

**BOPCO, L.P.**  
 810 Houston St  
 Fort Worth, Texas 76102  
 817-885-2453

October 6, 2017

**FEDERAL EXPRESS**

Bureau of Land Management  
 Carlsbad District Office  
 620 E. Green St.  
 Carlsbad, New Mexico 88220  
 Attn: Mr. Chris Walls

New Mexico State Land Office  
 Commissioner of Public Lands  
 310 Old Santa Fe Trail  
 Santa Fe, New Mexico 87501  
 Attention: Mr. Anchor Holm

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

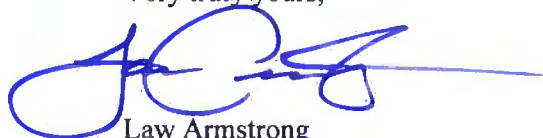
Re: Commercial Determination  
 Poker Lake Unit CVX JV BS No. 27H  
 Bone Spring Formation  
 Eddy County, New Mexico

Gentlemen:

Please find attached hereto one (1) copy of XTO's (as agent and attorney in fact for BOPCO, LP) commercial determination worksheets and exhibits which indicate that the subject well is a Commercial well in the Bone Spring Formation. Please indicate your concurrence to the above Commercial Determination to the undersigned at the address above.

Thank you very much and should you have any questions or comments in regard to the attached commercial determination, please do not hesitate to contact the undersigned at the number or email address below.

Very truly yours,



Law Armstrong  
 (817) 885-2453  
 Allen\_armstrong@xtoenergy.com

Bureau of Land Management

New Mexico State Land Office

New Mexico Oil Conservation Division

By: \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## BOPCO, L.P.

Date: October 2, 2017

To: Law Armstrong

From: Trent Boneau

Re: **Commercial Determination: PLU CVX JV BS #027H**  
**API 3001542111**  
**25S 31E Sec 3**  
**Eddy County, New Mexico**

Attached is the economic worksheet and well forecast to be submitted for commercial determination. The PLU CVX JV BS #27H was drilled in 2014 as a horizontal producer to a measured depth of 18245' in the 2<sup>nd</sup> Bone Spring Sand. The well is producing from perforations from 10876'-18076'. By mid-year 2017 the well has produced 102 kBO and as of Oct 1, 2017 was testing 91 bopd, 151 kcfd, and 94 bwpd on rod pump. This well is expected to recover approximately 393 kBOE from the current completion. The 27H cost \$10.99M to drill and complete, with almost \$2M of that being atypical trouble time due to lost circulation issues. For economics, those costs were deducted, and a CAPEX of \$9.082M was assumed.

Historical data along with the most recent EIA future pricing estimates for oil and natural gas were utilized in the economic evaluation. Prices were adjusted downward by approximately 12% to account for local conditions. Operating costs were assumed to be \$10k/mo, declining to \$5k/mo plus a fixed \$0.75/bw cost for water disposal.

The PLU CVX JV BS #27H is expected to have a lifetime undiscounted cashflow of approximately \$4.2M and bring > 5% rate of return. **It is commercial.**

