P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-136
Originated 12/23/91

*Submit original and 4 copies to the appropriate district office.*

## APPLICATION FOR APPROVAL TO USE AN ALTERNATE GAS MEASUREMENT METHOD
Rule 403.B(1) or (2)

Operator Name: SCHALK DEVELOPMENT CO. Operator No. _____

Operator Address: P.O.Box 25825 Albuquerque, NM 87125

Lease Name: SCHALK 94 #3 Type: State ____ Federal X Fee ____

Location: SW 1/4 SW 1/4 Section 26, T-32N, R-8W

Pool: Albino Canyon Pictured Cliffs

Requested Effective Time Period: Beginning after approval by OCD Ending when well plugged

### APPROVAL PROCEDURE: RULE 403.B.(1)
Please attach a separate sheet with the following information.

1) A list of the wells (including well name, number, ULSTR location, and API No.) included in this application.
2) A one year production history of each well included in this application (showing the annual and daily volumes).
3) The established or agreed-upon daily producing rate for each well and the effective time period.
4) Designate wells to be equipped with a flow device (required for wells capable of producing 5 MCF per day or more).
5) The gas transporter(s) connected to each well.

RECEIVED
APR 18 1994
OIL CON. DIV.
DIST. 3

### APPROVAL PROCEDURE: RULE 403.B.(2)
Please attach a separate sheet with the following information.
A separate application is required for each Central Point Delivery (CPD).
Working interest, royalty and overriding royalty ownership must be common for all wells to be connected to the subject CPD.

1) An ownership plat showing a description of the lease and all of the wells to be produced through this CPD.
   a) List the wells which will be metered separately, including API No.
   b) List the wells which will not be metered separately, including API No.
2) Describe the proposed method of allocating production from non-metered wells.
3) A one year production history of the wells which will not be metered showing the annual and daily volumes.
4) The gas transporter(s) connected to this CPD.

**Applicant will be responsible for filing OCD Form C-111 for the CPD.**

### OPERATOR
I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: Steve Schalk

Printed Name & Title: Steve Schalk, General Manager

### OIL CONSERVATION DIVISION
This approval may be cancelled at anytime that operating conditions indicate that re-tests may be necessary to prevent waste and protect correlative rights.

Approved Until: Further Notice

By: ORIGINAL SIGNED BY ERNIE BUSCH

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

SURFACE COMMINGLING PLAN

SCHALK 94 #3
and
SCHALK 94 #2

SW 1/4 SW 1/4 Section 26, T- 32N, R-8W
Rio Arriba County, New Mexico

On June 19, 1993 Schalk Development Co. re-completed the Schalk 94 #3 well in the Albino Canyon Pictured Cliffs formation. The well was fractured with 210 barrels gelled water and 45,000 pounds 20-40 sand and 273,882 SCF nitrogen. The well was flowed back for 51 hours between June 19 and 25, 1993 into a reserve pit. Estimated water flowed back during this time was 700 barrels. On June 29, 1993 a 400 barrel tank was placed on location and the well blew continually until July 12, 1993 producing 493 barrels of water. The last three days the well produced 20 barrels of water per day, and we felt that this was as clean as the well would get and we shut the well in.

The test data accompanying this report indicates this well will make a substantial amount of water and 10 to 20 MCFD gas, and that the water will be difficult to produce.

After analysis of the well tests and other data from this well, we felt that we could not justify the costs of production and measurement related equipment to tie the well into a pipeline. To control cost and still be able to produce some gas from this well we contacted Williams Field Services about flowing gas from this well through a Schalk well that is on the same well pad as the Schalk 94 #3. Williams was agreeable to this plan as long as ownership and royalties are the same for the two wells (which they are).

We are asking for approval to use an alternate gas measurement method to be used on the Schalk 94 #3 and flow gas from this well and measure gas from this well using the measurement equipment on the Schalk 94 #2 well, thereby making the Schalk 94 #3 and Schalk 94 #2 a central point of delivery as defined in Rule 403.B.(2).

We feel that we can obtain and maintain the correct measurement data by operating the well in the following manner:

1. Schalk 94 #2 is operated by a stopclock which turns the well on and off at programed times. Between the hours of 9:00 a.m. and 3:00 p.m. each day (6 hours) the Schalk 94 #2 well is turned off.

2. When the Schalk 94 #2 well is turned off during the 6 hour time period we will produce the Schalk 94 #3 for 2 to 4 hours daily, depending on how long we can keep the differential pen on chart for proper measurement.

3. Flow data for the Schalk 94 #3 will be estimated at the end of every chart period. This data will then be reported on a C-111 form each month.

4. We feel that we can operate these two wells in this manner, and still maintain quality measurement that is satisfactory to all parties involved.

