



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

November 30, 1983

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Mr. S. J. Okerson
Amoco Production Company
Box 68
Hobbs, New Mexico 88240

Dear Mr. Okerson:

An exception, to tie back cement on the production string,
is granted for your BDCDGU Well No. 2033 011G located in
Unit G of Section 1, Township 20 North, Range 33 East,
Harding County, New Mexico.

You have made a diligent effort to accomplish this work
and apparently have good cement over the appropriate forma-
tions.

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

cc: Carl Ulvog



Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

November 15, 1983

File: SJ0-534-WF

Re: Cementing Programs
Bravo Dome Carbon Dioxide Gas Unit (BDCDGU) No. 2033 011G
Undesignated Tubb
Harding County, New Mexico

The State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

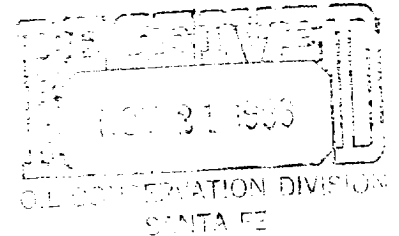
Attention: Joe Ramey

Gentlemen:

Your approval is hereby requested for an exception to the attached drilling permit proposing to tie-back cement on the 7" production casing to the 9-5/8" surface casing on BDCDGU No. 2033 011G. Recommend that cement tie-back operations be discontinued on this well based upon the quality of the hydraulic seal between the Tubb/Glorieta formations and other formations uphole, and the results of attempts made thus far to raise the top of cement.

To provide some background on Well No. 2033-011G, the 9-5/8" surface casing was set at 720' with 375 sx cement; 227 sx being circulated. The 7" production casing was set at 2618' with 800 sx cement. Circulation around the production casing was not obtained; therefore, a temperature survey was run indicating the top of cement to be approximately 1080'. A cement tie-back was attempted at 1030-31' where the casing was perforated but circulation could not be established. These perforations were squeezed with 500 sx cement. Pressure testing the squeeze confirmed that the perforations were still leaking so the perforations were resqueezed with 400 sx cement. The squeeze was once again pressure tested and still showing a leak.

A free pipe log was then run showing the cement top at approximately 1018'. The perforations were squeezed for a third time with 200 sx cement under a retainer rather than under a packer as the two previous



November 15, 1983
File: SJ0-534-WF
Page 2

squeezes had been. The well was drilled out and tested to 1200 psi satisfactorily. Another free pipe log was run indicating the top of cement at approximately 942'.

The well was then completed in the Tubb formation during which time a cement bond log was run from 1481' to 500' (See Attachment). The bond log showed that an excellent bond (hydraulic seal) exists from the bottom-most logged interval up to about 1270', from 1085'-1105' and from 1020'-1065'. Moderate bonding exists up to approximately 920'. Additionally, several cement bridges exist up to the surface casing point which provide hydraulic seals. These uphole bridges have been confirmed by unsuccessful attempts to establish circulation during tie-back operations.

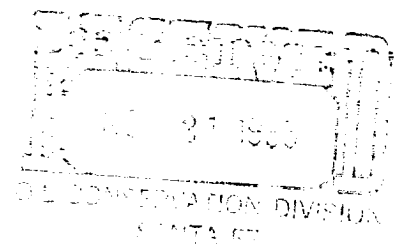
As a result of these "cement bridges" (hydraulic seals) up to the surface casing point and in light of efforts made to date, additional cement tie-back work is unnecessary. Effective hydraulic seals exist between both the Tubb (2294') and Glorieta (1822') formations with other uphole formations and the surface. Request your approval be granted to discontinue further tie-back operations.

If you have any questions, please contact Steve Lesikar in our Hobbs District Office at (505) 393-1781.

Yours very truly,

S. J. Keenan ALZ

Attachments



NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

APR # 30-021-20161

RECEIVED

APR 25 1983

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

SANTA FE

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well OIL WELL ☐ GAS WELL ☒ CO2 OTHER ☐		BDCDGU	
2. Name of Operator Amoco Production Company		8. Name of Lease Name BDCDGU	
3. Address of Operator P. O. Box 68, Hobbs, New Mexico 88240		9. Well No. 2033 011G	
4. Location of Well UNIT LETTER <u>G</u> LOCATED <u>1108.8</u> FEET FROM THE <u>North</u> LINE AND <u>1980</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>1</u> TWP. <u>20-N</u> RGE. <u>33-E</u> NMPM		10. Field and Pool, or Wildcat Und. Tubb	
11. Proposed Depth 2608'		12. County Harding	
19A. Formation Tubb		20. History of U.C. Rotary	
21A. Kind & Status Plug. Bond Blanket on File		22. Approx. Date Work will start 3rd Quarter-1983	
21B. Drilling Contractor N/A			
21C. Leavies (Show whether oil, K1, etc.) 4908' GL			

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	9-5/8"	32.30#	700'	Circ.	Surface
8-3/4"	7"	20.00#	2608'	Tieback to 9-5/8"	Surface

Propose to drill and equip well in the Tubb formation. After reaching TD logs will be run and evaluated. Perforate and stimulate as necessary in attempting commercial production.

