

366

BOPCO, L.P.
201 MAIN ST.
FORT WORTH, TEXAS 76102-3131
817/390-8400

September 23, 2015

FEDERAL EXPRESS

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

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

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

Re: Commercial Determination
PLU CVX JV Big Sinks #018H (15-24-30)
1st Bone Spring Shale
Eddy County, New Mexico

Gentlemen:

Please find attached hereto one (1) copy of Bass' commercial determination worksheets and exhibits which indicate that the subject well is not a commercial producer in the 1st Bone Spring Shale. Should you be in agreement that the 1st Bone Spring Shale is not commercial, please signify by executing one (1) copy of this letter in the space provided below and returning same to the undersigned at your earliest convenience.

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.

Very truly yours,



R. Travis Mears

2015 SEP 25 A.M. 8:12
RECEIVED OOD

Bureau of Land Management

New Mexico State Land Office

New Mexico Oil Conservation Division

By: _____

By: _____

By: _____

Its: _____

Its: _____

Its: _____

Date: _____

Date: _____

Date: _____



INTER-OFFICE MEMORANDUM



TO: Ross Sutton

FROM: Bryce Bezant

DATE: 8/27/2015

RE: Commercial Determination
PLU CVX JV Big Sinks #018H (15-24-30)
Poker Lake Unit (1st Bone Spring Shale)
Eddy County, New Mexico

Attached are the worksheets and necessary exhibits for the subject well to be submitted for commercial determination. The Big Sinks #018H was drilled in 2013 to a total depth of 16,400' laterally completed in the 1st Bone Spring Shale reservoir. The well is producing from perforations 9,141'-16,405'. On test 9/29/2013 the well flowed at the rate of 236 BOPD, 854 MCFD, and 1995 BWPD. This well has an expected recovery of approximately 158 MBOE (13:1 mcf/bbl) from the current completion.

The capital investment was taken from the AFE report and operating costs from the LIOR statement which included water hauling charges. The most recent strip price file was utilized adjusting for current area differentials. The Big Sinks #018H will not be a commercial well and should not be incorporated into a participating area.


R. Bryce Bezant, P.E.

RBB/tah

Cc: Travis Mears
Tom McCarthy
Steve Johnson

ECONOMIC PROJECTION

Date : 9/4/2015

Lior: 1004622

10:39:41AM

Project Name : 1-1-2015 NSAI Review For BOPCO, LP
Partner : All cases
Case Type : LEASE CASE
Archive Set : NS0115

As Of Date : 01/01/2013
Discount Rate (%) : 5.00
1004622/PLU CVX JV BS/018H/1ST

Lease Name : 1004622/PLU CVX JV BS/018H/1ST
Reserv Cat. : Proved Producing
Field : WILDCAT G-06 S243026M;BONE SPRING
Operator : BOPCO
Reservoir : BONE SPRING
Co., State : EDDY, NM

Cum Oil (mbbls) : 0.00
Cum Gas (mmcf) : 0.00
Risk: 0.000 Inherited/ 0.000 Compounded

Year	Gross Wet Production		Gross Dry Gas & NGL		Sales		
	Oil (Mbbbl)	Wet Gas (MMCF)	Dry Gas (MMCF)	NGL (MGal)	Oil (Mbbbl)	Gas (MMCF)	NGL (MGal)
2013	26.715	72.248	41.687	242.753	25.379	39.603	113.002
2014	33.648	259.223	149.572	870.989	31.966	142.093	405.446
2015	12.654	121.942	70.361	409.727	12.021	66.843	190.728
2016	8.241	86.062	49.658	289.170	7.829	47.175	134.609
2017	6.098	67.183	38.764	225.733	5.793	36.826	105.079
2018	4.852	55.649	32.110	186.981	4.609	30.504	87.040
2019	4.030	47.738	27.545	160.399	3.828	26.167	74.666
2020	3.455	42.053	24.264	141.298	3.283	23.051	65.774

Rem	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	99.693	752.098	433.961	2,527.050	94.708	412.263	1,176.342
Jlt.	99.693	752.098					

