DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
8.24.04		JONES	8.24.04	DHC	pSEM0423744451 45494

ABOVE THIS LINE FOR DIVISION USE ONLY 3331

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 _____

[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.

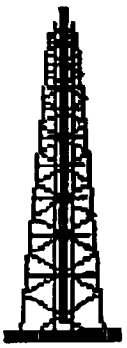
Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name	Signature	Title	Date

e-mail Address

BURLINGTON RESOURCES

3401 EAST 30TH STREET, FARMINGTON, NM 87402
P.O. BOX 4289, FARMINGTON, NM 87499



FAX

DATE: 8-24-04

Number of pages including cover sheet: 13

TO: William Jones

Company: OCD

Phone: 505-476-3448

Fax Phone: 505-476-3462

CC:

FROM: Tracy Ortmann

Company: Burlington Resources

Phone: 505-326-9891

Fax Phone: 505-599-4062

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

State 16 #3

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

Form C-107A
Revised June 10, 2003

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

APPLICATION FOR DOWNHOLE COMMINGLING

DHC 3331

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

STATE 16 — 3 — Unit M, Sec. 16, T28N, R09W — San Juan
Lease — Well No. — Unit Letter-Section-Township-Range — County

OGRID No: 14538 Property Code 7532 API No. 30-045-25641 Lease Type: ___Federal X State ___Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA Gas	BLANCO MESAVERDE PRO GAS	POTTER GALLUP OIL
Pool Code	82329	72319	50387
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	5994-6559'
Method of Production (Flowing or Artificial Lift)	NEW ZONE	NEW ZONE	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)	Original 538.2 psi from STATE 16 #1 offset (see attachment)	Original 1064.4 psi from STATE COM A #2E offset (see attachment)	Original – 290.3 Current – 63.9
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1260	BTU 1310	BTU 1247
Producing, Shut-In or New Zone	NEW ZONE	NEW ZONE	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: Rates:	Date: 05/31/04 Rates: 31 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 ___ % 	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 ___ No ___

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 [signature] TITLE Engineer DATE 7/1/04

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

E-MAIL ADDRESS lbierner@br-inc.com

State 16 #3
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Chacra

CH-Current
State 16 #1 Offset

GAS GRAVITY	0.739
COND. OR MISC. (C/M)	C
%N2	0.00428
%CO2	0.01233
%H2S	0
DIAMETER (IN)	7
DEPTH (FT)	3244
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	201.598
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	350
BOTTOMHOLE PRESSURE (PSIA)	379.4

CH-Original
State 16 #1 Offset

GAS GRAVITY	0.699
COND. OR MISC. (C/M)	C
%N2	0
%CO2	0
%H2S	0
DIAMETER (IN)	7
DEPTH (FT)	3244
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	201.598
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	498
BOTTOMHOLE PRESSURE (PSIA)	538.2

Mesaverde

MV-Current
State Com A #2E Offset

GAS GRAVITY	0.675
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0.01
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	4177
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	203.466
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	415
BOTTOMHOLE PRESSURE (PSIA)	456.4

MV-Original
State Com A #2E Offset

GAS GRAVITY	0.712
COND. OR MISC. (C/M)	C
%N2	0.00
%CO2	0.0055
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	4177
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	203.466
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	954
BOTTOMHOLE PRESSURE (PSIA)	1084.4

State 16 #3
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Gallup

GL-Current

GAS GRAVITY	0.7073
COND. OR MISC. (C/M)	C
%N2	0.00402
%CO2	0.00816
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	6407
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	171.39
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	55
BOTTOMHOLE PRESSURE (PSIA)	63.9

Current

GAS GRAVITY	0
COND. OR MISC. (C/M)	0
%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)	#DIV/0!

GL-Original

GAS GRAVITY	0.7361
COND. OR MISC. (C/M)	C
%N2	0.0058
%CO2	0.0085
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	6407
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	171.39
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	247
BOTTOMHOLE PRESSURE (PSIA)	290.3

Original

GAS GRAVITY	0
COND. OR MISC. (C/M)	0
%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)	#DIV/0!

