DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

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
New 3-12-96

APPROVAL PROCESS:
X Administrative ___ Hearing

EXISTING WELLBORE
X YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Phillips Petroleum Company — Operator
5525 Hwy 64, Farmington, NM 87401 — Address

San Juan 29-6 Unit — Lease
33 — Well No.
B Sec. 13, T29N, R6W — Unit Ltr. - Sec - Twp - Rge
Rio Arriba — County

OGRID NO. 017654 Property Code 009257 API NO. 30-039-07636 Spacing Unit Lease Types: (check 1 or more) 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	72319 Blanco Mesaverde		71599 Basin Dakota
2. Top and Bottom of Pay Section (Perforations)	5355' - 5804'		7844' - 7948'
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: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 600 psi (est.)	a.	a. 438 psi (24 hr SI)
	b. (Original) 1280 psi	b.	b. 3130 psi
6. Oil Gravity (°API) or Gas BTU Content	1160 btu/scf		1012 btu/scf
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date and oil/gas/ water rates of last production Note: For new zones with no production history, applicant shall be required to attach production	Date: Rates:	Date: Rates:	Date: Rates:

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DIST. 3

Form C-128 (6-57)

EW MEXICO OIL CONSERVATION CO[illegible]ION

Well Location and Acreage Dedication Plat

Section A.

Date JULY 22, 1959

Operator EL PASO NATURAL GAS COMPANY Lease SAN JUAN 29-6 UNIT SF 078278

Well No. 33-13(MD) Unit Letter C Section 13 Township 29-N Range 6-W NMPM

Located 800 Feet From NORTH Line, 1145 Feet From EAST Line

County RIO ARRIBA G. L. Elevation 6593 Dedicated Acreage 275.94 & 275.94 Acres

Name of Producing Formation MESA VERDE AND DAKOTA Pool BLANCO MV & WILDCAT DAKOTA Basin

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? Yes X No

2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No . If answer is "yes", Type of Consolidation

3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner Land Description

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DIST. 3

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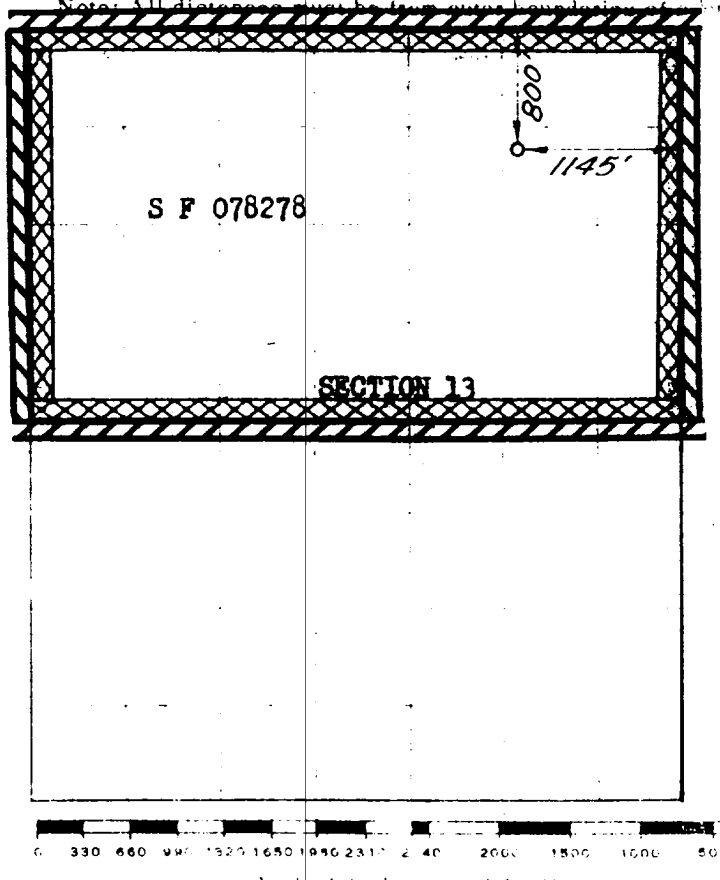
JAN 11 1961
OIL CON. COM.
DIST. 3

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company
(Operator)
Original Signed By: D.H. Oheim
(Representative)
Box 990
(Address)
Farmington, New Mexico

Note: All distances must be from outer boundaries of section.



