

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE - Oct. 16, 1979

Operator El Paso Natural Gas Company		Lease Mudge #14A (PM)	
Location NW 21-31-11		County San Juan	State New Mexico
Formation Pictured Cliff		Pool Aztec Ext.	
Casing: Diameter 4.500	Set At: Feet 5230	Tubing: Diameter 1 1/4	Set At: Feet 2608
Pay Zone: From 2514	To 2634	Total Depth: 5230	Shut In 9-27-79
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365	
Shut-in Pressure, Casing, PSIG 753	+ 12 = PSIA 765	Days Shut-In 19	Shut-in Pressure, Tubing PSIG 677
Flowing Pressure: P PSIG 24	+ 12 = PSIA 36	Working Pressure: P <sub>w</sub> PSIG 338	+ 12 = PSIA 350
Temperature: T = 52 °F	F <sub>t</sub> = 1.008	F <sub>pv</sub> (From Tables) 1.004	Gravity .670 F <sub>g</sub> = .9463

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365)(36)(1.008)(.9463)(1.004) = 426 \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = Q \left( \frac{585225}{462725} \right)^{.85} = (1.2647)^{.85} (426) = (1.2210)(426)$$

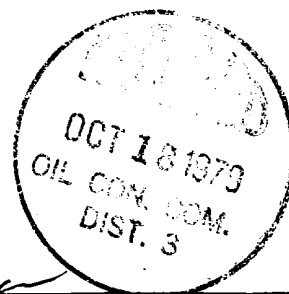
NOTE: Well Surging and Unloading Water Throughout Test, Well Vented 46 MCF/D to The Atmosphere.

$$Aof = 520 \text{ MCF/D}$$

TESTED BY C. Rhames

WITNESSED BY

*C. R. Wagner*  
Well Test Engineer



Adopted  
1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION  
PACKER SETTING REPORT


F-21-31-11

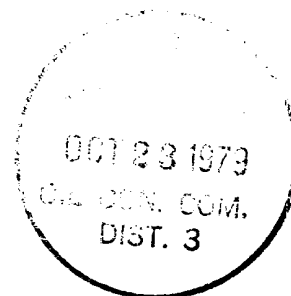
I, C.W. Dein, being of lawful age and having full  
*Name of party making report*  
knowledge of the facts hereinbelow set out do state:

That I am employed by El Paso Natural Gas Company in the capacity of  
Petroleum Engineer, that on September 27, 1979

I personally supervised the setting of a Baker Locator Seal Assembly in PBR  
*Make & type of packer*  
in EPNG, Mudge,  
*Operator of well* *Lease name*  
Well no. 14A (PM) located in the Aztec PC Ext. & Blanco MV field,  
San Juan county, state of New Mexico, at a subsurface depth of  
5078 feet, said depth measurement having been furnished me by  
Pipe Record;

That the purpose of setting this packer was to effect a seal in the annular space between two strings of pipe where the packer was set so as to prevent the commingling, in the bore of this well, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer; that this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

  
*(Signature)*  
Petroleum Engineer  
*(Title)*  
22 Oct 79  
*(Date)*

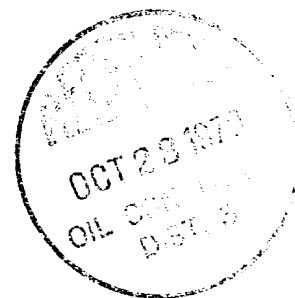


# EL PASO NATURAL GAS CO.

## DEVIATION REPORT

Name of Company El Paso Natural Gas Company		Address P. O. Box 289, Farmington, New Mexico 87401			
Lease Mudge	Well No. 14A(PM)	Unit F	Sec. 21	Township 31-N	Range 11-W
Pool Aztec PC. Ext. & Blanco Mesa Verde			County San Juan		

DEPTH	DEVIATION
225'	0°
730'	1/2°
1300'	1/2°
1829'	1/2°
2045'	3/4°
2550'	1°
2880'	3/4°
3385'	3/4°
3890'	3/4°
4050'	3/4°
4561'	3/4°
4808'	1°
5230'	3/4°



I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.

*W. H. Lawrence*

Subscribed and sworn to before me this 18th day of October, 19 79.

