

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



RECEIVED
 JUL 22 2004
 OIL CONSERVATION DIVISION

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.

TAMMY JONES
 Print or Type Name

Tammy Jones
 Signature

Regulatory Specialist
 Title

7-21-04
 Date

twimsatt@br-inc.com
 e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

District II
1301 W. Grand Avenue, Artesia, NM 88210

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING

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

Angel Peak 29 Unit I, Sec. 10, T28N, R11W San Juan
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No: 14538 Property Code 6787 API No. 30-045-25698 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	UPPER ZONE OTERO CHACRA Gas		✓ ARMENTA GALLUP OIL
Pool Code	82329 ✓		2290
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION		5246-6074'
Method of Production (Flowing or Artificial Lift)	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 717 psi from MANGUM #5 offset (see attachment)		Original: 441.2 Current: 333.9
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1146		BTU 1244
Producing, Shut-In or 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: 27 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 0% Gas 76% Will be supplied upon completion	Oil Gas % %	Oil 100% Gas 24% Will be supplied upon completion

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes 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 No

Will commingling decrease the value of production? Yes No

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 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 Reservoir Eng DATE 6-30-04
TYPE OR PRINT NAME Leonard Biemer, Engineer TELEPHONE NO. (505) 326-9700
E-MAIL ADDRESS lbiemer@br-inc.com

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: 7/27/04

API No.
30-045-25698

Well Name
ANGEL PEAK

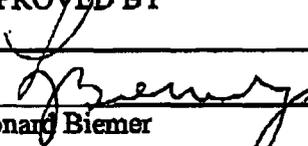
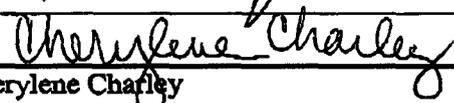
Well No.
#29

Unit Letter I	Section 10	Township T28N	Range R11W	Footage 1793' FSL & 593' FEL	County, State San Juan County, New Mexico
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Completion Date _____ Test Method
HISTORICAL FIELD TEST PROJECTED OTHER

FORMATION	GAS	PERCENT	CONDENSATE	PERCENT
CHACRA	285 MCFD	76%		0%
GALLUP	91 MCFD	24%		100%

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

APPROVED BY	TITLE	DATE
X 		
Leonard Biemer	Engineer	9/1/04
X 		
Cherylene Charley	Engineering Tech.	9/1/04

Angel Peak #29
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Gallup	Chacra																																																
<u>GP-Current</u>	<u>CH-Current</u>																																																
<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.719</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.00461</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">0.00678</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">5.5</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">5450</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">175.15</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">292</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">333.9</td></tr> </table>	GAS GRAVITY	0.719	COND. OR MISC. (C/M)	C	%N2	0.00461	%CO2	0.00678	%H2S	0	DIAMETER (IN)	5.5	DEPTH (FT)	5450	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	175.15	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	292	BOTTOMHOLE PRESSURE (PSIA)	333.9	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.00</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">0.0</td></tr> </table>	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
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Angel Peak #29 - SICP/Z Data

Zone: Gallup							
<u>Date</u>	<u>SICP (psig)</u>	<u>Chromatograph Used</u>	<u>Z-Factor</u>	<u>SICP/Z (psig)</u>	<u>Cum Qg (MMCF)</u>	<u>Slope</u>	<u>Y Intercept</u>
8/10/1983	206	10/10/2003	0.9758	211	0	N/A	211
???	325	10/10/2003	0.9621	338	225.47	0.56191	211
				338		↓	↓
12/31/2003	292	10/10/2003	???	338	225.47	0.56191	211

