



**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBES DISTRICT OFFICE**

**BRUCE KING
GOVERNOR**

9-5-91

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

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

Nov 45 /

RE: Proposed:

MC
DHC
NSL
NSP
SWD
WFX
PMX

Gentlemen:

I have examined the application for the:

Phillips Petroleum Co. Davis N #5-N 7-8-33
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

815

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No
- II. Operator: PHILLIPS PETROLEUM COMPANY
- Address: 4001 Penbrook St., Odessa, TX 79762
- Contact party: Carole Stevens Phone: (915) 368-1310
- 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 _____.
- 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: L. M. Sanders Supervisor,
Title Regulation and Proration

Signature: L. M. Sanders Date: Sept. 3, 1991

- * 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.

Submitted 3/82 upon completion

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.

RECF

SEP 04 1991

HOBBS, NM

Received

AUG 30 1991

P.B.R. Regulatory Section

AFFIDAVIT OF PUBLICATION

County of Chaves }
State of New Mexico,

I, Jean M. Pettit
Bus. Manager,

Of the Roswell Daily Record, a daily newspaper published at Roswell, New Mexico, do solemnly swear that the clipping hereto attached was published once a week in the regular and entire issue of said paper and not in a supplement thereof for a period

of one time

..... weeks

beginning with the issue dated 26th

August 1991

and ending with the issue dated 26th

August 1991

Jean M. Pettit
Manager

Sworn and subscribed to before me

this 26th day of

August 1991

Mary Jo Phillips
Notary Public

My commission expires

July 31, 1994
(Seal)

Publish August 26, 1991

LEGAL NOTICE

Notice is hereby given of the application of Phillips Petroleum Company, 4001 Penbrook Street, Odessa, Texas, 79762, Attention L. M. Sanders, 915/368-1488, to the Oil Conservation Division, New Mexico Energy and Mineral Department, for approval of the following disposal well authorization for the purpose of salt water disposal:

Well Name: Davis N Well No. 5

Location:

660 feet from the north line and 1980 feet from the east line, Sec. 7, T-8-S, R-33-E, Chaves County, New Mexico.

The disposal formation is San Andres at a depth of 4268'-4498' below the surface of the ground.

Expected maximum injection rate is 1000 bbls. water per day and expected maximum injection pressure is 500 pounds per square inch.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501 within fifteen (15) days.

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SEP 04 1991

OASIS
WOBBS OFFICE

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SEP 04 1991

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HOODS LIBRARY

DAVIS N #5
660' FSL & 1980' FNL
Section 7, T8S, R33E
Chaves County, New Mexico

**Application For Authorization To Inject
Wells of Public Record within the Area of Review**

| <u>Well Name</u> | <u>Type</u> | <u>Date</u> | <u>Location</u> | <u>Depth</u> |
|------------------|-------------|-------------|--------------------------------------------|-----------------------|
| Davis N #1 | Oil | 3/68 | 1980' FNL & FWL Sec. 18, T8S, R33E | 9150' TD 4590' PTD |
| Davis N #3 | Oil | 2/76 | 660' FNL & 1980' FWL Sec. 18, T8S, R33E | 4540' TD 4503' PTD |
| Davis N #4 | Oil | 4/82 | 660' FNL & 1980' FEL Sec. 18, T8S, R33E | 4620' TD 4550' PTD |

Proposed Operation

1. Average Rate = 500 BWPD
Maximum Rate = 1000 BWPD
2. Closed system
3. Average Injection Pressure = 350 psi
Maximum Injection Pressure = 500 psi

Geological Data

Lithology: Dolomite
Geological Name: San Andres
Thickness: 1,000'
Depth: 3608'-4600'

Water

Underground sources of drinking water

There are no fresh water wells within a mile radius of this well. No chemical analysis included.

The overlying drinking water source is the Ogallala at 140'-150'. There are no known underlying drinking water sources.