Trent Boneau  
Reservoir Engineering Advisor  
Delaware Basin Subsurface Team

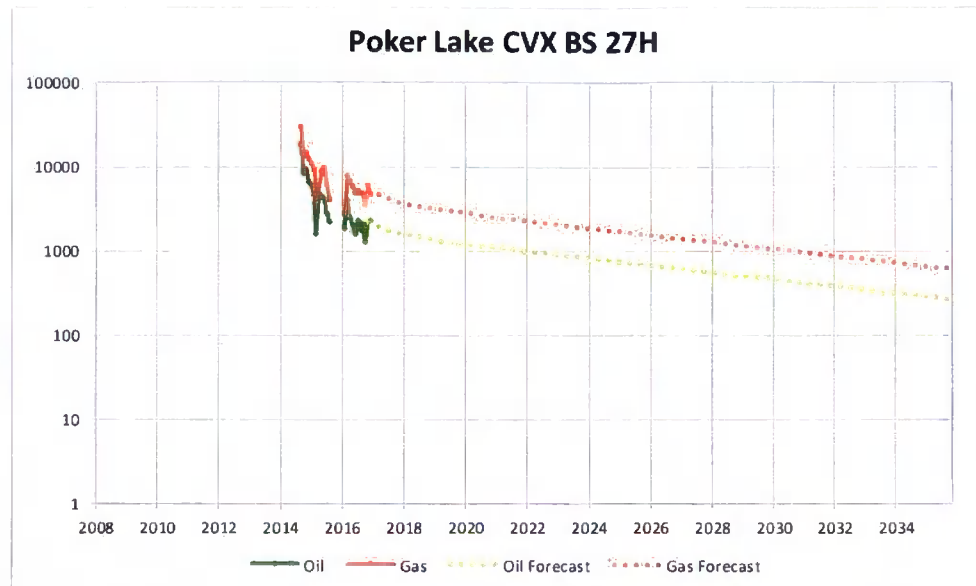
Well Name: Poker Lake CVX BS 27H  
 API Number: 3001542111  
 Formation: Bone Spring  
 Actual CAPEX, \$K: 10993.054  
 First Production Date: 11/1/2014  
 First Forecast Date: 1/1/2017  
 Cum Oil to Date (kbo): 93.917  
 Cum Wet Gas to Date (McF): 180.77  
 Water to Date (kbw): 108.135  
 Assumed Shrink: 0.6  
 NGL Yield Assumed: 125  
 WTI Price %: 0.9  
 HHub Price %: 0.82  
 NGL Price %: 0.8  
 Tax Gas: 8.19  
 Tax Oil: 7.09  
 WI %: 100  
 NRI %: 85.79294  
 OPX/mo Yr 1-3: 10000  
 OPX/mo Yr 4+: 5000  
 OPX/water (\$/bbl): 0.75  
 ECON CAPEX, \$K: 9082.244

## COMMERCIAL

TOTAL NCF 0% DISCOUNT: 12,345 KS  
 TOTAL NCF 5% DISCOUNT: 2,063 KS

EUR Oil: 287720 bo  
 EUR Wet Gas: 632844 kcf  
 EUR BOE: 393,194

## ECONOMICS MODULE



	Date	Oil Volume	Wet Gas Volume	Dry Gas Volume	NGL Volume, gals	Oil Price	Gas Price	NGL Price	Total Gross Revenue	Net Revenue	Total OpCost	Local Taxes	Net Oper Income	Total Capital	BTax CFlow	Discounted Cash Flow 5%
		BO	kcf	kcf	gal	\$ BO	\$ kcf	\$ gal	MS	MS	MS	MS	MS	MS	MS	MS
HISTORICAL	2014	26436	41944	25166	220206	93.30	4.39	0.63	2421.4	2077	132.8	159.92	1785	9082.244	-7298	-7298
HISTORICAL	2015	44376	83190	49914	436748	49.00	2.63	0.33	2180.2	1870	158.3	143.93	1568	0	1568	1494
HISTORICAL	2016	18775	45183	27110	237211	43.00	2.52	0.29	837.7	719	136.2	54.86	528	0	528	479
FORECAST	2017	22026	53269	31961	279660	46.07	2.70	0.31	1053.7	904	79.0	68.86	756	0	756	653
FORECAST	2018	17779	41222	24733	216416	49.37	2.89	0.33	906.3	778	75.4	59.20	643	0	643	529
FORECAST	2019	15153	36276	21765	190446	52.90	3.10	0.36	831.1	713	73.1	54.15	586	0	586	459
FORECAST	2020	13548	31922	19153	167593	56.68	3.32	0.38	794.6	682	71.7	51.72	558	0	558	417
FORECAST	2021	12329	28518	17111	149719	60.73	3.56	0.41	772.9	663	70.6	50.27	542	0	542	385
FORECAST	2022	11219	25951	15571	136244	65.08	3.81	0.44	753.7	647	69.7	48.95	528	0	528	357
FORECAST	2023	10210	23616	14169	123982	69.73	4.09	0.47	734.9	630	68.8	47.67	514	0	514	331
FORECAST	2024	9291	21490	12894	112824	74.71	4.38	0.50	716.6	615	68.0	46.43	500	0	500	307
FORECAST	2025	8455	19556	11734	102670	80.06	4.51	0.54	696.9	598	67.3	45.22	485	0	485	284
REMAINDER		78123	180707	108424	948710				7447	6389	1627	483	4278	0	4278	1779
TOTAL		287720	632844	379706	3322429				20147	17285	2698	1315	13272	9082	4190	176

**INTER-OFFICE MEMORANDUM**  
**MIDLAND OFFICE**

September 9, 2015

**TO:** FT. WORTH  
**FOR:** KENT A. ADAMS  
**FROM:** STEPHEN M. MARTINEZ  
**RE:** UPWARD SUPPLEMENT AFE #25688  
PLU CVX JV BS #027H  
BIG SINKS (BONE SPRING)  
EDDY COUNTY, NEW MEXICO

AFE No.	25688
Original AFE	\$ 6,443,054
Supplement #1	\$ 2,200,000
Supplement #2	\$ 2,350,000
New Total Amount	\$ 10,993,054

Attached for your approval is an AFE supplement to the drilling and completions portion of AFE #25688 in the amount of \$2,350,000 (BOPCO WI – 50%) to complete the subject well.

