

365

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

February 12, 2007

2007 FEB 13 AM 8 39

**FEDERAL EXPRESS**

Bureau of Land Management  
Roswell District Office  
2909 W. 2<sup>nd</sup> Street  
Roswell, New Mexico 88201  
Attn: Ms. Alexis Swoboda

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: William Jones

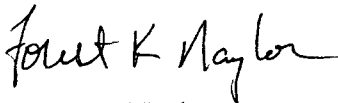
Re: Commercial Determination  
Big Eddy Unit #154  
Morrow Formation  
Eddy County, New Mexico

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 Morrow 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.

Sincerely,



Forest K. Naylor

Bureau of Land Management

New Mexico State Land Office

New Mexico Oil Conservation Division

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

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

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

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

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

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

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

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

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

# WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

## WELL DATA

WELL \_\_\_\_\_ BIG EDDY UNIT # 154 \_\_\_\_\_ FORMATION \_\_\_\_\_ MORROW \_\_\_\_\_  
 LOCATION \_\_\_\_\_ A \_\_\_\_\_ UNIT, \_\_\_\_\_ 660 \_\_\_\_\_ FEET FROM NORTH LINE & \_\_\_\_\_ 660 \_\_\_\_\_ FEET FROM EAST LINE  
 SECTION \_\_\_\_\_ 15 \_\_\_\_\_ TOWNSHIP \_\_\_\_\_ 22S \_\_\_\_\_ RANGE \_\_\_\_\_ 28E \_\_\_\_\_ COUNTY \_\_\_\_\_ EDDY \_\_\_\_\_, NEW MEXICO  
 SPUD DATE \_\_\_\_\_ 6/5/2006 \_\_\_\_\_ COMPLETION DATE \_\_\_\_\_ 08/01/2006 \_\_\_\_\_ INITIAL PRODUCTION \_\_\_\_\_ 10/05/2006 \_\_\_\_\_  
 PERFORATIONS \_\_\_\_\_ 12,200-12,212', 12,218-12,228', 12,274-12,284', 12,378-12,384' \_\_\_\_\_

### STIMULATION:

ACID \_\_\_\_\_  
 \_\_\_\_\_  
 FRACTURE \_\_\_\_\_ Frac 12,200-12,384' w/ 38154 gals foam + 62568 lbs 18/40 versaprop. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

POTENTIAL \_\_\_\_\_ (10/08/2006): 0 BOPD, 3859 MCFPD, & 0 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	320	
Porosity (por), %	7%	
Water saturation (Sw), %	23%	
Net Thickness (h), ft.	33	
Temperature (T), Fahrenheit	193	
Bottom Hole pressure (P), psia	3,620	
Recovery factor (RF), %	80%	
Recoverable gas, BCF *(See eq. below)	4.2	

\*Sometimes unable to match performance due to volumetric uncertainty.

Formula =  $(7758) (A) (h) (por) (1-Sw)(RF)/Bgi$

Bgi = 0.61 RB/MCF

Continued

**PERFORMANCE DATA**

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

CUMULATIVE PRODUCTION TO 12/31/2006 283,600 MCF Gas 0 BBL Oil

INITIAL RATE (qi) 3,922

ECONOMIC LIMIT (ql) 18

HYPERBOLIC DECLINE RATE, dy b = 1.0, d = 96.58

REMAINING GAS (Q) = 1,815,521

ULTIMATE RECOVERABLE GAS (mcf) 2,099,121

(Attach plot showing proration unit and participating area.)

**ECONOMIC**GROSS WELL COST \$ \$4,282,901 (to the depth of formation completed)COMPLETION COST \$ 919,314GROSS TOTAL COST \$ \$5,202,215

YEAR	GROSS GAS MMCF	BFIT NET REVENUE (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	283.6	836.8	42.2	-2,185.2
2	595.3	1,614.9	338.6	1,232.3
3	242.0	733.7	154.3	531.0
4	154.0	466.8	102.3	317.4
5	113.4	343.7	79.0	219.2
6	89.8	272.2	65.5	162.8
7	74.5	225.9	56.7	126.8
8	63.4	192.2	50.3	101.1
9	55.3	167.7	45.7	82.7
10	49.0	148.7	42.1	68.7
REMAINDER	379	1,148.2	476.6	329.9
TOTAL	2,099	6,150.6	1,453.2	986.7