Year	Average Price			Net Revenue			
	Oil \$/BBL	Gas \$/MCF	NGL \$/Gal	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2013	94.32	3.55	0.75	2,393.674	140.398	84.751	2,618.824
2014	90.27	4.27	0.84	2,885.565	607.140	339.917	3,832.622
2015	45.92	2.73	0.41	551.976	182.162	77.423	811.561
2016	42.82	2.92	0.38	335.256	137.748	51.487	524.490
2017	47.34	3.08	0.38	274.239	113.526	40.192	427.957
2018	50.52	3.16	0.38	232.851	96.396	33.292	362.539
2019	52.60	3.21	0.38	201.390	84.061	28.559	314.010
2020	54.18	3.31	0.38	177.844	76.209	25.158	279.211

Rem	0.00	0.00	0.00	0.000	0.000	0.000	0.000
Total	74.47	3.49	0.58	7,052.795	1,437.641	680.778	9,171.214

Year	Expenditures				Future Net Revenue			
	Total Sev Taxes (M\$)	Total Adv Taxes (M\$)	Net Investments (M\$)	Total Net Opcosts (M\$)	Annual (M\$)	Cumulative (M\$)	Disc. Ann. CF 5.00 % (M\$)	Cum. Disc. CF 5.00 % (M\$)
2013	18.146	0.773	6,703.052	405.297	-4,508.445	-4,508.445	-4,373.713	-4,373.713
2014	315.919	13.309	0.000	751.500	2,751.895	-1,756.550	2,573.128	-1,800.585
2015	67.368	2.816	250.000	287.967	203.409	-1,553.141	177.227	-1,623.358
2016	43.710	1.820	0.000	259.061	219.900	-1,333.241	185.708	-1,437.649
2017	35.660	1.485	0.000	243.943	146.869	-1,186.373	118.120	-1,319.530
2018	30.204	1.259	0.000	234.827	96.249	-1,090.124	73.740	-1,245.790
2019	26.164	1.090	0.000	228.673	58.083	-1,032.041	42.398	-1,203.392
2020	23.274	0.969	0.000	224.306	30.661	-1,001.380	21.341	-1,182.051

Rem	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	560.445	23.522	6,953.052	2,635.574	-1,001.380	-1,001.380	-1,182.051	-1,182.051

Major Phase : Gas
erfs : 0
itial Rate : 26.55 mmcf/month
bandonment : 3.30 mmcf/month
itial Decline : 85.00 % year
eg Ratio : 0.19 bbl/mmcf
nd Ratio : 0.08

Working Int : 1.00000000
Revenue Int : 0.95000000
Disc. Initial Invest. (m\$) : 6,710.467
Internal ROR (%) : >1000.0
ROI Investment (disc/undisc) : 0.82 / 0.86
Years to Payout : 0.00
Abandonment Date : 12/31/2020