State 16 #3 - SICP/Z Data

Zone: Gallup

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
12/31/1983	247	1/20/1984	0.9689	255	0	N/A	255
???	55	N/A	1	55	471	-0.394998	255
						↓	↓
10/13/2003	???	N/A	???	101	506.15	-0.394998	255

Z-Factor = 0.98
SICP (psig) = 99

Zone: Mesaverde

Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
3/16/1981	954	4/7/1998	0.9004	1060	0	N/A	1060
7/16/1981	817	4/7/1998	0.913	895	10.906	-15.10105	1060
7/24/1983	736	4/7/1998	0.9208	799	75.22	-3.459507	1060
5/1/1984	610	4/7/1998	0.9333	654	92.218	-4.401899	1060
10/15/1986	590	4/7/1998	0.9354	631	165.816	-2.585896	1060
3/16/1990	524	4/7/1998	0.9422	556	245.617	-2.049467	1060
10/14/1991	530	4/7/1998	0.9416	563	273.453	-2.02354	1060
???	415	N/A	1	415	301	-3.143023	1060
						↓	↓
10/13/2003	???	N/A	???	128	424.25	-3.143023	1060

Z-Factor = 0.94
SICP (psig) = 118

State 16 #3 - SICP/Z Data

Zone: Chacra

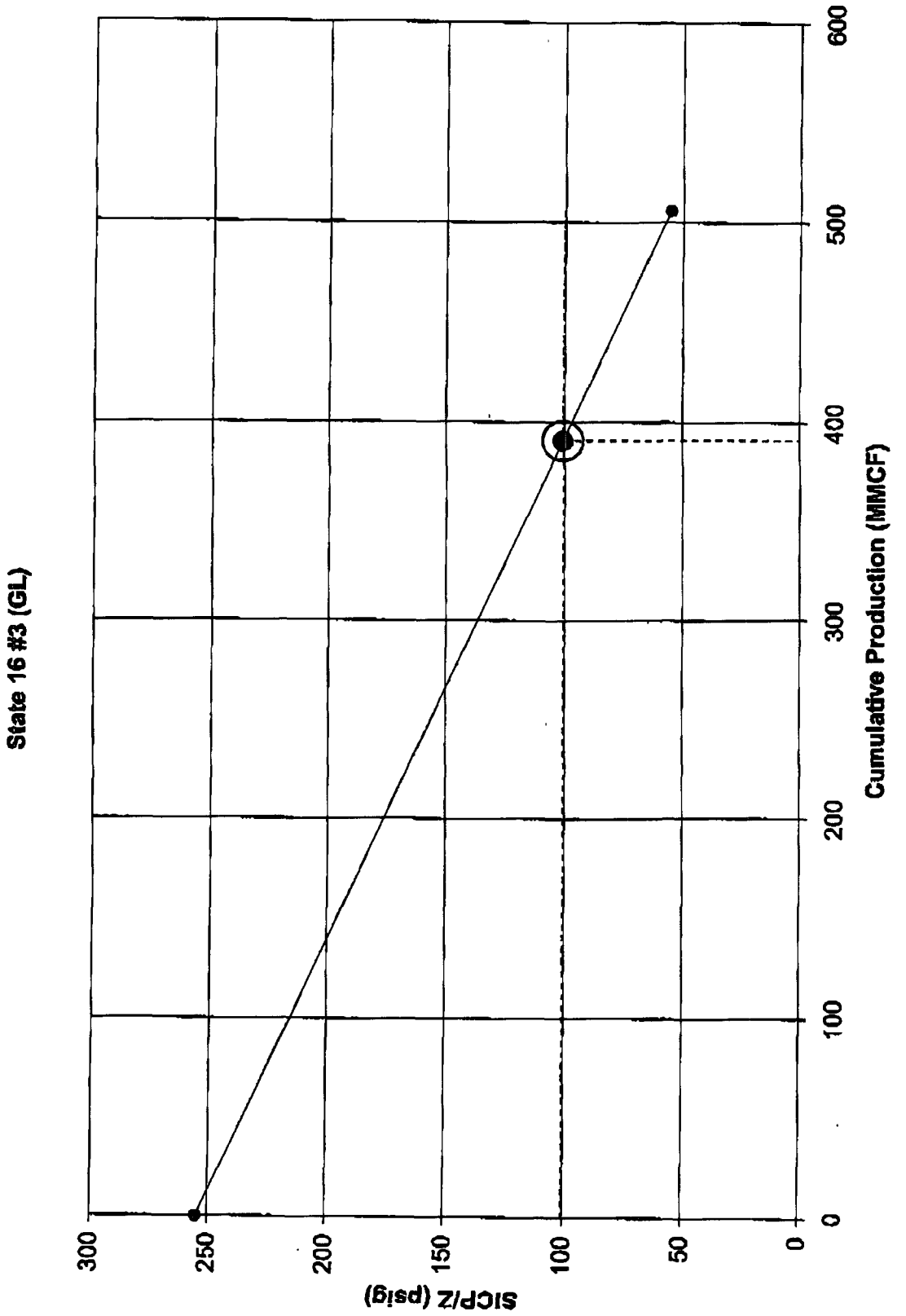
Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
2/14/1990	953	3/1/2004	0.8931	1067	0	N/A	1067
???	102	N/A	1	102	300.4	-3.212616	1067