WELL IS COMMERCIAL

# ECONOMIC PROJECTION

Date : 2/1/2007

Lior:

11:27:36AM

Project Name : 2007 CAPITAL BUDGET RISKED Extract-  
Partner : All Cases  
Case Type : LEASE CASE  
Archive Set : BUDGET

As Of Date : 10/01/2006  
Discount Rate (%) : 5.00  
BIG EDDY UNIT #154

Lease Name : BIG EDDY UNIT #154  
Reserv Cat. : Proved Producing  
Field : CARLSBAD E.  
Operator : BEPCO  
Reservoir : MORROW  
Co., State : EDDY, NM

Cum Oil (mbbls) : 0.00  
Cum Gas (mmcf) : 0.00

Year	Gross Wet Production		Gross Dry Gas & NGL		Sales		
	Oil (Mbbl)	Wet Gas (MMCF)	Dry Gas (MMCF)	NGL (MGal)	Oil (Mbbl)	Gas (MMCF)	NGL (MGal)
2006	0.000	283.600	273.674	0.000	0.000	132.109	0.000
2007	0.000	595.316	574.480	457.798	0.000	277.314	220.989
2008	0.000	242.023	233.553	186.116	0.000	112.741	89.842
2009	0.000	153.978	148.588	118.409	0.000	71.727	57.159
2010	0.000	113.370	109.402	87.182	0.000	52.811	42.085
2011	0.000	89.777	86.635	69.039	0.000	41.821	33.326
2012	0.000	74.522	71.913	57.307	0.000	34.714	27.663
2013	0.000	63.409	61.190	48.762	0.000	29.538	23.538
2014	0.000	55.308	53.372	42.532	0.000	25.764	20.531
2015	0.000	49.045	47.328	37.716	0.000	22.847	18.206

Rem	0.000	378.772	365.515	140.605	0.000	176.442	140.605
Total	0.000	2,099.121	2,025.652	1,396.136	0.000	977.828	673.946
Ult.	0.000	2,099.121					

Year	Average Price			Net Revenue			
	Oil \$/BBL	Gas \$/MCF	NGL \$/Gal	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2006	0.00	6.33	0.00	0.000	836.805	0.000	836.805
2007	0.00	5.82	0.00	0.000	1,614.858	0.000	1,614.858
2008	0.00	6.51	0.00	0.000	733.674	0.000	733.674
2009	0.00	6.51	0.00	0.000	466.770	0.000	466.770
2010	0.00	6.51	0.00	0.000	343.673	0.000	343.673
2011	0.00	6.51	0.00	0.000	272.152	0.000	272.152
2012	0.00	6.51	0.00	0.000	225.906	0.000	225.906
2013	0.00	6.51	0.00	0.000	192.220	0.000	192.220
2014	0.00	6.51	0.00	0.000	167.662	0.000	167.662
2015	0.00	6.51	0.00	0.000	148.676	0.000	148.676
Rem	0.00	6.51	0.00	0.000	1,148.216	0.000	1,148.216
Total	0.00	6.29	0.00	0.000	6,150.612	0.000	6,150.612

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\$)
2006	17.275	10.547	2,972.414	14.385	-2,177.815	-2,177.815	-2,185.157	-2,185.157
2007	132.257	80.743	0.000	125.566	1,276.292	-901.523	1,232.254	-952.903
2008	60.088	36.684	0.000	57.509	579.394	-322.129	530.985	-421.919
2009	38.228	23.339	0.000	40.782	364.421	42.292	317.413	-104.505
2010	28.147	17.184	0.000	33.689	264.654	306.946	219.196	114.690
2011	22.289	13.608	0.000	29.567	206.688	513.634	162.806	277.496
2012	18.502	11.295	0.000	26.902	169.207	682.841	126.760	404.256
2013	15.743	9.611	0.000	24.961	141.905	824.746	101.108	505.363
2014	13.731	8.383	0.000	23.546	122.001	946.747	82.683	588.047
2015	12.177	7.434	0.000	22.452	106.614	1,053.361	68.729	656.776
Rem	94.039	57.411	0.000	325.141	671.625	671.625	329.932	329.932
Total	452.476	276.237	2,972.414	724.500	1,724.986	1,724.986	986.708	986.708

Major Phase : Gas  
Perfs : 0 0  
Initial Rate : 151.45 mmcf/month  
Abandonment : 0.54 mmcf/month  
Initial Decline : 96.58 % year b = 1.001  
Beg Ratio : 0.00 bbl/mmcf  
End Ratio : 0.00

