

R:153
C:136

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

December 31, 2015

RECEIVED 003

2016 JAN -5 A 10:04
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 BS #029H (2-25-30)
Poker Lake Unit (Bone Spring 2 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 Bone Spring 2 Shale. Should you be in agreement that the Bone Spring 2 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

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: 12/04/2015

RE: Commercial Determination
PLU CVX JV BS #029H (12-25-30)
Poker Lake Unit (Bone Spring 2 Shale)
Eddy County, New Mexico



Attached are the worksheets and necessary exhibits for the subject well to be submitted for commercial determination. The PLU CVX JV BS #029H was drilled in 2014 to a total depth of 15,054' laterally completed in the Bone Spring 2 Shale reservoir. The well is producing from perforations 10,424'-15,015'. On test 8/17/2014 the well flowed at the rate of 423 BOPD, 769 MCFD, and 1026 BWPD. This well has an expected recovery of approximately 193 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 BS #029H 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 : 12/4/2015

Lior: 1004630

10:07:24AM

Project Name : 7-1-2014 NSAI Review For BOPCO, LP

As Of Date : 06/01/2014

Lease Name : 1004630/PLU CVX JV BS/029H/2ND

Partner : All cases

Discount Rate (%) : 5.00

Reserv Cat. : Proved Producing

Case Type : LEASE CASE

1004630/PLU CVX JV BS/029H/2ND

Field : WILDCAT G-06 S2530020;BONE SPRING

Archive Set : NS0715

Operator : BOPCO

Cum Oil (Mbbbl) : 0.00

Reservoir : 2ND BONE SPRING SHALE

Cum Gas (MMcf) : 0.00

Co., State : EDDY, NM

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)
2014	27.158	73.862	42.027	260.733	22.201	34.357	213.146
2015	27.293	66.704	37.955	235.466	22.311	31.028	192.491
2016	17.686	40.726	23.173	143.763	14.458	18.944	117.525
2017	12.434	28.632	16.292	101.072	10.165	13.318	82.625
2018	9.744	22.438	12.767	79.207	7.966	10.437	64.751
2019	8.075	18.594	10.580	65.638	6.601	8.649	53.658
2020	6.947	15.996	9.102	56.466	5.679	7.441	46.161
2021	6.087	14.017	7.976	49.481	4.976	6.520	40.450
2022	5.444	12.536	7.133	44.251	4.450	5.831	36.174
2023	4.933	11.360	6.464	40.101	4.033	5.284	32.782

Rem	37.476	86.301	49.105	304.624	30.636	40.143	249.027
Total	163.276	391.167	222.574	1,380.802	133.477	181.952	1,128.791
Ult.	163.276	391.167					