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C.R.
ROBERT CRAVEN

11/20/91

DAVIS N WELL NO.5
Recommended Procedure
April 24, 1991

Safe operations are of utmost importance at all Phillips Petroleum Company properties and facilities. To further this goal, the Phillips Supervisor at the location shall request tailgate safety meetings prior to initiation of work and also prior to any critical operations. These tailgate safety meetings shall be attended by all Company, contract, and service personnel then present at the location. All parties shall review proposed upcoming steps, procedures, and potentially hazardous situations. Occurrence of these meetings shall be recorded in the Daily Report.

1. MI and RU DDU. GIH with SL and check TD at 4527'. Clean out gas necessary.
2. RU HALLIBURTON LOGGING SERVICES to perforate 4-1/2" casing with a 3-1/8" casing gun, 2 SPF over the following intervals:

| DEPTH | FEET | SHOTS |
|-------------|-------|----------|
| 4352'-4356' | 4' | 8 |
| 4360'-4368' | 8' | 16 |
| 4373' | 1' | 2 |
| 4380' | 1' | 2 |
| 4386' | 1' | 2 |
| 4434'-4436' | 2' | 4 |
| 4442'-4448' | 6' | 12 |
| 4452' | 1' | 2 |
| TOTAL | ----- | ----- |
| | 25' | 50 shots |

Collars are located at: 4198', 4237+, 4277+, 4316', 4352', 4389', 4427', 4466'.

3. GIH with treating packer on 2-3/8" workstring. Set packer at 4210'. Load annulus with lease produced water. Maintain 500 psi on annulus during treatment. Pump 160 gallons xylene and 160 gallons Unichem TS 165. Displace with 17 bbls. lease produced water. SION. Swab back load.
4. RU CHARGER to treat perforated interval (4268'-4498') down 2-3/8" workstring with 2000 gallons 15% NEFE HCl acid and 600 gallons 10# brine with 600 lbs. rock salt as follows:

- a. Test all lines to 3000 psi.
- b. Pump 600 gallons acid at 4 BPM.
- c. Pump 300 gallons 10# brine with 300 lbs rock salt.
- d. Pump 700 gallons acid.
- e. Pump 300 gallons 10# brine with 300 lbs. rock salt.
- f. Pump 700 gallons acid.
- g. Displace with 25 bbls. produced water.

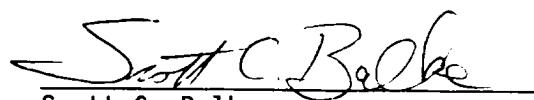
Max. Treating Pressure = 2500 psi

Max. Treating Rate = 4 BPM

5. Swab back load.

6. COOH with workstring and packer.

I, Scott C. Balke, have reviewed the the available geologic and engineering data and find no evidence of any open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.



Scott C. Balke

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**CCB
HOBBS OFFICE**

DAVIS "N" #5
660' FSL & 1980" FNL
SECTION 7, T8S, R33E
Chaves County, New Mexico

WELL DATA

(A)

Casings: 8-5/8", 24#, K-55, set at 614', in a 12-1/4" hole
Cemented with 400 sks. Cement circulated to surface.

4-1/2", 10.5#, K-55, set at 4600', in a 7-7/8 hole
Cemented with 1245 sks. TOC at 1260' from temp. survey

Tubing to be Used: 2-3/8", 4.7#, J-55, with TK-70 or equivalent plastic coating

Packer Type to be Used: Baker LOC-SET packer or equivalent to be set at +/- 4160'

(B)

