District I
1625 N. French Drive, Hobbs, NM 68240
District II
811 South First Street, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A
Revised May 15, 2000

APPLICATION TYPE
X Single Well
____Established Pre-Approved Pools
EXISTING WELLBORE
X Yes ____No

Bass Enterprises Production Co. — Operator
P. O. Box 2760 Midland TX 79702 — Address

COPY

James Ranch Unit — Lease
80 — Well No.
Section 36 T22S R30E — Unit Letter-Section-Township-Range
Eddy — County

OGRID No. 001801 Property Code 001786 API No. 30-015-32868 Lease Type ____Federal X State ____Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Quahada Ridge Delaware SE	Los Medanos Bone Spring	Los Medanos S Wolfcamp
Pool Code	50443	40295	96336
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	7314-7464'	10,900-910'	11096-111'
Method of Production (Flowing of Artificial Lift)	Artificial Lift	Flowing	Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	N/A	N/A	N/A
Oil Gravity or Gas BTU (Degree API or Gas BTU)	44.2	44.2	44.2
Producing, Shut-in or New Zone	Producing	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production (Note: For new zones with no production history, applicant shall be required to attach production astimates and supporting data.)	Date: 11/07/2003 Rates: 120/113/231	Date: 10/07/2003 Rates: 44/7/126	Date: 10/07/2003 Rates: 120/230/26
Fixed Allocation Percentage (Note: If allocation is based upon someting other than current or part production, supporting data or explanation will be required.)	Oil 54 % Gas 52 %	Oil 17 % Gas 19 %	Oil 29 % Gas 29 %

RECEIVED
NOV 26 2003
OCD-ARTESIA

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingling zones? Yes X No____
If not, have all working royalty and overriding royalty interest owners been notified by certified mail? Yes____ No____

Are all produced fluids from all commingling zones compatible with each other? Yes X No____

Will commingling decrease the value of production? Yes____ No X

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes X No____

NMOCD Reference Case No. applicable to this well: R-10558

Attachments:
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

Pre-Approved Pools

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

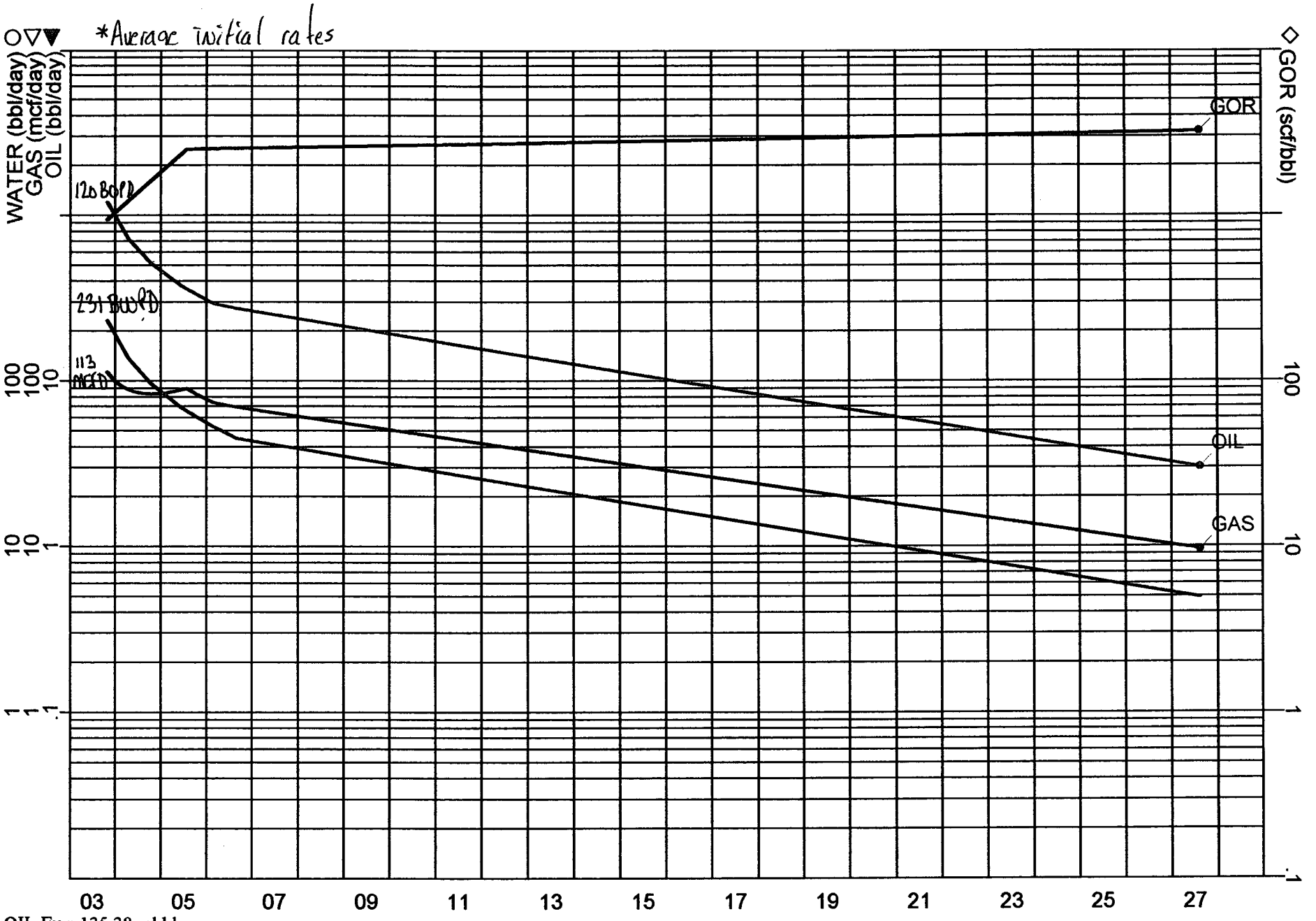
I hereby certify that the information above is true and complete to he best of my knowledge and belief.

