| NO. OF COPIES RECEIV              | VED                                       | 7   | r                     |   | 1                    |                              |                     |
|-----------------------------------|---|---|-----------------------|---|----------------------|------------------------------|---------------------|
| DISTRIBUTION                      |   | -   |                       | RECEIVED BY   |                      | Form C-103<br>Supersedes Ol  | ld                  |
| SANTA FE                          | V   | NEW MEX   | ICO OIL CON           | ISERYOLION EQUALSION  |                      | C-102 and C-1                | 03                  |
| FILE                              | VV  |   |                       | JUL U 2 1984 STON   | ļ                    | Effective 1-1-6              | 55                  |
| U.S.G.S.                          |   | _   |                       | <b>O</b> , C, D.  | [                    | ja, Indicate Type            | of Lease            |
| LAND OFFICE                       | /   | _   | 1                     | ARTESIA, OFFICE   |                      | State                        | Fee X               |
| OPERATOR                          | V   |   |                       |   |                      | 5. State Oil & Gas           | s Lease No.         |
|                                   | SUND                                      |   | 500070.0              |   |                      |                              |                     |
| DO NOT USE T                      | JUNUF<br>HIS FORM FOR PR<br>USE "APPLICA" | CT NUTICES AND R<br>OPOSALS TO DRILL OR TO D<br>TION FOR PERMIT - " IFORM | EPORISO               | N WELLS<br>BACK TO A DIFFERENT RESERVOIR<br>UCH PROPOSALS.) | . 8                  |                              |                     |
| 1.<br>οιι<br>ψειι Χ               | GAS WELL                                  | OTHER-  |                       |   | <u>^</u>             | 7. Unit Agreement            | Name                |
| 2. Name of Operator<br>N. Dale Ni | ichols /                                  | /   |                       |   |                      | 6. Farm or Lease             |                     |
| 3. Address of Operator            |   |   |                       |   |                      | Alma Shield                  | 1s                  |
| P. O. Box                         | 1972, Mid                                 | land, Texas 79  | 702                   |   |                      | 9. Well No.                  |                     |
|                                   | <u> </u>                                  | 1650 FEET FROM TH   | South                 | 1650  | 1                    | 0. Field and Poo<br>Acme San |                     |
|                                   |   |   |                       |   | FEET FROM            |                              |                     |
| THENESU                           | LINE, SECTI                               | ON TOWN   | C / SHIP              | RANGE 27E   | <u> </u>             |                              |                     |
|                                   | illillilli                                | 15. Elevation   | Show whethe           | r DF, RT, GR, etc.)   |                      | 2. County                    | 444444              |
| $\sum_{16}$                       |   | 4004  | .5 GL                 |   |                      | Chaves                       |                     |
| N                                 | Check .<br>NICE OF IN                     | Appropriate Box To<br>NTENTION TO:  | o Indicate ]          | Nature of Notice, Repor                                     |                      | r Data<br>REPORT OF:         | 4                   |
| PERFORM REMEDIAL WOR              |   | <b>2</b>  | D ABANDON             |   | <b></b>              |                              |                     |
| TEMPORARILY ABANDON               |   | FLUG AN   | D ABANDON             | REMEDIAL WORK   |                      |                              | NG CASING           |
| PULL OR ALTER CASING              |   | CHANGE  | PLANS                 | CASING TEST AND CEMENT JOB                                  | $\mathbf{x}$         | PLUG AN                      | DABANDONMENT        |
|                                   |   |   |                       | OTHER   |                      |                              |                     |
| OTHER                             |   |   | [_]                   |   |                      |                              |                     |
| 17. Describe Proposed             | or Completed Op                           | perations (Clearly state a  | ll pertinent de       | tails, and give pertinent dates,                            | including es         | timated date of st           | arting any proposed |
|                                   |   |   |                       |   |                      |                              | aring any proposed  |
| lhis<br>all w                     | amended C<br>ork perfo                    | -103 as request<br>rmed through 6-  | ed in yoι<br>20-84.   | ur letter of June 4   | , 1984,              | includes                     |                     |
| 1)                                | المطامعا ٨                                | 11 04   |                       |   |                      |                              |                     |
| 1.)<br>2.)                        | Spuadea 4                                 | -11-84 With 9 /   | /8" bit a             | and drilled to 280'   | •                    |                              |                     |
|                                   | sacks cla                                 | ss C cement C   | irculated             | casing cemented 0 2<br>1 an estimated 15 s                  | 78 With              | 100                          |                     |
|                                   | down 12:30                                | 0 pm 4-25-84.   |                       | an estimated 19 Si  | acks pit             | 19                           |                     |
| 3.)                               | Repair rig                                | g and WOC 188 h   | rs. Test              | ted 7" casing 8:30  | am 5-2-8             | 34.                          |                     |
|                                   | tested to                                 | 850 PSI for 30  | minutes.              | . Test OK.  |                      |                              |                     |
| 4.)                               | 280' +0 30                                | Jt shoe with mu   | d then ch             | nanged to air. Dri  | lled for             | rmation                      |                     |
| 5.)                               | Saueezed .                                | J4 . ENCOUNTER<br>7" casing with  | eu leak a<br>50 sachs | round casing shoe.<br>class C, squeezed                     | to 600 5             | ) C T                        |                     |
| ···/                              | Reversed (                                | out estimated   | 22 sacks              | Job completed 1:  | 10 000 P<br>30 nm 5- | - <b>4</b> -84               |                     |
| 6.)                               | WUC 65 1/2                                | 2 hrs. lested   | squeeze w             | / 600 PSI for 30 m <sup>-</sup>                             | inutes.              | Test OK.                     |                     |
| /.)                               | Ran 6 1/4                                 | bit and drille  | d with ai             | r to 887', changed  | to mud               | and                          |                     |
|                                   | drilled to                                | o total depth o   | f 2118'.              | -   |                      |                              |                     |
| 0.)                               | sacks clay                                | SS ( with 5 1bs   | 1/2, 11.              | 6 lb casing and cer<br>sack. Plug down                      | mented w             | vith 100                     |                     |
|                                   |   | 55 6 WICH 5 155   | sait per              | Sack. Flug down .   | 1:30 pm              | 5-18-84.                     | continued           |
| 18. I hereby certify that         | the information                           | above is true and comple  | te to the best        | of my knowledge and belief.                                 |                      |                              |                     |
| $\sim$                            |   | - / <b>/</b>  |                       |   |                      |                              |                     |
| SIGNED                            | ale 1                                     | ficheli   | TITLE(                | )perator  |                      | date June 2                  | . 1984              |
|                                   |   |   |                       | riginal Signed by   |                      |                              |                     |
| APPROVED BY                       |   |   |                       | eslie A. Clements   |                      | 88.87                        | 0 0 100 4           |
|                                   | ·· · · · · · ·                            |   | TITLE SU              | pervisor District II  |                      | DATE                         | U Z 1984            |

