

(SUBMIT IN TRIPLICATE)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces
Lease No. 079509-(b)
Unit L

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 REDRILLING OR REPAIR	X
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)

Artesia, New Mexico, Oct. 15, 1952

H. E. Balish
Well No. B-12 is located 1980 ft. from N line and 860 ft. from W line of sec. 22

NW 34 Sec. 22 17S 32E NMPN
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Palmar-Devonian Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4022 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)

SEE ATTACHED SHEETS

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

Company Buffalo Oil Company

Address Artesia, New Mexico

By Ralph L. May

Title Asst. Supt.

Remedial work was commenced on August 21, 1952, with the rigging up of Bechman's reverse circulation rig. After pulling Kobe pump, tubing was run back and swabbing tests were started. The following tests were made:

	<u>Sbbls. Oil</u>	<u>Bbbls. Water</u>	<u>Hrs.</u>	<u>Fluid Level</u>
August 25	34	69	11	5000'
26	98	254	24	2000'
27	114	292	24	2000'
28	104	298	22	2000'
29	117	282	24	2000'

On August 29, pumped 2 barrels of heavy mud mixed with gel flake to 13,450' at 2500 psi pump pressure, then spotted 20 sacks of cement from 11,385' to 11,225'. After letting cement harden, ran a 4½" bit with a Baker casing scraper and drilled out retainer at 11,285 and cleaned out to top of fish at 13,556'. Ran in with overshot and jars and got hold of perforating gun but could not pull it loose. Spotted 500 gals. of acid without further success. Ran McCullough back-off shot and unscrewed tubing at 13,491'. Went back in hole with overshot and jars, using a half string of 2½" N-80 tubing. This time we were successful in pulling fish including the perforating gun. Ran 4½" bit and drilled out plastic to 13,573'. Ran tubing back with hookwall packer, set at 12,510'. On Sept. 9, acidized with 2500 gals. of 15% acid at a maximum pressure of 2600 psi injecting 2 bbls. per minute. Swabbed 57 bbls. of oil plus 338 bbls. of water with fluid level at 2000'. Ran 4½" bit and cleaned out to bottom, then drilled 2' of new hole to 13,575'. There was evidence of junk in hole, so ran back in with a magnetic junk catcher and removed 2 pieces of steel. Ran back with core barrel, using a 4½" diamond core bit. Cored from 13,575' to 13,596' averaging 6½ minutes per foot. Recovered 1½' of dolomite with large vuggy porosity. Ran tubing back with hookwall packer set at 12,049'. Ran swab tests as follows:

	<u>Bbbls. Oil</u>	<u>Bbbls. Water</u>	<u>Hrs.</u>	<u>Fluid Level</u>
Sept. 18	4	530	24	800'
19	59	591	24	800'
20	81	444	24	800'
21	64	425	24	900'
22	76	488	24	900'
23	113	421	24	900'
24	75	291	18	900'
25	81	460	24	1000'

On Sept. 26, pulled tubing and ran caliper and spinner surveys. Spinner showed 21% loss at 13,556-565, 14% loss at 13608 and 65% loss below 13,616. Corrected total depth was 13,618'. Drilled to 13,628' in porous dolomite. Pulled tubing and dumped 20 gals. of hydromite, found top of plug at 13,606'. Ran bit in hole and drilled out bridge and drilled 3' of hydromite. Dumped 8 gals. of hydromite and found top of plug at 13,599'. Ran tubing back and set hookwall packer at 12,100'. Tubing perforations were located at 13,576-591. Pumped in 500 bbls. of Halliburton gel acid with the first 1½ bbls. containing perlite. Then pumped in 5000 gals. of 20% acid. Maximum pressure was 4200 psi and this broke to 3000 psi while acidizing. Injection rate was 3 bbls. per minute. After acidizing, the following swab tests were made:

	<u>Bbls. Oil</u>	<u>Bbls. Water</u>	<u>Hrs.</u>	<u>Fluid Level</u>
Oct. 2	0	77	10	1200'
3	80	446	24	800'
4	100	441	24	800'

Packer was pulled and tubing was run back with Kobe pump. Set hook-wall packer at about 12,000'. Testing by Kobe pump has been as follows:

	<u>Bbls. Oil</u>	<u>Bbls. Water</u>	<u>Hrs.</u>	<u>Pressure</u>	<u>SPM</u>
Oct. 8	146	440	24	1650	39
9	200	529	22	1650	39
10	205	586	24	1650	39
11	173	577	24	1650	39
12	168	591	24	1700	37
13	162	569	24	1700	36
14	162	581	24	1750	37
15	162	583	24	1750	37