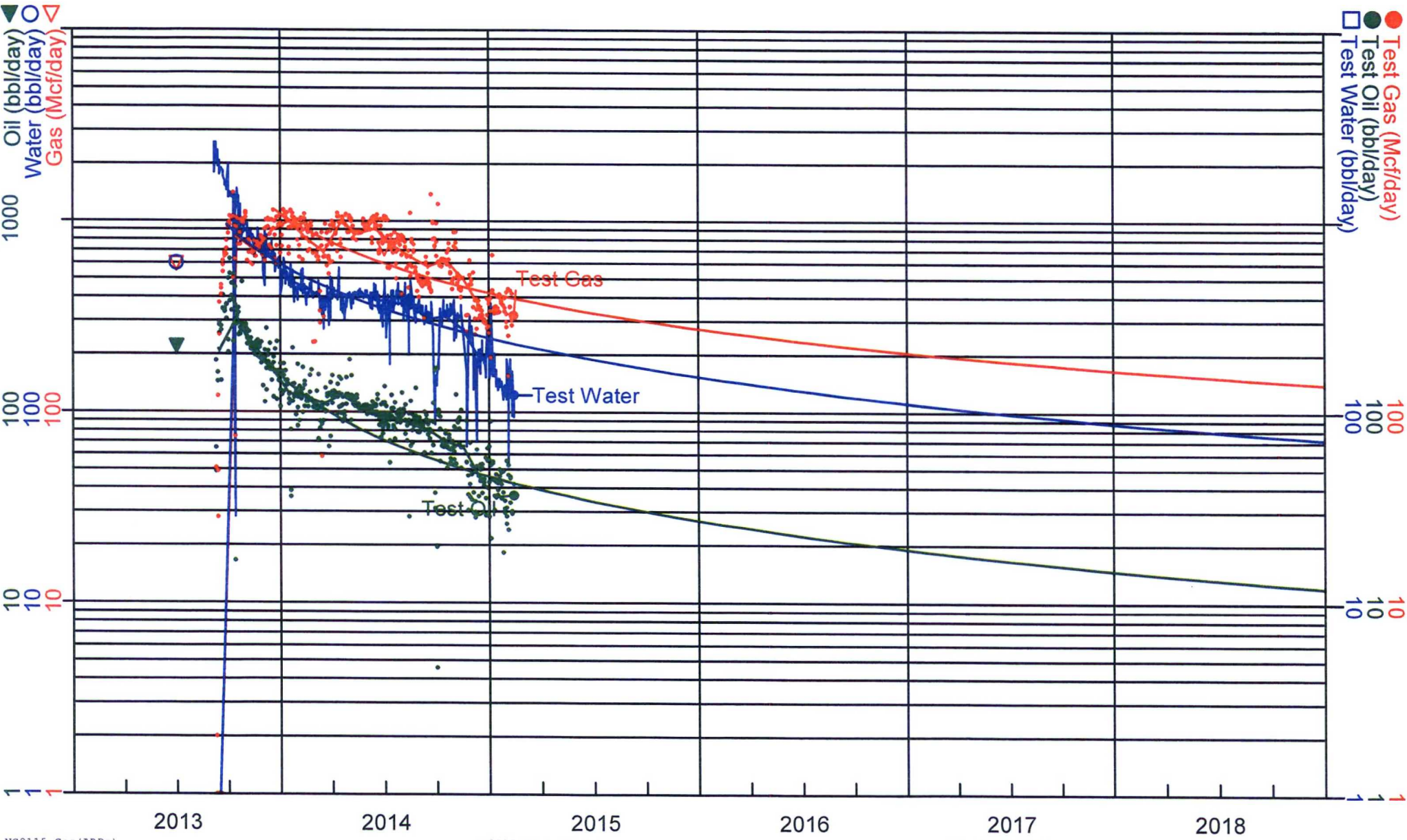
Present Worth Profile (M\$)

5.00% : -1,182.05
 9.00% : -1,296.65
 10.00% : -1,321.90
 12.00% : -1,368.81
 15.00% : -1,431.14
 20.00% : -1,517.06
 30.00% : -1,638.58
 40.00% : -1,714.36
 50.00% : -1,760.52
 60.00% : -1,786.85

	Initial	1st Rev.	2nd Rev.
Working Interest :	1.00000000	0.00000000	0.00000000
Revenue Interest :	0.95000000	0.00000000	0.00000000
Rev. Date :			

1004622/PLU CVX JV BS/018H/1ST
Oper: BOPCO
Major Phase: Gas

Field: WILDCAT G-06 S243026M;BONE SPRING
EDDY,NM
ECL Date: 12/31/2020



NS0115 Gas(ARPs)
Segment: 1 of 1
Cum: 0 Mcf
Rem: 1,267,446 Mcf
EUR: 1,267,446 Mcf
12/19/2013 - 07/29/2057
Qi: 34,979 / Qact: 26,550
Qf: 304
D: 85.000 / Dmin: 6.000
B: 1.20000

