



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 16, 1987

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

Re: Request for Approval to Convert Four (4)
Wells to Injection / Expansion of Waterflood;
Todd Lower San Andres Unit ("the Todd Unit");
Roosevelt County, New Mexico.

Dear Mr. Catanach:

I have enclosed herewith for your review and approval Murphy Operating Corporation's application dated October 12, 1987 for the conversion to injection of four (4) wells located in the Todd Lower San Andres Unit referenced above. The utilization of these wells (#30-10, #30-16, #31-8, #32-12 marked in blue on the map attached hereto) should create two sets of line-drive patterns along two preferential permeability trends. This configuration will permit a more uniform and effecient flood pattern which is compatible with 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 "typical" schematic diagram 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 (pages 1-4).
- VI. Attached as "Table of Drilling and Completion Information". Note that the only plugged well within the area(s) of review is Well #29-12 (see schematic diagram 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 September, 30 1987 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 4220' 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 4335' below ground level.

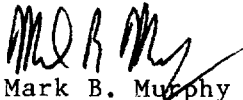
Fresh Water Zone: The only known fresh water source in this area is the Ogalala Formation. This is a fresh water sand that is infrequently present throughout the area. The maximum reported depth is 250 feet below ground level as evidenced in two water wells located approximately 2-1/2 miles east of the Todd Lower San Andres Unit eastern boundary line. If a local presence of the Ogalala exists, it will be protected by the 280 feet or more of 8 5/8" surface casing set in all of the wells in the Todd Lower 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. There are no producing fresh water wells within one mile of the proposed injection wells.
- 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 has been complied with. Please see the attached Affidavit of Publication and a copy of the certified return receipts from the landowner, Ted Williamson, Milnesand, New Mexico and the offsetting leasehold operators within 1/2 mile acknowledging receipt of this application.

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/msl

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 9/30/87;
Typical schematic diagram;
Affidavit of Publication; and
Certified copies of 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 Drawer 2648, Roswell, New Mexico 88201

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 #14-08-0001-19582

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.
NMCD #R-6677

* 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: Mark B. Murphy Title President/Chief Operations Officer

Signature:  Date: October 9, 1987

* 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.

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
TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Comp. & Drlg. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inf. Rate (BPD)	
							Downhole Tubing	Equipment	Average	Maximum
TLSAU SEC.30 10 J 30-T7S-R36E (Val State) 1980' FSL & 1980' FEL Elevation 4151' KB	IP	296' KB 8 5/8" 24# in 12 1/4" hole 150sks cmt. Circ surf. 4293' 5 1/2 15.5 in 7 7/8" hole 250sks cmt Top cmt 3582' by CE log.	12/30 66 1/15 67	4293'	1JSPF .42" 4236', 38, 44, 47, 51, 55, 63 4267'	Acidize w/3000gal frac w/30,000gal lease oil & 30,000# 20/40 mesh sand.	2 3/8" 4.7# Ceramic coated set approx. 4130'	5 1/2" Unit-I 3.10 packer set approx. 4133'	400/400#	600/850#
TLSAU SEC.30 16 P 30-T7S-R36E (Livaudais) 660' FSL & 660' FEL Elevation 4129' GR	IP	12 1/4" hole w/ 8 5/8" 24# set at 292' KB 150sks cmt. Circ surf. 7 7/8" hole 5 1/2 14# set at 4296' KB 275sks cmt. w/ 2% gel 8# salt per sk. Top cmt. 3850' CE log.	12/29 67 1/16 68	Open Hole 4305' GL	4239', 41, 43, 49, 52, 55, 60, 66, 71, 72 w/15PF 10/4/84 Reperforated .50 dia 1JSPF 4223'-4273'	Acidize w/3000gal DS-30sand/oil frac w/30,000gal oil & 30,000# 20/40 mesh sand. 10/4/84 Reacidized w/500gal xylene w/ 2000gal NEFE 20% 500# salt block & overflushed w/1000	2 3/8" 4.7# Ceramic coated set approx. 4130'	5 1/2" Unit-I 3.10 packer set approx. 4133'	400/400#	600/850#
TLSAU SEC.31 8 H 31-T7S-R36E (Skelly Sm) 1850' FNL & 660' FEL Elevation 4129.3' GR	IP	287' 8 5/8" 20# in 12-1/4" hole. 175sks cmt. circ. surf. 4300' 4- 1/2" 9.5# J-55 in 7 7/8" hole. 275 sks cmt. Top cmt. 3360' CE log	7/8 /70 7/22 /70	4300'	1JSPF 4265', 58, 61, 63, 67, 71, 72, 76, 78	Acidize w/3000 gal 15% HCl.	2 3/8" 4.7# Ceramic coated set approx. 4150'	4-1/2" Unit-I 3.05 pack- er set 4153'	400/400#	600/850#
TLSAU SEC.32 12 L 32-T7S-R36E (Roosevelt) 660' FNL & 2180' FSL Elevation 4131' KB	IP	293' KB in 12 1/4 hole 150sks cmt. circ surf. 4354' KB 5 1/2" in 7 7/8" hole. 250 sks cmt. Top cmt. 3400' by State Comp Form	4/16 68 5/1 68	4354'	4300' 06, 10, 13, 17, 26, 27, 32, 34, 40, 44	Acidize w/3000gal 15% DS-30	2 3/8" 4.7# Ceramic coated set approx. 4197'	5 1/2" Unit-I 3.10 packer set 4200'	400/400#	600/850#

