

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

July 6, 2010

FEDERAL EXPRESS

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

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
James Ranch Unit Well No. 107H
Delaware Formation
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 a commercial well in the Delaware Formation. Please indicate your concurrence to the above Commercial Determination. Upon your execution hereof, Bass will submit a participating area for the well.

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,



Brad Glasscock

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
MIDLAND OFFICE

April 5, 2010

TO: FORT WORTH, FILES
FOR: FRANK McCREIGHT
FROM: STEVE F. JOHNSON
RE: COMMERCIAL DETERMINATION
JAMES RANCH UNIT 107H
QUAHADA RIDGE SE (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
FILE: 100-WF: JRU107HCD.DOC

Attached are the worksheets and necessary exhibits for the subject well to be submitted for commercial determination. The James Ranch Unit #107H was drilled in 2009 to a measured depth of 12,436' and was completed in the Delaware formation. The well is producing from perforations 7714-12279'. On test 8/4/2009 the well pumped at the rate of 624 BOPD, 504 MCFPD, and 1186 BWPD. This well is expected to recover approximately 386.150 MBOE from the current completion.

The most recent price file from Fort Worth was utilized and the oil price was adjusted by - \$3.44/BO. An operating cost of \$12,500/mo plus a \$.57/mcf transportation expense was also incorporated in this evaluation. The James Ranch Unit #107H will be a commercial well and should be incorporated into a participating area.



RSD/cdp

cc: Ross Sutton
George Hillis
Brad Glasscock



Steve Johnson

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL _____ James Ranch Unit #107H _____ FORMATION _____ DELAWARE _____
 LOCATION _____ M _____ UNIT, _____ 860 _____ FEET FROM SOUTH LINE & _____ 900 _____ FEET FROM WEST LINE
 SECTION _____ 36 _____ TOWNSHIP _____ 22S _____ RANGE _____ 30E _____ COUNTY _____ Eddy _____ NEW MEXICO
 SPUD DATE _____ 5/18/2009 _____ COMPLETION DATE _____ 7/23/2009 _____ INITIAL PRODUCTION _____ 7/23/2009 _____
 PERFORATIONS _____ 7716-12279 _____

* BHL 594' FSL 918' FWL SEC 35, T22S R30E
 STIMULATION:

ACID _____

FRACTURE _____ *SEE: Completion report attached _____

POTENTIAL _____ (8/4/2009): 624 BOPD, 504 MCFPD, 1186 BWPD _____

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

VOLUMETRIC CALCULATION

	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	200	
Porosity (Φ), %	12%	
Water saturation (S_w), %	30%	
Net Thickness (H), ft.	80	
Temperature (T), Fahrenheit	120	
Bottom Hole pressure (P), psia	3,317	
Recovery factor (RF), %	15%	
Recoverable Oil, Bbls *(See eq. below)	833,306	

*Sometimes unable to match performance due to volumetric uncertainty.

Formula = $(7758) (A) (H) (\Phi) (1-S_w) (1/B_o) (RF)$

$B_o = 1.50$

Continued

James Ranch Unit #107H

PERFORMANCE DATA

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

CUMULATIVE PRODUCTION TO 10/31/2009 41,183 BBL OIL 37,306 MCFINITIAL RATE (qi) 600ECONOMIC LIMIT (ql) 3HYPERBOLIC DECLINE RATE, dy n = .75, d = 81%/yrREMAINING OIL (Q) = 288,235ULTIMATE RECOVERABLE OIL (BO) 329,418

(Attach plat showing proration unit and participating area.)