SIGNATURE Dami Wilber TITLE Production Clerk DATE 11/18/2003

TYPE OR PRINT NAME Tami Wilber TELEPHONE NO. (432)683-2277

Oper: BEPCO
Field: LOS MEDANOS
Reservoir: DELAWARE

Lease: JRU 80 DELAWARE
County,St: EDDY,NM
Major Phase: OIL



OIL Eur: 135.38 mbbl
GAS Eur: 318.00 mmcf

Input Page

10/1/2003

Lease Name: JRU 80 DELAWARE
Operator : BEPCO
Field Name : LOS MEDANOS
OIL Proved Producing

LEASE CASE
Reservoir : DELAWARE
Co., St. : EDDY, NM

Discount Method: C Annual Compoundings: 0

At AsOf Date

	OIL		GAS	
Qi (AsOf) =	3,650.000	bbl/month	3,431.000	mcf/month
Qf (ECL) =	91.246	bbl/month	291.987	mcf/month
Dec. =	76.500	%	-	%
b =	1.100		-	
Unit Price =	25.19	$/bbl	6.51	$/mcf
Unit Exp. =	0.00	$/bbl	0.00	$/mcf
Hist. Cum	0.000	Mbbl	0.000	Mmcf
Proj. Cum	0.000	Mbbl	0.000	Mmcf
Reserves	135.383	Mbbl	317.997	Mmcf
Ult.	135.383	Mbbl	317.997	Mmcf

ID Codes List

Id Label	IdCode
Retrieval Code	1
API Number	1
PhdWin ID	00001
Unique ID	29347626237393751857980001

Input Data

Projection Table

** Segment Volumes Adjusted for Historical Data.*

ARPS

		Start	End	Life Years	Initial Rate	Final Rate		Decline (%)	b	Min. Decline	Segment Volume	
OIL	01	10/26/2003	2/26/2006	2.34	3,650.0	888.5	bbl	76.50	1.100	-	45,901	bbl
OIL	02	2/27/2006	8/26/2006	0.50	888.5	832.0	bbl	12.80	1.000	-	5,115	bbl
OIL	03	8/27/2006	8/13/2027	20.98	832.0	91.2	bbl	10.00	0.000	-	84,367	bbl
WATER	01	10/26/2003	2/26/2006	2.34	7,019.2	1,599.2	bbl	76.50	1.000	-	86,095	bbl
WATER	02	2/27/2006	8/26/2006	0.50	1,599.2	1,360.3	bbl	27.99	0.000	-	8,732	bbl
WATER	03	8/27/2006	8/13/2027	20.98	1,360.3	149.2	bbl	10.00	0.000	-	137,936	bbl
GOR	01	10/26/2003	7/23/2005	1.75	940.0	2,500.0	scf/bbl	-75.15	0.000	-	0	scf/bbl
GOR	02	7/24/2005	8/13/2027	22.07	2,500.0	3,200.0	scf/bbl	-1.12	0.000	-	0	scf/bbl

