

DATE IN 8/26/03	SUSPENSE 9/23/03	ENGINEER DRC	LOGGED IN LR	TYPE DHC	APP NO. PLR0323855084
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



3189

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.

PEGGY COLE
 Print or Type Name

Peggy Cole
 Signature

REGULATORY Supr. 8-22-03
 Title Date

peole@br-inc.com
 e-mail Address

RECEIVED
 AUG 26 2003
 Oil Conservation Division

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

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Form C-107A
Revised May 15, 2000

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

APPLICATION FOR DOWNHOLE COMMINGLING

BURLINGTON RESOURCES OIL & GAS COMPANY PO BOX 4289, FARMINGTON, NM 87499

Operator Address
Navajo B #6M D-19-27N-8W San Juan
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 14538 Property Code 7347 API No. 30-045-23638 Lease Type: X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	OTERO CHACRA	BLANCO MESAVERDE	BASIN DAKOTA
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	WILL BE SUPPLIED UPON COMPLETION	4323'-4468'	6392'-6604'
Method of Production (Flowing or Artificial Lift)	NEW ZONE	SHUT-IN	SHUT-IN
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 1028 psi From Brookhaven Com #7A offset (see attachment)	Original 833 psi Current 252 psi	Original 2207 psi Current 489 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1309	BTU 1303	BTU 1303
Producing, Shut-In or New Zone	New Zone	Shut-In	Shut-In
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: See Attachment	Date: Rates: See Attachment
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION	WILL BE SUPPLIED UPON COMPLETION

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X 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.
- 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 Y. Tom Loveland TITLE SENIOR RESERVOIR ENGINEER DATE 8/21/03

TYPE OR PRINT NAME L. Tom Loveland TELEPHONE NO. (505) 326-9700

Navajo B #6M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Chacra	Mesaverde
<u>CH-Current</u>	<u>MV-Current</u>
GAS GRAVITY _____ 0 COND. OR MISC. (C/M) _____ C %N2 _____ 0 %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) #DIV/0!	GAS GRAVITY _____ 0.746 COND. OR MISC. (C/M) _____ C %N2 _____ 0.01 %CO2 _____ 0.01 %H2S _____ 0 DIAMETER (IN) _____ 5.5 DEPTH (FT) _____ 4396 SURFACE TEMPERATURE (DEG F) _____ 60 BOTTOMHOLE TEMPERATURE (DEG F) _____ 119.3 FLOWRATE (MCFPD) _____ 0 SURFACE PRESSURE (PSIA) _____ 224 BOTTOMHOLE PRESSURE (PSIA) 251.9
<u>CH-Original</u>	<u>MV-Original</u>
GAS GRAVITY _____ 0.757 COND. OR MISC. (C/M) _____ C %N2 _____ 0.0066 %CO2 _____ 0.0043 %H2S _____ 0 DIAMETER (IN) _____ 5.5 DEPTH (FT) _____ 3164 SURFACE TEMPERATURE (DEG F) _____ 60 BOTTOMHOLE TEMPERATURE (DEG F) _____ 95.5 FLOWRATE (MCFPD) _____ 0 SURFACE PRESSURE (PSIA) _____ 925 BOTTOMHOLE PRESSURE (PSIA) 1027.5	GAS GRAVITY _____ 0.7617 COND. OR MISC. (C/M) _____ C %N2 _____ 0.58 %CO2 _____ 0.888 %H2S _____ 0 DIAMETER (IN) _____ 5.5 DEPTH (FT) _____ 4396 SURFACE TEMPERATURE (DEG F) _____ 60 BOTTOMHOLE TEMPERATURE (DEG F) _____ 119.3 FLOWRATE (MCFPD) _____ 0 SURFACE PRESSURE (PSIA) _____ 728 BOTTOMHOLE PRESSURE (PSIA) 832.5

