

Lago Agrio,
June 25, 1980

OPE-276-80

DRILLING, WORKOVER & PRODUCTION PITS

Ing. René Bucaram
Quito.

Attention: Mr. E. L. Johnson

A study has been completed regarding the cost and necessity of eliminating possible contamination of the environment by the earthen pits used in the drilling, producing, and workover operations in the Oriente Region. The study was requested in your memorandum No 628 dated June 12, 1980.

In general, the possibility of pollution by our current waste disposal into pits is very minimal when liquid levels are monitored and drains are maintained in good operating condition. It is our recommendation that the pits not be lined, filled nor fenced. Further, we recommend that the siphons continue to be used to keep the oil in the pits and the water drained from the pits.

First, the current pits are necessary for efficient and economical operation of our drilling and workover programs and for our production operations. The alternative for using our current pits, is to use steel pits at a prohibitive cost. The additional cost to transport the pits for each workover and swabbing operation would also be expensive. A second alternative is to fill the old pits, dig new pits, and line the new pits. The cost to fill the old pits would be US\$ 5,180 per well or US\$ 1,222,480 for the 236 wells. The cost to dig new pits would be US\$ 472,000. Lining the new pit would cost US\$ 2,503,488. The total cost of eliminating the old pits and lining new pits would be US\$ 4,197,968.

The cost of fencing the current pits would be an additional US\$ 700,316. However, it has been our experience that the barbed wire used for these fences would be stolen within a very short time and render the fences useless.

The design of the current syphon system in our pits is such that the oil is retained in the pit and only water is drained from the pit. The water that is discharged from the pit is of such low salinity that it has little or no detrimental effect on the environment. To attest to this fact, no yellowing or dying vegetation can be found throughout this area of operation.

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Therefore, it is recommended that the pits neither be fenced, lined nor filled and that the siphons continue to be used.

D. W. Archer
District Superintendent

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