Forin 3 160-5 (June 1990)	DEPARTMENT/C	O STATES OF THE INTERIOR ID MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 3.1,1993 5. Lease Designation and Seriai No.
Do not use this form	n for proposals to drill or	D REPORTS ON WELLS to deepen or reentry to a different learning to the second s	reservoir.
	SUBMIT IN	TRIPLICA TE	7. If Unit or CA, Agreement Designation
i. Type of Well Oil Gas Well Well	Other		8. Well Name and No.
2. Name of Operator	San Juan 28-7 Unit # 35 9. API Well No.		
Address and Telephone No. 10 DESTA DR. ST Location of Well (Footage.)	30-039-07178 10 Basht Floridand Coale Blanco Pictured Cliffs South		
tn CHECK AP		& 990' FWL O INDICATE NATURE OF NOTIC	Rio Arriba, NM
TYPE OF SU			OF ACTION
Notice of In		Abandonment Recompletion	Change of Plans New Construction
Subsequent	Ionment Notice	Plugging Back Casing Repair Altering Casing	Water Shut-Off Conversion to Injection
		Other	Dispose Water INole: Reportesuitsof mulliplecompitiononW

It is proposed to abandon the Mesaverde in this well and recomplete in the Fruitland Coal and Pictured Cliffs using the attached procedure



14 I hereby certify that the foregoing is true and correct		Kay Maddox		·
Signed	Title	Regulatory Agent	Date	February 23, 1999
(This space for Federal or State office use) Approved by	Title	Team Lead, Petroloum Management	Date	APR 23 1999
BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FI	ILE ROOM			
Title 18 U.S.C. Section 1001, makes it a crime for any person know or representations as to any matter within its junsdiction.	wingly and willfu	Ily to make to any department or agency of the United	States any false,	fictitious or fraudulent statements
(E)	*See Ins	truction on Reverse Side		
)		MMUCO		

Form C-102

District 1 PO Box 1980, Hobbs. NM 88241-1980 State of New Mexico Energy, Minerals & Natural Resources Department

Revised February 21, 1994 instructions on back

1:27

District II PO Drawer DD, Artesia, NM 88211-0719 District III

OIL CONSERVATION DIVISION
PO Box 2088

Submit to Appropriate District Office

1000 Rio Brazos Rd. Aztec, NM 87410

PO Box 2088 Santa Fe, NM 87504-2088: 7 State Lease - 4 Copies Fee Lease - 3 Copies

District IV PO Box 2088, Santa Fe. NM 87504-2088

___ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039- 0717	2700.000	2 Pool Code 3 Pool Name 72439 Blanco Pictured Cliffs South		
4 Property Code		5 Property Name 6 Well Number		
016608	San Juan 2	San Juan 28-7 Unit #35		
7 OGRID No.	8 Operator Name 9 Elevation			
005073	Conoco Inc., 10 Desta Drive, Ste. 1	00W, Midland, TX 79705-4500	6169'	

10 Surface Location

UL or lat no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	27N	7W		1650	South	990	West	Rio Arriba
			11 Bo	ttom Hol	e Location 1	f Different Fr	om Surface		
UL or latino.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acre	s 13 Join	t or Infil 14	Consolidate	on Code 15	Order No.	·			***************************************
160	1								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	ORA NON-STAIN	DARD UNIT HAS B	EEN MITRO VED DI	THE DIVISION
16		The second secon	The second secon	17 OPERATOR CERTIFICATION
				Thereby certify that the information contained herein is true and complete to the best of my knowledge and belief
			EIVED 2 7 1999	Kau Maddex
		0111 Cd	סואו וביונה	Signature / Kay Maddox
		DO	DN. DIV. St. 3	Printed Name Regulatory Agent
		Same .		February 23, 1999
		=	9 10 cm	Date
				18 SURVEYOR CERTIFICATION
		jes pas jes pol		I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me
990'				or under my supervision, and that the same is true and correct to the best of my belief.
990'				
^				Date of Survey Signature and Seal of Professional Surveyor:
				J Signature and Sear or Professional Surveyor.
•				
,0501				
				Certificate Number
	**********	<u> </u>	 	4 L



State of New Mexico Energy, Minerals & Natural Resources Department

Revised February 21, 1994 instructions on back

District II PO Drawer DD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd. Aztec, NM 87410

OIL CONSERVATION DIVISION Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

District IV PO Box 2088, Santa Fe. NM 87504-2088

AMENDED REPO	ORT
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WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	2 Pool Code	3 Pool Name	
30-039- 0717	8 71629	Basin Fruitland Coal	
4 Property Code	5 Property Na	me 6 Well Nu	mber
016608	San Juan 28-7 U	nit #35	5
7 OGRID No.	8 Operator Name 9 Elevation		
005073	Conoco Inc., 10 Desta Drive, Ste. 100W	Midland, TX 79705-4500 616	9'

