

Appendix G

Producing Interval Codes

The producing interval code is a three-character standard format code (**X99** where **X** = a letter and **9** = a number) assigned by BLM or BSEE, when a Sundry Notice or Well Summary Report is approved. The numeric portion is uniquely and permanently related to a specific completion zone or producing configuration within a wellbore.

- The 3-character producing interval code is a separate identifier and is not part of the 12-digit API number. However, it does complete the well number for reporting purposes.
- The letter of the code is assigned based upon the number of tubing strings in the wellbore that are capable of production. For example, a producing interval code of **S01** indicates a single tubing string in the first reservoir completed; **D01** indicates a dual tubing string in the first reservoir completed.

NOTE

In the case of a tubingless or other completion where production from one reservoir flows through a tubing string and from another reservoir through the annulus, the letter of the producing interval code is D. In this case, the D code does not signify the presence of two tubing strings, but indicates there are two separate production streams with the annulus acting as a tubing string.

- The two numbers of the code relate to a specific reservoir or producing configuration and are assigned sequentially beginning with the number **01** for the first reservoir or formation completed within a wellbore, followed by consecutively increasing numbers assigned to successive completed reservoirs or formations. For example, a producing interval code of **S01** indicates the first reservoir or formation completed in the well; **S02** indicates the second reservoir or formation completed. If, however, additional perforations are added to an **S01** completion in the same reservoir or formation, the producing interval code remains **S01** because the completion is still producing from the same reservoir or commingled situation.

Components of the producing interval code are identified and described below.

Appendix G Producing Interval Codes

- The first character indicates the number of tubing strings, currently as follows:

Borehole	X
Single	S
Dual	D
Triple	T
Quadruple	Q
Quintuple	V
Allocated	A (onshore only)
Commingled	C (onshore only)

- The second and third characters indicate the reservoir or formation completed; for example, **01** through **99**.

A producing interval code of X01 must be used when reporting only the wellbore, such as in the following cases:

- Reporting an active or inactive drilling well.
- Reporting a wellbore in which all completions have been abandoned but the wellbore itself has not been abandoned; that is, temporary abandonment.
- Reporting a wellbore that has been permanently abandoned.

Largely due to new technology, offshore special completions and producing situations exist that require exceptional naming and numbering guidelines. In part, these cases are addressed by reserving and using blocks of producing interval codes for well completion identification purposes. These reserved producing interval code ranges are identified as follows:

Producing interval code	Reserved for:
01-19	All "routine" producing completions not included in any of the following groups.
21-39	All completions involving the combined production of unit and non-unit hydrocarbons in a single tubing string.
41-59	All completions that "cross lease lines."
61-79	All "capacity" completions. A capacity completion is defined as a completion with two or more tubing strings producing or capable of producing from the same reservoir.
81-99	Unassigned

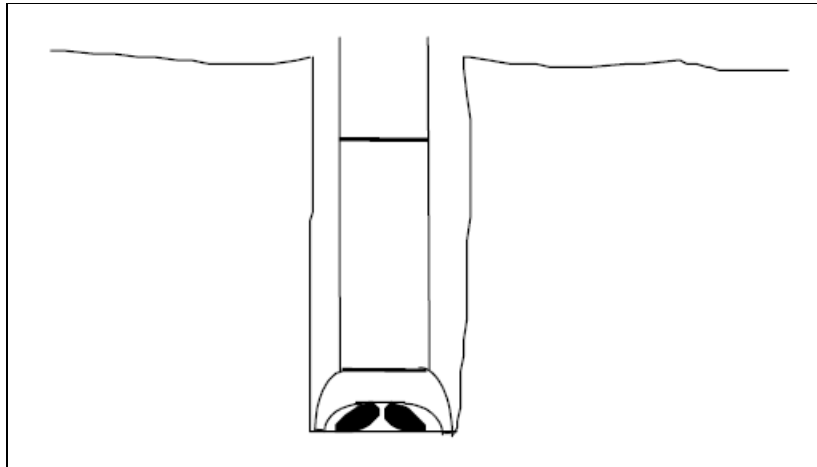
The producing interval code is required on the OGOR-A to complete the API well number and is confirmed to the designated operator through the WELL Confirmation Report. The following examples illustrate the correct producing interval codes for various completions.

G.1 Onshore Examples

EXAMPLE

Example G-1 Onshore—Basic drilling well

Completion code X01



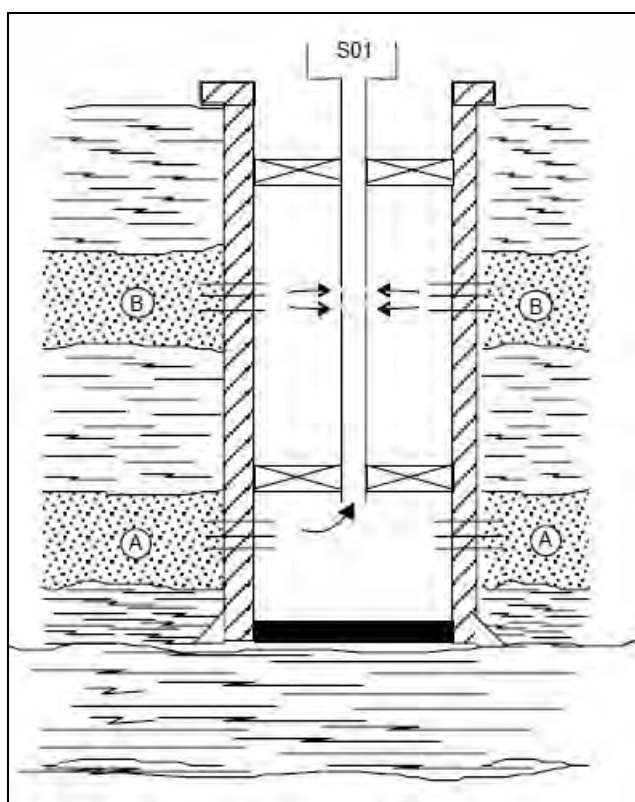
NOTE

Completion codes must be assigned by the appropriate BLM office.

EXAMPLE**Example G-3** Onshore—Basic commingled completion**Time 1**

Assume:

- One tubing string
- One completion in zones A and B
- Approval to commingle downhole

**NOTE**

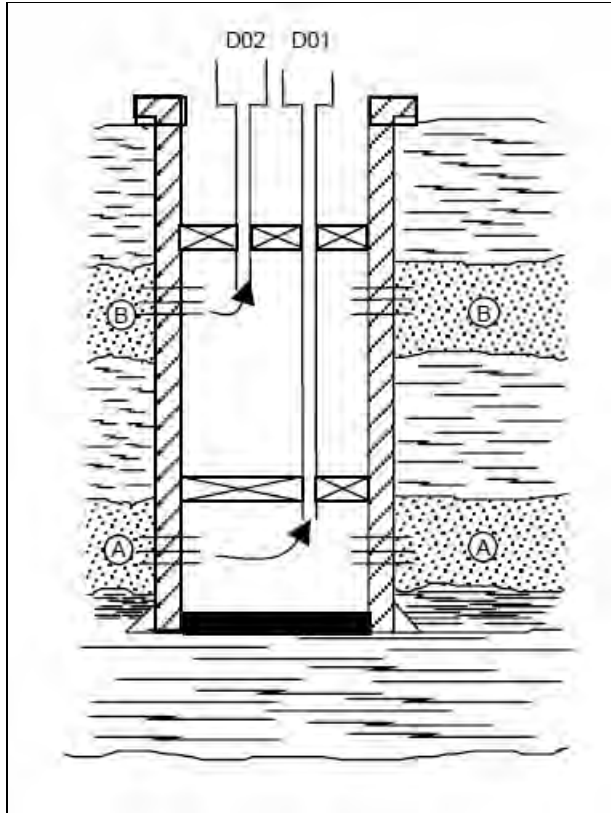
A single tubing string that has commingled production from two sets of perforations and production allocated to two PAs (allocation might be accomplished by closing off one of the sets of perforations by a mechanical device, such as a sliding sleeve, and measuring the production) is recorded in a unique way. The completion codes in this instance are S01 and S02.

EXAMPLE

Example G-4 Onshore—Basic dual completion

Zone A
Completion code D01

Zone B
Completion code D02



EXAMPLE

Example G-5 Onshore—Recompleting a well

Time 1

Assume:

- One tubing string
- One completion in zone A

Result:

Zone A
Completion code S01

Time 2

Assume:

- First completion in zone A squeezed off
- Well recompleted in zone B

Result:

Zone B
Completion code S02

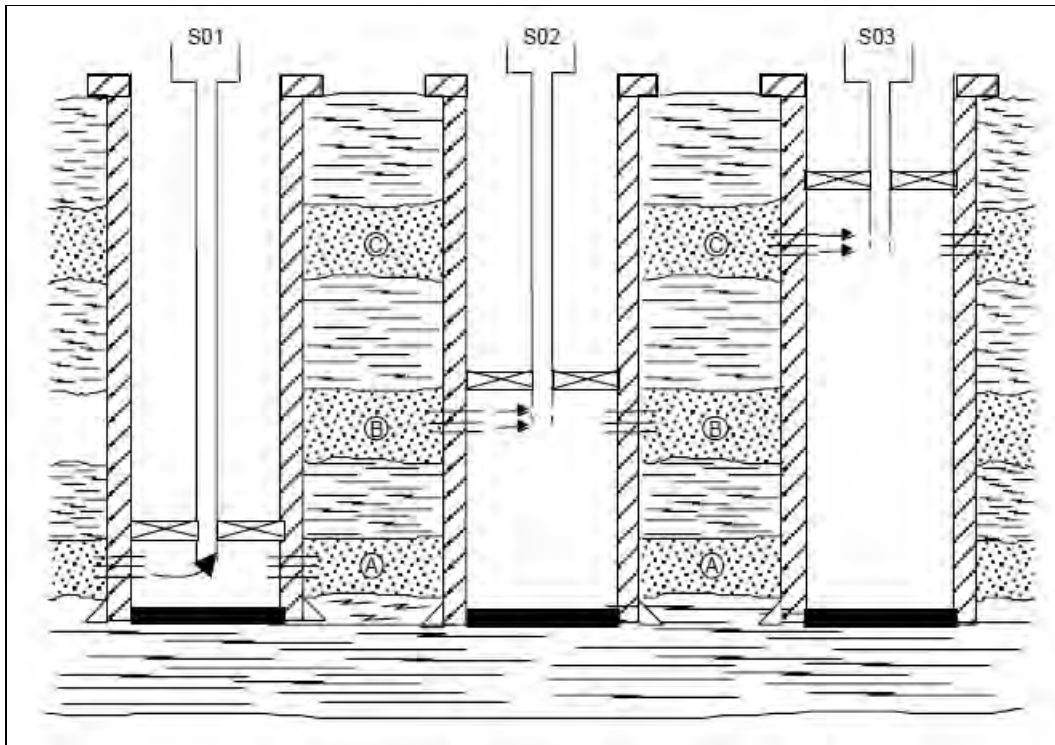
Time 3

Assume:

- Second completion in zone B squeezed off
- Well recompleted in zone C

Result:

Zone C
Completion code S03



NOTE

If the S01 completion in zone A is squeezed, recompleted in zone B and squeezed, then at a later date recompleted in the same zone A and tubing string, the completion code would be S01. The S01 will be reported as ABD on the OGOR the month the S02 begins reporting, and the S02 will be reported as ABD the month the S03 begins reporting.