Working Int : 0.57137460  
Revenue Int : 0.48272244  
Disc. Initial Invest. (m\$) : 2,972.414  
Internal ROR (%) : 18.11  
ROI Investment (disc/undisc) : 1.33 / 1.58  
Years to Payout : 3.12  
Abandonment Date : 08/30/2034

## Present Worth Profile (M\$)

5.00% :	986.71
8.00% :	676.92
10.00% :	506.21
12.00% :	357.32
15.00% :	165.92
20.00% :	-91.09
30.00% :	-461.94
40.00% :	-724.44
50.00% :	-925.02
60.00% :	-1,085.90

	Initial	1st Rev.	2nd Rev.
Working Interest :	0.57137460	0.00000000	0.00000000
Revenue Interest :	0.48272244	0.00000000	0.00000000
Rev Date :			

**WORKSHEET FOR COMMERCIAL DETERMINATION  
AND PARTICIPATING AREA IN FEDERAL UNITS**

Well: Big Eddy Unit No.154

Formation: Morrow

Location: 660' FNL 660' FEL

Section: 15 Township: 22S

Range: 28E

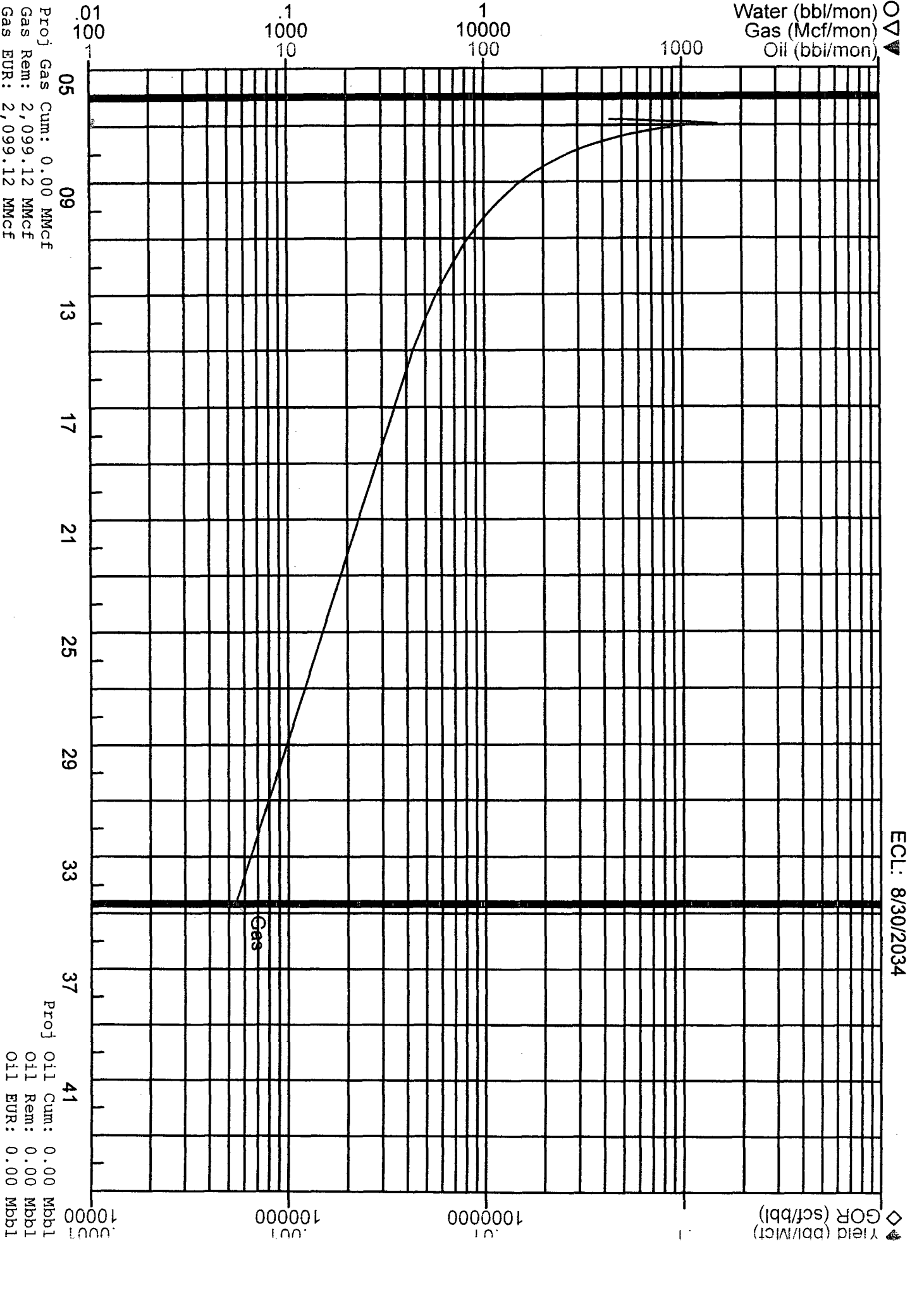
County: Eddy New Mexico

**VOLUMETRIC CALCULATION**

Area (A) proration unit size, acres:	320	
Porosity (por), %:	7.12	
Water Saturation (Sw), %:	23.4	
Net Thickness (h), ft:	33	
Temperature (T), Fahrenheit:	193	
Bottom Hole Pressure (P),psia:	3620 PSIA	11/13/2006 SITP
Recovery Factor (RF), %:	80.0	
Recoverable Gas,BCF:	4.249	

**PERFORMANCE DATA**

Initial Rate (qi):	121.6 MM/M
Economic Limit (qf):	0.554 MM/M
Hyperbolic Decline Rate,dy:	N=1.0, DEC=96.58%
Remaining Gas (Q):	
Ultimate Recoverable Gas (mcf):	2.124 BCF



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other  
b. Type of Completion ☐ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,  
Other \_\_\_\_\_

2. Name of Operator  
BEPCO, L.P.

3. Address  
P.O. BOX 2760 MIDLAND TX 79702-2760

3.a Phone No. (Include area code)  
(432)683-2277

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At Surface NENE 660' FNL 660' FEL

At top prod. interval reported below

At total depth

14. Date Spudded  
06/05/2006

15. Date T.D. Reached  
08/01/2006

16. Date Completed  
☐ D & A ☒ Ready to Prod.  
10/05/2006

18. Total Depth: MD 12,765'  
TVD

19. Plug Back T.D.: MD 12,394'  
TVD

20. Depth Bridge Plug Set: MD 12429'  
TVD

21. Type of Electric & Other Mechanical Logs Run (Submit copy of each)  