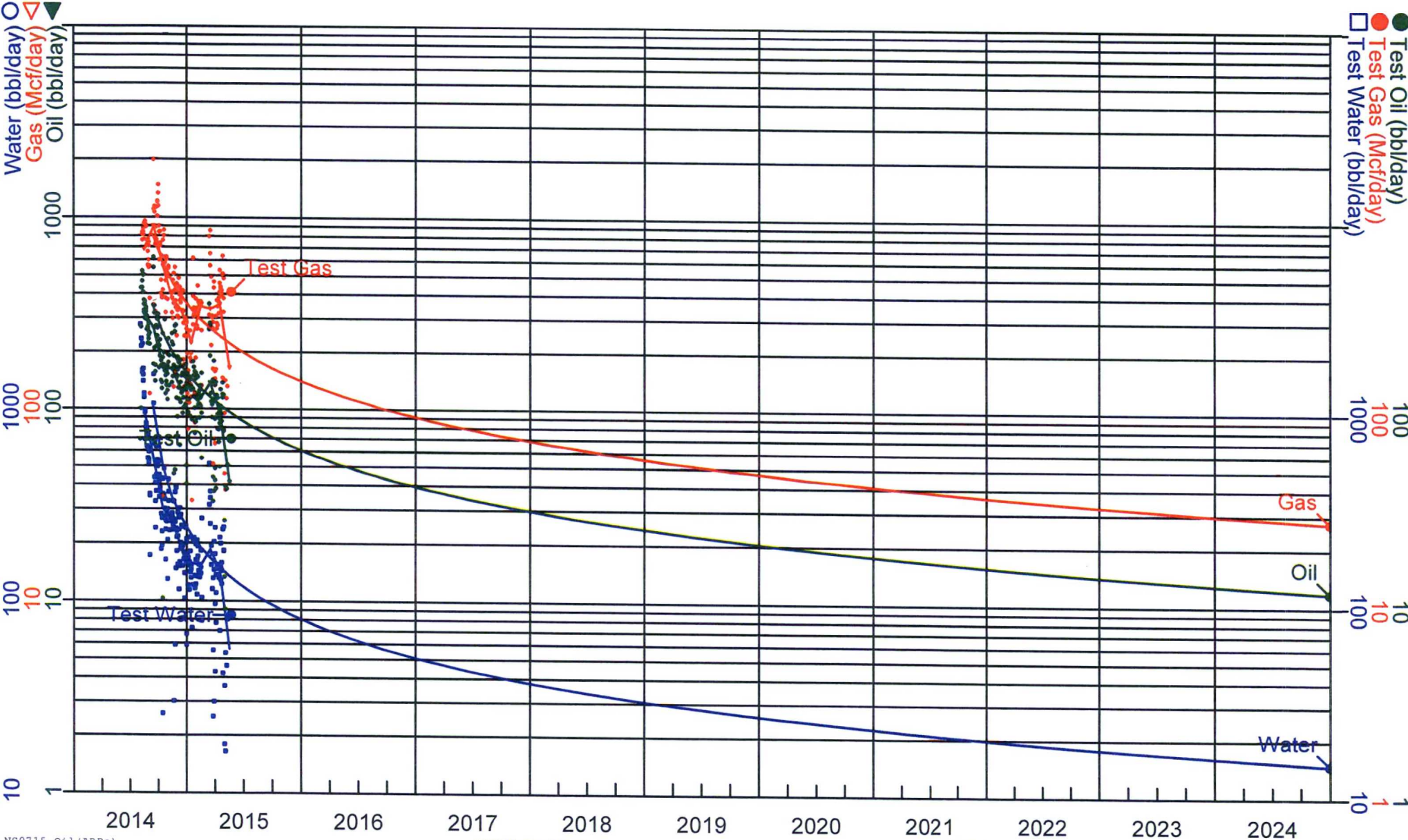
Year	Average Price			Net Revenue			
	Oil (\$/bbl)	Gas (\$/Mcf)	NGL (\$/gal)	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2014	77.57	3.34	0.72	1,722.12	114.83	152.80	1,989.76
2015	44.13	2.28	0.41	984.65	70.78	79.67	1,135.10
2016	41.49	2.11	0.38	599.88	39.89	45.13	684.90
2017	45.37	2.38	0.38	461.15	31.75	31.73	524.63
2018	47.69	2.46	0.38	379.90	25.68	24.86	430.44
2019	49.50	2.53	0.38	326.73	21.84	20.60	369.18
2020	50.81	2.63	0.38	288.55	19.56	17.73	325.83
2021	51.58	2.74	0.38	256.68	17.89	15.53	290.10
2022	52.04	2.88	0.38	231.58	16.80	13.89	262.26
2023	52.42	3.02	0.38	211.41	15.96	12.59	239.96
Rem	52.92	3.48	0.38	1,621.27	139.67	95.63	1,856.56
Total	53.07	2.83	0.45	7,083.92	514.65	510.16	8,108.72