NS0115 Water(ARPs)
Segment: 1 of 1
Cum: 0 bbl
Rem: 678,845 bbl
EUR: 678,845 bbl
09/26/2013 - 07/29/2057
Qi: 28,847 / Qact: 0
Qf: 181
D: 90.000 / Dmin: 5.000
B: 1.00000

NS0115 Oil(ARPs)
Segment: 1 of 1
Cum: 0 bbl
Rem: 137,834 bbl
EUR: 137,834 bbl
10/17/2013 - 07/29/2057
Qi: 9,125 / Qact: 9,387
Qf: 22
D: 99.000 / Dmin: 6.000
B: 1.00000

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL _____ PLU CVX JV BIG SINKS #018H (15-24-30) _____ FORMATION _____ BONE SPRING _____
 LOCATION _____ UNIT, _____ 450 _____ FEET FROM _____ SOUTH _____ LINE & _____ 770 _____ FEET FROM _____ EAST _____ LINE
 SECTION _____ 15 _____ TOWNSHIP _____ 24S _____ RANGE _____ 30E _____ COUNTY _____ Eddy _____, NEW MEXICO
 SPUD DATE _____ 7/5/2013 _____ COMPLETION DATE _____ 9/5/2013 _____ INITIAL PRODUCTION _____ 9/8/2013 _____
 PERFORATIONS _____ 8413-16400 _____
 BHL: 2529' FSL & 725' FEL SEC 10 T24S R30E _____
 STIMULATION:

ACID _____

FRACTURE _____ See Attached _____

POTENTIAL _____ (9/29/2013): 236 BOPD, 854 MCFPD, 1995 BWPD _____

(Attach Copy of C-105. Attach Copy of Wellbore Sketch of Completed Well.)

VOLUMETRIC CALCULATION

	SANDS PERFORATED	POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	160	
Porosity (Φ), %	8.8%	
Water saturation (S_w), %	23%	
Net Thickness (H), ft.	65	
Temperature (T), Fahrenheit	140	
Bottom Hole pressure (P), psia	4,370	
Recovery factor (RF), %	12%	
Recoverable oil, MBO *(See eq. below)	305.1	

*Sometimes unable to match performance due to volumetric uncertainty or low recovery efficiency of shale gas wells.

Formula = $((7758 \text{ rb/ac-ft}) (\text{por}) (1-S_w) / (\text{Boi rbo/stb})(\text{RF})(A) (h)) / 1000 \text{ bo/Mbo}$ Boi = 2.15 rb/stb

PERFORMANCE DATA

(If sufficient history exists, attach plot of oil production rate v time.)

CUMULATIVE PRODUCTION TO 7/31/2015 70,296 BBL Oil 455,975 MCF Gas

INITIAL RATE (qi) 300 BOPD

ECONOMIC LIMIT (ql) 1 BOPD

HYPERBOLIC DECLINE RATE, dy n = 1.0, d = 99%/yr

REMAINING MBO (Q) = 29

ULTIMATE RECOVERABLE MBO 100

(Attach plat showing proration unit and participating area.)

ECONOMIC

GROSS WELL COST \$2,681,221 (to the depth of formation completed)

COMPLETION COST \$4,021,831

GROSS TOTAL COST \$6,703,052

YEAR	GROSS OIL MBO	BFIT NET INCOME (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	26.715	2618.8	424.2	-4373.7
2	33.648	3832.6	1080.7	2573.1
3	12.654	811.6	358.2	177.2
4	8.241	524.5	304.6	185.7
5	6.098	428.0	281.1	118.1
6	4.852	362.5	266.3	73.7
7	4.030	314.0	255.9	42.4
8	3.455	279.2	248.5	21.3
9	0.000	0.0	0.0	0.0
10	0.000	0.0	0.0	0.0
REMAINDER	0.000	0.0	0.0	0.0
TOTAL	99.693	9171.2	3219.5	-1182.1