Mud Program: 0-700' Native Spud Mud
700'-TD Stable Foam using KCL water and foamer

BOP program attached
Gas is not dedicated

COLLECT AND SACK SAMPLES FOR
NEW MEXICO BUREAU OF MINES, SOCORRO
AT AT LEAST TEN FOOT INTERVALS

APPROVAL VALID FOR 90 DAYS
PERMIT EXPIRES 10-22-83
UNLESS DRILLING UNDERWAY

0+2-NMOCD, SF; 1-HOU R. E. Ogden Rm 21.150; 1-SUSP; 1-PJS; 1-Amerada; 1-Amerigas;
1-Cities Service; 1-Conoco; 1-CO2 in Action; 1-Excelsior; 1-Sun. Tex.; 1-Exxon;
1-Jim Russell, Clayton; 1-F. J. Nash, HOU Rm 4.206

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed Peter J. Sena Title Assistant Administrative Analyst Date 7-21-83

(This space for State Use)

APPROVED BY Carl Ulvog TITLE DISTRICT SUPERVISOR

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION COMMISSION TO BE NOTIFIED
WITHIN 24 HOURS OF BEGINNING OPERATIONS

RECEIVED

7/25/83

APR 31 1983

OIL CONSERVATION DIVISION

SANTA FE



COMPANY <u>AMOCO PRODUCTION COMPANY</u>	
WELL <u>BDCDGU # 2033 011 G</u>	
FIELD <u>BRAVO DOME</u>	
COUNTY <u>HARDING</u> STATE <u>NEW MEXICO</u>	
Location <u>1980' FNL & 1980' FEL</u>	Other Services:
Sec. <u>1</u> <u>Tw</u> <u>20-N</u> <u>Rge</u> <u>33-E</u>	

Elev.: K.B. 4920.4'
D.F. _____
G.L. 4908'

Run No.	- One -		
Date & Time Survey	10-14-83	9:30 AM	
Date & Time Cementing	8-23-83		
Type Cementing Operation	Primary		
Depth Driller	1500 PBTD		
Depth Welex	1489		
Logged Interval	500	to 1481	
Casing Driller	7"	@ 1500	
Float Collar—D.V. Tool			
Squeeze Depth			
Amount & Type Cement			
Amount & Type Admix			
Type Fluid in Hole	Water		
Fluid Level	Full		
Salinity PPM Cl			
Weight lb/gal—Vis.			
Approx. Logged Cem. Top	735		
Calculated Cement Top	1000		
Max. Hole Temperature		°F.	°F.
Tool No.	21156		
Spacing Recorded	4'		
Equipment—Location	1551	Hobbs	

[illegible]

Welex does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters, or recommendations which may be given by Welex personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions, or recommendations agrees that Welex is not responsible, except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.

GAMMA	DEPTH	AMPLITUDE	
API Gamma Ray Units 100		Pipe Gate	MICRO-SEISMOGRAM® LOG
200		Formation Gate	100 Micro-Seconds 1100

