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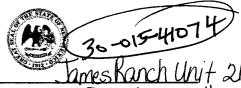
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ABOVE THIS LINE FOR DIVISION USE ONLY

#### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



## ADMINISTRATIVE APPLICATION CHECKLIST Federal SWD

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE **Application Acronyms:** [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response] [1] **TYPE OF APPLICATION -** Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication  $\square$  NSL  $\square$  NSP  $\square$  SD Check One Only for [B] or [C] Commingling - Storage - Measurement [B]  $\square$  DHC  $\square$  CTB  $\square$  PLC  $\square$  PC  $\square$  OLS  $\square$  OLM [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery ☐ WFX ☐ PMX 🔀 SWD ☐ IPI ☐ EOR ☐ PPR [D] Other: Specify NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply [2] [A] Working, Royalty or Overriding Royalty Interest Owners [B] Offset Operators, Leaseholders or Surface Owner [C] Application is One Which Requires Published Legal Notice [D] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office For all of the above, Proof of Notification or Publication is Attached, and/or, [E] [F] Waivers are Attached [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE. **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative **[4]** 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.

#### BOPCO, L. P.

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

(432) 683-2277

FAX (432) 687-0329

January 30, 2013

Re:

Notice of Application for Authorization to Complete this well as a SWD Well James Ranch Unit 21 Federal SWD #1 Eddy County, New Mexico

File: 100-WF: JRU21FedSWD1.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 James Ranch Unit 21 Federal SWD #1 located in Section 21, T22S, 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 Carlsbad office via Certified Mail, Cert #7160-3901-9846-4644-8017. Please find a copy of the notice attached. I will provide a copy of the signed receipt card when it returns. In addition, Conoco Phillips has working interest in this well. A letter of notification has been sent and a copy is attached.

Once we receive the newspaper ad and affidavit of publication from Carlsbad Current Argus, I will send you a copy. If additional information is required, please contact Emma Z. Galindo at the letterhead address, phone number or via email at <a href="mailto:expailt

Sincerely,

Emma Z. Galindo Engineering Assistant

ezg 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

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: Emma Z. Galindo PHONE: (432)683-2277
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed 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 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 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 sources 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: Emma Z. Galindo TITLE: Engineering Assistant
	SIGNATURE:
*	E-MAIL ADDRESS: ezgalindo@basspet.com  If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.  Please show the date and circumstances 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 the 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, New Mexico 87505, within 15 days.

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

# III. Well Data

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James Ranch Unit 21 Federal SWD 1451' FNL & 1861' FEL 21 T22S 1) Lease name: Township: Footage: Section: Range: Well #:

2) Casing Info:

Casing size	Set depth Sacks cmt Hole size	Sacks cmt	Hole size	<b>TOC</b>	Method
30", 157.68#, X52, PE	120		36"	Surface	Circulated
20, 133#, J-55, BTC	546'	1,126	.97	Surface	Circulated
13-3/8", 68#, HCN-80, BTC	3556'	2,785	17-1/2"	Surface	Circulated
9-5/8", 53.50#, L-80, LT&C	7500,	965	12-1/4"		
9-5/8", 53.50#, HCL-80, LT&C **	11,000'	2,260	12-1/4"	Surface	Circulated
7-5/8", 39#, P-110, Ultra FJ	10,800'-14,000'	220	8-1/2"	TO T.O.L.	Circulated
7-5/8", 42.80#, P-110, Ultra FJ	14,000-15,321'		8-1/2"		
	15,321-16,801'		5-1/2"	Н	
**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 @15,271'. Name, model, and depth of packer to be used: 4-1/2" Baker FA Nickel Plated EXT/INT PC Pkr set @ 15,271.

1) Name of the injection formation and, if applicable, the field or pool name: Devonian

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2) The injection interval and whether it is perforated or open hole: Open hole from 15,321 - 16,801 O.H.

BOPCO will evaluate the open hole interval by mudlogging the well as well as running open hole logs as in the ND 19 SWD.

State if the well was drilled for injection or, if not, the original purpose of the well: Newly drilled well for injection. 3

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations: 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 - 7,383'

# 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 plugged well illustrating all plugging detail ⋚

There are no wells that penetrate the proposed injection zone.

VII. Attach data on the proposed operation, including:

30,000 average, 35,000 maximum BWPD 1. Proposed average and maximum daily rate and volume of fluids to be injected:

Whether the system is open or closed:

3,058 psi maximum, 2,500 psi average 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. Produce water will come from the Delaware formation.

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

and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, 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 Name: Devonian

Thickness: 1510'

Depth: 15,291 · 16,801

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:

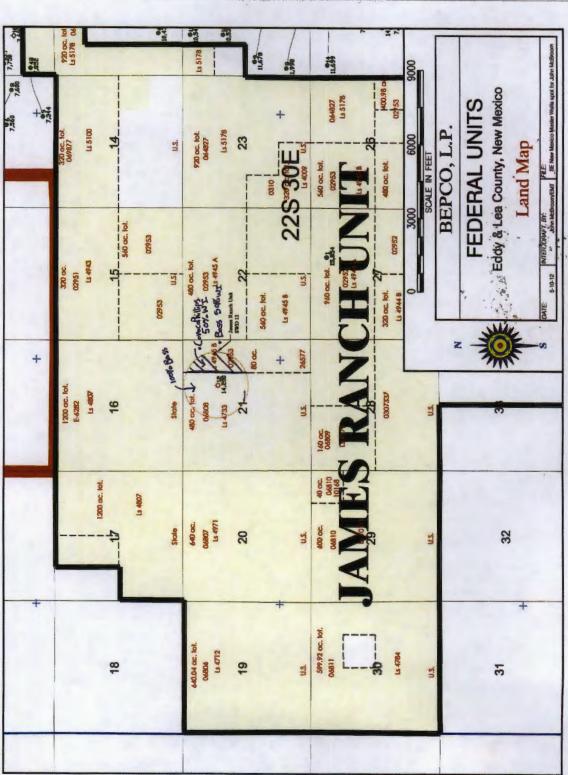
The open hole section from 15,321-16,801' will be acidized with approximately 50 gallons 15% NEFE HCI per foot for a total of 74,000 gallons.

- 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 ×
- 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 ᆽ

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

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.



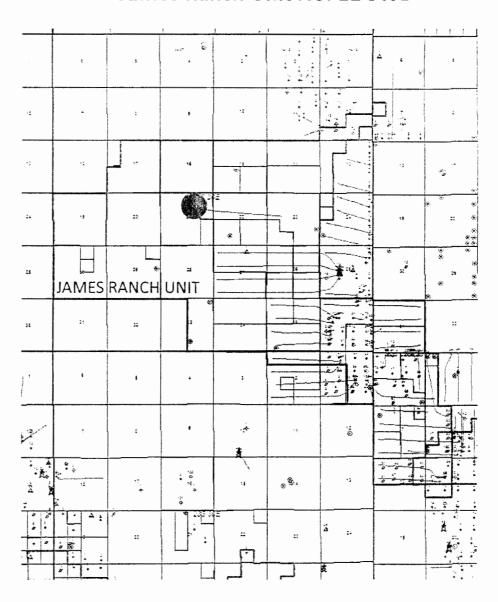
F.\DRAFING\WID\AMA\Federal Units\WORK MAPS\\_SF New Marko Master Wells spot for John McBroom.dwg, 8.5x11 Well half mile hounday. 1-12, 5/10/2012 11:18:30 AM. eleddy

#### PROPOSED WELLBORE DIAGRAM

Well No.: Lease: James Ranch Unit 21 SWD Injection Reservior: Devonian Location: 1451' FNL & 1861' FEL S21-T22S-R30E API: 30-015-County: EDDY St: NM Elevation GL: Elevation KB: Surface Csg. 20" Spud: Size: Completed Wt 133# J-55, BTC Grd Set @: 546 Sxs cmt: 1126 TOC: Surface Hole Size: 26" 20" @ 546' Intermediate Csg. Size: 13 3/8' 68# Wt Grd HCN-80, BTC Set @: 3556' Sxs Cmt: 2785 TOC: Surface 17 1/2' Hole Size: Production Csg. 13 3/8" @ 3556' 9 5/8" Size: 53.5# Wt Grd L-80, LT&C 11000 Set @: DV Tool @ 5500' Sxs Cmt: 3225 Surface TOC: 4 1/2" Injection tubing Hole Size: 12 1/4" Liner Size: 7 5/8" 39# Wt Grd P-110 FJ 10,800 - 15,321' Set @: Sxs Cmt: 570 10,800 TOC: 8 1/2" Hole Size: Open Hole 6 1/2" Size: 15321' - 16,801' Depth: Tubing TOC 10,800' for 7 5/8" Liner 4 1/2" IPC Size: 9 5/8" @ 11,000' 12.75# Wt L-80, RTS-8 Grd 15,271 Set @: Proposed Injection Interval 15,291' - 16,801' Injection packer @ 15,271' 7 5/8" @ 15,321' 6 1/2" OH Updated: 1/22/2013 Author: ezg TD: 16,801 Engr: CCC