Navajo B #6M
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 1/14/98

Dakota			
<u>DK-Current</u>		<u>Current</u>	
GAS GRAVITY	0.746	GAS GRAVITY	0
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.00749	%N2	0.00
%CO2	0.00619	%CO2	0
%H2S	0	%H2S	0
DIAMETER (IN)	2.0625	DIAMETER (IN)	0
DEPTH (FT)	6498	DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	147.6	BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	410	SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	488.6	BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!
<u>DK-Original</u>		<u>Original</u>	
GAS GRAVITY	0.7617	GAS GRAVITY	0
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.584	%N2	0.00
%CO2	0.888	%CO2	0
%H2S	0	%H2S	0
DIAMETER (IN)	2.0625	DIAMETER (IN)	0
DEPTH (FT)	6498	DEPTH (FT)	0
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	147.6	BOTTOMHOLE TEMPERATURE (DEG F)	0
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1760	SURFACE PRESSURE (PSIA)	0
BOTTOMHOLE PRESSURE (PSIA)	2206.9	BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!

Navajo B #6M - SICP/Z Data

Zone: Dakota							
Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
5/1/1980	1760	1/1/2003	0.8142	2162	0	N/A	2162
5/12/1982	993	1/1/2003	0.876	1134	35.619	-28.86295	2162
9/28/1983	937	1/1/2003	0.8821	1062	80.079	-13.72886	2162
9/12/1985	741	1/1/2003	0.9046	819	141.809	-9.46685	2162
9/1/1988	592	1/1/2003	0.9227	642	187.924	-8.088566	2162
???	137	N/A	1	137	316.13	-6.404426	2162
						↓	↓
7/31/2003	???	1/1/2003	???	423	271.54	-6.404426	2162

