

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
BLM

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

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

93 AUG 18 AM 11:28  
070 FARMINGTON, NM

5. Lease Designation and Serial No.  
SF-0784069 080069

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
Phillips Petroleum Company

3. Address and Telephone No.  
5525 Hwy. 64, NBU 3004, Farmington, New Mexico 87401

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Unit A, 1090' FNL & 990' NEL  
Section 22, T-29-N, R-5-W

7. If Unit or CA, Agreement Designation  
San Juan 29-5 Unit

8. Well Name and No.  
#45

9. API Well No.  
30-039-07596

10. Field and Pool, or Exploratory Area  
Blanco Mesa Verde

11. County or Parish, State

Rio Arriba, N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment / Temporarily	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input type="checkbox"/> Dispose Water

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

This replaces sundry submitted 7-27-93

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

TOOH with 1-1/4", 2.4 lb/ft, J-55 EUE production tubing and LD. If tubing parted, fish remaining tubing out of hole.

RIH with 7" casing scraper and used 6-3/4" rock bit on 2-7/8" tubing to 6000'. Circulate well clean with lease water. TOOH with bit and scraper.

Spot a cement plug from 7026' to 6926' inside the casing plus 50% excess. (Call top 6920')

RIH with 7" cement retainer and 2-7/8" workstring and set the retainer at +/- 5,500'. Squeeze the Mesa Verde Perforations with 100 sx class "B" cement. Unsting from cement retainer. Leave 20' Class "B" cement on top of retainer, and TOOH with tubing. WOC for 12 hrs.

Pressure test 7" casing to 500 psi for thirty minutes per OCD requirements.

RU logging service company. RIH with TMD log and log the interval from 1850' to 3850'. RD and release logging service company.

Temporarily abandon well per OCD requirements.

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

Signed Ed Hasely Ed Hasely Title Environmental Engineer

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_  
Conditions of approval, if any:

APPROVED  
AS AMENDED

8-16-93

Date

AUG 19 1993

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT MANAGER

## GENERAL INSTRUCTIONS

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.

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special in-

## SPECIFIC INSTRUCTIONS

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

*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 13*—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

## NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

**PRINCIPAL PURPOSE** — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

### ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

**EFFECT OF NOT PROVIDING INFORMATION** — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that: This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized. Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

## BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Allegan) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

2-12 El Paso Natural Gas #45-22 - San Juan 29-5 Unit, Sec. 22, T29N, R5W:

Drilling - 195'. Spud: 10-8-59.

11-9 El Paso Natural Gas #45-22-San Juan 29-5 Unit - Section 22-T29N, R5W

Total Depth 7888'. W.O.C. 13-3/8"-336-375, 9-5/8"-3912-160, 7"-7884-1075 sacks.  
Log Tops: Kayenta 3123, Fruita 3455, Pict. Cliffs 3723, Chinle 5560, Menefee 5660, Pt. Lookout 5913, Mancos 6015, Gallup 7110, Sanastee 7603.

