6-30-04 DATE IN	SUSPENSE	ENGINEER Jones	LOGGED IN 7-1-04	TYPE DHC 3297	APP NO. pSEM0418329122

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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 - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

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

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

[D] Other: Specify _____

2004 JUN 30 PM 12 57

[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] ☒ 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] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Frances Bond	Frances Bond	Regulatory Specialist	6-29-04
Print or Type Name	Signature	Title	Date

fbond@br-inc.com
e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. 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

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107A
Revised June 10, 2003

APPLICATION TYPE
_X_ Single Well
___ Establish Pre-Approved Pools
EXISTING WELLBORE
_X_ Yes ___ No

DHC-3297

Burlington Resources Oil & Gas Company LP — P.O.Box 4289 Farmington, NM 87499
Operator — Address

McClanahan — 17E — Unit I, Sec. 24, T28N, R10W — San Juan
Lease — Well No. — Unit Letter-Section-Township-Range — County

OGRID No: 14538 Property Code 18577 API No. 30-045-23750 Lease Type: _X_ Federal ___ State ___ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA	BLANCO MESAVERDE ProGas	BASIN DAKOTA ProGas
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION	4309-4396'	6373-6453' Upper DK 6495-6505' Lower DK
Method of Production (Flowing or Artificial Lift)	NEW ZONE	ARTIFICIAL LIFT-PLUNGER	ARTIFICIAL LIFT-PLUNGER
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)	Original 613 psi from McClanahan #14E offset (see attachment)	Original – 937.6 Current – 212.6	Original – 691.6 Current – 206.4
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1285	BTU 1319	BTU 1319
Producing, Shut-In or New Zone	NEW ZONE	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 estimates and supporting data.)	Date: N/A Rates: see attachment	Date: 05/31/04 Rates: 34 Mcf/d	Date: 05/31/04 Rates: 43 Mcf/d
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas Will be supplied upon completion	Oil Gas Will be supplied upon completion	Oil Gas Will be supplied upon completion

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes_X_ No___
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes_X_ No_X_

Are all produced fluids from all commingled 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: _____

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 the best of my knowledge and belief.

SIGNATURE Leonard Biemer TITLE Engineer DATE 06/29/04

TYPE OR PRINT NAME Leonard Biemer TELEPHONE NO. (505) 326-9700

E-MAIL ADDRESS lbiemer@br-inc.com

McClanahan #17E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 1/14/98

MESAVERDE

MV-Current

GAS GRAVITY	0.768
COND. OR MISC. (C/M)	C
%N2	0.00488
%CO2	0.00782
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	4352
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	177.37
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	190
BOTTOMHOLE PRESSURE (PSIA)	212.6

MV-Original

GAS GRAVITY	0.7163
COND. OR MISC. (C/M)	C
%N2	0.49
%CO2	1.1
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	4352
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	177.37
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	835
BOTTOMHOLE PRESSURE (PSIA)	937.6

CHACRA

CH-Current

McClanahan #14E Offset

GAS GRAVITY	0.749
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0.00974
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	2878
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	185
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	180
BOTTOMHOLE PRESSURE (PSIA)	193.4

CH-Original

McClanahan #14E Offset

GAS GRAVITY	0.716
COND. OR MISC. (C/M)	C
%N2	0.02
%CO2	0.0115
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	2878
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	185
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	570
BOTTOMHOLE PRESSURE (PSIA)	613.1

McClanahan #17E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 1/14/98

DAKOTA

DK-Current

GAS GRAVITY	0.768
COND. OR MISC. (C/M)	C
%N2	0.00488
%CO2	0.00782
%H2S	0
DIAMETER (IN)	5.5
DEPTH (FT)	6472
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	211.07
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	186
BOTTOMHOLE PRESSURE (PSIA)	218.8

Current

GAS GRAVITY	0
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0
%H2S	0
DIAMETER (IN)	0
DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	0.0