10 Surface Location

27N	7W		1650	Carrelle		1	1
		<u> </u>	1030	South	990	West	Rio Arriba
	11 Bo	ttom Ho	le Location I	f Different Fro	om Surface		
tion Townsh	ip Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
		İ				ľ	
		ion Township Range	ion Township Range Lot Idn	ion Township Range Lot Idn Feet from the	on Township Range Lot Idn Feet from the North/South line		ion Township Range Lot Idn Feet from the North/South line Feet from the East/West line

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A	NON-STANDARD UNIT HAS BE	EN APPROVED BY THE DIVISION
990'	NON-STANDARD UNIT HAS BE	In OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Kay Maddox Printed Name Regulatory Agent Title February 23, 1999 Date 18 SURVEYOR CERTIFICATION 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 belief. Date of Survey
,059/		Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

Justification:

Funds in the amount of \$85,000 are requested to recomplete the Fruitland Coal and Downhole Commingle (DHC) with existing Pictured Cliffs production in the San Juan 28-7 # 35. The subject well is located in SW/4 of sec 1, Twn 27N, Rng 7W of the Conoco operated San Juan 28-7 Unit.

This recompletion AFE is the 2nd of two written to recomplete and DHC the PC and FC in the subject well. The 1st AFE (#51-61-8968, see attached justification) included permanent abandonment of the, existing at the time, open-hole Mesaverde and recompletion to the PC. The work was separated in order to obtain a sustained production test of the PC for allocation purposes. Once the well is DHC'd production allocations will be determined by the subtraction method based on a projection of historical data from the PC.

Performing the requested work is expected to have an initial production of 158 MCFD and recover 357 MMCF of new reserves based on normalized FC production plots in the 28-7 unit. Perforation selection and Frac design will be tailored to reduce the risk of communication between the two zones

As payment for the use of the wellbore, the PC/FC working interest owner's will assume all P&A costs and liabilities for the MV working interest owner's share of the wellbore. The two recompletion AFE's will share the MV P&A costs equally.

 $F: User \land MSOFFICE \land WINWORD \land 1999 \ Recompletions \land 35 \ MV \ P\&A \ FC \ Recompletion \ \& \ DHC.doc$

San Juan 28-7 Unit # 35 Mesaverde Abandonment Pictured Cliffs Recompletion API # 30-039-071780

Justification:

Funds in the amount of \$85,000 are requested to permanently abandon the open-hole Mesaverde section of the wellbore and recomplete to the Pictured Cliffs (PC) in the San Juan 28-7 # 35. The subject well is located in SW/4 of sec 1, Twn 27N, Rng 7W of the Conoco operated San Juan 28-7 Unit. Current Mesaverde production averages < 15 MCFD, with a cumulative recovery of 1.15 BCF since its completion in 1955. Mesaverde production in this quarter section was replaced in 1997 with the recompletion of the offset #126 and is currently producing 160 MCFD.

This recompletion procedure includes permanently abandoning the current open-hole section of the Mesaverde. The Pictured Cliffs formation will then be perforated and fracture stimulated in a single stage, utilizing typical energized fluid stimulation techniques. Performing the requested work is expected to have an initial production of 210 MCFD and recover 452 MMCF of new reserves based on normalized PC production plots in the 28-7 unit.

Additionally, it is also planned to recomplete the subject well to the Fruitland Coal (FC) and Downhole Commingle (DHC) the PC and FC. Perforation selection and Frac design will be tailored to reduce the risk of communication between the two zones

For future allocation purposes, the FC will be added after a sustained production test of the PC is complete. The FC will then be added, utilizing a separate AFE, and allocation will be based on the subtraction method based on historical production data from the PC.

As payment for the use of the wellbore, the PC/FC working interest owner's will assume all P&A costs and liabilities for the MV working interest owner's share of the wellbore. The two recompletion AFE's, (one each for PC & FC) will share the MV P&A costs equally.

February 12, 1999

Summary of Work Recommended

- Isolate PC from FC.
- Perf & Stimulate FC Interval (single stage energized fluid frac)
- Place Well on Production as PC/FC DHC.

Well Data:

AFE#

51-61-8969

Downhole Commingle:

DHC-????

Location:

1650' FSL & 990' FWL, Sec. 1, T27N-R7W

Rio Arriba County, New Mexico

Elevations:

KB: 6177

GL: 6169' PBTD: 3400' TD: 5125'

Casing:

9 5/8", 25.4 #/ft, Spiral Wound, 4 jts set @ 175'

l stage:

125 sxs.

TOC @ Surface (circ)

7", 20 #/ft, J-55, 106 jts set â 4400°

l stage

500 sxs

TOC @ 1845' (TS)

Size	Wt	Drift	Capacity	Burst
9 5/8"	25.4	NA	NA	NA
7"	20	6.331"	24.70 ft/bbl	3740 psi
2 3/8"	4.7	1.901"	258 ft/bbl	5600 psi

Tubing:

2 3/8" 4.7#/ft, J-55, 142 jts set @ 2,840'

Perforations: Pictured Cliffs: (2866'-2810')

Re-Completed:

2nd atr - 1999



San Juan 28-7 Unit # 35 Mesaverde Abandonment Pictured Cliffs Recompletion API # 30-039-071780

February 12, 1999

Summary of Work Recommended

- Permanently Abandon Open Hole MV
- Perf & Stimulate PC Interval (single stage energized fluid frac)

Place Well on Production as PC single.

Well Data:

AFE#

51-61-8968

Downhole Commingle:

DHC-????

Location:

1650' FSL & 990' FWL, Sec. 1, T27N-R7W

Rio Arriba County, New Mexico

Elevations:

KB: 6177'

GL: 6169' PBTD: 5125'

 $TD \cdot$ 5125'

Casing:

9 5/8", 25.4 #/ft, Spiral Wound, 4 jts set @ 175'

l stage:

125 sxs.

TOC (a) Surface (circ)

7", 20 #/ft, J-55, 106 jts set @ 4400'

l stage

500 sxs

TOC @ 1845" (TS)

Size	Wt	Drift	Capacity	Burst
9 5/8"	25.4	NA	NA	NA
7''	20	6.331"	24.70 ft/bbl	3740 psi
2 3/8"	4.7	1.901"	258 ft/bbl	5600 psi

Tubing:

2 3/8" 4.7#/ft, J-55, 142 jts set @ 4,453"

Perforations: (Open Hole 4400' - 5125')

Treatment:

Point Lookout:

(4740' to 5125') 11,100 gallons oil & 10,500 lbs sand

Cliffhouse:

(4400' to 4610') 18,400 gallons oil & 14,000 lbs sand

Completed: July 1955

Please Refer questions to the following people:

Geologic/	Logging:

Tom Johnson

(915) 686-6111

Engineering/Procedural:

Randy Herring

(915) 686-6541

Pager

800-999-6710 I.D.# 991-7826

Fracturing:

Jim Russell: Pager

(505) 327-6222

Mobile

(505) 324-1867 (505) 330-0005

Completion:

Greg Vick: Pager

(505) 324-5819

(505) 324-2601

Mobile

(505) 320-4609

Gilbert Hughes
Pager
Mobile

(505) 324-5812 (505) 327-8753 (505) 320-4785

Lino Hernandez:

(505) 324-5816

Pager

(505) 326-8198

Mobile

(505) 320-6739

Other #'s

BLM:

(505) 599-8900

NMOCD:

(505) 334-6178

One Call:

1-800-321-2537

Midland Continuous Fax:

(915) 686-6112

EMERGENCY NUMBERS:

Aztec Fire & Police:

911

Air Care:

911 or 1-800-452-9990

NM State Police

325-7547

SJ County Sheriff:

334-6107

San Juan 28-7 Unit # 35 Mesaverde Abandonment Pictured Cliffs Recompletion API # 30-039-071780

- 1. Hold tailgate safety meetings prior to rigging up, each morning, and whenever necessary.
- 2. Test Anchors, MIRU Workover Unit. If necessary, kill well with a minimum of 1 % KCl. NU BOP. POOH w/ 2 3/8" production string (142 jts).

Abandon MV:

3. MU 7" cement retainer and RIH to +/- 3,500 ft. Pump Class "A" neat cement through retainer into open hole & casing. (Estimate 368 cu ft in OH & 204 cu ft of csg below retainer). Sting out of retainer and pump an additional 100' of cement to cover retainer. (Estimate 23 cu ft). Circulate excess to surface. & POOH w/ tubing.

PC Recompletion:

4. RU Wireline unit. MU 4" HSC Guns w/ 1 & 2 SPF, 11gm charges w/ 180 degree phasing. Run a GR strip to correlate to the attached log and perforate from bottom-up the following depths:

<u>Depth</u>	# ft	SPF	# shots
2866'-2856'	10	2	20
2853'-2840'	13	2	26
<u> 2827'-2810'</u>	17	1	17
	Total:		63 holes

- 5. RU Acidizing & Frac equipment. Test lines to 4,000 psi. Break down perforations using 1000 gallons 15% HCl. Bullhead down casing @ maximum rate to optimize breakdown w/o exceeding Max Pressure. MAXIMUM PRESSURE = 3500 PSI
- 6. Immediately follow acid w/ energized fluid frac per attached procedure. **DO NOT EXCEED 3500 psi**
- 7. Clean location & release frac equipment.



San Juan 28-7 Unit #35 Mesaverde Abandonment Pictured Cliffs Recompletion API #30-039-071780

8.	RU choke manifold and blow down well to lay down tank until well logs off. RU compressors and RIH w/ tubing & CO well to ÷/- 3,000'.	
9.	PUH and set tbg @ +/- 2840'. Obtain a stabilized flow test and Drywatch as necessary.	
10.	RDMO workover unit and clean location.	
11.	Install wellhead compression & place well on production	
12.	Thank You.	
Prepare	ed By:	
	Randy B. Herring,	
	Sr. Production Engineer	

- 1. Hold tailgate safety meetings prior to rigging up, each morning, and whenever necessary.
- 2. Test Anchors, MIRU Workover Unit. If necessary, kill well with a minimum of 1 % KCl. NU BOP. POOH w/ 2 3/8" production string..

Set Bridge Plug:

3. RU wireline unit, MU 7" CIBP and RIH and set plug @ 2800' ft. (If necessary run GR strip and correlate to attached log).
Test plug to 3,500 psi

FC Recompletion:

4. MU 4" HSC Guns w/ 1 & 2 SPF, 11gm charges w/ 180 degree phasing. Run a GR strip to correlate to the attached log and perforate from bottom-up the following depths:

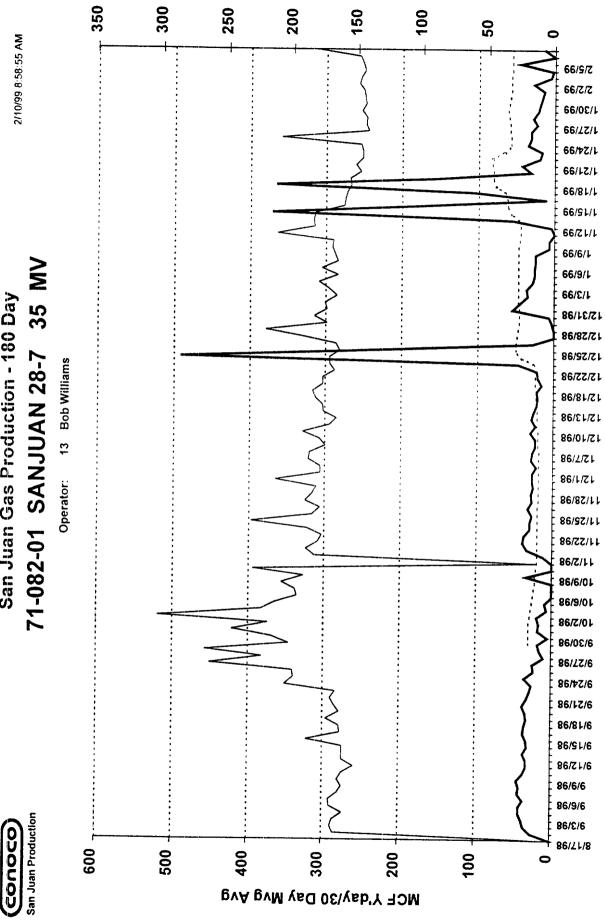
Depth	# ft_	SPF	# shots
2790'-2776'	14	1	14
2770`-2756`	14	2	28
2704`-2696`	8	2	16
2692`-2686`	6	2	12
2684`-2680`	44	2	8
	Total:	78 holes	

- 5. RU Acidizing & Frac equipment. Test lines to 4,000 psi. Break down perforations using 1000 gallons 15% HCl. Bullhead down casing @ maximum rate to optimize breakdown w/o exceeding Max Pressure. MAXIMUM PRESSURE = 3500 PSI
- 6. Immediately follow acid w/ energized fluid frac per attached procedure. **DO NOT EXCEED 3500 psi**
- 7. Clean location & release frac equipment.

- 8. RU choke manifold and blow down well to lay down tank until well logs off. RU compressors and RIH w/ tubing & CO well to CIBP @ 2800'.
- 9. Drill out CIBP and obtain a stabilized rate. Drywatch as necessary
- 10. Record and notify necessary personnel for regulatory and gas allocation purposes.
- 11. Install wellhead compression & place well on production as a PC/FC DHC.
- 12. Thank You.

Prepared By:	
	Randy B. Herring, Sr. Production Engineer

San Juan Gas Production - 180 Day



Pressure