ECONOMIC

GROSS WELL COST \$2,043,501 (to the depth of formation completed)COMPLETION COST \$1,837,507GROSS TOTAL COST \$3,881,008

YEAR	GROSS OIL MBBLS	BFIT NET INCOME (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	57,393	3517.6	344.3	-821.7
2	73,416	5423.6	611.3	4475.5
3	43,347	3371.8	436.2	2604.1
4	28,467	2237.5	340.0	1602.3
5	20,622	1631.7	288.6	1079.8
6	15,950	1270.9	258.0	775.5
7	12,864	1035.4	238.0	581.3
8	10,718	871.0	224.0	449.2
9	9,085	746.9	213.5	352.6
10	7,861	654.6	205.6	282.7
REMAINDER	49,695	4201.7	2223.4	1025.3
TOTAL	329,418	24962.7	5382.9	12406.4

WELL IS COMMERCIAL

ECONOMIC PROJECTION

Date : 4/5/2010

Lior: 1000427

5:18:07PM

Project Name : PROPZONE2

As Of Date : 01/01/2009

Lease Name : 1000427/JAMES RANCH UNIT/107H/DE

Partner : 99999

Discount Rate (%) : 5.00

Reserv Cat. : Proved Producing

Case Type : LEASE CASE

Field : QUAHADA RIDGE (DELAWARE) SE

Archive Set : CURRENT

1000427/JAMES RANCH UNIT/107H/DEL

Operator : BOPCO

Cum Oil (Mbbbl) : 0.00

Reservoir : DELAWARE

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)
2009	57.393	55.103	26.086	0.000	49.622	22.554	0.000
2010	73.416	74.638	35.334	272.734	63.475	30.549	235.804
2011	43.347	44.095	20.875	188.287	37.478	18.048	162.792
2012	28.467	29.219	13.832	124.765	24.613	11.959	107.871
2013	20.622	21.354	10.109	91.183	17.829	8.740	78.836
2014	15.950	16.662	7.888	71.146	13.791	6.820	61.513
2015	12.864	13.554	6.417	57.877	11.122	5.548	50.040
2016	10.718	11.390	5.392	48.637	9.266	4.662	42.051
2017	9.085	9.737	4.610	41.577	7.854	3.985	35.948
2018	7.861	8.497	4.022	36.282	6.797	3.478	31.369

Rem	49.695	56.143	26.578	239.730	42.966	22.979	207.269
Total	329.418	340.393	161.142	1,172.218	284.813	139.323	1,013.493
Ult.	329.418	340.393					

