

**Shell Western E&P Inc.**

A Subsidiary of Shell Oil Company



P.O. Box 576  
Houston, TX 77001

April 28, 1988

Mr. David R. Catanach  
New Mexico Oil Conservation Division  
State Land Office Building  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Gentlemen:

SUBJECT: NMOCD CASES 9230, 9231, AND 9232,  
SHELL WESTERN E&P INC.  
NORTHEAST DRINKARD UNIT, LEA COUNTY, NEW MEXICO

We are submitting herewith a copy of first "First Supplement - 1988" of the "Initial Plan of Operation" for the Northeast Drinkard Unit. This submittal is for your information in accordance with Section II of the Unit Agreement - Northeast Drinkard Unit. We have, this date, filed copies of "First Supplement - 1988" with the New Mexico Commissioner of Public Lands and the Bureau of Public Lands for their review and approval.

Yours very truly,

A handwritten signature in dark ink, appearing to read "W. F. N. Kelldorf".

W. F. N. Kelldorf  
Staff Production Engineer  
Safety, Environmental, and Administration  
Western Division

JHS:LGC

Enclosure

## NORTHEAST DRINKARD UNIT

"First Supplement-1988" to the "Initial Plan of Operation"

### Change in Water Source Strategy

It was the original intention of the NEDU Technical Committee to use ten "spare" wellbores in the northern portion of the Unit as water source wells, but the first well tested in that area failed to produce the desired volume of water. For that reason a test was performed in a well in the southern portion of the Unit, the NEDU 607, resulting in production of 4300 BWPD. It is estimated that under final design conditions the well will be able to sustain a daily rate of over 6000 BWPD.

Because there are no "spare" wellbores south of the NEDU 607, SWEPI decided to offer the following 5 expendable non-Unit wellbores to the Unit for use as source wells:

<u>Current Well No.</u>	<u>Proposed Unit Well No.</u>
Argo No. 10	NEDU No. 712S
Argo 'A' No. 5	NEDU No. 820S
Argo 'A' No. 9	NEDU No. 818S
Argo 'A' No. 10	NEDU No. 819S
Turner No. 16	NEDU No. 919S

Approval of this proposal was received from Unit Working Interest Owners April 25, 1988.

An evaluation into possible alternative uses for the original ten source wells is underway at this time. Following completion of the evaluation, estimated May 1988, a proposal will be drawn up for partner and regulatory approval.

### ARCO Wellbore Donation

The Unit has accepted a wellbore, offered by ARCO, located very near the NEDU No. 915 in the southeastern corner of the Unit. Formerly the Sarkey's No. 6, the well will be utilized as a Blinbry/Tubb gas producer enabling the NEDU No. 913 to be used as an injector (Injection Well Data Sheet Attached). This will regularize our injection pattern in that portion of the field.

### Other Deviations from Original Wellbore Utilization Scheme

In the original wellbore utilization strategy, the NEDU No. 216 (SWEPI State Section 2 No. 15) was to be an Upper Blinebry gas producer, while NEDU No. 218 (SWEPI State Section 2 No. 16) was to be a Lower Blinebry/Tubb/Drinkard injector. Due to questionable casing integrity across the lower intervals in the NEDU No. 218 however, it is now proposed that the 216 be used as the injector and the 218 as the gas producer. This will insure that no injection occurs into a gas interval. An injection well data sheet for the NEDU No. 216 is attached.

NEDU No. 607, originally labelled as a "spare" wellbore will be used as a San Andres Water Source Well, as discussed earlier.