GR-CLN-LDT; GR-AIT

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"	48#	0'	541'		560		0'	
12-1/4"	9-5/8"	40#	0'	6220'		2350		0'	
8-3/4"	5-1/2"	17#	0'	12750'		1885		4930' CBL	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
		12,435'	5-1/2"					

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MORROW	12489'	12626'	12,200' - 12,212'	0.380	12	PRODUCING
B)			12,218' - 12,228'	0.380	6	PRODUCING
C)			12,274' - 12,284'	0.380	15	PRODUCING
D)			12,378' - 12,384'	0.380	6	PRODUCING

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

Depth Interval	Amount and Type of Material

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
10/5/06	10/8/06	24	→	0	3859	0			FLOWING
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
20/64"		1450	→	0	3859	0		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	
			→						

\*See instructions and spaces for additional data on page 2)

## 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 or 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
				T/SALT	570'
				B/SALT	2390'
				T/DELAWARE MTN GROUP	2652'
				T/BONE SPRING LIME	6148'
				T/WOLFCAMP	9570'
				T/STRAWN	10915'
				T/ATOKA	11240'
				T/MORROW	11810'

32. Additional remarks (include plugging procedure):

PERFS 12,489' - 12,626' (218 HOLES) NON PRODUCTIVE, BEHIND CIBP @12,429' W/35' CEMENT.

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)   
 ☐ Geological Report   
 ☐ DST Report   
 ☒ Directional Survey  
☐ Sundry Notice for plugging and cement verification   
 ☐ Core Analysis   
 ☐ Other

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

Name (please print) CINDI GOODMANTitle PRODUCTION CLERKSignature Cindi GoodmanDate 10/10/2006

Title 18 U.S.C. Section 101 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 and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
811 South First, Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-34399	Pool Code 76140	Pool Name DUBLIN RANCH MORROW (GAS)
Property Code 001776	Property Name BIG EDDY UNIT	Well Number 154
OGRID No. 001801	Operator Name BEP CO, L.P.	Elevation 3131'