	WES	STITE	XAS DIV	ISION		Issu	Date:		4/23/2012
FIELD OR PROSPECT		WE	LL NAME			WELL NO.	API CLASS	EXPIDEV	EST, W.I E
James Ranch	Jam	es Ra	nch Uni	t SWD		12	1	SWD	1 00
	LOCATION				COUNTY	STATE		PRIMARY	OBJECTIVE
Surface: (13	371' FNL 8 1821' FEL	Sec. 2	1. T22\$-R3	BOE	Eddy	NM		Dev	onian
Bottom Hole:					Latera	l Length:			
TOTAL DEPTH	1				RILLING TA	RGETS			
MD: 16,800'	Target 1:							TVD:	***
TVD:	Target 2:							TVD:	
	:GT							TVD:	
Pilot Hole Y/N NA	Pilot Hole Dep				Latera	I Drilling D			
	ELEVATIONS	GL:	3.164	KB:	3.190	Operator	S GEOLOGIC	BOF	ELATION WELL
FORMATION / MARKER				-		Well	Jan		h Unit No. 12
	<u>E</u>	STIMA	ED DEPTI	<u> </u>		KB:		3,1	
	GM		rvo	SUE	SEA	SUB	SEA		tual from Log
Rustler	190			3.0	00.	3.0			180
Salado	555'			<del></del>	35	2.6			545
Lamar	3,535		*****	-3	45'	-34	<del></del>		3.525'
Delaware Sands	3,580			-3	30.	-39	90.		3.570*
Sone Spring	7,383			-4,	93.	4.1	93'		7,373'
Wolfcamp	10.692'			-7,5	02'	-7,5	02.		10,682
Middle Wolfcamp	11,350			-8.	60,	-6.1	60,		11,340
Strawn	12.282			-9.0	92'	-9.0	92'		12.272
Atoka	12.394'		~	-9.2	104'	-9.2	04'		12.384
Morrow	13,253			-10.	063	-10.0	063.		13.243
Middle Morrow	13.519			-10.	329'	-10.3	329'		13.509
Lower Morrow	13.914			-10,	724'	-10.	'24'		13,904"
Mississippian Lime	14,661'			-11,	471	-11.	511'		14,920
Woodford	15.121'			-11,	931'	-12.	071'		15.360
Devonian	15,290			-12.	100'	-12,	240'		15,549" **
TD	16,800			-13,	310'				
RESERV	OIR OBJECTIVES			PRIM	ARY	SECON	DARY		DEPTH
	Devonian			>				15,2	<b>290' -</b> 16.800'
			GNIFICAN	T OFFSET	WELLS				
		Si							6011/27
OPERATOR	WELL NAME	SI	WELL NO.	1 01 1 02 1		LOCATION			COUNTY : S'
OPERATOR BOPCO	WELL NAME James Ranch U				0" FNL & 1.		21, T22S-R30	E	Eddy
			WELL NO.	1,45	-			E	
BOPCO BOPCO TARG	James Ranch U	nit	WELL NO.	1,45	© FNL & 2,0	830' FEL Sec 104' FWL, Sec		GER	Eddy I
BOPCO BOPCO TARG Top target sand @ SL	James Ranch U Legg Federal	nit	WELL NO.	1,45	C FNL & 2,0	830' FEL Sec 104' FWL, Sec	7, T225-R30E MUD LOG	GER MORCO	Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC=	James Ranch U Legg Federal	nit	WELL NO.	1,45	VENDOR:	S30' FEL Sec 104' FWL, Sec 13Y:	77, T22S-R30E MUD LOG Surface to	GER MORCO pick surf	Eddy     Eddy     
BOPCO BOPCO TARG Top target sand @ SL	James Ranch U Legg Federal	nit	WELL NO.	1,45	CENL & 2.0 VENDOR: UNIT ON I	830' FEL Sec 104' FWL, Sec 154': FROM:	77. 1225-R30E MUD LOG Surface to Surface	GER MORCO pick surf	Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC=	James Ranch U Legg Federal	nit THS	WELL NO. 12 1	1,45	VENDOR: JNIT ON I SAMPLES	S30' FEL Sec 104' FWL, Sec 13Y:	77. 1225-R30E MUD LOG Surface to Surface	GER MORCO pick surf	Eddy     Eddy     
BOPCO BOPCO TARG Top target sand @ St. Top target sand @ EOC= Top target sand @ Target 1*	James Ranch U Legg Federal	nit THS	WELL NO. 12 1	1,45 56 DGGING PF	VENDOR: UNIT ON I SAMPLES SAMPLE I	830 FEL Sec 04 FWL Sec BY: FROM: NTERVAL (	Y T22S-R30E  MUD LOG  Surface to Surface  FT.): 10	GER MORCO pick surf TO:	Eddy I
BOPCO BOPCO TARG Top target sand @ St. Top target sand @ EOC= Top target sand @ Target 1*	James Ranch U Legg Federal SET SAND TOP DEP	nit THS Wirity, Se	12 1 1 RELINE LConic from	1.45 SI DGGING PF top of Dela	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM	S30 FEL Sec 104 FWL, Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Tap target sand @ SL Top target sand @ EOC= Top target sand @ Target 1= Spectral GR, Neut	James Ranch U Legg Federal SET SAND TOP DEP	nit THS Wirity, Se	WELL NO 12 1 1 RELINE LC onic from Spring to	1.45 SI DGGING PF top of Dela	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Tap target sand @ SL Top target sand @ EOC= Top target sand @ Target 1= Spectral GR, Neut	James Ranch U Legg Federal SET SAND TOP DEP	nit THS Wirity, Se	WELL NO. 12 1 1 SPELINE LC Driic from Spring to MUST CC	1.45 68 DEGING PROTOP OF Dela	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC= Top target sand @ Target 1*  Spectral GR, Neut Elemental Capture Spe	James Ranch U Legg Federal SET SAND TOP DEP tron-Density, Resist	wir wirity, Sin Bone	WELL NO. 12 1 1 1 RELINE LConic from Spring to MUST CC	1,45 66 DGGING PP top of Dela	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC= Top target sand @ Target 1= Spectral GR, Neut Elemental Capture Spe	James Ranch U Legg Federal SET SAND TOP DEP  tron-Density, Resist ectroscopy Log from	wir Wirity, Sin Bone	WELL NO. 12 1 1 1 RELINE LC conic from Spring to MUST CC RE	1,45 66 DEGING PF top of Dela Devonian DMMENCE	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC= Top target sand @ Target 1*  Spectral GR, Neut Elemental Capture Spe	James Ranch U Legg Federal SET SAND TOP DEP  tron-Density, Resist ectroscopy Log from	wir Wirity, Sin Bone	WELL NO. 12 1 1 1 RELINE LC conic from Spring to MUST CC RE	1,45 66 DEGING PF top of Dela Devonian DMMENCE	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC= Top target sand @ Target 1= Spectral GR, Neut Elemental Capture Spe	James Ranch U Legg Federal SET SAND TOP DEP  tron-Density, Resist ectroscopy Log from	wir Wirity, Sin Bone	WELL NO. 12 1 1 1 RELINE LC conic from Spring to MUST CC RE	1,45 66 DEGING PF top of Dela Devonian DMMENCE	VENDOR: UNIT ON I SAMPLES SAMPLE I ROGRAM aware to	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	NUD LOG  Surface to  Surface  FT.): 10	GGER  MORCO  pick surf  TO:	Eddy Eddy I
BOPCO BOPCO TARG Top target sand @ SL Top target sand @ EOC= Top target sand @ Target 1= Spectral GR, Neut Elemental Capture Spe	James Ranch U  Legg Federal SET SAND TOP DEP  tron-Density, Resist ectroscopy Log from maximize SWD cause are from the BOPC	wir Wirity, Sin Bone	WELL NO. 12 1 1 RELINE LC onic from Spring to MUST CC RE y. g Federal N	1,45 SGING PF top of Dela Devonian DMMENCE MARKS	VENDOR: VENDOR: JUNIT ON I SAMPLES SAMPLE I COGRAM WAY WAY ROTATION BY	S30 FEL Sec 104 FWL Sec BY: FROM: NTERVAL (	MUD LOG Surface to Surface to Surface FT.): 100 hole GR-Ni es in Bone	GGER  MORCO  pick surf  TO:	Eddy Eddy I

### James Ranch Unit No. 12 SWD



#### Martin Water Laboratories, Inc.

P.O. BOX 98 MIDLAND, TX. 79702 PHONE (432) 683-4521

709 W. INDIANA MIDLAND, TEXAS 79701 FAX (432) 682-8819

,, ,, ,	RESULT OF WATER	ANALYSES		, , , , , , , , , , , , , , , , , , , ,
		LABORATORY NO.		2-73
TO: Carlos Cruz		SAMPLE RECEIVED		25-12
PO Box 2267, Midland. TX 79702		RESULTS REPORTED.	10-	31-12
ROPCO				
		EASE		
FIELD OR POOL		ddy stat	e NM	ľ
SECTION BLOCK SURVEY	GOUNIY	ddy STAT	E TATA	
SOURCE OF SAMPLE AND DATE TAKEN: JR #29. 10-19-12				
TR #124 10-19-12			***	
NU. 2				
NU.3				
NO. 4 PLU #213. 10-19-12				<del>-,i</del>
REMARKS:	<del>,</del>			
C	HEMICAL AND PHYSIC	AL PROPERTIES		A STATE OF THE STA
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1976	1.2000	1.1942	1.1990
pH When Sampled	· · · · · · · · · · · · · · · · · · ·			
pH When Received	5.50	5.40	5,40	5.40
Bicarbonate as HCO,	12	10	12	10
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO,	62.000	1 0000		24.000
Total Hardness as CaCO <sub>4</sub>	95,000	87,000	84,000	84,000
Calcium as Ca	31,200	28,400	26,800	29,200
Magnesium as Mg	4,131	3,888	4.131	2.673
Sodium and/or Potassium	82,557 153	94,524	85,775 153	90,371
Sulfate as SO <sub>4</sub>	194,540		191,700	198,800
Chloride as Cl	91	207,320	89	198,800
Iron as Fe	0	0	0	0
Barium as Ba	· · · · · · · · · · · · · · · · · · ·	<del>                                     </del>		
Turbidity Electric		+		
Color as Pt Total Solids, Calculated	312,593	334,293	308,571	321,189
Temperature *F.				
Carbon Dioxide, Calculated		***************************************		
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	0.0	0.0	0.0
Resistivity, öhms/m at 77° Fc	0.044	0.039	0.045	0.044
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				:
	Results Reported As Millio		Estant sad same	-44a Nia baat
Additional Determinations And Remarks	i ne undersigned c	ertifies the above to	be true and correc	ct to the best
of his knowledge and belief.				
		· · · · · · · · · · · · · · · · · · ·		
	· · · · · · · · · · · · · · · · · · ·			
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		<del>/-//-</del>	1	

Form No. 3

Greg Ogden, B.S.