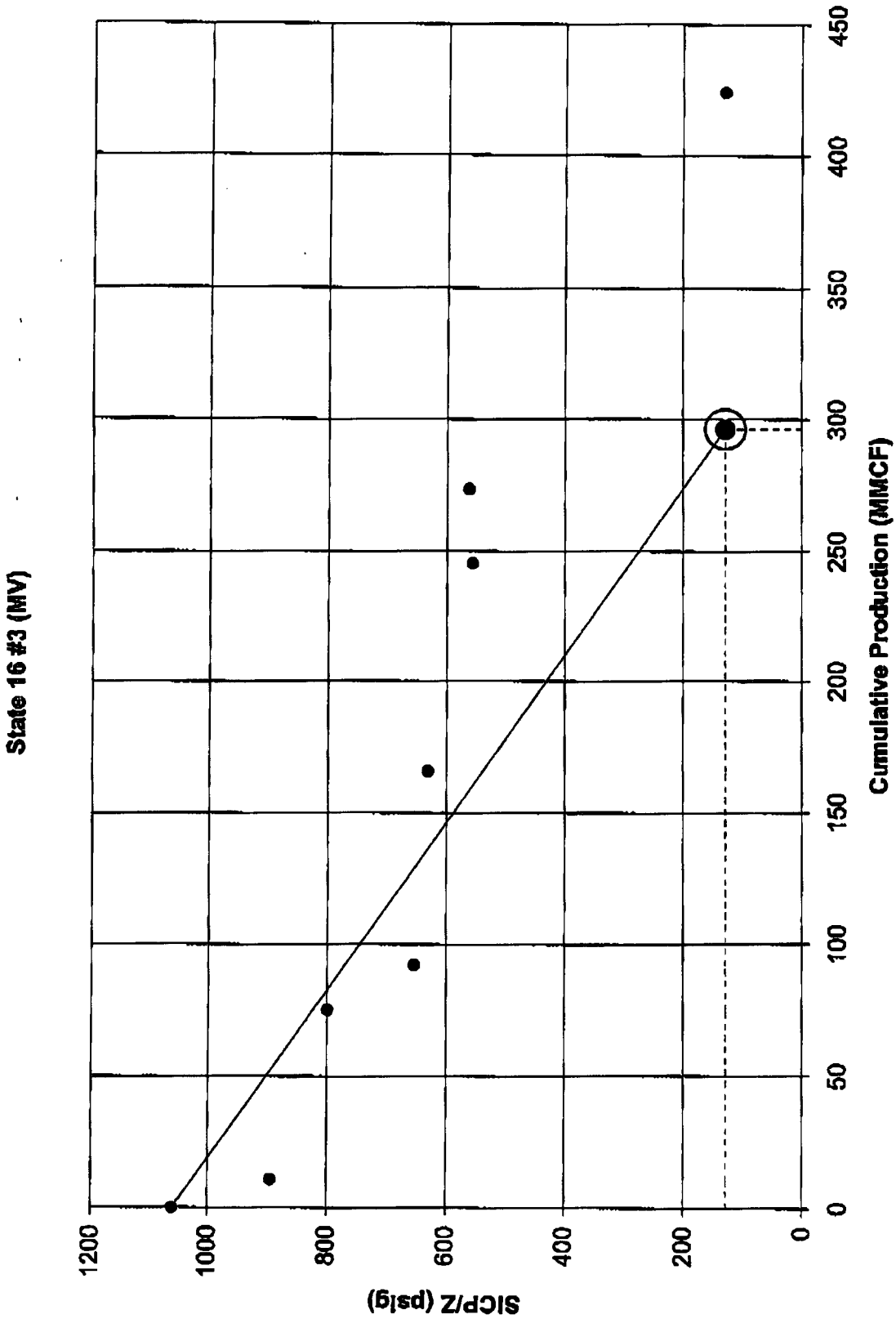
12/31/2002	???	N/A	???	102	300.4	-3.212616	1067