FORMULA

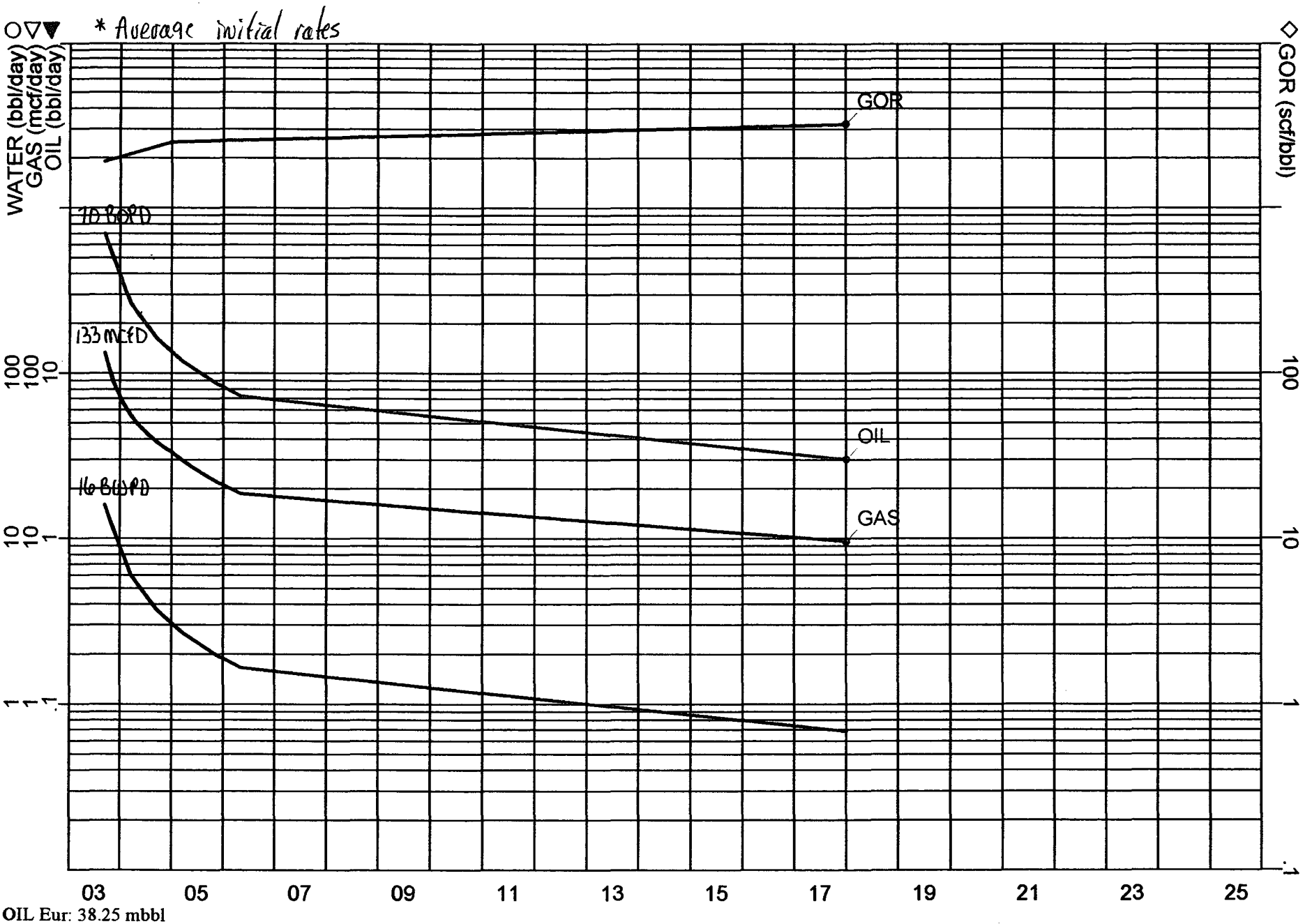
	Formula	Units
GAS	({GOR}X{OIL})/1000	MCF
OIL CUT	({OIL} / ({OIL} + {WATER})) X 100	%
YIELD	{OIL} / {GAS}	BBL/MCF
WATER CUT	({WATER} / ({OIL} + {WATER})) X 100	%

