District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 S. 1st Street, Artesia, NM 88210/2834 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

Sr. Regulatory/Proration Clerk

### State of New Mexico Energy, Minerals & Natural Resources Department

**OIL CONSERVATION DIVISION** 2040 South Pacheco Santa Fe, NM 87505

Instructions on back Submit to Appropriate District Office State Lease - 6 Copies Fee Lease - 5 Copies

| 2040 South Pache  | co, Sama Fe          | , INIVI O | 1505              | Sun                          | dry   |  |              |                            |                 |                             | X AN   | ŒN        | DED REPORT        |
|---|----------------------|-----------|-------------------|------------------------------|---|--|--------------|----------------------------|-----------------|-----------------------------|--|-----------|-------------------|
| A DDICEC  | APPEANT              | EOD       | - <b>- 131</b> 21 | DMIT T                       | A.DDII  | <br>I DE EN                                | TOTAL T      | o - <del>D</del> EI        |                 | PLUCIACI                    | Z .OD A  | nr        | LOC.              |
| APPIAC  | AHON                 |           |                   | •                            |   | A, KE-LI                                   |              | X, DEI                     | <del>(**)</del> | 127                         |  |           | RID Number        |
| <sup>1</sup> Operator name and Address Phillips Petroleum Company   |                      |           |                   |                              |   |  |              | .^<br>-                    | 2000 E          |                             |  |           |                   |
| •   |                      | •         | •                 |                              |   |  |              | $\int C $                  | 146             | CEIVED<br>CEIVED<br>CON DIV | 3  |           | )17654            |
| 5525 Highway  |                      |           | ŀ                 |                              |   |  |              | La rais                    | . AE            | Mr. Ola                     | 3  |           | PI Number         |
| Farmington,   |                      | )1        |                   |                              |   |  |              | (jail                      | , O'            | DIST 3                      | 30-0   |           | 26200             |
| <sup>4</sup> Pro <sub>1</sub>   | perty Code           |           |                   |                              |   |  |              | ty Nama                    | <u> </u>        | Die OS                      | ₹ <b>7</b>                                       | 6         | " <b>on 1</b> to. |
| 0   | 09258                |           |                   |                              |   |  |              | <u>30-5 U</u>              | nite Court      | 2021.757 22.00              |  |           | 220R              |
|   | 1                    | _         |                   | T                            |   | Surface 1                                  |              |                            | 496             | ic receive                  | I  | . T       |                   |
| UL or lot no.   | Section              | Town      | ship              | Range Lot. Idn               |   | Feet from the                              |              | North/So                   | outh Line       | Feet from the               | East/West  | line      | County            |
| N   | 8                    | 3         | ON                | 5W                           |   | 1147                                       |              |                            | <u>uth</u>      | 2570'                       | West   |           | Rio Arriba        |
|   |                      |           | 8 ]               | Proposed                     | Bottom 1  | Hole Location                              | on If        | Differe                    | nt Fron         | Surface                     |  |           |                   |
| UL or lot no.   | Section              | Town      | ship              | Range                        | Lot. Idn  | Feet from t                                | he           | North/So                   | outh Line       | Feet from the               | East/West  | line      | County            |
| IN  | <u> </u>             | 9 Prop    | osed P            | ool 1                        |   |  |              | <u> </u>                   |                 | 10 Proposed Po              | ool 2  |           |                   |
| Ra  | asin Frui            | tland     | l Coa             | 1                            | 71629   |  |              |                            |                 |                             |  |           |                   |
|   | <u> 13 ili   1 u</u> | Clanc     | COU               |                              | 71023   |  | <u> </u>     |                            |                 |                             |  |           |                   |
| 11 Work T   | ype Code             |           | 12                | Well Type Code 13 Cable/     |   |  | Rotary       | totary 14 Lease Type       |                 | ise Type Code               | 15 Ground Level Elevation                        |           | evel Elevation    |