Scale 4 inches equal 1 mile

NOTE:
THIS PLAT IS REISSUED TO REFLECT
A CHANGE IN DEDICATION. 1-6-61

(Seal) REGISTERED LAND SURVEYOR STATE OF NEW MEXICO No. 1463 JAMES P. LEESE

Farmington, New Mexico

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed AUGUST 30, 1955

James P. Leese
Registered Professional Engineer and/or Land Surveyor

PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

August 27, 1999

New Mexico Oil & Gas Conservation Div.
2040 South Pacheco
Santa Fe, New Mexico 87505-6429

Downhole Commingling Allocation Method
on the San Juan 29-6 Unit #33

Dear Sirs:

Phillips is proposing to utilize the subtraction method on the subject well for approximately twelve months after actual commingling occurs. After the twelve month period we will convert to the ratio method as indicated in our commingling application. We believe this will be a more accurate method of allocating production considering that the Dakota interval has been producing for years and that the production will not be stabilized on the Mesaverde for several months.

Dakota Production Forecast

September 1999	3,721	October 1999	3,825
November 1999	3,805	December 1999	3,419
January 2000	3,767	February 2000	3,626
March 2000	3,728	April 2000	3,589
May 2000	3,690	June 2000	3,671
July 2000	3,534	August	3,633

For example, if the total volume for September 1999 were 8,221 mcf, then the Dakota would be allocated 3,721 mcf and the Mesaverde 4,500 mcf. And subsequently, the Dakota would be allocated (3,721/8,221) or 45.26%, and Mesaverde would be allocated (4,500/ 8,221) or 54.74%.