LINTIME

	Start	Initial Rate	End	Final Rate	Life Years
WOR					

Oper: BEPCO
Field: LOS MEDANOS
Reservoir: BONE SPRING

Lease: JRU 80 BONESPRING
County,St: EDDY,NM
Major Phase: OIL



OIL Eur: 38.25 mbbl
GAS Eur: 97.32 mmcf

Input Page

Lease Name: JRU 80 BONESPRING
Operator : BEPCO
Field Name : LOS MEDANOS
OIL Proved Producing

10/1/2003

LEASE CASE
Reservoir : BONE SPRING
Co., St. : EDDY, NM

Discount Method: C Annual Compoundings: 0

At AsOf Date

	OIL		GAS	
Qi (AsOf) =	1,819.531	bbl/month	3,495.107	mcf/month
Qf (ECL) =	91.250	bbl/month	292.000	mcf/month
Dec. =	94.010	%	-	%
b =	1.000		-	
Unit Price =	25.19	$/bbl	6.51	$/mcf
Unit Exp. =	0.00	$/bbl	0.00	$/mcf
Hist. Cum	0.000	Mbbl	0.000	Mmcf
Proj. Cum	1.168	Mbbl	2.231	Mmcf
Reserves	37.081	Mbbl	95.090	Mmcf
Ult.	38.249	Mbbl	97.321	Mmcf

ID Codes List

Id Label	IdCode
Retrieval Code	2
API Number	2
PhdWin ID	00002
Unique ID	29347626237393929305050001

Input Data

Projection Table

** Segment Volumes Adjusted for Historical Data.*

ARPS

		Start	End	Life Years	Initial Rate	Final Rate		Decline (%)	b	Min. Decline	Segment Volume	
OIL	01	9/13/2003	5/5/2006	2.65	2,129.2	220.9	bbl	96.20	1.000	-	17,728	bbl
OIL	02	5/6/2006	12/30/2017	11.66	220.9	91.3	bbl	7.30	0.000	-	20,521	bbl
WATER	01	9/13/2003	5/5/2006	2.65	486.7	50.5	bbl	96.20	1.000	-	4,052	bbl
WATER	02	5/6/2006	12/30/2017	11.66	50.5	20.9	bbl	7.30	0.000	-	4,691	bbl
GOR	01	9/13/2003	1/1/2005	1.31	1,900.0	2,500.0	scf/bbl	-23.37	0.000	-	0	scf/bbl
GOR	02	1/2/2005	12/30/2017	13.00	2,500.0	3,200.0	scf/bbl	-1.92	0.000	-	0	scf/bbl