12-30-59 El Paso Natural Gas #45-22 San Juan 29-5 Unit Section 22: T29N - R5W

Completion: Before completion. TD-8276, PB 6303. Core 1 - 8065-8103 rec 43' bng, 37' sh, blk hrd, carbc, foss, 6 ss, lt gry, vfg, v shy w/vert fracs. Core 2 - 8103-21 rec 13' bng, 6' ss, hrd, vfg, shy, vert fracs, 1' sh, blk, hrd, carbc, 6' ss, lt gry, vfg, shy, qrtz, vert fracs, Core 3 - 8121-42 rec 19 1/2' bng, 6' ss, lt gry, fg, carbc, qrtz, 2' ss a/a, vert fracs, 2' ss, vfg, hrd, qrtz, 1' ss, vfg, carbc, hrd, horiz fracs, 6' ss, gry, vfg, qrtz, vert fracs, 1' ss, a/a, carbc prtngs, 3 1/2' ss, a/a, less carbc, Core 4 - 8142-57 REC 14 1/2' bng, ss, vfg, drk gry, qrtz, silic, sh prtngs, vert fracs. Core 5 - 8157-8217 rec 60' bng, 14 1/2' ss, fg, hrd, shy, vert fracs, 12 1/2' sh, blk, shy, hrd, carbc, v pyritic, 5 1/2' ss, vert fracs, hrd, fg, shy, pyritic, 1/2' sh, blk, carbc, hrd, v pyritic, 4' ss, shy, M hrd, fg, 13' ss, shy, vert fracs, vfg, sltstn strgrs, 3' sltstn, gry, hrd, 7' ss, sli slty, vert fracs, f-mg. Drld to 8276, ran logs. Ran SP-DST-8114-8176, ISIP-3395-1 hr. 15 min. open 2 hr. 25 min., rec 1050' wtr cushion, 240' GCM, FP-560-570, FSIP-not rec. HH-3630, bottom packer apparently failed. Ran 5" liner 7795 to 8271 w/100 sx. Spud 500g MCA. Perfd Dakota 2 # per ft. 8106-16, 20 # 8130-40, 32 # 8150-66. RBSOF w/55,000g, 30,000#, BD-3800, IR-50. Gas TSTM. Set plr at 8143. Acid perfs 8150-66 w/1000g MCA. Swbd no sho, fluid level 5000'. Sqzd Dakota perfs 8130-66 w/150 sx. Set plug at 7765. Perfd P.L. 2 # per ft. 5922-62, 5974-73, 5982-90, 6000-08, 6012-14, 6032-36, 6046-50. RBSWF w/42,000g 30,000#, BD-1100, IR-69. Set BP At 5830. Perfd Menefee, 2 # per ft. 5612-34, 5646-50, 5794-5802. RBSWF w/29,820g, 20,000#, BD-1400 IR-57. Gas TSTM. Set BP @ 5000', cut 7" casing at 3175', rec 76 joints. Drld BP @ 5000', Drld BP @ 5830, Gas guaged. 1374 MCF/D. PB to 6308. Ran 1 1/4" to 6103. Log tops: Green Hrn. 7885, Graneros-7941, Dakota 8030, Morrison-8239. MW-IP 2516 MCF/D, 3 hrs, 3/4" ck. SICP-1105-11 days, CAOF-2781 MCF from MW perfs 5612-6050, completed 12-14-59.

**MEMORANDUM**

Date: December 3, 1986

No.: 4320-PD-191-86

File Ref. No.:

To: Mike Turnbaugh

From: M.A. McCallister

Company:

Company:

Dept:

Dept:

Mail Stop:

Mail Stop:

Phone:

Subject: Possible Parted Tubing In The San Juan 29-5 Unit #45

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The subject well is incapable of lifting produced fluid due to either parted tubing or a hole in the tubing. There are a number of mechanical problems in the wellbore which would make fishing operations and running any packer difficult at best. The well has remaining reserves of 82 MMCF.

Due to the limited amount of reserves and potential difficulties with the wellbore, I recommend the well be produced as is until it is incapable of production. At that time the well can be reevaluated for workover or permanent abandonment.

Well History

The San Juan 29-5 Unit #45 was originally drilled as a wildcat Dakota well in 1959. The Dakota formation proved to be noncommercial after being stimulated with 30,000 lbs. of sand in 55,000 gallons of oil. A 7" cement retainer was set at 7765' and the Dakota perforations were squeezed with 100 sx of cement.

The Mesa Verde formation was completed in two stages. The Point Lookout member was stimulated with 30,000 lbs. of sand in 42,000 gallons of water and the Cliff House member was stimulated with 20,000 lbs. of sand in 29,820 gallons of water.

The 7" intermediate casing was cut off at 3175' and 76 joints were recovered (see wellbore diagram).

