



June 12, 1996

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
2040 S. Pacheco Street  
P. O. Box 6429  
Santa Fe, NM 87505

**Application for change in Allocation  
Florance G #36 Well  
Unit H Section 3-T30N-R8W  
Blanco Mesaverde and Basin Dakota Pools  
San Juan County, New Mexico**

**Southern  
Rockies  
Business  
Unit**

**RECEIVED**  
JUN 17 1996  
**OIL CON. DIV.**  
**DIST. 3**

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. Tenneco Oil Company requested and received approval to commingle the subject well in NMOCD Case #8762 and Order R-8094 (Attached). Amoco as successor in interest and operator of said well herein requests to change the allocation for these formations and is therefore submitting the information on the Form C-107-A as information only except for the allocations.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,

Pamela W. Staley

Enclosures

cc: Hiep Vu  
Patty Haefele  
Wellfile  
Proration File  
Frank Chavez, Supervisor  
NMOCD District III  
1000 Rio Brazos Road  
Aztec, NM 87410

Duane Spencer  
Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, NM 87401

DISTRICT I  
P.O. Box 1980, Hobbs NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-A  
New 3-12-96

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

DISTRICT II  
811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

☒ Administrative ☐ Hearing

DISTRICT III  
1000 Rio Brazos Rd. Aztec, NM 87410-1693

EXISTING WELLBORE  
☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Amoco Production Company	P.O. Box 800	Denver, CO 80201
Operator Florance G	Address H-3-30N-8W	County San Juan
Lease #36	Well No. H-3-30N-8W	Unit Ltr. - Sec Twp - Rge

OGRID NO. 000778 Property Code 000534 API NO. 30-045-09906

Spacing Unit Lease Types: (check 1 or more)  
Federal ☒ 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	Blanco Mesaverde 72319	<b>RECEIVED</b> JUN 17 1996 OIL CON. DIV. DIST. 3	Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	5021'-5517'		7574'-7754'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) 430 PSI	a.	a. 751 PSI
Oil Zones - Artificial Lift: Estimated Current			
Gas & Oil - Flowing: Measured Current	(Original) 1259 PSI	b.	b. 2882 PSI
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (* API) or Gas BTU Content	1149 BTU/ 53 DEG API		997 BTU/mmcft
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	no		yes
• If Shut-In, give date and oil/gas/water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 04/03/96 Rates: 140 mcf 0.03 bopd	Date: Rates:	Date: 04/03/96 Rates: 85 mcf 0 bopd
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 100 % Gas 62 %	Oil: % Gas %	Oil: 0 % Gas 38 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones?  
If not, have all working, overriding, and royalty interests been notified by certified mail?  
Have all offset operators been given written notice of the proposed downhole commingling?

☒ Yes ☐ No  
☐ Yes ☐ No  
☒ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☐ Yes ☐ No NM-012711

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S) \_\_\_\_\_

16. 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 all offset operators.
- Notification list of working, overriding, and royalty interests for uncommon interest cases.
- Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Pamela W. Staley TITLE Regulatory Affairs Engineer DATE 6/12/96  
TYPE OR PRINT NAME Pamela W. Staley TELEPHONE NO. ( 303 ) 830-5344

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 <b>TENNECO OIL COMPANY</b>			Lease <b>FLORANCE</b>		Well No. <b>36</b>
Unit Letter <b>H</b>	Section <b>3</b>	Township <b>30N</b>	Range <b>8W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1850</b> feet from the <b>North</b> line and <b>990</b> feet from the <b>East</b> line					
Ground Level Elev: <b>6284</b>	Producing Formation <b>Basin Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>E/2</b> <b>323.20 Acres</b>		

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

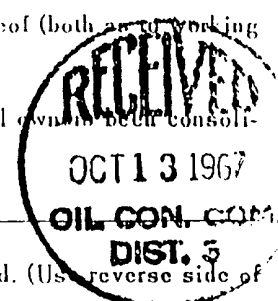
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

*M. K. Wagner*

Name **M. K. Wagner**

Position

**Tenneco Oil Company**

Company

**October 4, 1967**

Date

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

Registered Professional Engineer and/or Land Surveyor

Certificate No.

**ADMN 60820**

N MEXICO OIL CONSERVATION COMMISS )  
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.

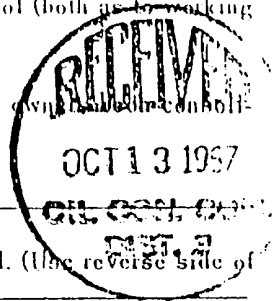
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>FLORANCE</b>		Well No. <b>36</b>
Unit Letter <b>II</b>	Section <b>3</b>	Township <b>30N</b>	Range <b>8W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
1850 feet from the North		line and 990 feet from the East		line	
Ground Level Elev: <b>6284</b>	Producing Formation <b>BLANCO MESAVERDE</b>	Pool <b>BLANCO MESAVERDE</b>		Dedicated Acreage: <b>E/2</b> <b>323.20 Acres</b>	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 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.

Name Mary K. Wagner

Position Tenneco Oil Company

Company October 5, 1967

Date \_\_\_\_\_

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 \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor

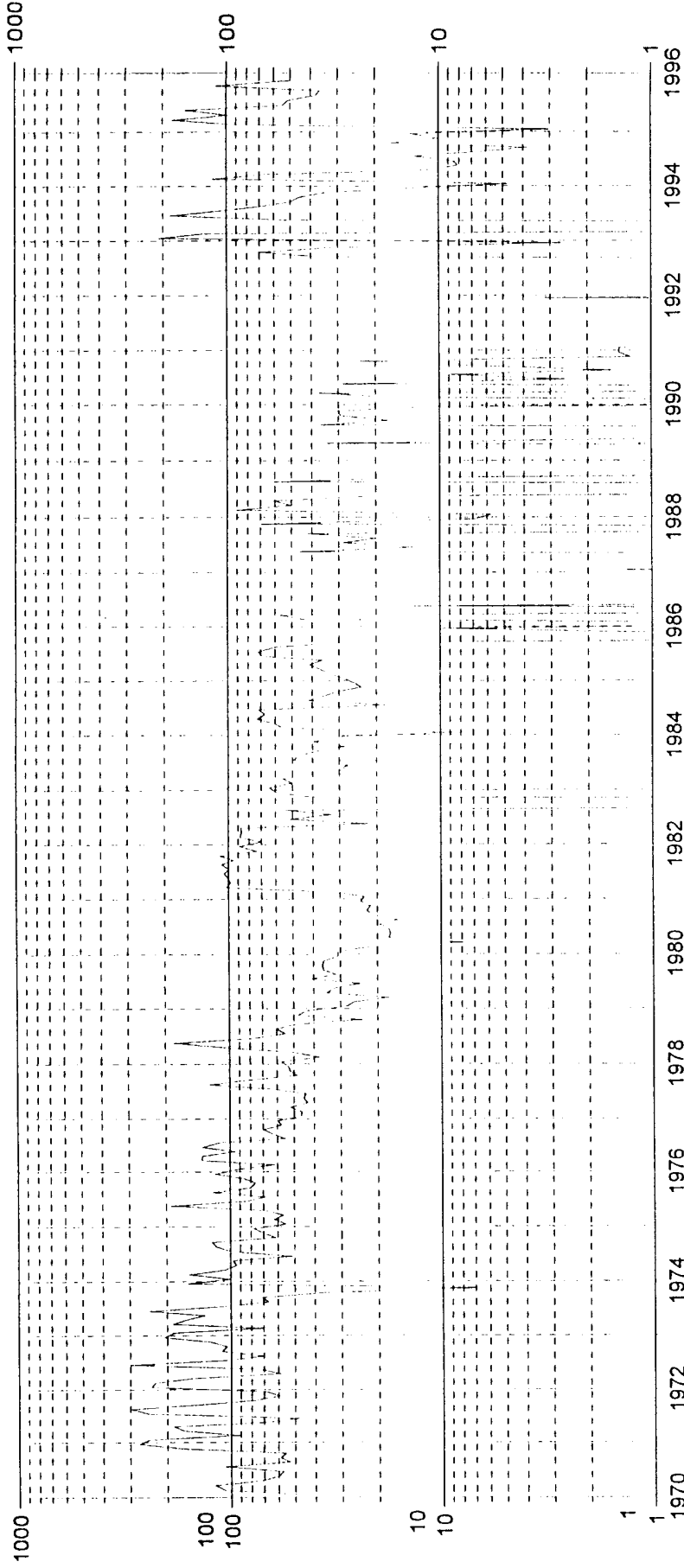
Certificate No. **ADMIN 60027**

			1850'
		O	990'

# Dwights

1000 Lease: FLORANCE G 000036

Retrieval Code: 251,045,30N08W03H00D



County: SAN JUAN

State: NM

F.P. Date: N/A

Date: 03/27/96

Field: BASIN (DAKOTA) DK

Oil Cum: 0 bbl

Reservoir: DAKOTA

Gas Cum: 1140 mmcf

Water (bbl/day)

Operator: AMOCO PRODUCTION CO

Location: 3H 30N 8W

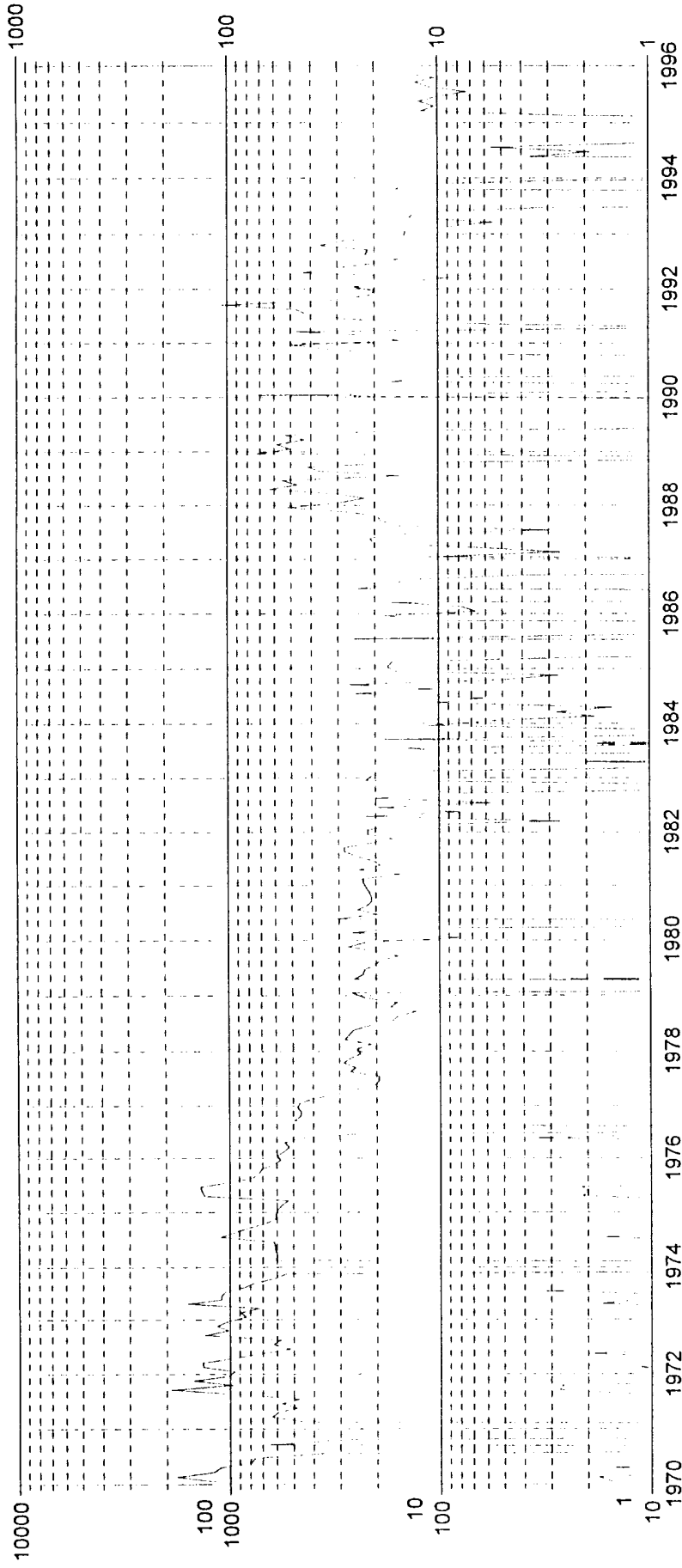
Gas (mcf/day)

Oil (bbl/day)

# Dwights

1000 Lease: FLORANCE G 000036

Retrieval Code: 251,045,30N08W03H00M



County: SAN JUAN

Field: BLANCO (MESAVERDE) MV

Reservoir: MESAVERDE

Operator: AMOCO PRODUCTION CO

State: NM

Oil Cum: 2181 bbl

Gas Cum: 6693 mmcf

Location: 3H 30N 8W

F.P. Date: 09/54

Water (bbl/day)

Gas (mcf/day)

Date: 03/27/96

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Oil (bbl/day)

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

*Well file*  
*Florance*  
*# 36*

ADMN 60676

8762  
R-8094

APPLICATION OF TENNECO OIL  
COMPANY FOR DOWNHOLE COMMINGLING,  
SAN JUAN COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on November 21, 1985, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 18th day of December, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) At the time of the hearing Division Cases Nos. 8762, 8763, 8764, and 8765 were consolidated for the purpose of testimony.
- (3) The applicant, Tenneco Oil Company, is the owner and operator of the Florance Well No. 36 located 1850 feet from the North line and 990 feet from the East line (Unit H) of Section 3, Township 30 North, Range 8 West, NMPM, San Juan County, New Mexico.
- (4) The applicant seeks authority to commingle production from the Basin-Dakota and Blanco-Mesaverde Gas Pools within the wellbore of the above-described well.
- (5) From the Basin-Dakota zone, the subject well is capable of low marginal production only.
- (6) From the Blanco-Mesaverde zone, the subject well is capable of low marginal production only.

ADMN 60677

(7) The proposed commingling should result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(8) The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(9) To afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(10) In order to allocate the commingled production to each of the commingled zones in the subject well, 88 percent of the total commingled production should be allocated to the Blanco-Mesaverde zone, and 12 percent of the total commingled production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Tenneco Oil Company, is hereby authorized to commingle production from the Basin-Dakota and Blanco-Mesaverde Gas Pools within the wellbore of the Florance Well No. 36, located 1850 feet from the North line and 990 feet from the East line (Unit II) of Section 3, Township 30 North, Range 8 West, NMPM, San Juan County, New Mexico.

(2) Eighty-eight percent of the total commingled production shall be allocated to the Blanco-Mesaverde zone and 12 percent of the total commingled production shall be allocated to the Basin-Dakota zone.

(3) The operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.



-3-

Case No. 8762  
Order No. R-8094

DONE at Santa Fe, New Mexico, on the day and year  
hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*R. L. Stamets*  
R. L. STAMETS,  
Director

S E A L

ADMN 60679

(C) Copyright 1992,1993									
Douglas M Boone									
All Rights Reserved									
Version 3.0M									
04-Apr-96									
-- FLOWBHP -- -- Pwf with correction for liquids -- Well Name: <b>Florance G #36 DK</b> Gas Gravity: <b>0.8</b> Condensate (Yes=1): <b>0</b> Reservoir Temp: <b>161.2 F</b> Surface Temp: <b>70 F</b> Depth of Zone: <b>7600 Feet</b> TVD: <b>7600 Feet</b> Tubing ID: <b>1.995 inches</b> Oil Production <b>0 Bopd</b> Oil Gravity <b>0 API</b> Water Production <b>0.055 Bwpd</b> Water SG <b>1</b> FTP <b>Rate</b> <b>Pwf</b> <b>Z</b> <b>Pwf/Z</b> <b>Mcf/d</b> <b>psia</b> <b>275</b> <b>60</b> <b>751</b> <b>1.002</b> <b>749</b> <b>Psia</b>									
GAS Gnc = <b>0.01</b> Tchc = <b>170.29</b> Pchc = <b>677.10</b> CWA = <b>0.00</b> Tavc = <b>575.27</b> Tc = <b>170.29</b> Pc = <b>677.10</b> Pc = <b>677.10</b> Tc = <b>170.29</b>									
BHT                      SURFT A = <b>0.0642</b> <b>0.0642</b> B = <b>1.1960</b> <b>1.0527</b> C = <b>-0.0329</b> <b>-0.1264</b> D = <b>3.3781</b> <b>3.1103</b> E = <b>0.0597</b> <b>0.0705</b> F = <b>0.6845</b> <b>0.6845</b> Tr = <b>3.378</b> <b>3.110</b> Tavc = <b>576.6</b> F <b>0.01494</b>									
GOR - water <b>1,090,909 cf/Bbl li</b> GOR - oil <b>10 cf/Bbl li</b> GOR total <b>10 cf/Bbl li</b> Mo <b>-1031</b> Oil Grav <b>0.000</b> SG wg <b>0.007</b> Mix Grav <b>1.000</b> SG mix <b>4.059</b> G <b>0</b> Rate corr <b>60</b> Gas Grav cor <b>4.059</b>									
Pr <b>0.406</b> G <b>0.110</b> pro <b>0.035</b> f(p <sub>r</sub> ) <b>0.000</b> f(p <sub>r</sub> )' <b>3.106</b> pro' <b>0.035</b> Z <b>0.999</b> Pwf <b>327</b> Zavc <b>1.000</b> 2.00 0.483 0.130 0.039 0.000 3.381 0.039 1.000 752 1.001 2.00 1.110 0.300 0.089 0.000 3.402 0.089 1.002 751 1.001 2.00 1.109 0.299 0.088 0.000 3.402 0.088 1.002 751 1.001 2.00 1.109 0.299 0.088 0.000 3.402 0.088 1.002 751 1.001 2.00									

INSTRUCTIONS:

- 1) Enter the shut-in tubing or flowing pressure.
- 2) Press [F9] to calculate the BHP and Z factor
- 3) Press [Ctrl][Home] to return to information screen.

Calculations based on Cullender-Smith with corrections for condensate and water production. The is also a correction for the gas equivalent of the condensate.

-- FLOWBHP --  
-- Pwf with correction for liquids --  
Well Name: Florance G #36 MV  
Gas Gravity: 0.8  
Condensate (yes=1): 0  
Reservoir Temp: 133.2 F  
Surface Temp: 70 F  
Depth of Zone: 5269 Feet  
TVD: 5269 Feet  
Tubing ID: 2.807 inches  
Oil Production 0 Bopd  
Oil Gravity 0 API  
Water Production 0.096 Bwpd  
Water SG 1  
FTP Rate Pwf Z Pwf/Z  
Psia Mcfd psia 430 1.000 430  
210 140

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Douglas M Boone  
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Version 3.0M  
09-Apr-96

GAS Gnc = 0.01  
Tchc = 170.29  
Pchc = 677.10  
CWA = 0.00  
Tavg = 561.27  
Tc = 170.29  
Pc = 677.10  
Pc = 677.10  
Tc = 170.29  
BHT SURFT  
A = 0.0642 0.0642  
B = 1.1520 1.0527  
C = -0.0614 -0.1264  
D = 3.2959 3.1103  
E = 0.0627 0.0705  
F = 0.6845 0.6845  
Tr = 3.296 3.110  
Tavg 562.6  
F 0.01391  
GOR - water 1,458,333 cf/Bbl liqui  
GOR - oil 10 cf/Bbl liqui  
GOR total 10 cf/Bbl liqui  
Mo -1031  
Oil Grav 0.000  
SG wg 0.007  
Mix Grav 1.000  
SG mix 4.059  
G 0  
Rate corr 140  
Gas Grav cor 4.059

Pr G pro f(p)' f(p)' pro' Z Pwf Zavg A  
0.310 0.084 0.027 0.000 3.106 0.027 0.999 238 0.999 1.426  
0.351 0.095 0.029 0.000 3.295 0.029 1.000 430 1.000 1.426  
0.635 0.171 0.052 0.000 3.299 0.052 1.000 430 1.000 1.426  
0.635 0.171 0.052 0.000 3.299 0.052 1.000 430 1.000 1.426  
0.635 0.171 0.052 0.000 3.299 0.052 1.000 430 1.000 1.426

INSTRUCTIONS:

- 1) Enter the shut-in tubing or flowing pressure.
- 2) Press [F9] to calculate the BHP and Z factor
- 3) Press [Ctrl][Home] to return to information screen.

Calculations based on Cullender-Smith with corrections  
for condensate and water production. The is also a correction  
for the gas equivalent of the condensate.