Sincerely,

PHILLIPS PETROLEUM COMPANY

Mark W. Stodola

Mark W. Stodola
Reservoir Engineer

MS/pc

cc: OCD – Aztec
BLM- Farmington
NM Commissioner of Public Lands – Santa Fe

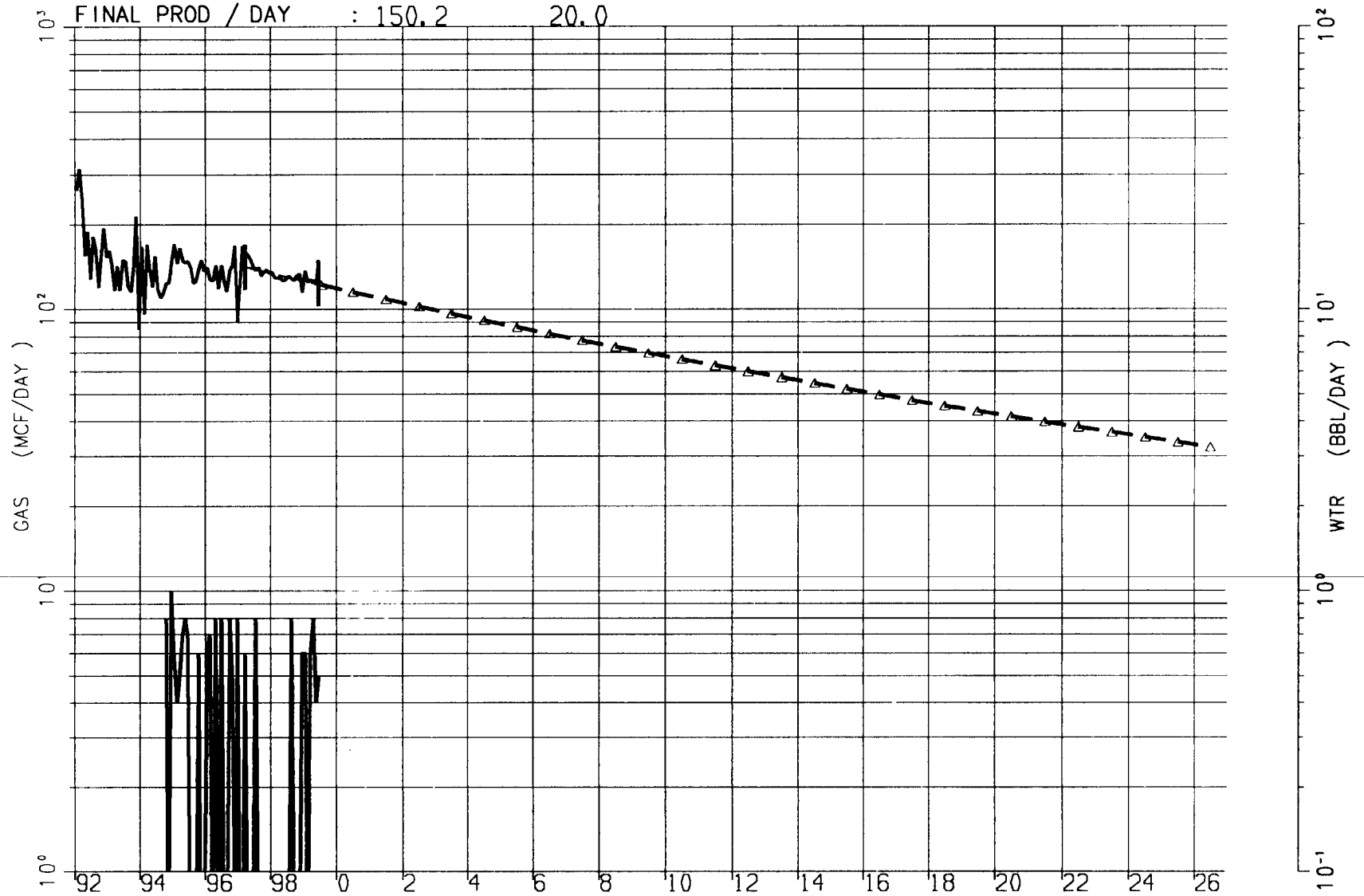
29-6 Unit #33 Dakota Forecast

Initial Production Rate	=	*125 MCFD*
Hyperbolic Exponent	=	*0.33*
Decline Rate	=	*6.24 %*

	Month	***Monthly MCF***
1999	Aug	***3,865***
	Sep	***3,721***
	Oct	***3,825***
	Nov	***3,805***
	Dec	***3,419***
2000	Jan	***3,767***
	Feb	***3,626***
	Mar	***3,728***
	Apr	***3,589***
	May	***3,690***
	Jun	***3,671***
	Jul	***3,534***
	Aug	***3,633***
	Sep	***3,498***
	Oct	***3,597***
	Nov	***3,578***
	Dec	***3,216***
2001	Jan	***3,543***

Use subtraction method for +/- 12 months based on this Dakota forecast.

	4/97-1/99	2/99-LIFE	ASSOC.	Current Cums
INITIAL PROD / DAY	: 141.2	125.6	0.0	391320. MCF GAS
REMAINING LIFE	: 1.83	40.47		
HYPR(0.33) DECL %	: 6.49	6.24		512. BBL WTR
CUM PRODUCTION	: 89991.	776239.	0.	
FINAL PROD / DAY	: 150.2	20.0		