WELL IS NOT COMMERCIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMLC068905	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator BOPCO LP		7. Unit or CA Agreement Name and No. 891000303X	
3. Address MIDLAND, TX 79702		8. Lease Name and Well No. PLU BIG SINKS 15 24 30 USA 1H	
3a. Phone No. (include area code) Ph: 432-221-7379		9. API Well No. 30-015-40936-00-S1	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface SESE 450FSL 770FEL 32.211707 N Lat, 103.862277 W Lon Sec 15 T24S R30E Mer NMP At top prod interval reported below SESE 587FSL 699FEL 32.211707 N Lat, 103.862277 W Lon Sec 10 T24S R30E Mer NMP At total depth NENE 2529FSL 725FEL		10. Field and Pool, or Exploratory WILDCAT	
14. Date Spudded 07/05/2013		15. Date T.D. Reached 08/02/2013	
16. Date Completed ☐ D & A ☒ Ready to Prod. 09/05/2013		17. Elevations (DF, KB, RT, GL)* 3434 GL	
18. Total Depth: MD 16400 TVD 9244		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) BOREHOLEPROFILE HRLAMICRO-CFL HNGS CNL AIT	
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ 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 H-40	48.0	0	726		680		0	
11.000	8.625 J-55	32.0	0	3995		1625		0	
7.875	5.500 HCP-110	17.0	0	16400		2450		880	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8648							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	8413	16400	9141 TO 16276	0.570	378	OPEN
B)			16400 TO 16405			OPEN HOLE
C)						
D)						

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

Depth Interval	Amount and Type of Material
9141 TO 16405	bbls total fluid, 4245414# total proppant over 16 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 Method
09/08/2013	09/29/2013	24	→	236.0	854.0	1995.0	44.8		ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→	236	854	1995	3619	POW	NOV 2 2013

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 Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

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

ELECTRONIC SUBMISSION #221798 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

RECLAMATION
DUE 3-5-14

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
				RUSTLER	661
				SALADO	992
				BASE OF SALT	3782
				BELL CANYON	4020
				CHERRY CANYON	4939
				BRUSHY CANYON	6217
				BONE SPRING	7869

32. Additional remarks (include plugging procedure):

Please hold completion confidential

Did not circulate cmt from 5-1/2" shoe to DV tool. Got back green dye.

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 #221798 Verified by the BLM Well Information System.

For BOPCO LP, sent to the Carlsbad

Committed to AFMSS for processing by JUNE CARRASCO on 10/25/2013 (14JNC0157SE)

Name (please print) TRACIE J CHERRY Title REGULATORY ANALYST

Signature (Electronic Submission) Date 10/01/2013

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.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

District I
1625 N French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

Effective 08/01/14

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40936	² Pool Code 97798	³ Pool Name WC G-06 S243026M; Bone Spring
⁴ Property Code 313213	⁵ Property Name Poker Lake Unit CVX JV BS	⁶ Well Number 18H
⁷ OGRID No. 260737	⁸ Operator Name BOPCO, LP	⁹ Elevation 3434

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	15	24S	30E	0	450	South	770	East	Eddy

¹¹ 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
I	10	24S	30E		2529	South	725	East	Eddy

¹² Dedicated Acres 240	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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.

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Tracie J Cherry</i> <i>08/04/14</i> Signature Date Tracie J Cherry Printed Name tjcherry@basspet.com E-mail Address
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey Signature and Seal of Professional Surveyor:
	Certificate Number
	Top Part 527 FSL 649 FEL 450



