



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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Land Office New MexicoLease No. M-021422Unit 831

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	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 RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING 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)

May 22 through June 16, 1963, 19

Well Federal of
Well No. 1 is located 660 ft. from [N] line and 1650 ft. from [E] line of sec. 4

Sec. 4 (1/4 Sec. and Sec. No.) 24 (Twp.) 34 (Range) 100M (Meridian)

Antelope-Ridge (Field) 100 (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3567' ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Ran 3:15' of 5 1/2" (17, 20, 8-110 & 8-80) liner and cemented 17,432' with 600 sacks Class A plus 0.25 CPM-1. Liner hung with T14 hanger, top of liner 13,617'. Lost full returns while circulating. Cemented with no returns. Circulated with full returns for 15 minutes. Hung liner. Circulated 20 minutes, lost complete returns. Ran north well temperature survey three times. Ran Schlumberger cement top log which indicated top cement 13,750'. Perforated 5 1/2" liner with 4 shots 14,607-14,608'. Broke circulation around liner 800 psi at 2 BPM. Recemented liner with 300 sacks Class A plus 0.25 CPM-1. After WOC 12 hours found top of cement inside casing at 14,354' (53' above water perforations and 725' above cement retainer). Circulated 4 hours. Ran cement top log (Schlumberger) and found cement over entire Devonian. Cement top in Woodford Shale.

Ran 11,402' of 7-5/8" (39#, 8-80) casing and cemented 11,422' with 100 sacks Class A and set into tie-back sleeve with 25,000#. Seals did not hold - left pressure on casing. Hung with cement weight. Muddled up and tested BOP.

Company Shell Oil CompanyAddress Box 1050Roswell, New MexicoOriginal Signed By
W. E. BingmanBy W. E. BingmanTitle Division Mechanical Engineer

and 15' of 7-5/8" casing to 6000 psi. Reported leaks. Tested all connections - held OK. Tested hydro to 4000 psi. Installed new diaphragm. Tested to 5000 psi - no drop in pressure. Drilled out orifice plate at 11,418'. Found top of 5 1/2" liner at 13,615' (All measurements by GIN & DE). Tested lower perforations to 1500 psi - OK. Tested above retainer (Model A set # 15,2301) and found 7-5/8" leaking. Located leak at the back stem. Set 7-5/8" Model A retainer # 11,2931. Reassembled 7-5/8" the-back with 100 sacks Class A plus G. 2-1 plus 100 sacks Class A most. Cement in place @ 7:30 p.m. (MST), June 8, 1963. Model A held OK. Reversed out 10 sacks cement. After 24 hours, tested with 6000 psi and pressure bled to 3900 psi in 32 minutes. Tested 7-5/8" the-back casing at 500' intervals from 12,000 to 3719' with 6000 psi. Evidence of leak between 4485'-4500'. Pumped 60 gallons hump to thread seal #600. Set FRBC. Squeezed casing leak with thread seal to 6800 psi. Pressure dropped to 6600 in 20 minutes. Held 525 psi back pressure on 9-5/8" and 7-5/8" annulus. Reversed out excess thread lock. Pulled FRBC. Reset BR # 11,600' and tested 7-5/8" casing above 11,600' with following results.

Pressure on DE
psi
3000
4000
5000
6000

15 min. SIDP
Pressure - psi
2700
3600
4650
5400

15 min. SIDP on 7-5/8" - 9-5/8" Annulus - psi
1100
2000
3000
4150

Run second test on 7-5/8" at 11,600':

Pressure on DE
psi
3000
4000
5000
6000

15 min. psi
Pressure
2550
3600
4600
5400

Pressure on 7-5/8" - 9-5/8" - psi
650
1550
2700
4000

equalized DE and annulus to 4950 psi. After 15 minutes - OK - pressured to 6000 psi - 30 minutes - OK. Pulled up to 4500'. Pumped in 17 barrels of mud; pressure bled to 6000 psi. In 30 minutes bled to 3100 psi. Pulled up to 4400'. Pumped in 5-1/4 barrels mud. Pressured to 6000 psi. Held OK. Released tool. Pulled out. Ran Schlumberger cement bond log. Found cement top at 9900'. In 7-5/8" - 9-5/8" annulus. Ran and set (Baker) CIP at 7630'. Perforated 7601' (Schlumberger) w/2 1/8". Attempted to circulate with mud. At 2400 psi, circulated 1 psi/min. Reperforated 7601'-02' w/2 1/8". Circulated mud at 1000 psi and 2 psi/min. Set Baker Model K cement retainer at 7395'. Cemented 7-5/8" - 9-5/8" annulus with 469 ex incor (Class C) as follows: Set DE into retainer and displaced 7-5/8" - 9-5/8" annulus with clean water. Mixed and pumped 615 ex incor (Class C) cement into DE. Held 200 psi on 7-5/8" annulus. Displaced cement with water - cleaned retainer and circulated 16 1/2 barrels cement (46 ex). Increased pressure on 7-5/8" annulus and pumped 3 ex increasing DE pressure to 5000 psi. Increased 9-5/8" - 7-5/8" annulus to 2500 psi. Pumped and increased DE 7-5/8" annulus to 3000 psi. Cement in place at 12:30 p.m. (MST), June 14, 1963. After 200 hours, released pressure on DE 7-5/8" annulus. Pulled DE. Ran 6 1/2" bit, 6 1/2" reamer, and one 5" bit. Drilled Model K retainer at 7395'-7400'. Had void space 7400'-7467'. CIP-1 led hard cement to 7630'. Drilled Baker Model C DE 8 hours. Here trip for new bit. Finished drilling DE. Pulled out. Ran Baker retrievable packer (7-5/8" and 7-5/8" DE cement) to 11,600'. Set cement. Set up and tested 7-5/8" casing with 6000 psi. In 30 minutes pressure bled to 3000 psi. Pressured to 6000 psi in 30 minutes pressure bled to 5900 psi. Conclusive test.