DK-Original

GAS GRAVITY	0.7163
COND. OR MISC. (C/M)	C
%N2	0.49
%CO2	1.1
%H2S	0
DIAMETER (IN)	2.065
DEPTH (FT)	6472
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	211.07
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1041
BOTTOMHOLE PRESSURE (PSIA)	1235.4

Original

GAS GRAVITY	0
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0
%H2S	0
DIAMETER (IN)	0
DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	0
BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	0.0

McClanahan #17E - SICP/Z Data

Zone: Dakota

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
4/30/1980	1005	3/1/2004	0.8983	1119	0	N/A	1119
9/15/1980	888	3/1/2004	0.9085	977	6.62	-21.35115	1119
8/31/1981	693	3/1/2004	0.9266	748	53.892	-6.881993	1119
6/8/1982	560	3/1/2004	0.9398	596	85.478	-6.117462	1119
7/24/1983	544	3/1/2004	0.9414	578	110.333	-4.902587	1119
9/10/1985	622	3/1/2004	0.9336	666	149.634	-3.024324	1119
9/27/1988	610	3/1/2004	0.9348	653	190.399	-2.44872	1119
10/2/1990	542	3/1/2004	0.9416	576	214.158	-2.536277	1119
7/4/1992	472	3/1/2004	0.9488	497	227.949	-2.725651	1119
???	132	N/A	1	132	390.77	-2.525219	1119
						↓	↓
N/A	???	N/A	???	**132**	390.77	-2.525219	1119

Z-Factor = 0.95
SICP (psig) = 125

Zone: Mesaverde

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
4/30/1980	940	3/1/2004	0.8833	1064	0	N/A	1064
9/30/1980	768	3/1/2004	0.9027	851	2.858	-74.67114	1064
8/31/1981	601	3/1/2004	0.9226	651	27.055	-15.25674	1064
6/8/1982	514	3/1/2004	0.9334	551	64.89	-7.913641	1064
5/1/1984	506	3/1/2004	0.9344	542	112.922	-4.628568	1064
1/14/1986	497	3/1/2004	0.9355	531	138.291	-3.853645	1064
???	128	N/A	1	128	296.38	-3.158753	1064
						↓	↓
N/A	???	N/A	???	**128**	296.38	-3.158753	1064