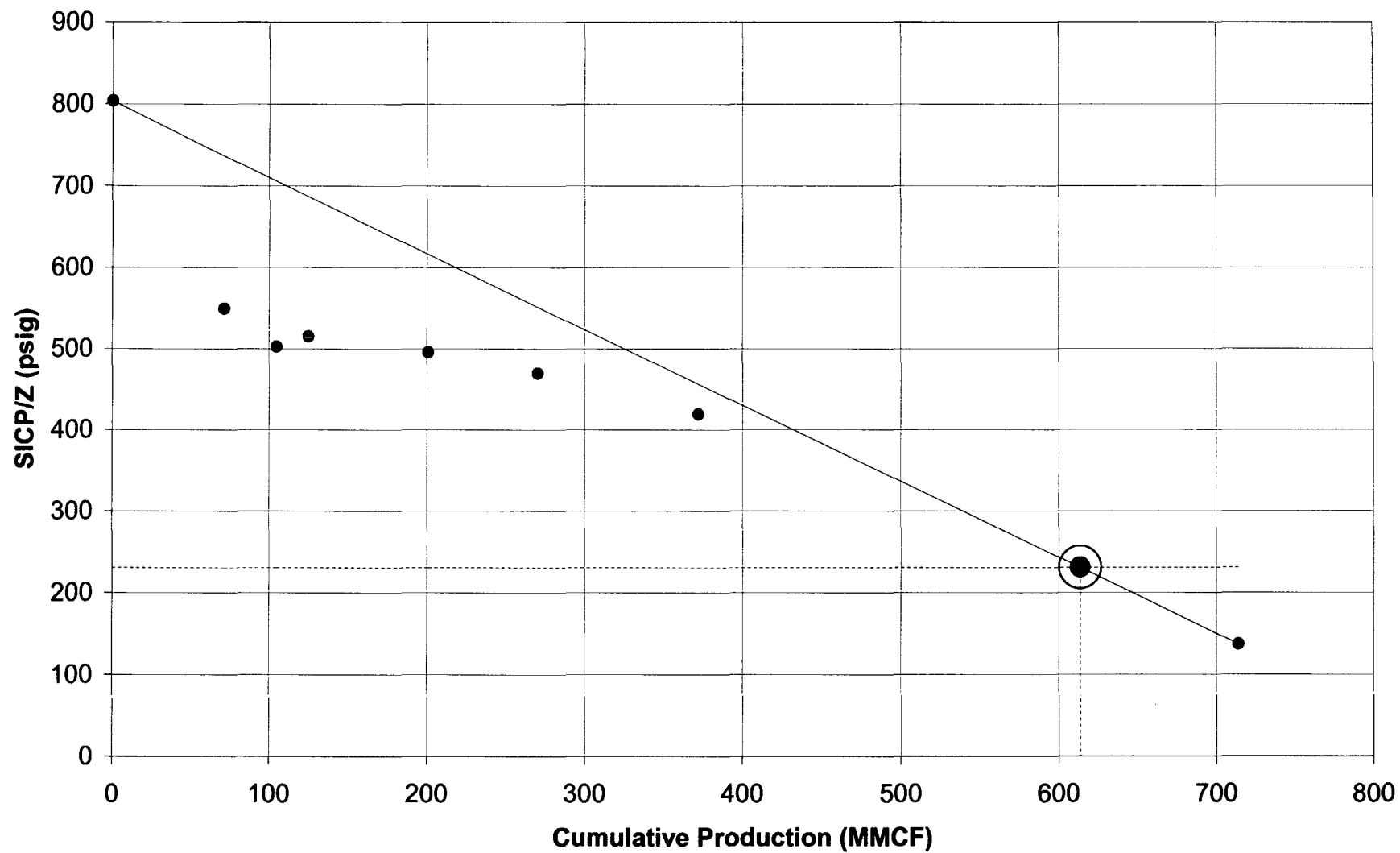
Z-Factor = 0.97
SICP (psig) = 410

Zone: Mesaverde							
Date	SICP (psig)	Chromatograph Used	Z-Factor	SICP/Z (psig)	Cum Qg (MMCF)	Slope	Y Intercept
5/1/1980	728	1/1/2003	0.9061	803	0	N/A	803
4/17/1982	512	1/1/2003	0.9327	549	71.59	-3.554957	803
4/1/1983	471	1/1/2003	0.9379	502	104.682	-2.877836	803
4/18/1984	482	1/1/2003	0.9365	515	124.915	-2.31166	803
6/23/1989	465	1/1/2003	0.9387	495	201.051	-1.532335	803
2/12/1991	442	1/1/2003	0.9416	469	270.277	-1.235879	803
5/5/1993	397	1/1/2003	0.9474	419	372.045	-1.033213	803
???	137	N/A	1	137	713.9916	-0.933405	803
						↓	↓
7/31/2003	???	1/1/2003	???	231	613.67	-0.933405	803

