

DATE IN 12/17/99	SUSPENSE 1/6/00	ENGINEER DC	LOGGED MV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2574

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

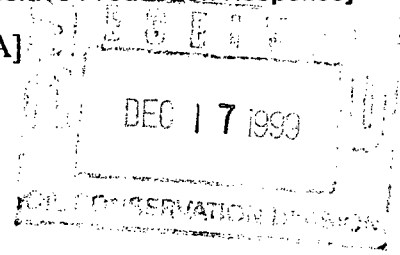
[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
NSL NSP DD SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
X DHC CTB PLC PC OLS OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
WFX PMX SWD IPI EOR PPR



[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
[B] Offset Operators, Leaseholders or Surface Owner
[C] Application is One Which Requires Published Legal Notice
[D] X Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[E] For all of the above, Proof of Notification or Publication is Attached, and/or,
[F] Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Cole

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

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

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
Revised August 1999

APPROVAL PROCESS:

___ Administrative ___ Hearing

EXISTING WELLBORE

___ YES ___X_ NO

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM 87499

Operator

Address

HARDIE E

1B

J 16-28N-08W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7089 API NO. 30-039-XXXXX Federal X, State, (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Otero CHACRA - 82329		BLANCO MESAVERDE - 72319
2. Top and Bottom of Pay Section (Perforations)	WILL BE SUPPLIED UPON COMPLETION		WILL BE SUPPLIED UPON COMPLETION
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 429 psi (see attachment) b. (Original) 1130 psi (see attachment)		a. (Current) 555 psi (see attachment) b. (Original) 1202 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1182		BTU 1269
7. Producing or Shut-In?	SHUT-IN		SHUT-IN
Production Marginal? (yes or no)	NO		YES
* If Shut-In, give date and oil/gas/ water rates of last production	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? ___X_ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes ___ No
11. Will cross-flow occur? ___X_ Yes ___ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ___X_ Yes ___ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ___X_ Yes ___ No
13. Will the value of production be decreased by commingling? ___ Yes ___X_ No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ___X_ Yes ___ No
15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).
16. 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, overriding, and royalty interests for uncommon interest cases.
* Any additional statements, data, or documents required to support commingling.

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

SIGNATURE

Wayne Fletcher

TITLE PRODUCTION ENGINEER

DATE:

12/107/99

TYPE OR PRINT NAME B. WAYNE FLETCHER

TELEPHONE NO. 505-326-9700

District I
PO Box 1990, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-	² Pool Code 82329/72319	³ Pool Name Otero Chacra/Blanco Mesaverde
⁴ Property Code 7089	⁵ Property Name HARDIE E	⁶ Well Number 1B
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 5818'

¹⁰ Surface Location

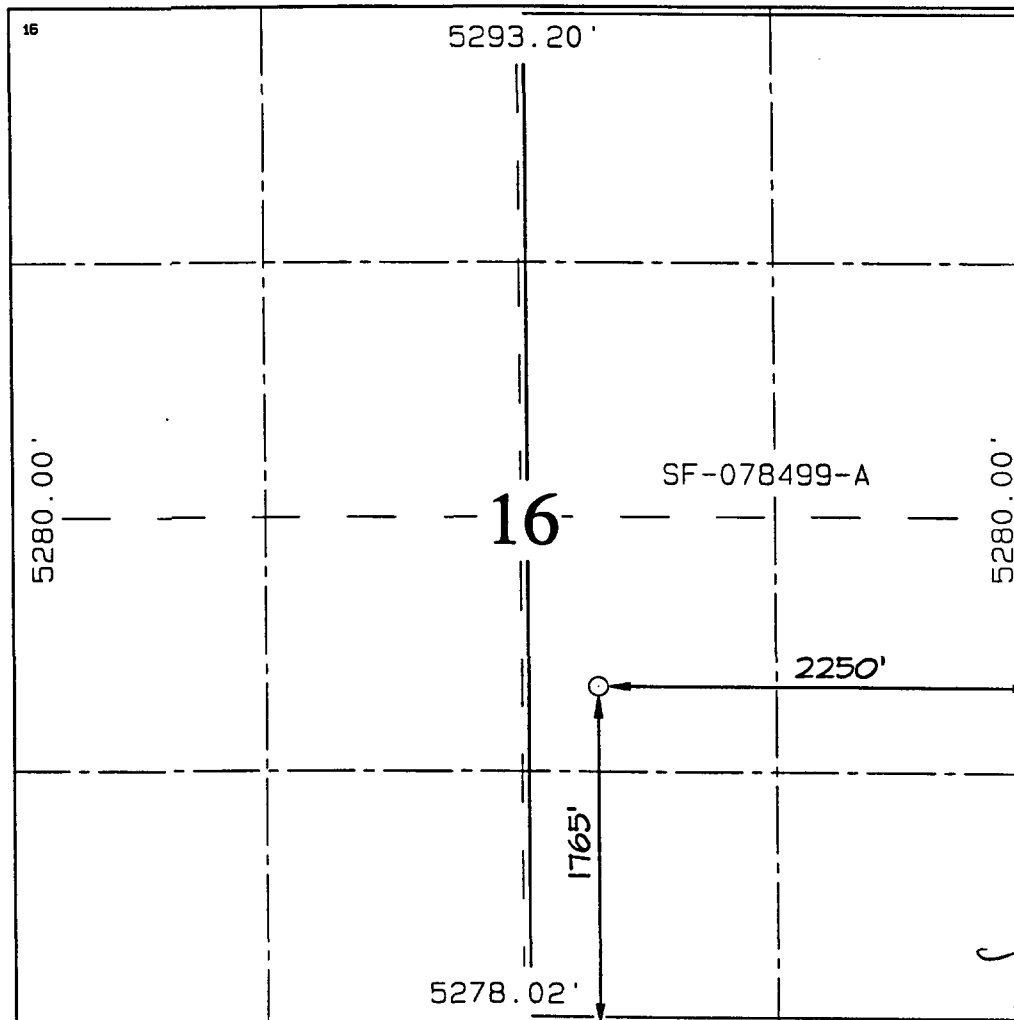
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	16	28N	8W		1765	SOUTH	2250	EAST	SAN JUAN