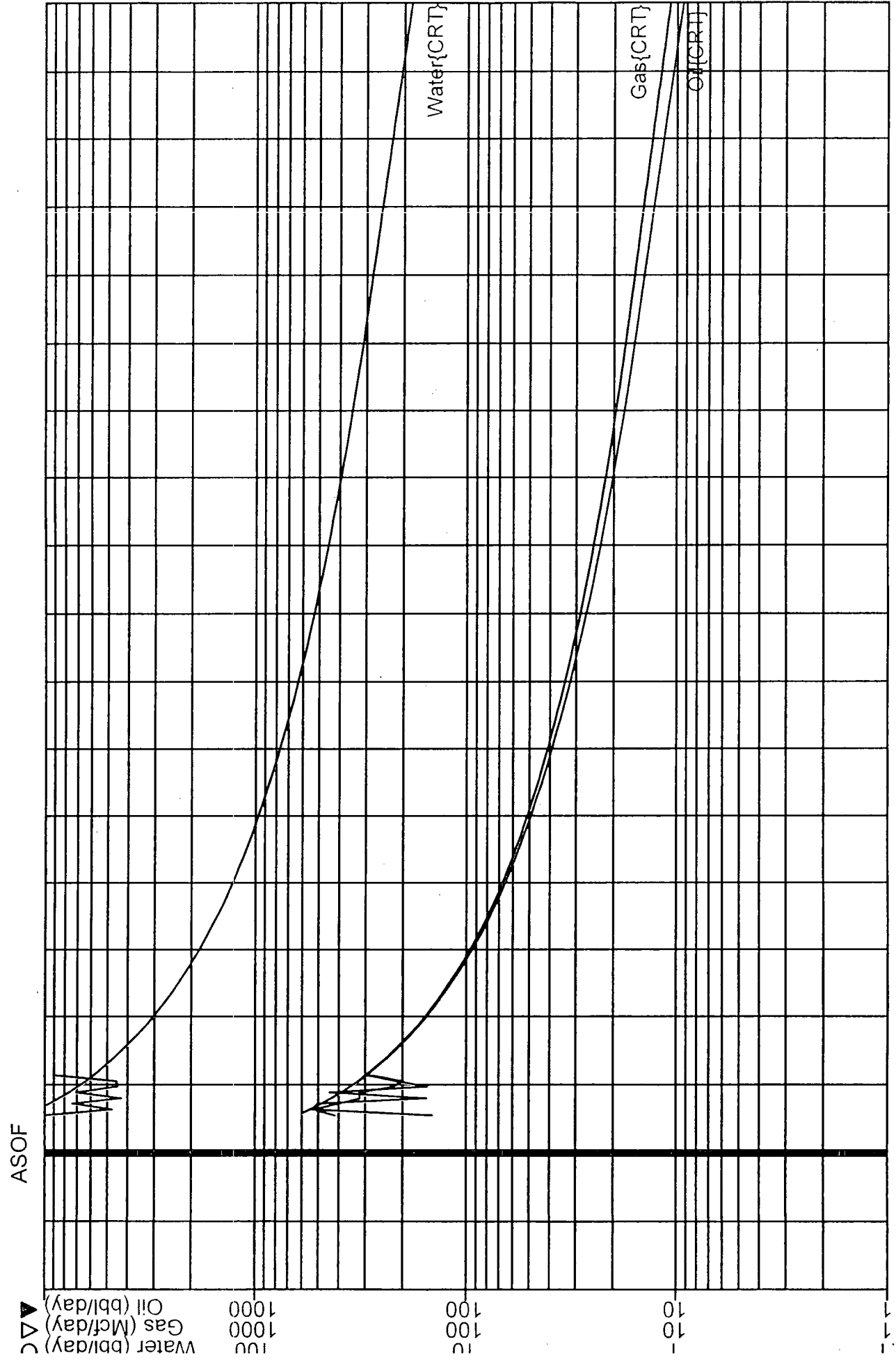
Year	Average Price			Net Revenue			
	Oil (\$/bbl)	Gas (\$/Mcf)	NGL (\$/gal)	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2009	69.22	3.67	0.00	3,434.81	82.76	0.00	3,517.57
2010	80.29	4.69	0.78	5,096.48	143.15	183.93	5,423.56
2011	83.90	5.56	0.78	3,144.45	100.34	126.98	3,371.77
2012	84.58	5.99	0.78	2,081.67	71.67	84.14	2,237.48
2013	85.00	6.26	0.78	1,515.47	54.74	61.49	1,631.71
2014	85.44	6.55	0.78	1,178.31	44.65	47.98	1,270.94
2015	86.16	6.87	0.78	958.23	38.14	39.03	1,035.40
2016	86.83	7.21	0.78	804.64	33.61	32.80	871.04
2017	87.69	7.54	0.78	688.80	30.06	28.04	746.89
2018	88.68	7.89	0.78	602.71	27.46	24.47	654.64
Rem	89.39	8.67	0.78	3,840.74	199.26	161.67	4,201.67
Total	81.97	5.93	0.78	23,346.32	825.82	790.52	24,962.66