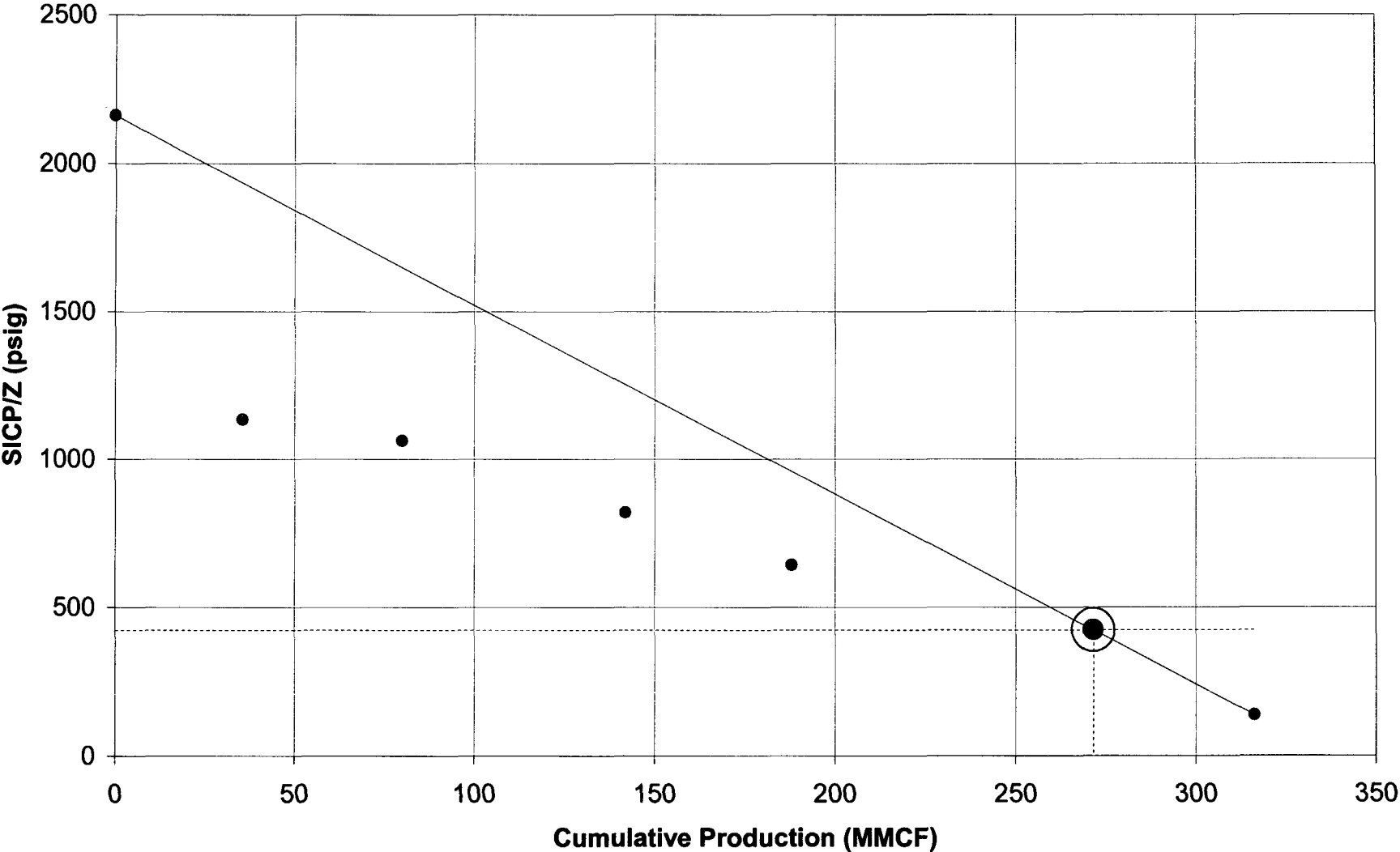
Z-Factor = 0.97
SICP (psig) = 224

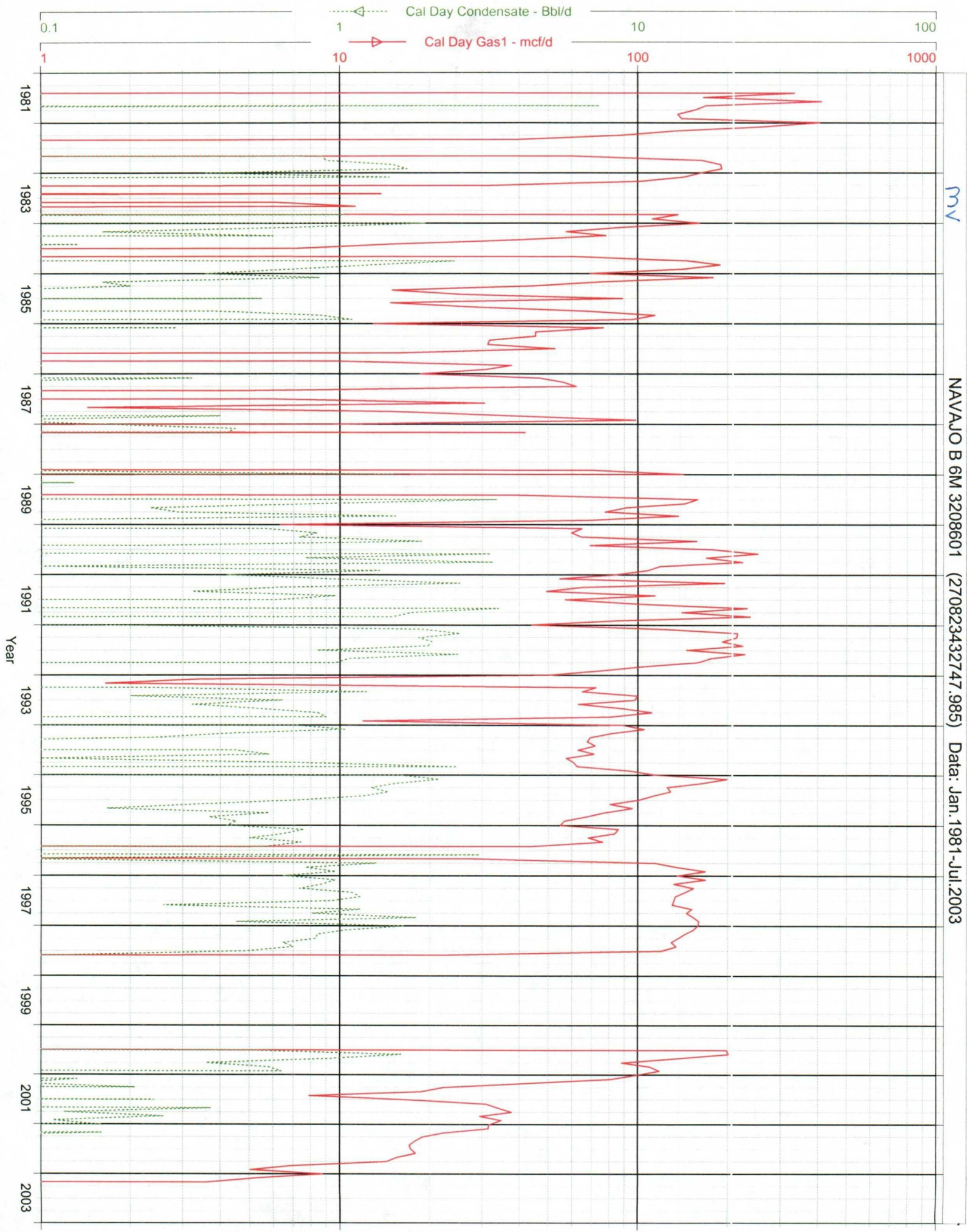
NOTE: THESE ARE ESTIMATES OF THE CURRENT RESERVOIR PRESSURE IN EACH ZONE. IT IS REALIZED THAT THE NEAR-WELLBORE PRESSURES FOR EACH ZONE SHOULD BE SIMILAR, DUE TO THEIR COMMINGLED STATUS.

Navajo B #6M (MV)



Navajo B #6M (DK)

