

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or recomplete a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

91 JUN 17 PM 1:17

5. Lease Designation and Serial No.

NM 021121

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Moncrief Federal #1

9. API Well No.

10. Field and Pool, or Exploratory Area

Basin Dakota

11. County or Parish, State

San Juan Co., New Mexico

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Union Oil Company of California

3. Address and Telephone No.

3300 N. Butler, Suite 200, Farmington, NM 87401 (505) 326-7600

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1450' FNL & 1190' FEL
Sec. 22, T29N, R12W

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent
 Subsequent Report
 Final Abandonment Notice

TYPE OF ACTION

Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other

Change of Plans
 New Construction
 Non-Routine Fracturing
 Water Shut-Off
 Conversion to Injection
 Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The Moncrief Federal No. 1 developed a tubing leak and died. On January 4, 1991, a rig was moved onto the well to return it to production. It was found that Kenpak, an oil/water emulsion that was used to repair a casing leak in 1969 was plugging the tubing. The tubing was pulled, the Kenpak was chemically cleaned out of the well annulus, the casing leak between 2781' to 3772' was squeezed with 495 sx. class 'B' cement and the squeeze was pressure tested to 100 psi with no pressure loss after 10 minutes. Following successful repair of the casing, additional pay was perforated at 6212'-31', 6236'-45', and 6142'-50'. The well was frac'd with 34,300 lbs. 20/40/ sand in 12,700 gallons 30# crosslinked gel. The well was subseq. back in and returned to production.

A detailed workover report is attached.

RECEIVED
JUL 01 1991
OIL CON. DIV
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed

Rraig A. De Ho

Title

Field Superintendent

Date

6/12/91

(This space for Federal or State office use)

Approved by

Conditions of approval, if any:

Title

Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Union Oil of California
Moncrief Federal #1
Section 22, T29N, R12W
San Juan County, New Mexico

019 FARMINGTON, N.M.

WORKOVER HISTORY

01-04-91 Move in and rig up Flint Rig. Nipple up BOP. Rig up Homco wireline and ran free point. Obstruction in tubing at 6009'. Tubing found to be free to 5825' and partially stuck to 5832' and 100% stuck below. POOH. RIH with chemical cutter and made cut at 5820'. POOH and rig down wireline. POOH. Shut down over night.

01-05-91 Rig up Mote hot oil unit and circulated hole with 120 bbls 2% KCl and 16 gallons Tretolite CF-23 @ 180 degrees and 200 psi. POOH with 185 1/2 jts tubing measuring 5810.58'. 107th jt at 3330' had hole. Suspect casing leak 111th-112th jts at 3460'. Ken Pak is heavy on tubing. Shut down over night.

01-06-91 Sunday--Crew Off

01-07-91 RIH with 90 jts 2 3/8" N-80 workstring and tag at 3337'. At 3980' circulated well. POOH. RIH with 3 7/8" bit, and 191 jts tubing to 5810'. Circulated well and pump TF-25 Tretolite with 5 gal TF-25 per 15 bbls 2% KCl water for total of 160 bbls. POOH with 92 jts tubing. Shut down over night.

01-08-91 POOH with 90 jts tubing and 3 7/8" bit. RIH with Homco flat bottomed mill to 5810' and circulate 30 minutes. POOH. RIH with Baker Lockset bridge plug and set at 5777' on tubing. POOH, 1 jt, set packer and test to 1000 psi. Held good. Release packer and POOH 18 jts and set packer @ 5167', test to 700 psi, OK. POOH with 22 jts and set packer and test to 700 psi, OK. POOH with 18 jts, set packer at 3943', test to 700 psi, OK. POOH with 14 jts and set packer at 3517' and had leak. RIH with 2 jts, set packer, at 3572', test, had leak. RIH with 12 jts tubing and set packer at 3942', test 700 psi, OK. POOH with 2 jts tubing, set packer at 3756', test, had leak. RIH with 1 jt tubing and set packer at 3787', test 800 psi, OK. POOH 15', set packer at 3772', test, OK at 800 psi. Bottom of leak @ 3773'. POOH 16 jts, set packer at 3269', test backside and pumped in at 1 bpm at 300 psi. Shut down over night.

