



MURPHY OPERATING CORPORATION  
UNITED BANK PLAZA, SUITE 300  
400 NORTH PENNSYLVANIA AVENUE  
POST OFFICE BOX 2648  
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE  
505 623-7210

October 21, 1988

Mr. David R. Catanach, Petroleum Engineer  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Request for Approval to Convert Two (2)  
Wells to Injection / Expansion of Waterflood;  
Bluitt San Andres Unit ("the Bluitt Unit");  
Roosevelt County, New Mexico.

Dear Mr. Catanach:

I have enclosed herewith for your review and approval Murphy Operating Corporation's (MOC) application dated October 11, 1988 for the conversion to injection of two (2) wells located in the Bluitt San Andres Unit referenced above. The utilization of these wells (#18-5, and #18-13 marked in blue on the map attached hereto) will create a nine-spot pattern. This configuration will permit MOC to monitor the pilot water flood project for any potentially adverse preferential permeability trends prior to expanding to the ultimate flood pattern of 80-acre five spots, where appropriate throughout the unit.

Enclosed with the application is a land plat upon which a 1/2 mile radius circle ("area of review") has been drawn around each injection well. A schematic diagram for each of the injection wells with the required downhole information is also included herewith. Certain statements necessary to the completion of application Form C-108 are given below:

REQUIRED INFORMATION: (Presented in same sequence and format as on Form C-108)

- V. Attached as Exhibit I
- VI. Included in tabular form attached hereto.  
Note that there are two (2) plugged wells within the area(s) of review. (see schematic diagrams attached).
- VII.
  - 1) Included in tabular form (see VI above).
  - 2) This is a closed system.
  - 3) Included in tabular form (see VI above).
  - 4) Attached, see water analysis and letter dated August 31, 1988 from Permian Treating Chemicals.
  - 5) Not applicable.
- VIII. Geological data and description of "Injection Zone" and "Fresh Water Zones" in area.

Injection Zone: The proposed injection zone is known as the Slaughter P-2 porosity zone of the San Andres Formation. This zone is a tan to brown dolomite. Scattered anhydrite inclusion and bedding occurs along with infrequent zones of fine solution porosity. The top of the P-2 occurs at approximately 4620' below ground level and has an approximate thickness of 40 to 60 feet. This zone dips south and east and as a result the bottom of this zone can occur at depths approaching 4700' below ground level.

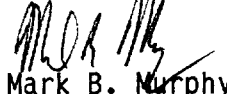
Fresh Water Zone: The only known fresh water source in this area is the Ogallala Formation. This is a fresh water sand that is infrequently present throughout the area. The maximum reported depth is approximately 220 feet below ground level as evidenced in MOC's water well located approximately 3/4 miles west of the proposed injection wells. If a local presence of the Ogallala exists, it will be protected by the 290 feet or more of 8 5/8" surface casing set in all of the wells in the Bluit San Andres Unit.

- IX. All past stimulation programs are listed in tabular form (see VI above).
- X. Wells logs have been previously submitted to the Division.
- XI. The required chemical analysis of two or more fresh water wells is included in Permian Treating Chemical's letter dated August 31, 1988 which is attached hereto.
- XII. Although this requirement is for disposal wells, Murphy Operating Corporation has examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the proposed disposal (injection) zone and any underground source of drinking water
- XIII. The Proof of Notice requirement is being complied with. The legal advertisement is to be published in the Portales Tribune, Portales, New Mexico for three consecutive days beginning Wednesday, October 19, 1988, and ending Friday, October 21, 1988. The Affidavit of Publication will be forwarded to your office next week when we receive same from the Portales Tribune. A copy of the certified return receipts from the landowner, Dick Buffington, Mauriceville, Texas and the offsetting leasehold operators within 1/2 mile are included herein.

Murphy Operating Corporation hereby respectfully requests administrative approval to the application contained herein. Should you have any questions or comments, please contact the undersigned at the telephone number listed above.

Sincerely,

MURPHY OPERATING CORPORATION



Mark B. Murphy  
President and Chief Operating Officer

MBM/js

cc: Mr. Jerry Sexton, Supervisor  
Oil Conservation Division  
Post Office Box 1980  
Hobbs, New Mexico 88240

Enclosures:

Exhibit I - Landplats outlining "Area of Review";  
Table of Drilling and Completion Information;  
Letter - Permian Treating Chemicals dated 8/31/88;  
Schematic diagrams for wells #18-5 and #18-13;  
Schematic diagrams and tabular information for P & A'd wells within Area of Review;  
Copies of certified return receipt(s) from landowner and offsetting leasehold operators.

## APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no

II. Operator: MURPHY OPERATING CORPORATION

Address: POST OFFICE BOX 2648, ROSWELL, NEW MEXICO 88202-2648

Contact party: MARK B. MURPHY Phone: 505/623-7210

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☒ yes ☐ no  
If yes, give the Division order number authorizing the project R-8118.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

\* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

\* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Matt B. Murphy Title: Operations Agent

Signature:  Date: 10/11/88

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.







TABLE OF DRILLING AND COMPLETION INFORMATION ON PROPOSED INJECTION AND PRODUCING WELLS WITHIN AREA OF REVIEW  
PROPOSED BLUITT SAN ANDRES UNIT, ROOSEVELT COUNTIES, NEW MEXICO

| Well Name & Location  | Unit Well# | Well Type* | Casing Record   | Date Drig. & Comp.    | Total Depth         | Perforations/Open Hole   | Completion  | Proposed                                   | Injection Equipment                    |
|---|------------|------------|---|-----------------------|---------------------|--|---|--|--|
|   |            |            |   |                       |                     |  |   | Downhole Tubing                            |  |
| MOC originally Roden Oil Company Bluit Federal #1 E-18-T8S-R-37E 2086' FNL & 554' FML Elevation 4004.5' GR          | 18-5       | IP         | 301' 8 5/8" 24# in 12 1/4" hole 200 sacks cmt. Circ. to surf.<br>4738' 5 1/2" 14# in 7 7/8 " hole 272 sacks cmt. TOC 4400' by Calc.       | 01-17-69/<br>02-24-69 | TD 4738' PBTD 4720' | 1-2 SPI (Eleven holes) 4697, 4701, 4702, 4707, 4712, 4715, 4716, 4717<br>01-05-88 (1 JPSPF) 4688, 4691, 4694, 4698, 4792, 4705, 4707, 4710, 4713, 4715, 4717 | Acidize w/3500 gals 15% HCl<br>Acidize w/2000 gals 15% NeFe                 | 2 3/8" 4.7# J-55 Ceramic lined set @ 4425' | 5 1/2" AD-1 Tension Packer set @ 4428' |
| MOC originally Franklin Aston & Fair Shaw Federal #2 M-18-T8S-R-38E 660' FSL & 660' FML Elevation 4000' GR 4009' KB | 18-13      | IP         | 293' KB 8 5/8" 20# in 12 1/4" hole, 175 sacks cmt. Circ. to surf.<br>4733' KB 5 1/2" 14# in 7 7/8" hole, 275 sacks cmt. TOC 4430' by CBL. | 02-01-69/<br>02-08-69 | TD 4733' PBTD 4728' | 1 JPSPF 4690, 4692, 4693, 4696, 4698, 4699, 4703, 4704, 4709, 4711, 4712<br>12-01-87 Acidize w/300 gals Xylene, 1500 gals 15% NeFe                           | Acidize w/3500 gals DS-30 acid<br>Acidize w/300 gals 15% NeFe               | 2 3/8" 4.7# J-55 Ceramic lined set @ 4428' | 5 1/2" AD-1 Tension Packer set @ 4431' |
| MOC originally Eugene E. Nearburg Baetz Federal #1 G-13-T8S-R-37E 1980' FNL & 1980' FEL Elevation 3999.4'           | 13-7       | I          | 300' 8 5/8" 20# in 12 1/4" hole 150 sacks cmt. Circ to surf.<br>4793' 4 1/2" 9.5# in 7 7/8" hole 200 sacks cmt. TOC 4030' CBL.            | 02-11-69/<br>02-26-69 | TD 5050' PBTD 4728' | 1 JPSPF 4649, 4649½, 4655, 4655½, 4661, 4661½, 4667, 4667½, 4675, 4675½, 4679, 4679½   | Acidize w/3000 gals 15% DS-30 Acid<br>09-26-88 Acidize w/2000 gals 15% NeFe | 2 3/8" 4.7# J-55 Ceramic lined set @ 4507' | 4 1/2" AD-1 Tension Packer set @ 4510' |