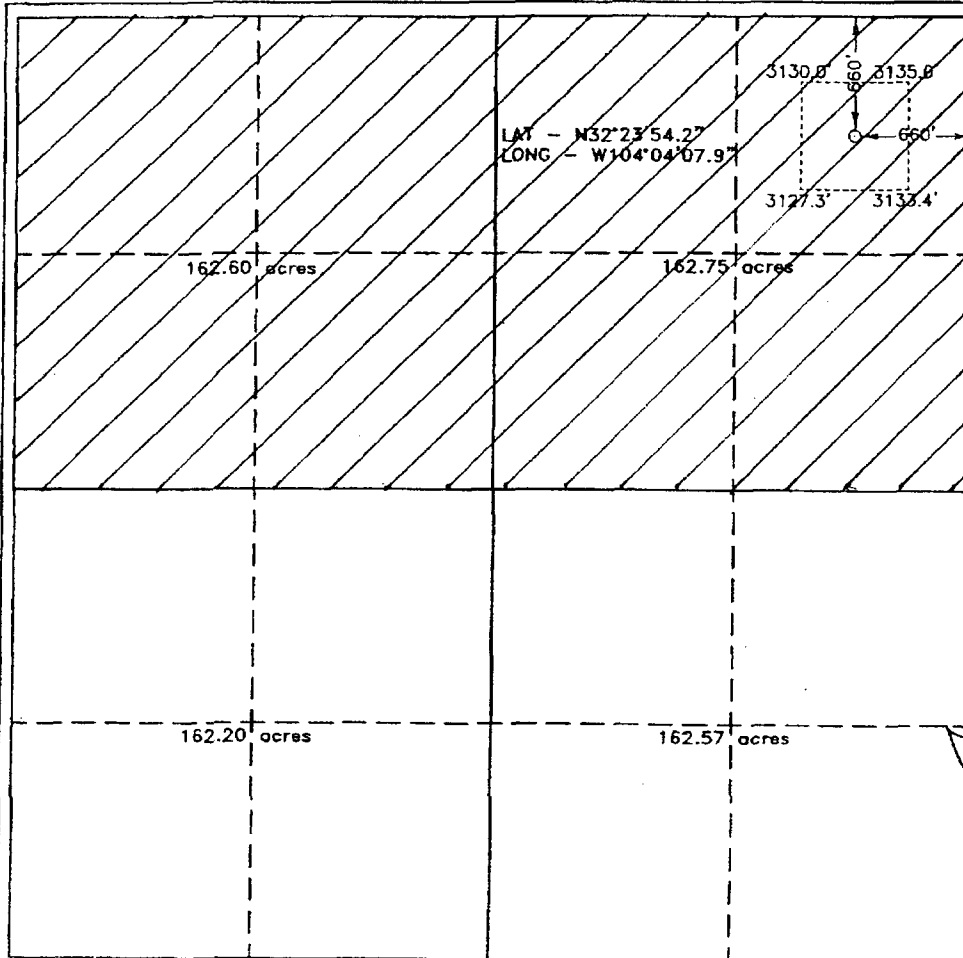
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	15	22 S	28 E		660	NORTH	660	EAST	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
Dedicated Acres 320	Joint or Infill N	Consolidation Code	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



OPERATOR CERTIFICATION

I hereby certify the the information  
contained herein is true and complete to the  
best of my knowledge and belief.

Signature  
W.R. DANNELS

Printed Name  
DIVISION DRILLING SUPT.

