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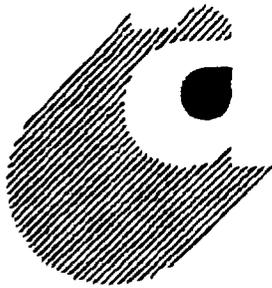
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June 15, 1994

R. E. Mayhew
CO2 Projects Coordinator
Exxon Company, U.S.A.
SW Division CDA #245
23 Desta Drive
Midland, Texas 79705

RE: Land and Engineering
Comments for Proposed
Avalon Unit, Eddy Co.
New Mexico

Dear Ron:

Please find attached comments and concerns pertaining to the proposed unit in general, the unit participation formula, the proposed Unit Agreement and proposed Unit Operating Agreement. After your review, please call if you want to discuss any issue. Mike Englert and I should be available to offer further clarification.

Again, I do apologize for the tardiness in returning our comments to you. As you and I have discussed, Patrick Petroleum Company i.e. ANPC, is for sale. The preparation of the data room has taken a significant amount of time away from day to day work.

Sincerely,
AMERICAN NATIONAL PETROLEUM CO.

Bill Hayworth

W. F. Hayworth
Engineering Manager

Attachments

cc: M. W. Englert

Engineering Problems & Comments

1) Economic Viability

Utilizing an economic study (results presented on H-5 and H-6) with a minimum value of \$19.00 per escalated at 6% is not practical. Prior to moving forward we need to view more realistic pricing combined with the new estimated investment to verify the project viability.

Specific Problems:

- a) Pricing and escalation factor are out of line from reality
- b) Hudson Inc.'s comments indicate that some of their leases are burdened much heavier than the 87.5% estimated in Exxon's economics. This could significantly affect the economics.
- c) Base charges for LEES are double of other operators - need to specifically address in Unit Operating Agreement what fixed costs administrative/lease overhead costs will be included.
- e) Comparison of Net Forecasts (using 87.5%)

	Model Primary		Model Waterflood		Incremental	
	BOPD	BOPY	BOPD	BOPY	BOPD	BOPY
1993	550	200750	889	*324485	339	123735
1994	408	148920	1021	372665	613	223745
1995	325	118625	1121	409165	796	290540

* H-6 economics match this number

Estimated remaining primary as of 1/1/93 - 1192.2 BO

Estimated remaining primary as of 1/1/94 - 986.6 BO
DIFFERENCE 205,600 BO

Economics should have been run on incremental oil production

2) Participation Formula

- a) Formula has little or no basis when you review economic run
- b) PV of 20% is arbitrary and immaterial. Keeping all other values the same, but utilizing PV of 10%, C = 24.61% and F = 75.39% (compared to PV 20% values where C = 62.43% & F = 37.5688%).
- c) Phase 1 formula uses a 1/1/93 remaining reserves denominator (1192.2) while weighting factors use a 1/1/94 remaining reserves (986.6).
- d) Using output (Present worth values) data from economic runs which have inappropriate oil prices, incorrect investments and some of the other problems identified in 1 above yields

nothing but FUNNY numbers.

- e) ANPC believes that the participants in the proposed unit need to move toward more traditional methods to determine tract factors and unit participation.

3) Waterflood Response Time

Although Exxon's model seems to predict the primary performance of the reservoir, I question the 60% increase in dayrate production for 1993 in comparison to 1992. Particularly as it relates to the start of the economic run in October 1992. It seems that the Ford Geraldine Unit response was closer to a year before significant response production was observed. What is the estimated time of fillup and response given that the reservoir has had two additional years of depletion?

4) Linking CO2 Injection with Waterflooding

If it is economically feasible, ANPC is interested in unitizing the Avalon Field for the purpose of waterflooding. Although Exxon sees great merit in initiating a CO2 Flood in the short term, ANPC is more interested in implementing a successful waterflood and based on an early response, verifying its economic viability. At that time, proceed forward in the setup a CO2 flood, if oil prices appear stable and the project is economically feasible.

ANPC prefers to drop all references to a Phase II "CO2 Flood" in the current documents. ANPC is not against the concept but believes that each phase should be managed individually. Exxon's has partially taken this approach by not equipping the wells with CO2 resistant tubulars. Given that there are a limited number of working interest owners in the proposed unit and that the reservoir responds to waterflooding as predicted by the model, it should be relatively easy to move from a secondary unit to a tertiary unit.