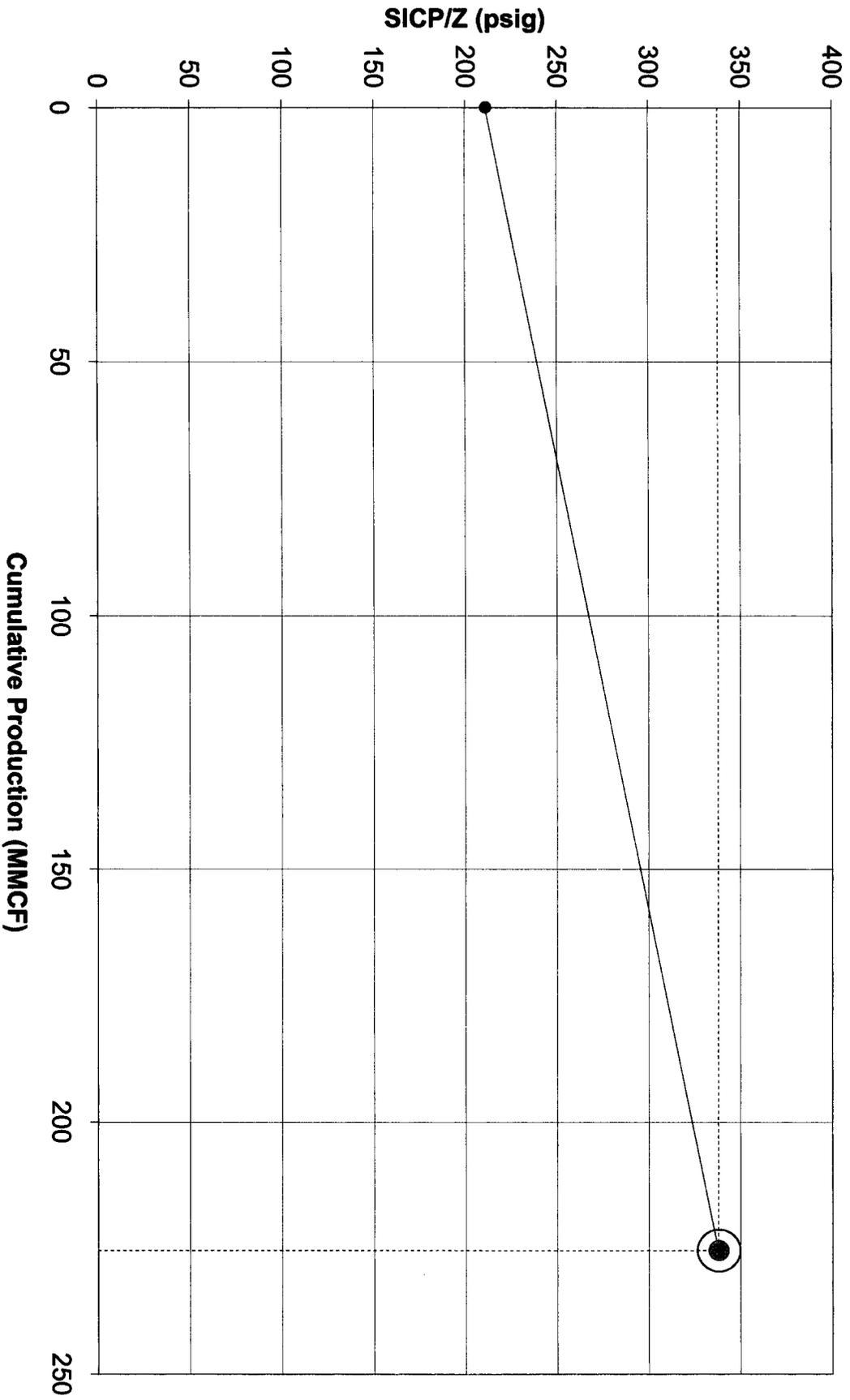
Z-Factor = 0.9668
SICP (psig) = 292

Zone: Chacra							
<u>Date</u>	<u>SICP (psig)</u>	<u>Chromatograph Used</u>	<u>Z-Factor</u>	<u>SICP/Z (psig)</u>	<u>Cum Qg (MMCF)</u>	<u>Slope</u>	<u>Y Intercept</u>
11/21/1983	300	1/9/2003	0.9756	308	0	N/A	308
???	39	N/A	1	39	217.704	-1.23334	308
				39		↓	↓
12/31/2003	???	N/A	???	39	217.704	-1.23334	308