Form 3160-3 (April 2004)			OMB N	APPROVED o. 1004-0137 March 31, 2007	
UNITED STATES  DEPARTMENT OF THE 1  BUREAU OF LAND MAN	NTERIOR		5. Lease Serial No. NMNM 00680	8	<del></del>
APPLICATION FOR PERMIT TO			6. If Indian, Allotee	or Tribe Name	
la. Type of work;  DRILL  REENTE	ER .		7 If Unit or CA Agre James Ranch	ement, Name and N Unit NMNM 709	
lb. Type of Well: Oil Well Gas Well Other	✓ Single Zone Multi	ple Zone	8. Lease Name and James Ranch	Well No. Unit 21 Fed SWI	) 1
2. Name of Operator BOPCO, L. P.			9. API Well No.		
3a. Address P. O. Box 2760 Midland, TX 79702	3b. Phone No. (include area code) 432-683-2277		10. Field and Pool, or SWD Devonia		
4. Location of Well (Report location clearly and in accordance with an At surface SENE, UL G, 1451' FNL, 1861' FEI At proposed prod. zone  4. Location of Well (Report location clearly and in accordance with an At surface SENE, UL G, 1451' FNL, 1861' FEI At proposed prod. zone		38313333	11. Sec., T. R. M. or B 21, T22S, R30	•	rea
14. Distance in miles and direction from nearest town or post office*  14 miles NW of Loying			12. County or Parish Eddy	13. State	c NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 6,788' (unit line)	16. No. of acres in lease	This is	g Unit dedicated to this		ıction
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed Depth 16,801' TVD		BIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,165' GL	22. Approximate date work will sta 12/01/2012	art*	23. Estimated duration 110	n	
	24. Attachments				
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover Item 20 above). Lands, the 5. Operator certifi	the operation cation	s form:  as unless covered by an  armation and/or plans as	-	
25. Signature	Name (Prinled Typed) Jeremy Braden			Date 10/30	2/12
Approved by (Signature)	Name (Printed/Typed)			Date	
Title	Office		***************************************		
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equitable title to those rigi	hts in the sub	jeet lease which would c	entitle the applicant	lo

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

<sup>\*(</sup>Instructions on page 2)

DISTRICT I 1625 N. French Dr., Hobbs, NM 86240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

### State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised July 16, 2010

Submit one copy to appropriate District Office

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

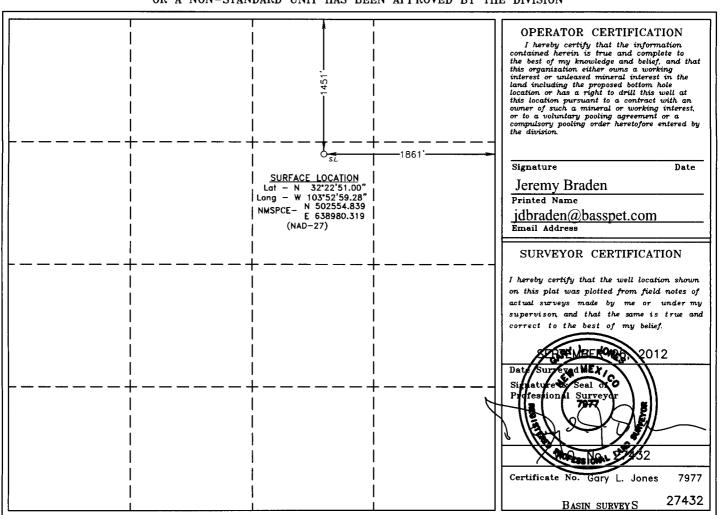
1220 S. St. Francis Dr., Santa Fe, NM 67505

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

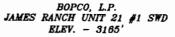
□ AMENDED REPORT

API	Number		1	Pool Code		_	Pool Name		
			961	01		SWD Devon	ian		
Property	Code				Property Nam	e		Well Nu	
306407				JAM	JAMES RANCH UNIT 21				SWD
	ogrid no. 260737				Operator Nam BOPCO, L.	•			
		•			Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	21	22 S	30 E		1451	NORTH	1861	EAST	EDDY
			Bottom	Hole Loc	eation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	r Infill Co	nsolidation (	Code Ore	der No.				
0									

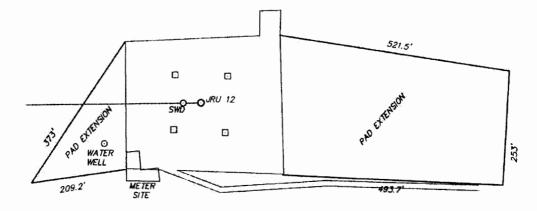
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SECTION 21, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, WELL PAD LAYOUT NEW MEXICO.



Lat - N 32"22"51.00" Long - W 103"52"59.28" NMSPCE- N 502554.839 E 636980.319 (NAD-27)



Directions to Location:

FROM THE JUNCTION OF HWY 128 AND CIMARRON, GO NORTH ON CIMARRON FOR APPROX. 6.2 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTHWESTERLY TO WELL PAD AND PROPOSED WELL LOCATION.

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

W.O. Number: 27432 Drawn By: J. SMALL

Date: 10-01-2012 Disk: JMS 27432

200 0 200 400 FEET

SCALE: 1" = 200'

#### BOPCO, L.P.

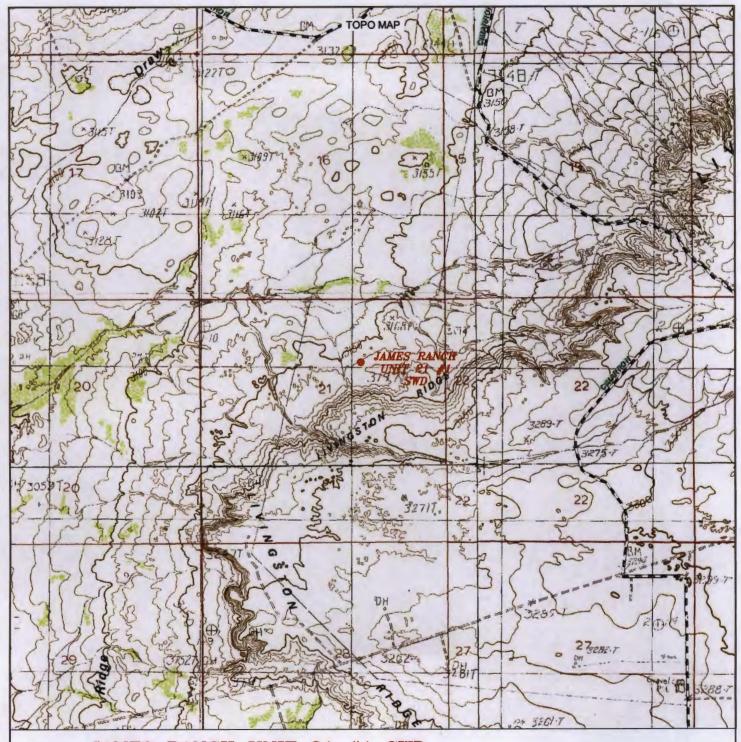
REF: JAMES RANCH UNIT 21 #1 SWD / WELL PAD TOPO

THE JAMES RANCH UNIT 21 #1 SWD LOCATED 1451'

FROM THE NORTH LINE AND 1861' FROM THE EAST LINE OF SECTION 21, TOWNSHIP 22 SOUTH, RANGE 30 EAST,

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

Survey Date: 09-26-2012 | Sheet 1 of 6 Sheets



## JAMES RANCH UNIT 21 #1 SWD

Located 1451' FNL and 1861' FEL Section 21, Township 22 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com W.O. Number: JMS 27432

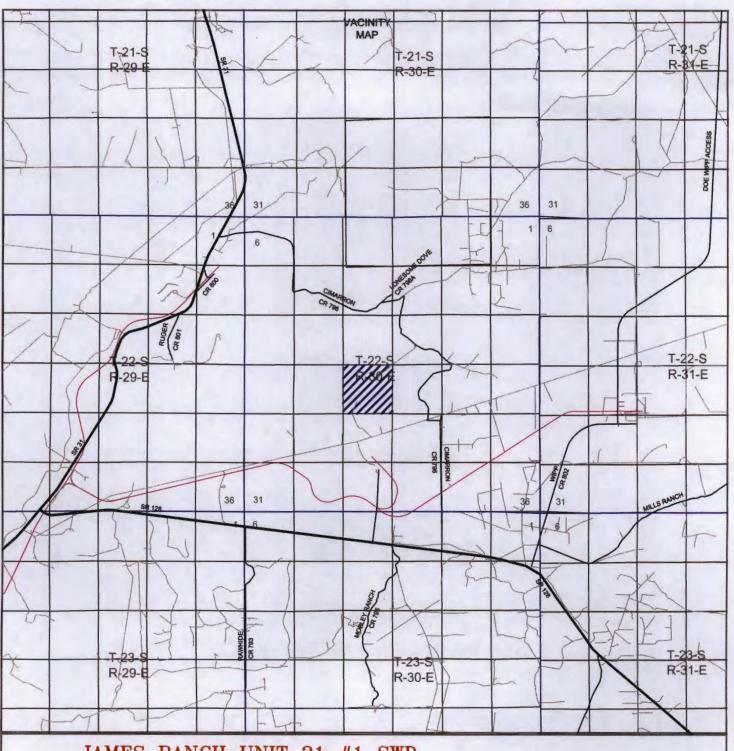
Survey Date: 09-26-2012

Scale: 1" = 2000'

Date: 10-01-2012

BOPCO, L.P.