|   | N                    |           |                   |                              |   |  | ₹            | P                          |                 |                             | 6273'  |           |                   |
| 16 <b>M</b> u   |                      |           | 17                | 17 Proposed Depth 18         |   | 18 Form                                    | ation 19     |                            | Contractor      |                             | <sup>20</sup> Spud Date                          |           |                   |
|   | M                    |           |                   | +/- 3023' Fruitlar           |   |  | nd C         | nd Coal Key Energy 1st Qtr |                 |                             | 0+5 2000   |           |                   |
|   | N                    |           |                   | _+/3023                      |   | sed Casing                                 |              |                            |                 | -5                          |  | ٠,        | <u>utr 2000</u>   |
| Hole Size Ca  |                      |           | Casin             | sing Size Casing weight/foot |   |  | Т            | Setting De                 |                 | Sacks of Ceme               | nt   | Es        | timated TOC       |
| 12-1/   |                      |           |                   |                              |   |  | K/.1-55 200' |                            |                 |                             |  | 3 surface |                   |
|   | •                    |           |                   | 7" 20# .1/K-55               |   |  | 2908'        |                            | 1-325 Type      | 1                           |  | Sui race  |                   |
| 8-3/  | 4                    | +         |                   | _/                           |   | <u> </u>                                   | 2300         |                            | T-50 sx Type 3  |                             | surface  |           |                   |
|   | A II                 |           |                   | -1/2" 15 5# .]-55            |   | - 11 - 1 - 1 - 1                           |              | 2888' - TD                 |                 | <del></del>                 | <del>;                                    </del> |           | surrace           |
| 6-1/4   | 4                    | -         | <del>5-1</del>    | <u> </u>                     | 15.   | o# J-55                                    |              | 888 -                      | 10-             |                             |  |           |                   |
| Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone.  Describe the blowout prevention program, if any. Use additional sheets if necessary  |                      |           |                   |                              |   |  |              |                            |                 |                             |  |           |                   |
| PLEASE CANCEL THE APD DATED 7/1/99 FOR THIS WELL. THE SITE HAD TO BE MOVED.   |                      |           |                   |                              |   |  |              |                            |                 |                             |  |           |                   |
| * The surface casing will be set at a minimum of 200', but could be set deeper if required to maintain hole stability. ** The 6-1/4" interval from the 7" casing shoe to the base of the coal may be underreamed to 9-1/2". If the coal is cleated a 5-1/2" 15.5# liner will be run in the open hole without being cemented. If the coal is not cleated, 4-1/2" 11.6# liner will be run & cemented. The well will then be completed by fracture stimulation. If this well proves good, the 30-5 Unit #220 will be converted to a pressure observation well. Also, see attached for cathodic protection details. |                      |           |                   |                              |   |  |              |                            |                 |                             |  |           |                   |
| <sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  |                      |           |                   |                              | OIL CONSERVATION DIVISION                       |  |              |                            | ON              |                             |  |           |                   |
| Signature: Mystm  |                      |           |                   |                              | Approved by: Original Signed by FRANK T. CHAVEZ |  |              |                            |                 |                             |  |           |                   |
| Printed name: Patsy Clugston  |                      |           |                   |                              | Title   | Title: SUPERVISOR DISTRICT#3               |              |                            |                 |                             |  |           |                   |
|   |                      |           |                   |                              | Appl  | Approval Date AN - 7 2000 Expiration Date: |              |                            |                 |                             |  |           |                   |