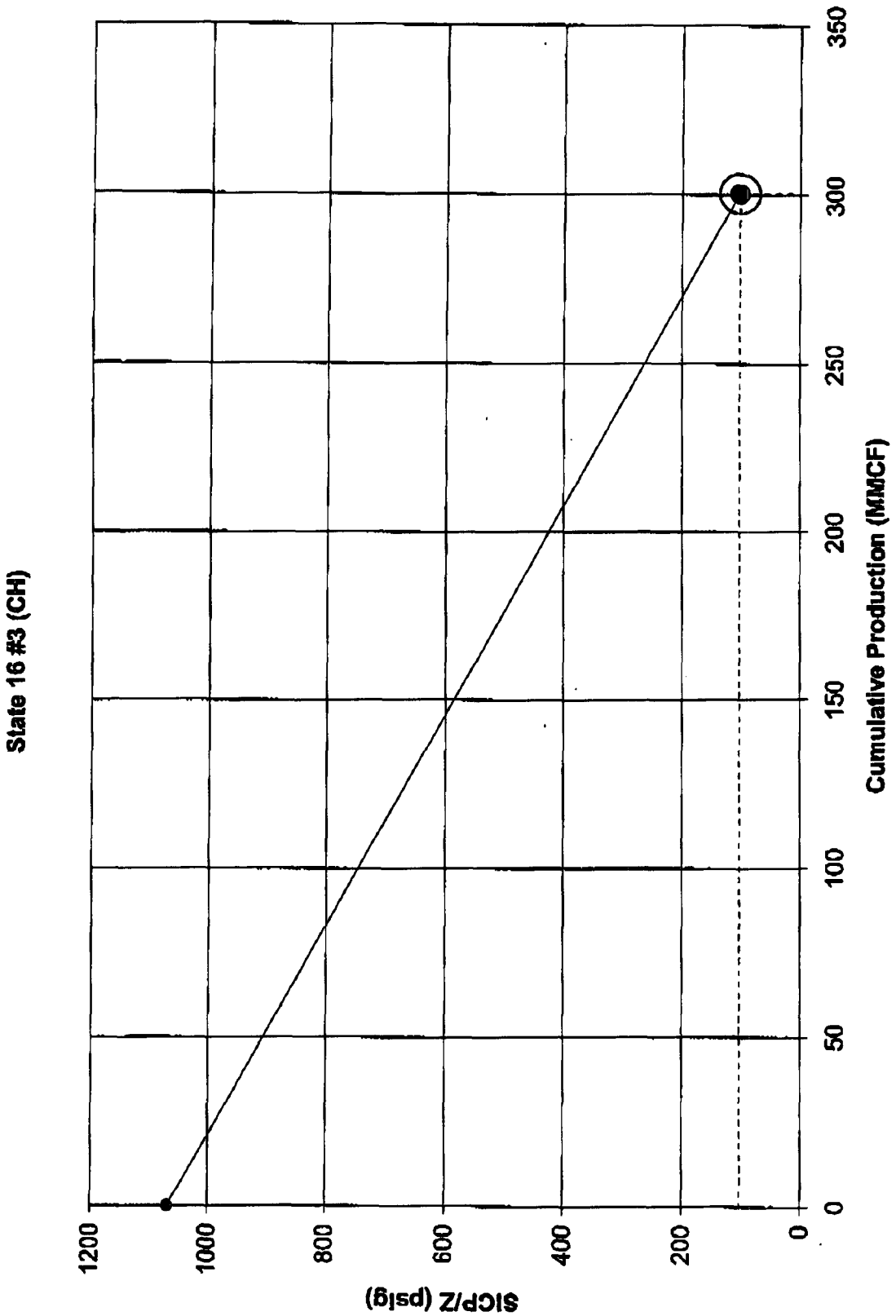
Z-Factor = 0.94
SICP (psig) = 96

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.


State 16 #3 (GL)
SICP/Z (psig)
300
250
200
150
100
50
0
Cumulative Production (MMCF)
0
100
200
300
400
500
600


State 16 #3 (MV)
SICP/Z (psig)
1200
1000
800
600
400
200
0
0
50
100
150
200
250
300
350
400
450
Cumulative Production (MMCF)


State 16 #3 (CH)
SICP/Z (psig)
1200
1000
800
600
400
200
0
Cumulative Production (MMCF)
0
50
100
150
200
250
300
350

BURLINGTON RESOURCES

PRODUCTION ALLOCATION FORM

Distribution: Regulatory Accounting Well File
Original: August 1, 2003

Status
PRELIMINARY ☒
FINAL ☐

Type of Completion
NEW DRILL ☐ RECOMPLETION ☒ PAYADD ☐ COMMINGLE ☐

Date: **Jul. 1, 04**

API No.
30-045-25641

Well Name
STATE 16

Well No.
3

Unit Letter	Section	Township	Range	Footage	County, State
M	**16**	**T28N**	**R09W**	**881' FSL & 927' FWL**	**San Juan, New Mexico**