We ask that you examine all data accompanying this report and grant approval to operate these wells under Rule 403. B. (2).

## APPROVAL PROCEDURE: RULE 403.B.(2)

**Please attach a separate sheet with the following information.**

**A separate application is required for each Central Point Delivery (CPD).**

**Working interest, royalty and overriding royalty ownership must be common for all wells to be connected to the subject CPD.**

1) An ownership plat showing a description of the lease and all of the wells to be produced through this CPD.
   a) List the wells which will be metered separately, including API No. ← 94 # 2
   b) List the wells which will not be metered separately, including API No. ← 94 # 3
2) Describe the proposed method of allocating production from non-metered wells.
3) A one year production history of the wells which will not be metered showing the annual and daily volumes. N A
4) The gas transporter(s) connected to this CPD. Williams Field Service

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
APR 18 1994
OIL CON. DIV.
DIST. 3

Type Test: ☐ Initial ☐ Annual ☒ Special — Test Date: 7-20-93

Company: Schalk Development Co. — Connection: New Completion

Pool: Albino Canyon — Formation: Pictured Cliffs

Completion Date: 6-19-93 — Total Depth: 3957' — Plug Back TD: 3957' — Elevation: 6881'

Farm or Lease Name: Schalk 94

Well No.: #3

| Csg. Size | Wt. | d | Set At | Perforations: |
|---|---|---|---|---|
| 2.875 | 6.40 | | 3957' | From 3826' To 3927' |
| Tbg. Size | Wt. | d | Set At | Perforations: |
| | | | | From To |

Unit: O — Sec.: 26 — Twp.: 32 — Rge.: 8

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas - Single — Packer Set At:

County: San Juan

Producing Thru: Csg. — Reservoir Temp. °F: @ — Mean Annual Temp. °F: — Baro. Press. – $P_a$: 12.0

State: New Mexico

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 3/4" choke | | |

| | FLOW DATA | | | | TUBING DATA | | CASING DATA | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | 2 X .750 | | | | 912 | | | | SIP |
| 1. | | | | | 7 | | | | 3 hrs. |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | 9.604 | | 19 | 1.000 | 1.000 | 1.000 | 182 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

| NO. | $P_r$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas _____ XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX _____

Critical Pressure _____ P.S.I.A. _____ P.S.I.A.

Critical Temperature _____ R _____ R

$P_c$ _____ $P_c^2$ _____

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ _____

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ _____

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ _____

Absolute Open Flow _____ Mcfd @ 15.025 — Angle of Slope θ _____ — Slope, n _____

Remarks: _____

# SUGGESTED FIELD DATA SHEET (Not Required To File)

Type Test: ☐ Initial ☐ Annual ☑ Special — Test Date: 7-20-93

Company: Schalk Development — Connection: New — Location:

Field: Albino Canyon PC — Reservoir:

Completion Date: 6-9-93 — Total Depth: 3957' — Plug Back TD: 3957' — Elevation: 6881'

Csg. Size: 2.875 — Wt.: 6.40 — d: — Set At: 3957' — Perforations: From: 3826' — To: 3927'

Tbg. Size: — Wt.: — d: — Set At: — Perforations: From: — To:

Type Completion (Describe): — Packer Set At:

Producing Thru: CSG. — Reservoir Temp. F: — Mean Annual Temp. F: — Baro. Press. — $P_a$:

L: — H: — $G_g$: — % $CO_2$: — % $N_2$: — % $H_2S$: — Prover: 3/4" choke — Meter Run: — Taps:

Lease No. or Serial No.:

Allottee:

Unit:

Farm or Lease Name: Schalk 94

Well No.: #3

Sec.: 26 — Twp.-Blk.: 32 — Rge.-Sur.: 8

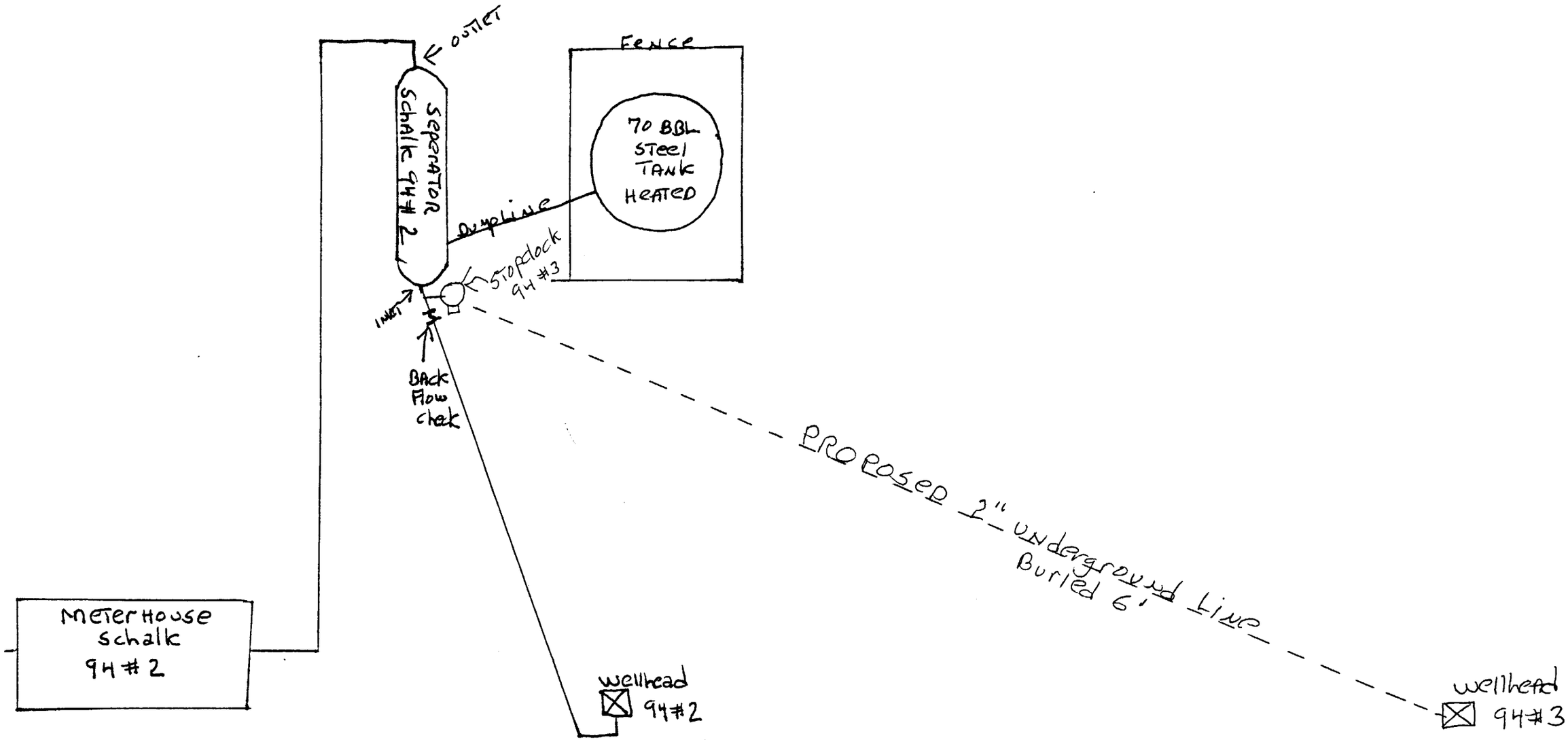
County or Parish: San Juan

State: N.M.

| DATE Time of Reading | ELAP. TIME Hrs. | Wellhead Working Pressure Tbg. Psig. | Csg. Psig. | Temp. F | METER OR PROVER Pressure Psig. | Diff. | Temp. F | Orifice | REMARKS (Include liquid production data: Type—A.P.I. Gravity—Amount) |
|---|---|---|---|---|---|---|---|---|---|
| 2:50 PM | 0 | | | | 912 | | | 3/4" | SIP |
| 3:07 | | | | | 61 | | | | Dry GAS |
| 3:15 | | | | | 29 | | | | Dry GAS |
| 3:20 | | | | | 23 | | | | Dry GAS |
| 3:35 | | | | | 8 | | | | Dry GAS |
| 3:45 | | | | | 7 | | | | WET GAS (Slugging) |
| 3:50 | | | | | 0-14 | | | | " " " |
| 4:30 | | | | | 0-14 | | | | " " " |
| 5:30 | | | | | 0-14 | | | | " " " |
| 5:50 | | | | | 0-14 | | | | " " " |
| 5:50 | | Shut well in | | | | | | | |
| 5:55 | | | | | 53 | | | | |
| 6:00 | | | | | 79 | | | | |
| 6:05 | | | | | 104 | | | | |

RECEIVED
APR 18 1994
OIL CON. DIV.
DIST. 3

Page ____ of ____ — Date By Jack Evans


OUTLET
FENCE
SEPERATOR
Schalk 94 # 2
70 BBL
STEEL
TANK
HEATED
Dumpline
Stopclock
94 #3
INLET
BACK
Flow
check
PROPOSED 2" underground Line
Buried 6'
Meter House
schalk
94 # 2
wellhead
94 #2
wellhead
94 #3