FORMULA

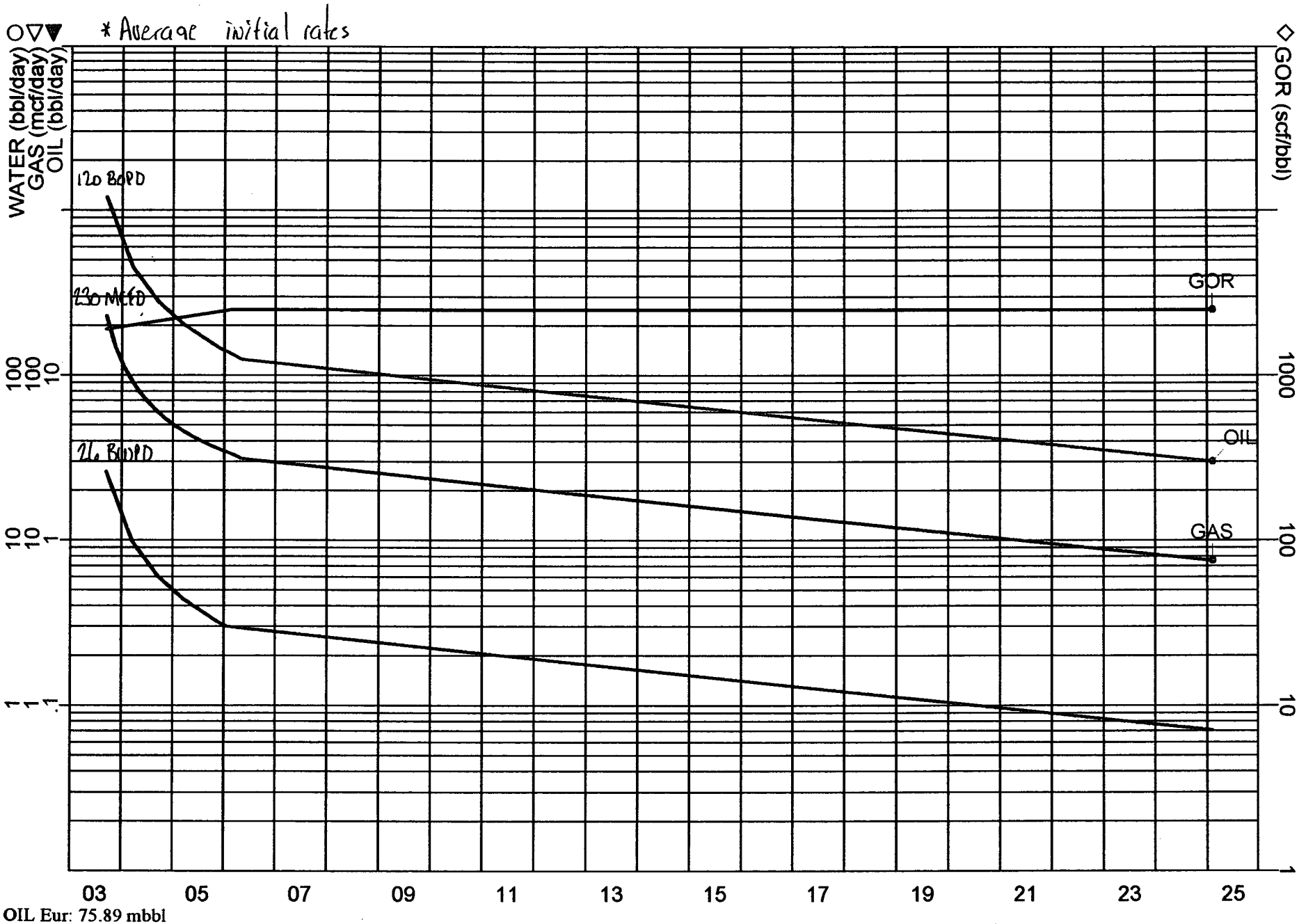
	Formula	Units
GAS	({GOR}X{OIL})/1000	MCF
OIL CUT	({OIL} / ({OIL} + {WATER})) X 100	%
YIELD	{OIL} / {GAS}	BBL/MCF
WATER CUT	({WATER} / ({OIL} + {WATER})) X 100	%

LINTIME

	Start	Initial Rate	End	Final Rate	Life Years
WOR					

Oper: BEPCO
Field: LOS MEDANOS
Reservoir: WOLFCAMP

Lease: JRU 80 WOLFCAMP
County,St: EDDY,NM
Major Phase: OIL



OIL Eur: 75.89 mbbl
GAS Eur: 177.49 mmcf

Input Page

Lease Name: JRU 80 WOLFCAMP
Operator : BEPCO
Field Name : LOS MEDANOS
OIL Proved Producing

10/1/2003

LEASE CASE
Reservoir : WOLFCAMP
Co., St. : EDDY, NM

Discount Method: C Annual Compoundings: 0

At AsOf Date

	OIL		GAS	
Qi (AsOf) =	3,119.196	bbl/month	5,960.869	mcf/month
Qf (ECL) =	91.233	bbl/month	228.082	mcf/month
Dec. =	94.010	%	-	%
b =	1.000		-	
Unit Price =	25.19	$/bbl	6.51	$/mcf
Unit Exp. =	0.00	$/bbl	0.00	$/mcf
Hist. Cum	0.000	Mbbl	0.000	Mmcf
Proj. Cum	2.003	Mbbl	3.815	Mmcf
Reserves	73.888	Mbbl	173.678	Mmcf
Ult.	75.891	Mbbl	177.493	Mmcf

ID Codes List

Id Label	IdCode
Retrieval Code	3
API Number	3
PhdWin ID	00003
Unique ID	29347626237393929486130002

Input Data

Projection Table

** Segment Volumes Adjusted for Historical Data.*

ARPS

		Start	End	Life Years	Initial Rate	Final Rate		Decline (%)	b	Min. Decline	Segment Volume	
OIL	01	9/13/2003	5/5/2006	2.65	3,650.0	378.7	bbl	96.20	1.000	-	30,390	bbl
OIL	02	5/6/2006	2/7/2025	18.78	378.7	91.2	bbl	7.30	0.000	-	45,501	bbl
WATER	01	9/13/2003	1/17/2006	2.35	790.8	91.3	bbl	96.20	1.000	-	6,275	bbl
WATER	02	1/18/2006	2/7/2025	19.07	91.3	21.5	bbl	7.30	0.000	-	11,042	bbl
GOR	01	9/13/2003	3/1/2006	2.47	1,900.0	2,500.0	scf/bbl	-11.76	0.000	-	0	scf/bbl
GOR	02	3/2/2006	2/7/2025	18.95	2,500.0	2,500.0	scf/bbl	0.00	0.000	-	0	scf/bbl