01-09-91 Found top of leak at 2781'. Bottom of leak at 3772'. 991' of bad casing. Pump in at 3 bpm at 800 psi. Release packer and RIH 118 jts tubing and get 2' off BP at 5775'. Circulate hole for casing inspection log. POOH with 189 jts tubing and packer. Shut down over night.

Moncrief Federal #1--Workover

01-10-91 No operation

01-11-91 RIH with Apollo Bond Log to 268', stuck, POOH.
RIH with 60 jts 2 3/8" tubing, circulate hole 45
minutes, hole took 40 bbls thru leaks. POOH. Ran Bond Log from
5772' to 2500'. Ran casing inspection log from 5772' to surface.
Shut down over night.

01-12-91 No operation

01-13-91 No operation

01-14-91 RIH with reverse sub and 184 jts tubing to 5774',
circulate hole 1 1/2 hrs and POOH. RIH with 102 jts
tubing to 3250' opened. Shut down over night.

01-15-91 Finish TIH to 5768'. Displace hole with 80 bf and
spot 2 sx sand on BP at 5777'. Pick up 60' and shut
down for 30 minutes. RIH and tag sand at 5745'. POOH. RIH with
Baker cement retainer and set at 2710'. Test casing to 700 psi.
Test tubing to 2500 psi. Stung into retainer and established
rate of 2 bpm at 1000 psi. Held 260 psi on shutdown. Mix and
pump 175 sx Class "B" cement with 1% CF18 and .05% TF4 at 15.6
ppg. Pump into interval 2781-3772' at 2 bpm at 200 psi with
calc. vol. to bottom of hole at 3772' (27 bbls). Work with
tubing cement volume (10 bbls) for 2 hrs from 30 seconds per bbl.
Pumped last 2 bbls at 1/4 bpm at 150 psi. Holding 100 psi @
shutdown. BHP top hole 1340 psi. Bottom hole 2144 psi. Sting
out of retainer and reverse out 5 sx cement. POOH with stinger.
Shut in overnight. Cost to date \$43360.

01-16-91 RIH with 3 7/8" bit and 6 3 1/8" DC and 84 jts
tubing and tag cement retainer. Circulate hole. Test
casing to 500 psi, OK. Drill on retainer for 2 hrs 45 minutes.
POOH to check bit. Cost to date \$46315.

01-17-91 Finish drilling retainer at 2710' and 60' cement
to 2766'. Test 500 psi, OK. POOH. RIH with 3 7/8"
bladed bit and drill good cement to 2825', test 500 psi, OK.
Pull 5 stands tubing and shut in overnight.

01-18-91 RIH and drill to 2887', test to 900 psi, OK.
Drill to 2946', test to 900 psi, OK. Drill to 3009',
test 900 psi, OK. Drill to 3071', test 900 psi, OK. Drill to
3129', test 900 psi, OK. Drill to 3191', test 900 psi, OK.
Drill to 3250', test 900 psi, OK. Drill to 3280', circulate hole
clean, reverse, and pull 5 stands and shut-in for night.

01-19-91 Drill to 3311', pressure test to 900 psi, bled to
500 psi in 30 seconds and held at 500 psi. Drilled to
3367' and fell out of cement. With bit at 3371', circulated hole

Moncrief Federal #1--Workover

clean. Closed pipe rams and pumped in at 2 bpm at 800 psi. Ran in hole to 3800', all clean. POOH. Shut-in for weekend.