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\$)
2009	272.22	6.79	3,881.01	65.32	-707.77	-707.77	-821.73	-821.73
2010	433.05	10.85	0.00	167.41	4,812.25	4,104.48	4,475.46	3,653.73
2011	269.21	6.74	0.00	160.29	2,935.53	7,040.01	2,604.07	6,257.80
2012	178.69	4.47	0.00	156.82	1,897.50	8,937.51	1,602.25	7,860.06
2013	130.33	3.26	0.00	154.98	1,343.13	10,280.64	1,079.78	8,939.84
2014	101.53	2.54	0.00	153.89	1,012.98	11,293.62	775.45	9,715.29
2015	82.73	2.07	0.00	153.16	797.44	12,091.06	581.31	10,296.60
2016	69.61	1.74	0.00	152.66	647.03	12,738.09	449.16	10,745.76
2017	59.70	1.49	0.00	152.27	533.43	13,271.52	352.62	11,098.38
2018	52.34	1.31	0.00	151.98	449.01	13,720.53	282.67	11,381.05
Rem	336.07	8.40	0.00	1,878.93	1,978.27	1,978.27	1,025.31	1,025.31
Total	1,985.46	49.68	3,881.01	3,347.72	15,698.79	15,698.79	12,406.36	12,406.36

Major Phase :	Oil	Working Int :	1.00000000	Present Worth Profile (M\$)	
Perfs :	0	Revenue Int :	0.86459483		
Initial Rate :	2.919.00 bbl/month	Disc. Initial Invest. (m\$) :	3,881.008	5.00% :	12,406.36
Abandonment :	160.52 bbl/month	Internal ROR (%) :	121.46	9.00% :	10,534.62
Initial Decline :	81.00 % year b = 0.750	ROI Investment (disc/undisc) :	4.20 / 5.05	10.00% :	10,139.29
Beg Ratio :	0.35 Mcf/bbl	Years to Payout :	1.18	12.00% :	9,417.51
End Ratio :	1.20 Mcf/bbl	Abandonment Date :	06/11/2031	15.00% :	8,478.48
Forecast Start :	07/01/2009			20.00% :	7,203.49
		Initial	1st Rev.	30.00% :	5,359.97
		Working Interest :	0.00000000	40.00% :	4,078.43
		Revenue Interest :	0.86459483	50.00% :	3,128.34
		Rev. Date :		60.00% :	2,392.34

1000427/JAMES RANCH UNIT/107H/DEL
CONTROL: 1000427
APP EUR OIL:

Field: QUAHADA RIDGE (DELAWARE) SE
IDCODE: C%MXDLJ1.107
APP EUR GAS:



07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Proj Oil Cum: 0.00 Mbbl
Oil Rem: 329.42 Mbbl
Oil EUR: 329.42 Mbbl

Proj Gas Cum: 0.00 MMcf
Gas Rem: 340.39 MMcf
Gas EUR: 340.39 MMcf

DISTRICT I

1620 N. Broadway Dr., Hobbs, NM 88240

DISTRICT II

1301 W. Grand Avenue, Lordsburg, NM 88320

DISTRICT III

1000 Rio Brazos Rd., Arteson, NM 87410

DISTRICT IV

1220 S. Francis Dr., Santa Fe, NM 87505

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-102

Revised October 12, 2006

Submit to Appropriate District Office

State Lease - 4 Copies

Pool Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37062	Pool Code 50443	Pool Name Quahada Ridge, SE (Delaware)
Property Code 306407	Property Name JAMES RANCH UNIT	Well Number 107H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3283'