FORMULA

	Formula	Units
GAS	({GOR}X{OIL})/1000	MCF
OIL CUT	({OIL} / ({OIL} + {WATER})) X 100	%
YIELD	{OIL} / {GAS}	BBL/MCF
WATER CUT	({WATER} / ({OIL} + {WATER})) X 100	%

LINTIME

	Start	Initial Rate	End	Final Rate	Life Years
WOR					

JAMES RANCH UNIT #80
Application for Downhole Commingling

COMPLETION SUMMARY:
The 3rd Bone Spring from 10,900'-910' and the Wolfcamp from 11,096'-111' were perforated, individually broken down with acid, and fracture stimulated. After flowing the two reservoirs for a period of 32 days, a CIBP was set at 10,800' and the 2nd Bone Spring from 10,522'-525' was perforated, broken down with acid, and swabbed dry. An RBP was then set at 7,800' and the Delaware from 7,454'-64' was perforated, broken down with acid, and fracture stimulated. A second RBP was set at 7,400' and the Delaware from 7,314'-24' was perforated, broken down with acid, and fracture stimulated. The RBP at 7,400' was removed and the Delaware intervals placed on pump.

The 3rd Bone Spring and the Wolfcamp intervals were treated and tested together. In order to determine how much production should be attributed to each of the two zones an allocation formula, based on log calculated pay, was developed. The following table shows this breakdown:

	3rd BONE SPRING	WOLFCAMP
Net Pay	14	24
Average Porosity	10%	10%
ΦH	1.4	2.4
Allocation Percentage	36.8%	63.2%

James Ranch Unit #80
DHC Allocation Factors

Year	Del Oil	BS Oil	Wfc Oil	Del Oil %	BS Oil %	Wf Oil %	Del Gas	BS Gas	Wfc Gas	Del Gas %	BS Gas %	Wfc Gas %
2003	7,136	4,191	7,185	38.5%	22.6%	38.8%	7,050	8,244	13,904	24.1%	28.2%	47.6%
2004	23,496	7,624	13,069	53.2%	17.3%	29.6%	31,747	16,888	26,921	42.0%	22.4%	35.6%
2005	13,564	3,780	6,479	56.9%	15.9%	27.2%	30,915	9,531	14,985	55.8%	17.2%	27.0%
2006	10,232	2,665	4,568	58.6%	15.3%	26.2%	25,849	6,853	11,402	58.6%	15.5%	25.9%
2007	9,135	2,428	4,163	58.1%	15.4%	26.5%	23,336	6,365	10,408	58.2%	15.9%	25.9%
2008	8,243	2,257	3,869	57.4%	15.7%	26.9%	21,294	6,030	9,673	57.6%	16.3%	26.1%
2009	7,397	2,086	3,577	56.6%	16.0%	27.4%	19,325	5,681	8,942	56.9%	16.7%	26.3%
2010	6,657	1,934	3,316	55.9%	16.2%	27.8%	17,588	5,367	8,289	56.3%	17.2%	26.5%
2011	5,992	1,793	3,074	55.2%	16.5%	28.3%	16,007	5,070	7,684	55.7%	17.6%	26.7%
2012	5,406	1,666	2,857	54.4%	16.8%	28.8%	14,606	4,803	7,142	55.0%	18.1%	26.9%
2013	4,852	1,540	2,641	53.7%	17.1%	29.2%	13,256	4,525	6,602	54.4%	18.6%	27.1%
2014	4,367	1,428	2,448	53.0%	17.3%	29.7%	12,064	4,275	6,120	53.7%	19.0%	27.2%
2015	3,930	1,324	2,269	52.2%	17.6%	30.2%	10,980	4,039	5,673	53.1%	19.5%	27.4%
2016	3,546	1,230	2,109	51.5%	17.9%	30.6%	10,019	3,826	5,273	52.4%	20.0%	27.6%
2017	3,182	1,133	1,950	50.8%	18.1%	31.1%	9,093	3,592	4,874	51.8%	20.5%	27.8%
Total	117,135	37,081	63,574	53.8%	17.0%	29.2%	263,128	95,090	147,892	52.0%	18.8%	29.2%