Title  
Date 9/7/2005

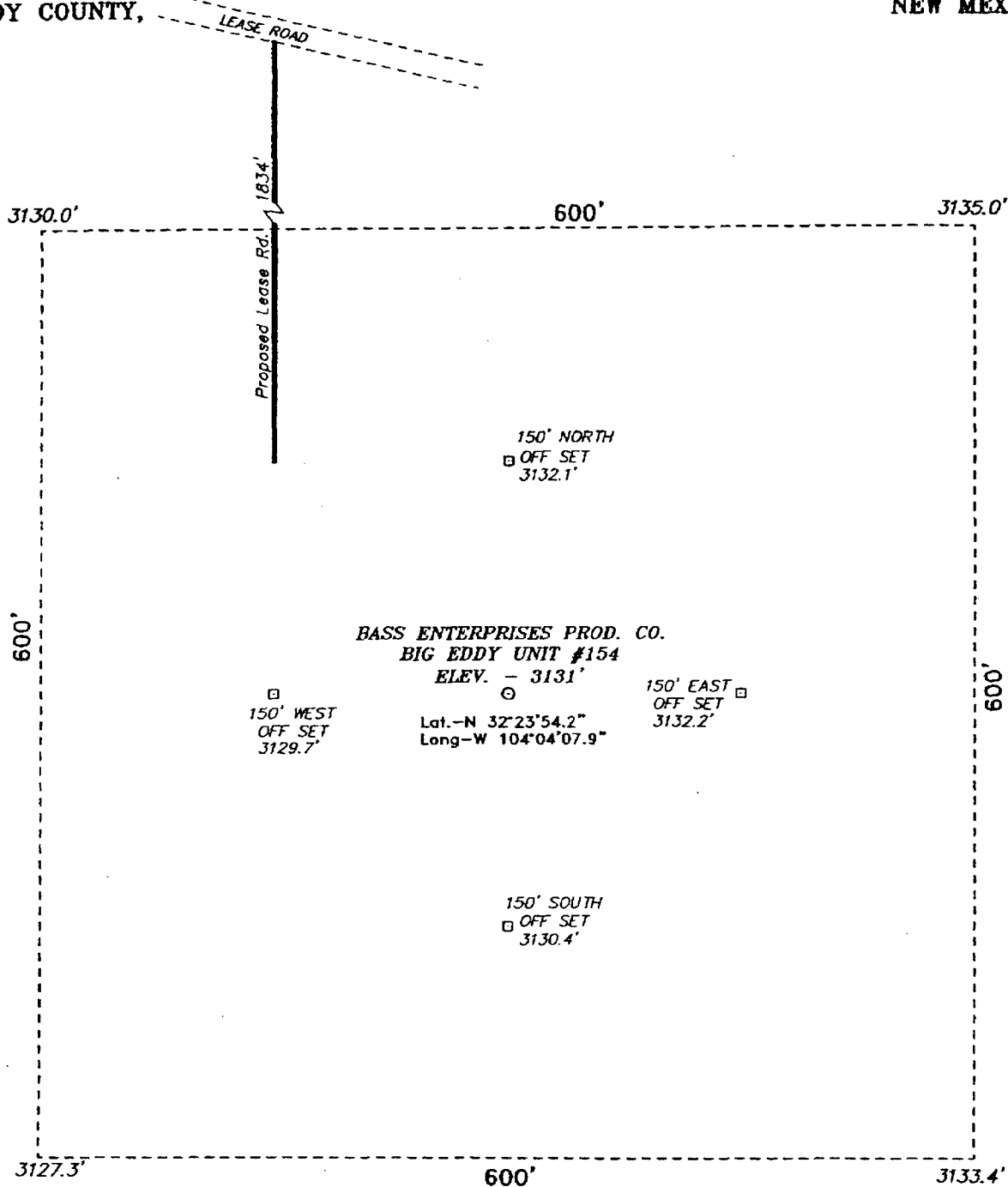
SURVEYOR CERTIFICATION

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.

JULY 20, 2005

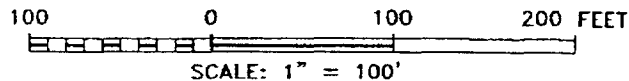
Date Surveyed  
Signature & Seal of  
Professional Surveyor  
W.O. No. 5621  
Certificate No. Gary Jones 7977  
BASIN SURVEYS

SECTION 15, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF US HWY 62/180 AND CO.  
RD. 603, GO WEST 62/180 FOR 0.2 MILE TO A  
LEASE ROAD; THENCE SOUTH ON LEASE ROAD FOR  
4.1 MILES TO A "T"; THENCE GO EAST FOR 0.2 MILE  
PAST IMC BOOSTER STATION; THENCE SOUTH ON  
LEASE ROAD FOR 1.4 MILE TO A 3 WAY  
INTERSECTION AND TAKE ROAD EAST FOR 1.1 MILE TO  
PROPOSED LEASE ROAD.