Surface Location

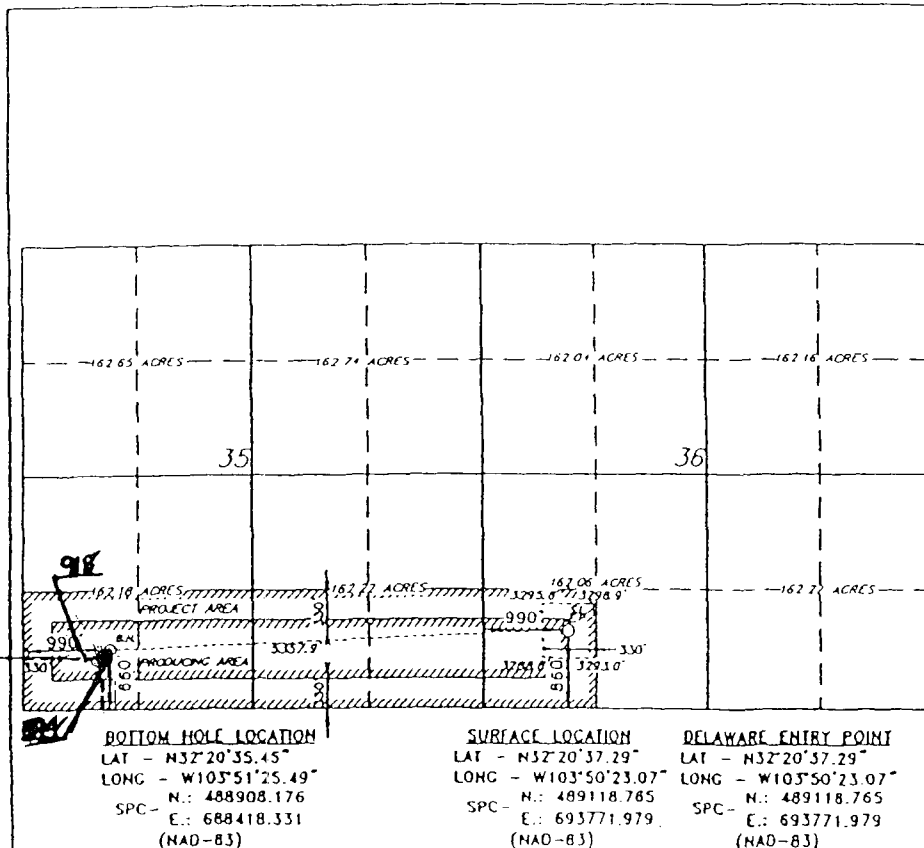
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	22 S	30 E		860	SOUTH	990	WEST	EDDY

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
M	35	22 S	30 E		594	SOUTH	918	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
200	N		

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



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 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.

Gary E. Gerhard
Signature Date 1/14/07

Gary E. Gerhard

Printed Name

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.

DECEMBER 8, 2008

Date Surveyed
Signature of Professional Surveyor
Professional Surveyor

W.L. Jones
7977

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SCALE - 1" = 2000'