01-20-91 Sunday--Crew Off

01-21-91 RIH with Baker fullbore packer (7.00') and 90 jts 2 3/8" tubing (2736.31'), and set packer at 2745' KB. Pressure backside to 1000 psi and trap. Establish rate of 1 bpm at 800 psi and 2 bpm at 1100 psi. Pumped total of 10 bbls. Mix 175 sx Class "B" with 0.6% fluid loss additive at 2 bpm at 1500 psi. After shut down, held 800 psi. Displaced with water at 2.2 bpm to 1/2 bpm at 1200 psi. Hesitated cement over 2 1/4 hrs, with maximum squeeze pressure of 1200 psi. Released packer and POOH.

01-22-91 RIH with 3 7/8" bladed bit and BHA as before and 93 jts tubing and tagged cement at 3007' KB. Drilled 60' soft cement. Drilled to 3097', tested to 900 psi, OK. Drilled and tested casing to 3340', all OK. Drilled to 3401', tested to 900 psi, had slight leak. Drilled out to 3557', testing to 1000 psi. Pressure bled to 750 psi in 1 minute. Pulled up and shut-in for night.

01-23-91 Thaw wellhead and lines. Continue drilling and testing to 1000 psi and each time would bleed to 750 psi in 1 minute. Fell free at 3773'. Tested and pumped into leak at 1 bpm at 1100 psi. On shutdown, would bleed off 200 psi in 1 minute. POOH. RIH with Baker fullbore packer and 90 jts tubing and set packer at 2745' KB. Loaded casing with 1000 psi and trapped. Established injection rate of 1.5 bpm at 1400 psi. Mixed 150 sacks Class "B" cement with 0.4% fluid loss additive and 2% calcium chloride at 1.8 bpm at 1500 psi to 1200 psi. Displaced at 1 1/2 bpm at 1100 psi to 1500 psi and at 1 bpm at 1300 psi to 1400 psi. Shut down and held 1200 psi. Hesitate cement 1/2 hr, pumped 1 1/2 bbls 1000 psi to 1300 psi. Hesitate cement 20 minutes and pumped in 1/4 bbl, 1000 psi to 1200 psi. Bled back pressure and had flow back. Pressure squeeze to 800 psi and shut-in for night.

01-24-91 POOH with packer. RIH with new 3 7/8" bladed bit & Drill Collars as before and 87 jts tubing and tag at 2824' KB. Drill good cement to 3039' KB. Circulate hole clean and Shut-in over night.

01-25-91 Drill good cement from 3039' to 3433'. Test casing at 3370' and 3401' and leaked 100 psi/minute.

01-26-91 Drill good cement from 3401' to 3620' and fell free. Test casing to 500 psi, bled to 100 psi in 10 minutes and held 100 psi for 5 minutes. Bled pressure. Continue in hole and with 183 jts tubing and BHA tagged sand fill at 5740' KB. Pull 5 stands tubing and shut-in over night.

Moncrief Federal #1--Workover

01-27-91 Sunday--Crew Off

01-28-91 Thaw out rig and piping. TIH with 183 jts tubing and BHA and reverse out 20' of sand off RBP at 5777'. Circulate hole clean and POOH. RIH with Baker retrieving head and 189 jts tubing and circulate onto RBP at 5777'. Latch onto plug and POOH. Recovered plug. Shut-in overnight.

01-29-91 TIH with 3 3/4" mill shoe (1.15'), 9 jts 3 3/4" wash pipe (289.76'), top sub (1.82'), Bowen Jars (8.48'), x-over (0.65'), 6 3 1/8" D.C. (177.09'), x-over (0.98'), seating nipple (1.00'), and 176 jts tubing for total measurement of 5843.27' and washover to packer at 6088' KB. Cut on packer 1 1/2 hrs and made 4". POOH. Mill shoe worn out. Made up and RIH BHA consisting of 3 3/4" overshot with 2 3/8" grapple (0.91'), bumper sub (4.50'), Bowen Jars (8.48'), x-over (0.65'), 6 3 1/8" D.C. (177.09'), x-over (1.06'), accelerator (8.60'), and x-over (0.82') and shut-in over night. Total BHA = 202.11'.