Sheet 2 of 6 Sheets



JAMES RANCH UNIT 21 #1 SWD Located 1451' FNL and 1861' FEL Section 21, Township 22 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

W.O. Number:	JMS 27432
Survey Date:	09-26-2012
Scale: 1" = 2	Miles

Date: 10-01-2012

BOPCO, L.P.

3 of 6 Sheets

Sheet



JAMES RANCH UNIT 21 #1 SWD Located 1451' FNL and 1861' FEL Section 21, Township 22 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.

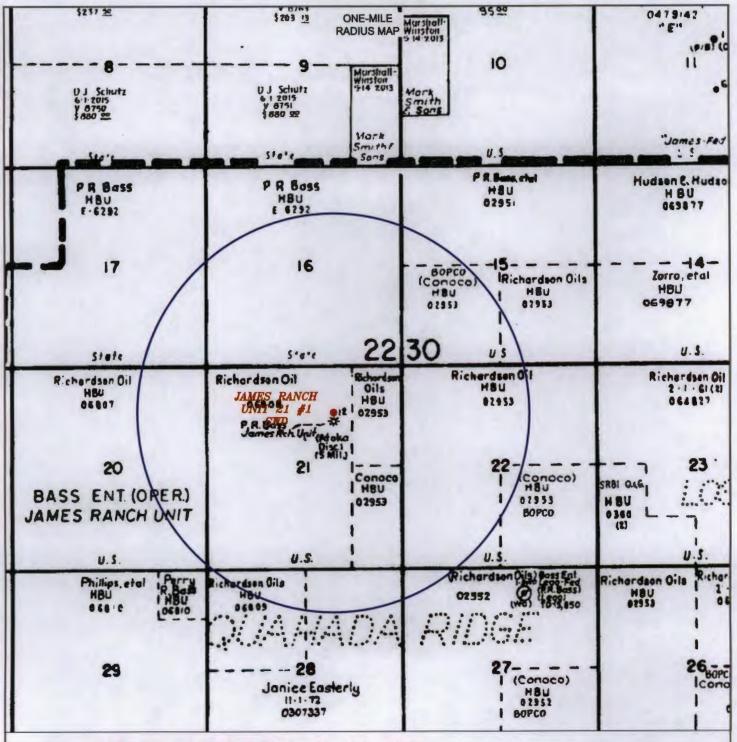


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com W.O. Number: JMS 27432

Scale: 1" = 2000'

YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND BOPCO, L.P.

Sheet 4 of 6 Sheets



JAMES RANCH UNIT 21 #1 SWD Located 1451' FNL and 1861' FEL

Section 21, Township 22 South, Range 30 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

W.O. Number: JMS 27432

Scale: None

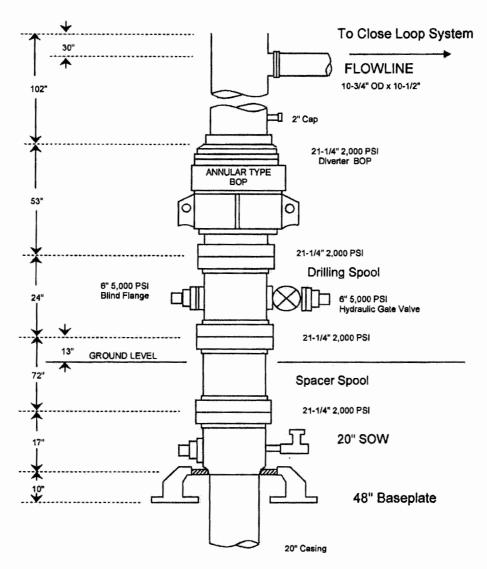
YELLOW TINT — USA LAND
BLUE TINT — STATE LAND
NATURAL COLOR — FEE LAND

BOPCO, L.P.

Sheet 5 of 6 Sheets

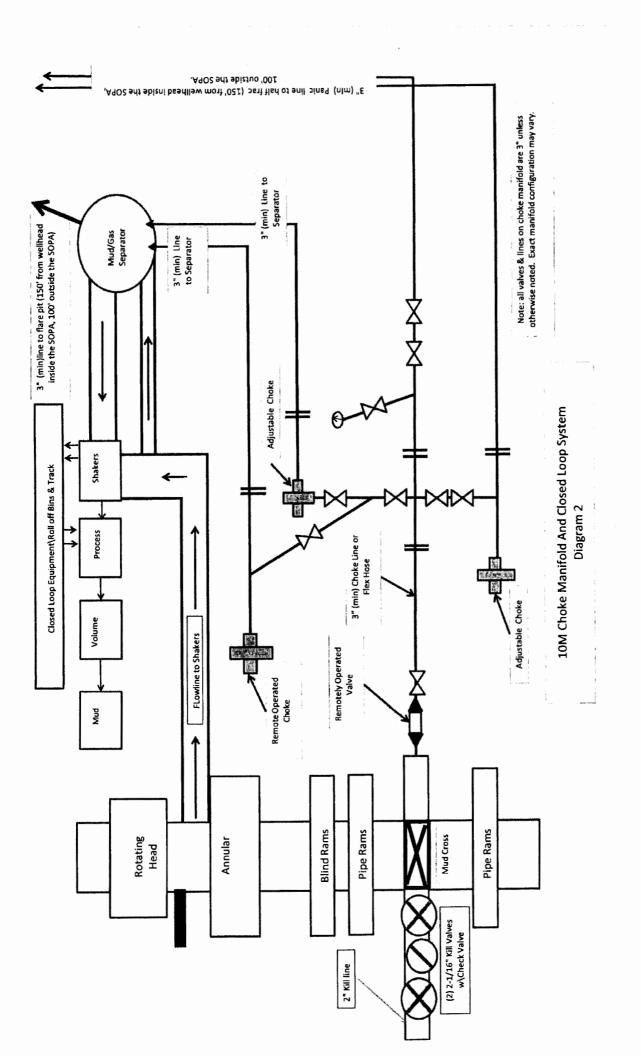
# BOPCO, L. P

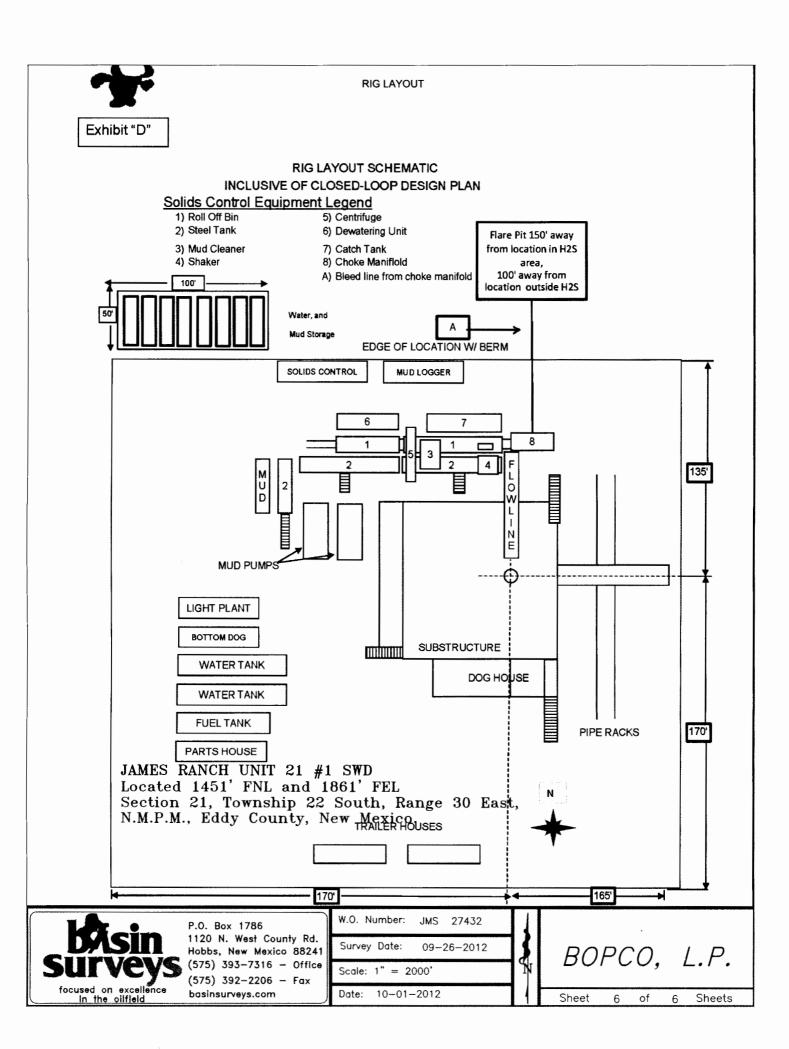
20" 2,000 PSI Diverter



Note: Actual lengths of casing heads may vary. Always measure items prior to installing in order to ensure proper spacing.