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

¹² Dedicated Acres Cha-160 MV-E/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

Signature
Peggy Cole
Printed Name
Regulatory Administrator
Title

Date

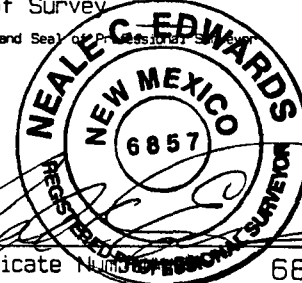
¹⁸ SURVEYOR CERTIFICATION

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.

NOVEMBER 18, 1999

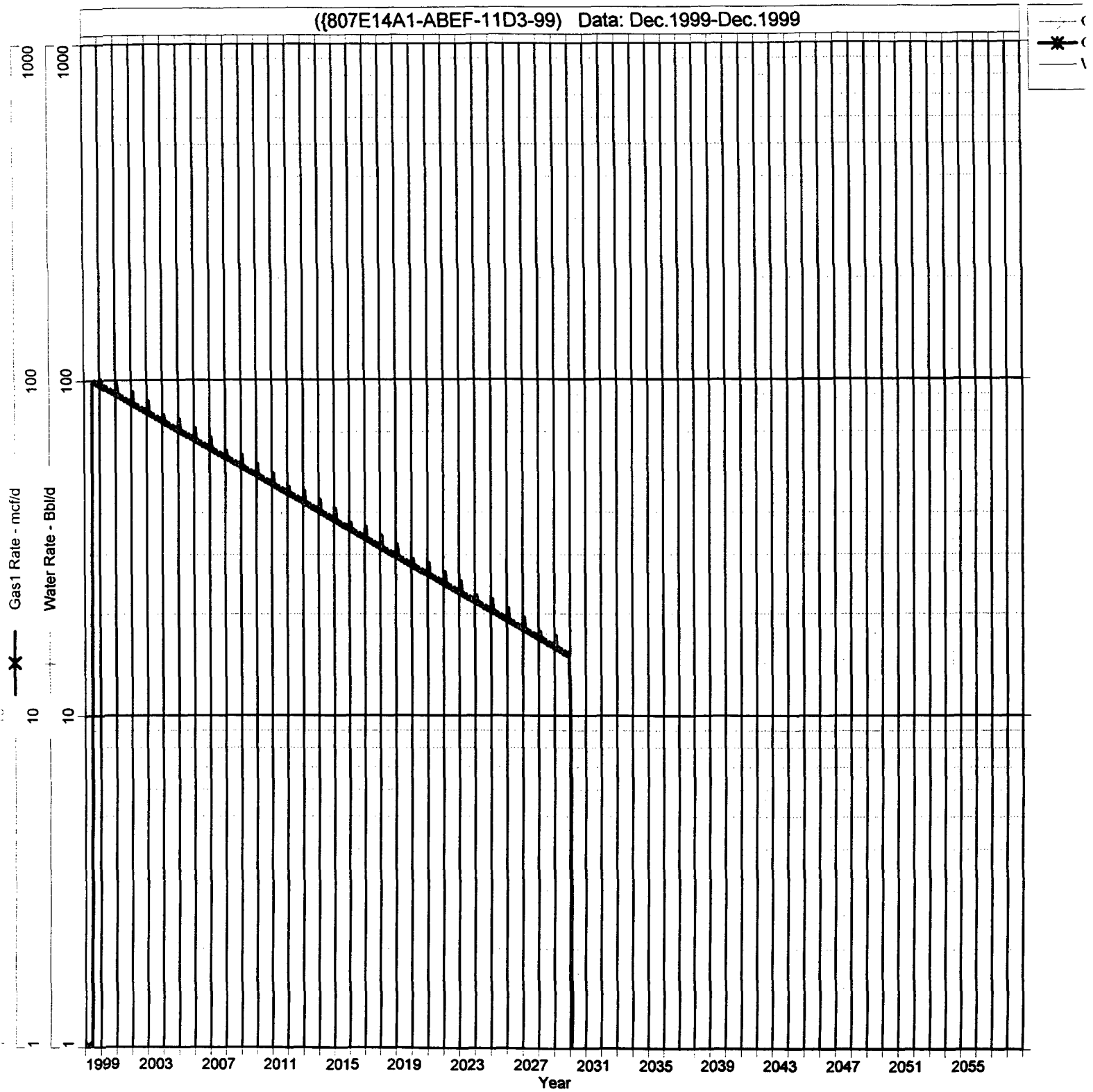
Date of Survey

Signature and Seal of Professional Surveyor

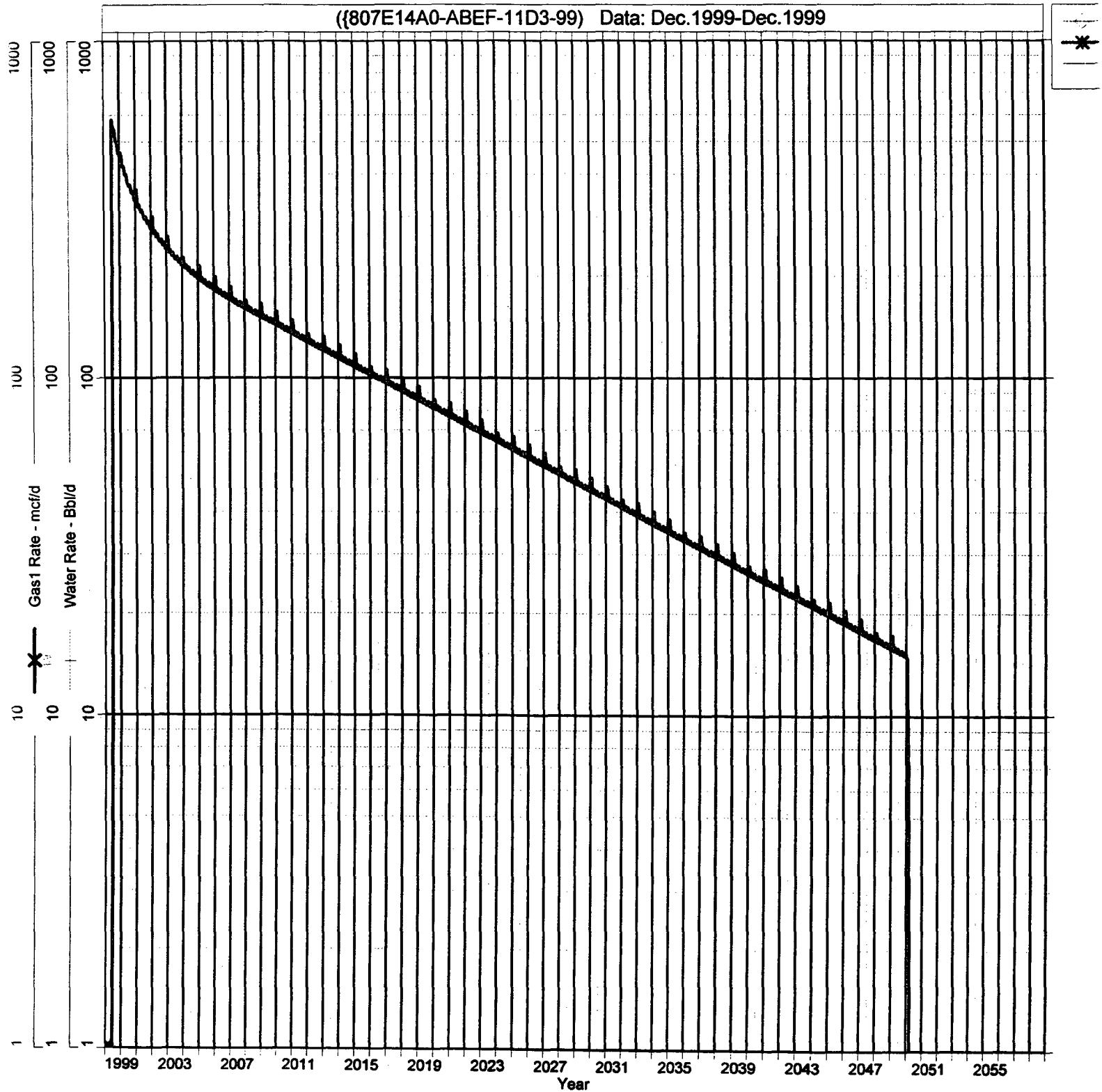


Certificate Number **6857**

Hardie E #1B
Expected Production
Chacra Formation



Hardie E #1B
Expected Production
Mesaverde Formation



Hardie E #1B
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Chacra		Mesaverde	
<u>CH-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.67	GAS GRAVITY	0.733
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.32	%N2	0.43
%CO2	0.27	%CO2	0.67
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	2.375