EXAMPLE

Example G-6 Onshore—Tubingless completion

Time 1

Assume:

- One completion
- Casing is used as the production string

Result:

Completion code S01

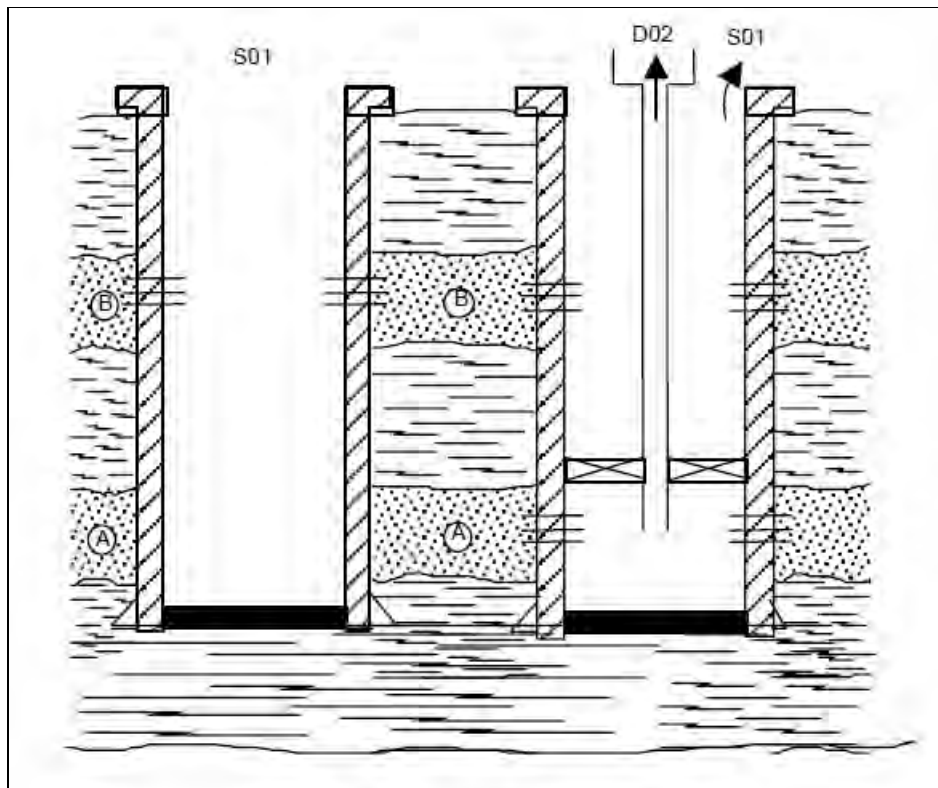
Time 2

Assume:

- Well completed
- One tubing string
- Two completions
- One interval is producing using the annulus

Result:

Zone A
Completion code D02
Zone B
Completion code S01



EXAMPLE

Example G-7 Onshore—Downhole commingling

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
Completion code D01

Zone B
Completion code D02

Time 2

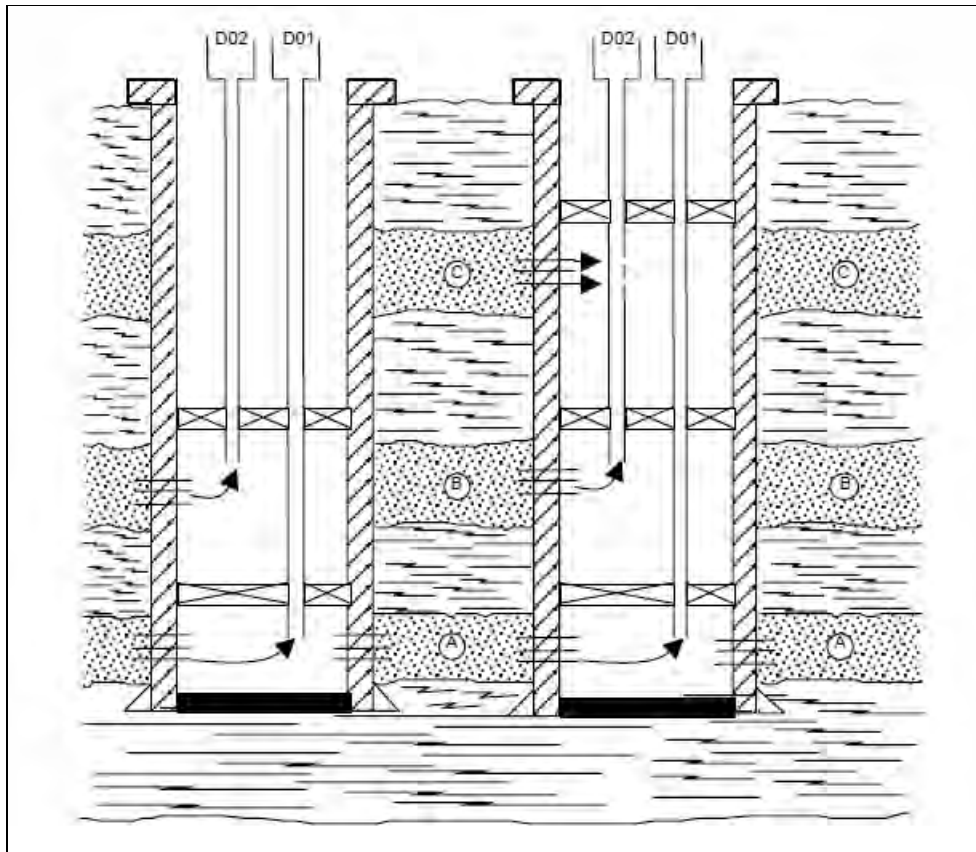
Assume:

- Two tubing strings
- Three completions
- Production from upper tubing string is commingled downhole

Result:

Zone A
Completion code D01

Zone B and C
Completion code D02



EXAMPLE

Example G-8 Onshore—Well deepened

Time 1

Assume:

- One tubing string
- One completion

Result:

Zone B
Completion code S01

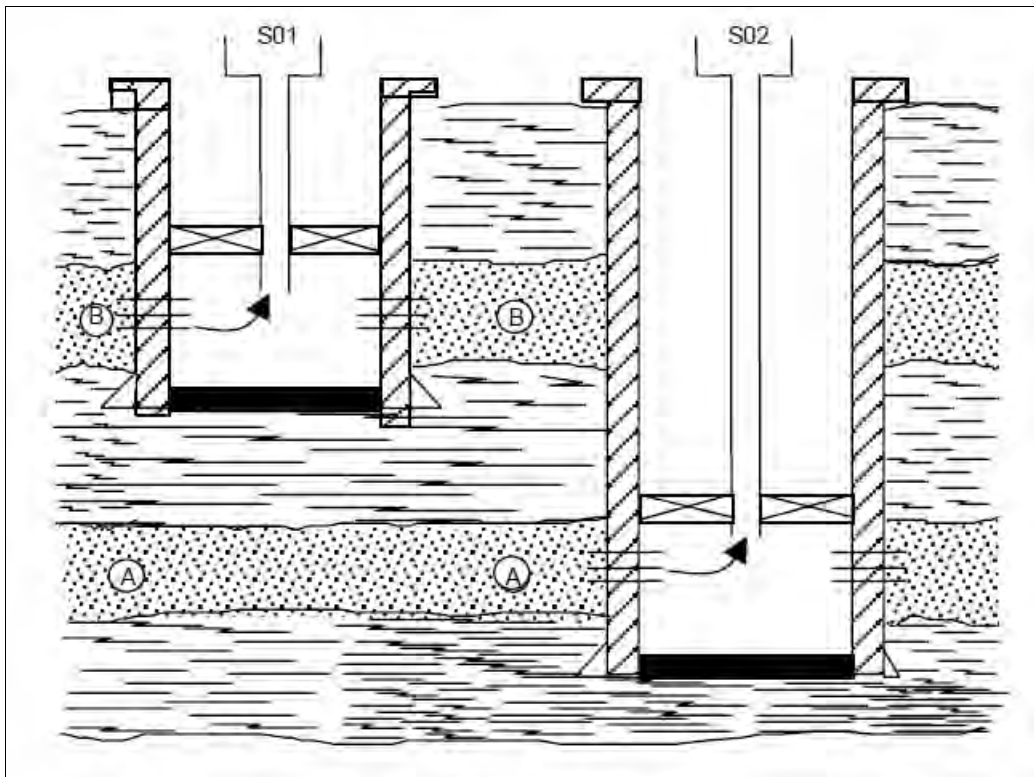
Time 2

Assume:

- One tubing string
- Formation B completion is squeezed off
- Well is deepened and completed in formation A

Result:

Zone A
Completion code S02



EXAMPLE

Example G-9 Onshore—Abandonment

Time 1

Assume:

- One tubing string
- One completion

Result:

Completion code S01
Well status POW

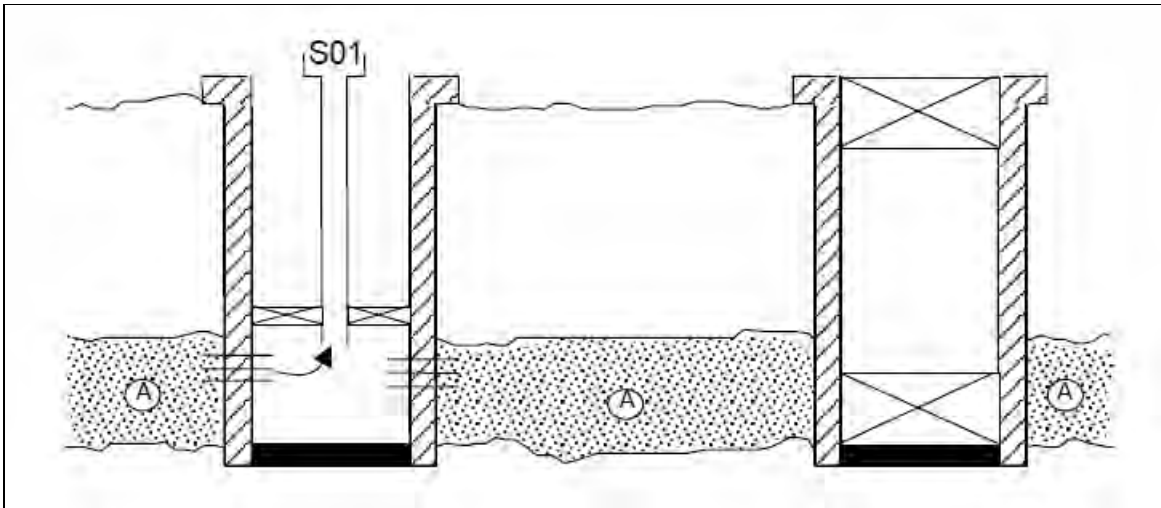
Time 2

Assume:

- Completion is squeezed
- Well is abandoned

Result:

Zone A
Completion code S01
Well status ABD



EXAMPLE

Example G-10 Onshore—Abandonment of one completion in a dually completed well

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
Completion code D01
Well status POW

Zone B
Completion code D02
Well status POW

Time 2

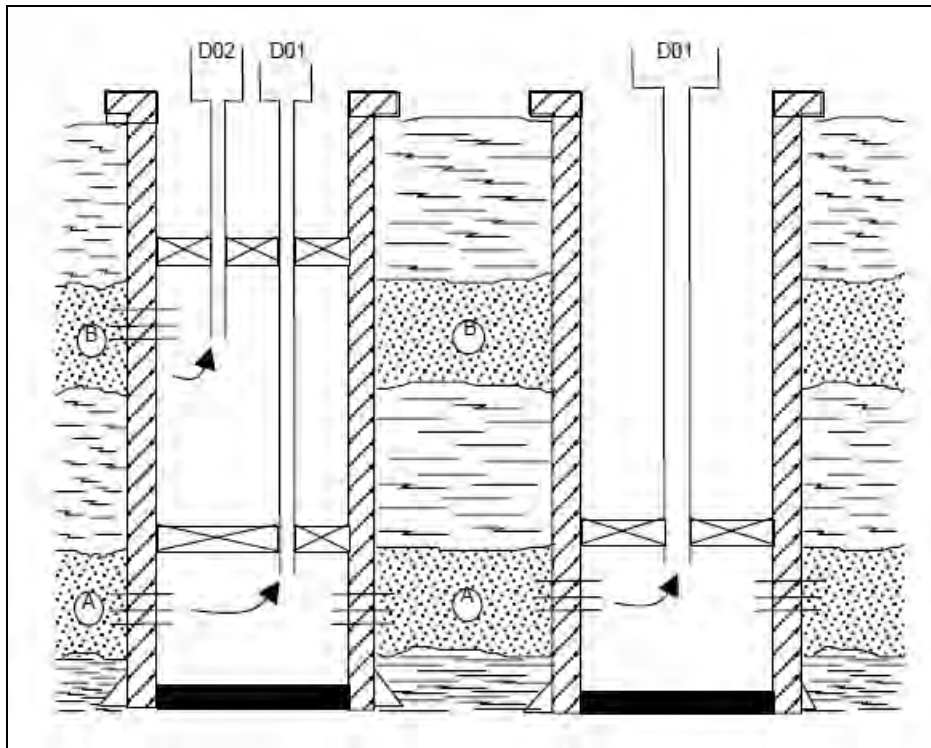
Assume:

- Zone B is abandoned
- One tubing string remains

Result:

Zone A
Completion code D01
Well status POW

Zone B
Completion code D02
Well status ABD



EXAMPLE

Example G-11 Onshore—Abandonment of both completions within a dually completed well

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
Completion code
D01
Well status POW

Zone B
Completion code
D02
Well status POW

Time 2

Assume:

- The D01 completion is abandoned
- The D02 completion remains producing

Result:

Zone A
Completion code
D01
Well status ABD

Zone B
Completion code
D02
Well Status POW

Time 3

Assume:

- Zone B is temporarily abandoned during the report month

Result:

Zone B
Completion code
D02
Well status TA

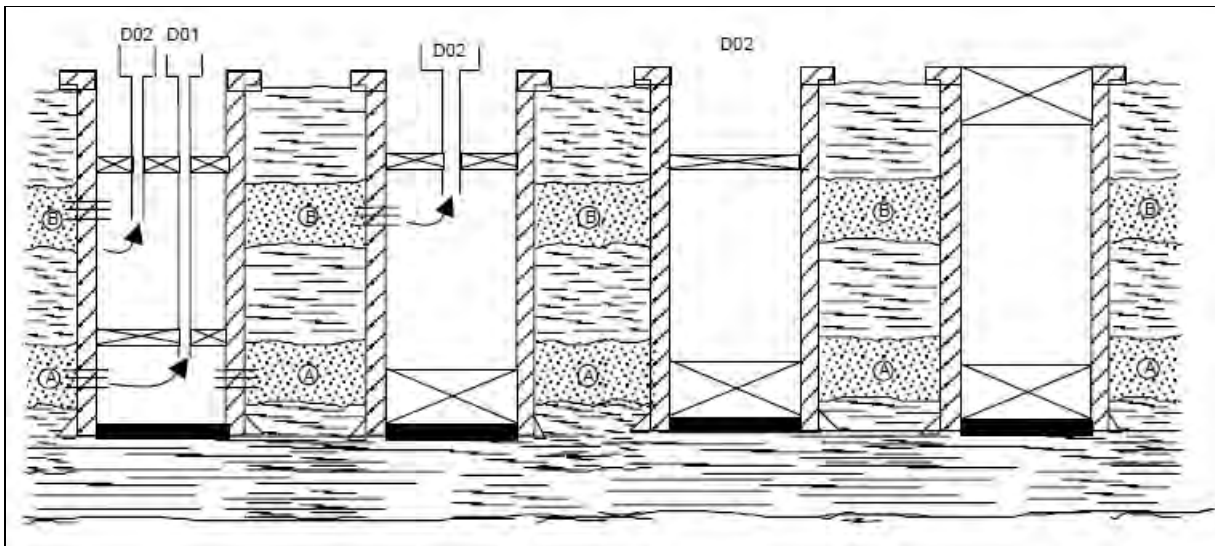
Time 4

Assume:

- Zone B is abandoned the next report period

Result:

Zone B
Completion code
D02
Well status ABD



EXAMPLE

Example G-12 Onshore—Recompleting a well and adding a tubing string

Time 1

Assume:

- One tubing string
- One completion in zone A

Result:

Zone A
Completion code S01

Time 2

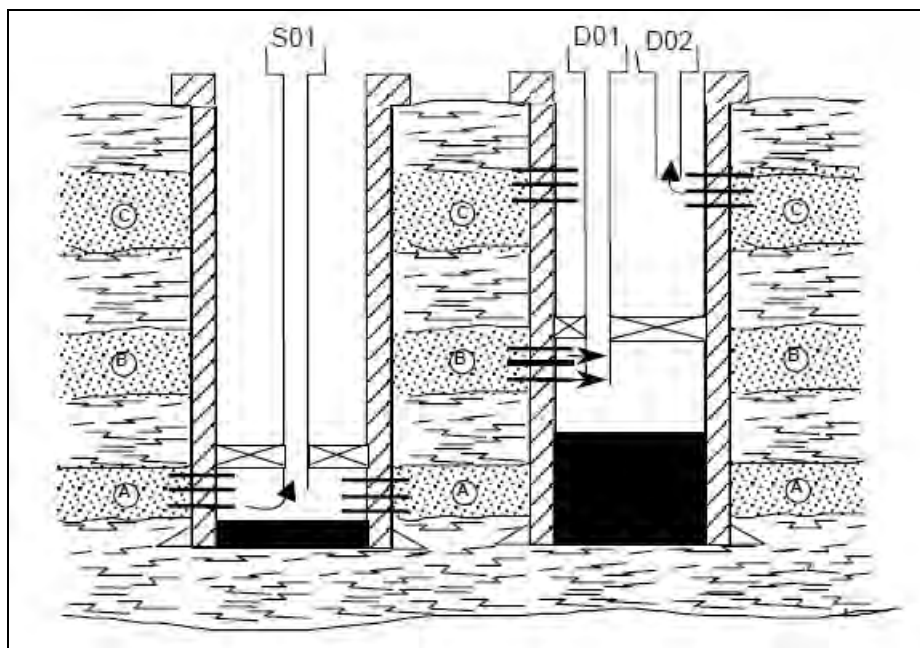
Assume:

- First completion in zone A squeezed off
- Well completed in zone B and zone C with a tubing string added

Result:

Zone B
Completion code D01

Zone C
Completion code D02



NOTE

The S01 will change to the D01 on the OGOR the month the D02 begins reporting.

EXAMPLE

Example G-13 Onshore—Dual completion commingled downhole and one tubing string removed

Time 1

Assume:

- Two tubing strings
- Two completions in zone A and zone B

Result:

Zone A
Completion code D01

Zone B
Completion code D02

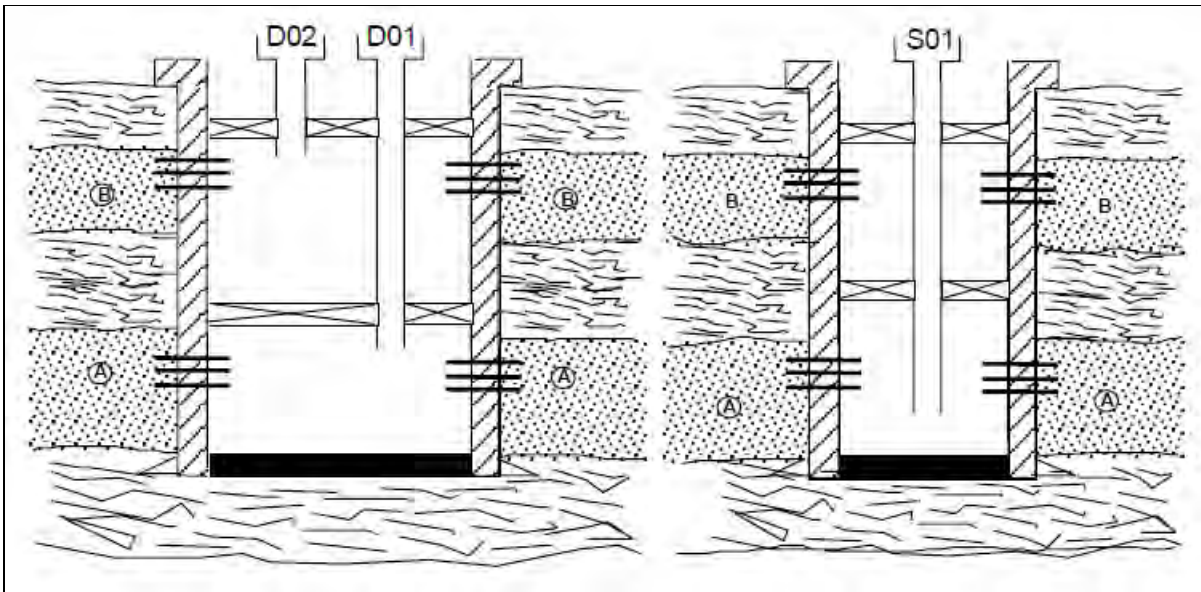
Time 2

Assume:

- Commingling (approved) D01 and D02 and remove one tubing string

Result:

Completion code S01



NOTE

The D01 will change to the S01 on the OGOR, and the D02 will be reported as ABD the month the S01 begins reporting the commingled production on the OGOR.