District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

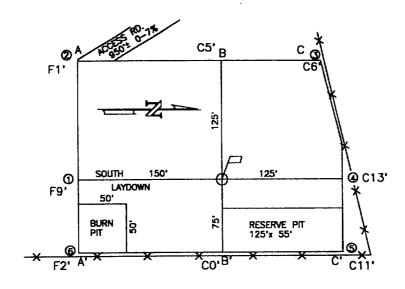
State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco

Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

# Santa Fe, NM 87505

| District IV<br>2040 South Puche | co, Sunta F              | e, NM 87505  |               |                     |                     |                                 |          |                      | X                                | J <sub>AME</sub>        | ENDED REPORT                                    |  |
|---------------------------------|--------------------------|--------------|---------------|---------------------|---------------------|---------------------------------|----------|----------------------|----------------------------------|-------------------------|---|--|
|                                 |                          | WI           | ELL LO        | CATIO               | N AND ACR           | REAGE DED                       | ICA      |                      |                                  |                         |   |  |
|                                 | API Numbe                | er           |               | 1 Pool Coc<br>71629 |                     | 'Pool Name Basin Fruitland Coal |          |                      |                                  |                         |   |  |
| 30-039-26200<br>4 Property Code |                          |              |               |                     | 5 Property          | Name                            | <u> </u> | * Well Number        |                                  |                         |   |  |
| .009258                         |                          |              |               |                     | SAN JUAN 30         |                                 |          |                      |                                  |                         | 220R  |  |
| 'ogrid<br>017654                | No.                      |              |               | PHILL               | Operator PS PETROLE | UM COMPANY                      |          |                      |                                  | 6273                    |   |  |
| <u> </u>                        |                          |              |               |                     | 10 Surface          | Location                        |          |                      |                                  |                         |   |  |
| Ul. or lot no.                  | Ul. or lot no. Section T |              | Range         | Lot Idn             | Feet from the       | North/South line                | Fee      | t from the           | East/Wes                         | l line                  | County  |  |
| N                               | 8                        | 30N          | 5W            | <u> </u>            | 1147'               | SOUTH                           |          | 570 <b>'</b>         | WEST                             | <u> </u>                | RIO ARRIBA                                      |  |
|                                 |                          |              | 11 Bot        | tom Ho              | le Location I       | f Different F                   | rom !    | Surface              |                                  |                         |   |  |
| UL or lot no.                   | Section                  | Township     | Range         | Lot Idn             | Feet from the       | North/South line                | Fee      | et from the          | East/Wcs                         | t line                  | County  |  |
| 12 Dedicated Aca                | res 13 Joint             | or Infill 14 | Consolidation | n Code 15           | Order No.           |                                 |          |                      |                                  |                         |   |  |
| 320 W/2                         | I                        |              | U             |                     |                     |                                 |          |                      |                                  |                         |   |  |
| NO ALLOW                        | ABLE WI                  | ILL BE AS    | SIGNED        | TO THIS             | COMPLETION          | UNTIL ALL I                     | NTER     | ESTS HAV             | E BEEN                           | CONSC                   | LIDATED OR A                                    |  |
|                                 |                          | N            | ON-STAI       | IDARD U             | NIT HAS BEEN        | N APPROVED                      | BY TH    | E DIVISIO            | N                                |                         |   |  |
| 16                              | ,                        | N89°         | 58 <b>'</b> E | 52                  | 79.34'              |                                 |          |                      |                                  |                         | TIFICATION                                      |  |
| ,                               |                          |              |               | ما                  |                     |                                 |          | I hereby certi       | fy that the in<br>plete to the b | formation<br>test of my | contained herein is<br>knowledge and belief     |  |
| 1                               |                          |              |               | 1                   | A 3 3 1             | 011770                          |          |                      |                                  |                         |   |  |
| ļ                               |                          |              |               |                     | 6                   | TO BE                           |          | _ ا                  | _                                |                         |   |  |
| 1                               |                          |              |               | 1                   | Fr B                | 000                             |          |                      | ),                               | 01                      | 1 _ /   |  |
|                                 | 7                        |              |               |                     | 100                 | Will S                          |          | 14/                  | they                             | . Cli                   | 451/1   |  |
|                                 | •                        | SF-078       | 399 <b>7</b>  |                     |                     |                                 |          | Signature            |                                  |                         |   |  |
| <b>*</b> _                      |                          | 240 ac       |               |                     | P. CIL              | 015 S                           | •        | Patsy<br>Printed Nam | Clugst                           | on                      |   |  |
| 8                               |                          |              |               |                     | N. Carlotte         | 22.3                            | 00       | Sr. Re               | gulato                           | ry/Pr                   | oration Cle                                     |  |
| 5280.00                         |                          |              |               |                     | - V220              | 0772 P. C.                      | 5280.00  | Title 12-22          | _00                              |                         |   |  |
| 22                              | •                        |              |               | 4                   |                     |                                 | 52       | Date                 | 99                               |                         |   |  |
|                                 |                          |              | <del></del>   | Secti               | on 8                |                                 |          |                      |                                  |                         |   |  |
|                                 |                          |              |               |                     |                     |                                 |          |                      |                                  |                         | TIFICATION                                      |  |
| <u></u>                         |                          |              |               |                     |                     |                                 | ध्य      | was plotted t        | from field no                    | ies of actu             | on shown on this plat<br>uil surveys made by me |  |
| 01 'E                           |                          |              |               | 1                   |                     |                                 | 01,      | 11 .                 | supervision,                     | , and that              | the same is true and                            |  |
| ; 0                             | ľ                        | <b>*</b>     |               |                     |                     |                                 | N00°01   | torrect to u         |                                  |                         |   |  |
| 00N                             |                          |              |               | 1                   |                     |                                 | N<br>N   | Date of Surv         | /23/99                           |                         |   |  |
|                                 |                          |              |               |                     |                     |                                 |          | n                    | d Scal of Pro                    | ofessional              | Surveyer:                                       |  |
|                                 | -                        | 2570         |               |                     |                     |                                 |          |                      | NCADSO                           |                         |   |  |
| FEE                             |                          |              |               | 71                  |                     |                                 |          | 18.                  | Chican Carl                      |                         |   |  |
| 1 FEE                           |                          |              | 1167          |                     |                     |                                 |          | 1260                 | C) MITTO                         | 3/5                     | ×   |  |
| N .                             | L                        | <b>†</b>     | =             | 1                   |                     |                                 |          |                      | D.A.                             | 7/\X                    | $\mathcal{E}$                                   |  |
| X                               |                          | _            |               |                     | 100 001             |                                 |          | Centificate          | umber                            | 7/3                     | 1   |  |
|                                 |                          | Eas          | st +          | 1 52                | 280.00'             | <u> </u>                        |          | Trans.               |                                  | 15                      | /   |  |
|                                 |                          |              |               |                     |                     |                                 |          | 130                  | POFE3510                         | N.AL /                  |   |  |
|                                 |                          |              |               |                     |                     |                                 |          |                      | -01-6001                         |                         |   |  |