*Nora G. Lucero*

Notary Public in and for San Juan County, New Mexico

My Commission expires, October 5, 1980

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other in-  
structions on  
reverse side)Form approved,  
Budget Bureau No. 42-R355.5.5. LEASE DESIGNATION AND SERIAL NO.  
SF078096

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Mudge

9. WELL NO.

14A (PM)

10. FIELD AND POOL, OR WILDCAT

Aztec PC Ext. Blanco MV

11. SEC. T., R., M., OR BLOCK AND SURVEY  
OR AREASec. 21, T-31-N, R-11-W  
N.M.P.M.12. COUNTY OR  
PARISH  
San Juan13. STATE  
New Mexico

1a. TYPE OF WELL:

OIL  
WELL ☐GAS  
WELL ☒DRY ☐

Other \_\_\_\_\_

b. TYPE OF COMPLETION:

NEW  
WELL ☒WORK  
OVER ☐DEEP-  
EN ☐PLUG  
BACK ☐DIFF.  
RESVR. ☐

Other \_\_\_\_\_

2. NAME OF OPERATOR

El Paso Natural Gas Company

3. ADDRESS OF OPERATOR

Box 289, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1560'N, 1685'W

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

4-6-79

16. DATE T.D. REACHED

4-15-79

17. DATE COMPL. (Ready to prod.)

10-16-79

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

5904' GL

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD &amp; TVD

5230'

21. PLUG, BACK T.D., MD &amp; TVD

5213'

22. IF MULTIPLE COMPL.,  
HOW MANY\*23. INTERVALS  
DRILLED BY

ROTARY TOOLS

0-5230'

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

4523-5151' (MV) 2514-2634' (PC)

25. WAS DIRECTIONAL  
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

CDL-GR; IEL-GR; Temp. Survey

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	219'	13 3/4"	224 cf.	
7 "	20#	2889'	8 3/4"	462 cf.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4 1/2"	2734'	5230'	222 cf.		2 3/8"	5111'	2744'
					1 1/4"	2607'	

31. PERFORATION RECORD (Interval, size and number) 2514-2526,  
2530-2540, 2546-2562, 2571-2580, 2592-2600,  
2616-2634' W/14 SPZ. 4523, 4530, 4544, 4553, 4610,  
4718, 4755, 4761, 4767, 4772, 4784, 4790, 4804, 4810,  
4816, 4822, 4847, 4865, 4872, 4892, 4922, 4964, 4978,  
5029, 5052, 5090, 5103, 5151' W/1 SPZ.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2514-2634'	73,500# sd, 83,500 gal. wtr.
4523-5151'	106,500#sd, 213,000 gal. wtr.

33.\* PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

Flowing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
MV 10-9-79 PC 10-16-79	3 hours	3/4 variable					
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
SI MV 801 SI PC 689	SI 765			MV 12,193 PC 520			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY  
MV L. Fothergill  
PC C. Rhames

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

J. G. Brisco

TITLE Drilling Clerk

DATE October 18, 1979

\*(See Instructions and Spaces for Additional Data on Reverse Side)

NMCCO

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
				P.C.	2510'	
				M.V.	4040'	
				P.L.	4744'	

## OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

API 30-045-23178

NO. OF COPIES RECEIVED	5
EXEMPTION	
DATE	
FILE	
U.S.G.	
LAND OFFICE	
TRANSPORTED	<input checked="" type="checkbox"/> OIL <input checked="" type="checkbox"/> GAS
OPERATOR	
REGISTRATION OFFICE	

El Paso Natural Gas Company

Address

Box 289, Farmington, New Mexico 87401

Reason(s) for filing (Check proper box)

New Well	<input checked="" type="checkbox"/>	Change in Transporter of:	
Recompletion	<input type="checkbox"/>	Oil	<input type="checkbox"/>
Change in Ownership	<input type="checkbox"/>	Casinghead Gas	<input type="checkbox"/>
		Dry Gas	<input type="checkbox"/>
		Condensate	<input type="checkbox"/>

Other (Please explain)

If change of ownership give name  
and address of previous owner

## II. DESCRIPTION OF WELL AND LEASE

Lease Name Mudge	Well No. 14A	Pool Name, including Formation Aztec P.C. Ext.	Kind of Lease State, Federal <del>Other</del>	Lease No. SF078096
Location				
Unit Letter F	1560	Feet From The North	Line and 1685	Feet From The West
Line of Section 21	Township 31-North	Range 11-West	San Juan County	

## III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)	
El Paso Natural Gas Company	Box 289, Farmington, New Mexico 87401	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)	
El Paso Natural Gas Company	Box 289, Farmington, New Mexico 87401	
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 21
	Twp. 31-N	Rge. 11-W
	Is gas actually connected? When	

If this production is commingled with that from any other lease or pool, give commingling order number:

## IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resist.	Diff. Resist.
		X	X					
Date Spudded 4-6-79	Date Compl. Ready to Prod. 10-16-79	Total Depth 5230'	P.B.T.D. 5213'					
Elevations (DF, RAB, RT, GR, etc.) 5904' GL	Name of Producing Formation Pictured Cliffs	Top Gas Pay 2514'	Tubing Depth 2607'					
Perforations 2514-2526, 2530-2540, 2546-2562, 2571-2580, 2592-2600, 2616-2634'	Depth Casing Shoe 5230'							
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
13 3/4"	9 5/8"	219'	224 cf.					
8 3/4"	7"	2889'	462 cf.					
6 1/4"	4 1/2" Liner	2734-5230'	222 cf.					
	1 1/4"	5111'	tubing					

## V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

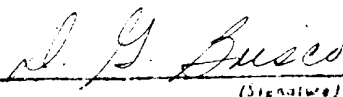
Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-ACF

## GAS WELL

Actual Prod. Test-MCF/D 520	Length of Test 3 hours	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.) Calc. A.O.F.	Tubing Pressure (Shot-in) 689	Casing Pressure (Shot-in) 765	Choke Size 3/4 variable

## CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
(Signature)

Drilling Clerk

(Title)

October 18, 1979

(Date)

## OIL CONSERVATION DIVISION

APPROVED BY 

TITLE

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Form C-104 must be filed for each pool in multiply completed wells.

OIL CONSERVATION DIVISION  
P. O. BOX 2000  
SANTA FE, NEW MEXICO 87501REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

API 30-045-23178

NO. OF SPACES REQUESTED	5
DISTRIBUTION	
SALE AREA	
FILE	
USE OF	
LAND OFFICE	
TRANSPORTER	
OPERATOR	
REGISTRATION OFFICE	

Operator El Paso Natural Gas Company	
Address Box 289, Farmington, New Mexico 87401	
Reason(s) for filing (check proper box)	Other (Please explain)
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>

If change of ownership give name  
and address of previous owner \_\_\_\_\_

## II. DESCRIPTION OF WELL AND LEASE

Lease Name Mudge	Well No. 14 A	Pool Name, including Formation Blanco Mesa Verde	Kind of Lease <del>State</del> , Federal <del>Lease</del>	Lease No. SF078096
Location Unit Letter <u>F</u> ; <u>1560</u> Feet From The <u>North</u> Line and <u>1685</u> Feet From The <u>West</u> Line of Section <u>21</u> Township <u>31-N</u> Range <u>11-W</u> , NMPL, San Juan County				

## III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) El Paso Natural Gas Company Box 289, Farmington, New Mexico 87401	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) El Paso Natural Gas Company Box 289, Farmington, New Mexico 87401	
If well produces oil or liquids, give location of tanks.	Unit F	Sec. 21
	Twp. 31-N	Rge. 11-W
	Is gas actually connected? _____ When _____	

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

## IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug back	Some Instv.	Unit. Instv.
		X	X					
Date Spudded 4-6-79	Date Compl. Ready to Prod. 10-16-79		Total Depth 5230		P.B.T.D. 5213'			
Elevations (DF, RKB, RT, GR, etc.) 5904'	Name of Producing Formation Mesa Verde		Top Oil/Gas Pay 4523'		Tubing Depth 5111'			
Perforations 4523, 4530, 4544, 4553, 4610, 4718, 4755, 4761, 4767, 4772, 4784, 4790, 4804, 4810, 4816, 4822, 4865, 4872, 4892, 4922, 4964, 4978, 5029, 5052, 5090, 5103, 5151' W/1 SPZ.					Depth Casing Shoe 5230'			
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
13 3/4"	9 5/8"		219'		224 cf.			
8 3/4"	7"		2889'		462 cf.			
6 1/4"	4 1/2" Liner		2734-5230'		222 cf.			
	2 3/8"		5111'		tubing			

## V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

## GAS WELL

Actual Prod. Test - MCF/D 12,193	Length of Test 3 hours	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (spot, back pr.) Calc. A.O.F.	Tubing Pressure (shut-in) 801	Casing Pressure (shut-in)	Choke Size 3/4 variable

## VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

A. G. Guisco  
(Signature)

Drilling Clerk

(Title)

October 18, 1979

(Date)

## OIL CONSERVATION DIVISION

APPROVED \_\_\_\_\_, 19\_\_\_\_  
Original \_\_\_\_\_  
BY \_\_\_\_\_

TITLE \_\_\_\_\_

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation facts taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter or other such change of condition.

Separate Forms C-104 must be filed for each pool in suitably recompleted wells.

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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

### REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I. Operator Amoco Production Company		Well API No. 3004523178
Address 1670 Broadway, P. O. Box 800, Denver, Colorado 80201		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	
Recompletion <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
Change in Operator <input checked="" type="checkbox"/>		
If change of operator give name and address of previous operator Tenneco Oil E & P, 6162 S. Willow, Englewood, Colorado 80155		

### II. DESCRIPTION OF WELL AND LEASE

Lease Name MUDGE LS	Well No. 14A	Pool Name, Including Formation BLANCO (PICTURED CLIFFS)	FEDERAL	Lease No. SF078096
Location Unit Letter F 1560 Feet From The FNL Line and 1685 Feet From The FWL Line Section 21 Township 31N Range 11W, NMPM, SAN JUAN County				

### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
EL PASO NATURAL GAS COMPANY	P. O. BOX 1492, EL PASO, TX 79978					
If well produces oil or liquids, give location of tanks.	Unit	Soc.	Twp.	Rge.	Is gas actually connected?	When?

If this production is commingled with that from any other lease or pool, give commingling order number:

### IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RI, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

### V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF
GAS WELL			
Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

*J. L. Hampton*  
Signature

J. L. Hampton

Sr. Staff Admin. Suprv.

Printed Name

January 16, 1989

Date

303-830-5025

Telephone No.

### OIL CONSERVATION DIVISION

Date Approved MAY 08 1989

By

*[Signature]*  
SUPERVISION DISTRICT # 3

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.



DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

### REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator <b>Amoco Production Company</b>		Well API No. <b>3004523178</b>
Address <b>1670 Broadway, P. O. Box 800, Denver, Colorado 80201</b>		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	
Recompletion <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
Change in Operator <input checked="" type="checkbox"/>		
If change of operator give name and address of previous operator <b>Tenneco Oil E &amp; P, 6162 S. Willow, Englewood, Colorado 80155</b>		

### II. DESCRIPTION OF WELL AND LEASE

Lease Name <b>MUDGE LS</b>	Well No. <b>14A</b>	Pool Name, including Formation <b>BLANCO (MESAVERDE)</b>	FEDERAL	Lease No. <b>SF078096</b>
Location Unit Letter <b>F</b> : <b>1560</b> Feet From The <b>FNL</b> Line and <b>1685</b> Feet From The <b>FWL</b> Line Section <b>21</b> Township <b>31N</b> Range <b>11W</b> , <b>NMPM</b> , <b>SAN JUAN</b> County				

### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> <b>CONOCO</b>	Address (Give address to which approved copy of this form is to be sent) <b>P. O. BOX 1429, BLOOMFIELD, NM 87413</b>	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> <b>EL PASO NATURAL GAS COMPANY</b>	Address (Give address to which approved copy of this form is to be sent) <b>P. O. BOX 1492, EL PASO, TX 79978</b>	
If well produces oil or liquids, give location of tanks.	Unit	Sec.
	Twp.	Rge.
		Is gas actually connected? When?

If this production is commingled with that from any other lease or pool, give commingling order number:

### IV. COMPLETION DATA

Designate Type of Completion - (X)	<input type="checkbox"/> Oil Well	<input type="checkbox"/> Gas Well	<input type="checkbox"/> New Well	<input type="checkbox"/> Workover	<input type="checkbox"/> Deepen	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Same Res v	<input type="checkbox"/> Diff Res v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
HOLE SIZE		TUBING, CASING AND CEMENTING RECORD		DEPTH SET		SACKS CEMENT		
		CASING & TUBING SIZE						

### V. TEST DATA AND REQUEST FOR ALLOWABLE

**OIL WELL** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

### GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

*J. L. Hampton*  
Signature

J. L. Hampton

Sr. Staff Admin. Suprv.

Printed Name

January 16, 1989

Date

303-830-5025

Telephone No.

### OIL CONSERVATION DIVISION

Date Approved **MAY 08 1989**

By *[Signature]*

Title **SUPERVISION DISTRICT # 3**

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

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

Form C-104  
Revised 10-01-78  
Format 06-01-83  
Page 1

NO. OF COPIES RECEIVED	
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OPERATOR	GAS
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REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I. Operator <b>Tenneco Oil Company</b>		<b>RECEIVED</b> SEP 06 1985 OIL CON. DIV. DIST. 3
Address <b>P. O. Box 3249, Englewood, CO 80155</b>		
Reason(s) for filing (Check proper box)	Other (Please explain)	
<input type="checkbox"/> New Well <input type="checkbox"/> Recompletion <input checked="" type="checkbox"/> Change in Ownership	Change in Transporter of: <input type="checkbox"/> Oil <input type="checkbox"/> Casinghead Gas <input checked="" type="checkbox"/> Dry Gas <input checked="" type="checkbox"/> Condensate	Well Name

If change of ownership give name and address of previous owner **El Paso Natural Gas, P.O. Box 4990, Farmington, NM 87499**

II. DESCRIPTON OF WELL AND LEASE

Lease Name <b>Mudge LS</b>	Well No. <b>14 A</b>	Pool Name, Including Formation <b>Aztec-PC Ext.</b>	Kind of Lease State, Federal or Fee <b>USA SF</b>	Lease No. <b>078096</b>
Location Unit Letter <b>F</b> : <b>1560</b> Feet From The <b>N</b> Line and <b>1685</b> Feet From The <b>W</b> Line of Section <b>21</b> Township <b>31N</b> Range <b>11W</b> NMPM, <b>San Juan</b> County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil or Condensate <input checked="" type="checkbox"/> <b>Conoco Inc. Surface Transportation</b>	Address (Give address to which approved copy of this form is to be sent) <b>P. O. Box 460, Hobbs, NM 88240</b>					
Name of Authorized Transporter of Casinghead Gas or Dry Gas <input checked="" type="checkbox"/> <b>El Paso Natural Gas</b>	Address (Give address to which approved copy of this form is to be sent) <b>P. O. Box 4990, Farmington, NM 87499</b>					
If well produces oil or liquids, give location of tanks.	Unit <b>F</b>	Sec. <b>21</b>	Twp. <b>31N</b>	Rge. <b>11W</b>	Is gas actually connected? <b>Yes</b>	When

If this production is commingled with that from any other lease or pool, give commingling order number

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

*Loth McKinnis*  
(Signature)  
**Sr. Regulatory Analyst**

**SEP 1 1985**

(Date)

OIL CONSERVATION DIVISION  
APPROVED **SEP 06 1985**  
BY *Frank J. Dwyer*  
TITLE **SUPERVISOR DISTRICT 3**

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Section I, II, III, and VI for changes of owner, well name and or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

# IV. COMPLETION DATA

Designate Type of Completion — (X)		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	DMT, Page V
------------------------------------	--	----------	----------	----------	----------	--------	-----------	------------	-------------

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (D.F., RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations		Depth Casing Shoe	

## TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

## V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.
	Gas - MCF	Choke Size

## GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

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

Form C-104  
Revised 10-01-78  
Format 06-01-83  
Page 1

NO. OF COPIES RECEIVED	
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TRANSPORTER	OIL
	GAS
OPERATOR	
PRORATION OFFICE	

REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator <b>Tenneco Oil Company</b>		SEP 06 1985 OIL CON. DIV. REC'D
Address <b>P. O. Box 3249, Englewood, CO 80155</b>		
Reason(s) for filing (Check proper box)		Other (Please explain)
<input type="checkbox"/> New Well <input type="checkbox"/> Recompletion <input checked="" type="checkbox"/> Change in Ownership	Change in Transporter of: <input type="checkbox"/> Oil <input type="checkbox"/> Casinghead Gas	<input type="checkbox"/> Dry Gas <input checked="" type="checkbox"/> Condensate Well Name

If change of ownership give name and address of previous owner **El Paso Natural Gas, P.O. Box 4990, Farmington, NM 87499**

II. DESCRIPTION OF WELL AND LEASE

Lease Name <b>Mudge LS</b>	Well No. <b>14 A</b>	Pool Name, Including Formation <b>Blanco-MV</b>	Kind of Lease State, Federal or Fee <b>USA SF</b>	Lease No. <b>078096</b>
Location				
Unit Letter <b>F</b>	<b>1560</b>	Feet From The <b>N</b>	Line and <b>1685</b>	Feet From The <b>W</b>
Line of Section <b>21</b>	Township <b>31N</b>	Range <b>11W</b>	NMPM. <b>San Juan</b> County	

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>Conoco Inc. Surface Transportation</b>	<b>P. O. Box 460, Hobbs, NM 88240</b>
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>El Paso Natural Gas</b>	<b>P. O. Box 4990, Farmington, NM 87499</b>
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When
Unit <b>F</b> Sec. <b>21</b> Twp. <b>31N</b> Rge. <b>11W</b>	<b>Yes</b>

If this production is commingled with that from any other lease or pool, give commingling order number

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

*Scott McKinnis*  
(Signature)  
Sr. Regulatory Analyst

SEP 1 1985

(Date)

OIL CONSERVATION DIVISION  
APPROVED *Frank J. Dwyer* SEP 06 1985  
BY  
TITLE **SUPERVISOR DISTRICT # 3**

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Section I, II, III, and VI for changes of owner, well name and or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

# IV. COMPLETION DATA

Designate Type of Completion — (X)		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Drl. Resv.
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.						
Elevations (D.F., RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth	Perforations					
				TUBING, CASING, AND CEMENTING RECORD					
HOLE SIZE		CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

# V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

# GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

# OIL CONSERVATION DIVISION

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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

## REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

### I.

Operator AMOCO PRODUCTION COMPANY	Well API No. 300452317800
Address P.O. BOX 800, DENVER, COLORADO 80201	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of: <input type="checkbox"/>
Recompletion <input type="checkbox"/>	Oil <input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator	

### II. DESCRIPTION OF WELL AND LEASE

Lease Name MUDGE LS	Well No. 14A	Pool Name, Including Formation AZTEC PICTURED CLIFFS (GAS)	Kind of Lease State, Federal or Fee	Lease No.
Location Unit Letter <u>F</u> : <u>1560</u> Feet From The <u>FNL</u> Line and <u>1685</u> Feet From The <u>FWL</u> Line Section <u>21</u> Township <u>31N</u> Range <u>11W</u> , <u>NMPM</u> , <u>SAN JUAN</u> County				

### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
MERIDIAN OIL INC.	3535 EAST 30TH STREET, FARMINGTON, NM 87401
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS COMPANY	P.O. BOX 1492 EL PASO, TX 79978
If well produces oil or liquids, give location of tanks.	Is gas actually coalesced? <input type="checkbox"/> When?

If this production is commingled with that from any other lease or pool, give commingling order number:

### IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations								
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET					
			AUG 23 1990					
			OIL CON. DIV					
			DIST. 3					

### V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

### GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (piston, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Doug W. Whaley  
Signature  
Doug W. Whaley, Staff Admin. Supervisor  
Printed Name  
July 5, 1990  
Date  
303-830-4280  
Telephone No.

### OIL CONSERVATION DIVISION

Date Approved AUG 23 1990  
By [Signature]  
Title SUPERVISOR DISTRICT #3

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

Operator AMOCO PRODUCTION COMPANY		Well API No. 300452317800
Address P.O. BOX 800, DENVER, COLORADO 80201		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of:	
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	<input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name HUDGE LS	Well No. 14A	Pool Name, Including Formation BLANCO MESAVERDE (PRORATED GAS)	Kind of Lease State, Federal or Fee	Lease No.
Location Unit Letter F : 1560 Feet From The FNL Line and 1685 Feet From The FWL Line				
Section 21 Township 31N Range 11W, NMPM, SAN JUAN County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)	
MERIDIAN OIL INC.	3535 EAST 30TH STREET, FARMINGTON, NM 87401	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)	
EL PASO NATURAL GAS COMPANY	P.O. BOX 1492, EL PASO, TX 79978	
If well produces oil or liquids, give location of tanks.	Unit	Soc.
	Twp.	Rge.
	Is gas actually connected? When?	

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH S		CIMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for the test, or 24 hours)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature D. W. Whaley  
Printed Name Doug W. Whaley, Staff Admin. Supervisor  
Date July 5, 1990 Telephone No. 303-830-4280

OIL CONSERVATION DIVISION

Date Approved AUG 23 1990  
By [Signature]  
Title SUPERVISOR DISTRICT #3

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

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OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

I.

Operator AMOCO PRODUCTION COMPANY	Well API No. 3004523178
Address P.O. BOX 800, DENVER, COLORADO 80201	
Reason(s) for Filing (Check proper box) <input checked="" type="checkbox"/> Other (Please explain) New Well <input type="checkbox"/> Change in Transporter of: Recompletion <input type="checkbox"/> Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> NAME CHANGE - Mudge. LS #144 Change in Operator <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name MUDGE /B/	Well No. 14A	Pool Name, Including Formation AZTEC (PICTURED CLIFFS)	Kind of Lease FEDERAL	Lease No. SF078096
Location Unit Letter F : 1560 Feet From The ENL Line and 1685 Feet From The FWL Line Section 21 Township 31N Range 11W, NMPM, SAN JUAN County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/> CONOCO	Address (Give address to which approved copy of this form is to be sent) P.O. BOX 1429, BLOOMFIELD, NM 87413					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> EL PASO NATURAL GAS COMPANY	Address (Give address to which approved copy of this form is to be sent) P.O. BOX 1492, EL PASO, TX 79978					
If well produces oil or liquids, give location of tanks.	Unit	Soc.	Twp.	Rge.	Is gas actually connected?	When?

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations			Depth Casing Shoe					
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	RECEIVED OCT 29 1990
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	OIL CON. DIV. DIST. 3
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Doug W. Whaley  
Doug W. Whaley, Staff Admin. Supervisor  
Printed Name  
Date October 22, 1990  
Telephone No. 303-830-4280

OIL CONSERVATION DIVISION

OCT 29 1990

Date Approved

By

SUPERVISOR DISTRICT #3

Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.



Submit 5 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

Operator AMOCO PRODUCTION COMPANY		Well API No. 3004523178
Address P.O. BOX 800, DENVER, COLORADO 80201		
Reason(s) for Filing (Check proper box) <input checked="" type="checkbox"/> Other (Please explain) NAME CHANGE - Mudge LS #14A		
New Well <input type="checkbox"/>	Change in Transporter of: Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
Recompletion <input type="checkbox"/>		
Change in Operator <input type="checkbox"/>		

If change of operator give name and address of previous operator \_\_\_\_\_

II. DESCRIPTION OF WELL AND LEASE

Lease Name MUDGE /B/	Well No. 14A	Pool Name, Including Formation BLANCO (MESAVERDE)	Kind of Lease FEDERAL	Lease No. SF078096
Location Unit Letter F : 1560 Feet From The FNL Line and 1685 Feet From The FWL Line Section 21 Township 31N Range 11W, NMPM, SAN JUAN County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/> GONGOO	Address (Give address to which approved copy of this form is to be sent) P.O. BOX 1429, BLOOMFIELD, NM 87413					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> EL PASO NATURAL GAS COMPANY	Address (Give address to which approved copy of this form is to be sent) P.O. BOX 1492, EL PASO, TX 79978					
If well produces oil or liquids, give location of tanks.	Unit	Soc.	Twp.	Rge.	Is gas actually connected?	When?

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Xiff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)			
Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas - MCF OCT 29 1990
GAS WELL			
Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature D. W. Whaley  
Doug W. Whaley, Staff Admin. Supervisor  
Printed Name  
October 22, 1990  
Date  
303-830-4280  
Telephone No.

OIL CONSERVATION DIVISION

Date Approved OCT 29 1990  
By Burt D. Shum  
SUPERVISOR DISTRICT #3  
Title \_\_\_\_\_

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO  
ENERGY and MINERALS DEPARTMENT

Location of Well: F213111 Page 1

OIL CONSERVATION DIVISION  
NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator: AMOCO PRODUCTION COMPANY Lease/Well #: MUDGE B 014A  
Meter #: 90801 RTU: 2-109-05 County: SAN JUAN

	NAME RESERVOIR OR POOL	TYPE PROD	METHOD PROD	MEDIUM PROD
UPR COMP	MUDGE LS 014A APC 90800	GAS	FLOW	TBG
LWR COMP	MUDGE LS 014A BMV 90801	GAS	FLOW	TBG

PRE-FLOW SHUT-IN PRESSURE DATA

	Hour/Date Shut-In	Length of Time Shut-In	SI Press. PSIG	Stabilized
UPR COMP	06/01/92	132	445	yes
LWR COMP	06/01/92	145	241	yes

FLOW TEST DATE NO.1

Commenced at (hour, date)\*

				Zone Producing (Upr/Lwr)	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		Prod Temp.	REMARKS
		Upper	Lower		
06/01/92	Day 1				Both Zones SI
06/02/92	Day 2				Both Zones SI
06/03/92	Day 3				Both Zones SI
06/04/92	Day 4				flowed lower zone
06/05/92	Day 5				"
06/06/92	Day 6				"

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ BBLs in \_\_\_\_\_ Hrs \_\_\_\_\_ Grav \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: \_\_\_\_\_ MFCPD: Tested thru (Orifice or Meter): METER

MID-TEST SHUT-IN PRESSURE DATA

	Hour, Date SI	Length of Time SI	SI Press. PSIG	Stabilized (yes/no)
UPR COMP	06/02/92	140	438	no
LWR COMP		105	21	no

(Continue on reverse side)

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OIL CON. DIV.  
DIST. 3

# FLOW TEST NO. 2

Commenced at (hour, date) **				Zone producing (Upper or Lower):	
TIME (hour, date)	LAPSED TIME SINCE **	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower Completion		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MCFPD: Tested thru (Orifice or Meter): \_\_\_\_\_

Remarks: \_\_\_\_\_

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

Approved JUN 22 1992 19 \_\_\_\_\_  
New Mexico Oil Conservation Division

Operator Amoco Prod.

By W. H. Williams

By \_\_\_\_\_  
Special Agent in Charge, OCS

Title field tech

Title DEPUTY OIL & GAS INSPECTOR, DIST. #3

Date 6/17/92

## NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Division.

2. At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Division in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.

3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.

4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: if, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.

5. Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.

6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except

that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.

7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at time intervals as follows: 3 hours tests: immediately prior to the beginning of each flow-period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.

24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures as required above being taken on the gas zone.

8. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Asset District Office of the New Mexico Oil Conservation Division on Northwest New Mexico Packer Leakage Test Form Revised 10-01-78 with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only).



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

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SEP 16 1993

**OIL CON. DIV.**  
**DIST. 3**

**COMMINGLING ORDER PC-840**

Amoco Production Company  
P.O. Box 800  
Denver, CO 80201

Attention: J.W. Hawkins

**LEASE NAME:** *Mudge "B" Well No. 14-A*

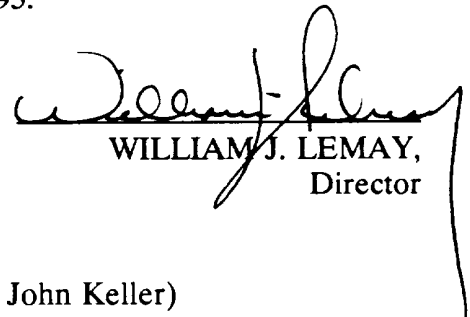
**DESCRIPTION:** *Blanco Mesaverde: N/2 and, Blanco Pictured Cliffs: NW/4 of Section 21, Township 31 North, Range 11 West, San Juan County, New Mexico.*

The above-named company is hereby authorized to commingle Blanco Mesaverde and Blanco Pictured Cliffs Pool production in a common separator and meter run, and to determine the production from each pool by well tests to be conducted on a bi-annual basis. (All commingled production must be of marginal nature; further, the operator shall notify the Santa Fe office of the Division in the event any well in the commingled battery becomes capable of top allowable production, at which time the Division will amend this order or take such other action as may be appropriate.

**FURTHER:** The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

**NOTE:** This installation shall be installed and operated in accordance with the applicable provisions of Rule 303 of the Division Rules and Regulations and the Division "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

DONE at Santa Fe, New Mexico, on this 1st day of September, 1993.

  
WILLIAM J. LEMAY,  
Director

cc: Oil Conservation Division- Hobbs  
US Bureau of Land Management - Farmington (Attention: John Keller)