KEY: P-Producing IP-Proposed Injection  
I-Injection TA-Temporarily Abandoned

TABLE OF DRILLING AND COMPLETION INFORMATION ON PROPOSED INJECTION AND PRODUCING WELLS WITHIN AREA OF REVIEW  
PROPOSED BLUETT SAN ANDRES UNIT, ROOSEVELT COUNTIES, NEW MEXICO

| Well Name & Location   | Unit Well# | Well Type* | Casing Record   | Date Drig. & Comp.    | Total Depth                        | Perforations/Open Hole   | Completion   | Proposed   | Injecti Equipme                              |
|--|------------|------------|---|-----------------------|------------------------------------|--|--|--|--|
|  |            |            |   |                       |                                    |  |  | Downhole Tubing  |  |
| MOC originally<br>Layton Enterprises<br>Bluett Federal #3<br>0-13-T8S-R37E<br>660' FSL & 1980 FEL<br>Elevation 3997 GL | 13-15      | I          | 402' 8 5/8" 24# in 12 1/4" hole<br>325 sacks cmt. Circ. to surf.<br>4740' 4 1/2" 9.5# in 7 7/8" hole<br>500 sacks cmt. Circ. to surf.   | 10-02-77/<br>11-11-77 | TD<br>4750'<br>P8TD<br>4727'       | 1 JSPF<br>4640, 4642, 4644, 4646,<br>4648, 4650, 4652, 4654,<br>4656, 4658, 4660, 4662,<br>4664, 4666, 4670,   | Acidize w/16000 gals 20%<br>HCl-Ne & 1000 gals Xylene<br>11-18-88<br>Acidize w/6000 gals PAD<br>Acid   | 2 3/8"<br>4.7# J-55<br>Ceramic<br>lined set<br>@ 4397' | 4 1/2"<br>AD-1<br>Tensio<br>Packer<br>@ 4400 |
| MOC originally<br>Eugene Nearburg<br>Baetz Federal #4<br>C-13-T8S-R-37E<br>587' FNL & 1849' FML<br>Elevation 4011' GR  | 13-3       | P          | 303' 8 5/8" 28# in 12 1/4" hole<br>150 sacks cmt. Circ to surf.<br>4751' 4 1/2" 9.5# in 7 7/8" hole<br>200 sacks cmt. TOC 3956' by CBL. | 06-23-69/<br>07-01-69 | TD<br>4760'<br>P8TD<br>4751'       | 1 JSPF<br>4633, 4640, 4644, 4645, 4653,<br>4656, 4659, 4662 KB   | Acidize w/6000 gals<br>15% NeFe  |  |  |
| MOC originally<br>Eugene Nearburg<br>Baetz KGS #1E<br>E-13-T8S-R-37E<br>1980' FNL & 660' FEL<br>TOC 4200' by CBL       | 13-5       | P          | 307 8 5/8" 24# in 12 1/4" hole<br>150 sacks cmt. Circ to surf.<br>4730' 5 1/2" 14# in 7 7/8" hole<br>200 sacks cmt. TOC 4200' by CBL.   | 07-02-69/<br>07-16-69 | TD<br>4740'<br>KB<br>P8TD<br>4687' | Perforate 9 holes<br>4608, 4609, 4613, 4618<br>4623, 4627, 4630, 4635<br>11-02-87 Squeeze perfs at<br>4608-4635<br>280 sacks cmt.<br>1 JSPF<br>4608, 4609, 4613, 4614<br>4618, 4619, 4623, 4627,<br>4630, 4635, 4636, 4637 | Acidize w/6000 gals<br>15% NeFe<br>10-30-87<br>Acidize w/5000 gals<br>15% NeFe<br>Int (4608'-4636')<br>11-04-87<br>Acidize w/4000 gals<br>PAD acid |  |  |