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

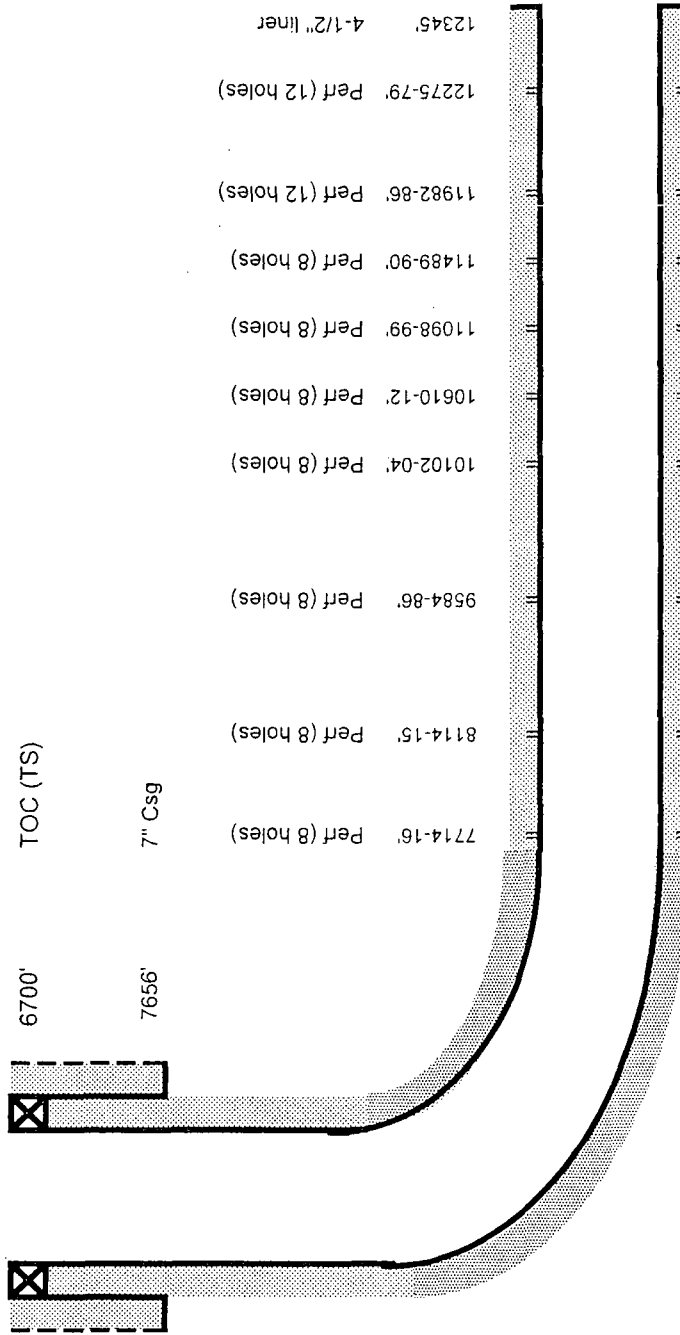
1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NM 02952A							
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr., Other _____		6. If Indian, Allottee or Tribe Name							
2. Name of Operator BOPCO, L.P.		7. Unit or CA Agreement Name and no.							
3. Address P.O. Box 2760 Midland TX 79702		8. Lease Name and Well No. James Ranch Unit 107H							
3.a Phone No. (Include area code) (432)683-2277		9. API Well No. 30-015-37062							
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface ULM, 860' FSL, 990' FWL, Lat N. 32.3433692, Long W 103.840853 At top prod. interval reported below At total depth ULM, 594' FSL, 918' FWL, Lat N 32.343181, Long W 103.857081		10. Field and Pool, or Exploratory Quahada Ridge SE (Delaware)							
14. Date Spudded 05/18/2009		11. Sec., T., R., M., on Block and Survey or Area SEC 36, T22S, R30E							
15. Date T.D. Reached 06/11/2009		12. County or Parish Eddy							
16. Date Completed ☐ D & A ☒ Ready to Prod. 07/23/2009		13. State NM							
17. Elevations (DF, RKB, RT, GL)* 3294.4' GL									
18. Total Depth: MD 12436' TVD 7242'		19. Plug Back T.D.: MD 12435' TVD							
20. Depth Bridge Plug Set: MD TVD									
21. Type of Electric & Other Mechanical Logs Run (Submit copy of each) Array Induction; Compensated Photo Density/Dual Neutron Log		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit copy)							
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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"	48#	0	530		560 sxs		0' circ	
12-1/4"	9-5/8"	40#	0	3805		1500 sxs		0' circ	
8-3/4"	7"	26#	0	7656		395 sxs Stg I		0' circ	
						600 sxs Stg II		0' circ	
6-1/8"	4-1/2"	11.6#	0'	12,435		280 sxs		6700' calc	
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2-7/8"	6619' EOT	NA							
25. Producing Intervals				26. Perforation Record					
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status			
A) DELAWARE	3764'	12279'	7714-6'; 8114-5'; 8597-8'	0.380	24	PRODUCING			
B)			9088-9'; 9584-6'; 10102-4'	0.380	24	PRODUCING			
C)			10610-12'; 11098-99'	0.380	16	PRODUCING			
D)			11489-90'	0.380	8	PRODUCING			
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.				11982-86'; 12275-79' 0.380 24 PRODUCING					
Depth Interval				Amount and Type of Material					
12,275'-79'; 11,982'-86'				Frac'd w/ 26,093 gals 20# XL Borate w/ 151,653 lbs Ottawa sand					
11,489'-11,490'				Frac'd w/ 49,428 gals 20# XL Borate w/ 93,473 lbs Ottawa sand					
11,098'-11,099'				Frac'd w/ 26,904 gals 20# XL Borate w/ 94,900 lbs Ottawa sand					
10,610'-10,612'				Frac'd w/ 19,299 gals 20# XL Borate w/ 97,447 lbs Ottawa sand (see 2nd pg for remaining details)					
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
07/23/09	08/04/09	24	→	624	504	1186			PUMPING
Choke Size	Tbg. Press. Flwg. SI	Csg. Press. 370	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
WO		350	→					PRODUCING	
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	
			→						

