Submit 3 Copies to Appropriate District Office

CONDITIONS OF APPROVAL, IF ANY:

# State of New Mexico Energy, Minerals and Natural Resources

Form C-103 Revised 1-1-89

DISTRICT I				RVATIO	_	/ISION		WELL API	NO.			
P.O. Box 1980, Hobbs, NM 88240 P.O.Box 208						8 300				04525477		
DISTRICT II P.O. Drawer DD, Artesia, NM 88210 Santa Fe, New Mexico						2088		5. Indicate	Type of L	ease	————— 1	
DISTRICT III	d Attoo NA	4 07410						0.01-1-0		STATE _	F	EE X
1000 Rio Brazos Ro	i., Aziec, Nr	1 0/410					/	6. State C	il & Gas Le	ease No.		
· · · · · ·	SUNDRY	/ NOTICES	AND REF	PORTS ON	WELLS	i i	i					
(DO NOT USE TH		OR PROPOSA RESERVOIR.					FO A	7. Lease I	Name or Ur	nit Agreemen	t Name	
•		ORM C-101) F							STATE	GAS CON	J RX	
1. Type of Well:									OTATE	. OAO OO!	" DX	
OIL WELL  2. Name of Operator		S X	O	THER				8. Well No				
AMOCO PRODU	CTION CO	MPANY		Attention	Nancy I.	. Whitaker				#1		
								9. Pool na	me or Wild	cat		
P.O. Box 800	Denver	Colo	rado	80201	303-8	30-5039		CEDAR	HILL FRU	TLAND BAS	SAL COA	AL GAS
4. Well Location	Κ.	1490 <sub>Eas</sub>		SOU	ITH		179	90 _		WF	EST	
Unit Letter	:	Fee	t From The			Line and		Fe	et From Th	e		Line
Section	32	Tov	vnship	32N	Range	10W	N	MPM	SAI	N JUAN	c	County
			10. Eleva	tion (Show wh	ether DF, R	KB, RT, GR,	etc.)					
					6084 G	L						
11. <b>N</b>	Ched OTICE O	ck Appropria F INTENTIO	te Box to N TO:	Indicate N	ature of N			Other Da		RT OF:		
PERFORM REMEDIA	AL WORK	× PLUG	AND ABA	NDON	REME	DIAL WORK			ALTE	ERING CAS	ING	
TEMPORARILY ABA	NDON	CHAN	IGE PLANS		COM	MENCE DRILL	LING O	PNS.	PLU	G AND ABA	NDONM	ENT
PULL OR ALTER CA	SING				CASIN	NG TEST AND	Э СЕМІ	ENT JOB				
		<u></u>										
OTHER:					OTHE	.K		<del></del>				
12. Describe Propose work) SEE RUL		eted Operations	(Clearly sta	te all pertinent	details, and	d give pertinen	t dates	, including e	stimated d	ate of starting	g any pro	posed
AMOCO PRODUCT PROCEDURES.	ION COMP	ANY REQUEST	S PERMIS	SION TO CLE	AN OUT AI	ND CAVITATI	E THE	ABOVE WI	ELL ACCO	RDING TO	THE ATT	TACHED
FOR TECHNICAL IN	NFORMATIC	ON CONTACT I	KHANH VU	303-830-4920	ס							
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I hereby certify that	the informati	on above is true	and comple	ate to the hest	of my knowl	edge and helic	of					
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APPROVED BY	GALMON,	y Roli	- CANCALO	~ ~	_ тг <b>об</b> РШ	Y OIL & GA	s insi	ector, d	IST. <b>#</b> 3	DATE	<u> </u>	

## **Amoco Production Company**

**ENGINEERING CHART** 

SUBJECT State Gas Com BX

Spud 10/82

Sheet No Of File \_\_\_\_\_

Appn \_\_\_\_\_

Date 4-8-97

By KQV



13 3/8" , 54.5#

Toc - Suf (Circ)

Ojo - 1013'

Kirt - 1900'

Sands 2457' 16' 2479' 14'

2500' 06' 2514' 10'

2530' 6

2542' 8'

2600' 22'

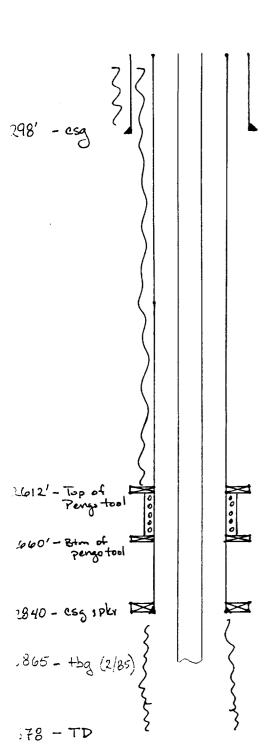
Ignacio 2626 14'

2646 8'

Cottonwood 2715' 7'

2729' 8'

Cahn 2848' 22'



### **SJOET Well Work Procedure**

State Gas Com BX 1

Version:

Date:

May 2, 1997

**Budget:** 

Well Repair

Work Type:

Perf & Cavitate

#### **Objectives:**

C/O OH section and cavitate

Open up Ignacio and Cottonwood seams

Place well back on production

**Pertinent Information:** 

Location:

1490'FSL x 1790'FWL;Sect 32K-T32N, R10W

Horizon: API #:

FC

County:

San Juan

Fee

30-045-25477 Vu

State:

**New Mexico** 

Enar:

W-(303)980-6324

Lease: Well Flac: Phone:

H -(303)830-4920

P--(303)687-3819

**Economic Information:** 

APC WI:

75.17%

Prod. Before Repair:

1460 MCFD

**Estimated Cost:** 

\$150,000

Anticipated Prod.:

2500 MCFD

Pavout:

Months

Max Cost -12 Mo. P.O.