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PROPOSED BLUITT SAN ANDRES UNIT, ROOSEVELT COUNTIES, NEW MEXICO

| Well Name & Location  | Unit Well# | Well Type* | Casing Record  | Date Drig. & Comp.    | Total Depth                              | Perforations/Open Hole  | Completion   | Proposed        |
|---|------------|------------|--|-----------------------|--|---|--|-----------------|
|   |            |            |  |                       |  |   |  | Downhole Tubing |
| MOC originally<br>Eugene Nearburg<br>Baetz Federal #3<br>H-13-T8S-R-37E<br>1980' FNL & 660' FEL<br>Elevation 3995.3                       | 13-8       | P          | 303' 8 5/8" 28# in 12 1/4" hole<br>150 sacks cmt. Circ to surf.<br>4767' 4 1/2" 9.5# in 7 7/8" hole<br>200 sacks cmt. TOC 4050' by Calc. | 02-14-69/<br>02-26-69 | TD<br>4780'<br>PBTD<br>4747'             | 1 JSPF<br>4670, 4672, 4677, 4683,<br>4685, 4692, 4694, 4698   | Acidize w/6000 gals 15%<br><br>12-05-87<br>Acidize w/2000 gals Ne-<br>WS38   |                 |
| MOC originally<br>Franklin, Aston & Fair<br>Blutt Federal #1<br>I-13-T8S-R-37E<br>1980' FSL & 660' FEL<br>Elevation 4003' DF<br>3991.3 GR | 13-9       | P          | 295' 8 5/8" 20# in 12 1/4" hole<br>150 sacks cmt. Circ. to surf.<br>4756' 5 1/2" 14# in 7 7/8" hole<br>275 sacks cmt. TOC 3850' by CBL.  | 10-01-68/<br>10-17-68 | TD<br>4756'<br>PBTD<br>4728'             | 1 JSPF at selected intervals<br>from 4661-4680 9 holes<br><br>12-11-88 (1 JSPF)<br>4665, 4667, 4672, 4675, 4679<br>4681, 4684, 4687, 4688, 4690 | Acidize w/3000 gals 15%<br>DS-30<br><br>12-11-88<br>Acidize w/1000 gals Ne-<br>WS38<br>Int. 4661-4680<br><br>12-11-88<br>Acidize w/3000 gals 15%<br>Nefe<br>Int. 4661-4690 |                 |
| MOC originally<br>Franklin, Aston & Fair<br>Blutt Federal #2<br>J-13-T8S-R-37E<br>1980' FSL & 1980' FEL<br>Elevation 3997.5 GR            | 13-10      | P          | 286' 8 5/8" 20# in 12 1/4" hole<br>175 sacks cmt. Circ. to surf.<br>4694' 5 1/2" 14# in 7 7/8" hole<br>275 sacks cmt. TOC 3850' by CBL.  | 12-10-68/<br>12-22-68 | TD<br>4694'<br>PBTD<br>4688'             | 1 JSPF<br>4645, 4648, 4651, 4657,<br>4658, 4664, 4667, 4669   | Acidize w/9000 gals 15%<br>HCl   |                 |
| MOC originally<br>Eugene Nearburg<br>Baetz Federal #2<br>K-13-T8S-R-37E<br>1980' FSL & 1980 FEL<br>Elevation 3997.5 GR                    | 13-11      | P          | 295' 8 5/8" 24# in 12 1/4" hole<br>sacks cmt. Circ. to surf.<br>4787' 4 1/2" 9.5# in 7 7/8" hole<br>sacks cmt. TOC 4100' by Calc.        | 02-04-69/<br>02-13-69 | TD<br>4800'<br>KB<br>PBTD<br>4729'<br>KB | 1 JSPF<br>4623, 4625, 4628, 4634,<br>4636, 4642, 4645, 4648,<br>4652  | Acidize w/6000 gals 15%<br>acid<br><br>12-03-87<br>Acidize w/2400 gals 15%<br>Ne-WS48  |                 |

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PROPOSED BLUITT SAN ANDRES UNIT, ROOSEVELT COUNTIES, NEW MEXICO

| Well Name & Location   | Unit Well# | Well Type* | Casing Record  | Date Drig. & Comp.    | Total Depth            | Perforations/Open Hole   | Completion   | Proposed        | Inject Equipment |
|--|------------|------------|--|-----------------------|------------------------|--|--|-----------------|------------------|
|  |            |            |  |                       |                        |  |  | Downhole Tubing |                  |
| MOC originally Eugene Nearburg Baetz Federal #5 N-13-T8S-R37E 660' FSL & 1980' FML Elevation 3992.2 GR                 | 13-14      | P          | 294' 8 5/8" 24# in 12 1/4" hole 150 sacks cmt. Circ. to surf. 4733' 4 1/2" 9.5# in 7 7/8" hole 200 sacks cmt. TOC 3878' by CBL.        | 07-12-69/<br>07-19-69 | TD 4733' KB PBTD 4715' | 1 JSPF 4669, 4672, 4678, 4680, 4684, 4687, 4691, 4694, 4698  | Acidize w/6000 gals 15% Nefe<br><br>12-24-87<br>Acidize w/2000 gals 15% Nefe               |                 |                  |
| MOC originally Franklin Aston & Fair Shaw Federal #1 L-18-T8S-R37E 1980' FSL & 660' FML Elevation 3984.7' GR 3996.7 KB | 18-12      | P          | 295' 8 5/8" 20# in 12 1/4" hole 175 sacks cmt. Circ. to surf. 4740' 5 1/2" 14# in 7 7/8" hole 275 sacks cmt. TOC 3870' by CBL.         | 12-01-68/<br>12-11-68 | TD 4740' PBTD 4726'    | 1 JSPF 4688, 4690, 4692, 4693, 4696, 4697, 4700, 4702, 4704<br><br>01-03-88 (1 JSPF)<br>4676, 4682, 4686, 4690, 4693, 4695, 4701, 4708, 4710, 4713 | Acidize w/3000 gals 15% acid.<br><br>01-03-88<br>Acidize w/2000 gals 15% Nefe              |                 |                  |
| MOC originally Franklin Aston & Fair Roden Federal #2 C-19-T8S-R38E 1874' FML & 554' FNL Elevation 3994.2' GR          | 19-3       | P          | 295' KB 8 5/8" 20# in 12 1/4" hole, 175 sacks cmt. Circ. to surf. 4765' KB 5 1/2" 14# in 7 7/8" hole, 275 sacks cmt. TOC 3900' by CEL. | 04-15-69/<br>04-25-69 | TD 4765' PBTD 4753'    | 1 JSPF 4724, 4726, 4727, 4728, 4732, 4734, 4744, 4746, 4747  | Acidize w/3000 gals 15% Acid.<br><br>12-08-87<br>Acidize w/2000 gals 15% Nefe.             |                 |                  |
| MOC originally Roden Oil Company Roden Blutt Fed #2 D-19-T8S-R38E 510' FNL & 660' FML Elevation 4010.2' GR             | 19-4       | P          | 345' 8 5/8" 20# in 12 1/4" hole 200 sacks cmt. Circ. to surf. 4770' 5 1/2" 14# in 7 7/8" hole 275 sacks cmt. TOC 4400' by Calc.        | 04-04-69/<br>04-28-69 | TD 4770' PBTD 4768'    | 11-19-87 (1 JSPF)<br>4718, 4720, 4724, 4726, 4728, 4730, 4732, 4734, 4736  | 04-18-69<br>Acidize w/1000 gals 15% Acid.<br><br>11-19-87<br>Acidize w/3750 gals PAD Acid. |                 |                  |

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I-Injection IA-Temporarily Abandoned