**DIAGRAM B** 





20" OD Surface casing is to be set into the Rustler below all fresh water sands at an approximate depth of 546' and cement circulated to surface.

13-3/8" OD salt/potash protection casing will be set into the Lamar Lime at 3,556'. Cement will be circulated to surface.

9-5/8" OD protection\production casing will be set at approximately 11,000' into the Wolfcamp formation and cemented in two stages with DV tool set at approximately 5,500'. Cement will be circulated to surface. Drilling procedure, BOP diagram, and anticipated tops are attached.

This well is located inside the R111 Potash area and Secretary's Potash area.

The surface location is nonstandard and located inside the Poker Lake Unit.

#### Surface Lease Numbers- Federal Lease: NMNM 0006808

BOPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a subsidiary of BOPCO, L.P., 201 Main Street, Ft. Worth, TX, 76102. Bond No. COB000050 (Nationwide).

# EIGHT POINT DRILLING PROGRAM BOPCO, L.P.

NAME OF WELL: James Ranch Unit 21 SWD 1

LEGAL DESCRIPTION - SURFACE: 1,451' FNL, 1,861' FEL, Section 21, T22S, R30E, Eddy County, NM.

POINT 1: ESTIMATED FORMATION TOPS (See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3,191' (estimated)

GL 3,165'

Formation Description	Est from KB (TVD)	Est (MD)	SUB-SEA TOP	BEARING
T/Fresh Water	346'	346'	+ 2,845'	Fresh Water
T/Rustler	191'	191'	+ 3,000'	Barren
T/Salado	556'	556'	+ 2,635'	Barren
T/Lamar	3,536'	3,536'	- 345'	Oil/Gas
Delaware Sand	3,581'	3,581'	- 390'	Oil/Gas
Bone Spring	7,384	7,384'	- 4,193'	Oil/Gas
Wolfcamp	10,693'	10,693'	- 7,502'	Oil/Gas
Middle Wolfcamp	11,351'	11,351'	- 8,160'	Oil/Gas
Strawn	12,283'	12,283'	- 9,092'	Oil/Gas
Atoka	12,395	12,395'	- 9,204'	Oil/Gas
Morrow	13,254'	12,254'	- 10,063'	Oil/Gas
Middle Morrow	13,520'	13,520'	- 10,329'	Oil/Gas
Lower Morrow	13,915'	13,915'	- 10,724'	Oil/Gas
Mississippian Lime	14,662'	14,662'	- 11,471'	Oil/Gas
Woodford	15,122'	15,122'	- 11,931'	Oil/Gas
Devonian	15,291'	15,291'	- 12,100'	Disposal Zone\BW
TD	16,801'	16,801'	- 13,610'	Disposal Zone\BW

POINT 3: CASING PROGRAM

TYPE	INTERVAL MD	HOLE SIZE	PURPOSE	INSTALLATION TYPE
30"	0' – 120'	36"		
20", 133 ppf, J-55, BTC	0' - 546'	26"	Surface	New
13-3/8", 68 ppf, HCN-80, BTC	0' - 3,556'	17-1/2"	Potash	New
9-5/8", 53.50 ppf, L-80, LTC*	0' - 7,500'	12-1/4"	Production	New
9-5/8", 53.50 ppf, HCL-80, LTC*	7,500' — 11,000'	12-1/4"	Production	New
7-5/8", 39 ppf, P-110 Ultra FJ	10,800' – 14,000'	8-1/2"	Prod. Liner	New
7-5/8", 42.80 ppf, P-110 Ultra FJ	14,000' – 15,321'	8-1/2"	Prod Liner.	New

<sup>\*9-5/8</sup>", 53.50, L-80 & HCL-80 will be special drift casing. It will drift up to 8.5".

#### **CASING DESIGN SAFETY FACTORS:**

TYPE TE	NSION	COLLAPSE	BURST
20", 94 ppf, J-55, BTC	13.92	2.29	2.89
13-3/8", 68 ppf, HCN-80, BTC	6.78	1.29	2.25
9-5/8", 53.50 ppf, L-80, LTC*	2.27	1.31	1.67
9-5/8", 53.50 ppf, HCL-80, LTC*	6.04	1.39	1.66
7-5/8", 39 ppf, P-110 Ultra FJ	8.95	1.18	1.66
7-5/8", 42.80 ppf, P-110 Ultra FJ	22.60	1.38	1.86

<sup>\*9-5/8&</sup>quot;, 53.50, L-80 & HCL-80 will be special drift casing. It will drift up to 8.5".

#### **DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:**

#### **SURFACE CASING - (20")**

Tension A

A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).

Collapse

A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

**Burst** 

A 1.3 design factor with a surface pressure equal to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure a that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient. The effects of tension on burst will not be utilized.

#### PROTECTIVE CASING - (13-3/8")

Tension

A 1.6 design factor utilizing the effects of buoyancy (10.2 ppg).

Collapse

A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.

In the case of development drilling, collapse design should be analyzed using internal evacuation equal to 1/3 the proposed total depth of the well. This criterion will be used when there is absolutely no potential of the protective string being used as a production casing string.

**Burst** 

A 1.0 surface design factor and a 1.3 downhole design factor with a surface pressure equivalent to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Back pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient.

#### Production CASING - (9-5/8")

Tension

A 1.6 design factor utilizing the effects of buoyancy (9.5 ppg).

Collapse

A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

Burst

A 1.25 design factor with anticipated maximum tubing pressure (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

#### Production Liner - (7-5/8")

Tension

A 1.6 design factor utilizing the effects of buoyancy (12.5 ppg).

Collapse

A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

Burst

A 1.25 design factor with anticipated maximum tubing pressure (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

#### POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM 2)

The BOPE when rigged up on the 20" surface casing head (17-1/2" hole) will consist of 20" annular and diverter system per Diagram B (2,000 psi WP). The annular when installed on surface casing will be tested to 1,000 psi. There will be a 6", 5000 psi or better gate valve installed on the drilling spool for fill up. The choke manifold system will be rigged up to the hydraulic gate valve on the drilling spool.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 10M will be installed, used, maintained and tested as per Onshore Order 2. In addition to the high pressure test, a low pressure (250-300 psig) test will be performed

After running the 9-5/8" intermediate casing, a 13-5/8" BOP/BOPE system with a minimum rating of 10M will be installed on the 9-5/8" intermediate casing spool (8-1/2" open hole), used, maintained and tested as per Onshore Order 2. In addition to the high pressure test, a low pressure (250-300 psig) test will be performed.

After running the 7-5/8" liner, a 13-5/8" BOP/BOPE system with a minimum rating of 10M will be installed on the 9-5/8" intermediate casing spool (8-3/4" open hole), used, maintained and tested as per Onshore Order 2. In addition to the high pressure test, a low pressure (250-300 psig) test will be performed.

#### **H2S** contingency

H2S monitors shall be installed prior to drilling out the surface shoe. If H2S is encountered in quantities greater than 10 PPM, the well will be shut in and H2S equipment will be installed, including a flare line that will be extended pursuant to onshore oil and gas order #6.

These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Thirty days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

BOPCO, L.P. would like to request a variance to use an armored, 3" or 3.5", 10,000 psi WP flex hose for the choke line in the drilling of the well if the rig is equip with hose. (See specification for hose that might be used, attached with APD exhibits). This is rig equipment and will help quicken nipple up time thus saving money without a safety problem. The hose itself is rated to 10,000 psi and has 10,000 psi flanges on each end. This well is to be drilled to 16,801' MD (16,801' TVD) and max surface pressure should be +/- 3356 psi as prescribed in onshore order #2 shown as max BHP minus 0.22 psi/ft.

Please refer to diagram 2 for choke manifold and closed loop system layout. If an armored flex hose is utilized, the company man will have all of the proper certified paper work for that hose available on location. Please refer to diagram 2 for choke manifold and closed loop system layout.

**POINT 5: MUD PROGRAM** 

	The second secon	The state of the s					
DEPTH	MUD TYPE	WEIGHT	<u>FV</u>	PV	YP	<u>FL</u>	Ph
0 – 546'	FW Spud Mud	8.5 – 9.2	70-40	20	12	NC	10.0
546' 3,556'	Brine Water	9.8 – 10.2	28-32	NC	NC	NC	10.0
3,556' — 9,000'	FW/Gel	8.7 - 9.0	28-32	NC	NC	NC	9.5 -10.5
9,000' — 11,980'	Cut Brine\Brine Mud	9.0 - 9.5	34-42	10	8	< 25	9.5 – 10.5
11,980' — 16,300'	XCD Brine Mud	11.0 – 12.5	45-48	20	10	< 5	9.5 – 10.5
16,300' – 16,801'	Fresh Water Mud	8.4 ~ 8.6	28-30	NC	NC	NC	9.5 – 10.5

NOTE: May increase vis for logging purposes only.