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\$)
2014	89.56	3.27	6,777.90	96.37	-4,977.35	-4,977.35	-5,004.69	-5,004.69
2015	92.61	3.39	0.00	245.08	794.03	-4,183.32	755.46	-4,249.23
2016	55.88	2.04	250.00	222.82	154.16	-4,029.16	140.12	-4,109.11
2017	42.80	1.57	0.00	209.24	271.02	-3,758.14	233.49	-3,875.63
2018	35.12	1.29	0.00	204.58	189.46	-3,568.68	155.42	-3,720.21
2019	30.12	1.10	0.00	201.74	136.22	-3,432.46	106.42	-3,613.78
2020	26.58	0.97	0.00	199.83	98.44	-3,334.01	73.25	-3,540.53
2021	23.67	0.87	0.00	198.39	67.17	-3,266.84	47.61	-3,492.92
2022	21.40	0.78	0.00	197.32	42.76	-3,224.08	28.87	-3,464.05
2023	19.58	0.72	0.00	196.47	23.19	-3,200.89	14.92	-3,449.13
Rem	151.47	5.55	0.00	2,525.81	-826.27	-826.27	-339.88	-339.88
Total	588.77	21.54	7,027.90	4,497.67	-4,027.15	-4,027.15	-3,789.01	-3,789.01

Major Phase :	Gas	Working Int :	1.00000000	Present Worth Profile (M\$)	
Perfs :	0 0	Revenue Int :	0.81748906		
Initial Rate :	18,734.00 Mcf/month	Disc. Initial Invest. (m\$) :	7,003.403	5.00% :	-3,789.01
Abandonment :	304.17 Mcf/month	Internal ROR (%) :	>1000.0	9.00% :	-3,785.19
Initial Decline :	99.00 % year b = 1.200	ROI Investment (disc/undisc) :	0.46 / 0.43	10.00% :	-3,795.55
Seg Ratio :	0.30 bbl/Mcf	Years to Payout :	0.00	12.00% :	-3,823.76
End Ratio :	0.43 bbl/Mcf	Abandonment Date :	01/21/2037	15.00% :	-3,877.19
Forecast Start :	09/01/2014			20.00% :	-3,976.55
		Initial	1st Rev.	30.00% :	-4,164.57
		Working Interest : 1.00000000	0.00000000	40.00% :	-4,319.52
		Revenue Interest : 0.81748906	0.00000000	50.00% :	-4,445.28
		Rev. Date :		60.00% :	-4,549.06

1004630/PLU CVX JV BS/029H/2ND
Oper: BOPCO
Major Phase: Gas

Field: WILDCAT G-06 S2530020;BONE SPRING
EDDY,NM
ECL Date: 01/21/2037



NS0715 Oil (ARPs)
Segment: 1 of 1
Cum: 0 bbl
Rem: 163,276 bbl
EUR: 163,276 bbl
09/12/2014 - 01/21/2037
Qi: 10,646 / Qact: 5,558
Qf: 132
D: 99,000 / Dmin: 8.000
B: 1.20000

NS0715 Gas (ARPs)
Segment: 1 of 1
Cum: 0 Mcf
Rem: 391,167 Mcf
EUR: 391,167 Mcf
09/12/2014 - 01/21/2037
Qi: 24,514 / Qact: 18,734
Qf: 304
D: 99,000 / Dmin: 8.000
B: 1.20000

NS0715 Water (ARPs)
Segment: 1 of 1
Cum: 0 bbl
Rem: 239,515 bbl
EUR: 239,515 bbl
09/12/2014 - 01/21/2037
Qi: 32,850 / Qact: 11,381
Qf: 208
D: 100,000 / Dmin: 6.000
B: 1.20000

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL _____ PLU CVX JV BIG SINKS #029H (2-25-30 4H) _____ FORMATION _____ BONE SPRING _____
 LOCATION _____ UNIT, _____ 170 _____ FEET FROM _____ SOUTH _____ LINE & _____ 660 _____ FEET FROM _____ WEST _____ LINE
 SECTION _____ 2 _____ TOWNSHIP _____ 25S _____ RANGE _____ 30E _____ COUNTY _____ Eddy _____, NEW MEXICO
 SPUD DATE _____ 6/13/2014 _____ COMPLETION DATE _____ 8/1/2014 _____ INITIAL PRODUCTION _____ 8/14/2014 _____
 PERFORATIONS _____ 10424-15015 _____
 BHL: 355' FNL & 668' FWL SEC 2 T25S R30E _____

STIMULATION:

ACID _____

FRACTURE _____ See Attached _____

POTENTIAL _____ (8/17/2014): 423 BOPD, 769 MCFPD, 1026 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), %	4.6%	_____	_____	_____
Water saturation (S_w), %	21%	_____	_____	_____
Net Thickness (H), ft.	239	_____	_____	_____
Temperature (T), Fahrenheit	151	_____	_____	_____
Bottom Hole pressure (P), psia	4,894	_____	_____	_____
Recovery factor (RF), %	12%	_____	_____	_____
Recoverable oil, MBO *(See eq. below)	684.7	_____	_____	_____

*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 = 1.88 rb/stb

PERFORMANCE DATA

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

CUMULATIVE PRODUCTION TO 5/31/2015 38,637 BBL Oil 104,152 MCF Gas
INITIAL RATE (qi) 350 BOPD
ECONOMIC LIMIT (qi) 4.34 BOPD
HYPERBOLIC DECLINE RATE, dy n = 1.2, d = 99%/yr
REMAINING MBO (Q) = 125
ULTIMATE RECOVERABLE MBO 163

(Attach plat showing proration unit and participating area.)

ECONOMIC

GROSS WELL COST \$2,711,160 (to the depth of formation completed)

COMPLETION COST \$4,066,739

GROSS TOTAL COST \$6,777,899

YEAR	GROSS OIL MBO	BFIT NET INCOME (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	<u>27.158</u>	<u>1989.8</u>	<u>189.2</u>	<u>-5004.7</u>
2	<u>27.293</u>	<u>1135.1</u>	<u>341.1</u>	<u>755.5</u>
3	<u>17.686</u>	<u>684.9</u>	<u>280.7</u>	<u>140.1</u>
4	<u>12.434</u>	<u>524.6</u>	<u>253.6</u>	<u>233.5</u>
5	<u>9.744</u>	<u>430.4</u>	<u>241.0</u>	<u>155.4</u>
6	<u>8.075</u>	<u>369.2</u>	<u>233.0</u>	<u>106.4</u>
7	<u>6.947</u>	<u>325.8</u>	<u>227.4</u>	<u>73.3</u>
8	<u>6.087</u>	<u>290.1</u>	<u>222.9</u>	<u>47.6</u>
9	<u>5.444</u>	<u>262.3</u>	<u>219.5</u>	<u>28.9</u>
10	<u>4.933</u>	<u>240.0</u>	<u>216.8</u>	<u>14.9</u>
REMAINDER	<u>37.476</u>	<u>1856.6</u>	<u>2682.8</u>	<u>-339.9</u>
TOTAL	<u>163.277</u>	<u>8108.7</u>	<u>5108.0</u>	<u>-3789.0</u>

WELL IS NOT COMMERCIAL

NM OIL CONSERVATION

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

ARTESIA DISTRICT 105
Revised August 1, 2011
AUG 19 2014

1. WELL API NO.
30-015-42365

2. Type of Lease
☒ STATE ☐ FEE ☐ INDIAN

3. State Oil & Gas Lease No.

5. Lease Name or Unit Agreement Name
Poker Lake Unit CVX JV BS

6. Well Number:

029H

CONFIDENTIAL

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:

☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)

☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

7. Type of Completion:

☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8. Name of Operator
BOPCO, LP

9. OGRID
260737

10. Address of Operator
PO Box 2760
Midland, TX 79702

11. Pool name or Wildcat

Wildcat G-06 S2530020; Bone Spring

12. Location	Unit	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	M	02	25S	30E		170	South	660	West	Eddy
BH:	Lot 4	02	25S	30E		355	North	668	West	Eddy

13. Date Spudded. 06/13/2014	14. Date T.D. Reached 07/08/2014	15. Date Rig Released 07/09/2014	16. Date Completed (Ready to Produce) 08/01/2014	17. Elevations (DF and RKB, RT, GR, etc.) 3345
18. Total Measured Depth of Well 15054 (10463 TVD)	19. Plug Back Measured Depth -----	20. Was Directional Survey Made? Yes	21. Type Electric and Other Logs Run RCBL, CNL	