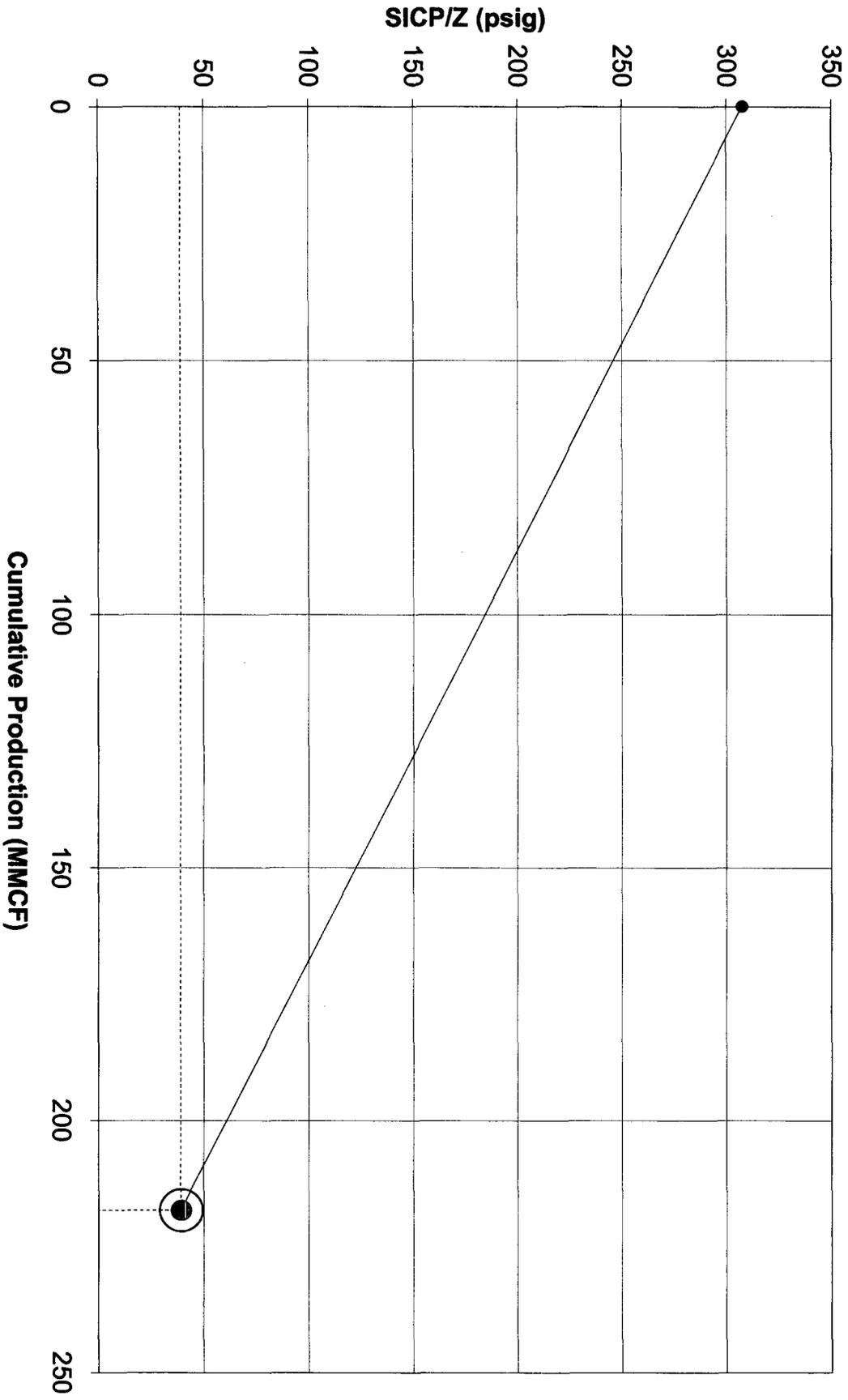
Z-Factor = 0.96
SICP (psig) = 37

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.