After reconciling reported cost versus actual invoices, it was discovered that supplement #1 was underestimated by \$500,000. The original completion AFE was over expended by \$1,850,000 due to changes in scope of the well and problems that occurred during/after the completion of this well. The additional costs incurred are detailed below:

- Scope (\$190,661):
  - A fracstring (not in original AFE) had to be run for the well to be completed since the casing design changed from 5-1/2" to 7" X 4-1/2" due to severe loss of circulation while drilling ( see supplement #1).
- Trouble (\$1,910,810):
  - Fishing operation on packer after drilling out frac plugs added additional PU, snubbing unit, contract services and equipment rental costs.
  - 2" coil tubing was also used to drillout frac plugs after well completion due to high bottom hole pressure. Additional CT cost was incurred due to difficulties milling plugs, plug debns in wellbore, and downhole motor failures.
- Other (\$245,870):
  - The cost of frac tanks, hauling PW/FW and containment were underestimated in the original AFE.

**For econs, deduct this from total cost**  
**\$10993k - \$1911k = \$9082k**

DISTRICT I  
1626 N. French Dr., Hobbs, NM 88240  
Phone (505) 333-8191 Fax (505) 333-0722

DISTRICT II  
511 S. First St., Artesia, NM 88210  
Phone (505) 748-1823 Fax (505) 748-0722

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 534-6176 Fax (505) 534-6170

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-6450 Fax (505) 476-6452

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to appropriate  
District Office

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT  
"As Drilled"

API Number 30-015-42111	Pool Code 96641	Pool Name Paduca; Bone Spring
Property Code 313213	Property Name POKER LAKE UNIT CVX JV BS	Well Number 027H
ODRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3453'

Surface Location

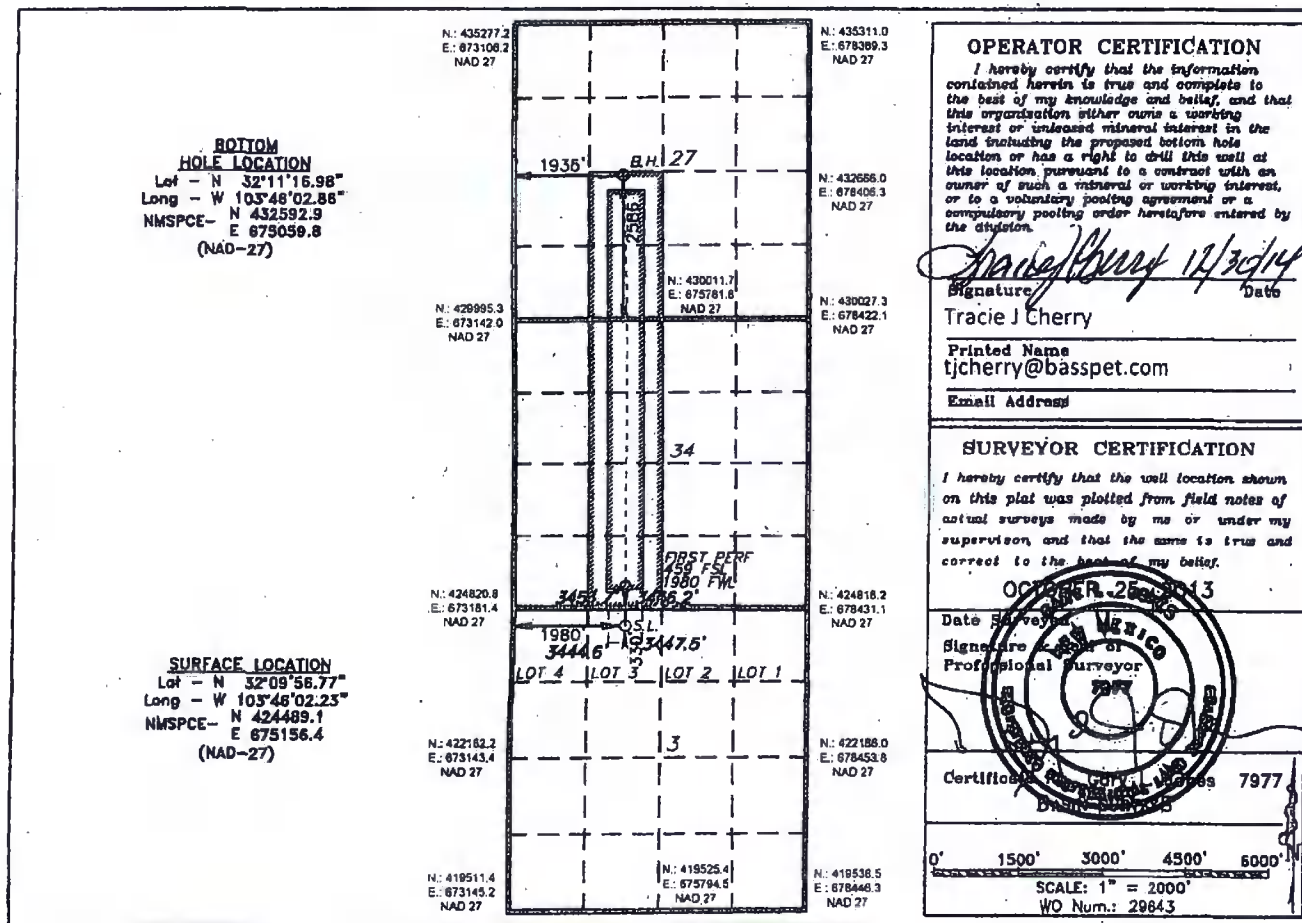
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 3	3	25 S	31 E		330	NORTH	1980	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	27	24 S	31 E		2586	SOUTH	1935	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

