THE INTERIOR SUBMIT IN TRIPLICATE\* Form 9-331 (May 1963) Form approved, Budget Bureau No. 42 R1424. UNITED STATES DEPARTMENT 5. LEASE DESIGNATION AND BERIAL NO. NM-0557686 GEOLOGICAL SURVEY SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.) 7. UNIT AGREEMENT NAME ī Plug & Abandon OIL GAS WELL OTHER SEMU 2. NAME OF OPERATOR FARM OR LEASE NAME CONTINETT2/ 01/ Company SEMU Tenn Box 460, Ho BBS, NM 88240 EXECUTION OF WELL (Report location clearly and in accordance with any State ro At surface 10. FIELD AND POOL, OR WILDCAT Cass Ponn 1980' FSL & 1980' FWL OF Soc. 23 11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA Sec, 23, 7-205, R. 37E 12. COUNTY OB PARISH 13. STATE 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 14. PERMIT NO. 3*53*2 NM 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO : SUBSEQUENT REPORT OF : FULL OR ALTER CASING REPAIRING WELL TEST WATER SHUT-OFF WATER SHUT-OFF MULTIPLE COMPLETE FRACTURE TREAT FRACTURE TREATMENT ALTERING CASING SHOOTING OR ACIDIZING ABANDONMENT\* SHOOT OR ACIDIZE ABANDON\* REPAIR WELL CHANGE PLANS (Other) (NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) (Other) 149 & Abandon 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) • IT IS Proposed to Plug and Abandon The Subject Wall Due to Mechanical Condition, Soe Attached Well History and Rocommendation. Plugging Procedure as Follows! (1) Run Tbg open ended to 7680" and Pump 275 5x Closs "" CMT. Pull Tbg and WOC OVOR Night, TOP of Plug AT 4550' Est. (2) Run Free Point, cut and Pull 7"OD CSG 2200' Est. (3) Run Tbg eRon outod to 100' Bolow cut OFF 7" C59 and SPOT 50 SX Class 'C" CMT with 2% CACL2 From TOP OF Plug to 100' 1Nto 9 Bucsg, Pull Tby and WOC. (4) Port 9 8" (59 AT 1000' with 4 Jot Shots. (5) Run Tby with Phr sot AT 850' and Squarze w/200 Sx class "E". Disphere CMT to I 925'. (6) SPOT 30 5% CANT Plug From 390'- 300' INSIDE 9 58" CSg. (7) SPOT 10 SX Surface Plug and Restore the Surface. Butterfield TITLE ADMIN, SUPERVISOR DATE 1-28-77 SIGNED 1/m (This space for Federal or State office use) APPROVED BY TITLE APPROVED CONDITIONS OF APPROVAL, IF ANY: AS AMENDED MAR 2 1977 \*See Instructions on Reverse Side USGS.(5), NMFU(4), File BERNARD MOROZ CTING DISTRICT ENGINEER

#### Well History and Recommendation

Plug and Abandon SEMU Penn No. 3

The mechanical condition of the SEMU No. 3 precludes the possibility of continuing production from the Cass Penn Pool or shallower producing formations. A casing failure, caused by corrosion and rod wear, was repaired in 1966 by cutting off the oil string just above the top of the cement and running a tapered string of 7", 5 1/2" and 4 1/2" casing. The well was then produced until October 1972 when production had declined to four barrels oil, 184 barrels water pumping from 4500". It is planned to replace the well by drilling the SEMU No. 97 at a location 282 feet southwest of the SEMU No. 3. It is therefore recommended that the SEMU No. 3 be plugged and abandoned. The following information is in support of the recommendation.

## 1. Initial completion

Date: May 10, 1945 Total Depth: 7698' CassPenn Elevation: 3534' DF Oil String: 7" at 7655' Producing Interval: Open hole 7655-7698' Initial Potential: Flow at rate of 1938 BOPD GOR 396 ft.<sup>3</sup>/bb1.

#### 2. Remedial Work

# 1966

Holes in 7" casing repaired. Cut casing at 3242 and pulled. Ran tapered string consisting of 4 1/2" from 7576' to 4628'; 5 1/2" from 4628 to 3175' and 7" from 3175' to surface. Cemented with 375 sx.

#### 1970

Squeezed casing leak after attempting to treat formation with 3000 gallons acid. Treated formation with 1500 gallons acid.

### 3. Present Status

The well was shut in on 10-9-72. The well was being pumped from 4500' and produced 4 barrels oil with 184 barrels water on last test dated 9-27-72. The pump was set at the bottom of the 5 1/2" casing and was as low as possible.

Cumulative oil production is 804,045 barrels. Rods and pumping equipment have been removed.

# 4. Discussion

The well bore is in poor condition due to corrosion and there is probably some formation damage due to fill from scale. A casing inspection log of the 5 1/2" casing in January 1971 found the 5 1/2" casing to be in reasonably good condition and another log on May 9, 1972 found the same casing to be in fair to poor condition. The well was shut in shortly after the last casing inspection log was run because of uneconomical production.

The SEMU No. 2 was recompleted in the Drinkard Pool during 1974 and the same zone is present in the SEMU No. 3. The Drinkard is at 6640" opposite the 4 1/2" and 7" casing in the well. The Drinkard is tight, evidenced by recovery of 730' gas cut mud and 270' salt water on one hour DST, and would require stimulation to be commercial. It is extremely doubtful if the formation could be stimulated because the treatment would fracture the weak cement bond between the two strings of pipe and be lost. The same probability exists for any recompletion attempt in other possible producing zones.

The well should not be saved for salt water disposal possibilities because of its mechanical condition.

## 5. Recommendation

It is recommended that the SEMU No. 3 be plugged and abandoned according to New Mexico state rules and regulations. District Engineer U. S. Geological Survey

Gentlemen:

# RE: SEMU Ponn NO. 3 PiA

This refers to the Form 9-331, Sundry Notices and Reports on Wells, accompanying this letter. The undersigned hereby states that he has personnally contacted  $\underline{Stwcafflocompany}$ , the owner of the surface land where the proposed abandonment work is to be conducted and advised him of the proposed work.

It has been agreed, upon abandonment of the well, that the roads shall be (ripped or left-intect), the pad shall be (ripped or <u>left-intect</u>) and the surface restored.

STATE OF NEW MEXICO COUNTY OF LEA

Subscribed and sworn to before me this  $\frac{28}{28}$  day of  $\frac{6}{28}$ , 1977.

Notary Public

My commission expires