#### **POINT 6: TECHNICAL STAGES OF OPERATION**

A) TESTING None anticipated.

#### B) LOGGING

Run #1:

GR, Neutron-Density, Resistivity, Dipole Sonic from top of Delaware to TD. Cased hole GR-Neutron to surface.

Mud Logger: Rigged up at 100'

#### C) **CONVENTIONAL CORING**

#### D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	ТҮРЕ	GALS/SX	PPG	FT <sup>3/</sup> SX
SURFACE: Lead: 0' – 346'	610	346'	Cemex premium Plus C + 4% bentonite	9.15	13.50	1.73
Tail: 346' – 546'	516	200'	Cemex Premium Plus C + CaCl2	6.48	14.80	1.35
INTERMEDIATE:						
Lead: 0' - 3,056'	2220	3056'	Class C + 0.1% HR-601, 3% salt	9.88	12.90	1.83
Tail: 3,056' – 3,556'	565	500'	HalCem C	6.34	14.80	1.33
Production Stage 1:						
Lead: 5 ,500' 8,000'	615	2500'	Econ Cem + 0.57 Lap-1 + 5#\sk Kol-Seal + 8#\sk CaCl2 + 0.77 HR-800 + 0.47 CFR-3	14.65	11.75	2.60
Tail: 8,000' – 11,000'	1645	3000'	HalCem H + 0.67 Halad 9 + 0.27 HR-80D + 3#\Sk Kol-Seal	4.86	15.85	1.17
DV Tool @ 5,500'						
Stage 2:						
Lead: 0' - 5,000'	720	5000'	Tuned Light + 1.25 #\sk CFR-3 + 0.15 #\sk WG-17 + 1 #\sk CaCl2 + 20 #\sk HGS 6000 + 3 #\sk Kol-Seal + 1 #\sk Cal-Seal 60	13.14	9.80	3.00
Tail: 5,000' 5,500'	245	500'	HalCem C + 0.4% Halad 9	6.34	14.80	1.33
Production Liner						
Tail: 10,800' – 15,321'	570	4521'	VersaCem H + 0.5% Halad – 344 + 0.30% HR-601	5.05	14.40	1.24

Cement excesses will be as follows:

Surface - 100% excess with cement circulated to surface.

Production- Production Liner – 50% above gauge hole or 35% above electric log caliper with cement circulated up into the 9-5/8" intermediate casing.

Cement volumes will be adjusted proportionately for depth changes of the multi stage tool.

<sup>1&</sup>lt;sup>st</sup> Intermediate – 50% excess above fluid caliper with cement circulated to surface.

#### E) H2S SAFETY EQUIPMENT

As stated in the BLM Onshore Order 6, for wells located inside the H2S area, H2S equipment will be rigged up after setting surface casing. For the wells located inside the H2S area the flare pit will be located 150' from the location. For wells located outside the H2S area flare pit will be located 100' away from the location. (See page 6 of Survey plat package and diagram 2) There is not any H2S anticipated in the area, although in the event that H2S is encountered, the H2S contingency plan attached will be implemented. (Please refer to diagram 2 for choke manifold and closed loop system layout.) Please refer to H2S location diagram for location of important H2S safety items.

#### F) CLOSED LOOP AND CHOKE MANIFLOLD

Please see diagram 2.

#### **POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout Delaware section. Lost circulation may exist, but not likely, in the Delaware Section from 3,981'- 7,900' TVD. Once in the Bone Spring, pore pressures will gradually increase to the top of the Wolfcamp. 9-5/8" casing will be set in the Wolfcamp and pore pressures will continue to increase through the Strawn and Atoka sections. A 7-5/8" production liner will be set into the Devonian with mud weights at 12.5 ppg or less. The Devonian BHP is 7200 psi and can be drilled with 8.5 ppg fresh water. Maximum surface pressures in the Devonian if productive could be 7944 psi with 7500 ppm H2S and 5% CO2.

#### POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

110 days drilling operations

10 days completion operations

JDB

# 160 3901 9846 4644 800C

#### BOPCO, L. P.

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

(432) 683-2277

FAX (432) 687-0329

January 22, 2013

Carlsbad Current Argus P O Box 1629 Carlsbad, NM 88220

Re:

Notice of Application to Dispose James Ranch Unit 21 SWD #1

Sec 21; T22S; R30E

**Eddy County, New Mexico** 

File: 100-WF: .C108

Certification: 7160 3901 9846 4644 8000

#### Gentlemen:

Enclosed for publication is a legal advertisement. BOPCO, L.P. requests that this be published for three consecutive days. BOPCO, L.P. is required by the New Mexico Oil Conservation Division to furnish them with a copy of this advertisement, from your newspaper, giving the dates of publication. Also enclosed is a check for the fee required to run this advertisement. Email me with any questions at <a href="mailto:ezgalindo@basspet.com">ezgalindo@basspet.com</a>.

Please send the ad, the affidavit of publication and the invoice to Emma Z. Galindo at the above letterhead address.

Sincerely, Emma & Malindo ÚS Postal Servic Postage Oemile: Certified Fee Mei Return Receipt Fee Endorsement Required Receipt Postmark Here Restricted Delivery Fee Domestic Mail Only No Insurance Coverage Provided Total Postage & Fees

Carlsbad Current Argus P O Box 1629 Carlsbad, NM 88220

PS Form 1800 Junuary 2005 US Presil Service

Cartified Wall Fleceipt

# 160 3901 9846 4644 8192

#### BOPCO, L. P.

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

(432) 683-2277

FAX (432) 687-0329

January 25, 2013

Re:

Notice of Application for Authorization

to Dispose

James Ranch Unit 21 Federal SWD #1

Sec.21, T22S, R30E Eddy County, New Mexico

File: 100-WF: JRU21FEDSWD1.C108

Tom Scarbrough Conoco Phillips Company 600 N. Dairy Ashford Street 3WL-14066 Houston, TX 77079

600 N. Dairy Ashford Street

Houston, TX 77079

PS Form 3800, January 2005

#### Gentlemen:

This letter and attached copy of our injection well application is to notify you, as Working Interest owner, that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to dispose of fluid into a zone not productive of oil and gas in the subject wellbore.

If you should have any questions or require additional information, please contact Emma Z. Galindo at the above letterhead address, phone number or via email at <a href="mailto:ezgalindo@basspet.com">ezgalindo@basspet.com</a> Any objections or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Frances Dr., Santa Fe, New Mexico 87505, within 15 days of this letter's date.

Certified Mail Receipt

Sincerely, US Postal Service Postage Certified Certified Fee Mail Return Receipt Fee Receipt Postmark Here Restricted Delivery Fee Domestic Mail Only No Insurance Coverage Provided Total Postage & Fees Sent To: Tom Scarbrough Conoco Phillips Company

US Postal Service

TO REORDER GO TO
www.walzpostal.com
OR CALL 1-800-882-3811

#### FOLD AND TEAR HERE

A. Received by		
	A. Received by (Please Print Clearly)	B. Date of Delivery
G. Signature		☐ Agent ☐ Addressee
7160 3901 9846 4644 8017 Tres, ente	D. Is delivery address different from item 1? If YES, enter delivery address below:	% &       
3. Service Type CERTIFIED MAIL.		
4. Restricted Delivery? (Extra Fee)		
1. Article Addressed to:		
Bureau of Land Managenent		
620 E. Greene Street		
Carlsbad, NM 88220-6292		
	JRUAI FEDSWID #	17 (1)
PS Form 3811, January 2005	Domestic Return Receipt	urn Receipt

#### Jones, William V., EMNRD

From:

Galindo, Emma Z. <EZGalindo@BassPet.Com>

Sent:

Monday, February 25, 2013 12:59 PM

To:

Jones, William V., EMNRD

Subject:

FW: JRU 21 SWD - Mosaic Potash Notification

**Attachments:** 

Mosaic with certified.pdf

The letter to the nearest Potash Lessee went out on February 19, 2013. Although the letter attached has 2012. As soon as I get a copy of the return receipt I will forward it to you.

Thanks,

Emma

From: Morrison, Andy

Sent: Monday, February 18, 2013 4:18 PM

To: Galindo, Emma Z.

Cc: Sutton, Ross; Smitherman, John; Cruz, Carlos; Johnson, Steve F

Subject: JRU 21 SWD - Mosaic Potash Notification

Emma,

Per your request, please find attached the notification I am sending to Mosaic Potash regarding the subject well. It will be sent via Certified Mail tomorrow (since today is a post office holiday). If you need anything else from me please let me know.

Thanks, Andy

#### **Andy Morrison**

BOPCO, L.P. 201 N. Main St., Suite 2900 Fort Worth, TX 76102 Bus: (817) 339-7036 Fax: (817) 339-7102

From: Jackson, Lea Ann

Sent: Monday, February 18, 2013 4:12 PM

To: Morrison, Andy

Subject:

BOPCO, L.P. 201 MAIN STREET, SUITE 2700 FORT WORTH, TEXAS 76102 817 / 390-8400

ANDY MORRISON DIVISION LANDMAN

February 19, 2012

# CERTIFIED MAIL - RETURN RECEIPT REQUESTED 7008 0500 0001 3079 0174

Mosaic Potash Carlsbad Inc. PO Box 71 1361 Potash Mines Road Carlsbad, New Mexico 88221-0071

Attention: Mr. David Vaughn

Re: Notice of Application for Authorization to Dispose

Dear Mr. Vaughn,

This letter and the attached copy of our Form C-108 Application for Authorization to Dispose are to notify you that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to dispose of fluid into a zone not productive of oil and gas in the subject wellbore.

