

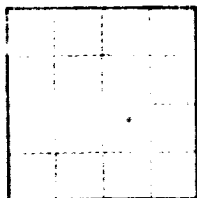
(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

Allegation Tribal

Lease No. 1A-20-603-184



*Approved:*  
*11-28-61*

**SUNDRY NOTICES AND REPORTS ON WELLS**

|                                                    |                                     |                                                 |  |
|----------------------------------------------------|-------------------------------------|-------------------------------------------------|--|
| NOTICE OF INTENTION TO DRILL.....                  | <input checked="" type="checkbox"/> | SUBSEQUENT REPORT OF WATER SHUT-OFF.....        |  |
| NOTICE OF INTENTION TO CHANGE PLANS.....           |                                     | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... |  |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....    |                                     | SUBSEQUENT REPORT OF ALTERING CASING.....       |  |
| NOTICE OF INTENTION TO REDRILL OR REPAIR WELL..... |                                     | SUBSEQUENT REPORT OF REDRILLING OR REPAIR.....  |  |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....       |                                     | SUBSEQUENT REPORT OF ABANDONMENT.....           |  |
| NOTICE OF INTENTION TO PULL OR ALTER CASING.....   |                                     | SUPPLEMENTARY WELL HISTORY.....                 |  |
| NOTICE OF INTENTION TO ABANDON WELL.....           |                                     |                                                 |  |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

November 21, 1961

Well No. 5 is located 2135 ft. from S line and 1935 ft. from E line of sec. 23

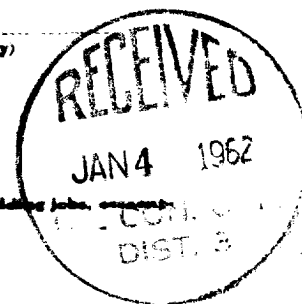
N 1/2 Sec. 23 32 North 18 East N.M.P.M.  
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

(N.M. Horsehoe) San Juan County New Mexico  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5375 ft.

**DETAILS OF WORK**

(State names of and expected depths to objective zones; show sizes, weights, and lengths of proposed casings; indicate recording jobs, casing points, and all other important proposed work.)



Set approximately 30 feet of 7 inch surface pipe cemented with 5 sacks cement. Air drill to about 1190 feet, core and test Tertiary sandstone. Drill ahead to approximately 1250 feet, set 4 1/2 inch production string, or plug and abandon depending on test.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company EXPLORATION DRILLING COMPANY

Address 910 Petroleum Club Building

Denver 2, Colorado

By \_\_\_\_\_

Title EXPLORATION MANAGER

The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt$$

It is well known that this function is the arctangent function, i.e.  $f(x) = \arctan x$ .