EXAMPLE

Example G-14 Onshore—Recompleting a commingled well and adding a tubing string

Time 1

Assume:

- One tubing string
- One completion in zone A and zone B
- Approval to commingle downhole

Result:

Completion code S01

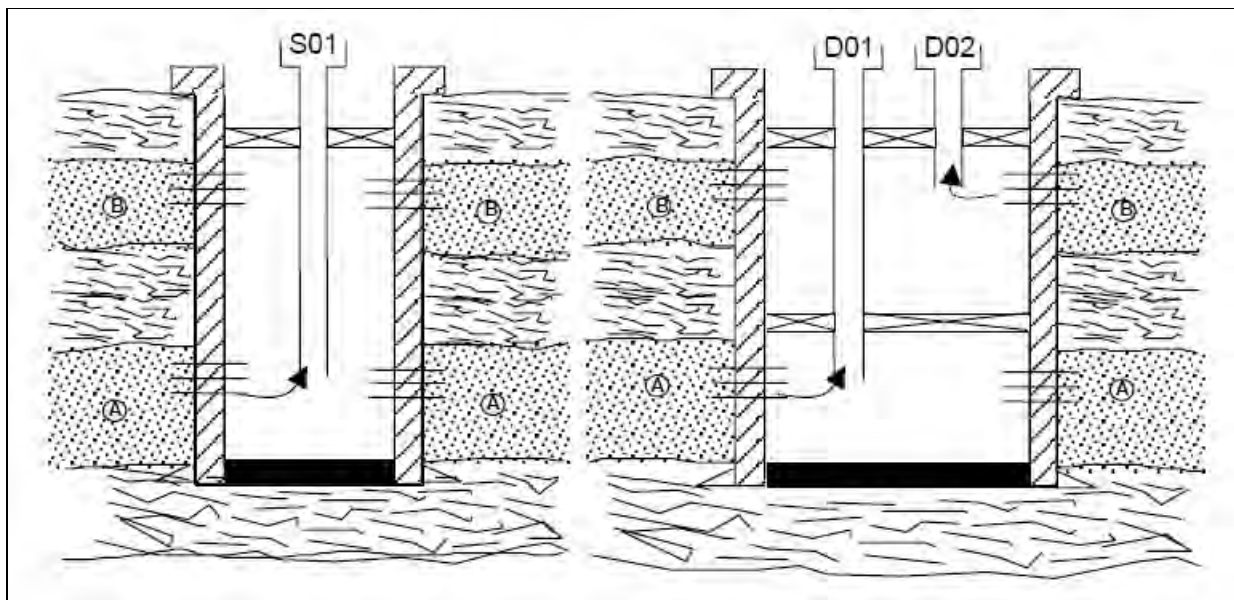
Time 2

Assume:

- Two tubing strings
- Two completions in zone A and zone B

Result:

Zone A
Completion code D01
Zone B
Completion code D02



NOTE

The S01 will change to the D01 on the OGOR the month the D02 begins reporting.

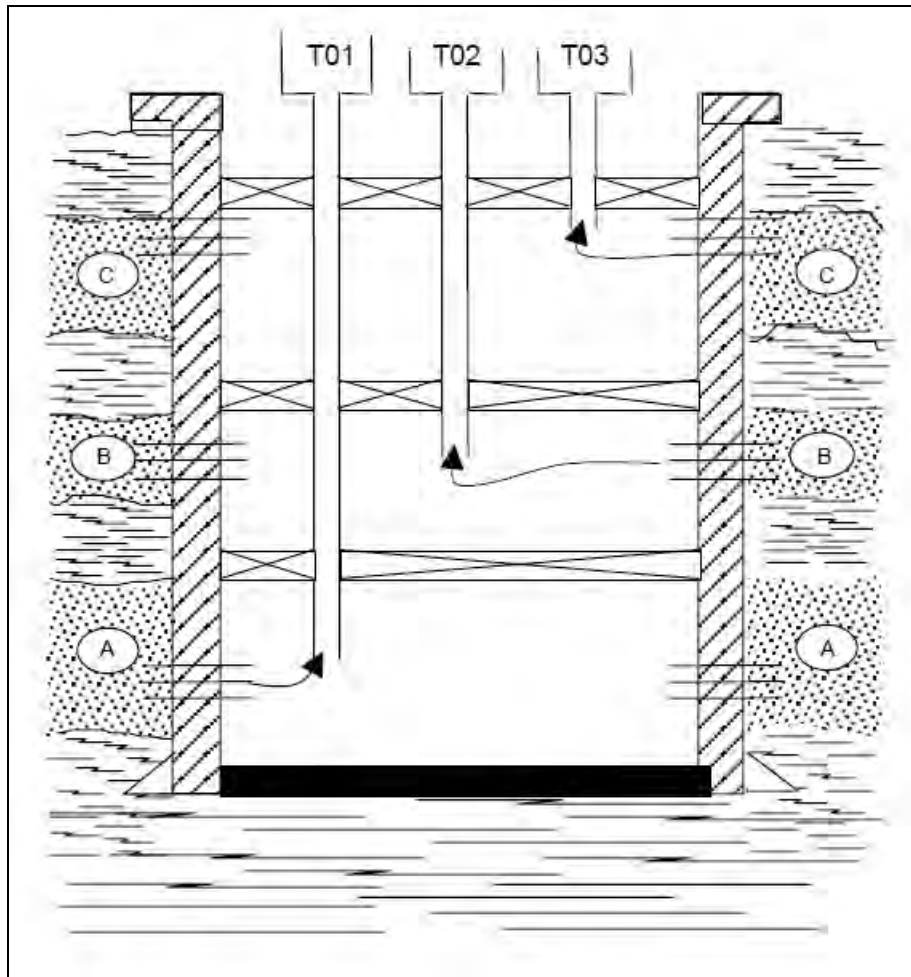
EXAMPLE

Example G-15 Onshore—Basic triple completion

Zone A
Completion code T01

Zone B
Completion code T02

Zone C
Completion code T03



EXAMPLE

Example G-16 Onshore—Single completion with a dual completion added and then a triple completion added

Time 1

Result:

Zone A
Completion code S01

Time 2

Result:

Zone A
Completion code S01

Zone B
Completion code D02

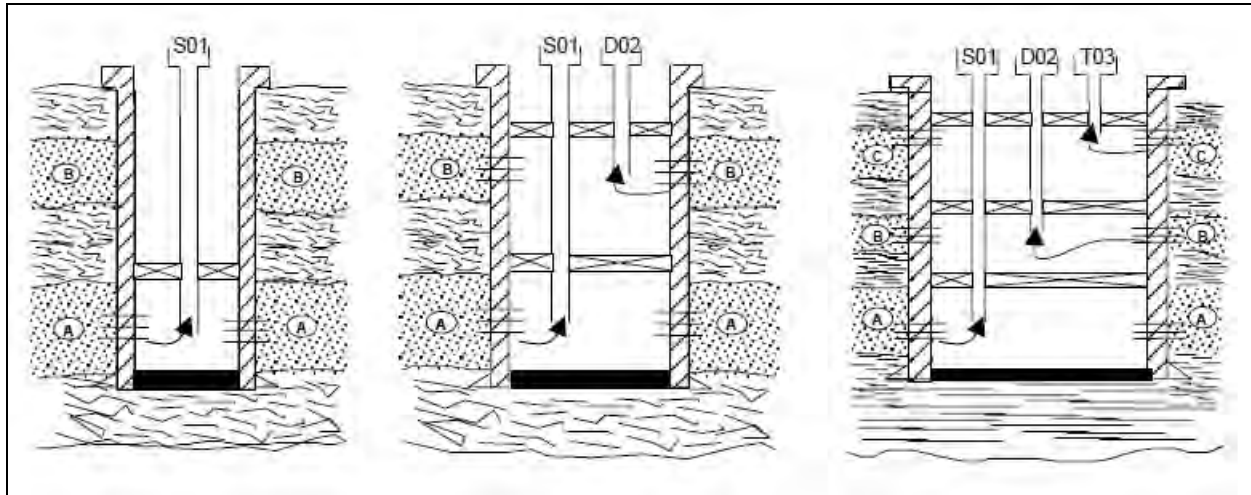
Time 3

Result:

Zone A
Completion code S01

Zone B
Completion code D02

Zone C
Completion code T03



EXAMPLE

Example G-17 Onshore—Triple well recompleted to commingle two of three zones

Time 1

Assume:

- Three tubing strings
- Three completions in three zones
- Approval to commingle two zones

Result:

- Zone A
Completion code T01
- Zone B
Completion code T02
- Zone C
Completion code T03

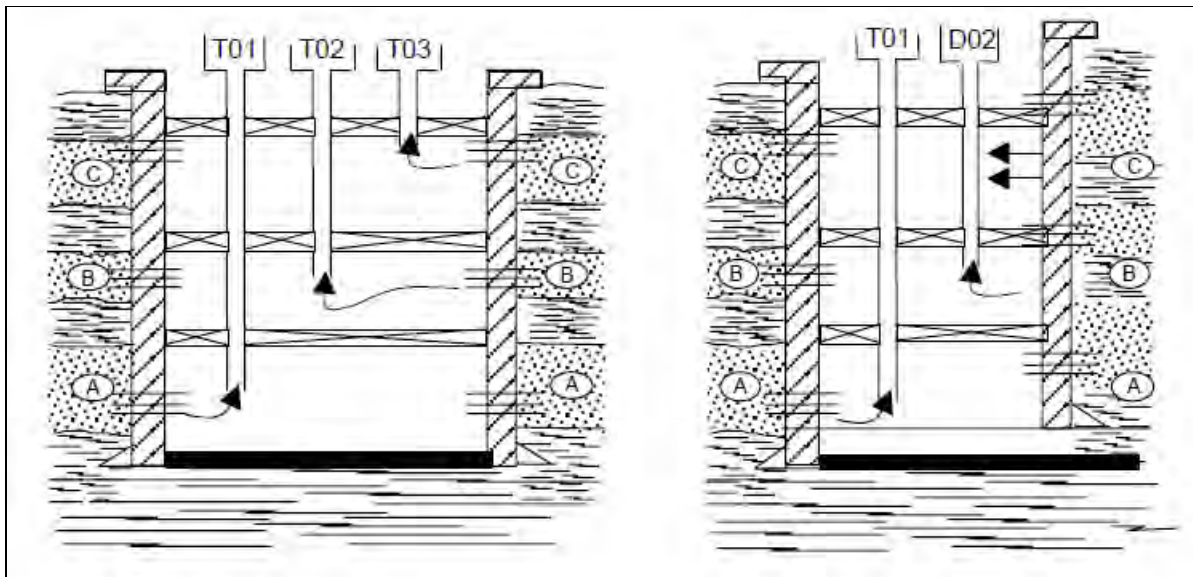
Time 2

Assume:

- T02 and T03 commingled downhole
- One tubing string pulled
- Three completions in three zones

Result:

- Zone A
Completion code D01
- Zone B
Completion code D02



NOTE

The T02 will change to the D02, and the T03 will be reported as ABD on the OGOR the month the D02 begins reporting.