Z-Factor = 0.92
SICP (psig) = 118

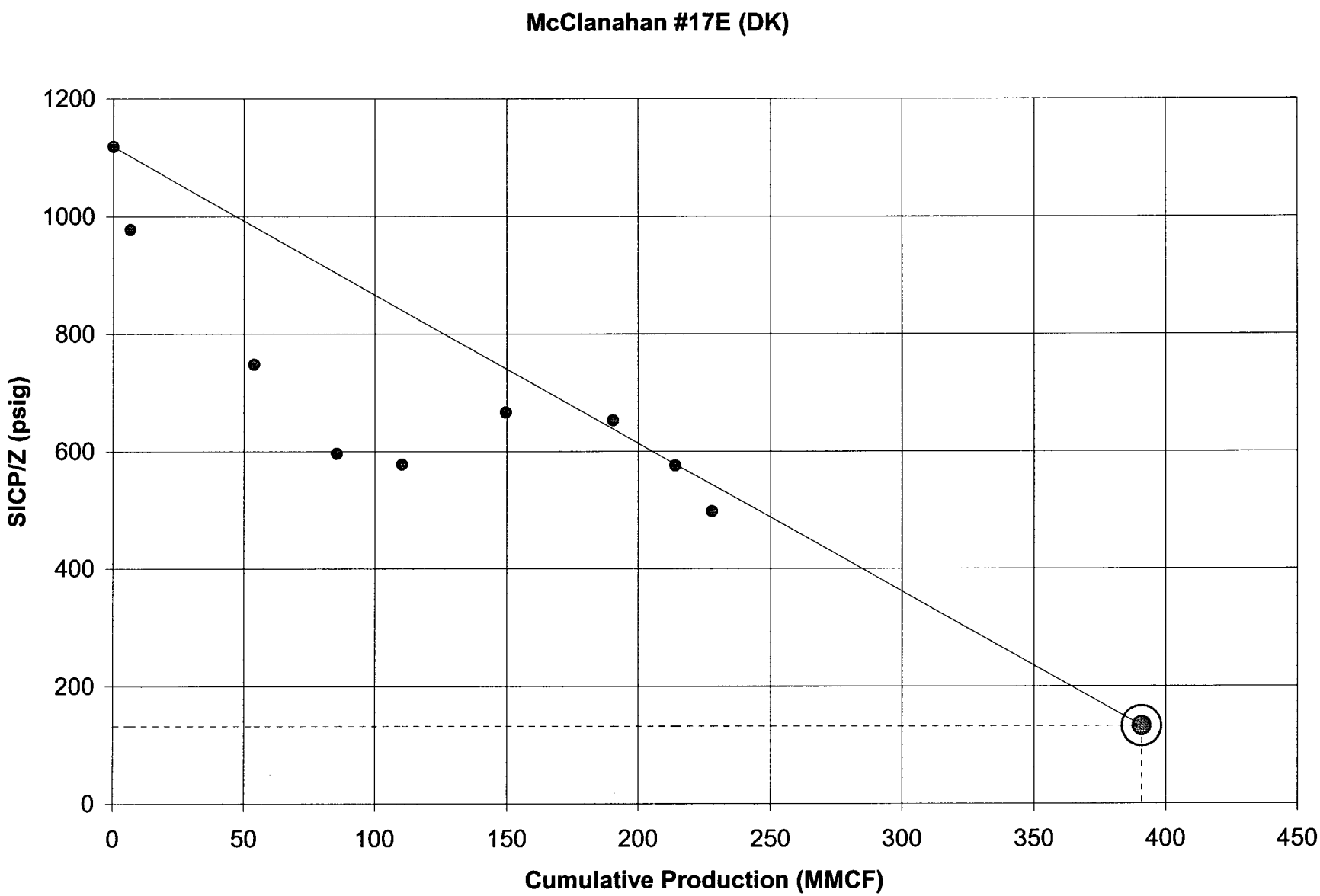
Zone: Chacra

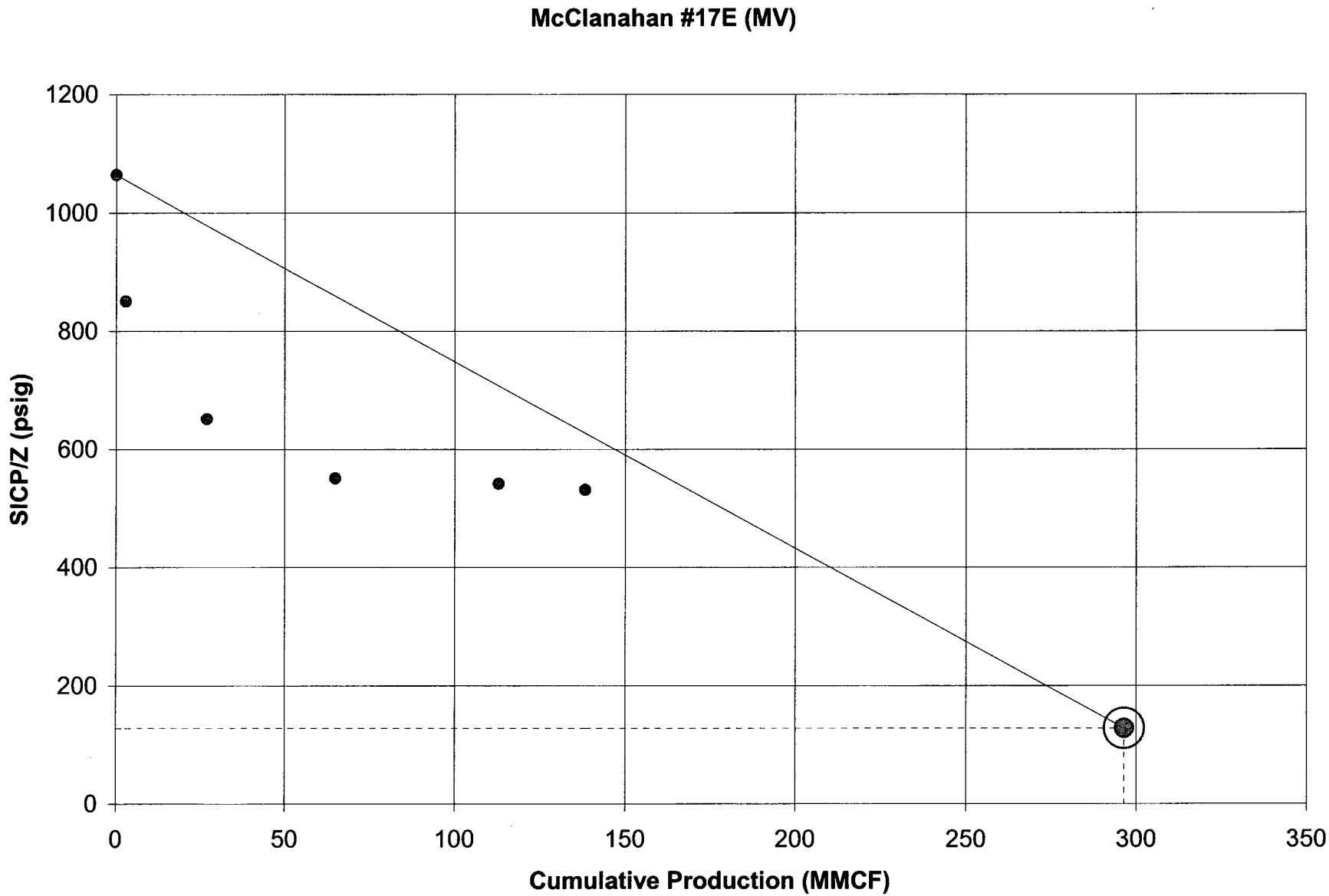
Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
2/14/1990	953	3/1/2004	0.8931	1067	0	N/A	1067
???	102	N/A	1	102	300.4	-3.212616	1067
						↓	↓
12/31/2002	???	N/A	???	**102**	300.4	-3.212616	1067