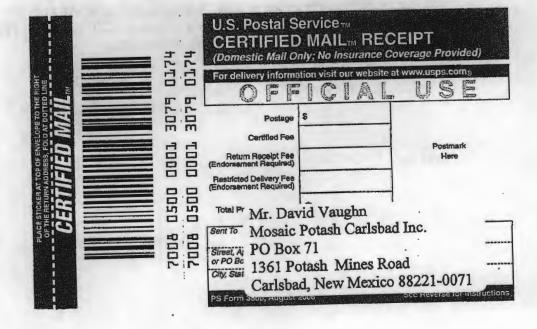
If you have any questions or need more information, please contact the undersigned at (817) 339-7036 or via e-mail at <a href="mailto:amorrison@basspet.com">amorrison@basspet.com</a>. Any objections or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Frances Dr., Santa Fe, New Mexico 87505, within 15 days of the date of this letter.

Regards,

Andy Morrison

AM:mc

A. Signature .	
x	☐ Agent ☐ Addressee
B. Received by ( Printed Name)	C. Date of Delivery
D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No	
2 Canica Time	
Certified Mail  Expres	s Mail Receipt for Merchandise
4. Restricted Delivery? (Extra Fee	) ☐ Yes
0001 3079 0174	
	D. Is delivery address different from If YES, enter delivery address I YES, enter delivery addre



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

L.	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: Emma Z. Galindo PHONE: (432)683-2277
m.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed 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 tadius 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>
<b>*</b> 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 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 sources 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: Emma Z. Galinglo TITLE: Engineering Assistant
	SIGNATURE:
*	E-MAIL ADDRESS: exalindo@basspet.com  If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

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

### III. WELL DATA

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

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

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well.

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

Attached

- (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, New Mexico 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.

ď

1451' FNL & 1861' FEL

2) Casing Info:

Casing size	Set depth Sacks cmt Hole size	Sacks cmt	Hole size	70C	Method
30", 157,68#, X52, PE	120		36"	Surface	Circulated
20, 133#, J-55, BTC	546'	1,126	<b>5</b> 0,	Surface	Circulated
13-3/8", 68#, HCN-80, BTC	3556'	2,785	17-112"	Surface	Circulated
9-5/8", 53.50#, L-80, LT&C	1500,	962	12-1/4"		
9-5/8", 53.50#, HCL-80, LT&C **	11,000'	2,260	12-1/4"	Surface	Circulated
7-5/8", 39#, P-110, Ultra FJ	10,800'-14,000'	570	8-1/2"	TO T.O.L.	Circulated
7-5/8", 42.80#, P-110, Ultra FJ	14,000-15,321		8-1/2"		
	15,321-16,801		5-1/2"	НО	
**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 @15,271'.
- Name, model, and depth of packer to be used: 4-1/2" Baker FA Nickel Plated EXT/INT PC Pkr set @ 15,271.
- 1) Name of the injection formation and, if applicable, the field or pool name: Devonian œ
- 3

The injection interval and whether it is perforated or open hole: Open hole from 15,321 - 16,801 O.H. BOPCO will evaluate the open hole interval by mudlogging the well as well as running open hole logs as in the ND 19 SWD.

State if the well was drilled for injection or, if not, the original purpose of the well: 6

Newly drilled well for injection.

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

seal off such perforations: NA

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 - 7,383'

BOPCO application for disposal- PLUPC3FedSWD#1

# 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 litustrating all plugging detail.

There are no wells that penetrate the proposed injection zone.

VII. Attach data on the proposed operation, including:

30,000 average, 35,000 maximum BWPD Proposed average and maximum daily rate and volume of fluids to be injected;

Whether the system is open or closed;

3. Proposed average and maximum injection pressure:

the receiving formation if other than reinjected produced water. Produce water will come from the Delaware formation. 3,058 psi maximum, 2,500 psi average 4. Sources and an appropriate analysis of injection fluid and compatibility with

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

and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness,

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:

Carbonate Lithologic Detall:

Devonian Geological Name;

15,291' - 16,801' Thickness:

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.

Describe the proposed stimulation program, if any: ≚

The open hole section from 15,821-16,801' will be acidized with approximately 50 gallons 15% NEFE HCI per foot for a total of 74,000 gallons.

- 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. ×
- Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. No known fresh water wells within one mile of proposed well.
- XII. Applicants for disposal wells must make an affinative statement that they have examíned 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

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.

# PROPOSED WELLBORE DIAGRAM

Injection	James Ranch Unit 21	SWD	Well	lo.; 1		
Reservior						
Location	1451' FNL & 1861' FEL	\$21-T225-R30E				
	EDDY	St; NM	-	<del></del>	ATIL 2	0.015
•					API: 3	0-015-
Surface Csg		retaret i f	MEN		Elevation GL:	
Size:	20"		y g		Elevation KB:	
Wt	133#		五章 英		Spud: Completed	
Grd	J-55, BTC		\$ 50 E	i	Ootupieteu	
Set @:	546'					
Sxs cmt: TOC:	1126					
Hole Size:	Surface 26"	201	3 3 2			
		FASTER SALVENDER	ANDERSON MANAGEMENTS OF THE STATE OF THE STA	20" @ 546'		
Intermediate Size:						
Wt	13 3/8" 68#					
Grd	HCN-80, BTC					
Set @:	3556'					
Sxs Cmt:	2785		<b>高級</b>			
TOC:	Surface		88			
Hole Size:	17 1/2"	COLOR NATIONAL PROPERTY COLOR				
Production (	-					
Size:	9 5/8"			13 3/8" @ 3556'		
Wt Grd	53.5#		6			
Set @:	L-80, LT&C 11000'		100			
Sxs Cmt:	3225		33	DV Tool @ 5500'		
TOC:	Surface			DA 1001 @ 2200		
Hole Size:	12 1/4"			4 1/2" Injection tubing		
Liner						
Size:	7 5/8 <sup>4</sup>	<b>SI</b>				
Wt	39#		<u></u>			
Grd	P-110 FJ	<b>9</b>	Ž.			
Set @: Sxs Cmt;	10,800 - 15,321 <sup>1</sup>		18			
TOC:	10,800'		<b>19</b>			
Hole Size:	8 1/2"					
Open Hole			100 A			
Size:	6 1/2"					
Depth:	15321' - 16,801'					
Tubina	,	Here a respondence of the second services of the second se	in a some of the work of the second of the s			
<i>Tubing</i> Size:	4 1/2" IPC			TOC 40 0001 f 7 5/0" * *		
Wt	12.75#			TOC 10,800' for 7 5/8" Lin 9 5/8" @ 11,000'	er	
Grd	L-80, RTS-8			9 5/6" (U) 11,000		
Set @:	15,271'		334			
			and section of the se			
				Proposed Injection Interva	d	
			- Area	15,291' - 16,801'	•	
			G.			
		X X		Introduction and the second		
				Injection packer @ 15,27	٦.	
	6 1/2" OH	;	[	7 5/8" @ 15,321'		
		i	i			
		TD: 16,80	11		Updated:	1/22/2013
		10. 10,00			Author: Engr:	CCC

# **Affidavit of Publication**

State of New Mexico, County of Eddy, ss.

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

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

January 30	2013
January 31	2013
February 1	2013

That the cost of publication is \$146.00 and That payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

My commission expires Notary Public

STEPLANE COSSON
NOTON PUBLIC
STORE OF NAME MARKET
MY COTTO EXCITATION ASSOCIATION

January 30, 31, and February 1, 2013

NOTICE OF APPLICATION FOR SALT WATER DIS-POSAL WELL PERMIT

BOPCO, L.P. is in the process of applying to the New Mexico Dil Conservation Division for a permit to dispose of produced salt water into a porous formation not productive of oil or gas.

of oil or gas.

The applicant proposes to dispose of produced water into the James Ranch Unit 21 Federal SWD #1. (Devonian Formation). The maximum allowable injection pressure will be 30,058 psi and the estimated maximum rate will be 30,000 bibs produced disposal well is located in Eddy County. New Mexico in Section 21, T225, R30E. The produced section 21, T225, R30E. The produc

Any questions concerning this application should be directed to Emma Z. Galindo, Engineering 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 Oil Conservation Division '1220 S. St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days.

# Jones, William V., EMNRD

From:

Galindo, Emma Z. <EZGalindo@BassPet.Com>

Sent: To: Wednesday, February 06, 2013 11:57 AM Jones, William V., EMNRD

Subject:

RE: Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD

#1 30-015-NA Devonian Open Hole

**Attachments:** 

Carlsbad Argus Proof of delivery.pdf; Conoco Phillips Proof of Delivery.pdf; BLM- Proof

of Delivery.pdf

Mr. Jones,

I am attaching the copies of the signed certified mail receipts. I have not received our affidavit of publication from the newspaper but I have the signed certified mail receipt of when they received our check for publication, I will furnish the affidavit as soon as I can.

I also have the geologist's comments on your request......

Based on offsets in the southeastern portion of the James Ranch Unit, the formations which could potentially be encountered in the JRU 21 Federal SWD #1 below the base of Woodford would include Devonian, Silurian Fusselman, Ordovician Montoya, and Ordovician Simpson. The depths of these formations is uncertain at this time. None of these formations is expected to contain hydrocarbons.

If anything else is needed please let me know.