G.2 Offshore Examples

EXAMPLE

Example G-18 Offshore—Sidetrack well

Time 1

Assume:

- Two tubing strings
- Two completions in three zones
- API well number 177174000000

Result:

Zone A
WB code 00
PI code D01

Zone B
WB code 00
PI code D02

Time 2

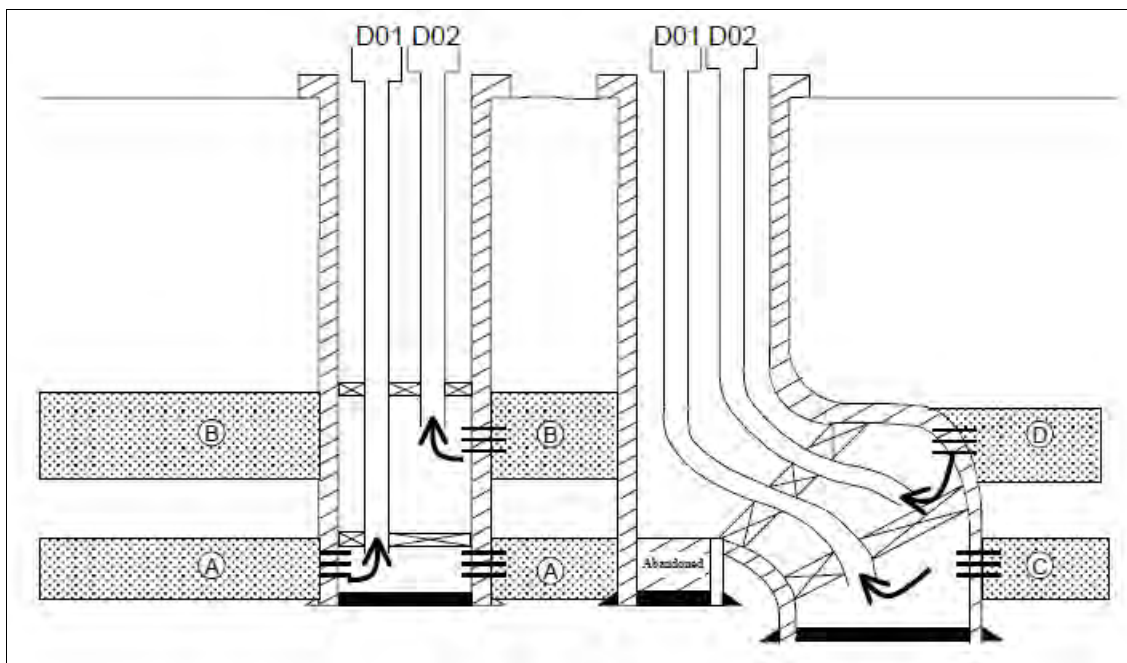
Assume:

- Zones A and B in original wellbore squeezed off
- Well sidetracked and completed in new zones
- API well number 177174000001

Result:

Zone C
WB code 01
PI code D01

Zone D
WB code 01
PI code D02



NOTE

Because a sidetrack creates a unique API well number, all completions are assigned new producing interval codes independent of the original wellbore.

EXAMPLE

Example G-19 Offshore—Well deepened

Time 1

Assume:

- One tubing string
- One completion

Result:

Zone B
WB code 00
PI code S01

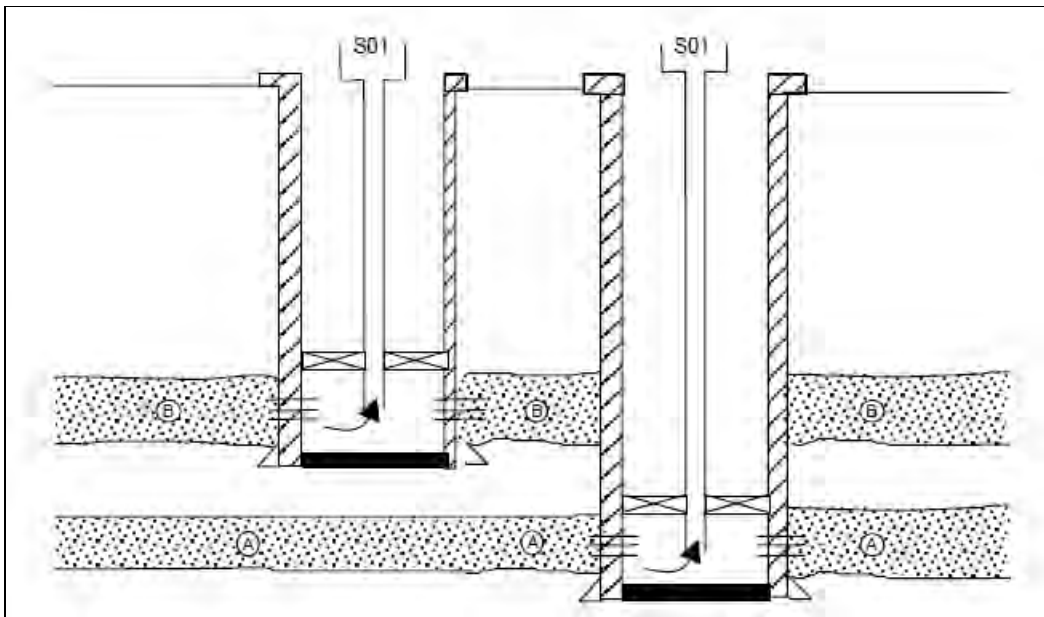
Time 2

Assume:

- One tubing string
- Zone B is squeezed off
- Well is deepened and completed in zone A

Result:

Zone A
WB code 01
PI code S01



NOTE

In this example, the well is initially completed and later deepened and recompleted in another zone. The API number wellbore code is incremented to 01. The producing interval code remains S01 because it is attached to a new wellbore.

EXAMPLE

Example G-20 Offshore—Historical wellbore with no API well number assigned

Time 1

Assume:

- Original wellbore is drilled
- API number is assigned 427094012300
- Zone B is completed and produced
- Well log name—A001

Result:

Zone B
Log ST 00
WB code 00
PI code S01

Time 2

Assume:

- Second wellbore is sidetracked from original hole
- Junked section is abandoned
- Mistakenly, no API number is assigned
- Wellbore is logged
- Well log name/ well name suffix—A001ST1

Result:

Log ST 01

Time 3

Assume:

- Third wellbore is sidetracked from second wellbore
- API number is assigned 427094012301
- Zone A is completed and produced
- Well log name/ well name suffix—A001ST2

Result:

Zone A
Log ST 02
WB code 01
PI code S01

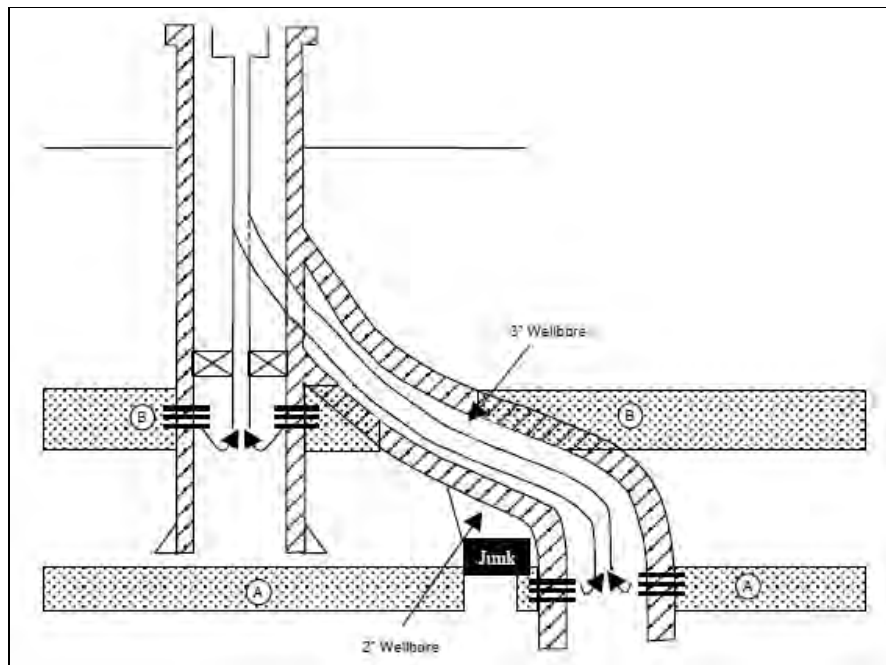
Time 4

Assume:

- API number with 70 series WB code is assigned to second wellbore 427094012370
- Allows identification of second wellbore data
- API numbers for original and third wellbores not changed

Result:

Log ST 01
WB code 70



NOTE

*Historical sidetracks, bypasses, well deepenings, etc., that were not initially assigned an API number can be assigned an API number with a 70 series WB code at a later time, so any wellbore data can be identified but will not be confirmed to the operator for reporting purposes. API numbers already assigned will **not** be changed.*

EXAMPLE

Example G-21 Offshore—Recompleting a well

Time 1

Assume:

- One tubing string
- One completion in zone A

Result:

Zone A
PI code S01

Time 2

Assume:

- First completion in zone A squeezed off
- Well recompleted in zone B

Result:

Zone B
PI code S02

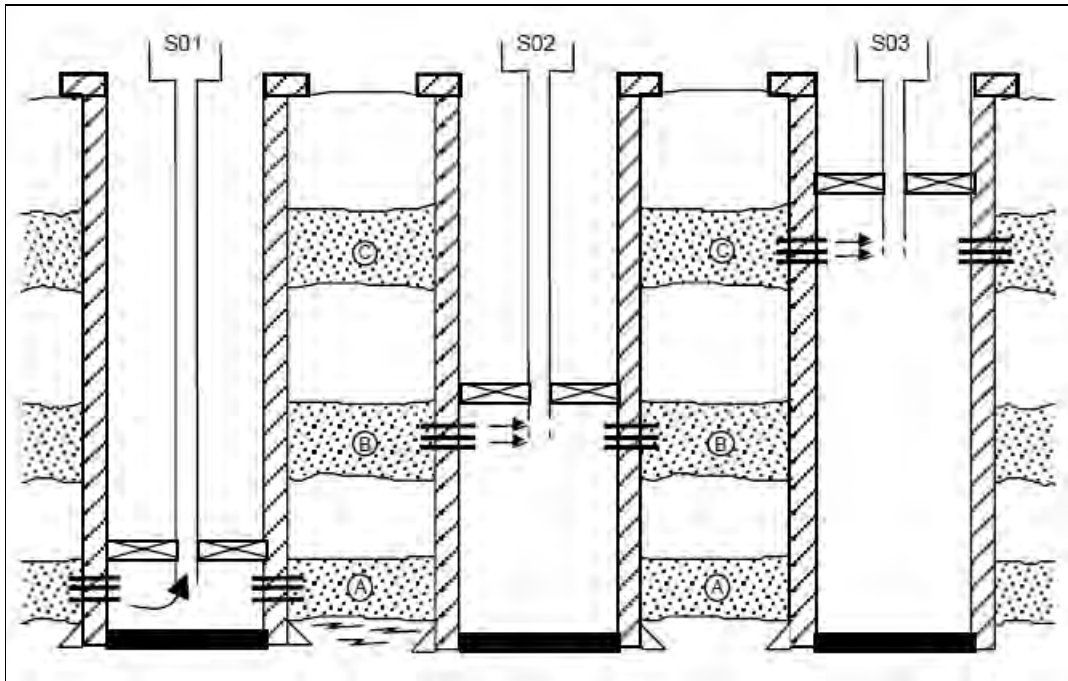
Time 3

Assume:

- Second completion in zone A
- zone B squeezed off
- Well recompleted in zone C

Result:

Zone C
PI code S03



EXAMPLE

Example G-22 Offshore—Workover

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
PI code D01

Zone B
PI code D02

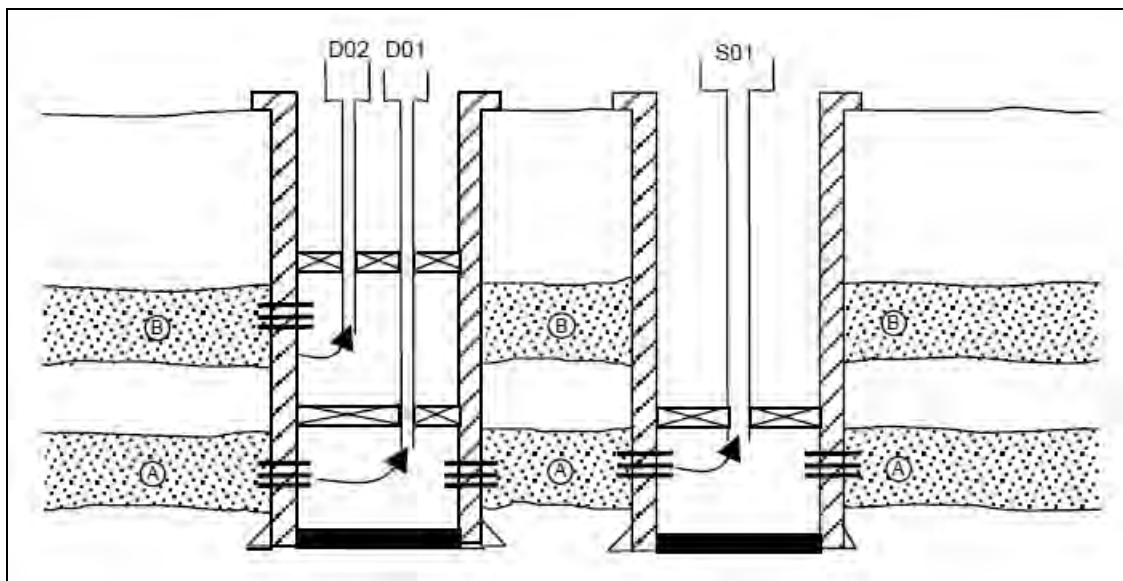
Time 2

Assume:

- One of the tubing strings is removed during workover
- Zone B is squeezed off

Result:

Zone A
PI code S01



NOTE

The D02 completion must be reported as abandoned (status code 15) on the OGOR-A in the same month that the S01 completion begins reporting.

EXAMPLE

Example G-23 Offshore—Collapsed tubing string

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
PI code D01

Zone B
PI code D02

Time 2

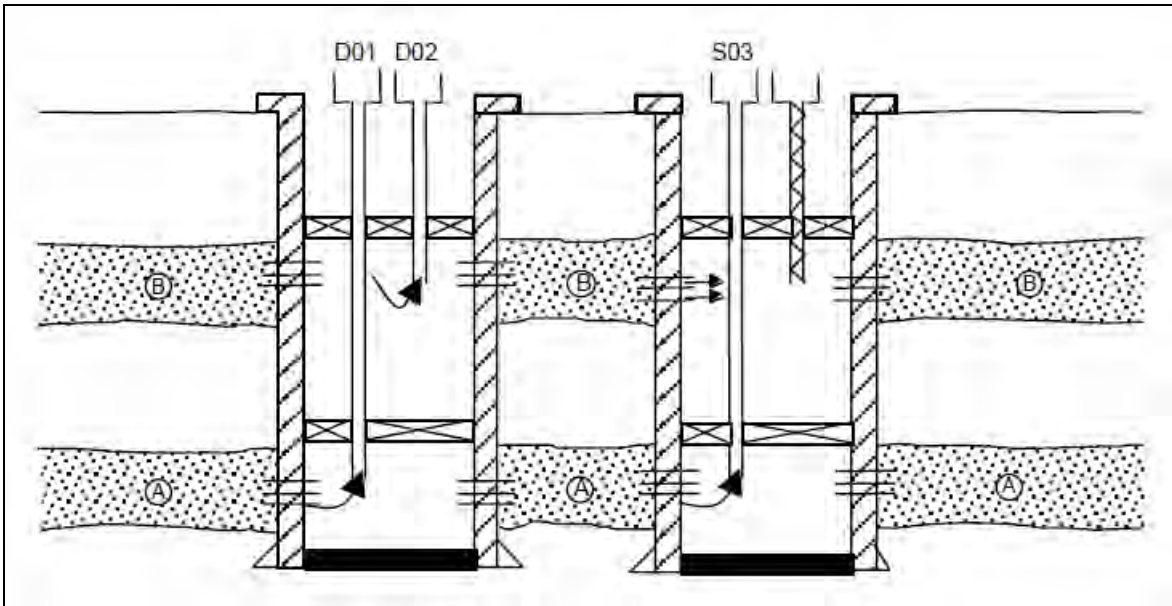
Assume:

- D02 tubing collapsed—no longer capable of producing to surface
- D01 tubing recompleted in zone B
- Production is commingled downhole

Result:

Zone A
PI code S03

Zone B
PI code S03



NOTE

The D01 and D02 must be reported as completion abandoned (status code 15) on the OGOR-A in the same month that the S03 begins reporting.

EXAMPLE

Example G-24 Offshore—Tubingless completion

Time 1

Assume:

- One completion
- Casing is used as the production string

Result:

Zone B
PI code S01

Time 2

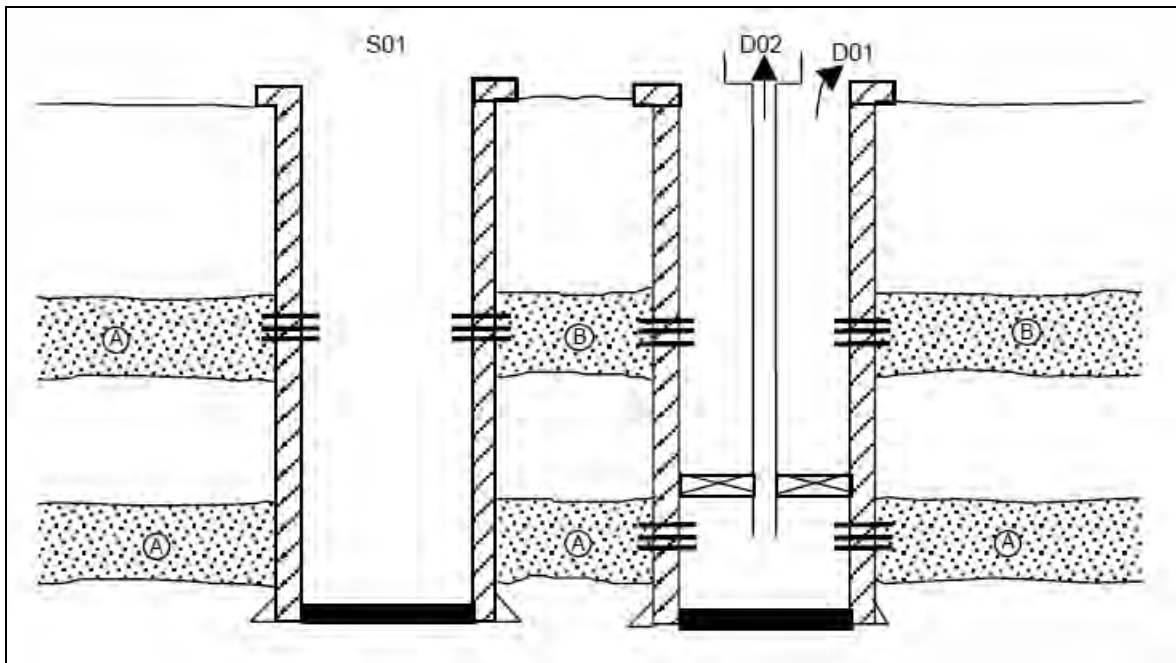
Assume:

- Well recompleted
- One tubing string
- Two completions
- One interval is producing using the casing