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TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Drig. & Date	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
							Tubing	Downhole Equipment	Packer	Average
TLSAU SEC.29 13 M 29-T7S-R36E (Peterson) 330' FSL & 660' FWL Elevation 4140' GL	I	334.55' GL. 8 5/8" 24# J-55 in 12 1/4" hole. 250sks cmt., circ. surf. 4334' GL. 5 1/2" 15.5# J-55 in 7 7/8" hole 1000 sks cmt. circ to surf.	12/7/84 1/2/85	4335' GL.	IJSPF .42" diam 4246'-4296' GL.	Acidize w/10,000 gal 28% HCl, 12,000# 100 mesh sand.	2 3/8" 4.7# J-55 PVC lined set approx. 4167' GL.	5 1/2" UNI-1 3.05 pkr set approx 4170' GL	180/400#	600/850#
TLSAU SEC.30 9 I 30-T7S-R36E (Livaudais) 1980' FSL & 660' FEL Elevation 4144' GL	I	323' 8 5/8" 24# J-55 in 12 1/4" hole 250sks cmt circ surf 4299' 5 1/2" 15.5# J-55 in 7 7/8" hole 1,100sks cmt, 150sks to pit	11/30/83 12/12/83	4320' GL 4299' PBSD	IJSPF .50" 4240-4290' GL.	Acidize w/10,000 gal 28% HCL 12,000 # 100 mesh sand	2 3/8" 4.7# J-55 PVC lined set approx. 4137'	5 1/2" UNI-1 3.02 pkr. set approx 4140'	180/400#	600/850#
TLSAU SEC.31 3 C 31-T7S-R36E (Hobb R) 330' FNL & 1650' FWL Elevation 4161' GR	I	254' 8 5/8" 24# in 12 3/4" hole 150sks cmt. circ surf. 4430' GL 4 1/2" 10.5# in 7 7/8" hole 250 sks cmt. Top cmt 3339' by temp survey.	Spud 10/31 64 Rntr 4/2 65 Comp 4/24 64	4440' KB 4354' PBSD	IJSPF 4257', 63, 67, 70, 74, 82, 90, 98 & 4302' 9 shots. (2/17/84) Reperf IJSPF .50" 4252'-4302' 50 shots.	Acidize w/2000gal 15% HCl. Frac w/ 20,000gal gel Ise oil 20,000# 20/40 sand (2/17/84) Reacidize w/24bbls 28% HCl	2 3/8" 4.7# J-55 PVC lined set approx. 4167' GL	4 1/2" UNI-1 3.05 pkr set approx 4170' GL	160/400#	600/850#
TLSAU SEC.31 7 G 31-T7S-R36E (Skelly Sm) 1830' FNL & 1980' FEL Elevation 4135' GL	I	285' KB 8 5/8" 24# in 12" hole. 150sks cmt. circ surf. 4305' KB 5 1/2" 14# 7 7/8" hole. 300sks cmt. Top cmt above 3000' by CE log	1/8/71 1/13/71	4305' KB 4285' PH TDKB	IJSPF 4255, 57, 58, 62, 68, 69, 71, 72, 75, 86, 88, 4290'	Acidize w/ Phasel 3000gal 15% DS-30 Phase2 8000gal 15% DS-30 (3/7/84) Reacidize w/1000 gal 20% NEFE	2 3/8" 4.7# J-55 PVC lined set approx. 4145'	5 1/2" UNI-1 3.10 pkr set approx 4148'	150/400#	600/850#

TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Comp. & Drlg. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
							Downhole Tubing	Equipment	Average	Maximum
TLSAU SEC.32 3 C 32-T7S-R36E (Gates) 640' FNL & 1980' FWL Elevation 4123' GR	I	291' KB 8 5/8" 24# in 12 1/4" hole 150sks cmt. circ surf. 4320' 5 1/2" 14# in 7 7/8" hole. 275sks cmt Topcmt cmt. 3470' by CE log.	4/27/71	4320' GL	9 shots 4274'-4297' (2-13-84)Reperforated 1JSPF .50" 4263'-4303'	Acidized w/ Phase 1 3000gal 15% DS-30 Phase 2 6000gal 15% DS-30 (2-13-84)Reacidize w/26bbls 28% HCl	2 3/8"4.7# J-55 PVC lined set approx. 4127'	5 1/2" UNI-1 3.02 pkr. set appro 4130'	180/400#	600/850#
TLSAU SEC.32 5 E 32-T7S-R36E (Gates) 1830' FNL & 660' FWL Elevation 4122' GR 4129' GL 4141' KB	I	272' KB 8 5/8" 24# in 12" hole 175sks cmt. Circ. surf. 4308' K.B. 5 1/2 14# in 7 7/8"hole 300sks Top cmt. above 3600' by CE log	8/18/71 9/20/71	4308' KB	1JSPF 4267, 68, 70, 72, 74, 76, 84, 86, 88, 90, 92 (9-26-84) Reperf. & drill open hole 1JSPF .42" 4251'-4307' KB Open Hole 4308'-4320' KB	Acidize w/ Phase 1 3000 gal 15% DS-30 Phase 2 8000gal 15% DS-30 (9-27-84)Reacidize w/1000gal 15% NEFE	2 3/8"4.7# J-55 PVC lined set approx. 4148' KB	5 1/2" UNI-1 3.10 pkr set appro 4151' KB	150/400#	600/850#
TLSAU SEC.32 10 J 32-T7S-R36E (Roosevelt) 2180' FSL & 1980' FEL elevation 4120' GR	I	360' 8 5/8" 24# J-55 in 12-1/4" hole. 225 sks cmt circ. to surf. 4445'.4 1/2" 9.5# J-55 in 7- 7/8" hole.1250sks cmt circ surf	7/11/69 7/25/69	4445' TD 4420' PB TD	4JSPF 4408' - 10' 4413' - 15'	Acidized w/ 2000 gal 28% HCl	2 3/8" 4.7# plastic coated set approx. 4268'	4 1/2" Guiberson Type AF set @ 4271'	400/400#	600/850#
TLSAU SEC.19 15 O 19-T7S-R36E (Hobbs Z) 660' FSL & 1980' FEL Elevation 4167' DF	P	357' KB 8 5/8"24# in 11"hole 250sks cmt. circ surf. 4318' 4 1/2"10.5# in 7 7/8"hole 350 sks cmt. Top cmt. 3600' by CE log	7/15/67 7/29/67	4318' PRTD 4287'	1JSPF 4243', 51, 55, 61, 64, 66, 73, 77, 4280'	Acidize w/3750gal 24% & 3000 gal treated water. fraced w/30,000gal lease oil 37,500# 20/40 sand.				