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PROPOSED BLUITT SAN ANDRES UNIT, ROOSEVELT COUNTIES, NEW MEXICO

| Well Name & Location   | Unit Well# | Well Type* | Casing Record   | Date Drig. & Comp.    | Total Depth                  | Perforations/Open Hole   | Completion   | Proposed        | Injecti Equipme |
|--|------------|------------|---|-----------------------|------------------------------|--|--|-----------------|-----------------|
|  |            |            |   |                       |                              |  |  | Downhole Tubing |                 |
| MOC originally Frankl in Aston & Fair McCaw Federal #1 A-24-T8S-R37E 660' FNL & 660 FEL Elevation 4007'KB 3997.9' GR | 24-1       | P          | 295' KB 8 5/8" 20# in 12 1/4" hole, 175 sacks cmt. Circ. to surf.<br>4748' KB 5 1/2" 14# in 7 7/8" hole, 275 sacks cmt. TOC 4150' by CBL. | 02-24-69/<br>03-08-69 | TD<br>4748'<br>PBTD<br>4739' | 1 JSPF<br>4702, 4704, 4708, 4710, 4714, 4717, 4718, 4725, 4726, 4732   | Acidize w/3500 gals DS-30<br>12-10-87<br>Acidize w/2000 gals 15% NE-WS38   |                 |                 |
| MOC originally Tom L. Ingram Ingram Fed E #2 B-24-T8S-R37E 554' FNL & 1874' FEL Elevation 3987' GR                   | 24-2       | P          | 315' 8 5/8" 20# in 12 1/4" hole 200 sacks cmt. Circ. to surf.<br>4750' 4 1/2" 9.5# in 7 7/8" hole 275 sacks cmt. TOC 3650' by Calc.       | 03-31-69/<br>04-21-69 | TD<br>4750'<br>PBTD<br>4732' | 1 JSPF<br>4703, 4705, 4707, 4709, 4711, 4716, 4717, 4724, 4725, 4729   | 04-21-69<br>Acidize w/3000 gals 15% DS-30<br>12-22-87<br>Acidize w/2000 gals 15% Nefe  |                 |                 |
| MOC originally Tom L. Ingram Ingram Fed E #1 C-24-T8S-R37E 660' FNL & 1980' FNL Elevation 3993' GR                   | 24-3       | P          | 339' 8 5/8" 32# in 11" hole 375 sacks cmt. Circ. to surf.<br>4830' 4 1/2" in 9" hole 275 sacks cmt. TOC 3700' by Calc.                    | 02-24-69/<br>06-15-69 | TD<br>4830'<br>PBTD<br>4725' | 1 JSPF<br>4746, 4747, 4749, 4750, 4751, 4753, 4756, 4758, 4768,<br>Reperforated (1 JSPF)<br>4618, 4620, 4636, 4638, 4643, 4649, 4650, 4668, 4669, 4673, 4674, 4675, 4681, 4685, 4689, 4691 | Acidize w/4500 gals DS-30<br>Reacidized w/2500 gals 15%<br>Second stage 6000 gals 15%<br>Frac w/20,000 gals lease oil & 16,000# sand |                 |                 |

KEY: P-Proposed IP-Proposed Injection  
I-Injection TA-Temporarily Abandoned

# PERMIAN

Treating Chemicals, Inc.

---

P. O. BOX 815  
TATUM, NM 88267  
PHONE (505) 398-4111

August 31, 1988

Murphy Operating Corporation  
P. O. Drawer 2648  
Roswell, NM 88202-2648

Subject: Compatibility of fresh & produced water from Bluit San Andres unit.

Gentlemen:

We have ran analysis's on fresh, produced and commingled waters from the above mentioned lease (see attached copies.)

We at Permian Treating Chemicals, Inc. feel that these waters injected separately or commingled are very compatible.

If we can be of any further assistance, please call myself or Mr. Gale Blackwell at anytime.

Sincerely,



David Nailon,  
Permian Treating Chemicals, Inc.

# PERMIAN

Treating Chemicals, Inc.

P. O. BOX 728  
LOVINGTON, NM 88263  
PHONE (505) 396-5674

## WATER ANALYSIS REPORT

Company Murphy Operating Date Sampled 8-31-88  
Field Bluitt Field County Curry  
Lease Unit Sec 24 State New Mexico  
Well #1 Formation San Andres  
Type of Water Produced Water, B/D \_\_\_\_\_  
Sampling Point Wellhead Sampled By David Nailon

### DISSOLVED SOLIDS

#### CATIONS

|                   | mg/l  |        | meq/l |
|-------------------|-------|--------|-------|
| Sodium, Na+(Calc) | 51175 | ÷ 23   | 2225  |
| Calcium, Ca++     | 17880 | ÷ 20   | 894   |
| Magnesium, Mg++   | 73143 | ÷ 12.2 | 600   |
| Barium, Ba++      |       | ÷ 68.7 |       |
| Iron, Fe (Total)  |       |        |       |
|                   |       |        |       |
|                   |       |        |       |

#### ANIONS

|                                 |        |        |      |
|---------------------------------|--------|--------|------|
| Chloride, Cl-                   | 132000 | ÷ 35.5 | 3718 |
| Sulfate, So <sub>4</sub> =      |        | ÷ 48   |      |
| Carbonate, Co <sub>3</sub> =    |        | ÷ 30   |      |
| Bicarbonate, HCo <sub>3</sub> - | 85     | ÷ 61   | 1.   |
|                                 |        |        | 3719 |

### OTHER PROPERTIES

pH 5.6  
Specific Gravity \_\_\_\_\_  
H<sub>2</sub>S \_\_\_\_\_  
Total Dissolved Solids 274,283  
Total Hardness 74800

Remarks and Recommendations \_\_\_\_\_



**PERMIAN**

Treating Chemicals, Inc.

P.O. BOX 728  
LOVINGTON, NM 89263  
PHONE (505) 396-5674

**WATER ANALYSIS REPORT**

Company Murphy Operating Date Sampled 8/31/88  
Field Bluitt County \_\_\_\_\_  
Lease GunBarrel State NM  
Well \_\_\_\_\_ Formation \_\_\_\_\_  
Type of Water Comingled Water, B/D \_\_\_\_\_  
Sampling Point GunBarrel Sampled By \_\_\_\_\_

DISSOLVED SOLIDS

OTHER PROPERTIES

CATIONS

mg/l

meq/l

pH 6.8

Sodium, Na+(Calc)

2737

÷ 23

119

Specific Gravity

Calcium, Ca++

1000

÷ 20

50

1.00

Magnesium, Mg++

292

÷ 12.2

24

H<sub>2</sub>S Neg.

Barium, Ba++

÷ 68.7

Total Dissolved

Iron, Fe (Total)

Solids 11224

Total Hardness

3700

ANIONS

Chloride, Cl-

6000

÷ 35.5

169

Sulfate, So<sub>4</sub>=

975

÷ 48

20

Carbonate, Co<sub>3</sub>=

0

÷ 30

0

Bicarbonate, HCo<sub>3</sub>-

220

÷ 61

4

Remarks and Recommendations

# PERMIAN

Treating Chemicals, Inc.

P. O. BOX 728  
LOVINGTON, NIA 88263  
PHONE (505) 396-8674

## WATER ANALYSIS REPORT

Company Murphy Operating Date Sampled 8-31-88  
Field \_\_\_\_\_ County \_\_\_\_\_  
Lease Bluitt San Andres State NM  
Well FW #1 Formation FW  
Type of Water Fresh Water, B/D \_\_\_\_\_  
Sampling Point Well Sampled By Nailon

### DISSOLVED SOLIDS

#### CATIONS

|                   | mg/l       |        | meq/l     |
|-------------------|------------|--------|-----------|
| Sodium, Na+(Calc) | <u>460</u> | + 23   | <u>20</u> |
| Calcium, Ca++     | <u>87</u>  | + 20   | <u>4</u>  |
| Magnesium, Mg++   | <u>54</u>  | + 12.2 | <u>4</u>  |
| Barium, Ba++      | _____      | + 68.7 | _____     |
| Iron, Fe (Total)  | _____      |        | _____     |
| _____             | _____      |        | _____     |
| _____             | _____      |        | _____     |

#### ANIONS

|                                 |            |        |           |
|---------------------------------|------------|--------|-----------|
| Chloride, Cl-                   | <u>500</u> | + 35.5 | <u>14</u> |
| Sulfate, So <sub>4</sub> =      | <u>547</u> | + 48   | <u>11</u> |
| Carbonate, Co <sub>3</sub> =    | _____      | + 30   | _____     |
| Bicarbonate, HCo <sub>3</sub> - | <u>191</u> | + 61   | <u>3</u>  |
| _____                           | _____      |        | _____     |
| _____                           | _____      |        | _____     |

### OTHER PROPERTIES

pH 7.4  
Specific Gravity 1.009  
H<sub>2</sub>S Neg  
Total Dissolved Solids 1839  
Total Hardness 405

Remarks and Recommendations \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# PERMIAN

Treating Chemicals, Inc.

P.O. BOX 728  
LOVINGTON, N.M. 88260  
PHONE (505) 398-5674

## WATER ANALYSIS REPORT

Company Murphy Operating Date Sampled 8-31-88  
Field Bluitt County Bluitt  
Lease Bluitt San Andres State NM  
Well #2 Formation F/W  
Type of Water Fresh Water, B/D Nailon  
Sampling Point Well Sampled By

### DISSOLVED SOLIDS

#### CATIONS

|                   | mg/l |        | meq/l |
|-------------------|------|--------|-------|
| Sodium, Na+(Calc) | 690  | + 23   | 30    |
| Calcium, Ca++     | 89   | + 20   | 4     |
| Magnesium, Mg++   | 48   | + 12.2 | 4     |
| Barium, Ba++      |      | + 68.7 |       |
| Iron, Fe (Total)  | 0    |        |       |
|                   |      |        |       |
|                   |      |        |       |

#### ANIONS

|  |     |        |    |
|--|-----|--------|----|
| Chloride, Cl-                              | 800 | + 35.5 | 23 |
| Sulfate, So <sub>4</sub> <sup>=</sup>      | 553 | + 48   | 12 |
| Carbonate, Co <sub>3</sub> <sup>=</sup>    | 0   | + 30   | 0  |
| Bicarbonate, HCo <sub>3</sub> <sup>-</sup> | 198 | + 61   | 3  |
|  |     |        |    |
|  |     |        |    |

### OTHER PROPERTIES

pH 7.2  
Specific Gravity 1.008  
H<sub>2</sub>S Neg  
Total Dissolved Solids 2378  
Total Hardness 408

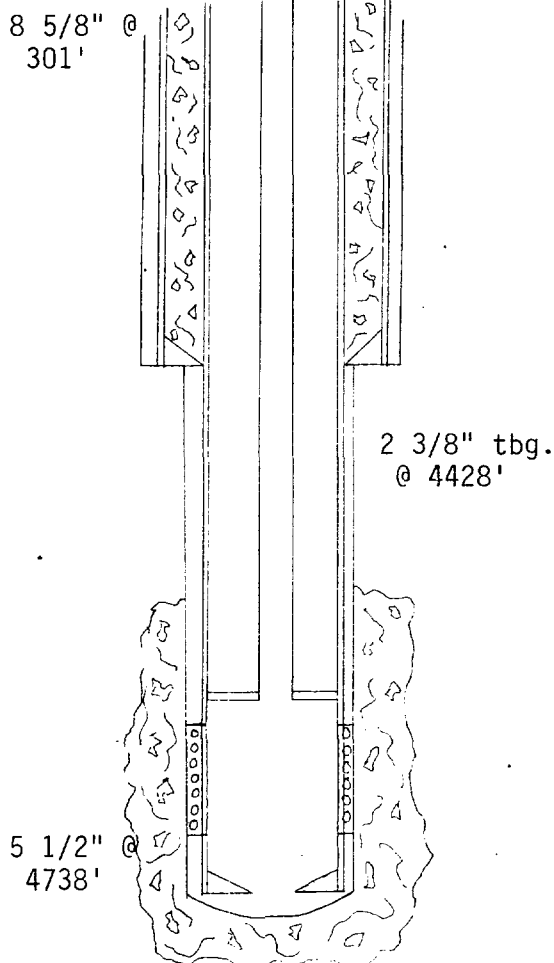
Remarks and Recommendations

## INJECTION WELL DATA SHEET

|                              |                      |                        |          |       |
|------------------------------|----------------------|------------------------|----------|-------|
| MURPHY OPERATING CORPORATION |                      | BLUITT SAN ANDRES UNIT |          |       |
| OPERATOR                     |                      | LEASE                  |          |       |
| 18-5                         | 2086- FNL & 554' FWL | 18                     | 8S       | 38E   |
| WELL NO.                     | FOOTAGE LOCATION     | SECTION                | TOWNSHIP | RANGE |

Schematic

Tabular Data



## Surface Casing

Size 8 5/8 " Cemented with 200 sx.TOC Surface feet determined by circulationHole size 12 1/4"

## Intermediate Casing

Size \_\_\_\_\_ " Cemented with \_\_\_\_\_ sx.

TOC \_\_\_\_\_ feet determined by \_\_\_\_\_

Hole size \_\_\_\_\_

## Long string

Size 5 1/2 " Cemented with 275 sx.TOC 4400 feet determined by calculationHole size 7 7/8"Total depth 4738' TD 4720' PBDT

## Injection interval

4688 feet to 4717 feet  
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with ceramic epoxy set in a  
(material)  
AD-1 packer at 4428 feet  
(brand and model)

(or describe any other casing-tubing seal).

## Other Data

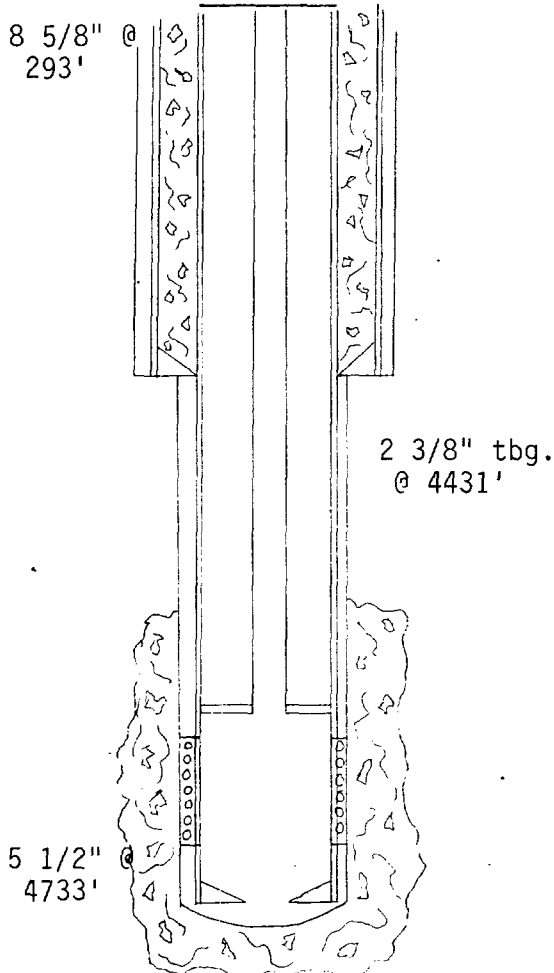
- Name of the injection formation P-2 San Andres
- Name of Field or Pool (if applicable) Bluitt San Andres Unit
- Is this a new well drilled for injection? ☐ Yes ☒ No  
If no, for what purpose was the well originally drilled? Oil & gas producer
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. P-1 San Andres zone produces gas in this general area and occurs at a depth of 4562' - 4668'.



## INJECTION WELL DATA SHEET

MURPHY OPERATING CORPORATION  
OPERATORBLUITT SAN ANDRES UNIT  
LEASE18-13  
WELL NO.660' FSL & 660' FWL  
FOOTAGE LOCATION18  
SECTION8S  
TOWNSHIP38E  
RANGE

Schematic



Tabular Data

Surface CasingSize 8 5/8 " Cemented with 175 sx.TOC Surface feet determined by circulationHole size 12 1/4"Intermediate CasingSize          " Cemented with          sx.TOC          feet determined by         Hole size         Long stringSize 5 1/2 " Cemented with 275 sx.TOC 4430 feet determined by CBLHole size 7 7/8"Total depth 4733' TD 4728' PBDInjection interval4690 feet to 4712 feet  
(perforated or open-hole, indicate which)Tubing size 2 3/8" lined with ceramic epoxy set in a

(material)

AD-1

(brand and model)

packer at 4431 feet

(or describe any other casing-tubing seal).

Other Data1. Name of the injection formation P-2 San Andres2. Name of Field or Pool (if applicable) Bluitt San Andres Unit3. Is this a new well drilled for injection? ☐ Yes ☒ NoIf no, for what purpose was the well originally drilled? Oil & gas producer4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. P-1 San Andres zone produces gas in this general area and occurs at a depth of 4560' - 4674'.

PLUGGING DIAGRAM  
Bluitt San Andres Unit  
Roosevelt County, New Mexico

Company Name: Austral Oil Exploration Company, Inc.

Lease Name: C. P. Yadon

Well No.: 1

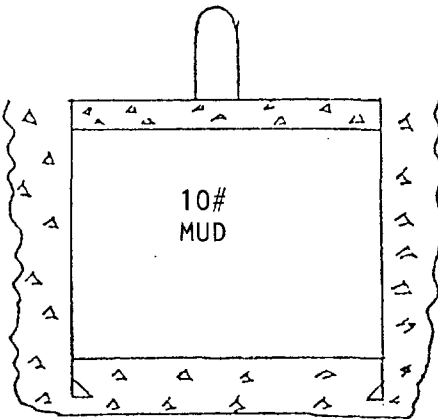
Location: Unit M Sec. 7 T-8-S, R-38-E 660FSL & 660FWL

Drilling and Completion Data

10 3/4" @ 315' w/200 sx circ.

Plugging and Abandonment Data

50' cmt plug at surface



5 1/2" @ 4596' w/100 sx circ.

50' cmt plug 300'-350'

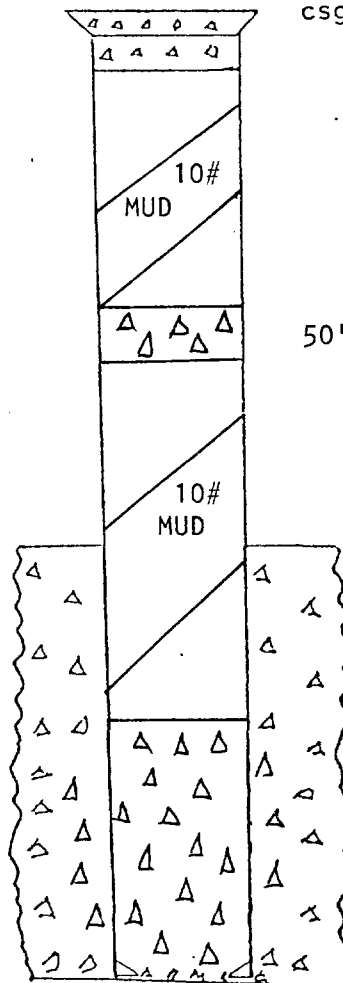
csg cut and pulled @ 1988'

50' cmt plug 1950'-2000'

Set a 300' cmt plug from 4490'-4790'

Perfs: none

5 1/2" csg set to 4596'



## NEW MEXICO OIL CONSERVATION COMMISSION

## MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission District Office within ten days after the work specified is completed. It should be signed and filed as a report on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

|  |   |  |   |
|--|---|--|---|
| REPORT ON BEGINNING DRILLING OPERATIONS                    |   | REPORT ON REPAIRING WELL                       |   |
| REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL |   | REPORT ON PULLING OR OTHERWISE ALTERING CASING | X |
| REPORT ON RESULT OF TEST OF CASING SHUT-OFF                |   | REPORT ON DEEPENING WELL                       |   |
| REPORT ON RESULT OF PLUGGING OF WELL                       | X |  |   |

August 4, 1952

Houston, Texas

Date

Place

Following is a report on the work done and the results obtained under the heading noted above at the

Austral Oil Exploration Company Inc. C. P. Yacon Well No. 1 in the  
 Company or Operator Lease  
 SW, SW of Sec. 7, T. 8S, R. 38E, N. M. P. M.,  
 Bluit Pool Roosevelt County.

The dates of this work were as follows: July 23 through 25, 1952

Notice of intention to do the work was (~~XXXX~~) submitted on Form C-102 on June 17, 1952,  
 and approval of the proposed plan was (~~XXXX~~) obtained. (Cross out incorrect words.)

## DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Well T.D. 4790. 5-1/2" casing originally set at 4596. a 300' cement plug was placed in hole from 4790 up to 4490'. Casing was cut and pulled at 1988'. A 50' cement plug was placed in hole from 2000' up to 1950'; a 50' cement plug was placed in hole from 350' back up into surface casing to 300'. A 50' cement plug was placed in top of surface casing and an iron marker placed in cement extending 4' above ground surface. The hole is completely filled with a 10#/gal. mud.

Witnessed by W. O. Speegle Austral Oil Expl. Co. Inc. Field Supt.  
 Name Company Title

APPROVED:  
 OIL CONSERVATION COMMISSION

I hereby swear or affirm that the information given above is true and correct.

Name C. W. Leish  
 Position General Superintendent  
 Representing Austral Oil Expl. Co. Inc.  
 Company or Operator  
 Address 2810 Gulf Bldg., Houston, Texas

Date

19

PLUGGING DIAGRAM.

Bluitt San Andres Unit  
Roosevelt County, New Mexico

Company Name: FRANKLIN, ASTON & FAIR

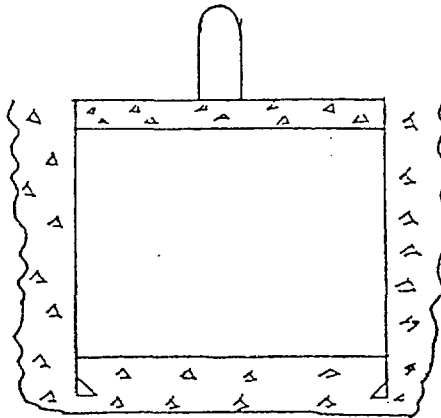
Lease Name: Roden Federal

Well No.: 1

Location: Unit F, Sec. 18, T8S, R38E, 1980' FNL & 1980' FWL

Drilling and Completion Data

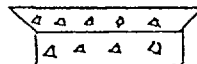
285' of 8-5/8" 20# in  
12-1/4" hole. Cmt. w/200,  
circ. to surface.



Plugging and Abandonment Data

Set 5 sack plug & marker at surface.

Spot 35 sacks cmt., plug through 5-1/2" csg. in & out of 8-5/8" surface csg.  
Set @ 283'.

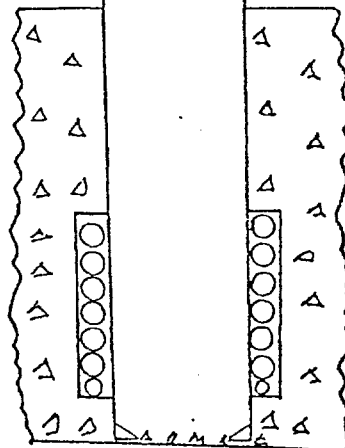


Shot & pulled csg. @ 1412'.

Spot 35 sacks cmt., plug through 5-1/2" csg.  
@1412'.

TOC approx. 4400' by calc.

4770' of 5-1/2" 14# cmt.  
w/275 sx.



25 sacks cmt., plug 4704'-4744'.

To 4770'



UNIT. STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE  
(Other instructions on  
reverse side)

COPY TO O. C. C.

Form approved.  
Budget Bureau No. 42-R1424.

## SUNDRY NOTICES AND REPORTS ON WELLS

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

|  |  |  |
|--|--|--|
| 1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Dry Hole   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>NM 044216-B                       |
| 2. NAME OF OPERATOR<br>FRANKLIN, ASTON & FAIR, INC.  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                     |
| 3. ADDRESS OF OPERATOR<br>P. O. Box 1090, Roswell, New Mexico 88201  |  | 7. UNIT AGREEMENT NAME   |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*<br>See also space 17 below.)<br>At surface<br>1980' FNL & 1980' FWL, Sec. 18, T. 8 S., R. 38 E. |  | 8. FARM OR LEASE NAME<br>Roden   |
| 14. PERMIT NO.   |  | 9. WELL NO.<br>1   |
| 15. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>4002.9   |  | 10. FIELD AND POOL, OR WILDCAT<br>Bluitt-San Andres                      |
|  |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Sec. 18-8S-38E, NMPM |
|  |  | 12. COUNTY OR PARISH: 13. STATE<br>Roosevelt New Mexico                  |

16.

## Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐

PULL OR ALTER CASING

☐  
☐  
☐  
☐

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

☐  
☐  
☒

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

17. 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.) \*

On March 30, 1970, this well was plugged and abandoned as follows:

Circulated hole with mud and spotted 25 sack plug through tubing across perforations 4704' - 4744'. Pulled tubing, ran free point and shot 5½" csg. at 1412'. Spotted 35 sack cement plug through 5½" csg. at 1412'. Spotted 35 sack cement plug through 5½" csg. in and out of 8 5/8" surface csg. set at 283'. Set 5 sack plug and marker at surface.

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

SIGNED

*Grant M. Smith*

TITLE Geologist

DATE 4-2-70

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

NOTED

APPROVED

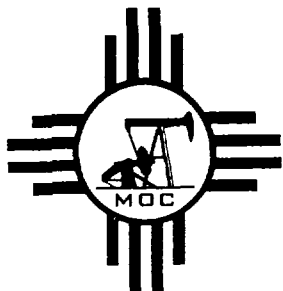
SEP 24 1970

SEP 24 1970

\*See Instructions on Reverse Side

GORD

J. L. GORDON  
ACTING DISTRICT ENGINEER



MURPHY OPERATING CORPORATION  
UNITED BANK PLAZA, SUITE 300  
400 NORTH PENNSYLVANIA AVENUE  
POST OFFICE BOX 2648  
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE  
505 623-7210

October 13, 1988

Ms. Debbie Burrows  
Portales Tribune  
Post Office Box 848  
Portales, New Mexico 88130

RE: Submittal of Legal Notice on  
Bluitt San Andres Unit

Dear Ms Burrows:

Please find enclosed a legal notice to be placed in the Portales Tribune for Murphy Operating Corporation. Please run the notice for a total of three (3) days. I understand that we will be billed an undetermined amount after you have received the notice.

Thank you for all of your help in this matter. If there are any questions concerning the placement of this legal notice, please feel free to contact me at 505/623-7210.

Sincerely,

MURPHY OPERATING CORPORATION

Jeanette Sons  
Assistant to the President

Mark B. Murphy  
President, and Chief Operating Officer

/js

Enclosure: Legal Notice

## LEGAL NOTICE

This shall constitute notice to all the world that Murphy Operating Corporation (United Bank Plaza, Suite 300, Post Office Box 2648, Roswell, New Mexico 88202-2648, Attention Mark B. Murphy, telephone number (505) 623-7210) intends to convert the following wells from producing to injection service for the purpose of expanding the existing waterflood project, the Bluit San Andres Unit, located in Township 8 South, Range 37 East, NMPM, Roosevelt County, New Mexico.

| <u>Well No.</u> | <u>Section</u> |
|-----------------|----------------|
| 18-5            | 18             |
| 18-13           | 18             |

Water will be injected into the P2 zone of the San Andres formation (between the logged depths of 4640' and 4676' in the Murphy Operating Corporation BSAU Well #13-15 as shown on the Nuclear Log of said well dated October 17, 1977) at rates of approximately 400 BWPD and at maximum as shown on the wellhead pressures not exceeding 850psi.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, Post Office Box 2088, Santa Fe, New Mexico 87501 within 15 days.

Published in Portales News-Tribune \_\_\_\_\_ Legal No. \_\_\_\_\_ .  
late

Distribution List  
Bluitt San Andres Unit  
Injection Expansion  
Form C-108

Mr. Dick Buffington  
Post Office Box 201  
Mauriceville, Texas 77626

Dear Mr. Buffington:

Mr. Jerry Skinner  
Enron Oil and Gas Company  
Post Office Box 2267  
Midland, Texas 79702

Dear Mr. Skinner:

Mr. Wiley Barrow  
Union Oil Company of California  
Post Office Box 671  
Midland, Texas 79702

Dear Mr. Barrow:

Mr. Andy Grooms  
Post Office Box 2328  
Roswell, New Mexico 88202-2328

Dear Mr. Grooms:



P 665 399 456  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

|   |                      |
|---|----------------------|
| Sent to   | Mr. Jerry Skinner    |
| Street and No.  | Post Office Box 2267 |
| P.O. State and ZIP Code                                       | Midland, Texas 79702 |
| Postage   | \$ 1.25              |
| Certified Fee   | 1.75                 |
| Special Delivery Fee  |                      |
| Restricted Delivery Fee                                       |                      |
| Return Receipt showing to whom and Date Delivered             |                      |
| Return Receipt showing to whom, Date, and Address of Delivery |                      |
| TOTAL Postage and Fees  | \$ 2.00              |
| Postmark or Date  | 10/20/88             |

PS Form 3800, June 1985

P 665 399 470  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

|   |                           |
|---|---------------------------|
| Sent to   | Mr. Dick Buffington       |
| Street and No.  | Post Office Box 201       |
| P.O. State and ZIP Code                                       | Mauriceville, Texas 77626 |
| Postage   | \$ .25                    |
| Certified Fee   | 1.75                      |
| Special Delivery Fee  |                           |
| Restricted Delivery Fee                                       |                           |
| Return Receipt showing to whom and Date Delivered             |                           |
| Return Receipt showing to whom, Date, and Address of Delivery |                           |
| TOTAL Postage and Fees  | \$ 2.00                   |
| Postmark or Date  | 10/20/88                  |

PS Form 3800, June 1985

P 665 399 458  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

|   |                           |
|---|---------------------------|
| Sent to   | Mr. Andy Groom            |
| Street and No.  | Post Office Box 2328      |
| P.O. State and ZIP Code                                       | Roswell, New Mexico 88201 |
| Postage   | \$ 1.25                   |
| Certified Fee   | 1.75                      |
| Special Delivery Fee  |                           |
| Restricted Delivery Fee                                       |                           |
| Return Receipt showing to whom and Date Delivered             |                           |
| Return Receipt showing to whom, Date, and Address of Delivery |                           |
| TOTAL Postage and Fees  | \$ 2.00                   |
| Postmark or Date  | 10/20/88                  |

PS Form 3800, June 1985

P 665 399 457  
**RECEIPT FOR CERTIFIED MAIL**  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

|   |                      |
|---|----------------------|
| Sent to   | Mr. Wiley Barrow     |
| Street and No.  | Post Office Box 671  |
| P.O. State and ZIP Code                                       | Midland, Texas 79702 |
| Postage   | \$ 1.25              |
| Certified Fee   | 1.75                 |
| Special Delivery Fee  |                      |
| Restricted Delivery Fee                                       |                      |
| Return Receipt showing to whom and Date Delivered             |                      |
| Return Receipt showing to whom, Date, and Address of Delivery |                      |
| TOTAL Postage and Fees  | \$ 2.00              |
| Postmark or Date  | 10/20/88             |

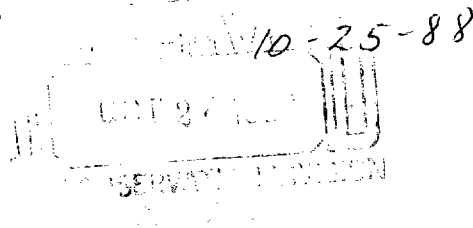
PS Form 3800, June 1985



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161



OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX ☒ \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

*Bluth SA Unit Sec. 18 #13-M 18-8-38*  
*Murphy Oper Corp.* *Bluth SA Unit Sec. 18 #5-E 18-8-38*  
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

*OKJS*

Yours very truly,

*Jerry Sexton*  
Jerry Sexton  
Supervisor, District 1

/ed



# MURPHY OPERATING CORPORATION

UNITED BANK PLAZA, SUITE 300  
400 NORTH PENNSYLVANIA AVENUE  
POST OFFICE BOX 2648  
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE  
505 623-7210

November 4, 1988

Mr. David Catanach, Petroleum Engineer  
Oil Conservation Division  
Post Office Box 2088  
Santa Fe, New Mexico 87501

RE: Affidavit of Publication

Dear Mr. Catanach:

Pursuant to Mark B. Murphy's letter dated October 21, 1988 regarding a request for approval to convert two (2) wells to injection for the purpose of expanding existing waterflood project on the Bluitt San Andres Unit in Roosevelt County, New Mexico, please find attached the original Affidavit of Publication from the Portales News-Tribune certifying publication of legal notice.

Thank you for waiting for proof of publication. If I may be of any assistance, please notify me at the number listed above.

Sincerely,

MURPHY OPERATING CORPORATION

Jeanette Sons  
Assistant to the President

Mark B. Murphy  
President and Chief Operating Officer

/js

Enclosure: Affidavit

### LEGAL NOTICE

This shall constitute notice to all the world that Murphy Operating Corporation (United Bank Plaza, Suite 300, Post Office Box 2648, Roswell, New Mexico 88202-2648, Attention Mark B. Murphy, telephone number (505) 623-7210) intends to convert the following wells from producing to injection service for the purpose of expanding the existing waterflood project, the Bluit San Andres Unit, located in Township 8 South, Range 37 East, NMPM, Roosevelt County, New Mexico.

Well No. 18-5; Section 18  
Well No. 18-13; Section 18

Water will be injected into the P2 zone of the San Andres formation (between the logged depths of 4840' and 4676' in the Murphy Operating Corporation BSAU Well #13-15 as shown on the Nuclear Log of said well dated October 17, 1977) at rates of approximately 400 BWPD and at maximum as shown on the wellhead pressures not exceeding 850psi.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, Post Office Box 2088, Santa Fe, New Mexico 87501 within 15 days.

Published in the Portales News-Tribune October 19, 20, 21, 1988.  
Legal #0487.

# Affidavit of Publication

I, Raymond Stimmett  
Business Manager of

## THE PORTALES NEWS-TRIBUNE

a newspaper of general paid circulation and entered under second class postal privilege in Roosevelt County, published daily, (except Saturday) at Portales, New Mexico, for the fifty-two (52) consecutive weeks preceding this date, do solemnly swear that a copy of the above notice, as per clipping attached, was published weekly in the regular and entire issue of said

newspaper, and not in any supplement thereof for 3

consecutive weeks commencing with the issue dated

October 19 1988

and ending with the issue dated October 21 1988

All publication costs having been paid.

Raymond Stimmett  
1988

Subscribed and sworn to before me this 22nd day of October 1988

DeMaris Barnett  
Notary Public

My commission expires 11/7/92 1988