After blowing the well with gas for several days, 188 joints of 1-1/4" tubing was landed at 6103' KB. The Mesa Verde formation was tested making 2781 MCF/D AOF and the well was first delivered on April 21, 1960.

The well was assigned total reserves of 470 MMCF and has produced 388 MMCF thru August of 1986. There are 82 MMCF reserves remaining.

In March of 1961 the well was reported to be very wet and was logging frequently. An intermitter was installed in 1962, but the well still logged frequently. The well required swabbing in 1964 to regain production. The tubing remained logged most of the time and due to the

well's inability to produce, a .375" orifice plate was installed. In 1972 the intermitter was retired and a stopcock was installed. In 1979 the orifice plate was changed to .750". Even with the larger plate the well was staying logged with the differential never getting above a 2.0. The tubing was being blown frequently in 1980 and 1981, but no fluid was ever recovered. The casing and tubing pressures became equalized in 1981.

As can be seen from the attached production curve, the producing rate became erratic in 1979. The rate of decline before 1979 was 3% and has been 14% since then. With extended periods of shut in time, the producing rate is very erratic and lower when the well comes back on.

#### Discussion

Sonologs of the tubing indicate large holes or parted tubing at approximately 3110'. This is approximately the same depth as the 7" casing was cut off. The casing shot indicates the top of the 7" casing at approximately 3110' and a possible hole of the same depth.

The well quit lifting fluid in 1981 and the tubing and casing pressures became equalized at approximately the same time.

Due to the 7" casing being cut, fishing operations and running packers will be difficult. As stated above, sonologs indicate a possible hole in the casing at the cut off point.

#### Conclusion

The estimated cost to recover the 1-1/4" tubing, run a new string of tubing and evaluate the well is \$35,310. Considering the remaining reserves and the potential problems of recovering the tubing, I recommend the well be left as is until it can no longer produce.

Due to the wellbore conditions, it was thought the 1-1/4" tubing that had parted could be left in the hole and would not hamper production. The well was drilled to the Dakota and plugged back to 7765'. The bottom Mesa Verde perforation is 6050' resulting in 1700' of rat hole.

The estimated cost to pull the remaining 1-1/4" tubing and run a new string of 2-3/8" tubing with a packer is \$26,040 (see wellbore diagrams and cost estimate). The estimated savings by not fishing the 1-1/4" tubing is \$9,270. Assuming the producing rate can be returned to what it was when the tubing developed a hole (23 MCF/D), the workover will pay out in 5 years and 10 months with a rate of return of 7.2%.

Even with the cost reduction from not fishing the parted tubing there are not enough reserves to warrant the workover. I recommend the well be produced as is until it is not commercial. At that time the well can be reevaluated for workover or permanent abandonment.

NE/4 22-29N-5W, SI 12/3/86, parted tubing, (?) holed casing. The #45 well was spud 10/8/59. Upon re-entering the hole to drill the Dakota section, after an attempt to set 7 in casing at 7888, the drilling crew found the casing set full of cement up to 5486. There is a good chance that the casing may have been eroded or holed as the excess cement was drilled out. It is also highly likely that the cement behind pipe does not cover a significant interval in this well. After drilling out the cement, the well was drilled to a TD 8275 in the Dakota Sandstone.

Perforations were shot across from the Dakota (8106-16, 8130-40, 8150-66). There is some question as to depth control on these and later perforation intervals. There is a large depth control discrepancy between the open-hole GR-IES log, run at TD, and the cased hole GR-N log, run after casing was set. It is unknown which of these logs was used for comparison and control of the perforation intervals. If the GR-N log was used, the wrong intervals were perforated. After perforating, the Dakota was fracture stimulated with prepad 500 gal MCA, 33,000# sand in 55,000 gal of crude oil, BDP 3800 psi, AIP 4000 psi, MIP 4200 psi and flushed with 13,400 gal oil. After the fracture stimulation, the formation was treated with 1000 gal MCA. The (?)Dakota tested gas TSTM. Those perforations were squeezed with 100 sks cement and the hole was plugged back to 7765.