TABLE OF DRILLING AND COMPLETION INFORMATION
TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Comp. & Drig. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Inj. Rate (BPD)			
							Proposed Inj. Average	Proposed Inj. Maximum	Downhole Tubing	Packer
TLSAU SEC.29 14 N 29-T7S-R36E (Peterson) 660' FSL & 2180' FWL Elevation 4142' RDB	P	12 1/4" hole 8 5/8" set at 317' 275 sks cmt circ to surf. 7 7/8" hole 4 1/2" set at 4326' 300sks cmt Top cmt 3482' by CE log	8/15 73 8/31 73	4326' KB	2JSPF 4249', 54, 66-78, 82-90 w/25JPF	Acidize w/1000gal 15% NE & fraced w/ 35,000 gal gel brine & 42,500# sand.				
TLSAU SEC.29 15 O 29-T7S-R36E (Spradley) 660' FSL & 1980' FEL Elevation 4140' RDB	P	11" hole 8 5/8" 24# set at 329' 250sks cmt. circ surf. 4 1/2" 9.5# set at 4330' 300 sks cmt Top cmt 3600' by CE log	12/30 68 1/10 69	4330' KB	2JSPF 4263-72', 80-96 w/25JPF	(2/19/70) Acidize w/4000gal 20% LSTNE frac w/30,000gal gel brine 1# 1 1/2# 20/40 mesh sand in 1st 25,000 tail w/1# 10/23 in last 500gal.				
TLSAU SEC.29 16 P 29-T7S-R36E (Solsbery) 660' FSL & 660' FEL Elevation 4137' RDB	P	12 1/4" hole w/ 8 5/8" 24# set at 330' 250sks cmt Circ surf 7 7/8" hole 4 1/2" 9.5# set at 4363' 300 sks cmt. Top cmt 3600' by CE log	12/14 69 12/24 69	4363' KB	4305'-4319' w/25JPF	Acidize w/4000gal of 20% fraced w/ 30,000gal gel brine & 35,000 20/40 mesh sand 5000 10/20				
TLSAU SEC.30 2 B 30-T7S-R36E (Val) 660' FNL & 1980' FEL Elevation	P	290' 8 5/8" 24# in 12-1/4" hole 150 sks cmt. circ surf. 4293' 5-1/2 14.5# in 7 7/8" hole. 250 sks Top cmt 3475' by CE log	11/29 67 2/9 67	4294'	1JSPF 4238', 41, 44, 47, 51, 55, 58, 63, 65, 72	Acidize w/ 3000 gal 15% DS-309				

TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Comp. & Drig. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
							Downhole Tubing	Equipment Packer	Proposed Inj. Average	Press. (PSI) Maximum
TLSAU SEC.30 6 F 30-T7S-R36E (Livaudais) 1873' FWL & 1980' FNL Elevation 4152 K.B.	P	294' 8 5/8" 24# in 12-1/4" hole. 150 sks circ surf 4290' 5-1/2" 14# in 7/8"hole. 250 sks Top cmt 3460' by CE log.	5/12 /67 /62 /67	4290'	IJSPF 4230, 36, 39, 40, 44, 48, 52, 57, 58, 64	Acidize w/ 3000 gal 15% DS-30. Frac w/ 5000 gal oil and 51000# 20/40 sand				
TLSAU SEC.30 12 L 30-T7S-R36E (Livaudais) 611.3 FWL & 1980' FSL Elevation 4157' KB	P	12 1/4"hole 8 5/8 24# set at 281' 160sks cmt. Circ surf 7 7/8" hole 5 1/2" 15.5 set at 4290' 250sks cmt w/2% gel w/ 8# CaCl per sk Top cmt 3482' by CE log.	9/19 66 10/2 66	Open Hole 4305' GL	4232', 38, 43, 48, 57, 58, 63, 66 w/15PF	Acidize w/3000gal DS-30 fraced w/ 30,000gal crude oil & 30,000# 20/40 mesh sand.				
TLSAU SEC.30 13 M 30-T7S-R36E (Livaudais) 610.5' FWL & 660' FSL Elevation 4151' GR	P	285' 8 5/8" 24# in 12 1/4" hole 150sks cmt circ surf 4305' 5 1/2 14# in 7 7/8"hole 250sks cmt. Top cmt above 3950' by CE log.	4/10 66 4/26 66	4315' KB	IJSPF .39" 4234', 39, 53, 57 62, 69, 75	Acidize w/1500gal 15% DS-30 Frac w/ 31,000gal lease crude31,000# 20/40 mesh sand				
TLSAU SEC.30 15 O 30-T7S-R36E (Val) 660' FSL & 1980' FEL Elevation 4144' GL	I	340' 8 5/8" 24# J-55 in 12 1/4" hole 250sks cmt circ surf. 4352' 5 1/2" 15.5# J-55 in 7 7/8" hole. 1200sks cmt.circ 193sks to pit	12/13 83 12/29 83	4358' GL. 4333' PRTD	IJSPF .50" 4236'-4298'	Acidize w/10,000 gal. 28% HCl, 12,000# 100 mesh sand.				