HORIZONTAL WELLBORE DIAGRAM

LEASE: JAMES RANCH UNIT WELL #: 107H HORIZONTAL
FIELD: SOUTHEAST QUAHADA RIDGE (DELAWARE)
LOCATION: SL: 860' FSL & 990' FWL, SECTION 36, T22S, R30E
BHL: 660' FSL & 990' FWL, SECTION 35, T22S, R30E
COUNTY: EDDY ST: NM API #: 30-015-37062

PRODUCTION CASING

SIZE: 4-1/2"
WT/GRD: 11.6# HCP110
SET @: 12435'
1st Stg: 280' Halco Solucem
CIRC: N
TOC: 6700' (calc)
HOLE SIZE: 6-1/8"



Updated: 7/21/2009
Author: ezg
Engr: JBB

CURRENT WELLBORE DIAGRAM

LEASE: JAMES RANCH UNIT WELL #: 107H HORIZONTAL
 FIELD: QUAHADA RIDGE, SE (DELAWARE)
 LOCATION: SL: 860' FSL & 990' FWL, SECTION 36, T22S, R30E
BHL: 660' FSL & 990' FWL, SECTION 35, T22S, R30E
 COUNTY: EDDY ST: NM API# 30-015-37062

****CURRENT****

SEE HORIZONTAL SKETCH

KB: 3313.9'
 GL: 3294.4'
 SPUD DATE: 5/18/2009
 COMP DATE:

SURFACE CASING

SIZE: 13-3/8"
 WT/GRD: 48# J55 - 438'
 48# H40 - 530'
 SET @: 530'
 SX CMT: 250 EconoCem
 SX CMT: 310 HalCem
 CIRC: Y 115 sx
 TOC: Surface
 HOLE SIZE:

530' 13-3/8" CSG
 3805' 9-5/8" CSG 12-1/4" HOLE

INTERMEDIATE CASING

SIZE: 9-5/8"
 WT/GRD: 40# J55
 SET @: 3805'
 SX CMT: 1250 EconoCem
 SX CMT: 250 HalCem
 CIRC: Y 394 sx
 TOC: Surface
 HOLE SIZE: 12-1/4"

5034" DV Tool

2ND INTERMEDIATE CASING

SIZE: 7"
 WT/GRD: 26# N80
 SET @: 7656'
 1ST STAGE: 175 Tuned Light
 SX CMT: 220 HalCem
 CIRC: Y 80 sx
 2ND STAGE: 500 EconoCem
 SX CMT: 100 HalCem
 CIRC: Y 187 sx
 TOC: Surface
 HOLE SIZE: 8-3/4"

6700' TOC (calc)
 7656' 7" CSG 8-3/4" HOLE

PRODUCTION CASING

SIZE: 4-1/2"
 WT/GRD: 11.6# HCP110
 SET @: 12435'
 1st Stg: 280 Halco Solucem
 CIRC: N
 TOC: 6700' (calc)
 HOLE SIZE: 6-1/8"

12435' 4-1/2" CSG 6-1/8" HOLE

TUBING DATA

SEE HORIZONTAL SECTION DETAIL

RODS

PBD: 12435'
 TD: 12436'

6/23/2009

ezg

JBB