01-30-91 TIH with BHA and 185 jts tubing and latch onto fish at 5820' KB. Set jars off twice at 40k and pull free. POOH. Recovered 5' cut off piece of tubing and 8 jts tubing of which 6 were plugged, and seal assembly for packer. RIH with packer plucker (14.30'), Bowen jars (8.48'), 6 drill collars (177.09'), x-over (0.98'), for total BHA length of 200.85' and 193 jts tubing and latch into Model "P" packer at 6088' KB. Clean out drill tank and fill with 2% KCl water. Pump 75 bbls into well and no returns. Out of water. Shut-in overnight.

01-31-91 Thaw rig and lines. Mill on packer at 6088' while circulating the long way. Full returns. Cut on packer 4 hrs and twisted off. POOH with 19 jts tubing, had had collar failure, pin end looked good. RIH with overshot and 19 jts tubing and latched onto fish. Worked packer plucker and packer came up hole 20'. Pulled to 70k and slacked off, working packer plucker. Established circulation and worked plucker, no success. Attempt to release packer plucker and failed. Jar to 65k for 5 minutes and came free. Dragging 5k over string weight for 5 stands and freed up. Pulled 36 stands. Recovered overshot and tubing collar was split on one side. Shut-in for night.

02-01-91 Finish POOH and recovered an estimated 3/4 of Model "P" packer. RIH with 3 3/4" mill and 6 drill collars and 193 jts tubing and tagged at 6072' KB. Established circulation conventionally and milled 6" and fell free. RIH and tagged again at 6191' KB. Milled to 6281' KB and was at PBDT. Recovered scale, rubber, frac balls, sand, and steel cuttings. Circulated hole clean and pulled 5 stands and shut-in for weekend.

02-02-91 Saturday--Crew Off

02-03-91 Sunday--Crew Off

Moncrief Federal #1--Workover

02-04-91 POOH laying down rental 2 3/8" tubing and drill collars. Loaded out washpipe. RIH with Baker Fullbore packer (6.90') and 127 jts tubing (3973.70') and set packer at 3985' KB. Tested squeeze holes to 100 psi, after 10 minutes, no bleed off. Released packer and POOH. RIH with sawtooth collar (0.40'), 1 jt 2 3/8" tubing (31.01'), standard seating nipple (1.08'), and 127 jts 2 3/8" tubing and shut down for night.

02-05-91 Finish running production tubing and landed as follows:

2 3/8" sawtooth collar	.40'
1 jt 2 3/8" 4.7# EUE tubing	31.01'
Standard seating nipple (1.78" ID)	1.08'
<u>196 jts 2 3/8" 4.7# EUE tubing</u>	<u>6178.70'</u>
197 jts total	6211.19'
Landed below KB	<u>10.00'</u>
Tubing Landed at	6221.19'

Seating nipple is at 6189' KB.

Rig up and swab well.

WORKOVER HISTORY

03-19-91 Move in and rig up Flint Rig. Nipple down tree and nipple up BOP. POOH with 2 3/8" production tubing strapping pipe. Pulled total of 197 jts, seating nipple, and sawtooth collar all measuring 6201.86'. RIH with 3 7/8" Homco tapered mill and bit sub (4.83'), and 199 jts 2 3/8" tubing (6263.98'), and tag fill at 6269' KB. Started pulling tubing and had to shut down due to high winds after pulling 25 stands.

03-20-91 Finish POOH with tapered mill. Rig up Blue Jet and ran gamma-ray correlation log from 6269' to 5250'. Perforated with 2 JSPF 6212-31', 6236-45', and 6142-50'. No reaction after perforating. RIH with Baker Retrievamatic packer (6.40'), x-over (0.83'), and picked up 182 jts 2 7/8" 7.9# nulock tubing and set packer at 5828' KB. Loaded backside with water and clayfix and spotted 300 gallons 10% acetic acid. Closed bypass and established rate of 20 bpm at 4150 psi. 8DP 4400 psi. Fracked with 34,300 lbs 20/40 sand in 12,700 gallons 30# crosslinked gel. Ramped sand to 6.5 ppg. Screened off leaving 26,600 lbs sand in formation and 7,700 lbs in pipe. AIR 21 bpm at an average treating pressure of 3700 psi. Screened off to 6500 psi. Sand concentration at perforations at screen off was 5.89 ppg. Total load water to recover 369 bbls. Left well shut-in overnight.

03-21-91 SICP zero. Open tubing--no flow. Pump in 1 bbl water down casing and pressure to 500 psi, and maintain same. Released packer and POOH with 4800' 2 7/8" tubing. Gel was not

Moncrief Federal #1--Workover

broken and sand laden. Reversed out remaining gel and laid down 2 7/8" tubing on float. RIH with sawtooth collar (0.40'), 1 jt 2 3/8" tubing (31.76'), standard seating nipple (1.08'), and 184 jts 2 3/8" tubing (5792.75') and tag sand fill at 5820' KB. Rig up to reverse circulate. Cleaned out sand to 5972' KB, pulled 1 stand and shut-in overnight.

03-22-91 SITP & CP zero psi. Reverse out sand from 5952' to 6274' KB. Circulate hole clean. Pull 4 jts tubing to place EOT at 6200' KB. Rig up to swab. IFL at surface. Made 17 runs in 5 hrs. ending at 3:30 p.m. and recovered 87 BLW. FFL 4800'. Slight blow with swab up. 282 BLW yet to be recovered. Bled casing and lowered tubing and tagged sand at 6216' KB for 58' of fill. Place EOT at 6144' KB and resumed swabbing. Made 7 runs in 2 hrs ending at 6:00 p.m. and recovered 18 BLW with FFL at 5000'. Final CP zero psi. Slight sand in swab cups. 264 BLW yet to be recovered. Shut-in for night.

03-23-91 SITP zero, SICP 20 psi. Ran swab. IFL 4700'. In 5 hrs ending at noon, made 18 runs and recovered 35 BLW, with FL at 5500'. CP 80 psi. Still on vacuum with swab up. No oil. In 3 hrs ending at 3:00 p.m. made 10 runs and recovered 10 BLW, CP 110 psi, FL 5900', last 2 runs had slight blow with swab up. No oil. Wait 1 hr, made run from seating nipple and recovered 1 BLW, FL 5500'. CP 140 psi. Wait 1 hr, made run from seating nipple, recovered 1 BLW, FL 5500', CP 145 psi. Summary for day. IFL 4700', made 30 runs and recovered 47 BLW, FFL 5500', FCP 145 psi. 217 BLW yet to be recovered. Slight blow on tubing with swab up, dies in 1 minute. Shut-in for weekend.

03-24-91 Sunday--Crew Off

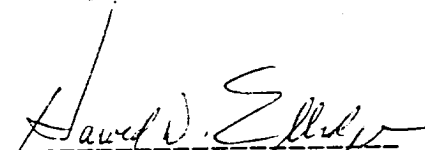
03-25-91 SITP 50 psi, SICP 320 psi. Ran swab, IFL 4800'. Made 4 runs and recovered 12 BLW and well kicked off flowing gas with a heavy mist of water. Died in 1/2 hr with CP 230 psi. In 1 1/2 hrs, ran swab twice and recovered 4 BLW, FL 5500' and CP down to 180 psi. Bled casing pressure and lowered tubing and tagged sand at 6216' KB for 58' of fill. POOH. RIH with Baker hydrostatic bailer and cleaned out sand 6216' to 6260' and bailer quit. Pulled up and waited for 1/4 hr, and tagged sand fill at 6245' KB. POOH and dumped bailer. TIH with bailer and cleaned out sand 6245' to 6274' KB. Pulled up and waited 1/4 hr, and had no fill, clean to 6274' KB. POOH. Total water pumped in to operate bailer 40 bbls. 241 BLW yet to be recovered. Shut-in for night.

Moncrief Federal #1--Workover

03-26-91 SICP 20 psi. Ran final production tubing as follows:

Sawtooth Collar, 2 3/8"	0.40'
1 jt. 2 3/8" 4.7# EUE tubing	31.76'
Standard Seating Nipple	1.08'
<u>196</u> jts 2 3/8" 4.7# EUE tubing	<u>6168.62'</u>
197 jts Total	<u>6201.86'</u>
Landed below KB	<u>10.00'</u>
Tubing landed at	6211.86' KB

Seating nipple at 6179' KB. Nipple down BOP and nipple up tree.
Released Flint Rig. Rig up Silver Star to swab. Turned job over
to Mr. Les Gimbel. Job Complete.



Harold W. Elledge
Petroleum Engineer

Pipe Tally 03-26-91 Union Oil Company of California 2 3/8" tubing Moncrief Federal #1

1	0.40	31.76	1.08	62.45	63.60	62.98	63.02
2				62.48	62.32	62.61	63.96
3	s		s	62.91	63.76	63.16	63.32
4	a		e	62.02	63.37	63.31	62.23
5	w		a	62.10	63.33	62.90	63.12
6	t		t	62.40	63.40	63.35	63.21
7	t		i	62.97	64.10	62.61	62.90
8	o		n	63.33	62.90	62.92	62.57
9	o		g	62.11	63.46	63.20	
10	t			63.47	63.45	62.10	
11	h		n	61.87	62.42	62.04	
12	i		i	63.16	63.35	62.71	
13	c		p	63.95	63.21	63.40	
14	o		p	63.12	62.40	62.78	
15	l		l	61.91	62.45	62.68	
16	l		e	62.75	63.32	62.21	
17	a			63.00	63.10	62.34	
18	r			63.08	62.55	62.52	
19				63.48	63.45	63.21	
20				62.63	62.71	62.55	
21				63.47	62.95	63.46	
22				62.88	62.27	62.05	
23				63.16	63.55	62.71	
24				63.40	62.26	62.96	
25				63.30	62.44	64.63	
26				62.90	64.20	63.54	
27				63.42	61.82	63.23	
28				62.12	63.50	62.85	
29				63.38	63.37	62.36	
30				63.40	63.37	62.32	

Sub Total	0.40	31.76	1.08	1886.62	1891.98	1885.69	504.33	0.00	0.00	0.00
Cum		32.16	33.24	1919.86	3811.84	5697.53	6201.86	6201.86	6201.86	6201.86
Avg Length	31.47 feet/jt	Total Jts. on Rack 197.00								

Landed 197 jts 2 3/8" 4.7# EUE tubing at 6212' KB
 1.78" ID Seating Nipple is at 6179' KB
 No tubing left on location

CUSTOMER: Union Oil of California
 WELL: Y. Maria Federal #1
 COUNTY: San Juan
 STATE: New Mexico

WELLBORE DIAGRAM AS OF
 DATE: 02-26-91

SURFACE CEMENT JOB: 200 sacks
 circulated to surface

Wellhead Manufacturer:
 O. C. T.

4 1/2" OSA 249 MKB

4 1/2" 10.5# Casing

Bad Casing 3751' 440

Bad Casing 3772' 440

Tip of Cement from Bond Job
 (1000')

444 Aggrused with 500 lb Glass
 "B" cement in 2 jobs.
 Tested and Held 100 psi
 with hole full of water

Dakota Model "B" Packer ran at
 6000' MKB Out Out 02-24-91

Log of log reported with
 250 sacks cement

1.75" ID casing nipple at 6179'
 2 3/8" 1.75 EWT tubing landed at
 at 6212' MKB 187 lbs total

Graneros Perfs 6142' to 6150'
 Dakota Perforations:
 4 1985 6212' to 6221' &
 6234' to 6245'
 Dakota perforated 02-20-91
 444 Cleaned out to 6274'
 444 4 1/2" OSA 6310 MKB
 WELL ID: 6330 MKB

PREPARED BY: Harold W. Ellledge, P.E.