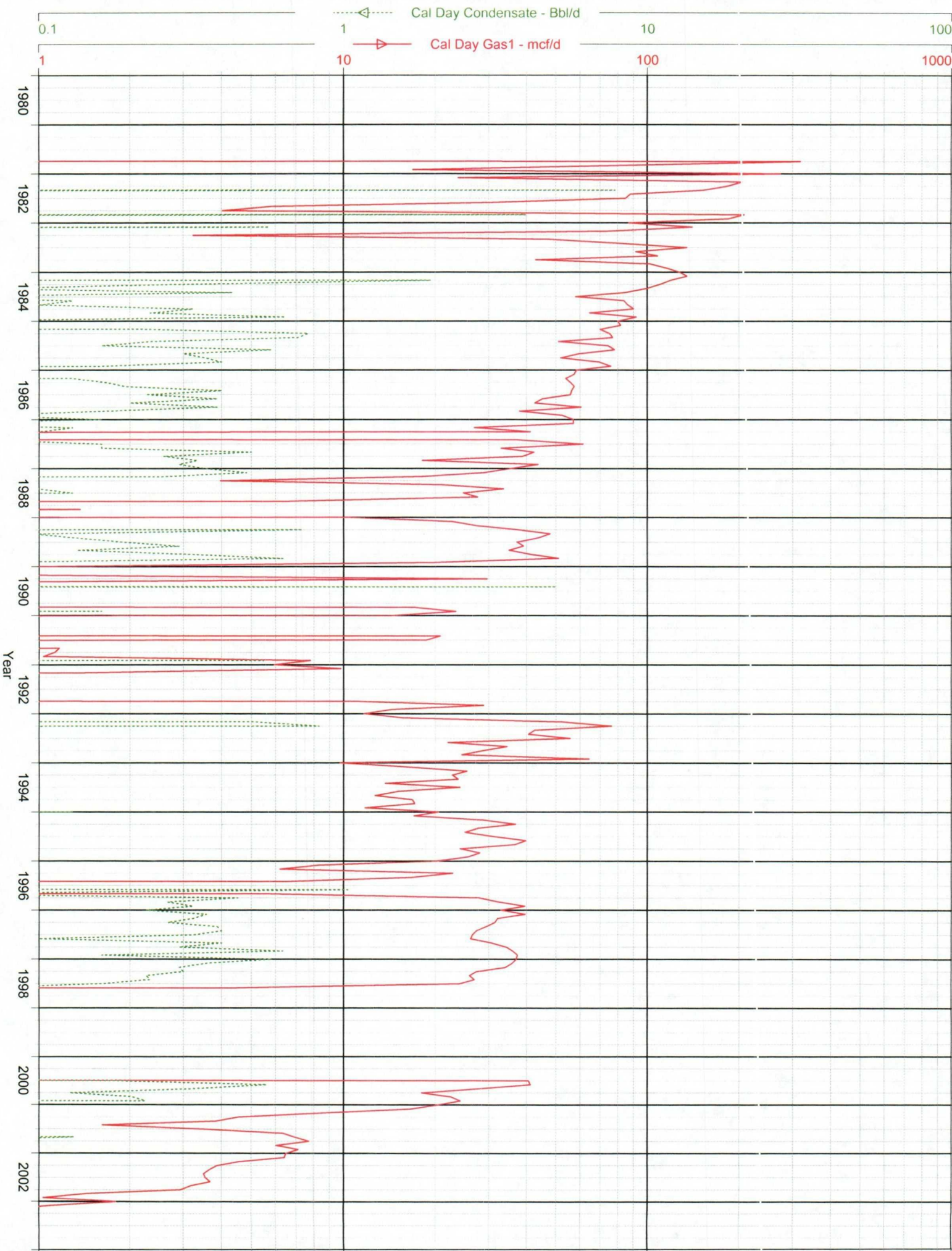




mv

NAVAJO B 6M 3208601 (270823432747.985) Data: Jan. 1981-Jul. 2003

8



BURLINGTON RESOURCES

Lewis Implementation Team

Memorandum

TO: New Mexico Oil Conservation Division
FROM: Lewis Implementation Team, Burlington Resources
DATE: December 2, 2002
RE: 2003 Chacra Recompletion Program Expected Production

Chacra-only production from 73 wells completed after 1970 was normalized and forecasted to result in the production model presented in Table 1. A graphical representation of this normalized production forecast is shown in the attached Figure 1. These wells are located in or near the Chacra Fairway in T-27-N, R-08-W; T-27-N, R-09-W; T-28-N, R-08-W; T-28-N, R-09-W; T-28-N, R-10-W; T-28-N, R-11-W; T-29-N, R-09-W; T-29-N, R-10-W; and T-29-N, R-11-W. Actual results from the individual payadds will certainly vary, but this production model represents the average results that should be achieved. Further delineation in the area will be made in 2003.

Table 1: 2003 Chacra production model.

Decline Type	Hyp to Exp
Initial Incremental Rate (MCF/D)	260
Initial Decline (%/yr, effective)	62
Final Decline (%/yr, effective)	1.6
Final Incremental Rate (MCF/D)	15
Hyperbolic Exponent, n	2.0
EUR (MMCF)	496

Figure 1. Graphical representation of the 2003 Chacra production model.