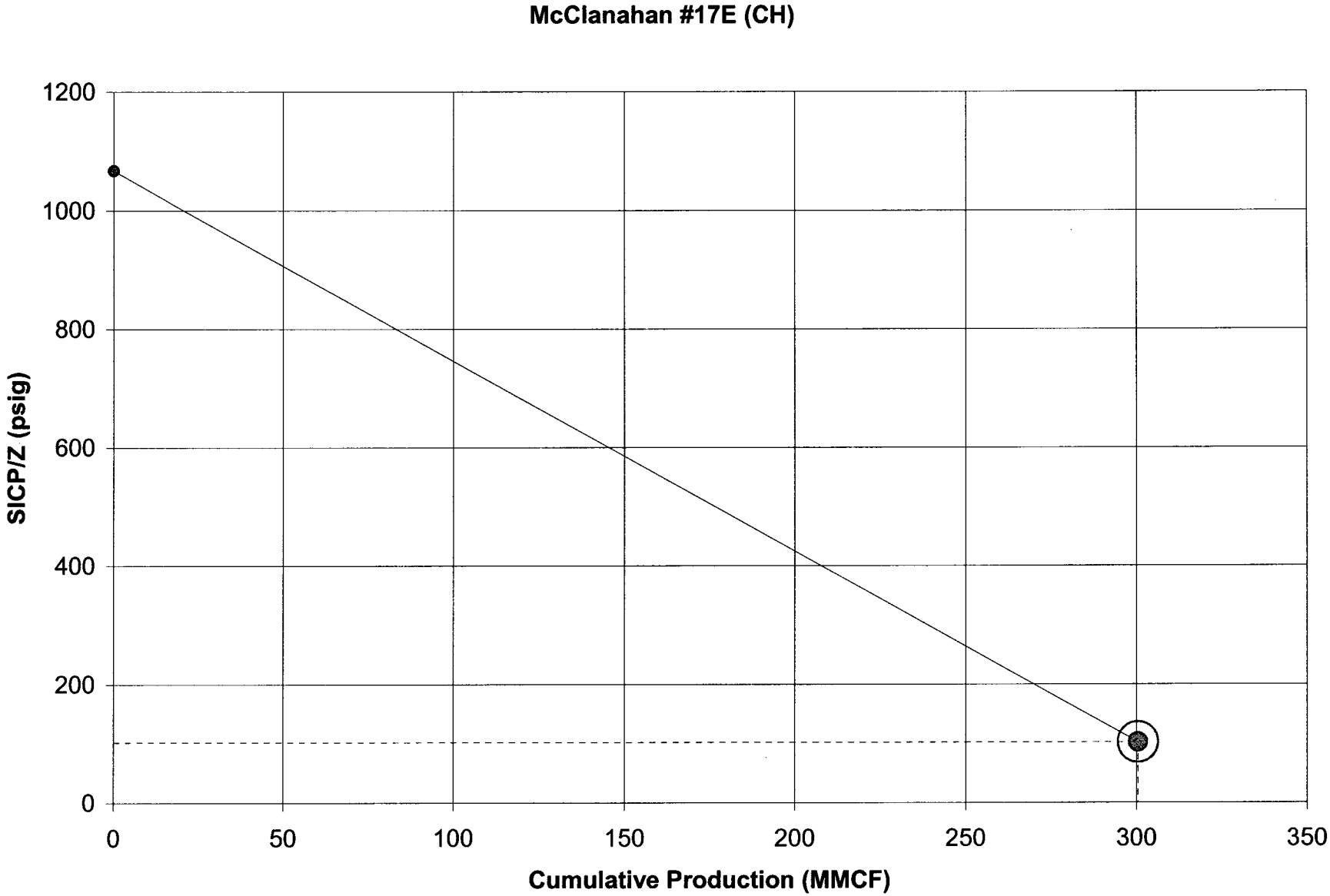
Z-Factor = 0.94
SICP (psig) = 96

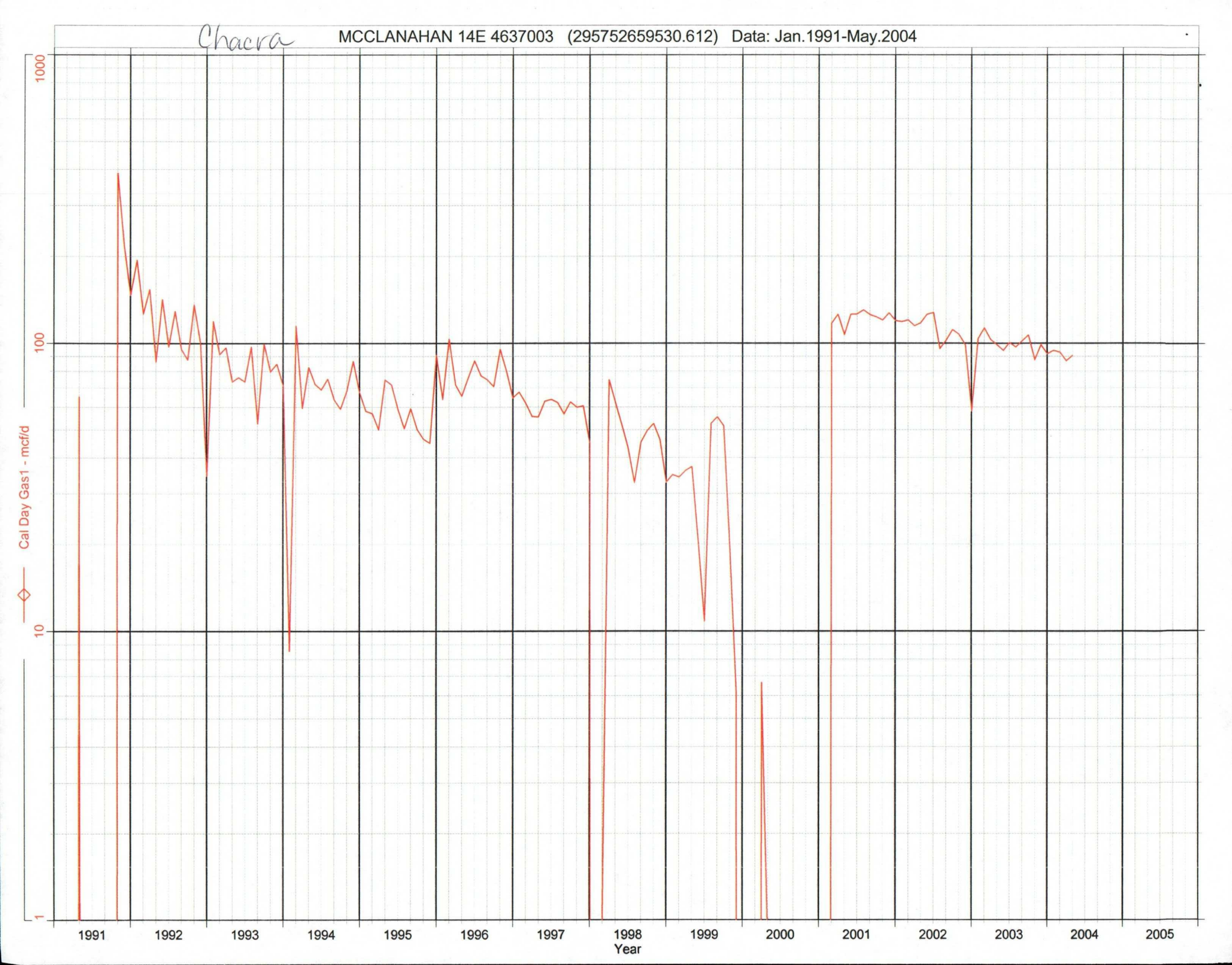
Offset Jicarilla 150 #1E Gallup

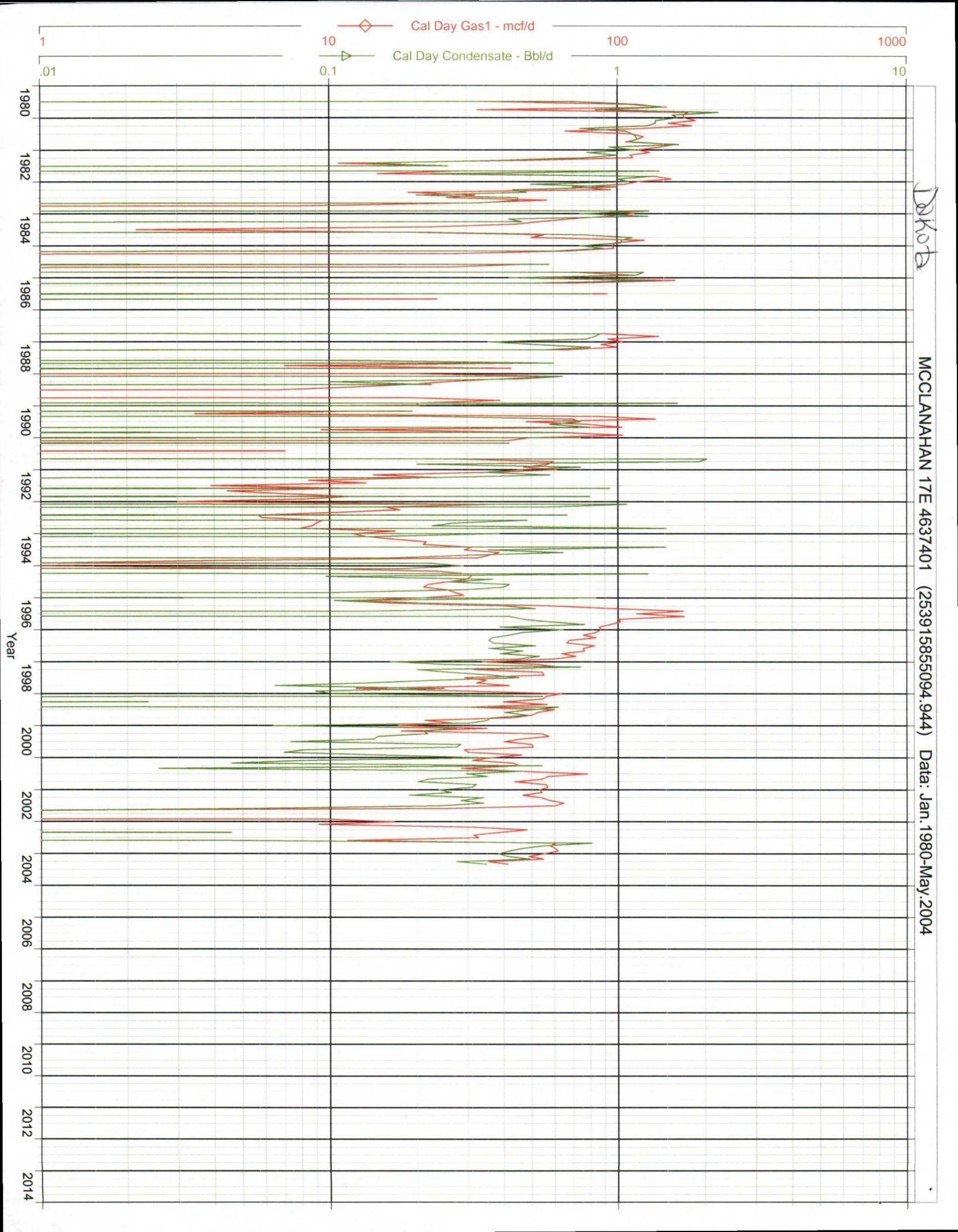
NOTE: THESE ARE ESTIMATES OF THE CURRENT RESERVOIR PRESSURE IN EACH ZONE. IT IS REALIZED THAT THE NEAR-WELLBORE PRESSURES FOR EACH ZONE SHOULD BE SIMILAR, DUE TO THEIR COMMINGLED STATUS.


McClanahan #17E (DK)
SICP/Z (psig)
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
350
400
450
Cumulative Production (MMCF)


McClanahan #17E (MV)
SICP/Z (psig)
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
350
Cumulative Production (MMCF)


McClanahan #17E (CH)
SICP/Z (psig)
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
350
Cumulative Production (MMCF)


Chacra
MCCLANAHAN 14E 4637003 (295752659530.612) Data: Jan.1991-May.2004
1000
100
10
1
Cal Day Gas1 - mcf/d
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
Year


Cal Day Gas1 - mcf/d
1
10
100
1000
Cal Day Condensate - Bbl/d
.01
0.1
1
10
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
Year
Dakota
MCCLANAHAN 17E 4637401 (253915855094.944) Data: Jan.1980-May.2004


Mesaverde
MCCLANAHAN 17E 4637402 (232562443480.649) Data: Jan.1980-May.2004
Cal Day Gas1 - mcf/d
Cal Day Condensate - Bbl/d
1000
100
10
1
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Year

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-1:
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Southland Royalty Company	McClanahan	17E

Unit Letter	Section	Township	Range	County
I	24	28N	10W	San Juan

Actual Footage Location of Well:
1460' feet from the South line and 830' feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
5883'	Dakota/Mesa Verde	Basin Dakota/Blanco Mesaverde	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