22. Producing Interval(s), of this completion - Top, Bottom, Name
10424-15015 - 2nd Bone Spring Shale

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13.375	48	1187	17.5	1100' sx 'C'	0
9.625	40	3995	12.25	1810' sx 'C'	0
5.5	17	15054/DV @ 5034	7.875	1603' sx PVL & 370' sx 'C'	0

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2.875	9794	9794

26. Perforation record (interval, size, and number)
10424-15015; 43"; 312 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
10424-15015	Frac using total 141838 bbls fluid, 3945928# propanol across 13 stages

PRODUCTION

28. Date First Production 08/14/2014		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing			Well Status (Prod. or Shut-in) Producing		
Date of Test 08/17/2014	Hours Tested 24	Choke Size 26/64	Prod'n For Test Period	Oil - Bbl 423	Gas - MCF 769	Water - Bbl 1026	Gas - Oil Ratio 1818

Flow Tubing Press. 670	Casing Pressure 0	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)
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29. Disposition of Gas (Sold, used for fuel, vented, etc.)
Sold

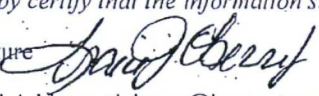
30. Test Witnessed By

31. List Attachments
Directional survey, C102, cased hole logs

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.

33. If an on-site burial was used at the well, report the exact location of the on-site burial:

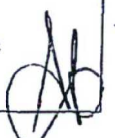
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature 
E-mail Address tjcherry@basspet.com

Printed Name Tracie J Cherry

Title Sr. Regulatory Analyst

Date



INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico			Northwestern New Mexico	
T. Anhy	912	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	1272	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	3785	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates		T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers		T. Devonian	T. Cliff House	T. Leadville
T. Queen		T. Silurian	T. Menefee	T. Madison
T. Grayburg		T. Montoya	T. Point Lookout	T. Elbert
T. San Andres		T. Simpson	T. Mancos	T. McCracken
T. Glorieta		T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock		T. Ellenburger	Base Greenhorn	T. Granite
T. Blinbry		T. Gr. Wash	T. Dakota	
T. Tubb		T. Delaware Sand	3999	T. Morrison
T. Drinkard		T. Bone Springs	7815	T. Todilto
T. Abo		T. Avalon	8033	T. Entrada
T. Wolfcamp		T.		T. Wingate
T. Penn		T.		T. Chinle
T. Cisco (Bough C)		T.		T. Permian

OIL OR GAS SANDS OR ZONES

No. 1, from.....10263.....to.....10498..... No. 3, from.....to.....
 No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
3996	7815		Sandstone, Siltstone, Shales				
7815	8033		Limestone, Shales, Sandstone				
8033	8352		Limestone, Siltstone, Shales				
8732	8600		Siltstone, Shales				
8829	9086		Sandstone, Limestone				
9086	9296		Shale, Siltstone, Limestone				
9541	10263		Sandstone, Limestone				
10263	10498		Shale, Siltstone, Limestone				
No open hole logs run. Tops picked from offset #3 well							

NM OIL CONSERVATION ARTESIA DISTRICT

AUG 19 2014

Form C-102

Revised August 1, 2011

Submit one copy to appropriate District Office

DISTRICT I
1826 N. French Dr., Hobbs, NM 88240
Phone (505) 333-6161 Fax: (505) 333-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-0720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 354-6178 Fax: (505) 354-8170

DISTRICT IV
1820 S. St. Francis Dr., Santa Fe, NM 87506
Phone (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-42365	Pool Code 97913	Pool Name WC; G-06 S2530020; BONE SPRING
Property Code 313213	Property Name POKER LAKE UNIT CVX JV BS	Well Number 029H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3345'

