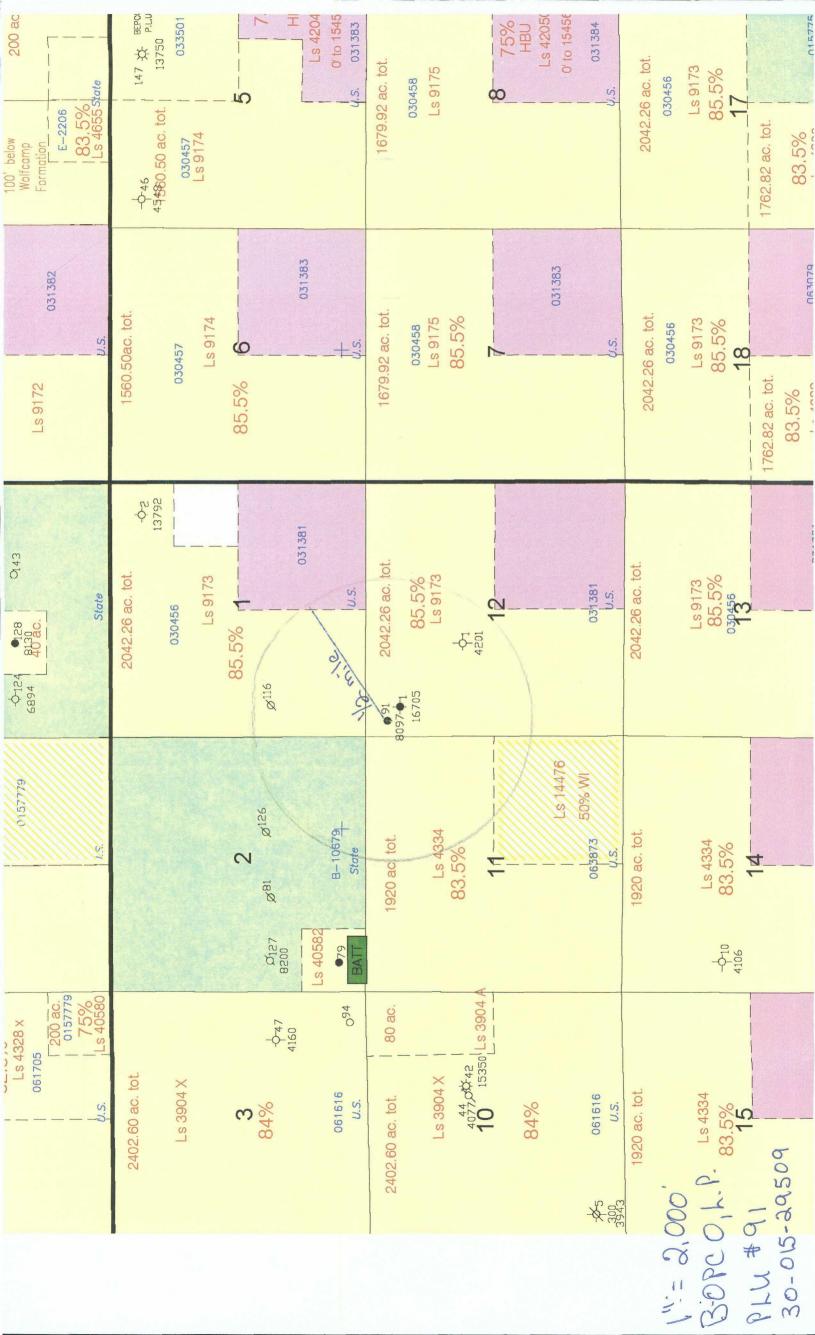
OFFICIAL SEAL STEPHAME DOBSON Notary Public State of New Mexic, Comm, Expires



# RECEIVED

APR 30 2010

BOPCO WID PRODUCTION



## Jones, William V., EMNRD

From: Sent:	Belt, Sandra J. [SJBelt@BassPet.Com] Thursday, August 26, 2010 4:28 PM
To:	Jones, William V., EMNRD
Subject:	PLU 91 Disposal Permit; Missing Documents
Attachments:	PLU 91 Missing Documents Newsp Article Plat Production History.pdf

Good afternoon Will – here are copies of the missing documents. You should already have the plats and newspaper article, but if not I have attached. Also, Carlos gave me the production curve or whatever it is called. Please let me know if I need to submit anything further. I thank you for your time and help. Have a good one.

Sandra J. Belt

Regulatory Clerk

BOPCO, L.P.

P O Box 2760

Midland Tx 79702-2760

432.686.2999 ext. 149

432.687.0329 (F)

sjbelt@basspet.com

## Jones, William V., EMNRD

From: Sent:	Belt, Sandra J. [SJBelt@BassPet.Com] Tuesday, September 14, 2010 12:03 PM
To:	Jones, William V., EMNRD
Cc:	Cruz, Carlos
Subject:	RE: Disposal application from BOPCO, LP: PLU #91 30-015-29509

Will do Will. There is someone in Ft. Worth working on it now and will let me know so that I can send out the waiver letters. Thanks and will be getting back w/u. Have a good one.

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, September 14, 2010 12:16 PM
To: Jones, William V., EMNRD; Belt, Sandra J.
Subject: RE: Disposal application from BOPCO, LP: PLU #91 30-015-29509

Sandra:

Two of your BOPCO Landman's were here today concerning another project and I asked them about your land map. They pointed out that the Section 1 and Section 2 areas referenced below are currently owned by different oil companies.