Angel Peak #29 (Gallup)



Angel Peak #29 (Chacra)



ANGEL PEAK 29 3249201 (292972258073.225) Data: Jan. 1983-May 2004

Gallup

1000

100

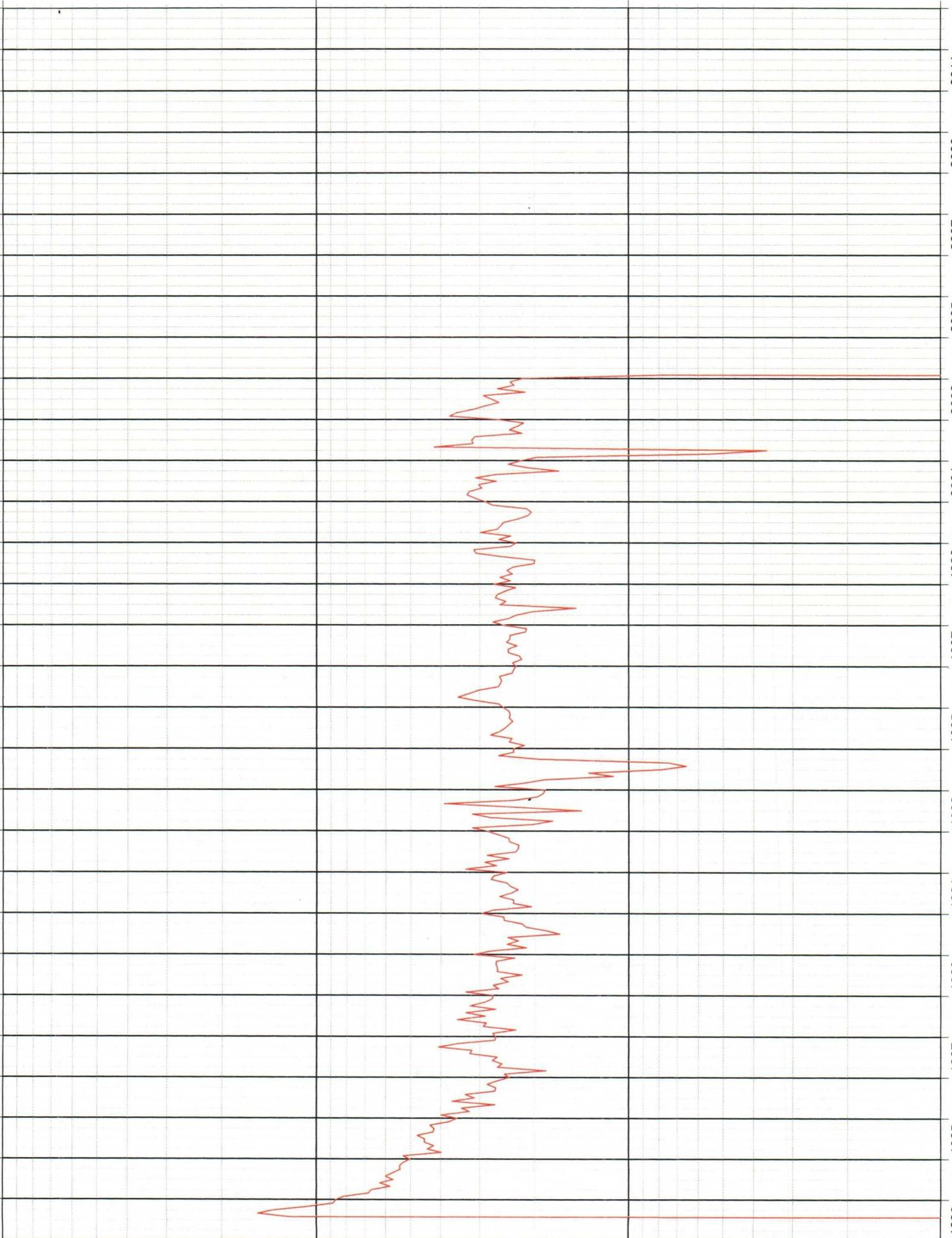
Cal Day Gas1 - mcf/d

10

1