Downhole Profile - Vertical Wells

BOPCO, L.P. - West Texas

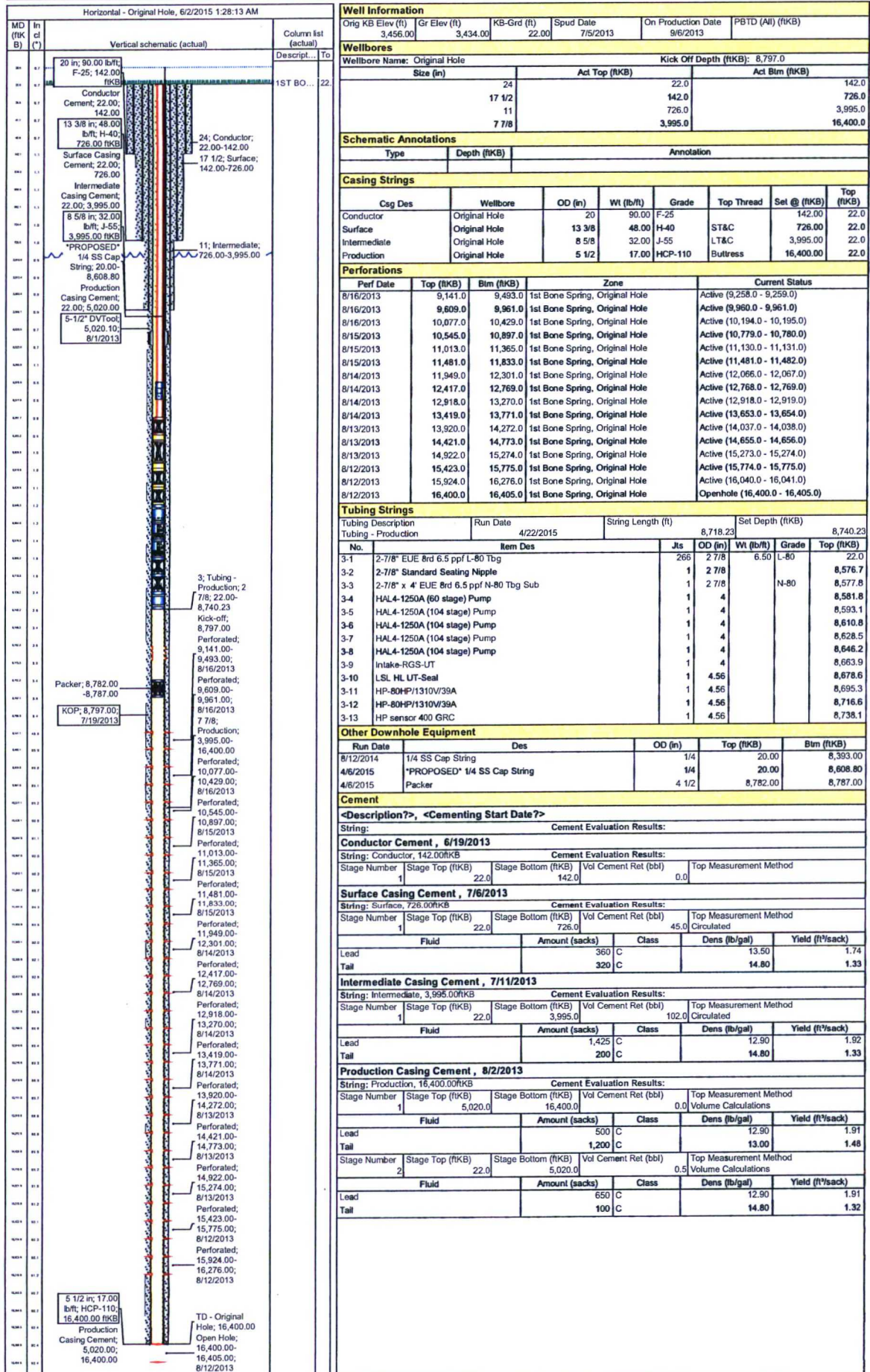
Well Name: POKER LAKE UNIT CVX JV BS #018H (15-24-30)

Well ID: 30-015-40936

Field: Wildcat - Bone Spring

Sect: 15 Town: 24S Rng: 30E County: Eddy State: New Mexico

Surface Location: 450' FSL & 770' FEL, Sec 15, T24S-R30E





Schematic - Vertical Production

BOPCO, L.P. - West Texas

Well Name: POKER LAKE UNIT CVX JV BS #018H (15-24-30)

Well ID: 30-015-40936

Field: Wildcat - Bone Spring

Sect: 15 Town: 24S Rng: 30E Eddy Co., State: New Mexico

Blk: Survey:

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Maintenance	Sub Pump		4/17/2015	4/23/2015