Surface Location

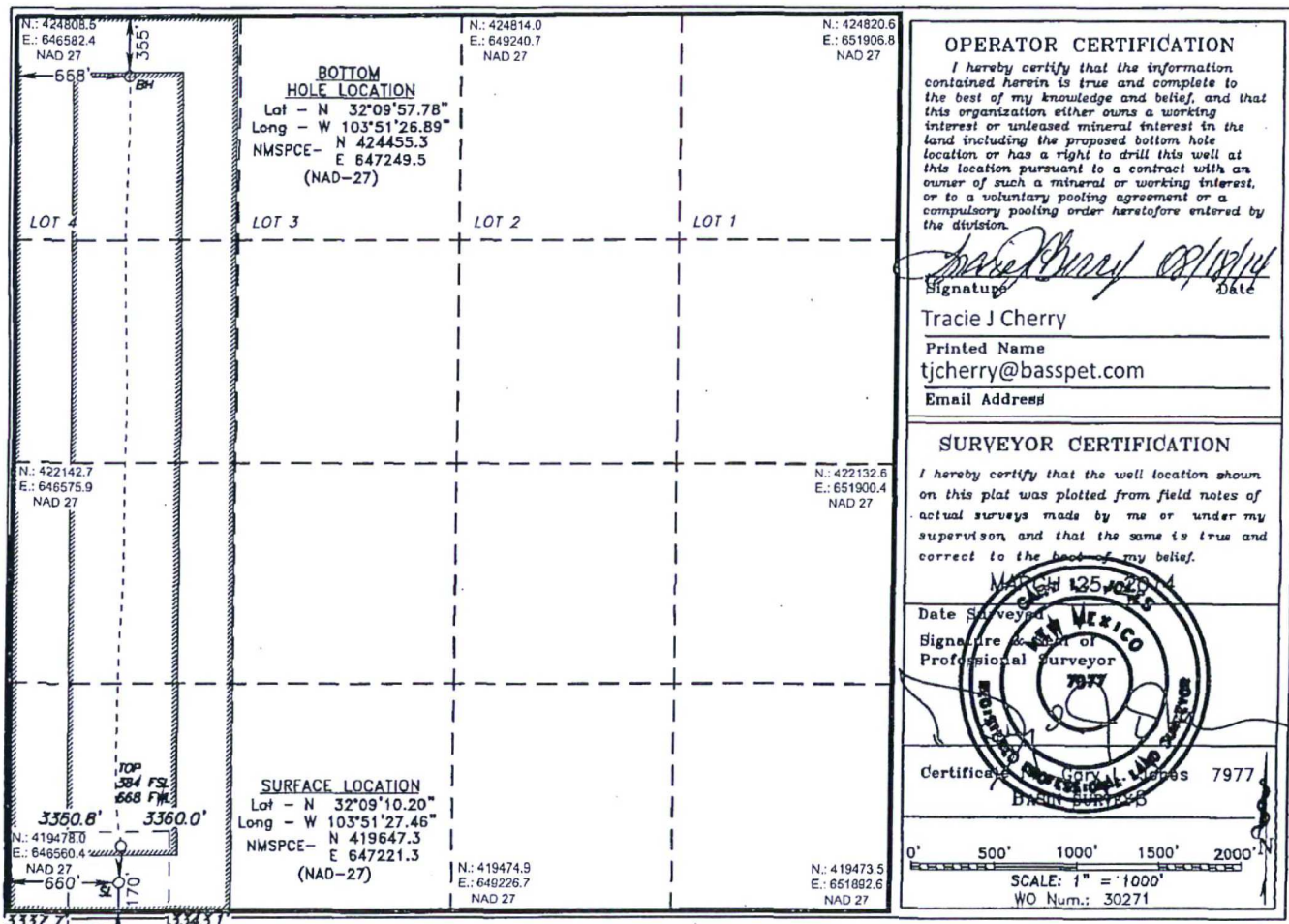
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	2	25 S	30 E		170	SOUTH	660	WEST	EDDY

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
LOT 4	2	25 S	30 E		355	NORTH	668	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160.10			

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





Downhole Profile - Vertical Wells

Well Name: POKER LAKE UNIT CVX JV BS #029H (02-25-30)