**BASS ENTERPRISES PRODUCTION CO.**

REF: BIG EDDY UNIT No. 154 / Well Pod Topo

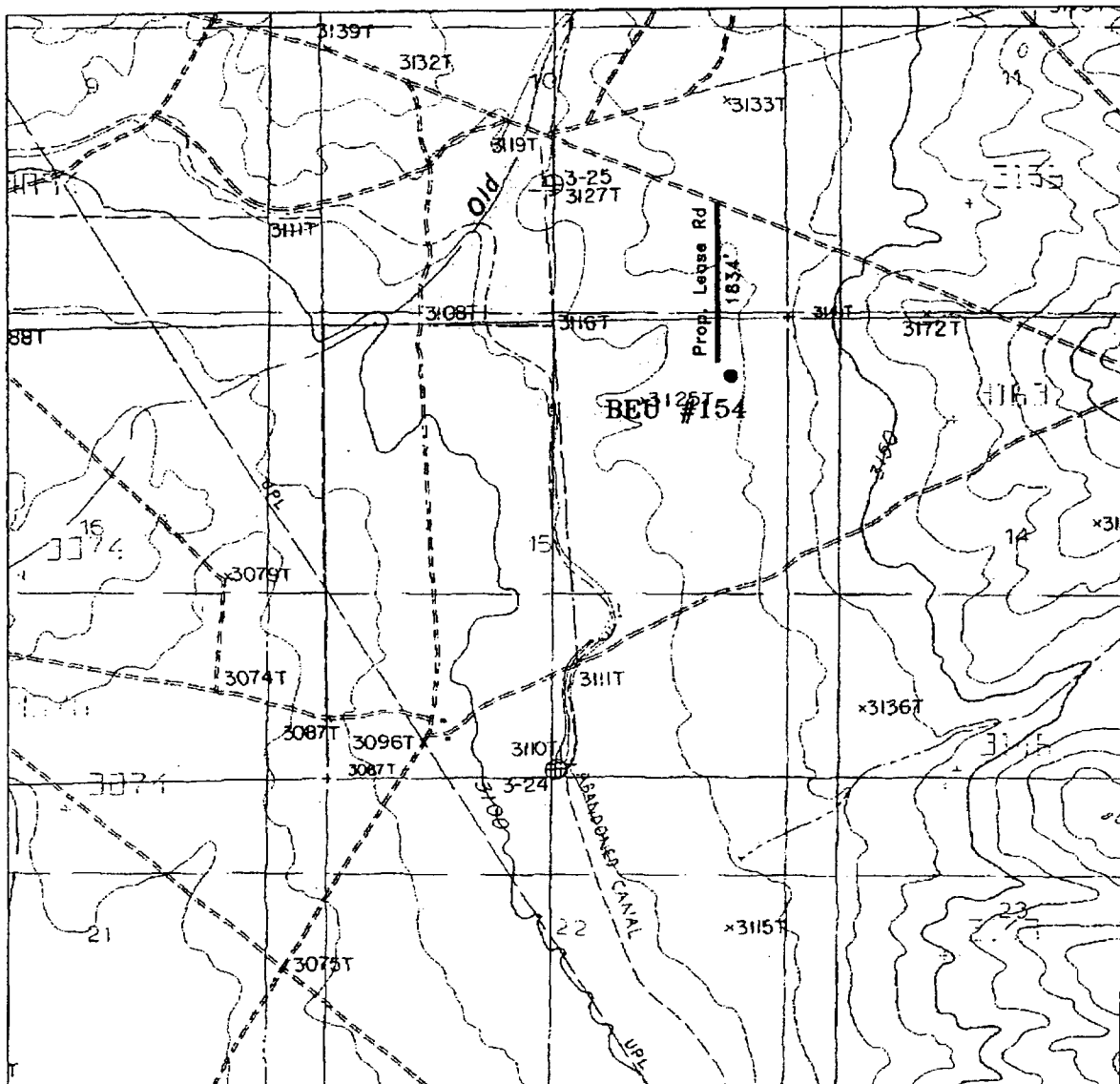
THE BIG EDDY UNIT No. 154 LOCATED 660' FROM  
THE NORTH LINE AND 660' FROM THE EAST LINE OF  
SECTION 15, TOWNSHIP 22 SOUTH, RANGE 28 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 5621 Drawn By: K. GOAD

Date: 07-22-2005 Disk: KJG CD#7 - 5621A.DWG

Survey Date: 07-20-2005 Sheet 1 of 1 Sheets



# **BIG EDDY UNIT #154**

Located at 660' FNL and 660' FEL  
 Section 15, Township 22 South, Range 28 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 5621AA - KJG #7

Survey Date: 07-20-2005

Scale: 1" = 2000'

Date: 07-22-2005

**BASS ENTERPRISES  
 PRODUCTION CO.**