Result:

Zone A
PI code D02

Zone B
PI code D01



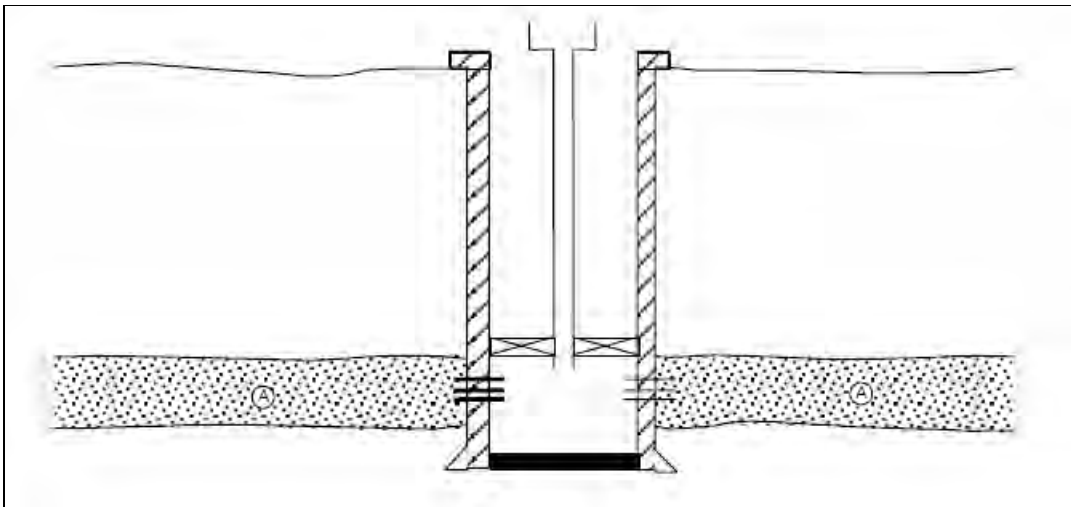
EXAMPLE

Example G-25 Offshore—Unit and nonunit production combined

Time 1

Assume:

- One tubing string
- One completion
- Gas production is unitized, oil production is not



NOTE

Gas production would be reported on unit OGOR-A; oil production would be reported separately on lease OGOR-A.

EXAMPLE

Example G-26 Offshore—Completion that crosses lease line

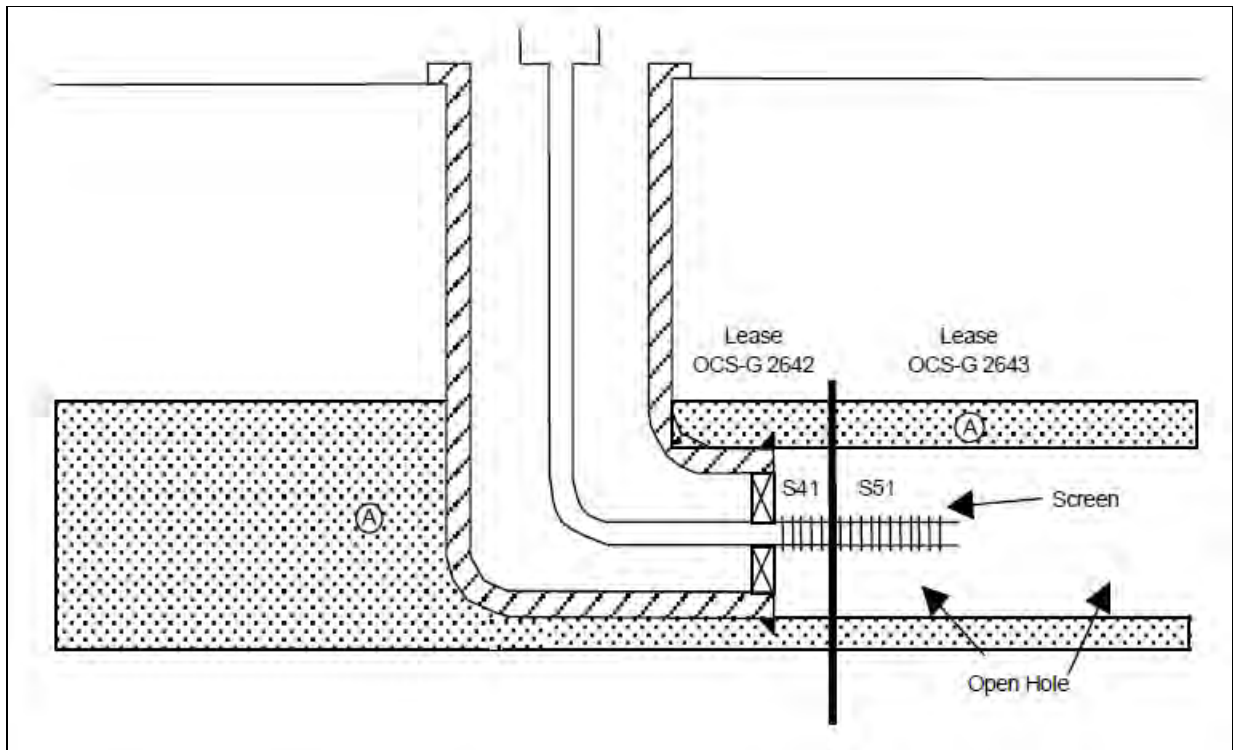
Time 1

Assume:

- Directional or horizontal well is completed with the perforated interval crossing a lease line

Result:

- Two completion records set up, one for each lease
- API number, including WB code, and well name suffix will be the same for both records
- Production and test data will be allocated to each lease based on method specific by ONRR
- PI codes S41 and S51



EXAMPLE

Example G-27 Offshore—Capacity well

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
PI code D01

Zone B
PI code D02

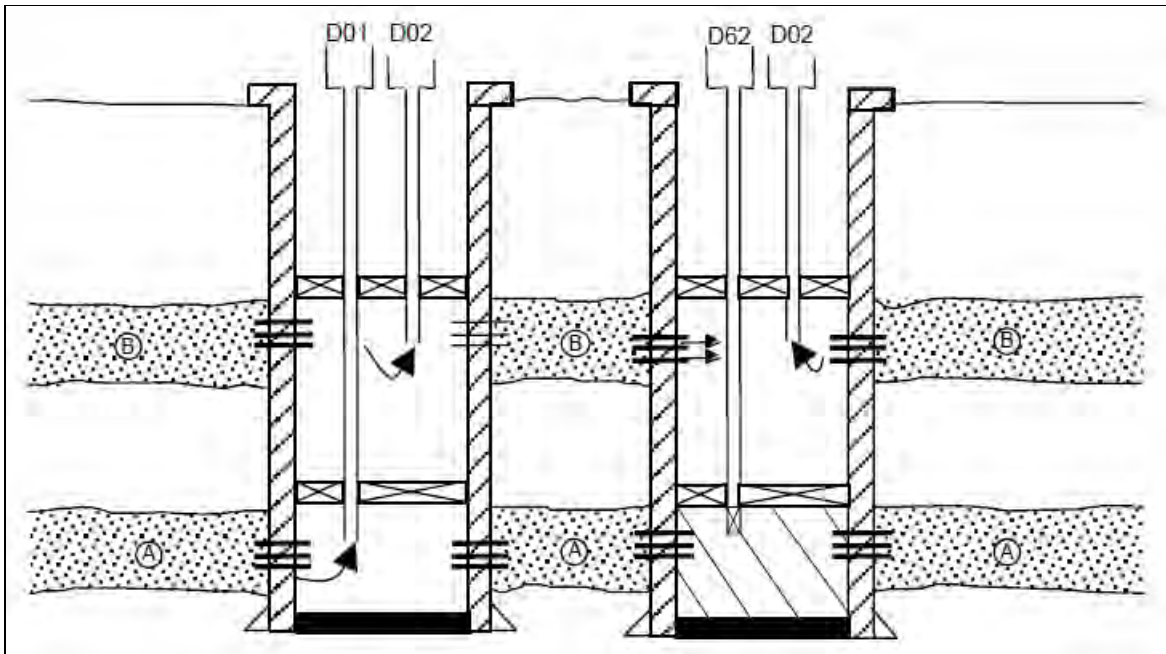
Time 2

Assume:

- After workover, zone A is squeezed off
- Lower string is plugged and perforated in zone B
- Both tubing strings producing from the same zone

Result:

Zone B
PI code D02 and D62



NOTE

The D01 completion must be reported as a completion abandoned (status code 15) on the OGOR-A in the same month that the D62 completions begin reporting along with the existing D02.

EXAMPLE

Example G-28 Onshore—Downhole commingling, single tubing string

Time 1

Assume:

- Three potential pay zones: A, B and C
- Zones A and B completed at same time
- Production is commingled downhole

Result:

Zone A
PI code S01
Zone B
PI code S01

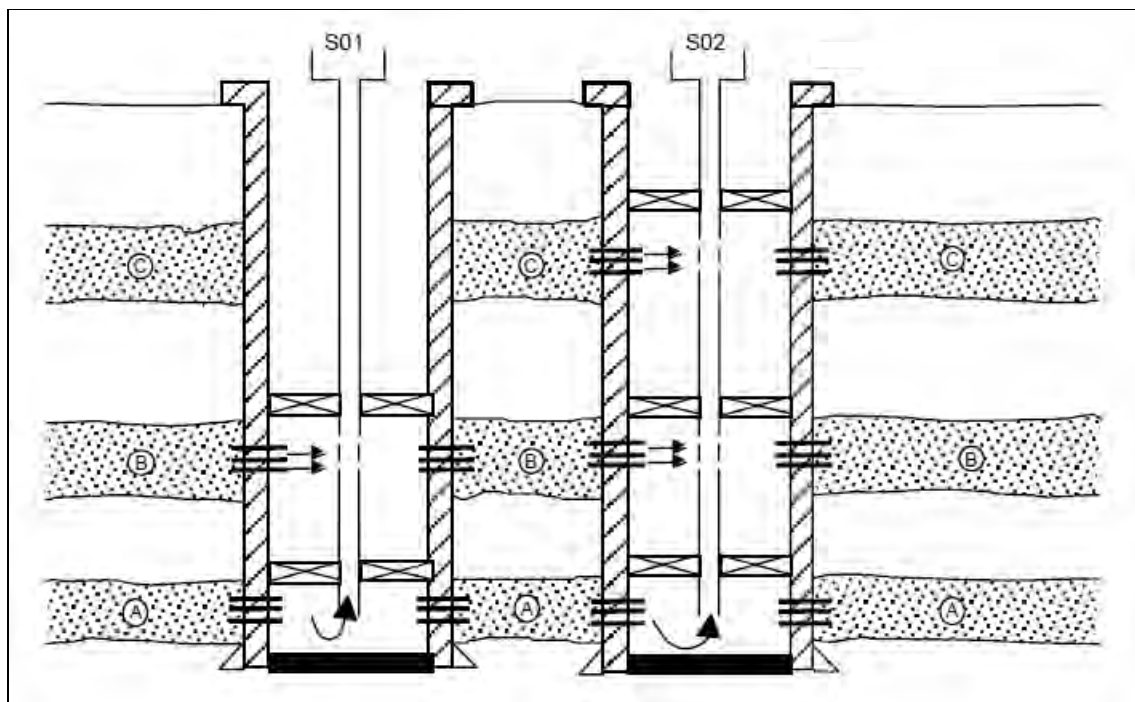
Time 2

Assume:

- Zone C completed
- Production from zones A, B and C commingled downhole

Result:

Zone A
PI code S02
Zone B
PI code S02
Zone C
PI code S02



NOTE

The S01 must be reported as a completion abandoned (status code 15) on the OGOR-A in the same month that the S02 begins reporting.