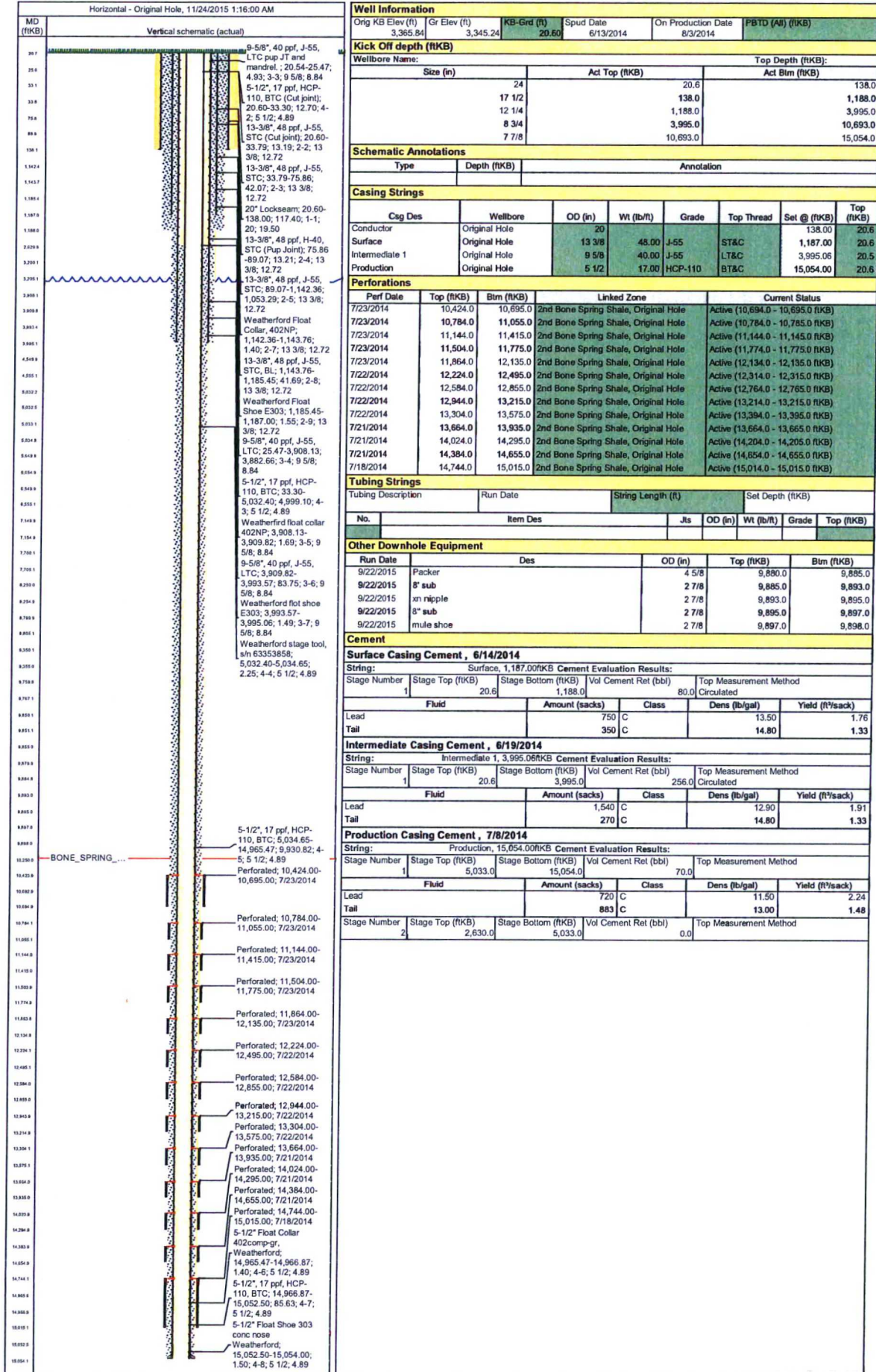
Field: Wildcat - Bone Spring

BOPCO, L.P. - West Texas

Well ID: 30-015-42365

Sec: 2 Town: 25S Rng: 30E County: Eddy State: New Mexico

Surface Location: 170' FSL & 660' FWL, Sec 2 T25S-R30E





Schematic - Vertical Production

BOPCO, L.P. - West Texas

Well Name: POKER LAKE UNIT CVX JV BS #029H (02-25-30)

Well ID: 30-015-42365

Field: Wildcat - Bone Spring

Sect: 2 Town: 25S 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	Lift Change		7/1/2015	7/8/2015