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Well name & Location	Well Type	Casing Record	Comp. & Drilg. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Inj. Rate (BPD)			
							Tubing	Packer	Proposed Inj. Average	Press. (PSI) Maximum
TLSAU SEC.31 1 A 31-T78-R36E (Skelly Sm) 460' FNL & 660' FEL Elevation 4131.9' GR 4141' KB	I	292' 8 5/8" 24# J-55 in 12 1/4" 150sks cmt.circ. surf. 4300' 4 1/2" 9.5# cmt. 7 7/8" hole 350sks cmt. Top cmt 3314' by CE log	9/2/ 67 9/13/ 67	4304' KB	1JSPF 4239, 47, 49, 51, 55, 61, 65, 71, 74, 76, 4278. (11 Shots) (10/13/84) Reperf 1JSPF .42" 4240-4300' Open Hole 4300'-4304' KB	Acidize w/3000 gal DS-30 (10/13/84) Reacidize w/2000 gal 28% NEFF				
TLSAU SEC.31 2 B 31-T7S-R36E (Skelly Sm) 519' FNL & 2121' FEL Elevation 4149.6 KB	P	290' KB 8 5/8" 20# in 12' hole 150sks cmt. circ surf. 4305' KB 4 1/2" 9.5 # in 7 7/8" hole 300sks cmt.Top cmt 3706' CE log	7/5 67 8/1 67	4305' KB 11/6 84 4288 KB	1JSPF 4243'-4286'	Acidize w/3000gal DE-30 acid. Frac w/32,000gal oil, 32,000# 20/40 mesh sand & 900# Adomite Mark II				
TLSAU SEC.31 5 E 31-T7S-R36E (Hobbs R) 1980' FNL & 661.1" FEL Elevation 4156' DF	P	350' 8 5/8" 12 1/2 hole 200sks cmt. 4375' 4 1/2" in 7 7/8" hole 250 sks cmt. Top cmt above 3900' CE log	5/21 65 6/26 65	4375' PBT 4364'	20 shots 4259'-4300.5 10/8/84 Reperforate w/.42 diam. 60 holes. 1JSPF 4244'-4304'	Acidize w/2000gal 15% frac w/20,000 gal lease oil & 20,000# sand. 10/8/84 Reacidize w/500gal Xylene				
TLSAU SEC.31 10 J 31-T7S-R36E (Atl. Sm.) 2180' FSL & 1980' FEL Elevation 4136' GR 4146' KB	P	301' KB 8 5/8" 24# in 12 1/4" hole 150sks cmt. circ surf 4333' 5 1/2" 15.5in 7 7/8" hole 240sks cmt. Top cmt 3700' by CE log.	11/1 67 11/27 67	4333' 11/15 84 Tagged Btm. 4310' GL 4320' KB	1JSPF 4280', 81, 86, 87, 90, 91, 96, 98, 4303', 13, 15 11/16/84 Reperforated 1JSPF 41' 4280'-4230'	Acidize w/3000gal 15%. 11/16/84 reacidize Acidize w/500gal Xylene, 2000gal 28% NEFF & 500# salt block overflushed w/1000gal 2% KCL water				

TABLE OF DRILLING AND COMPLETION INFORMATION
TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

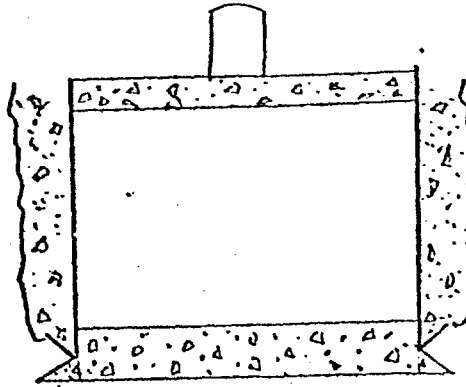
Well name & Location	Well Type	Casing Record	Comp. & Drlg. Date	Total Depth	Perforations/Open Hole	Completion	Proposed Injection		Proposed Inj. Rate (BPD)	
							Tubing	Equipment	Average	Maximum
TL7SAU SEC.31 9 I 31-T7S-R36E (Actl. Sm.) 2180' FSL & 660' FEL Elevation 4126.1' GR 4135' KB	I	282' 8 5/8" 24# J-55 in 12 1/4" hole 150sks cmt circ surf. 4326' GL 5 1/2" 14# J-55 7 7/8" hole.250sks cmt. Top cmt 3470' by CE log.	1/19 68 2/6/ 68	4326' GL	1JSPF.50" 4282-4322' GL. (9-12-84) Reperf 1 JSPF 4282, 86, 88, 91, 94, 98 4300', 04, 12, 15, 17	Acidized w/3,000 gal 15% DS-30 Frac w/30,000gal lease oil & 30,000 # 20/40 mesh sand. (9-12-84)Reacidize w/2000gal 20% NEFF				
TL7SAU SEC.31 11 K 31-T7S-R36E (Actl. Sm.) 2120' FSL & 2023' FWL Elevation	P	331' 8 5/8" 20# in 2 1/4" hole 225sks cmt. circ surf 4333.5'5-1/2 7 7/8"hole 250 sks cmt. Top cmt above 3900' by CE log	7/8 68 7/16 68	4335' 4333.5' PBSD	1JSPF 4382', 84, 89, 91, 96, 4301', 07, 09, 12, 15, 17	Acidize w/3000gal 15% acid Frac w/ 30,000gal lease oil & 35,000# 20/40 sand.				
TL7SAU SEC.31 12 L 31-T7S-R36E (State BC) 1980' FSL & 608.5' FWL Elevation 4155' KB 4144.5 GL	P	360.14' 8 5/8' 24# in 1 1/2" hole 200sks cmt.circ 4399.98' 4 1/2" in 7 7/8" hole 320sks cmt. Top cmt. 3400' by State Comp Form	7/18 65 8/1 65	4400' PBSD 4370'	1JSPF .41 size of 4281', 89, 96, 4299' & 4304' 1/29/85 Reperf 1JSPF .42 dia (4272'-4332')	Acidize w/2000gal 15% acid Frac w/ 20,000gal oil & 20/40 sand 1/30/85 Reacidized w/2000gal 28% NEFF 500# salt block w/ 500gal gel brine & overflushed w/1586 gal 2% KCL H2O at 2900# Max PSI Max BPM rate 5.6 BPM				
TL7SAU SEC.32 2 B 32-T7S-R36E (Roosevelt) 660' FNL & 1980' FEL Elevation 4139' KDB	P	363' 8 5/8" in 12 1/4" hole 255 sks cmt.circ surf 4 1/2" in 7 7/8" hole 900sks cmt. circ to surf.	2/27 69 3/18 69	4350' PBSD 4322' KB	2 JSPF 4231'-33' 4172'-74' 4119'-21'	Acidized w/2000gal 28% NEFF acid				

TABLE OF DRILLING AND COMPLETION INFORMATION
TODD LOWER SAN ANDRES UNIT PROPOSED INJECTION WELLS AND WELLS WITHIN AREA OF REVIEW

Well name & Location	Well Type	Casing Record	Comp. & Date	Total Depth	Perforations/Open Hole	Completion	Proposed Inj. Rate (BPD)					
							Downhole Equipment	Packer	Proposed Inj. Press. (PSI)	Average	Maximum	
TL3AU SEC.32 4 D 32-T7S-R36E (Gates St.) 460' FNL & 660' FWL Elevation 4126.7 GR 4137.7 KB	P	298' 8 5/8" in 12 1/4" hole 150 skc cmt.circ surf 4306'KB 5 1/2" in 7 7/8"hole 250skc cmt.Top cmt.above 3950' by CE log	1/8 68 2/3 68	4306' KB	1JSPF 4244', 52, 54, 58, 61, 65, 68, 71, 78, 83, 86 10/30/84 Reperf 1JSPF 4304'-4244'	Acidize w/3500gal 15% DS-30 Frac w/ 30,000gal crude oil, 30,000# 20/40 sand 900# Adomite KB 4310' KBM 10/30/84 Reacidize w/500gal Xylene, 2000gal 28% NEFE 500# salt block mixed w/250gal 2% KCL gel water & overflushed with 1000gal KCL water						
TL3AU SEC.32 6 F 32-T7S-R36E (Gates St.) 1830' FNL & 1980' FWL Elevation 4127' KB 4117' GL	P	295' 8 5/8" in 12 1/4"hole 175 skc cmt.circ surf 4338' 4 1/2" in 7 7/8"hole 300skc cmt.Top cmt above 3950' by GBL	3/18 70 4/2 70	4338'	4282'84, 90, 92, 86, 96, 98	Acidized w/3000gal 15% DS-30						
TL3AU SEC.32 7 G 32-T7S-R36E (Roosevelt) 1780' FNL & 1980' FEL Elevation 4128' GR	P	362' 8 5/8" 24# in 12 1/4" hole 225skc cmt. circ surf. 4400' 4 1/2 9.5# in 7 7/8" hole 1150skc cmt good returns of cmt. at surface	5/15 69 5/26 69	4400' PBTB 4366'	4JHPF 4318'-4324'	Acidized w/2000gal 28% NEFE acid						
TL3AU SEC.29 12 L 29-T7S-R36E (Peterson) 1980' FSL & 660' FWL	PA	317' 8 5/8" 24# J-55 in 12-1/4" hole. 250 skc cmt surf. 4298' 4-1/2 9.5# J-55 in 7 7/8" hole. 300 skc cmt. Top cmt 3550' by CE log	12/27 /67 1/8 /68	4298' TD 4278' TD	2JSPF 4232' - 37', 42' - 60', 64' - 66', 70' - 72'	Acidized w/5000gal 28% HCl						

TODD LOWER SAN ANDRES UNIT
 WELL # 29-12
 ROOSEVELT COUNTY, NEW MEXICO
 UNIT L, SEC. 29, T7S, R36E
 1990' FSL & 660' FWL
 PLUGGING DIAGRAM

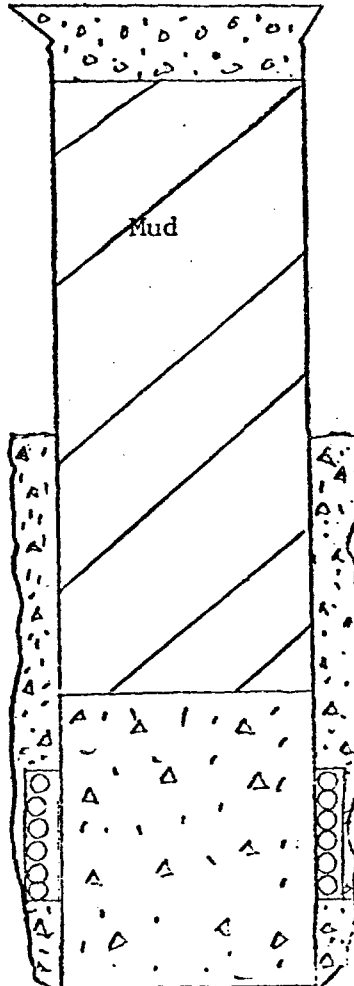
317' K.B. 8 5/8" 24#
 in 12 1/4" hole. 250
 sacks cement circulated
 to surface



10 sack cement plug at surface

25 sack cement plug

4298' K.B. 4 1/2" 9.5# in
 7 7/8" hole. 300 sacks
 cement.



25 sack cement plug

Well abandoned 4-10-71. Plugged as follows:

Spotted 50 sack cement plug 4204' - 4278'. Loaded hole with mud. Shot and pulled 4 1/2" casing from 1291'. Spotted 25 sacks of cement in and out of 4 1/2" stub at 1291'. Spotted 25 sacks of cement in and out of 8 5/8" casing at 317'. Spotted 10 sacks of cement at surface and erected P/A marker.

50 sack cement plug
 4204' - 4278'

T.D. 4298'

P-2 S.A. perforations
 4232' - 4272' K.B.

TODD LOWER SAN ANDRES UNIT
 WELLS #30-10, #30-16, #31-8, #32-12
 ROOSEVELT COUNTY, NEW MEXICO
 "TYPICAL DATA SHEET"

J-55 in 12 1/4" hole. Cement circulated to the surface.

Annulus is filled with inert fluid and pressure tested.

4 1/2" or 5 1/2" Unit-I packer set approximately 100' above upper most perforation.

The proposed injection interval is the P-2 zone of the San Andres Formation. This well was originally drilled as a producer. No known commercial oil or gas production exists in the next higher or next lower zone.

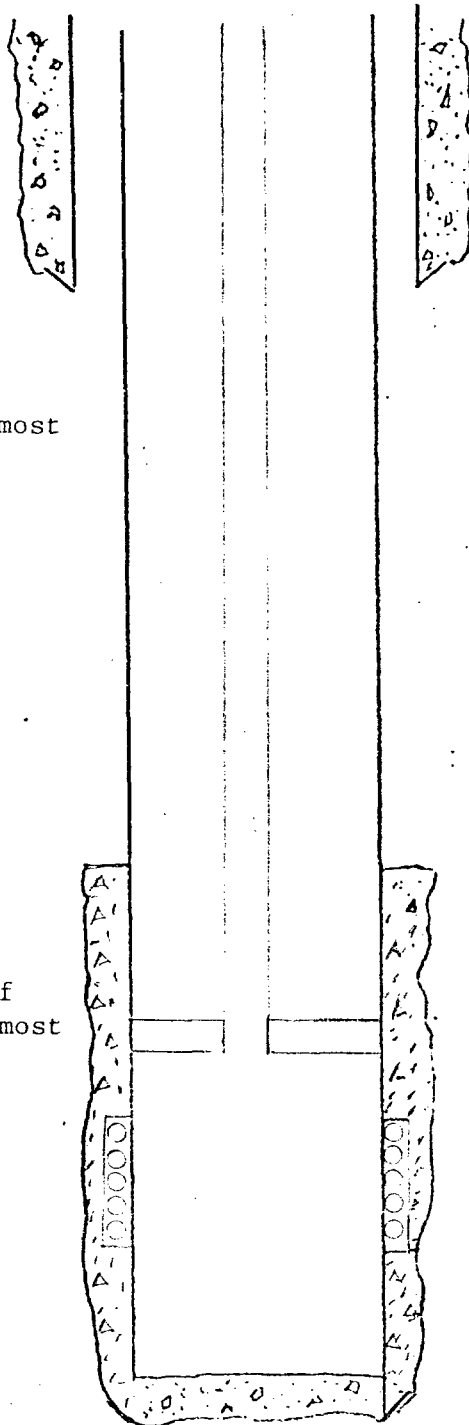
2 3/8" 4.7# J-55 ceramic lined and set.

Proposed injection Rate/Pressure

	BPD/PSI
Average	400/400#
Maximum	600/850#

4 1/2" or 5 1/2" 7 -7/8" hole. Top of cement 500' - 1000' above uppermost perforation.

P-2 S.A. Perforations



NOT DRAWN TO SCALE

Well #	T.D.
30-10	4293'
30-16	4305'
31- 8	4300'
32-12	4354'

PERMIAN

Treating Chemicals, Inc.

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

September 30, 1987

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

Subject: Compatibility of fresh and produced waters
from Todd Lower San Andres Unit.

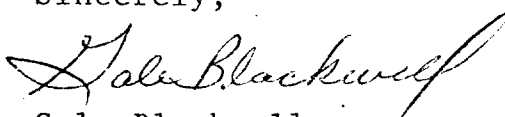
Gentlemen:

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

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

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

Sincerely,



Gale Blackwell
Permian Treating Chemicals, Inc.

001 7 1987

PERMIAN

Treating Chemicals, Inc.

P.O. BOX 728
LOVINGTON, NM 86260
PHONE (505) 396-5674

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Sampled 9-30-87
Field Todd County Roosevelt
Lease Lower San Andres Unit State NM
Well _____ Formation _____
Type of Water Fresh Water, B/D _____
Sampling Point Fresh water tank Sampled By Blackwell

DISSOLVED SOLIDS

CATIONS

	mg/l	req/l
Sodium, Na+(Calc)	<u>37</u>	<u>1.6</u>
Calcium, Ca++	<u>148</u>	<u>7.4</u>
Magnesium, Mg++	<u>24</u>	<u>2</u>
Barium, Ba++	<u>-0-</u>	<u>-0-</u>
Iron, Fe (Total)	<u>.04</u>	

OTHER PROPERTIES

pH 7.2
Specific Gravity 1.000
H₂S Negative
Total Dissolved Solids 745 Mg/L.
Total Hardness 466 Mg/L.

ANIONS

Chloride, Cl-	<u>100</u>	<u>2.8</u>
Sulfate, SO ₄ ⁼	<u>220</u>	<u>4.6</u>
Carbonate, CO ₃ ⁼	<u>-0-</u>	<u>-0-</u>
Bicarbonate, HCO ₃ ⁻	<u>216</u>	<u>3.5</u>

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P.O. BOX 728
LONGSTON, N.M. 89263
PHONE (505) 396-5674

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Sampled 9-30-87
Field Todd County Roosevelt
Lease Lower San Andres Unit State NM
Well _____ Formation _____

Type of Water Commingled, Produced, Fresh Water, B/D
Sampling Point Todd Plant Sampled By Blackwell

DISSOLVED SOLIDS

CATIONS

	mg/l	µeq/l
Sodium, Na+(Calc)	<u>13721</u>	<u>597</u>
Calcium, Ca++	<u>5013</u>	<u>251</u>
Magnesium, Mg++	<u>978</u>	<u>80</u>
Barium, Ba++	<u>-0-</u>	<u>7</u>
Iron, Fe (Total)	<u>2</u>	

OTHER PROPERTIES

pH 6.8
Specific Gravity 1.040
H₂S Positive
Total Dissolved Solids 52550
Total Hardness 16 715

ANIONS

Chloride, Cl-	<u>32621</u>	<u>919</u>
Sulfate, So ₄ ⁼	<u>410</u>	<u>9</u>
Carbonate, Co ₃ ⁼	<u>-0-</u>	
Bicarbonate, HCo ₃ ⁻	<u>326</u>	<u>5</u>

Remarks and Recommendations _____

PERMIAN

Treating Chemicals, Inc.

P.O. BOX 728
MCKINSTRON, N.M. 86260
PHONE (505) 398-5674

WATER ANALYSIS REPORT

Company Murphy Operating Corporation Date Sampled 9-30-87
Field Todd County Roosevelt
Lease Lower San Andres Unit State NM
Well _____ Formation San Andres
Type of Water Produced Water, B/D _____
Sampling Point Produced water Injection tank. Sampled By Blackwell

DISSOLVED SOLIDS

OTHER PROPERTIES

CATIONS	mg/l	meq/l	pH
Sodium, Na+(Calc)	<u>28993</u>	<u>± 25</u>	<u>1261</u>
Calcium, Ca++	<u>10238</u>	<u>± 20</u>	<u>512</u>
Magnesium, Mg++	<u>2148</u>	<u>± 17.2</u>	<u>176</u>
Barium, Ba++	<u>-0-</u>	<u>± 68.7</u>	<u>-0-</u>
Iron, Fe (Total)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

pH 5.5
Specific Gravity _____
1.080
H₂S Positive
Total Dissolved Solids 111.052
Total Hardness _____
34370

ANIONS

Chloride, Cl ⁻	<u>67985</u>	<u>± 35.5</u>	<u>1918</u>
Sulfate, SO ₄ ⁼	<u>900</u>	<u>± 48</u>	<u>19</u>
Carbonate, CO ₃ ⁼	<u>-0-</u>	<u>± 30</u>	<u>-0-</u>
Bicarbonate, HCO ₃ ⁻	<u>743</u>	<u>± 61</u>	<u>12</u>

Remarks and Recommendations _____

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 Todd Lower San Andres Unit, located in Township 7 South, Range 36 East, NMPM, Roosevelt County, New Mexico.

Well No. 30-10, Section 30; Well No. 30-16, Section 30; Well No. 31-8, Section 31; Well No. 32-12, Section 32.

Water will be injected into the P2 zone of the San Andres formation (between depths of 4200' to 4350') at rates of approximately 400 BWPD and at maximum 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 September 28, 29, 30, 1987. Legal #0063.

Affidavit of Publication

0

I, Marshall Stinnett
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

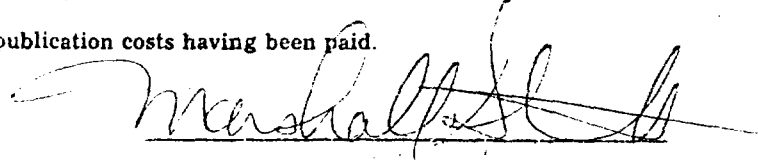
newspaper, and not in any supplement thereof for 3

Days
consecutive weeks commencing with the issue dated _____

September 28, 1987

and ending with the issue dated September 30, 1987

All publication costs having been paid.

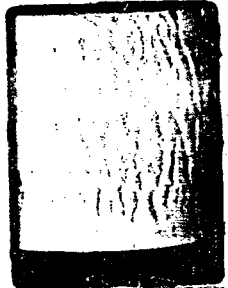


Subscribed and sworn to before me this 7th day of October, 1987

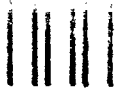
De Maris Barnett

Notary Public

My commission expires 3/7/91 19



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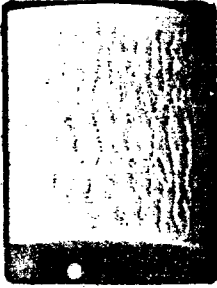
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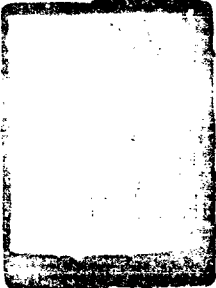
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Mr. Ted Williamson, Sr.
Milnesand, New Mexico 88125

4. Type of Service:	Registered <input type="checkbox"/>	Insured <input type="checkbox"/>	Article Number P 004 869 423
	<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD	
Express Mail <input type="checkbox"/>			

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee

Ted Williamson Sr

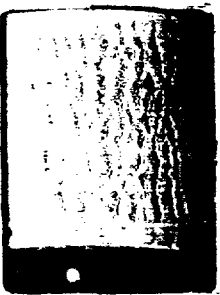
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Evelyn & Harvey Ehmke
322 Railroad
Albany, Oregon 97321

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	<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD	
Express Mail <input type="checkbox"/>			

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Evelyn Ehmke

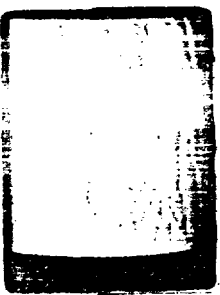
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7. Date of Delivery

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Monzano Oil Co.
Post Office Box 2107
Roswell, New Mexico 88201

4. Type of Service:	Registered <input type="checkbox"/>	Insured <input type="checkbox"/>	Article Number P 004 869 421
	<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD	
Express Mail <input type="checkbox"/>			

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5. Signature - Addressee

Monzano Oil Co

6. Signature - Agent

X

7. Date of Delivery

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8. Addressee's Address (ONLY if requested and fee paid)

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3. Article Addressed to:

Mabel Badberg
305 Carol Street
Talmage, NE 684

4. Type of Service:	Registered <input type="checkbox"/>	Insured <input type="checkbox"/>	Article Number P
	<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD	
Express Mail <input type="checkbox"/>			

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee

Mabel Badberg

6. Signature - Agent

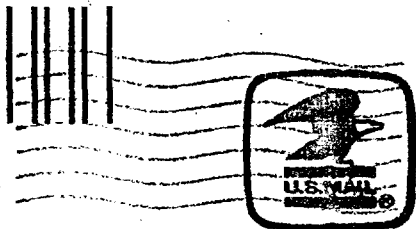
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(Name of Sender)

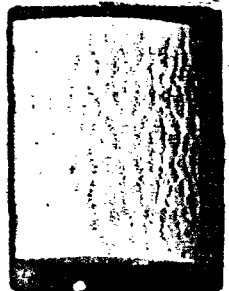
Post Office Box 2648

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

Roswell, New Mexico 88201

(City, State, and ZIP Code)

MBM



UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS



PENALTY FOR PRIVATE USE, \$300

OCT 15 1987

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN TO

Murphy Operating Corporation

(Name of Sender)

Post Office Box 2648

(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

Roswell, New Mexico 88201

(City, State, and ZIP Code)

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OFFICIAL BUSINESS



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RETURN TO

Murphy Operating Corporation

(Name of Sender)

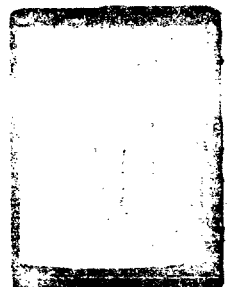
Post Office Box 2648

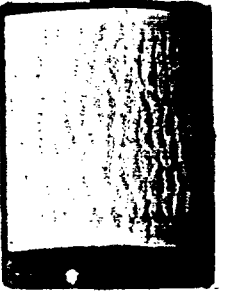
(No. and Street, Apt., Suite, P.O. Box or R.D. No.)

Roswell, New Mexico 88201

(City, State, and ZIP Code)

MBM





SENDER: Complete items 1, 2, 3 and 4.
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. Show to whom, date and address of delivery.
 2. Restricted Delivery.

3. Article Addressed to:
 Leila Burns
 Rt 8 Box 236
 Malvern, Arkansas 72104

4. Type of Service: Article Number
 Registered Insured
 Certified COD P 004 869 419
 Express Mail

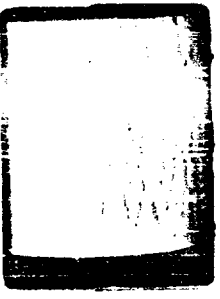
Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
 X *Leila Burns*

6. Signature - Agent
 X

7. Date of Delivery
 10-13-87

8. Addressee's Address (ONLY if requested and fee paid)



SENDER: Complete items 1, 2, 3 and 4.
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. Show to whom, date and address of delivery.
 2. Restricted Delivery.

3. Article Addressed to:
 Arnold & Gail Willisandt
 1304 Camps Drive
 Brownwood Texas 76801

4. Type of Service: Article Number
 Registered Insured
 Certified COD P 004 869 416
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
 X *Arnold & Gail Willisandt*

6. Signature - Agent
 X

7. Date of Delivery
 10/13/87

8. Addressee's Address (ONLY if requested and fee paid)

SENDER: Complete items 1, 2, 3 and 4.
 Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. Show to whom, date and address of delivery.
 2. Restricted Delivery.

3. Article Addressed to:
 Mr. Miller
 809 West Main - Space 203
 Battleground, Washington
 98604

4. Type of Service: Article Number
 Registered Insured
 Certified COD P 004 869 420
 Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
 X *Mr. Miller*

6. Signature - Agent
 X

7. Date of Delivery
 10/13/87

8. Addressee's Address (ONLY if requested and fee paid)



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

10-22-87

GARREY CARRUTHERS
 GOVERNOR

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

OCT 28 1987

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

RE: Proposed:

- MC _____
- DHC _____
- NSL _____
- NSP _____
- SWD _____
- WFX 367
- PMX _____

Gentlemen:

I have examined the application for the:

Murphy Operating Corp. Todd Lower SA Unit Sec 30 #10-J
 Operator Lease & Well No. Unit S-T-R 30-7-36

and my recommendations are as follows:

OK J " *Sec 30 #16-P* "
 " *Sec 31 # 8-H 31-7-36*
 " *Sec 32 #12-L 32-7-36*

Yours very truly,

Jerry Sexton
 Jerry Sexton
 Supervisor, District 1

/ed