EXAMPLE

Example G-29 Onshore—Downhole commingling, dual completion

Time 1

Assume:

- Two tubing strings
- Two completions

Result:

Zone A
PI code D01
Zone B
PI code D02

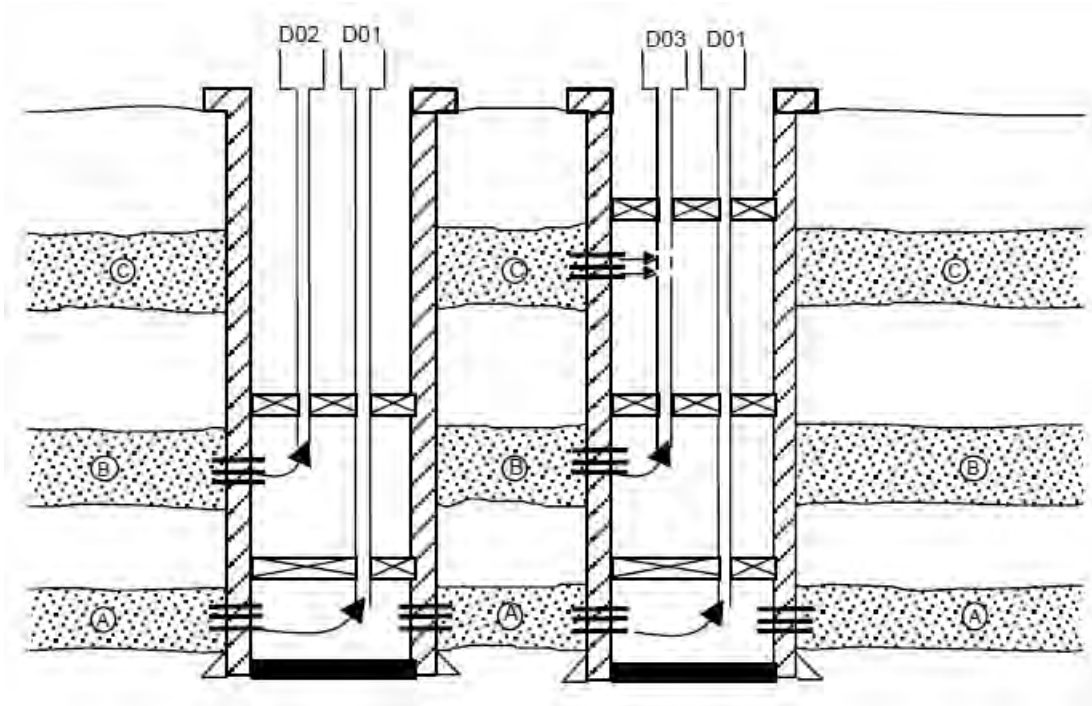
Time 2

Assume:

- Two tubing strings
- Three completions
- Production from upper tubing string is commingled downhole

Result:

Zone A
PI code D01
Zone B
PI code D03
Zone C
PI code D03



NOTE

The D02 must be reported as a completion abandoned (status code 15) on the OGOR-A in the same month that the D03 begins reporting.

EXAMPLE

Example G-30 Offshore—Horizontal well

Time 1

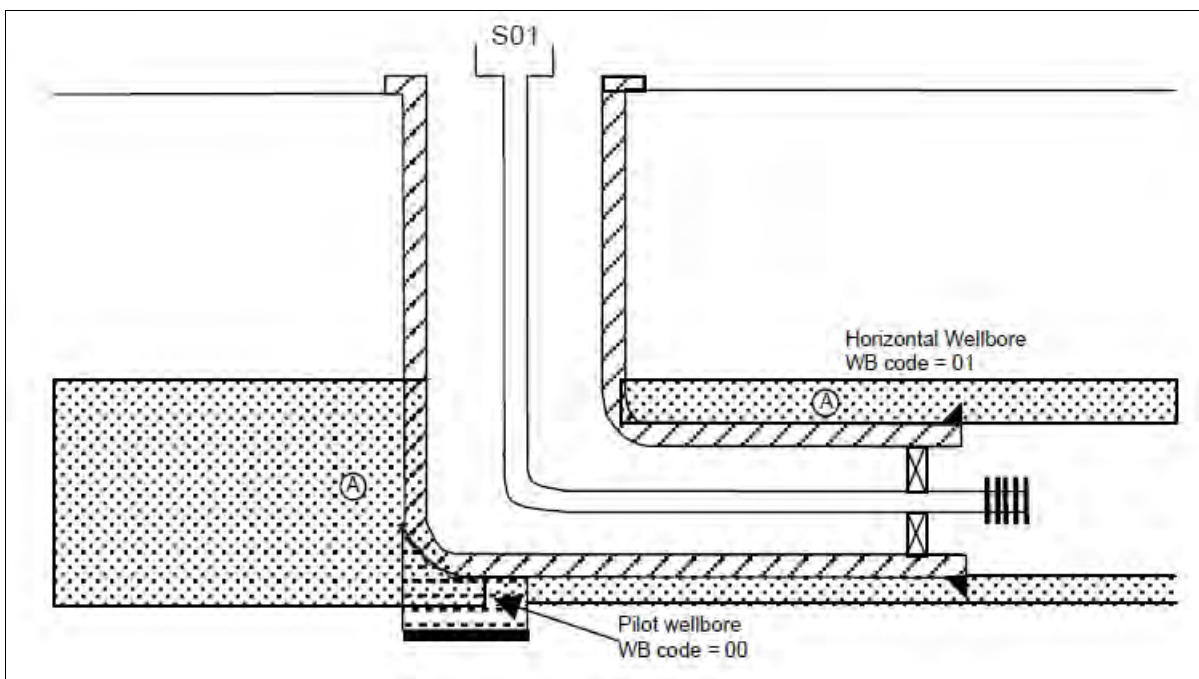
Assume:

- Pilot hole drilled through potential pay zone and plugged back
- Single tubing string completed in horizontal portion of wellbore
- API well number of original pilot wellbore 177214031000
- API well number of horizontal wellbore 177214031001

Result:

Zone A

PI code S01



NOTE

*Pilot wellbore is reported as plugged and abandoned (status code **16**) on the OGOR-A.*

EXAMPLE

Example G-31 Offshore—Multilateral well

Time 1

Assume:

- Single tubing string completed in horizontal portion of wellbore
- One completion in zone A and one completion in zone B
- The WB code of each lateral will be numbered sequentially from the original wellbore
- API well number of original pilot wellbore 177254061000
- API well number of horizontal wellbore 177254061001

Result:

Zone A in first lateral

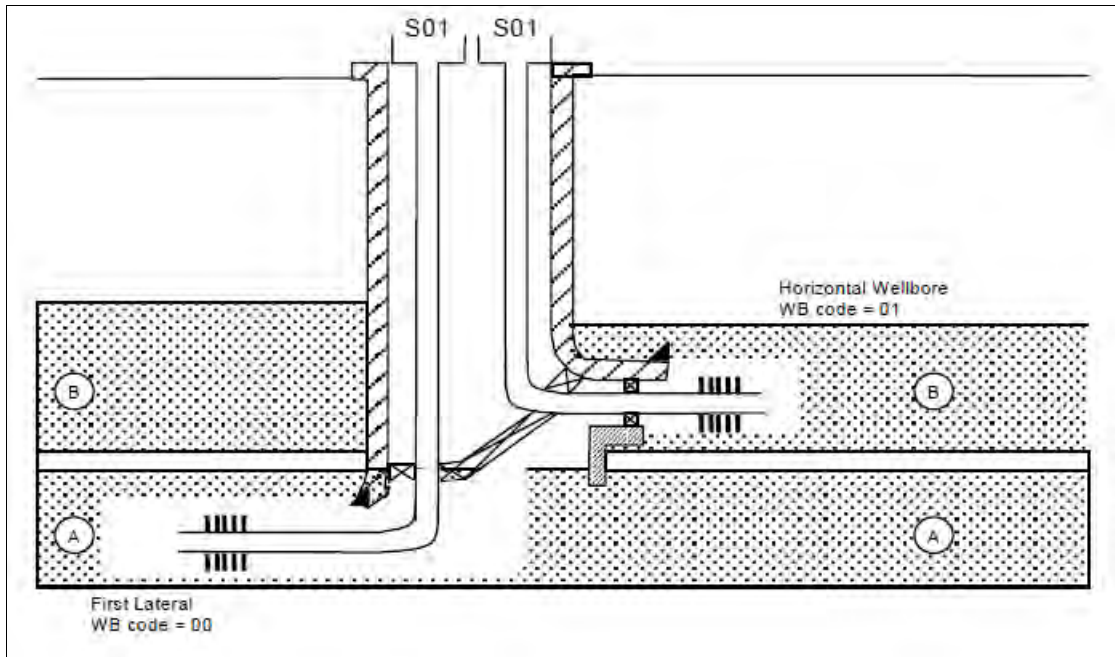
WB code 00

PI code S01

Zone B in second lateral

WB code 01

PI code S01



NOTE

Both laterals are open to production. The producing interval codes of S01 are unique to each wellbore segment.

EXAMPLE

Example G-32 Offshore—Downhole splitter well

Time 1

Assume:

- Single tubing string in each wellbore completed in horizontal position of well
- Because each wellbore has separate production casing and trees at surface, API well number of each wellbore will be numbered separately
- Each splitter well has a different well name (that is, A-1 and A-2)
- API well number of the first wellbore drilled 177244201100
- API well number of horizontal wellbore 177244121100 (or next available API well number)

Result:

First wellbore

Zone A

WB code S01

Second wellbore

Zone

WB code S01