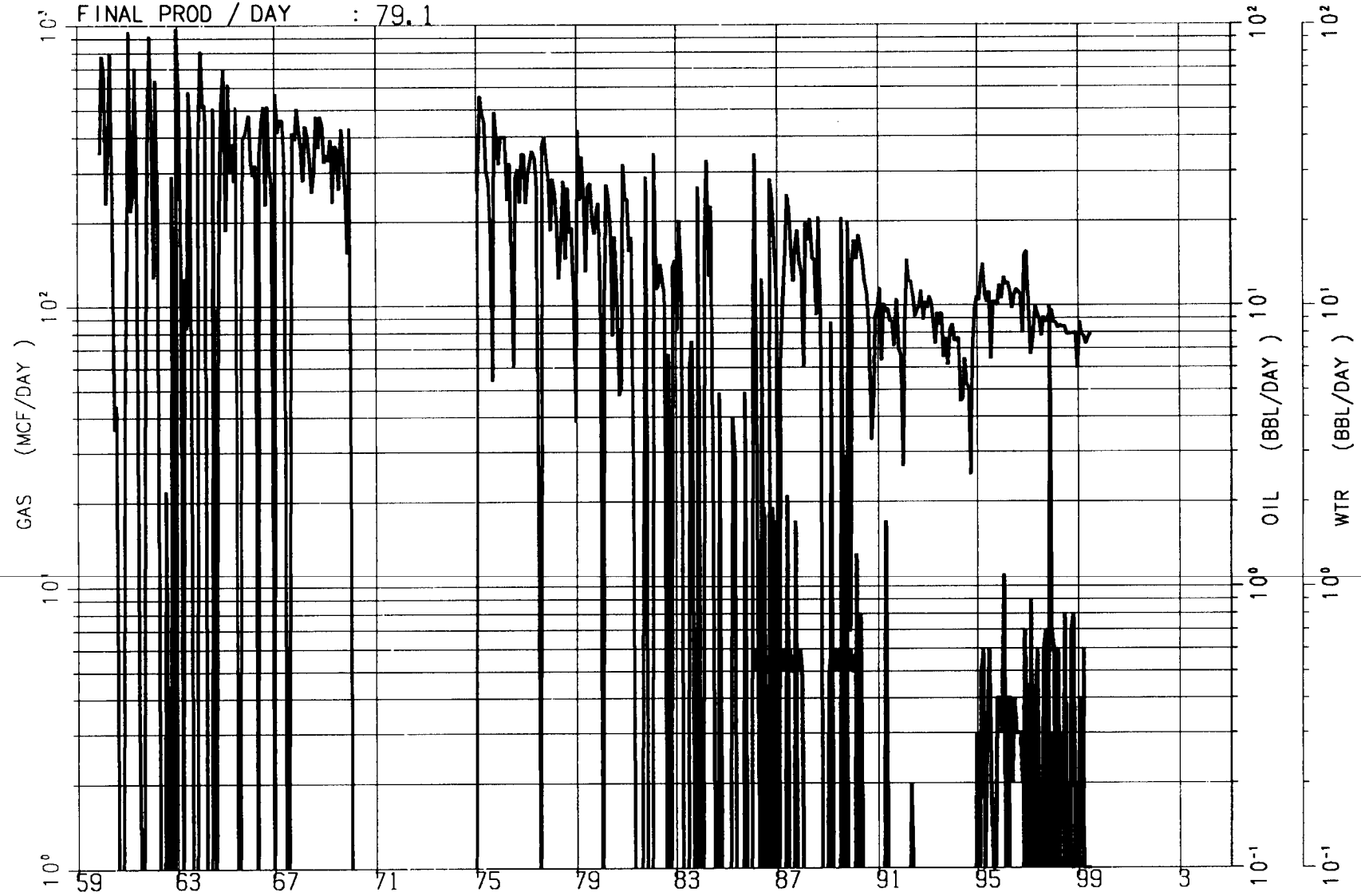
LEASE- 650325 : SAN JUAN 29-6 UNIT #33 DK NON-CO
RESVR- 076 : BASIN DAKOTA
WELL - 000033 CUM MMCF= 2049.

F029002
ZONE-650325076000033 F029002
API-30039076360000 THRU 99/06

MWST 1999/08/18 17:32

11/59-1/99 Current Cums

INITIAL PROD / DAY	: 622.0	2237.	MMCF GAS
REMAINING LIFE	: 39.25	854.	BBL OIL
HYPR(0.33) DECL %	: 7.45	1282.	BBL WTR
CUM PRODUCTN-MUNITS	: 2225.		
FINAL PROD / DAY	: 79.1		



LEASE- 650112 : SAN JUAN 29-6 MESA VERDE
RESVR- 002 : BLANCO MESAVERDE
WELL - 000033 CUM MMCF= 2239.

F029001
ZONE-650112002000033 F029001
API-30039076360000 THRU 99/06

MWST 1999/08/18 17:34

PHILLIPS PETROLEUM COMPANY
5525 HWY 64 NBU 3004
FARMINGTON, NEW MEXICO 87401

DATE: AUGUST 23, 1999

WELL NAME: SAN JUAN 29-6 # 33
FORMATION: DAKOTA

TYPE TEST: STATIC GRADIENT

COUNTY: RIO ARRIBA
STATE: NEW MEXICO

TOTAL DEPTH: 8032'
PERFS: MP 7896'
TUBING SIZE: 2 3/8 TO 7927'
CASING SIZE:
PACKER:
OTHER: SN @ 7891'
ENGAGED @ 17:00

CASING PRESSURE:
TUBING PRESSURE: 360
OIL LEVEL:
WATER LEVEL:
TEMPERATURE:
ELEMENT NO.
ELEMENT RANGE 0 TO 3500

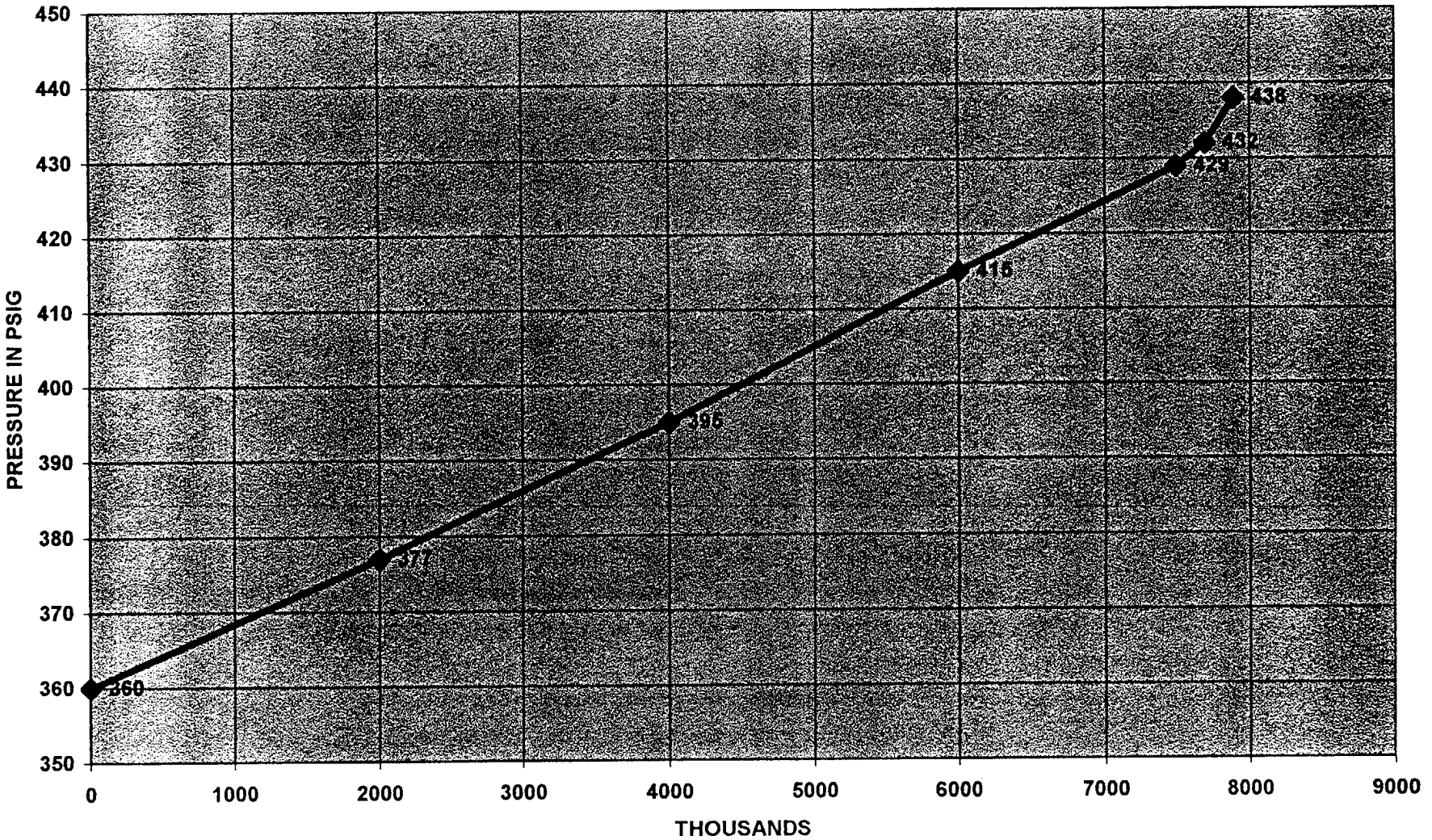
WELL STATUS: SHUT IN

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	360	
2000	377	0.008
4000	395	0.009
6000	415	0.010
7491	429	0.009
7691	432	0.015
7891	438	0.030

HAS BULL PLUG ON BTM OF TUBING

H & H WIRELINE SERVICE INC.
P. O. BOX 899
FLORA VISTA, NEW MEXICO 87415
OPERATOR: STEVEN HODGES
UNIT NO. T-1O

PHILLIPS PETROLEUM SAN JUAN 29-6 # 33
DATE: AUGUST 23, 1999



a) the average estimated Mesaverde and Dakota ultimate recoverable gas reserves within the San Juan 29-6 Unit on a per well basis are approximately .74 BCFG and 1.23 BCFG, respectively;

b) the average initial producing rate for a Mesaverde and Dakota gas well (either newly drilled or recompleted) is approximately 363 MCFGD and 277 MCFGD, respectively; and

c) the estimated ultimate gas recoveries and initial producing rates from the Mesaverde and Dakota formations within the San Juan 29-6 Unit are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(9) The evidence and testimony presented by the applicant indicates that the Blanco-Mesaverde and Basin-Dakota Gas Pools within the San Juan 29-6 Unit should be properly classified as "marginal".

(10) In support of its request to except pressure criteria within the Mesaverde and Dakota formations within the San Juan 29-6 Unit, the applicant presented engineering evidence and testimony indicating that:

a) the average shut-in bottomhole pressure within the Mesaverde and Dakota formations at the time of initial development was approximately 1,280 psi and 3,130 psi, respectively; and

b) the average current shut-in bottomhole pressure within the Mesaverde and Dakota formations is approximately 500 psi and 844 psi, respectively.

(11) Testimony by the applicant indicates that the pressure data described above was obtained from seven (7) Mesaverde and five (5) Dakota wells within the San Juan 29-6 Unit.

(12) The applicant presented insufficient pressure data within the San Juan 29-6 Unit area to except pressure criteria.

(13) The applicant testified that various allocation methods would be utilized for downhole commingled wells within the San Juan 29-6 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

a) in those instances where a newly completed zone is commingled with an existing producing interval with an established decline, the subtraction method will be utilized for a period of +/- 12 months. Subsequent to that time, and assuming that the production rate has stabilized, a fixed allocation will be determined and utilized; and

Exhibit 3.2

Production Allocation Methodology

- ♦ Adding New Zone to Existing Zone - Initially Subtraction Method followed by Fixed Allocation Method
  - Subtraction Method (+/- 1st 12 months)
    - Forecast production rate by month for existing zone utilizing established decline curve for zone
    - Subtract forecasted rate from commingled rate to define new zone rate
    - Utilize subtraction method for +/- 12 months until new zone rate stabilizes, then utilize fixed allocation method with current rates
  - Fixed Allocation Method (after Subtraction Method)
    - Utilize forecasted rate from established decline curve for lower zone
    - Calculate upper zone rate by subtracting lower zone rate from commingled rate
    - Lower zone allocation = $\frac{\text{Lower zone rate}}{\text{Commingled rate}}$
    - Upper zone allocation = (Commingled rate - Lower zone rate) / Commingled rate

Attachment

OCD Form C-107A (3/12/96)

Item No. 12 - additional explanation:

Based on water analysis from the Mesaverde and Dakota zones and discussions with the chemical treating/analysis company the water from these two zones are compatible. Lab analysis of the individual waters from both the Mesaverde and Dakota formations resulted in positive scaling indices for barium sulfate. There was a slight increase in the barium sulfate scaling index of the combined waters relative to the scaling index of the individual waters.

None of the waters, combined or individual, had meaningful scaling tendencies and combined with the fact that typical water production from either of these zones in San Juan 30-5 are 0-1 BWPD and no barium sulfate scale has been detected to date, no negative impacts to the formations are anticipated.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

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DIST. 3

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
SF-078278

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
San Juan 29-6 Unit

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SJ 29-6 Unit #33

2. Name of Operator
Phillips Petroleum Company

9. API Well No.
30-039-07636

3. Address and Telephone No.
5525 Highway 64, NBU 3004, Farmington, NM 87401 505-599-3454

10. Field and Pool, or exploratory Area
Blanco Mesaverde and
~~Blanco Mesaverde~~

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Unit B, 800' FNL & 1145' FEL
Section 13, T29N, R6W

11. County or Parish, State
Rio Arriba, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Add pay & commingle	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

This well was drilled and dual completed in the Mesaverde and Dakota formations in August 1959. We have now added Lewis Shale pay to the Mesaverde interval and will first deliver this well as a commingled well per DHC Order #2465 dated 9/21/99. See the attached for details of the procedure used to add pay and stimulate the Lewis Shale. We will submit another sundry reporting the date commingling actual occurs.

14. I hereby certify that the foregoing is true and correct
Signed Patsy Clugston Title Regulatory Assistant Date 10/14/99

(This space for Federal or State office use)
Approved by /s/ Joe Hewitt Title Team Lead, Petroleum Management Date NOV - 4
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

NMOCD

San Juan 29-6 Unit #33
SF-078278; Unit B, 800' FNL & 1145' FEL
Section 13, T29N, R6W; Rio Arriba County, NM

Procedure used to add pay and stimulate the Lewis Shale within the exiting Mesaverde formation before Commingling production from the Dakota and Mesaverde intervals.

9/21/99
MIRU Key Energy #29. Kill well. ND WH & NU BOPs. PT - OK. Unset tubing hanger & COOH w/1-1/4" tubing. Pulled 2-3/8" tubing hanger & COOH w/2-3/8" tubing above packer. Cleaned out fill above Packer @ 7450'. Had to cut packer & fish packer & tubing below packer. Retrieved 100%. Made bit & 7" scraper run to liner top @ 7568', then 5" scraper run to 8015'. RIH w/7" RBP & set @ 5250'. Load hole & PT plug, casing and rams to 550 psi for 30 minutes - held good. Spot 15 gal of frac sand on top of plug. RU Blue Jet & ran GR/CCL&CBL log from 5218 to surface. TOC @ 3748'. Perforated Lewis Shale @ .38" holes @ 1 spf as follows:

5094' - 5096' (3');	5028' - 5030' ('3);	4930' - 4932' (3');	4859' - 4861' (3');
4788' - 4790' (3');	4673' - 4675' (3');	4605' - 4607' (3');	4528' - 4530' (3');
4462' - 4464' (3');	4398' - 4400' (3');	4319' - 4321' (3');	4270' - 4272' (3'); Total 36 holes

RU BJ to acidize. Pumped 1000 gal of 15% HCl & ballsealers. Knocked balls off. POOH w/packer. RU to frac. RIH w/FB packer & set @ 4060'. Pumped 64,104 gal of 60 Quality N2 foam consisting of 31,164 gal of 30# X-link gel & 891,000 scf N2 gas. Pumped a 4200 gal foam pad followed by 204,220 # of 20/40 Brady sand. Flushed w/2520 gal of 2% KCL. ATR - 45 bpm, ATP - 2800 psi., ISDP - 730 psi. Flowed back on 1/4" and 1/2" chokes for approx. 36 hours.

RD flowback equipment. Unset packer & POOH. RIH w/7" retrieving head on tubing to clean out fill on top of RBP. Latched on 7" RBP & COOH. RIH w/2-3/8" 4.7# tubing head cleaned out fill to PBTD @ 8032'. PUH & set tubing @ 7928' with "F" nipple set @ 7896'. ND BOP & NU WH. Pumped off check. RD & released rig 2000 hrs 10/7/99. Turned well over to production department to commingle production.