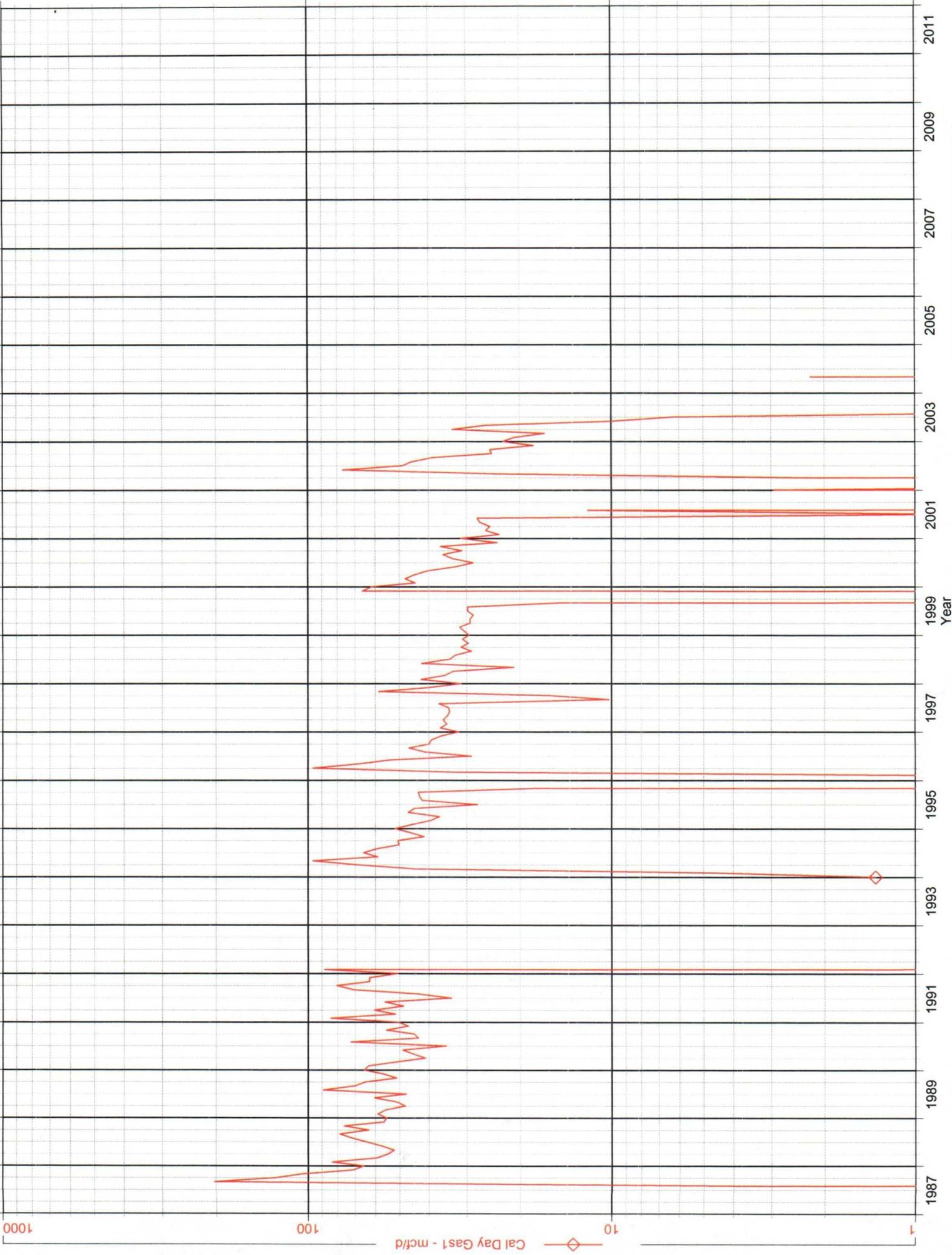
1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011

Year



MANGUM 5 3249602 (295564317832.355) Data: Jan. 1987-May. 2004

Chacra



All Distances must be from the outer boundaries of the section.