The Mesaverde completion was done in two stages. The first, in the Point Lookout Sandstone, perforated the following intervals: 5922-46, 5974-78, 5982-90, 6000-08, 6012-14, 6032-36, and 6046-50. These perfs were fracture stimulated with 30,000# 10/20 sand in 42,000 gal water, BDP 1100 psi, AIP 1000 psi, MIP 2000 psi, flushed with 11,970 gal water. A temporary bridge plug was then set above the Pt. Lookout perforations and the Cliff House Sandstone and selected zones in the Menefee Formation were perforated, as follows: 5612-34, 5646-50, 5794-5802. These zones were fracture stimulated with 20,000# 40/60 sand in 29,820 gal water, BDP 1400 psi, AIP 1800 psi, MIP 2200 psi, flushed with 8820 gal water. The temporary bridge plug was pulled and the well was completed in the Mesaverde 12/14/59 for IP CAOF 2781 MCFG/D, FTP 395, SITP 1056.

The #45 was first delivered 4/21/60. A report dated from March, 1961 indicated that the well apparently was logging-off frequently. An intermitter was installed in early 1962, but the well continued to periodically log-off and require swabbing. A stopcock was installed in 1972. The well's production rate became very erratic and casing- and tubing pressures equalized in 1979. A sonolog indicated parted tubing at 3110 and it is possible that the casing is holed also. The well was producing approximately 20 MCFG/D at the time it was shut-in.

#### GEOLOGICAL RECOMMENDATION:

If it can be shown that the proper interval was perforated and tested in the original completion attempt, then there are no other zones worthy of testing in the Dakota Sandstone. Given that, I would recommend, first, running a TMD log in the cased hole. It is probable that some water is entering the well from the lower portion of the Point Lookout zone, and this could possibly be prevented by plugging back to 5928.

Should the TMD log support the indications of the wireline logs, the following Mesaverde Group intervals could be perforated:

Menefee Formation	5705-08	5820-22
	5743-46	5840-42
	5792-96	5855-58
	5814-16	5876-80

After this, should the Mesaverde Group not be economic to produce, then that zone should be abandoned, and the well plugged back to 3800.

The next zone to be tested should be the Pictured Cliffs Sandstone. It should be perforated in the interval 3732-56 and fracture stimulated with an appropriate treatment. Should that zone also prove non-productive, it should be abandoned and the well plugged back to 3726.

The Fruitland Coal zone should be considered for testing before the well is entirely abandoned. The following Fruitland intervals should be perforated and fracture stimulated:

Fruitland Coal	3470-76	3668-80
	3500-08	3693-3702
	3532-44	3712-14
	3586-3608	3716-22

Beyond this, there are no other recompletion possibilities. Should the well continue to be non-productive, or should these recompletions be deemed to be not economically or mechanically feasible, the well should be plugged and abandoned.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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☐ Oil Well ☒ Gas Well ☐ Other

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Phillips Petroleum Company

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San Juan 29-5 Unit

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Rio Arriba, N.M.

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Attempt to recover remaining fish to the Mesa Verde perms. Perforated interval is 5612-6050'. If fish is recoverable, set cement retainer at +/- 5500' and abandon interval per OCD requirements. If fish is not recoverable, clean out wellbore to 3950', set cement retainer at 3900', and abandon Mesa Verde interval per OCD requirements.

After cement has set, test casing integrity per OCD requirements to temporarily abandon well. Going to run TMD log from 3100' to 3850' to see if any completion potential.

RECEIVED  
BLM  
JUL 28 AM 11:57  
FARMINGTON, NM

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

Signed Ed Hasely Ed Hasely Title Environmental Engineer Date 7-27-93

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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\*See Instruction on Reverse Side

NMOCD