

PHILLIPS PETROLEUM RESOURCES, LTD.

SUITE 2800, SUN LIFE PLAZA 144 FOURTH AVENUE S.W. CALGARY, ALBERTA T2P 3N4 (403) 298-1266

April 10, 1990

Province of British Columbia
Petroleum Resources Branch
Ministry of Mines and Petroleum Resources
Parliament Buildings
VICTORIA, British Columbia
V8V 1X4

Attention: Mr. Baldwin van Oort

Chief Reservoir Engineer

Dear Sir:

RE: Application for Good Engineering Practice Produced Gas Re-Injection Stoddart West Belloy C Pool

Phillips Petroleum Resources, Ltd., in accordance with Division 77 of the British Columbia Drilling and Production Regulations, hereby applies for Good Engineering Practice approval for thirteen oil wells in the Stoddart West Belloy "C" Pool.

The area of application includes all of Section 26 and the west half of Section 35 in Township 85, Range 20W6M and the south half of Section 2-86-20W6M, as shown in Figure 1. Land holdings and well status is also shown in Figure 1. It is proposed that a Project allowable of 193.7m³/day be applied to the area, with GOR penalties based on net gas production. Phillips requests that the Project status be approved as soon as possible, with the above allowable of 193.7m³/day being the sum of the individual wells in the Project. This will allow us to shut-in the high GOR wells 16-26, 6-35 and 12-35 and produce the Project wells in an efficient manner with minimum reservoir energy loss.

Rock and fluid properties and a sample Project DOA calculation is summarized in Table 1, and Table 2 is a list of individual well Daily Allowables in the area. Table 3 is a composite production history along with individual well histories.



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Phillips has completed reservoir simulation of the Phillips operated property within the pool and have included offsetting Sections. The model indicates that gas injection into the 14-26-85-20 well will increase oil recovery to Phillips by 76,000 cubic meters and a recovery increase of 24,000 cubic meters will also occur for offset operators. Waterflood within the Phillips project indicated that a small amount of oil recovery increase would occur to Phillips, with decreases for the Poco and Scurry offset lands. We have discussed cooperative enhanced recovery with Scurry, and expect that this may commence in 1991. If a cooperative scheme can not be accomplished, then Phillips is prepared to commit to gas injection into 14-26 to reduce GOR penalty in this time frame.

As supported by Table 3, gas injection at the Poco 10-35-85-20 well appears to have increased the GOR at offsetting wells. Approval of a Project Allowable would allow Phillips to produce under this scenario until enhanced recovery is started. Phillips Petroleum Resources, Ltd. views gas injection at 14-26 as an interim measure which could be adopted prior to enhanced recovery for the entire pool.

If more information is required please call Mr. Bob McAuley at (403) 298-1266.

Yours truly,

PHILLIPS PETROLEUM RESOURCES, LTD.

G.L. Hood

Director, Engineering

RGM/cg Attachments

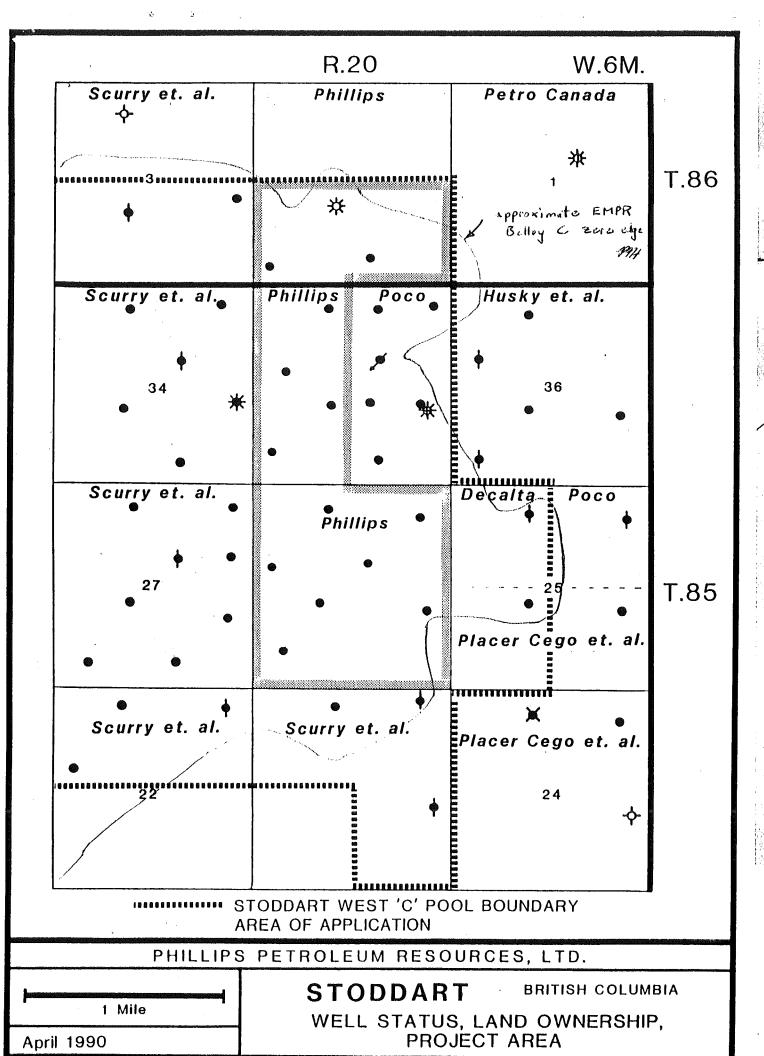
cc: (w/attach.)

D.L. Johnson (Ft. St. John)

T.E. Garland

E.C. Wiszneauckas

Well Files - RC



PARA



PHILLIPS PETROLEUM RESOURCES, LTD.

SUITE 2800, SUN LIFE PLAZA 144 FOURTH AVENUE S.W. CALGARY, ALBERTA T2P 3N4 (403) 298-1266

March 22, 1991

Province of British Columbia
Petroleum Resources Branch
Ministry of Mines and Petroleum Resources
Parliament Buildings
Victoria, B.C.
V8V 1X4

Attention:

Mr. Baldwin van Oort

Chief Reservoir Engineer

Dear Sir:

RE: GOOD ENGINEERING PRACTICE

STODDART WEST BELLOY "C" POOL EFFECTIVE DATE OF INJECTION

In accordance with the Approval dated July 4, 1990 and Clause 4 dealing with the effective date, Phillips Petroleum Resources, Ltd. wishes to advise that gas injection became operational at 14-26-85-20 W6M on March 12, 1991 and has been continuous since that time.

Effective date of Gasanjer

Phillips plans to submit yearly progress reports covering calendar years with the first injection period being ten months, and a pressure survey will be conducted at the 6-35 and 14-26 wells in the fall of 1991, provided no objections to the above are received from the Branch.

If more information is required please call Mr. Bob McAuley at (403) 298-1266.

Yours very truly,

PHILLIPS PETROLEUM RESOURCES, LTD.

G.L. Hood

Director, Engineering

RGM/db

c.c. D.L. Johnson (Fort St. John)

T. Allen

R.L. Fox (r) File: STO 1-5