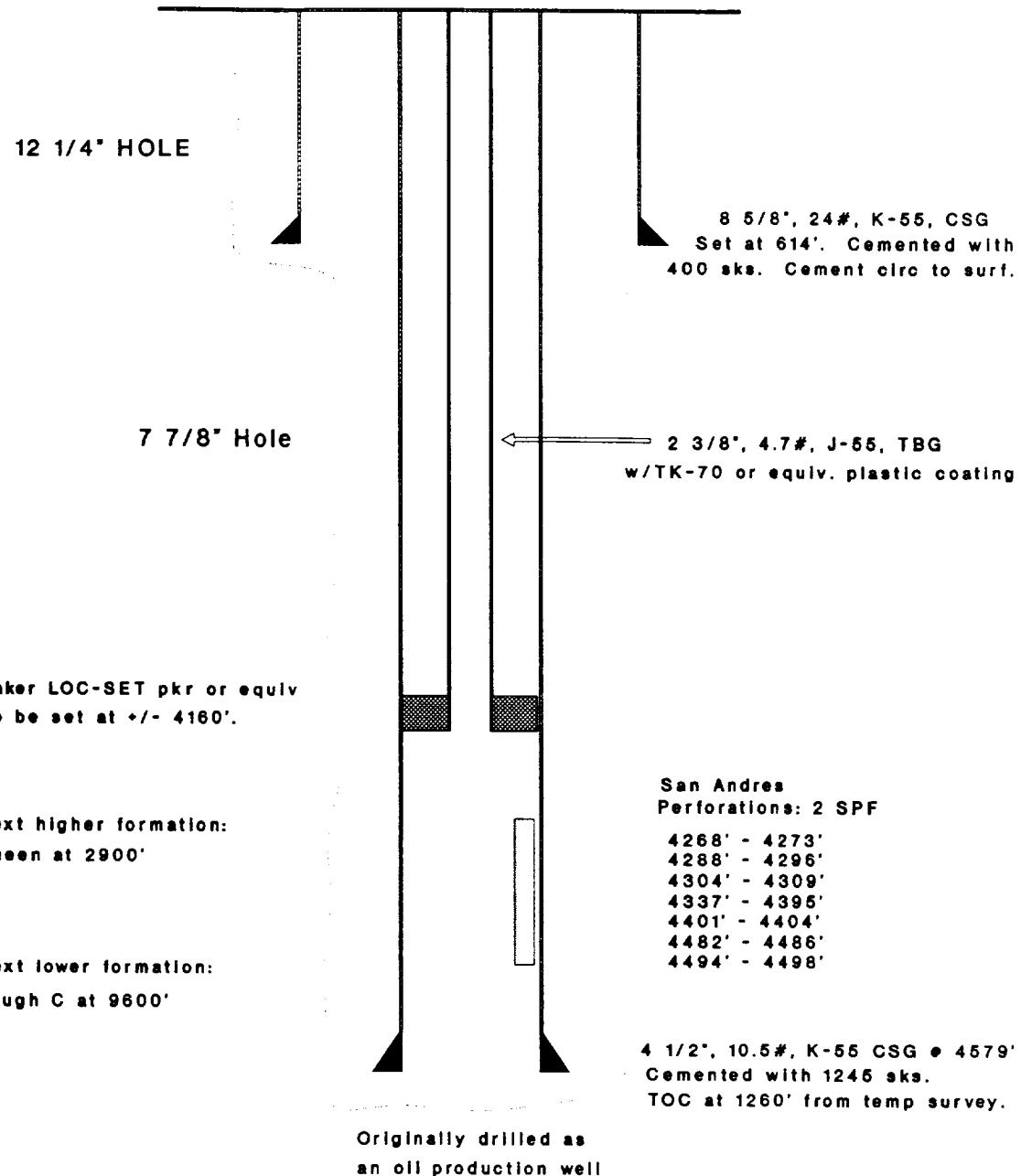
Injection Formation: San Andres
Field/Pool Name: Chaverro San Andres
Injection Interval: Perforated 4268'-4498'
Original Well Purpose: Production
Other Intervals: Not open in this well
Next Higher Oil & Gas Zone: Queen Formation at 2900'
Next Lower Oil & Gas Zone: Bough C-Penn at 9600'

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BBG
HOBBY PRICE

DAVIS "N" #5
660' FNL & 1980' FEL
SECTION 7, T8S, R33E
San Andres Chavaroo (SA) Field



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PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

EXPLORATION AND PRODUCTION GROUP
Permian Basin Region

DAVIS N WELL NO. 5

OFFSET OPERATORS:

High Plains Oil Co.
P.O. Box 141
Tatum, NM 88267

UNLEASED OFFSETS:

Estate of Harry G. Houston
c/o Alice H. Cushing
1605 Bayita Lane, NM
Alburquerque, NM 87107

SURFACE LAND OWNER:

Bureau of Land Management
P.O. Box 1857
Roswell, NM 88201

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SEP 04 1991

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPL.