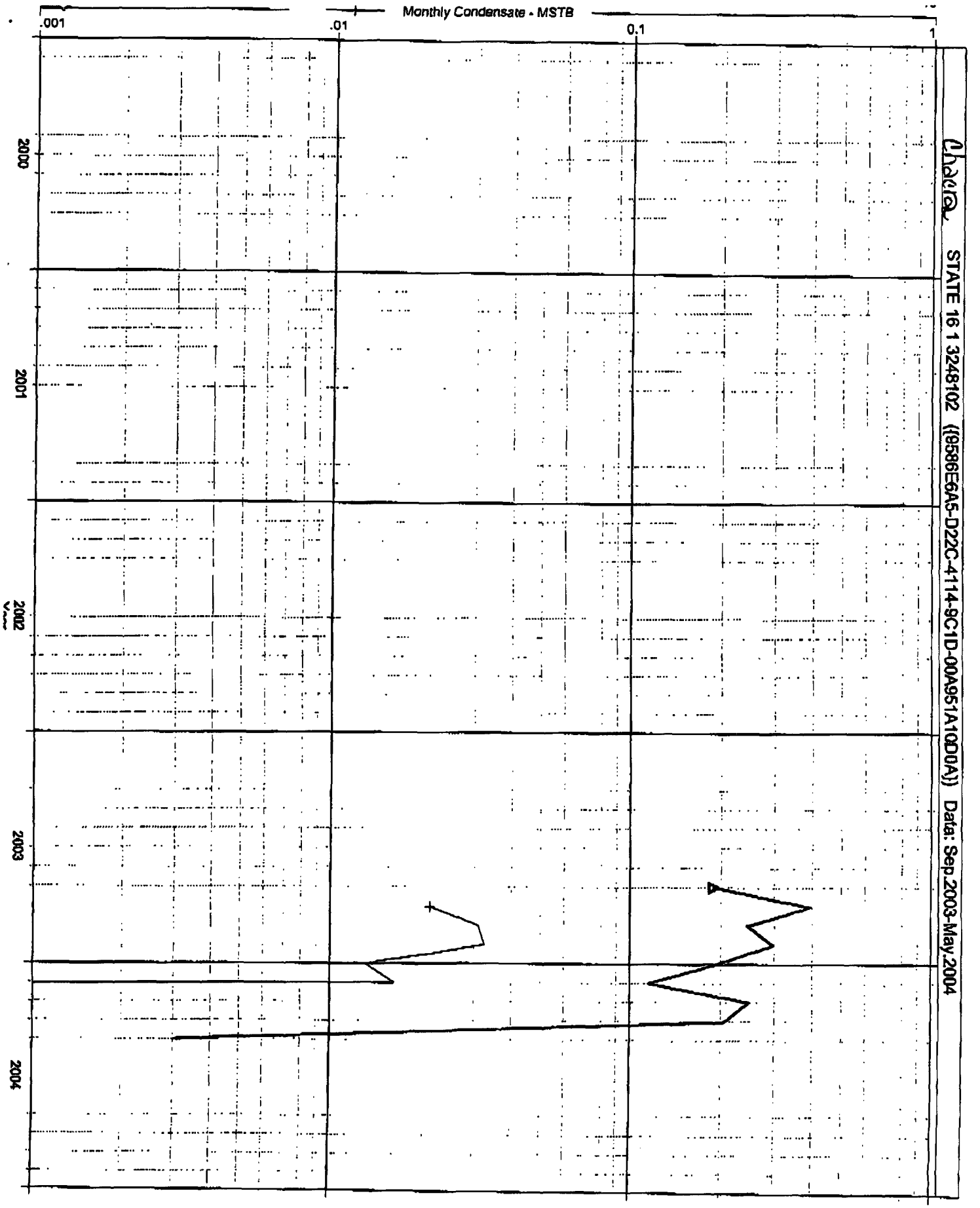
1st Delivery Date

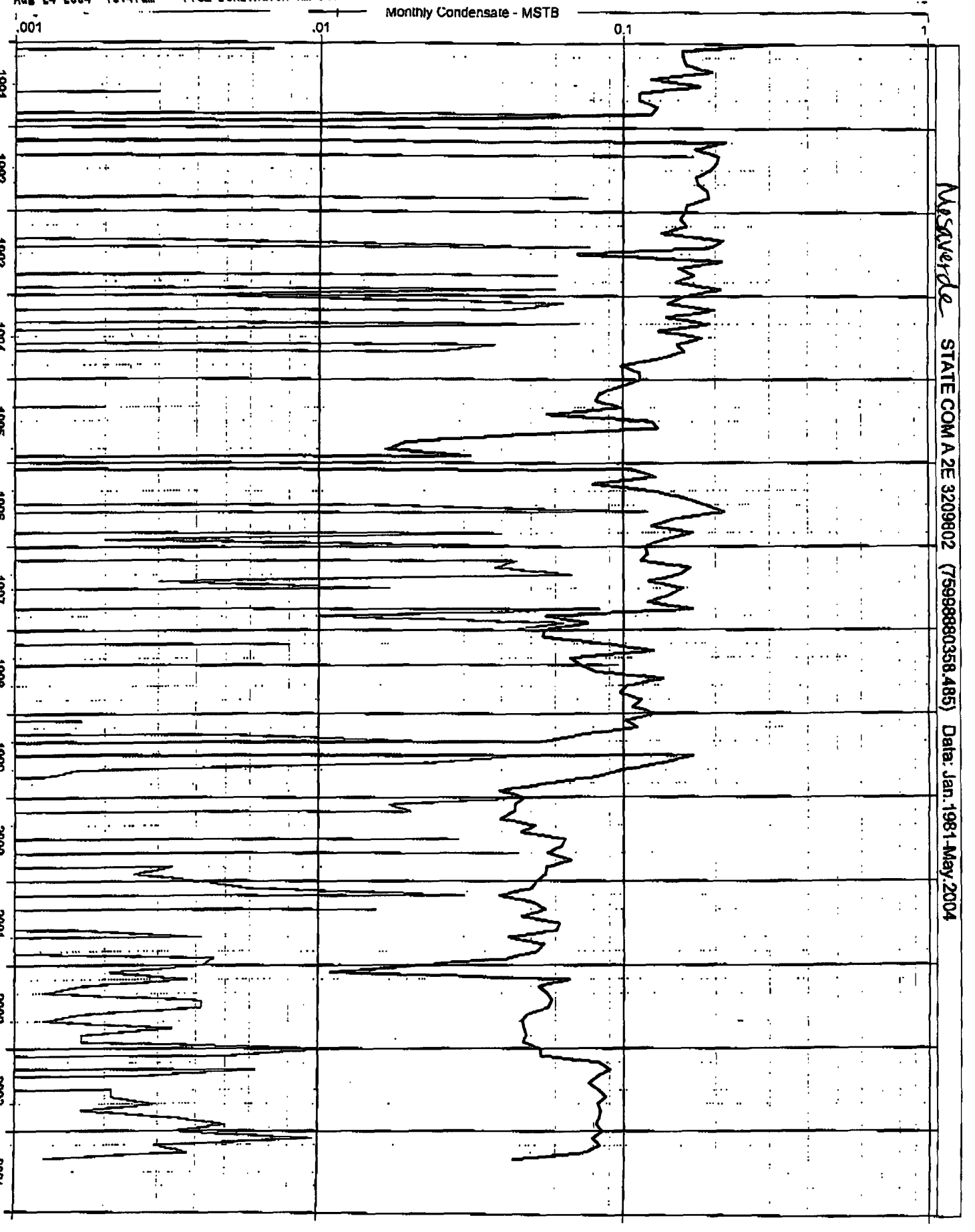
Test Method
HISTORICAL ☐ FIELD TEST ☐ PROJECTED ☒ OTHER ☐

FORMATION	GAS	PERCENT	OIL	PERCENT
Chacra	47 MMCF	6%		0%
Mesaverde	276 MMCF	34%	3.2 MSTB	78%
Gallup	496 MMCF	60%	0.9 MSTB	22%

JUSTIFICATION OF ALLOCATION
Preliminary allocation for the Chacra/Mesaverde Recompletion: Gas percentages are based on remaining reserves for the Gallup formation and estimated reserves for the Chacra and Mesaverde formations. The Chacra formation does not produce any oil therefore; oil percentages are allocated based on remaining reserves for the Gallup and estimated reserves for the Mesaverde.

APPROVED BY	TITLE	DATE
	Leonard Biemer, Production Engineer	7/1/04
	Cherylene Charley, Engr. Tech.	7/1/04


Monthly Condensate - MSTB
.001
.01
0.1
1
2000
2001
2002
2003
2004
Chevron STATE 16 1 3248102 {{8586E6A5-D22C-4114-9C1D-00A951A10D0A}} Data: Sep 2003-May 2004


Monthly Condensate - MSTB
.001
.01
0.1
1
1981
1982
1983
1984
1985
1986
1987
1988
1989
2000
2001
2002
2003
2004
Mesaverde
STATE COM A 2E 3209802 (75998880358.485) Data: Jan.1981-May.2004

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

Operator	Lease	Well No.
Union Texas Petroleum	State 16	3

Unit Letter	Section	Township	Range	County
M	16	28 North	9 West	San Juan

Actual Footage Location of Well:
881 feet from the South line and 927 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6263	Gallup	Potter	SW SW 40.00 Acres