DEPTH (FT)	3248	DEPTH (FT)	5197
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	397	SURFACE PRESSURE (PSIA)	486
BOTTOMHOLE PRESSURE (PSIA)	429.2	BOTTOMHOLE PRESSURE (PSIA)	554.5
<u>CH-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.67	GAS GRAVITY	0.733
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.32	%N2	0.43
%CO2	0.27	%CO2	0.67
%H2S	0	%H2S	0
DIAMETER (IN)	2.875	DIAMETER (IN)	2.375
DEPTH (FT)	3248	DEPTH (FT)	5197
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1036	SURFACE PRESSURE (PSIA)	1041
BOTTOMHOLE PRESSURE (PSIA)	1129.9	BOTTOMHOLE PRESSURE (PSIA)	1202.3

Hardie E #1B

Chacra Offset

<u>Well Name</u>	<u>Date</u>	<u>CUM</u>	<u>Pressure</u>
HANCOCK A 10	12/18/74	0	1,036
HANCOCK A 10	01/03/75	1,387	1,049
HANCOCK A 10	04/11/75	2,371	775
HANCOCK A 10	04/14/76	6,346	489
HANCOCK A 10	06/28/77	9,468	459
HANCOCK A 10	04/05/93	29,712	397

Hardie E #1B

Mesaverde Offset