(See instructions on reverse side)

Form approved.
Budget Bureau No. 42-R325.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL GAS DRY Other _____b. TYPE OF COMPLETION: NEW WORK DEEP-EN PLUG DIFF. RESVR. Other _____

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Room 401, 4001 Penbrook, Odessa, Texas 79762

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 660' FN and 1980' FE lines

At top prod. Interval reported below Same

At total depth Same

| | | |
|----------------|-------------|-------------------|
| 14. PERMIT NO. | DATE ISSUED | 13. STATE |
| --- | 1-22-82 | Chaves New Mexico |

| | | | | |
|------------------|-----------------------|----------------------------------|-----------------------------------------|----------------------|
| 15. DATE SPUNDED | 16. DATE T.D. REACHED | 17. DATE COMPL. (Ready to prod.) | 18. ELEVATIONS (DF, RSB, RT, GR, ETC.)* | 19. ELEV. CASINGHEAD |
| 2-15-82 | 3-7-82 | 4-21-82 | 4449 DF, 4450' KB | --- |

| | | | | | |
|---------------------------|-------------------------------|-----------------------------------|--------------------------|--------------|-------------|
| 20. TOTAL DEPTH, MD & TVD | 21. PLUG, BACK T.D., MD & TVD | 22. IF MULTIPLE COMPL., HOW MANY* | 23. INTERVALS DRILLED BY | ROTARY TOOLS | CABLE TOOLS |
| 4620 | 4550 | → | X | | |

| | |
|-------------------------------------------------------------------------------|---------------------------------|
| 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* | 25. WAS DIRECTIONAL SURVEY MADE |
| Chaveroo/San Andres Top: 3600'; Btm: 4620' (4253-4532') | NO |

| | |
|--------------------------------------------|--------------------|
| 26. TYPE ELECTRIC AND OTHER LOGS RUN | 27. WAS WELL CORED |
| DLL-Rxo-GR-Cal, CNS-CDL-GR-Cal, CNS-GR-Cal | NO |

| | | | | | |
|----------------------------------------------------|------------------|----------------|-----------|----------------------|--|
| 28. Casing Record (Report all strings set in well) | CEMENTING RECORD | AMOUNT PULLED | | | |
| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | 400 SX Class "C" | |
| 8-5/8" | 24#, K-55 | 604' | 12-1/4" | 1600 SX TLW & 225 SX | |
| 4-1/2" | 10.5#, K-55 | 4620 | 7-7/8" | Class "C" | |

| | | | | | | | |
|------------------|-------------------|-------------|---------------|-------------|--------|----------------|-----------------|
| 29. LINER RECORD | 30. TUBING RECORD | | | | | | |
| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
| | | | | | 2-3/8" | 4527' | |

| | |
|----------------------------------------------------|-----------------------------------------------------------------------|
| 31. PERFORATION RECORD (Interval, size and number) | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. |
| Perfd 4-1/2" csg w/2 JSPF as follows: | DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED |
| 4253'-4276' 4327'-4332' 4526'-4532' | 4253'-4532' Trtd w/7000 gals NEFE HCl w/1 ball sealer/bbl (166 balls) |
| 4278'-4285' 4357'-4366' | |
| 4299'-4304' 4385'-4388' | |
| 4306'-4313' 4459'-4473' | |

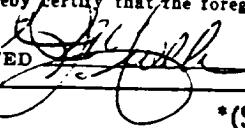
| | | | | | | | |
|---------------------|-----------------------|----------------------------------------------------------------------|------------------------------------|----------|------------|-------------------------|---------------|
| 33. PRODUCTION | DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | WELL STATUS (Producing or shut-in) | | | | |
| | 4-25-82 | 2" x 1-1/2" x 16' insert pump | producing | | | | |
| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
| 4-29-82 | 24 | --- | → | 51 | 39 | 86 | 759 |
| FLOW. TUBING PRESS. | CASING PRESS.RE | CALCULATED 24-HOUR RATE | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) | |
| --- | --- | → | --- | --- | --- | 32.8 | |

| | |
|------------------------------------------------------------|-------------------|
| 34. DISPOSITION OF GAS (Sold, used for fuel, rented, etc.) | TEST WITNESSED BY |
| Sold | D. Thorp |

| |
|-------------------------|
| 35. LIST OF ATTACHMENTS |
|-------------------------|

| |
|------------------------------------------|
| Logs to be furnished direct by Gearhart. |
|------------------------------------------|

| |
|-----------------------------------------------------------------------------------------------------------------------------------|
| 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records |
|-----------------------------------------------------------------------------------------------------------------------------------|

| | | | |
|--------------------------------------------------------------------------------------------|---------------|----------------------------------|------------------|
| SIGNED  | W. J. Mueller | TITLE Sr. Engineering Specialist | DATE May 5, 1982 |
|--------------------------------------------------------------------------------------------|---------------|----------------------------------|------------------|

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formations and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Stocks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES :
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-TEST TESTS, INCLUDING
DEPTH INTERVAL, THICKNESS, CATIONIC TEST, TIME TEST, OIL TEST, DRAWDOWN TEST, AND RECOVERY TEST
DESCRIPTION, CONTENTS, ETC.

| FORMATION | TOP | BOTTOM | DESCRIPTION | NAME | |
|--------------|-------|--------|-------------|------------|------------------|
| | | | | MEAN DEPTH | TRUE VERT. DEPTH |
| Surface | 0 | 610' | | | |
| Salt & Anhy | 610' | 1391' | | Rustler | 1804' |
| Redbeds | 1391' | 1890' | | Yates | 2343' |
| Salt & Anhy | 1890' | 3197' | | Queen | 2856' |
| Dolo & Shale | 3197' | 4393' | | San Andres | 3600' |
| Lime, Shale | 4393' | 4550' | | Pi | 4083 |
| Dolo, Lime, | | | | | |
| Shale | 4550' | 4595' | | | |
| Lime, Dolo | 4595' | 4620' | | | |
| TD | 4620' | | | | |

SEP 6 1968
1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLIC

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.8.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

1b. TYPE OF COMPLETION:
NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR Phillips Petroleum Company

3. ADDRESS OF OPERATOR Room 711, Phillips Bldg., Odessa, Texas 79761

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface
Unit C, 660' FN & 1980' FW lines

At top prod. interval reported below

Same

At total depth

| 14. PERMIT NO. | DATE ISSUED |
|----------------|-------------|
| - | 1-28-76 |

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (FT. RKB, RT. GR. ETC.)* 19. ELEV. CASINGHEAD

2-5-76 2-13-76 2-19-76 4430' Gr., 4438' RKB -

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

4540 4503 - → 0-4540 -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

San Andres = top 3530, bottom 4503'

No

26. TYPES ELECTRIC AND OTHER LOGS RUN. Schlumberger BHC-Sonic-GR Caliper-dual latrolog 27. WAS WELL CORED

No

| Casing Record (Report all strings set in well) | | | | |
|------------------------------------------------|-----------------|----------------|-------------------------|----------------------------------------------------|
| Casing Size | Weight, lb./ft. | Depth Set (MD) | Hole Size | Cementing Record |
| 8-5/8" | 28.55# X-42 | 400' | 12 $\frac{1}{2}$ " (400 | sx Class H w/2% CaCl2 & # |
| 4-1/2" | 11.6# K-55 | 4540' | 7-7/8" (300 | sx TRLW w/10% DD, 7 $\frac{1}{2}$ salt/sx & 300 sx |

Class H neat. Temp survey TOC at 2675')

| Liner Record | | | | | Tubing Record | | |
|--------------|----------|-------------|---------------|-------------|---------------|----------------|-----------------|
| Size | Top (MD) | Bottom (MD) | Backs Cement* | Screen (MD) | Size | Depth Set (MD) | Packer Set (MD) |
| | | | | | 2-3/8" | 4157 | - |

| Preparation Record (Interval, size and number) | | | | Acid, Shot, Fracture, Cement Squeeze, etc. | | | |
|----------------------------------------------------------------------------------|--|--|--|--------------------------------------------|----------------------------------|--|--|
| | | | | Depth Interval (MD) | Amount and Kind of Material Used | | |
| One jet shot per foot 4240-56', 4262-66', 4274-84', 4289-94', total 35, 35 holes | | | | 4240-94' | 2000 gals 15% NE HCL acid | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Production | | | | Well Status (Producing or Shut-in) | | | |
|-----------------------|--|----------------------------------------------------------------------|--|------------------------------------|--|--|--|
| Date First Production | | Production Method (Flowing, gas lift, pumping—size and type of pump) | | Producing | | | |
| 2-21-76 | | Insert pump 2" x 1 $\frac{1}{2}$ x 16" | | | | | |

| Date of Test | Hours Tested | Choke Size | Prod'n. for Test Period | Oil-Bbl. | Gas-Mcp. | Water-Bbl. | Gas-Oil Ratio |
|--------------|--------------|------------|-------------------------|----------|----------|------------|---------------|
| 2-27-76 | 24 | - | → | 110 | 44 | 2 | 402 |

| Flow. Turng Press. | Casing Pressure | Calculated 24-Hour Rate | Oil-Bbl. | Gas-Mcp. | Water-Bbl. | Oil Gravity-API (Corr.) |
|--------------------|-----------------|-------------------------|----------|----------|------------|-------------------------|
| - | - | → | - | - | - | 35.5 |

| Disposition of Gas (Sold, used for fuel, vented, etc.) | Test Witnessed By |
|--------------------------------------------------------|-------------------|
| Sold | E. T. Millhollon |

| List of Attachments |
|---------------------|
|---------------------|

Logs as above were furnished direct by Schlumberger

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED W.J. Mueller TITLE Engineering Advisor DATE 3-2-76

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 23, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), forms and attachments, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or private lands or waters, or Federal or State offices for specific instructions.

Interval, or Interval, top (S), bottom (N) and name (W) (or any) for only the interval pertinent to such Interval.

Item 29: "Sacks Cement": Attached supplemental form for this item.

Item 33: Submit a separate completion report on this form for each Interval to be separately produced. (See instruction for items 22 and 24 above.)

| 87. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORING INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERY | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|-----------------------------|
| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. |
| Caliche, sand, surface | 0 | 400 | |
| Redbeds | 400 | 740 | |
| Redbeds, salt | 740 | 1925 | |
| Anhydrite, salt | 1925 | 3260 | |
| Anhydrite | 3260 | 3533 | |
| Anhydrite, lime | 3533 | 4540 | |

| GEOLOGIC MARKERS | | | |
|------------------|------------|-------------|-------------------------|
| | NAME | MEAS. DEPTH | TOP TRUE VERT. DEPTH |
| | Rustler | 1795 | |
| | Yates | 2342 | |
| | Queen | 2852 | |
| | San Andres | 3530 | |
| | Pr Zone | 4082 | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATES*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

MD174830

6. IF INDIAN, ALLOTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Devie #N

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Tobac (Penn)11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA**Sec. 18, T-8-S, R-33-E**12. COUNTY OR
TAOS13. STATE
New Mexico

1a. TYPE OF WELL:

OIL GAS
WELL WELL DRY Other _____

b. TYPE OF COMPLETION:

NEW WORK OVER DEEPEN PLUG BACK DIFF. RESVR. Other _____

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Room B-2, Phillips Building, Odessa, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface **1980' FM and W lines**

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

-

1-30-68

15. DATE SPUNDED

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DEE, BEE, ET, GR, ETC.)*

19. ELEV. CASINGHEAD

2-7-68**3-19-68****3-28-68****4434' Gr; 4447' Dp**

20. TOTAL DEPTH, MD & TVD

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL.,
HOW MANY*23. INTERVALS
DRILLED BY**ROTARY TOOLS**

CABLE TOOLS

9150**9109**

-

-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

8909-19'25. WAS DIRECTIONAL
SURVEY MADE
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

Interlog, Microlateralog, Sonic GR

27. WAS WELL CORED

Yes

28.

CASING RECORD (Report all strings set in well)

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|----------------|-----------------|----------------|----------------|-------------------------------------------------|---------------|
| 13-3/8" | 40W | 408' | 17-1/2" | 450 ex Class K, Circ. to surf. - | |
| 8-5/8" | 24W, 32L | 4820' | 11" | 750 ex Trinity LN, 700 ex "H", 100 2100' | |

29.

LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|---------------|--------------|--------------|--------------------|----------------|---------------|----------------|-----------------|
| 5-1/2" | 6602' | 9144' | 400 Trinity | (Inscr) | 2-3/8" | 8955' | 8829 |

31. PERFORATION RECORD (Interval, size and number)

2 - 1-1/2" holes/ft. (20 holes)**8909-19'**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| 8909-19 | 2000 gals 20% HGA acid |
| 8909-19 | 1000 gals 3% H acid |
| | 5000 gals 15% H acid |

33.*

PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | | | | WELL STATUS (Producing or shut-in) | | |
|-----------------------|----------------------------------------------------------------------|-------------|-------------------------|------------|------------------------------------|--------------|---------------|
| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
| 6-23-68 | 24 | 1/2" | → | 162 | 355 | 3 BBL | 2189 |

| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) |
|---------------------|-----------------|-------------------------|----------|----------|------------|-------------------------|
| 110 | pkr | → | - | - | - | 45.2 |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented - to be connected

35. LIST OF ATTACHMENTS

Perforation record; DST and Core data sheet

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available recd

SIGNED *R. J. Stringer*TITLE *Assoc. Reservoir Engineer*DATE *6-23-68*

*(See Instructions and Spaces for Additional Data on Reverse Side)

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See instructions on items 22 and 24, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachment.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 38. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Rocky Mountain": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 31: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL, OPEN, PLOWING AND SHIFT-IN PASSURES, AND RECOVERIES

| FORMATION | TOP | SEE DIRECTIONS ON THIS SHEET, ATTACHED | | DESCRIPTION, CONTENTS, ETC. |
|-----------------------|-------|----------------------------------------|-------|-----------------------------|
| | | BOTTOM | TOP | |
| Surf sand, Calcareous | 0' | 90' | 410' | |
| Sand, Interbedded | 90' | 410' | 742' | |
| Redbeds | 410' | 742' | 2160' | |
| Redbeds, Anhy. Salt | 742' | 2160' | 3290' | |
| Anhy. Grit | 2160' | 3290' | 3938' | |
| Anhydrite | 3290' | 3938' | 4029' | |
| Ashy, Lignite | 3938' | 4029' | 4220' | |
| Lignite | 4029' | 4220' | 5263' | |
| Sand, Lignite | 4220' | 5263' | 7317' | |
| Lignite | 5263' | 7317' | 7953' | |
| Lignite, Shale | 7317' | 7953' | 8246' | |
| Lignite, Shale | 7953' | 8246' | 8313' | |
| Lignite, Chert | 8246' | 8313' | 8324' | |
| Lignite | 8324' | 8365' | 8655' | |
| Lignite, Shale | 8365' | 8655' | 8738' | |
| Lignite | 8738' | 8952' | 9052' | |
| Lignite, Shale | 8952' | 9150' | | |

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