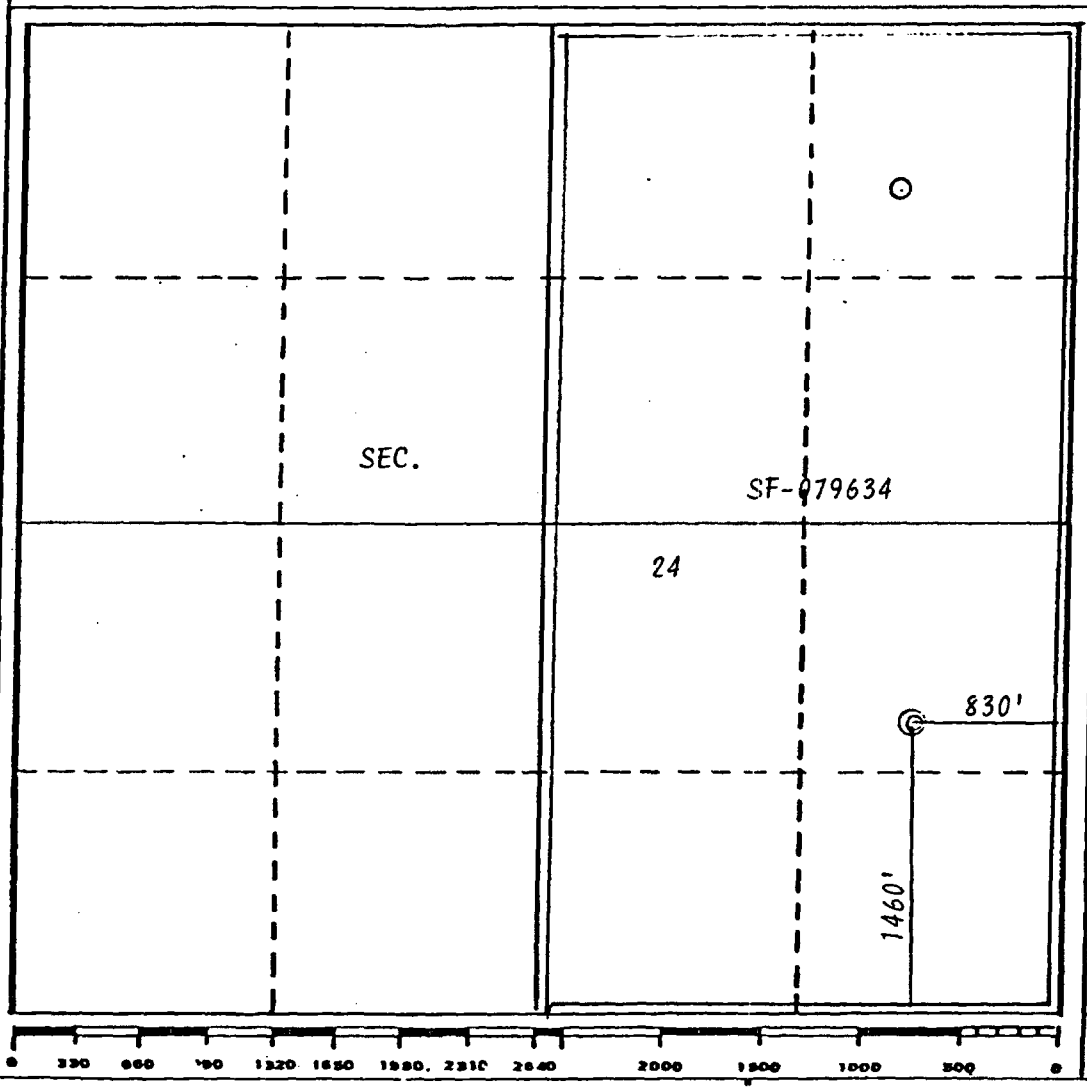
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Curtis C. Parsons

Name: Curtis C. Parsons

Position: District Engineer

Company: Southland Royalty Company

Date: May 27, 1980

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 knowledge and belief.

Date Surveyed: August 2, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr, Jr.

Certificate No. 3950