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

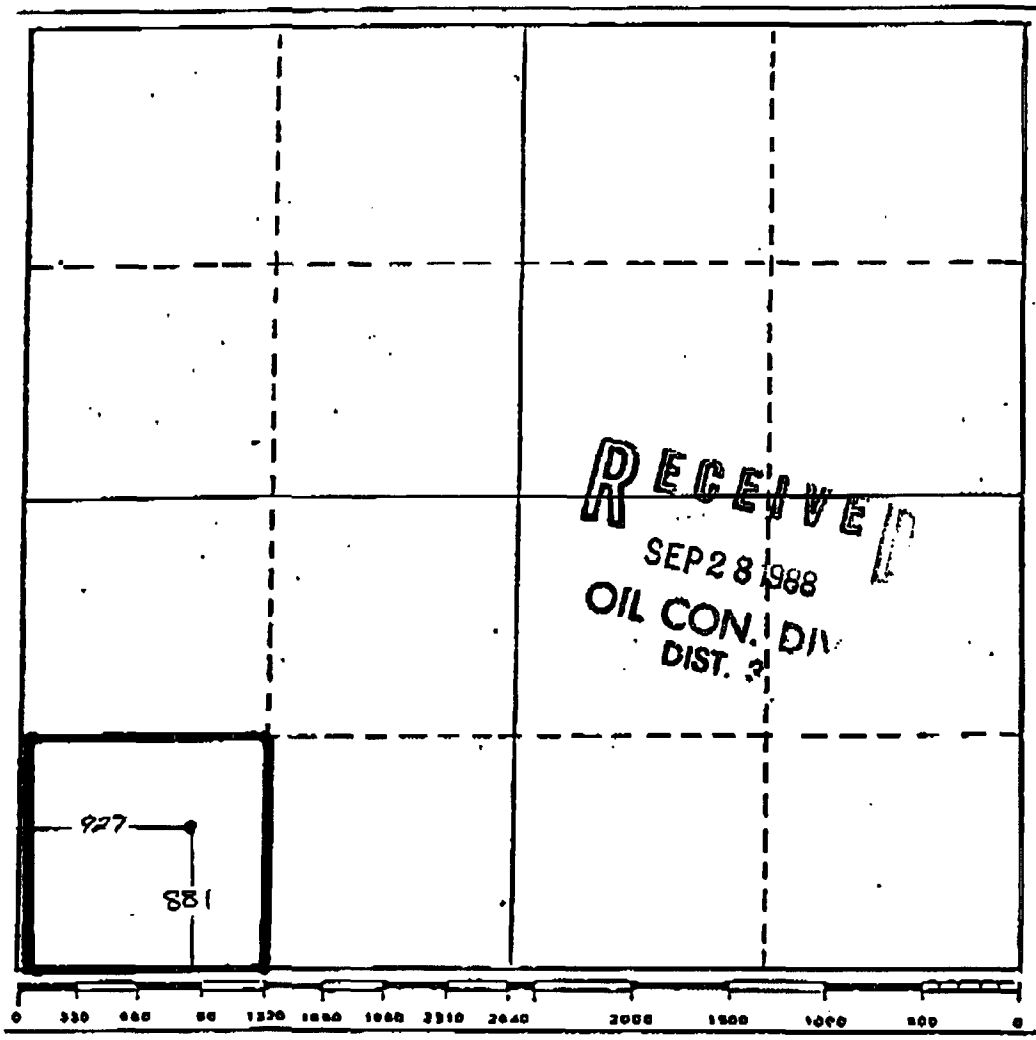
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Division.



RECEIVED
SEP 28 1988
OIL CON. DIV.
DIST. 3

CERTIFICATION

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

Robert C. Frank

Name: Robert C. Frank

Position: Permit Coordinator

Company: Union Texas Petroleum

Date: September 20, 1988

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: Original on file

Registered Professional Engineer and/or Land Surveyor

Certificate No.