| CONDITIONS | OF | APPROVAL. | ١F | ANY: |
|------------|----|-----------|----|------|
|            |    | -         |    |      |

N. Dale Nichols Alma Shields # 4 New Mexico Oil Conservation Commission Form C-103 Amended

Item 17 continued

- 9.) Caculated top of cement 1359 based on 50% excess cement.
- 10.) WOC 274 1/2 hrs. Tested casing with 850 PSI for 30 minutes. Test OK.
- 11.) Ran cement bond log. Found cement displaced 550' up hole. Cement located between 1170' and 1550'. No appreciable cement across potential pay.
- 12.) Perforated 4 1/2" casing with 4 holes @ 2095 and r holes @ 1620. Ran RTTS packer and set @ 2098 and tested shoe w/ 1000 PSI. Test OK. Reset RTTS packer @ 2090 circulated KCL water out, perforation 2095 up hole-casing anulus to perforations 1620. Pulled RTTS packer.
- 13.) Ran EZ drill cement retainer on 2 3/8 tubing and set at 2090. Recemented 4 1/2" casing with 100 sacks class C with 5 lbs salt per sack. Pulled stinger out of retainer and pulled up to 1550' and reversed out estimated 20 sacks. Job complete 11:45 am 5-31-84.
- 14.) WOC 68 1/2 hrs.
- 15.) Tested 4 1/2" casing with 850 PSI for 30 minutes. Test OK 6-4-84.
- 16.) Ran 3 7/8 bit on 2 3/8 tubing. Encountered cement @ 1570'. Drilled cement to 1660. Free to 2040. Drilled cement 2040 to 2088.
- 17.) Pull out of hole. Tested 4 1/2" casing at 400 PSI. Test OK.
- 18.) Ran cement bond log. Found cement in place 2090 to 1620 with questionable bonding 2090 to 2010.
- 19.) Perforated 4 1/2" casing with 2 holes @ 2041, 2 holes @ 2050 and 2 holes @ 2060.
- 20.) Ran Halliburton pin point packer and straddled holes @ 2060. Hole in tubing unable to treat. Pulled pin point packer.
- 21.) Ran RTTS packer on 2 3/8 tubing. Tested tubing to 4000 PSI going in the hole. Found collar leak.
- 22.) Set RTTS @ 2055 and had communications with perforations @ 2041 and 2050.
- 23.) Reset RTTS @ 2046 and had communications with perforations @ 2041.
- 24.) Reset RTTS @ 2020 and treated perforations from 2041-2060 w/ 750 gals 22 % HCL. Formation broke @ 1800 PSI and treated @ 2 BPM at 1800 PSI.

N. Dale Nichols Alma Shields # 4 New Mexico Oil Conservation Commission Form C-103 Amended

Item 17 continued

- 25.) Flowed and swabbed load and acid water, swabbed formation water @ rate of 4 BPH.
- 26.) Ran EZ drill cement retainer @ 2029 and squeezed perforations 2041-2060 with 75 sacks class C. Squeezed to 2600 PSI. Reversed out estimated 40 sacks. Job complete 12:00 noon 6-14-84.
- 27.) WOC 24hrs. Ran temperature survey. Survey indicated cement entered zone from 2000 to 2029.
- 28.) Perforated P 1 zone of the slaughter 1 hole @ 1930, 1 hole @ 1943, 1 hole @ 1949 and 2 holes @ 1957.
- 29.) Ran RD-1 tension packer on 2 3/8 tubing to 1963. Spotted 2 bbls of acid. Pulled up and set packer @ 1833 and tail pipe at 1865'.
- 30.) Acidized perforations with 3000 gal 22 % HCL in three stages using ball sealers. Formation broke at 2400 PSI and treated @ 2000 PSI @ 3.2 BPM.
- 31.) Swabbed and flowed 42 bbls load and acid water in 3 hrs. Shut down over night.
- 32.) Swabbed 67 bbls load and acid water in 7 hrs. Last hour swabb 3 BPH cutting estimated 25 % oil.
- 33.) Pulled tubing and packer.
- 34.) Ran tubing and seating nipple @ 1927 and bottom of mud anchor at 1941.
- 35.) Ran pump and rods.
- 36.) Waiting on pumping unit.