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





FEB 06 2015

OCD Artesia  
RECEIVED

Form 3160-4  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMNM051382 NMNM0522A

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name	
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____		7. Unit or CA Agreement Name and No. NMNM71016X	
2. Name of Operator BOPCO LP		8. Lease Name and Well No. POKER LAKE UNIT CVX JV BS 027H	
3. Address P O BOX 2760 MIDLAND, TX 79702		9. API Well No. 30-015-42111	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NENW Lot 03 330FNL 1980FWL Sec 34 T24S R31E Mer NMP At top prod interval reported below SESW 459FSL 1980FWL Sec 27 T24S R31E Mer NMP At total depth NESW 2586FSL 1935FWL		10. Field and Pool, or Exploratory PADUCA; BONE SPRING	
14. Date Spudded 05/18/2014		15. Date T.D. Reached 07/04/2014	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 11/03/2014		17. Elevations (DF, KB, RT, GL)* 3246 GL	
18. Total Depth: MD 18245 TVD 10350		19. Plug Back T.D.: MD TVD	
20. Depth Bridge Plug Set: MD TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CNL/GR/CCL, RCBL/GR/CCL		22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)	

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55	48.0		841		725	212	0	
11.000	8.625 L80	32.0		4371		1646	519	0	
7.875	7.000 HCP110	26.0		9685		600	246	3880	
6.125	4.500 HCP110	11.6	9420	18245		900	197	9420	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	9089							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) 2ND BONE SPRING	10055	18245	10876 TO 18076	0.430	156	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10876 TO 18076	FRAC DOWN CSG USING TOTAL 53,661 BBLs FLUID, 3,978,064# PROPANT ACROSS 13 STAGES

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Status
11/05/2014	11/24/2014	24	→	487.0	1113.0	791.0			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→				2285	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Status
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

ACCEPTED FOR RECORD

ELECTRIC PUMP SUB-SURFACE

FEB 3 2015

Deborah Han

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #286510 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

## 29. Disposition of Gas(Sold, used for fuel, vented, etc.)

SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
BELL CANYON	4418	5152	SANDSTONE	RUSTLER	470
CHERRY CANYON	5152	6596	SANDSTONE	SALADO/T. SALT	878
BRUSHY CANYON	6596	8278	SANDSTONE	B. SALT	4114
BONE SPRING	8278		SANDSTONE/LIMESTONE	BELL CANYON	4418
				CHERRY CANYON	5152
				BONE SPRING	8278
				U. AVALON SHALE	8614
				2ND BONE SPRING SND	10055

## 32. Additional remarks (include plugging procedure):

\*\*\*\*PLEASE HOLD COMPLETION CONFIDENTIAL\*\*\*\*

## 33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7. Other:

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #286510 Verified by the BLM Well Information System.  
For BOPCO LP, sent to the Carlsbad  
Committed to AFMSS for processing by DEBORAH HAM on 01/30/2015 ()

Name (please print) TRACIE J CHERRY

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 12/30/2014

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.

\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\*