$$f'(x) = \frac{1}{1+x^2}$$

$$f''(x) = -\frac{2x}{(1+x^2)^2}$$

$$f'''(x) = \frac{2(1-x^2)}{(1+x^2)^3}$$

$$f^{(4)}(x) = \frac{6x(1-x^2)}{(1+x^2)^4}$$

$$f^{(5)}(x) = \frac{6(1-5x^2)}{(1+x^2)^5}$$

$$f^{(6)}(x) = \frac{24x(5-x^2)}{(1+x^2)^6}$$

$$f^{(7)}(x) = \frac{24(1-7x^2)}{(1+x^2)^7}$$

$$f^{(8)}(x) = \frac{168x(7-x^2)}{(1+x^2)^8}$$

$$f^{(9)}(x) = \frac{168(1-9x^2)}{(1+x^2)^9}$$

$$f^{(10)}(x) = \frac{1440x(9-x^2)}{(1+x^2)^{10}}$$

$$f^{(11)}(x) = \frac{1440(1-11x^2)}{(1+x^2)^{11}}$$

$$f^{(12)}(x) = \frac{17280x(11-x^2)}{(1+x^2)^{12}}$$

$$f^{(13)}(x) = \frac{17280(1-13x^2)}{(1+x^2)^{13}}$$

$$f^{(14)}(x) = \frac{207360x(13-x^2)}{(1+x^2)^{14}}$$

$$f^{(15)}(x) = \frac{207360(1-15x^2)}{(1+x^2)^{15}}$$

$$f^{(16)}(x) = \frac{2592000x(15-x^2)}{(1+x^2)^{16}}$$

$$f^{(17)}(x) = \frac{2592000(1-17x^2)}{(1+x^2)^{17}}$$

$$f^{(18)}(x) = \frac{31457280x(17-x^2)}{(1+x^2)^{18}}$$

$$f^{(19)}(x) = \frac{31457280(1-19x^2)}{(1+x^2)^{19}}$$

$$f^{(20)}(x) = \frac{389500800x(19-x^2)}{(1+x^2)^{20}}$$

$$f^{(21)}(x) = \frac{389500800(1-21x^2)}{(1+x^2)^{21}}$$

$$f^{(22)}(x) = \frac{4864000000x(21-x^2)}{(1+x^2)^{22}}$$

$$f^{(23)}(x) = \frac{4864000000(1-23x^2)}{(1+x^2)^{23}}$$

$$f^{(24)}(x) = \frac{60825600000x(23-x^2)}{(1+x^2)^{24}}$$

$$f^{(25)}(x) = \frac{60825600000(1-25x^2)}{(1+x^2)^{25}}$$

**EXPLANATION SYMBOLS**

Well #5 UNIT Letter J Sec. 23

2135 ft. from South

Colleg Station

December 27, 1961

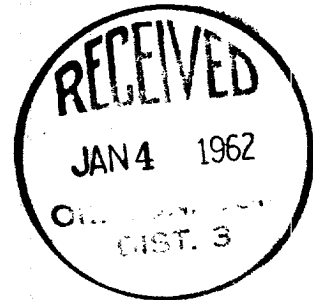
Range T14N R18W

32N 18W  
1935 ft. from EAST  
22.00

(10) Section Canyon

X

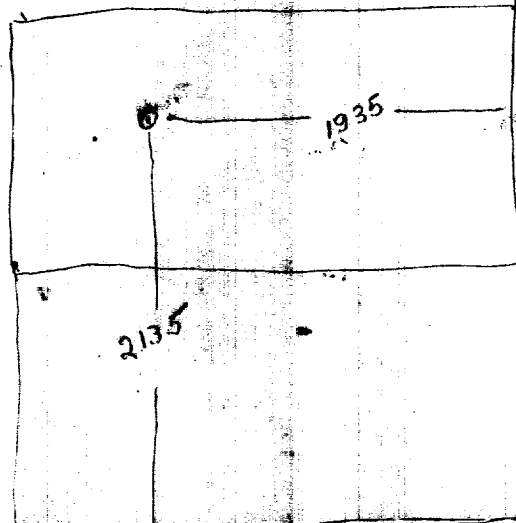
See attached description and designation of symbols



**EXPLANATION SYMBOLS**

Wm. L. Wells

910 Patterson Club Building  
Denver 2, Colorado



100-100000

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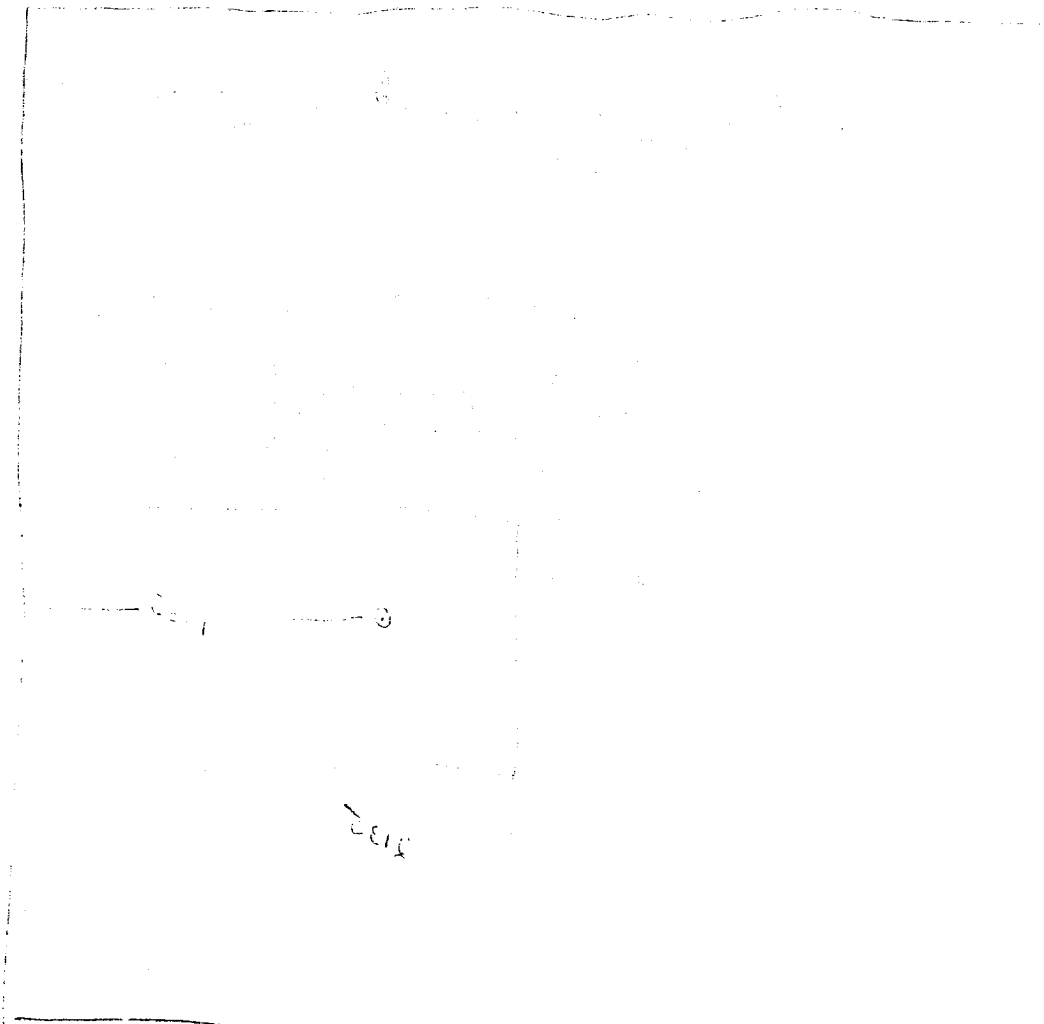
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100-100000