Operator UNION TEXAS PETROLEUM CORPORATION		Lease ANGEL PEAK		Well No. 29
Unit Letter I	Section 10	Township 28 NORTH	Range 11 WEST	County SAN JUAN

Actual Footage Location of Wells

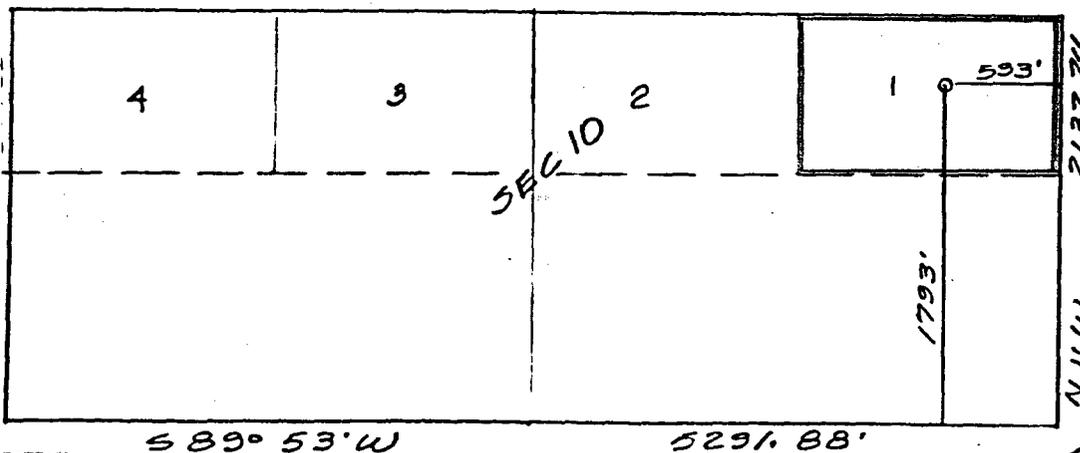
1793 feet from the **SOUTH** line and **593** feet from the **EAST** line

Ground Level Elev. 5579	Producing Formation Gallup	Pool Undesignated Gallup	Dedicated Acreages Lot 1 24.86 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



CERTIFICATION

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

Rudy D. Motto

Name
Rudy D. Motto

Position
Area Operations Manager

Company
Union Texas Petroleum Corp.

Date
March 10, 1983

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 are correct to the best of my knowledge and belief.

Date Surveyed
February 17, 1983

Registered Professional Engineer and/or Land Surveyor
Michael Daly

Certificate No.
5992

INTEREST OWNERS

ANGEL PEAK 29 - GL/CH Well

AMANDA FAYE HAWKINS

ANTHONY EARL ROGERS

ARTHUR G VILES REVOCABLE LIVING TR

BRENDA RUDD

BUREAU OF LAND MANAGEMENT

CATHY JEAN LAHTI

CHRISTMANN MINERAL CO

EDWARD LOYD HUNTSMAN

HANCEL MCCORD ESTATE

HERD PARTNERS LTD

JACK MARKHAM,

JAMIE M HAWKINS

JANET KAY HUMPHREY

JOHN A HUNTSMAN TRUSTE

JOHN PHILLIP VILES.

LAURA Z ALBRIGHT TRUSTEE ALBRIGHT LIVING TRUST

MEGAN M HAWKINS

PATRICIA G HEMAN TRUSTEE ROGER H HEMAN JR REV TRUST

PROVIDENCE MINERALS LLC

VERITY TRUST