<u>Well Name</u>	<u>Date</u>	<u>CUM</u>	<u>Pressure</u>
Hardie E #1	07/20/57	0	1,041
Hardie E #1	05/22/58	12,828	785
Hardie E #1	03/29/59	19,435	752
Hardie E #1	02/14/60	30,275	713
Hardie E #1	12/13/61	48,633	616
Hardie E #1	09/04/62	50,647	700
Hardie E #1	2/19/63	55,977	660
Hardie E #1	3/9/64	62,329	696
Hardie E #1	2/24/65	69,829	677
Hardie E #1	8/30/66	81,144	622
Hardie E #1	3/10/67	84,478	628
Hardie E #1	4/29/68	91,878	612
Hardie E #1	8/14/69	102,002	555
Hardie E #1	4/27/70	106,873	538
Hardie E #1	6/25/71	116,534	483
Hardie E #1	6/19/72	124,966	462
Hardie E #1	6/14/73	131,635	513
Hardie E #1	7/2/74	140,918	477
Hardie E #1	5/12/76	152,906	522
Hardie E #1	5/19/78	162,519	462
Hardie E #1	7/24/80	171,361	440
Hardie E #1	6/10/82	175,990	469
Hardie E #1	8/10/84	179,218	530
Hardie E #1	6/18/86	182,696	508
Hardie E #1	5/16/89	189,456	507
Hardie E #1	2/18/91	197,754	451
Hardie E #1	3/30/93	199,198	486

Hardie E #1B
Chacra / Mesaverde
28N - 8W - 16