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

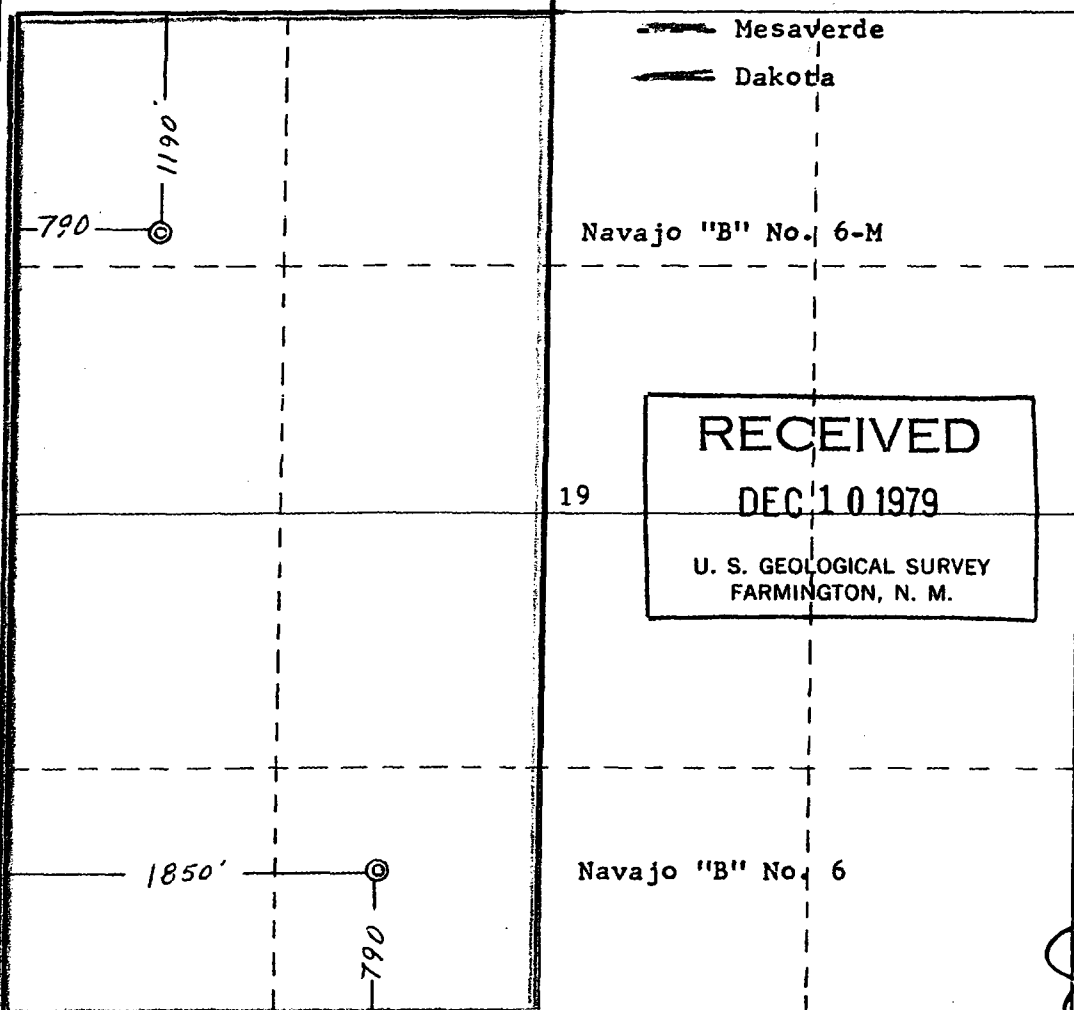
Operator SUPRON ENERGY CORPORATION			Lease NAVAJO "B"		Well No. 6-M
Unit Letter D	Section 19	Township 27 NORTH	Range 8 WEST	County SAN JUAN	
Actual Footage Location of Well: 1190 feet from the NORTH line and 790 feet from the WEST line					
Ground Level Elev: 6016	Producing Formation ME SAVERDE DAKOTA		Pool BLANCO BASIN	Dedicated Acreage: W 1/2 320 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.

Rudy D. Motto

Name

Rudy D. Motto

Position

Area Superintendent

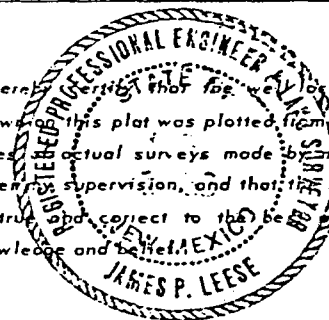
Company

Supron Energy Corporation

Date

December 6, 1979

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 same is true and correct to the best of my knowledge and belief.



Date Surveyed

31 May 1979

Registered Professional Engineer and/or Land Surveyor

James P. Leese

Certificate No.

1463