Please let me know your progress in obtaining waivers or providing notice to these two companies.

Regards,

Will Jones New Mexico Oil Conservation Division Images Contacts

From: Jones, William V., EMNRD
Sent: Tuesday, September 14, 2010 8:14 AM
To: 'sjbelt@basspet.com'
Subject: Disposal application from BOPCO, LP: PLU #91 30-015-29509

Hello Sandra:

I have your permit ready but in your application it has no statements as to who controls the minerals in the Delaware all around this disposal well.

You did send a colored plat with ownership percentages on it. Some acreage has no percentages listed.

Are those ownership percentages on this map for BOPCO? Does Bass control the minerals in Section 2 to the NW? What about the SE/4 of Section 1?

William V Jones, P.E. Engineering, Oil Conservation Division 1220 South St. Francis Drive, Santa Fe, NM 87505 Tel 505.476.3448 ~ Fax 505.476.3462



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## Jones, William V., EMNRD

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From: Sent: To: Cc: Subject: Jones, William V., EMNRD Monday, December 13, 2010 3:13 PM 'Belt, Sandra J.' Cruz, Carlos RE: Disposal application from BOPCO, LP: PLU #91 30-015-29509

Hello Sandra:

Are you folks still interested in an SWD permit for this well?

Looks like the land folks never got back with you on the owners of the two tracts referenced below? All I am lacking to release this permit is proof of notice to the owners of those two tracts of land.

FYI: the permit would require:

- a. Run tie-in casing from surface to the 4170 feet cutoff point and circulate with cement.
- b. Squeeze cement to close the open annulus from 6065 feet to 6280 feet or otherwise show it is already squeezed.

Let me know.

Will Jones New Mexico Oil Conservation Division Images Contacts

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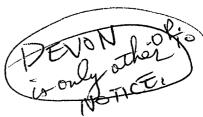
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## Jones, William V., EMNRD

From:	Jones, William V., EMNRD
Sent:	Thursday, December 23, 2010 11:23 AM
To:	'Belt, Sandra J.'
Cc:	Ezeanyim, Richard, EMNRD
Subject:	RE: Disposal application from BOPCO, LP: PLU #91 30-015-29509

Hello Sandra:

Please send the proof of notice (sending the C-108 application) to Devon for this well and I will schedule it for release.

Regards,

Will Jones New Mexico Oil Conservation Division Images Contacts

Robine 1/21/11

From: Jones, William V., EMNRD
Sent: Monday, December 13, 2010 3:13 PM
To: 'Belt, Sandra J.'
Cc: Cruz, Carlos
Subject: RE: Disposal application from BOPCO, LP: PLU #91 30-015-29509

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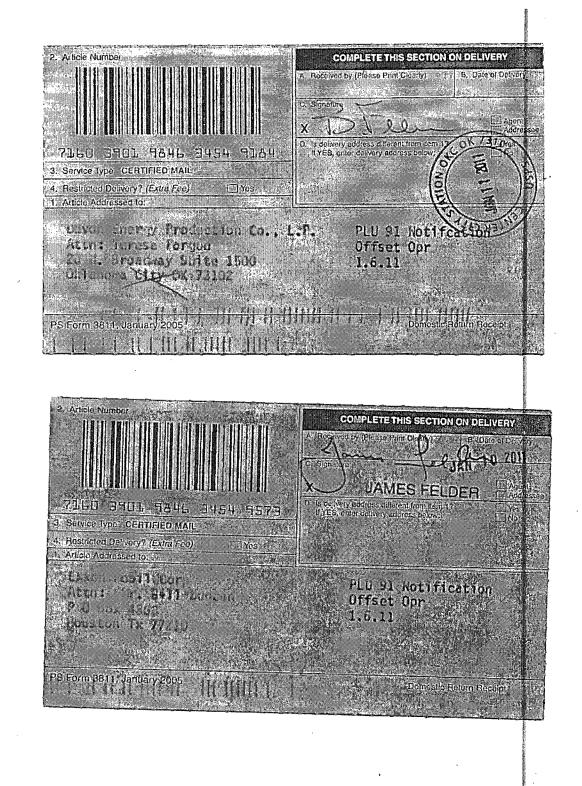
## Jones, William V., EMNRD

From: Sent: To: Subject: Attachments: Belt, Sandra J. [SJBelt@BassPet.Com] Monday, January 17, 2011 7:56 AM Jones, William V., EMNRD PLU #91; Certification Notification/Signed & Received Offset Certification Notification.pdf

Good morning Will – attached please find where the documents were received for Devon and Exxon. U have a good day, and a set of the set of the

Sandra J. Belt

Regulatory Clerk BOPCO, L.P. P O Box 2760 Midland Tx 79702-2760 432.686.2999 ext. 149 432.687.0329 (F) sjbelt@basspet.com



		134	14 1/2	27/7=	TF	-KY)	
	Injection Permit Checkli	1 12 100	Permit Date		IL AS		
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	1		ed BASIN				
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	Well File Reviewed Currer	it Status: PEA					
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	Notice: Newspaper Date	20 OSurface Owner	bun	<u> </u>	Mineral Owner(s)		
	RULE 26.7(A) Affected Person		<u> </u>				
•	AOR: Maps? Well List?	Producing in Interval	? NOWellbore Diagr	ams?			
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		hirs? Which Wells?	_Ku (ie)	r CSG	/CIRC. Gen	he r	
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	9/13/2010/3:25 PM	v	Page 1 of 1			SWD_Checklist.xls/Li	st