| A-A' ELEVATION | C/L |  |  |  |  |  |  |  |
|----------------|-----|--|--|--|--|--|--|--|
| 6293           |     |  |  |  |  |  |  |  |
| 6283           |     |  |  |  |  |  |  |  |
| 6273           |     |  |  |  |  |  |  |  |
| 6263           |     |  |  |  |  |  |  |  |
| 6253           |     |  |  |  |  |  |  |  |

| B-B' | C/L                                    |
|------|--|
| 6293 |  |
| 6283 | p                                      |
| 6273 | VIII VIII VIII VIII VIII VIII VIII VII |
| 6263 |  |
| 6253 |  |

| C-C' | C/L |  |  |  |  |  |
|------|-----|--|--|--|--|--|
| 6293 |     |  |  |  |  |  |
| 6283 |     |  |  |  |  |  |
| 6273 |     |  |  |  |  |  |
| 6263 |     |  |  |  |  |  |
| 6253 |     |  |  |  |  |  |

COMPANY: PHILLIPS PETROLEUM CO.

LEASE: SAN JUAN 30-5 UNIT No. 220R

FOOTAGE: 1147 FSL 2570 FWL UNIT N

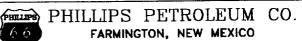
SEC. 8 TWN. 30 N RNG. 5 W N.M.P.M.

COUNTY: RIO ARRIBA STATE: N.M.