PV15:

Max Cost PV15:

Economics will be run on all projects that have a payout exceeding ONE year. Note:

Formation Tops: (Formation tops)

Nacimento:

1013'

FT - Cottonwood:

2715-37'

Oio Alamo:

Kirtland Shale:

FT - Cahn: Pictured Cliffs:

**CSG** 

2848'-78'

Fruitland:

1900' PBTD:

2878'

FT - Ignacio:

2626-54

\*(Estimated)

CSG

TD:

2878'

**Bradenhead Test Information:** 

BH

Test Date:

Tubing:

Casing:

INT

BH:

Time 5 min

10 min

15 min

Comments:

State Gas Com BX 1
Orig. Comp. 10/82
TD = 2878', PBD = 2878'

Page 2 of 2 Version 1

History: This well has never been cavitated. It has only been treated with acid. The Cottonwood seams have been isolated by two packers. This well has been producing from 1-1.5 mmcfd for the last 10 years. The following procedure will stimulate the coal seams to fully produce it potential.

- 1. Install/Check anchors. Inspect location for pit, access, etc.
- 2. Pick up drillstring/workstring
- 3. MIRU Rig with blooie lines, 2" flowline off of manifold, sample box catcher
- 4. NUBOE, kill well w/ produced coal water, if necessary. Set tbg stop.
- 5. TOH w/ 2 7/8" tbg @ 2865' (6.5#, J-55)
- 6. TIH w/ 6 1/4" bit, bit sub, drill collars and workstring. Cleanout hole to TD. Rotate and reciprocate until hole is clean. Sweep w/ 10 bbls of water & 2 bbls of soap. Make note of fill & attempt to rotate (off ledge) before cleaning to bottom
- 7. Load hole w/ acid with sequestering agents to 100' above top perf
- 8. RU lubricator and run guns to perforate the following schedule (correlate to Gearhart CDL/CNS/GR log dated 11/4/82)

COAL ZONES		PERFORATIONS				
Ignacio	2,626 to 2,640	4 jspf	56 holes			
	2,646 to 2,654	4 "	32 "			
Cottonwood	2,715 to 2,722	4 "	28 "			
	2,729 to 2,737	4 "	32 "			
Cahn	2,848 to 2,929	openhole				

148 holes

- 9. Perform flow test as follows after unloading well (calibrate all pres gauges before test):
  - a. 1 hour flow through 3/4" positive choke. Record pres & rate every 15 min
  - b. 1 hour shutin test. Record pres every 15 min
- 10. Initiate surges. Work for minimum of 8 hours. If there is no sign of coal, inject only air @ 3,600 CFM to perform break over test. Start surging with air @ 100 psig below breakover for 36 hours or hole bridges over
- 11. TIH w/ 6 1/4" bit, bit sub, drill collars and workstring. Cleanout hole to TD. Rotate and reciprocate until hole is clean. Sweep w/ 10 bbls of water & 2 bbls of soap. Make note of fill & attempt to rotate (off ledge) before cleaning to bottom
- 12. Perform flow test as follows:
  - a. 1 hour flow through 3/4" positive choke. Record pres & rate every 15 min
  - b. 1 hour shutin test. Record pres every 15 min
- 13. Repeat steps 10-12 and report results to engineer daily.
- 14. Cleanout to PBD @ 2878'. Wait for 4-6 hrs to determine if hole stable, tag for fill, cleanout and repeat if necessary. TOH and lay down drill pipe and bit
- 15. RIH w/ 2 7/8" TBG as follows (if hole is stable):
  - 1) 1/2 blind mule shoe
  - 2) 2' slotted 2 7/8" tbg sub
  - 3) 10' 2 7/8" tbg sub
  - 4) 10' 2 7/8" tbg sub w/ 5/8" hole in middle
  - 5) 2 7/8" std. SN (2.280" ID) with retrievable pressure bomb and plug in place
  - 6) remainder 2 7/8" TBG (All TBG: 6.4# J55)

#### Contingency (If hole is not stable):

- 1) 4 3/4" bit
- 2) bit sub + float collar
- 3) 1 jt 2 7/8" tbg
- 4) 2 7/8" std. SN (2.280" ID) with retrievable pressure bomb and plug in place
- 6) remainder 2 7/8" TBG (All TBG: 6.4# J55)
- 1. Land bottom of TBG at approximately 2865'.
- 2. NDBOE. RDMODU. Lock wellhead and notify production that air was used. Return well to production

Note: well may require swabbing to enable RTP.

State Gas Com BX 1
Orig. Comp. 10/82
TD = 2878', PBD = 2878'
Page 3 of 2
Version 1

Dependent on speed of hole stabilization, I estimate this procedure to require approximately 8 days and to cost \$150,000 (see attached AFE form).

#### Khanh Vu

W - (303) 830-4920 Pager - (303) 687-3819 H - (303) 980-6324 Fax - (303) 830-4777 Continuous Fax - (303) 830-4276