ONE MINUTE
INTERVAL MARKER

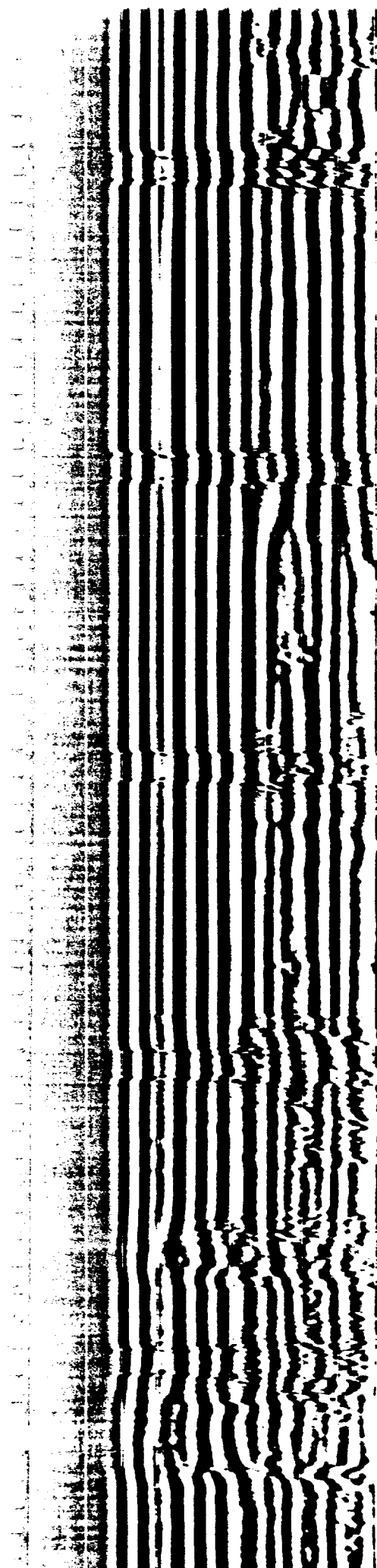
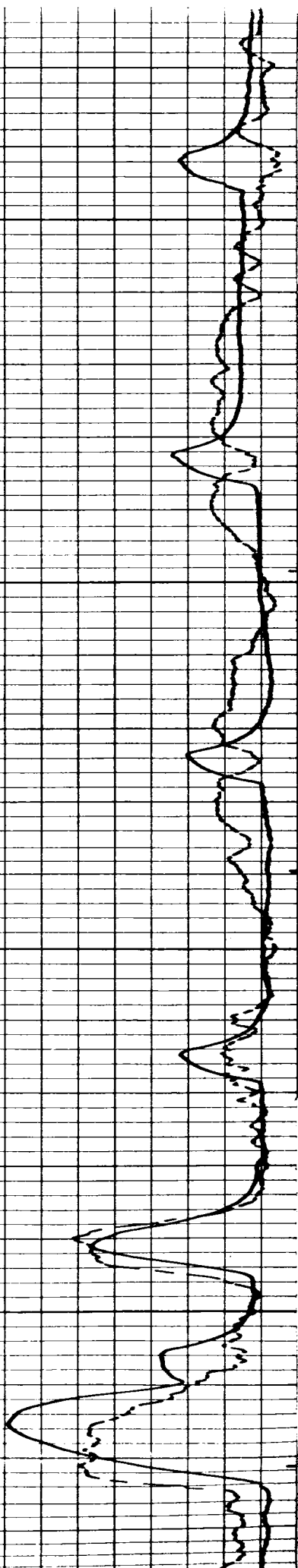
600

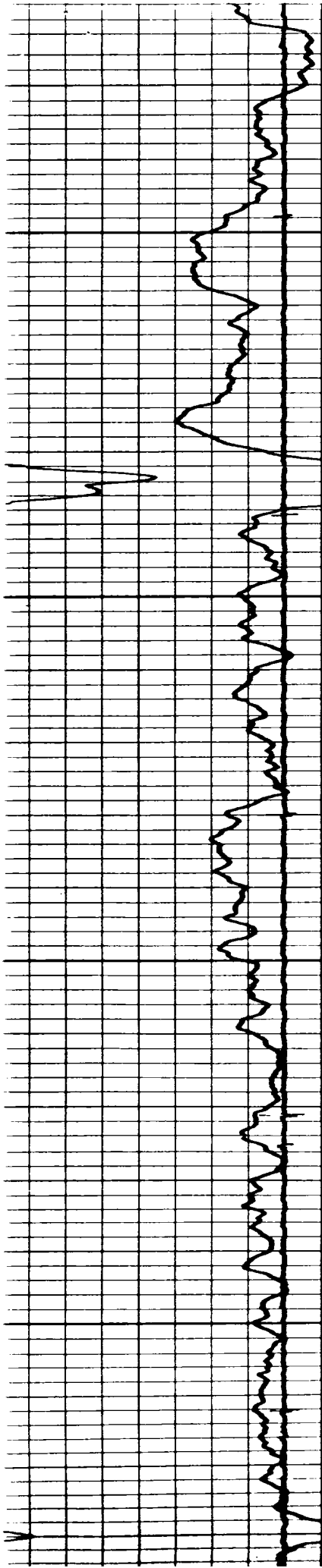
650

700

750

seconds





800

850

900

950

cement bridges

moderate bond