ELEVATION: 6273

LATITUDE: 36-49-23

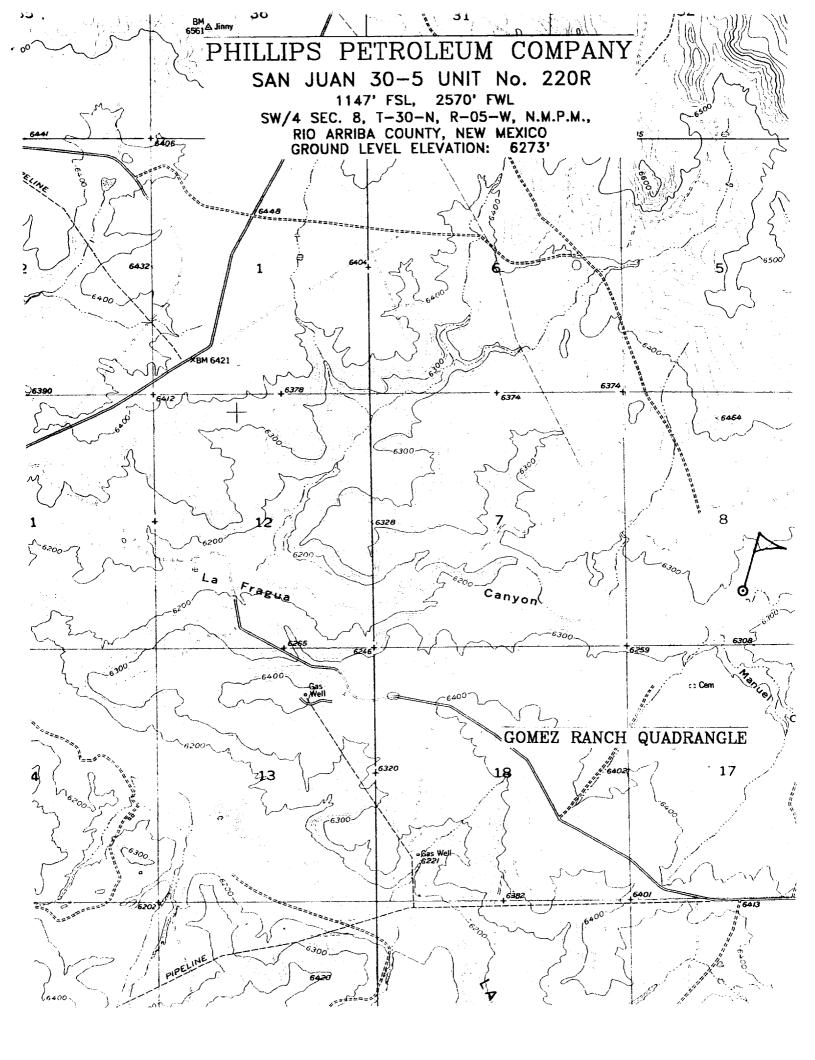
LONGITUDE: 107-22-51



| SURVEYED: 11/23/99 | REV. DATE:           | APP. BY          |
|--------------------|----------------------|------------------|
| DRAWN BY: K.REA    | DATE DRAWN: 11/26/99 | FILE NAME: UF014 |

FIELD SERVICES INC.

P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505)334-0408



## San Juan 30-5 #220R

#### **SURFACE CASING:**

Drill Bit Diameter

Casing Outside Diameter

Casing Weight

Casing Grade

Shoe Depth

Cement Yield

**Excess Cement** 

Hole / Casing Annulus Capacity

0.0558 bbl/ft

1,41 cuft/sk

200 '

110 %

0.3132

8.913

**Cement Required** 

93.3 sx

SHOE

200', 9.625",

36 ppf,

K-55

## **INTERMEDIATE CASING:**

**Drill Bit Diameter** 

Casing Outside Diameter

Casing Weight

Casing Grade

Shoe Depth

Lead Cement Yield

Lead Cement Excess

Tail Cement Length

Tail Cement Yield

**Tail Cement Excess** 

**Casing Capacity** 

0.0405 bbl/ft

20 ppf

2.41 cuft/sk

1.41 cuft/sk

-- **100** % 211.6 '

0.2272

0.0296 bbl/ft 0.0268 bbl/ft

100 %

0.1660 0.1503

30

6.455

Lead Cement Required

**Tail Cement Required** 

325.2 sx

50.0 sx

**LINER TOP** 

2888 '

Casing / Casing Annulus Capacity

Hole / Casing Annulus Capacity

SHOE

2908',

7 "

20 ppf,

K-55

LINER BOTTOM

3023

## San Juan 30-5 Unit #220R Fee; Unit N, 1147' FSL & 2570' FWL; Section 8, T30N, R5W; Rio Arriba County, NM

#### **Cathodic Protection**

Phillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and "Tierra Dynamic Company" of Farmington will be doing the drilling for Phillips.

# **GEOLOGIC PROGNOSIS**

Company:

Phillips Petroleum Company

Project:

2000 Fruitland Fm. Coal Program

Area:

San Juan 30-5 Unit

Operator:

**Phillips Petroleum Company** 

Well Name:

San Juan 30-5 Unit No. 220Ř (Kfc)

Location:

SESW 08-30N-05W

Footage: County/State: 1147' FSL & 2570' FWL **Rio Arriba/New Mexico** 

Surveyed GL: 6273

Est. (15') KB:

6288

| Formation San Jose Fm. Nacimiento Fm. Ojo Alamo Ss. Kirtland Sh. Fruitland Fm. Int. Csg. Depth Top Coal Interval Base Coal Interval | Thickness 1233 1015 205 410 45 15 100 0 | Depth Surface 1233 2248 2453 2863 2908 2923 3023 | Struct. Elev.<br>6273<br>5055<br>4040<br>3835<br>3425<br>3380<br>3365<br><b>3265</b> |
|---|---|--|--|
| Total Depth Pictured Cliffs Ss.   | 5<br>NA                                 | 3023<br><b>3023</b><br>3028                      | <b>3265</b><br>3265<br>3260  |

Mud Log:

Mud log (5"=100') from intermediate casing to TD

(Mud Logger to pick intermediate casing point and TD)

Mechanical Logs:

None

**Correlation Logs:** 

San Juan 30-5 Unit No. 220 (NESW 08-30N-05W)

San Juan 30-5 Unit No. 26-8 (NWSW 08-30N-05W)

Estimated intervals of water, oil, and gas:

Water:

Ojo Alamo

2248-2453

Oil: Gas:

None Fruitland Coal

NA 2923-3023

Gas & Water:

Fruitland Coal

2923-3023

John E. Bircher

December 14, 1999