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

Thanks,

Emma

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Thursday, January 31, 2013 1:21 PM

To: Galindo, Emma Z.

Cc: Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD

**Subject:** Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD #1 30-015-NA Devonian

Open Hole

Hello Emma,

I just received this a few minutes ago and glanced it over,

Would you please send a formal notice to the nearest Potash Lessee? And later, let me know the other notices went out (the copies I got did not show dates of notice). Then a copy of the actual newspaper notice.

If your geologist is not certain where the Devonian or deeper formations will be encountered, for providing notice, it is best to err on the side of caution and consider noticing for a larger disposal interval and possibly saying Devonian,

Silurian, Ordovician or something like that. When you finish with this well, you should know if you completed in formations deeper than Devonian. At that time we will need to amend the permit to make it accurately reflect what is in the open hole. We can do that without new notices if the gross interval was noticed prior. If not, then new notices must be sent out prior to amending the permit.

I will	get you more	feedback	on th	is appl	ication a	as soon -	as possit	ole.
	0-1,			· ·			p	

Regards,

Will Jones

Carlsbad, Current Argus P O Box 1629 Carlsbad, NM 88220 JRM 21 FED SIMD I Domostic Return Receipt

PS Form 3811, January 2005.

2. Article Number	COMPLETE THIS SECTION ON DELIVERY	DEL.VERY
	A. Readyddyr (Pydae Print Clearly)	Spare Helingry
	C. Supplies	Agent
7160 3901 9846 4644 8192	D. Is delivery address different from Item 1? If YES, enter delivery address below:	Sex ON
3. Service Type CERTIFIED MAIL		
4. Restricted Delivery? (Extra Fee) Tes		
1. Article Addressed to:		
Tom Scarbrough		
Conoco Phillips Company		
Houston, TX 77079		
	JRUAL FEDSWD	
PS Form 3811, January 2005	Domestic Return Receipt	ırn Receipt
The control of the co	The second secon	the programme of the pr

Addressee COMPLETE THIS SECTION ON DELIVERY Domestic Return Receipt JRU21 FEDSWD #1 D. is delivery address different from item 17 if YES, enter delivery address below: A. Received by (Please Print Clearly) C. Signatur 7160 3901 9846 4644 8017 Sex. □ **Bureau of Land Managenent** Carlsbad, NM 88220-6292 Restricted Delivery? (Extra Fee)
 Article Addressed to: 3. Service Type CERTIFIED MAIL 620 E. Greene Street PS Form 3811, January 2005 2. Article Number

# Jones, William V., EMNRD

From: Jones, William V., EMNRD

Sent: Thursday, January 31, 2013 12:21 PM

**To:** 'Galindo, Emma Z.'

Cc: Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD

**Subject:** Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD #1

30-015-NA Devonian Open Hole

Hello Emma,

I just received this a few minutes ago and glanced it over,

Would you please send a formal notice to the nearest Potash Lessee? And later, let me know the other notices went out (the copies I got did not show dates of notice). Then a copy of the actual newspaper notice.

If your geologist is not certain where the Devonian or deeper formations will be encountered, for providing notice, it is best to err on the side of caution and consider noticing for a larger disposal interval and possibly saying Devonian, Silurian, Ordovician or something like that. When you finish with this well, you should know if you completed in formations deeper than Devonian. At that time we will need to amend the permit to make it accurately reflect what is in the open hole. We can do that without new notices if the gross interval was noticed prior. If not, then new notices must be sent out prior to amending the permit.

I will get you more feedback on this application as soon as possible.

Regards,

Will Jones

# Jones, William V., EMNRD

From:

Galindo, Emma Z. <EZGalindo@BassPet.Com>

Sent:

Friday, February 08, 2013 8:16 AM

To:

Jones, William V., EMNRD

Subject:

RE: Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD

#1 30-015-NA Devonian Open Hole

**Attachments:** 

Affidavit of Publication-JRU21FedSWD1.pdf

Mr. Jones,

Attached is the Affidavit of Publication for the JRU 21 Federal SWD #1.

About the Notice to the Potash Lessee, Andy Morrison from our land dept. informed me that he would call you directly.

Please let me know if there is anything else needed on my part.

Thanks, Emma

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Wednesday, February 06, 2013 2:44 PM

To: Galindo, Emma Z.

Subject: RE: Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD #1 30-015-NA

Devonian Open Hole

Thank You!

From: Galindo, Emma Z. [mailto:EZGalindo@BassPet.Com]

Sent: Wednesday, February 06, 2013 11:57 AM

To: Jones, William V., EMNRD

Subject: RE: Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD #1 30-015-NA

Devonian Open Hole

Mr. Jones,

I am attaching the copies of the signed certified mail receipts. I have not received our affidavit of publication from the newspaper but I have the signed certified mail receipt of when they received our check for publication, I will furnish the affidavit as soon as I can.

I also have the geologist's comments on your request......

Based on offsets in the southeastern portion of the James Ranch Unit, the formations which could potentially be encountered in the JRU 21 Federal SWD #1 below the base of Woodford would include Devonian, Silurian Fusselman, Ordovician Montoya, and Ordovician Simpson. The depths of these formations is uncertain at this time. None of these formations is expected to contain hydrocarbons.

If anything else is needed please let me know.

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

Thanks, Emma

**From:** Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Thursday, January 31, 2013 1:21 PM

To: Galindo, Emma Z.

Cc: Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD

**Subject:** Disposal application from BOPCO, L.P.: proposed James Ranch Unit 21 Federal SWD #1 30-015-NA Devonian

Open Hole

Hello Emma,

I just received this a few minutes ago and glanced it over,

Would you please send a formal notice to the nearest Potash Lessee? And later, let me know the other notices went out (the copies I got did not show dates of notice). Then a copy of the actual newspaper notice.

If your geologist is not certain where the Devonian or deeper formations will be encountered, for providing notice, it is best to err on the side of caution and consider noticing for a larger disposal interval and possibly saying Devonian, Silurian, Ordovician or something like that. When you finish with this well, you should know if you completed in formations deeper than Devonian. At that time we will need to amend the permit to make it accurately reflect what is in the open hole. We can do that without new notices if the gross interval was noticed prior. If not, then new notices must be sent out prior to amending the permit.

I will get you more feedback on this application as soon as possible.

Regards,

Will Jones

In	ijection Permit Checklist First Email Date: 13013 Final Reply Date: 7425 13 Final Notice Date: Ebyl 3
	sued Permit: Type:WFX/PM/SWD, Number: 1402 Permit Date3/12/13 (Legacy Permit:)
	Wells I Well Name(s): JAMES RANCH UNIT 21 Falsol SWD # 1
AF	PI Num: 30-0 15-14   O74   Spud Date: New/Old: N
Fc	potages 1451 FNL/1867 FELLot Unit G Sec 21 Tsp225 Rge 30 E County EDDY
G	eneral Location or Pool Area: MIPRE OF J.R. U.
0	perator: BoPCO, L. P. Contact EMMA Z. GALINDO
0	GRID 60 73 TRULE 5.9 Compliance (Wells) 3/490 (Finan Assur) OK 155.9 OK? OK
w	Vell File Reviewed Not Current Status: NOT DRINED NOT PERMITED
	0 / 520/
<u> 171</u>	
Di	iagrams: Before Conversion After Conversion Are Elogs in Imaging?: Could be Submitted  Sizes Setting Stage Cement Cement Top and
	Well Details: HolePipe Depths, Tool Sx or Cf Determination Method
	Planned or Existing _Surface 26 - 20 546 11265x CIRC
	Planned or Existing _Interm 17/2 — 13/8 3556 — 2785 SX CIBC
	Planned_or Existing _ LongSt /2 14 - 95/8 11000 5500 2260 + 5500
	Planned_or Existing _ Liner 8 /2 _ 75/8 /6800 - 15321
P	lanned or Existing OpenHole 6 /2   15321-16801
,	
	Depths/Formations: Depths, Ft. Formation Tops?
	Above Above
Γ	Proposed Interval TOP: 15291 DEV Max. PSI 3058 OpenHole Perfs
	Proposed Interval BOTTOM: 16,801 Tubing Size 4/2 Packer Depth 15271
	Below
	Below 1 1 2 2
G	Capitan Reef? (in_/thru_). Potash? Noticed? [WIPP?Noticed? Salado TopBotCliff House?
_	Fresh Water: MaxDepth: 546 FW Formation Rose Wells? [1070-Analysis?Affirmative Statement
<u>+</u>	Fresh Water: MaxDepth: FW Formation Kushus Wells? Turanalysis? Affirmative Statement
<u></u>	Disposal Fluid: Formation Source(s) DELAWARE On Lease Only from Operator or Commercial
	10 WIND TO EVALUATE
	Disposal Interval: Protectable Waters? NO H/C Potential: Log (/Mudlog)/DST_/Tested_/Depleted_Other
1	Notice: Newspaper Post Date 1/30 1/3 Surface Owner BLM N. Date 4777
	RULE 26.7(A) Identified Tracts? Affected Persons: Cornection N. Date 1/29
-	Anether results. CONOCC M. Date ( 1)
1	AOR: Macs? Well List? Producing in Interval? 15 Formerly Produced in Interval? 15
-	PenetratingNo. Active Wells O Num Repairs? O on which well(s)?
-	PenetratingNo. P&Aed Wells Num Repairs? On which well(s)? Diagrams?
-	PenetratingNo. P&Aed Wells Num Repairs? On which well(s)?

Issues: