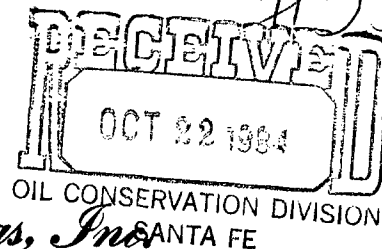


P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

Consolidated Oil & Gas, Inc.



October 16, 1984

Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, New Mexico 87410

Re: Northwest 3
895' FNL & 1850' FWL
Sec 6C, T26N, R4W
Rio Arriba Co., New Mexico

Dear Mr. Chavez;

Consolidated Oil & Gas, Inc. hereby requests authorization to down-hole commingle the Basin Dakota and B S Mesa Gallup formations within the above referenced well.

This well failed the 1984 New Mexico Packer Leakage Test from an apparent hole in the 1 1/2" Dakota production tubing. The Dakota averaged 189 MCFD and 2.3 BOPD from 1964 to present. The Gallup averaged 60 MCFD and 0.5 BOPD during the same period.

The ownership, working interest, royalty and overriding royalty is common for both zones.

Due to the economics involved in working over an old well, we would like to commingle the Dakota and Gallup by producing both zones through one string of 1 1/2" production tubing already set at the Dakota perforations.

Consolidated would like to allocate 76% gas and 100% oil to the Dakota and 24% gas and 0% oil to the Gallup formations, based on G O R tests and the well's production history.

Enclosed please find requested information.

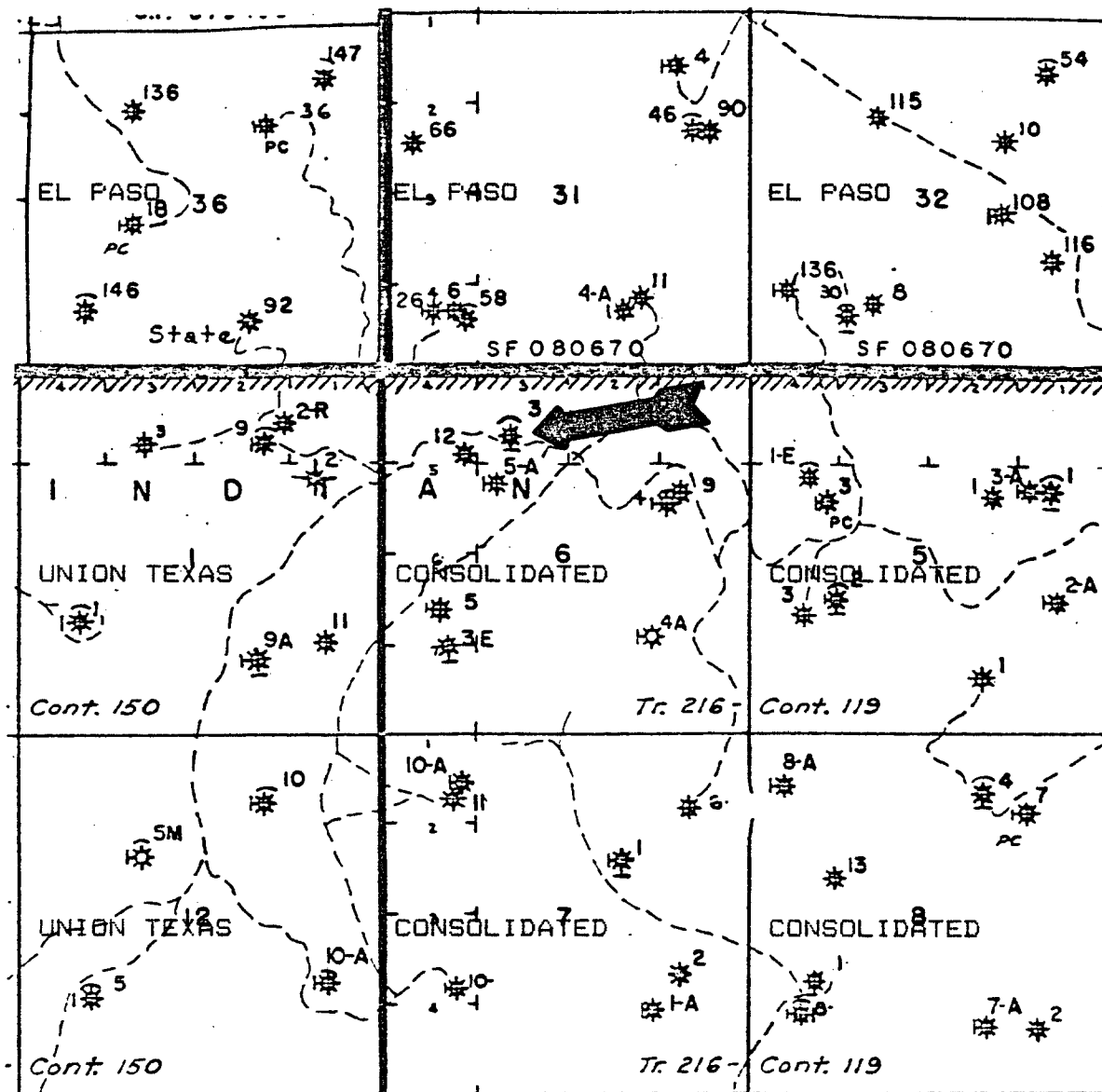
Yours very truly,

Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures
cc: N. M. Oil Conservation Division, Santa Fe

1984 PACKER LEAKAGE TEST

CONSOLIDATED OIL & GAS, INC.		WELL NAME AND NUMBER NORTHWEST 4		UNIT LETTER L	SEC.-TWP.-RGE. 8-26-4	COUNTY RA
UPPER COMPLETION GALLUP		PRODUCING THRU	LOWER COMPLETION DAKOTA		PRODUCING THRU	
DATE	UPPER ZONE SHUT-IN—5 DAYS			LOWER ZONE SHUT-IN—3 DAYS		
9-10	SHUT BOTH ZONES IN			SHUT BOTH ZONES IN		
	CSG	TBG			TBG	
9-11	25	722	90			742
9-12	26	750	110			762
9-13	27	770	190			780
TURN ON LOWER ZONE AFTER CARD SIGNED				LOWER ZONE FLOW		
28	UPPER ZONE REMAINS SHUT-IN		Failed	DIFFERENTIAL	6.5	FLOWING PRESSURE
9-14	CSG	TBG		STATIC	7.2	
29	UPPER ZONE REMAINS SHUT-IN			DIFFERENTIAL	4.3	FLOWING PRESSURE
9-15	CSG	TBG		STATIC	7.4	
TEST COMPLETED WHEN INITIALED →				PLATE SIZE	1.625	STATIC SPRING STATIC 500
REMARKS well checked during flow						AVERAGE RATE 185



Location Plat to Accompany Application
for Administrative Commingling of the

NORTHWEST 3
895' FNL & 1850' FWL
Sec 6C, T26N, R4W
Rio Arriba Co., New Mexico

Section A.

Date April 2, 1964

Operator CONSOLIDATED OIL & GAS, INC. Lease NORTHWEST FEDERAL
 Well No. 4-8 Unit Letter B Section 8 Township 26 NORTH Range 4 WEST, NMPM
 Located 890 Feet From NORTH Line, 1840 Feet From EAST Line
 County PIO ARriba G. L. Elevation 7173.0 Dedicated Acreage 320 Acres
 Name of Producing Formation DAKOTA Pool 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

Section B.

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

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

Consolidated Oil & Gas, Inc.

(Operator)

(Representative)

W. H. Williams

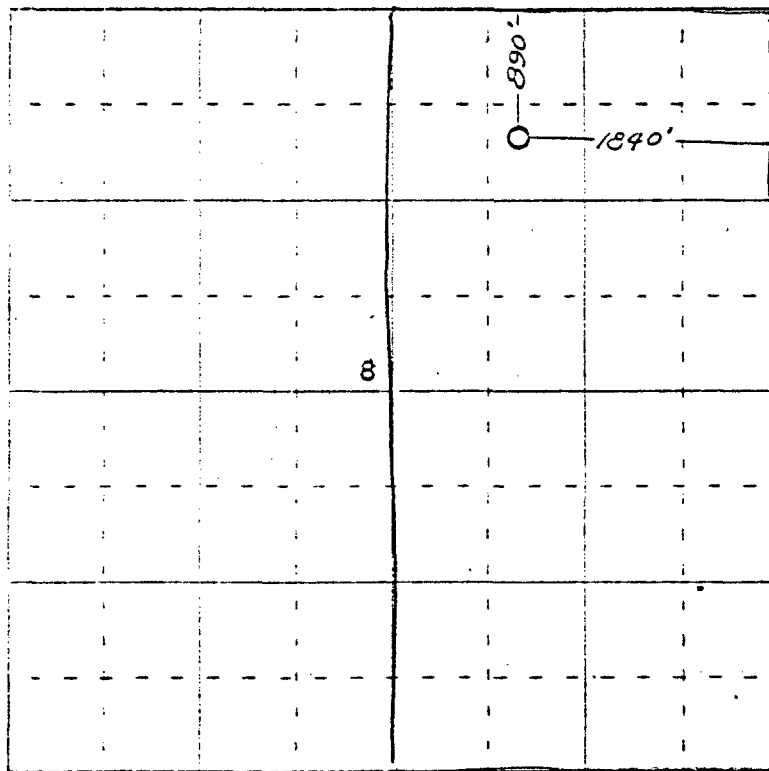
(Address)

Chief Engineer

4150 East Mexico Avenue

Denver 22, Colorado

Ref: GLO platd dated Nov. 4, 1932



0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 0

Scale 4 inches equal 1 mile

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 5 March 1964

James B. Lene
 Licensed Professional Engineer and/or Land Surveyor
 No. 1463
 New Mexico Reg. No. 1463

N. MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-120
Effective 1-1-65

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

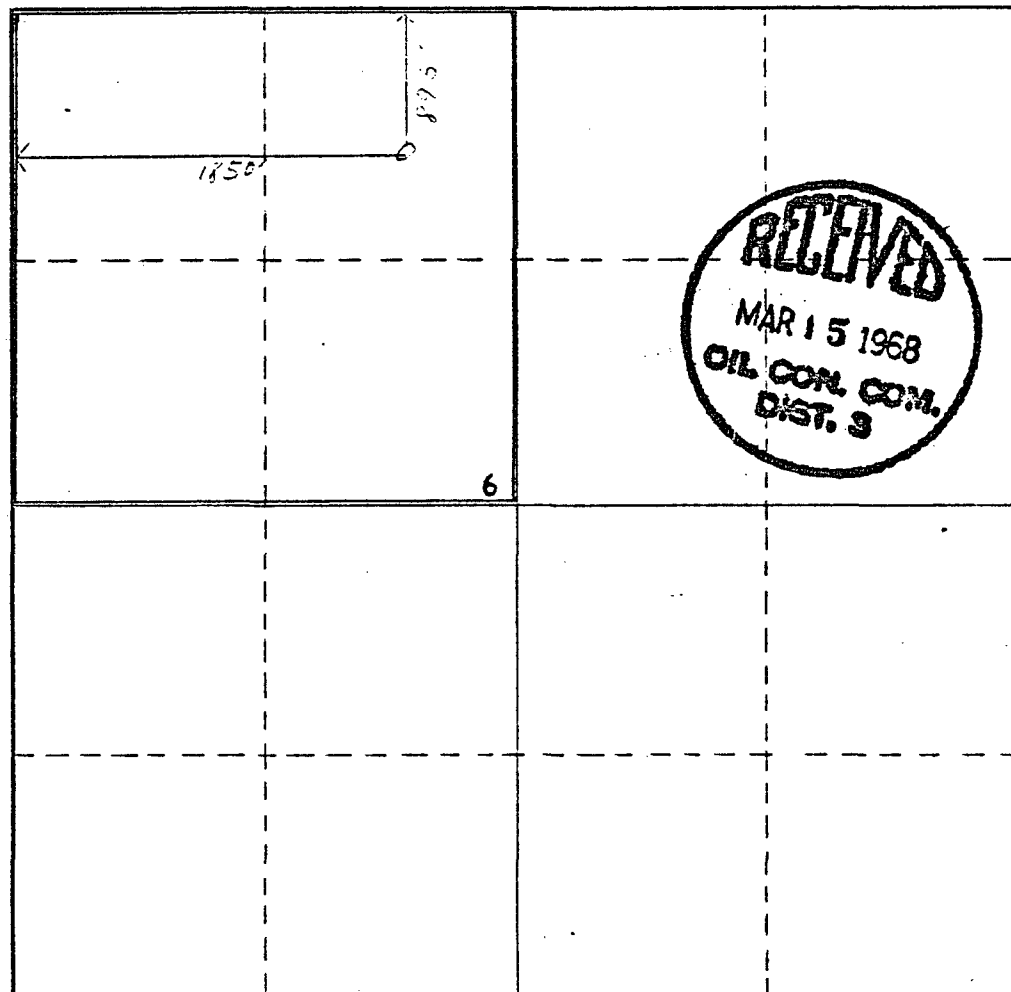
Operator Consolidated Oil & Gas, Inc.			Lease Northwest		Well No. 3
Unit Letter C	Section 6	Township 26 North	Range 4 West	County Rio Arriba	
Actual Footage Location of Well:					
1850	feet from the West	line and	895	feet from the North	line
Ground Level Elev: 7192	Producing Formation Gallup		Pool Undesignated		Dedicated Acreage: 165 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. *1.03*
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.

E. Wayne Rogers
Name

E. Wayne Rogers

Position
Production Manager

Company
Consolidated Oil & Gas, Inc.

Date
March 13, 1968

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.

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (d)

We would like to request an exception to rule 303C, Para. 2, Requirement (d). A current (within 30 days) 24 hour productivity test of the Dakota and Gallup zones would not reflect accurate production potential due to the leak in the Dakota tubing string. We are submitting representative G O R tests of each zone over a 24 hour period in 1982 and 1983 based on production. These production tests were recorded when the other zone was shut in for lack of demand.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2038
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS-OIL RATIO TESTS

Operator		Consolidated Oil & Gas, Inc.		Pool		Basin Dakota		County		Rio Arriba							
Address				PO Box 2038, Farmington, NM 87499				TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>							
LEASE NAME		WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST		GAS - OIL RATIO CU.FT./BBL				
			U	S	T	R					WATER BBL.S.	GRAV. OIL BBL.S.	GAS M.C.F.				
Northwest		3	C	6	26N	4W	9-4-83	F	None	320		24	0	63.5	1.46	210	143,835:1

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

(Signature)

(Title)

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS-OIL RATIO TESTS

Operator Consolidated Oil & Gas, Inc.		Pool B S Mesa Gallup		County Rio Arriba							
Address PO Box 2038, Farmington, NM 87499		TYPE OF TEST - (X)		Scheduled <input type="checkbox"/> Special <input checked="" type="checkbox"/>							
LEASE NAME	WELL NO.	LOCATION U S T R		DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBL.S. GRAV. OIL BBL.S. GAS M.C.F.		GAS - OIL RATIO CU.FT./BBL.
Northwest	3	C 6 26N 4W		10-12-82 F	None	300		24	0 - 0 75		-

No well will be assigned an allowable greater than the amount of oil produced on the official test.
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

(Signature)

(Title)

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (e)

We are submitting production decline curves for the Basin Dakota
and B S Mesa Gallup.

Consolidated Oil & Gas, Inc.
Dual Completion Schematic for
Commingling Application

Elevation: 7204' KB
7192' GL

NORTHWEST 3
Sec 6C, T26N, R4W
Rio Arriba Co., NM
October 16, 1984

12-3/4", 40# csg @ 196'
Cmt w/ 195 sx Regular w/
2% CaCl₂. Cmt top at
surface.

17-1/2" hole to 206'

7-5/8", 26.4# csg @ 4154'
Cmt w/ 75 sx Cl "C" w/
12% gel. Tail-in w/ 25 sx
w/ 2% CaCl₂. Cmt top calc
at 3650'.

5-1/2" liner top @
4092'

10-5/8" hole to 4205'

Frac Gallup w/ 39,984 gal
oil & 25,000 lbs sand

1-1/2" tbg @ 7631'

Gallup perf interval:
7676-7656'
(24 holes)

NOTE: Approval to surface
commingle oil production
from the Dakota & Gallup
was made on 12-7-64.
(Admin. Order # PC-248)

Baker Retrieval-a-D
pkr @ 8060'

1-1/2" tbg @ 8078'

Frac Dakota w/ 123,522 gal
water & 87,000 lbs sand in
two stages.

Dakota perf interval:
8321-8126' (272 holes)

PBTD @ 8351'
Clean out to 8351'

5-1/2", 15.5#, J-55 csg
@ 8390'. Cmt w/ 290 sx
Cl "C" 50/50 pozmix w/
4% gel. Cmt top calc at 4092'.

6-3/4" hole to 8390'
Drillers TD - 8390'
Loggers TD - 8342'

[illegible]

WELL DELIVERABILITY TEST REPORT FOR 1981

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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75083

COMPANY Consolidated Oil and Gas, Inc.			WELL NAME AND NUMBER Northwest #3 DK		
UNIT LETTER C	SECTION 6	TOWNSHIP 26	RANGE 4	PURCHASING PIPELINE Northwest Pipeline Corporation	
CASING O.D. - INCHES 5.500	CASING I.D. - INCHES 5.012	SET AT DEPTH - FEET 8390'	TUBING O.D. - INCHES 1.990	TUBING I.D. - INCHES 1.610	TOP - TUBING PERF. - FEET 8078'
GAS PAY ZONE FROM 8126' TO 8321'		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .708	GRAVITY X LENGTH 5719'
DATE OF FLOW TEST FROM Oct. 19 TO Oct. 26			DATE SHUT-IN PRESSURE MEASURED November 2, 1981		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 310	(b) Flowing Tubing Pressure (DWt) 310	(c) Flowing Meter Pressure (DWt) 308	(d) Flow Chart Static Reading 313	(e) Meter Error (Item c - Item d) -5	(f) Friction Loss (a - c) or (b - c) 2	(g) Average Meter Pressure (Integr.) 310
(h) Corrected Meter Pressure (g + e) 305	(i) Avg. Wellhead Press. $P_t = (h + f)$ 307	(j) Shut-in Casing Pressure (DWt) -	(k) Shut-in Tubing Pressure (DWt) 750	(l) P_c = higher value of (j) or (k) 750	(m) Del. Pressure $P_d = 50\% P_c$ 375	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 143	Quotient of $\frac{\text{Item c}}{\text{Item d}}$.9840	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$.9920	Corrected Volume Q = 142 MCF/D
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WORKING PRESSURE CALCULATION

$(1 - e^{-n})$.340	$(F_c Q_m)^2 (1000)$ 5464	$R^2 = (1 - e^{-n}) (F_c Q_m)^2 (1000)$ 1858	P_t^2 94249	$P_w^2 = P_t^2 + R^2$ 96107	$P_w = \sqrt{P_w^2}$ 310
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DELIVERABILITY CALCULATION

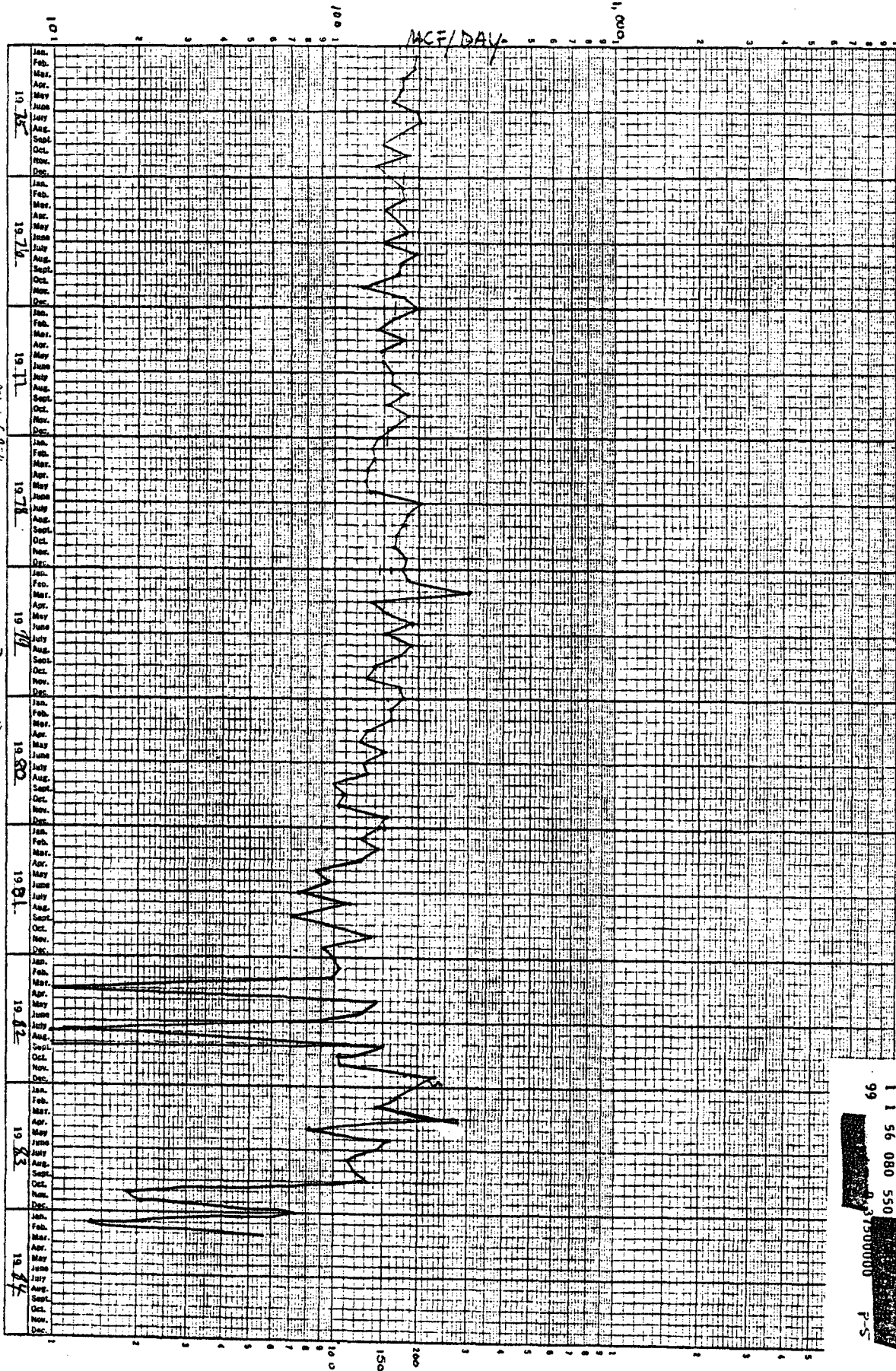
$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 142$	$\left[\frac{421875}{456393} \right]^n = .9045$	$\left[\frac{421875}{456393} \right]^n = .9275$	$= 132$ MCF/D
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REMARKS:

SUMMARY

Item h	305	Psia
P_c	750	Psia
Q	142	MCF/D
P_w	310	Psia
P_d	375	Psia
D	132	MCF/D

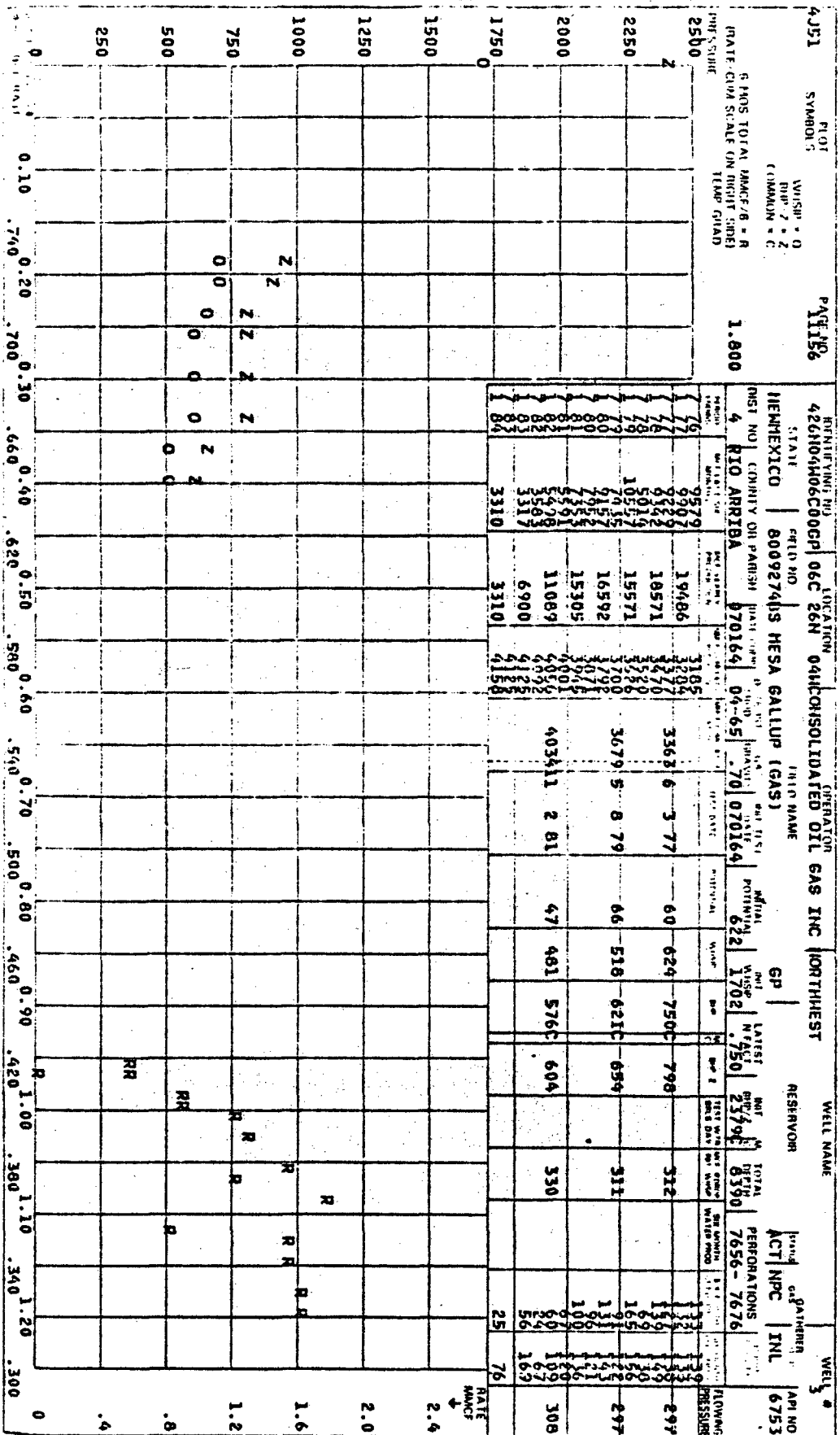
Company Consolidated Oil and Gas, Inc.
By *[Signature]*
Title
Witnessed By
Company



CONSOLIDATED OIL & GAS, INC.

1 1 56 080 550

99 17500000 P-5



OIL CONSERVATION DIVISION

P. O. BOX 2088

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

Form C-122-A
Revised 10-1-78WELL DELIVERABILITY TEST REPORT FOR 19 81

POOL NAME B.S. Mesa	POOL SLOPE n = .75	FORMATION Gallup	COUNTY Rio Arriba
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75082

COMPANY Consolidated Oil and Gas, Inc.			WELL NAME AND NUMBER Northwest #3 GL		
UNIT LETTER C	SECTION 6	TOWNSHIP 26	RANGE 4	PURCHASING PIPELINE Northwest Pipeline Corporation	
CASING O.D. - INCHES 5.500	CASING I.D. - INCHES 5.012	SET AT DEPTH - FEET 8390'	TUBING O.D. - INCHES 1.315	TUBING I.D. - INCHES 1.049	TOP - TUBING PERF. - FEET 7631'
GAS PAY ZONE FROM 7656' TO 7676'		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .733	GRAVITY X LENGTH 5594'
DATE OF FLOW TEST FROM Oct. 19 TO Oct. 26			DATE SHUT-IN PRESSURE MEASURED November 2, 1981		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a - c) or (b - c)	(g) Average Meter Pressure (Integr.)
363	307	306	312	-6	1	310
(h) Corrected Meter Pressure (g + e)	(i) Avg. Wellhead Press. $P_i = (h + f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k)	(m) Del. Pressure $P_d = \frac{80}{\%P_c}$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
304	305	481	460	481	385	

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
47	.9808	.9903	Q = 47 MCF/D

WORKING PRESSURE CALCULATION

$(1 - e^{-n})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1 - e^{-n}) (F_c Q_m)^2 (1000)$	P_i^2	$P_w^2 = P_i^2 + R^2$	$P_w = \sqrt{P_w^2}$
.334	5611	1874	93025	94899	308

DELIVERABILITY CALCULATION

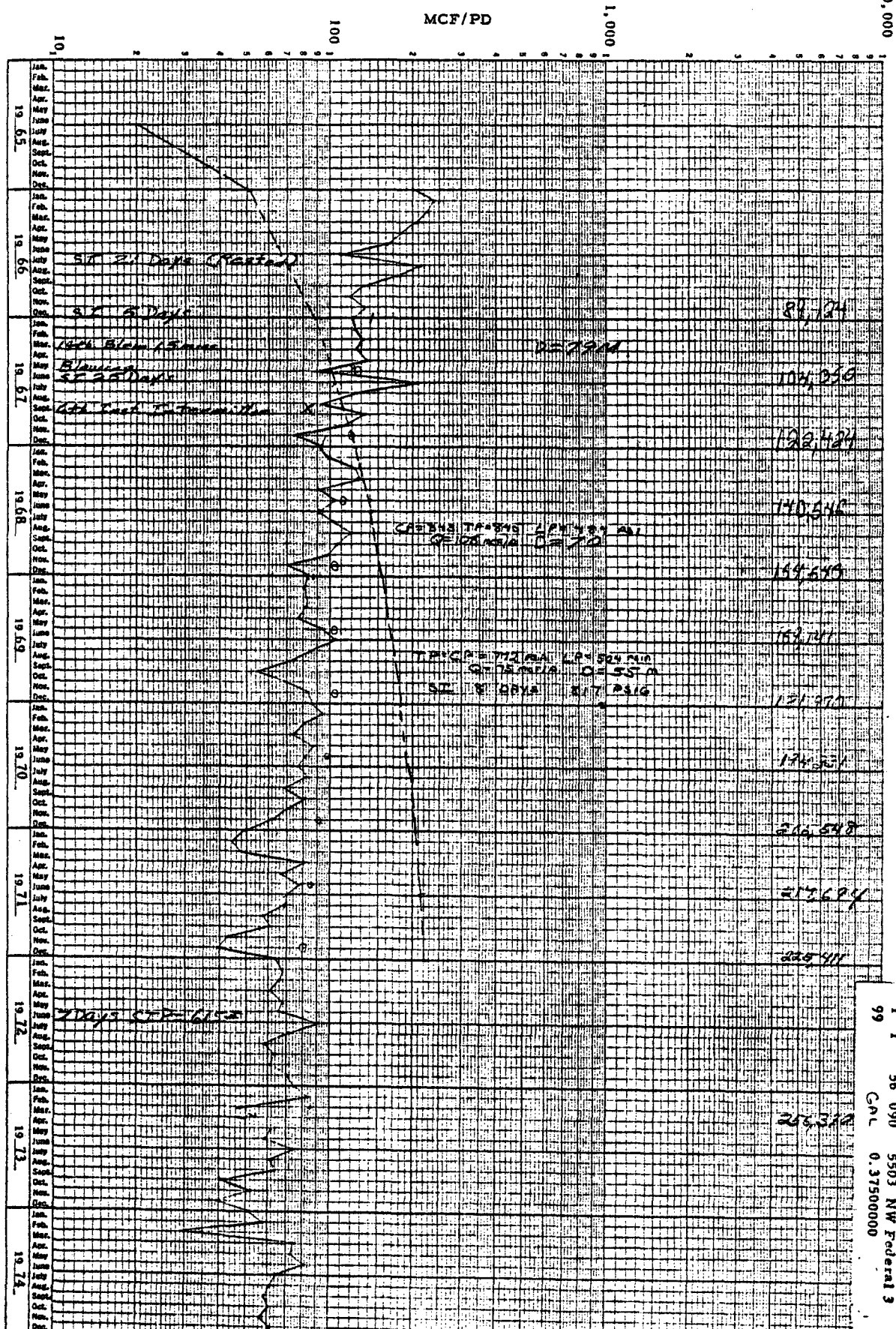
$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 47$	$\left[\frac{83136}{136462} \right]^n \left(.6092 \right)^n = .6896$	$= 32$ MCF/D
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REMARKS:

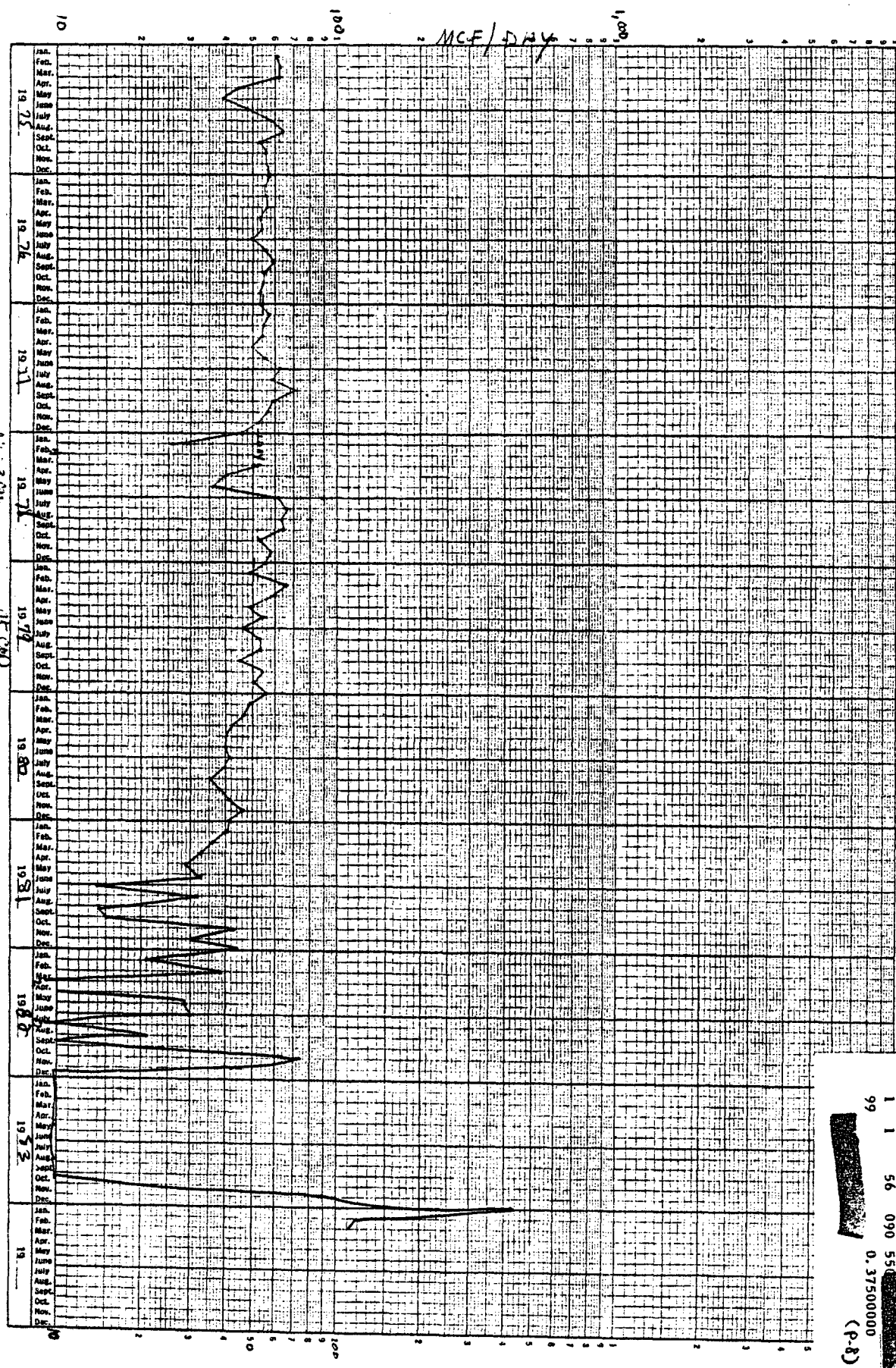
SUMMARY

Item b	304	P _{elm}
P _c	481	P _{elm}
Q	47	MCF/D
P _w	308	P _{elm}
P _d	385	P _{elm}
D	32	MCF/D

Company Consolidated Oil and Gas, Inc.
 By [Signature]
 Title _____
 Witnessed By _____
 Company _____



CONSOLIDATED OIL & GAS, INC.
 1 1 56 090 5503 NW Federal 3
 99 C/L 0.37500000



CONSOLIDATED OIL & GAS, INC.

1 1 56 090 55
99 0.37500000
(P-8)

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (f)

Due to the economics involved in acquiring measured bottom-hole pressures with a hole in the production tubing, we are submitting the latest Packer Leakage Test which did not fail in 1983.

George

OPERATOR COG		WELL NAME AND NUMBER NW 3		UNIT LETTER C	SEC. - TWP. - RGL. 6-26N-4W	COUNTY RA
UPPER COMPLETION GP		PRODUCING THRU Tbg		LOWER COMPLETION DK		PRODUCING THRU Tbg
DATE	UPPER ZONE SHUT-IN - 5 DAYS		INITIAL	LOWER ZONE SHUT-IN - 3 DAYS		
7-25	SHUT BOTH ZONES IN			SHUT BOTH ZONES IN		
	CSG	TBG				
7-26-83	780	768		798		
7-27-83	801	784		798		
7-28-83	802	789		803		
8-2 TURN ON LOWER ZONE AFTER CARD SIGNED 789			8-2	LOWER ZONE FLOW 803		
8-3-83	UPPER ZONE REMAINS SHUT-IN			DIFFERENTIAL 7.0		FLOWING PRESSURE
	CSG 802	TBG 789		STATIC 5.7		
8-4-83	UPPER ZONE REMAINS SHUT-IN			DIFFERENTIAL 7.4		FLOWING PRESSURE
	CSG 804	TBG 791		STATIC 65.		
TEST COMPLETED WHEN INITIALED →				PLATE SIZE 1,200	STATIC SPRING 1000	
REMARKS: sub 8-16-83						

327 MCFD

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (g)

We would like to request an exception to Rule 303C, Para. 2, Requirement (g). Analysis of fluids taken from this well in both zones would not be representative of reservoir fluids in each zone due to the tubing leak. We have not observed any problems with emulsions or precipitates forming in the surface facilities. Offset wells commingled to these two zones have not experienced any apparent problems. The following data is representative of the produced fluids in this well:

	GAS (s.g.)	OIL (API)	B.S. & W. (%)
DAKOTA	.698	63.5	0.0
GALLUP	.695	-	-

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (h)

We believe production will not decrease by commingling the Dakota and Gallup formations. The well has continued to produce satisfactorily despite existing line pressures and periods of shut in due to no demand. We do anticipate that production will remain the same or increase with additional gas volumes helping to lift produced liquids in the wellbore. Oil production from both zones is already commingled at the surface (Admin. Order # PC-248). Specific gravity of the Dakota gas is .698 with a heating value of 1204 BTU. Specific gravity of the Gallup gas is .695 with a heating value of 1222 BTU. The price of gas from both zones is currently \$1.15/MCF, so commingling will not reduce the sum of the values of the individual streams.

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (i)

We would like to allocate 76% gas and 100% oil to the Dakota and 24% gas and 0% oil to the Gallup formations, based on previous well production since 1964 and production decline curves. Percent of allocation was arrived from the total production from each zone from 1964 to June 1984. Oil production from the Gallup has dropped to zero in the recent production history of this well. This accounts for the zero allocation.

TOTAL PRODUCTION

	GAS (Mcf)	OIL (Bbls)
DAKOTA	1,327,984	15,992
GALLUP	424,058	3,478

PERCENT ALLOCATION

	GAS (%)	OIL (%)
DAKOTA	76	100
GALLUP	24	0 *

* Allocation for oil production was established in 1983 and is documented at the NMOCD.

NORTHWEST 3
Sec 6C, T26N, R4W

RE: Rule 303C, Para. 2, Requirement (j)

Certified letters of intent to commingle this well were sent to the attached list of offset operators, including the Bureau of Land Management. Sample copies of the letter and waiver are included.

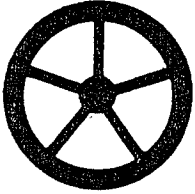
Consolidated Oil & Gas, Inc.
List of Offset Operators

NORTHWEST 3

El Paso Natural Gas Company
P. O. Box 990
Farmington, New Mexico 87499

Union Texas Petroleum Company
P. O. Box 1290
Farmington, New Mexico 87499

Bureau of Land Management
Caller Service 4104
Farmington, New Mexico 87499



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

October 16, 1984

El Paso Natural Gas Company
Attn: Mr. Don Walker
P. O. Box 990
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Downhole Commingling
for Consolidated Oil & Gas, Inc. Northwest 3, Basin Dakota
& B S Mesa Gallup Dual, 895' FNL & 1850' FWL, Sec 6C, T26N,
R4W, Rio Arriba Co., New Mexico

Dear Mr. Walker;

Consolidated Oil & Gas, Inc. has submitted an application to the New Mexico Oil Conservation Division, as outlined in NMOCD Rule 303C, to apply for approval to administratively commingle the Dakota and Gallup zones in the subject well. We are notifying your office of our intent, and would like you to sign and return each copy of the Waiver of Objection in the self addressed envelopes.

Please mail the waivers to Frank Chavez, New Mexico Oil Conservation Division, 1000 Rio Brazos Rd., Aztec, New Mexico 87410 and Dale Richardson, Consolidated Oil & Gas, Inc., P. O. Box 2038, Farmington, New Mexico 87499.

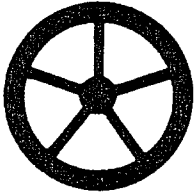
If you have any questions concerning this request please contact Wayne Converse at 632-8056.

Yours very truly,

Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

October 16, 1984

Union Texas Petroleum Company
Attn: Mr. Rudy Motto
P. O. Box 1290
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Downhole Commingling
for Consolidated Oil & Gas, Inc. Northwest 3, Basin Dakota
& B S Mesa Gallup Dual, 895' FNL & 1850' FWL, Sec 6C, T26N,
R4W, Rio Arriba Co., New Mexico

Dear Mr. Motto;

Consolidated Oil & Gas, Inc. has submitted an application to the New Mexico Oil Conservation Division, as outlined in NMOCD Rule 303C, to apply for approval to administratively commingle the Dakota and Gallup zones in the subject well. We are notifying your office of our intent, and would like you to sign and return each copy of the Waiver of Objection in the self addressed envelopes.

Please mail the waivers to Frank Chavez, New Mexico Oil Conservation Division, 1000 Rio Brazos Rd., Aztec, New Mexico 87410 and Dale Richardson, Consolidated Oil & Gas, Inc., P. O. Box 2038, Farmington, New Mexico 87499.

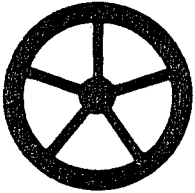
If you have any questions concerning this request please contact Wayne Converse at 632-8056.

Yours very truly,

Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

October 16, 1984

Bureau of Land Management
Attn: Area Manager
Caller Service 4104
Farmington, New Mexico 87499

Re: Waiver for Administrative Approval of Downhole Commingling
for Consolidated Oil & Gas, Inc. Northwest 3, Basin Dakota
& B S Mesa Gallup Dual, 895' FNL & 1850' FWL, Sec 6C, T26N,
R4W, Rio Arriba Co., New Mexico

Gentlemen:

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Yours very truly,

Dale Richardson
Production & Drilling Superintendent

DER:WLC:wc
Enclosures

cc: N. M. Oil Conservation Division, Santa Fe
N. M. Oil Conservation Division, Aztec

WAIVER OF OBJECTION AND
CONSENT TO COMMINGLE THE
DUAL COMPLETION

FOR CONSOLIDATED OIL & GAS, INC.

THE UNDERSIGNED, as an offset operator/lease holder of a lease

offsetting NORTHWEST 3, DK/MV Dual
 895' FNL & 1850' FWL
 Sec 6C, T26N, R4W
 Rio Arriba Co., New Mexico

Does hereby acknowledge receipt of the letter requesting approval
of commingling of the above captioned well.

The undersigned hereby waives any objection to this application
and voluntarily consents to the commingling of the above captioned
well.

SIGNED: _____

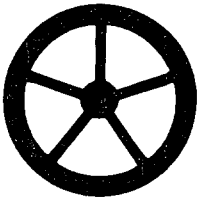
NAME: _____

TITLE: _____

FIRM: _____

DATE: _____

Please find enclosed self addressed envelopes. Mail one copy to
Frank Chavez, New Mexico Oil Conservation Division, 1000 Rio Brazos
Rd., Aztec, New Mexico 87410 and Dale Richardson, Consolidated Oil
& Gas, Inc., P. O. Box 2038, Farmington, New Mexico 87499



Consolidated Oil & Gas, Inc.

P. O. BOX 2038
FARMINGTON, NEW MEXICO 87499
(505) 632-8056

October 25, 1984

Mr. David Katnach
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Bottom Hole Pressures for NORTHWEST 3 & 4, Basin Dakota
& B S Mesa Gallup Commingling Applications, T26N, R4W,
Rio Arriba Co., New Mexico

Dear Mr. Katnach,

Enclosed are computation sheets for bottom hole pressures on the above referenced wells. The bottom hole pressure formula is from page 26 of Applied Petroleum Reservoir Engineering by B. C. Craft and M. F. Hawkins, 1959. Surface pressure data is taken from the 1983 packer leakage test on both wells.

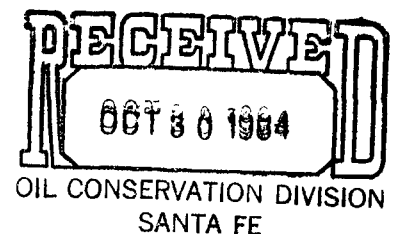
If you have any questions as to the source of the remaining data values, please give me a call at 632-8056.

Thank you for your assistance.

Sincerely,

Wayne L. Converse
Engineering Consultant

WLC:wc
Enclosures
cc: N. M. Oil Conservation Division, Aztec



Consolidated Oil & Gas, Inc.
Calculation for Bottom Hole Pressures
Basin Dakota/B S Mesa Gallup

NORTHWEST 3

Bottom Hole Pressure Formula:
$$\frac{(0.01875)(SG)(D)}{(Zave)(Tave)}$$

$$Pws = Pwh * e^{\frac{(0.01875)(SG)(D)}{(Zave)(Tave)}}$$

Pws - bottom-hole pressure, static
Pwh - wellhead surface pressure, shut-in
SG - specific gas gravity
D - Depth of tubing string or perfs
Zave - average gas deviation factor (compressibility factor)
Tave - average well temperature (midway point)

BASIN DAKOTA

Pwh = 803 psi (tbg)	$\frac{(0.01875)(.698)(8078)}{(.934)(591)}$
SG = .698	
D = 8078' (tbg)	Pws = 803 * e^
Zave = .934	
Tave = 591 (degrees Rankine)	= <u>973 psi</u>

B S MESA GALLUP

Pwh = 789 psi (tbg)	$\frac{(0.01875)(.695)(7631)}{(.954)(588)}$
SG = .695	
D = 7631' (tbg)	Pws = 789 * e^
Zave = .954	
Tave = 588 (degrees Rankine)	= <u>942 psi</u>

(Pressure corrected to 8078' Dakota mean depth, Pws = 951 psi)

- (a) Name and address of the operator.
- (b) Lease name, well number, well location, name of the pools to be commingled.
- (c) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.
- (d) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas, and water produced from each zone.
- (e) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be submitted.)
- (f) Estimated bottom-hole pressure for each artificially lifted zone. A current (within 30 days) measured bottom-hole pressure for each zone capable of flowing.
- (g) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the well-bore.
- (h) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams.
- (i) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula.
- (j) A statement that all offset operators and, in the case of a well on Federal land, the United States Geological Survey, have been notified in writing of the proposed commingling.

*Consolidated Oil & Gas
Northwest #3
C-6-26N-9W*



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 10/22/84

RE: Proposed MC _____
Proposed DHC ✓ _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated October 19, 1984
for the Consolidated Oil & Gas Inc. Northmont #3 C-6-26A-4W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Frank J. Chung

