Form 3160-3 (July 1992)

CONDITIONS OF APPROVAL, IF ANY:

## UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TREE CATES
(Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO. NM<sup>5</sup> 0 - 81171 - K BUREAU OF LAND MANAGEMENT 6. IF INDIAN, ALLOTTER OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL 😠 DEEPEN b. TYPE OF WELL WELL X MULTIPLE X 8. FARM OR LEASE NAME, WELL NO. 2. NAME OF OPERATOR ERIN 5337 9. API WRILL NO Coulthurst Management & Investments 3. ADDRESS AND TELEPHONE NO. 30-043-10. FIELD AND POOL, OR WILDCA'
53630 1990 Marin Ave. Berkeley CA 94707 5105272659
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) South San Luis MV 11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA 990'FNL, 2310' FEL Sec 33, T18N R3W At proposed prod. zone **B** 33, T18N, R3W Cretaceous Menefee & Point Lookout

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE® 12. COUNTY OR PARISH | 13. STATE 3.5 Miles South of Torreon Navajo Mission Sandoval NM 15. DISTANCE FROM PROPOSED\* 17. NO. OF ACRES ASSIGNED TO THIS WELL 16. NO. OF ACRES IN LEASE LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 990 (Also to nearest drig, unit line, if any) 520 18. DISTANCE FROM PROPOSED LOCATIONS 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <u>6</u>60' Rotary <u>850 '</u> 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START\* 6472.9' Gr 8-17-96 23 PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT 5/8" 85! J-55 23# \_sacks 850' 10.5# 145 Sacks IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface/locations and measured and true vertical depths. Give blowout preventer program, if any DATE 6-15-76 BOONT space for Federal or State office use) PERMIT NO. Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

\*See Instructions On Reverse Side

itle 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department, or agency of the

All distances must be from the outer boundaries of the Section. Well No. ERIN 3326 INVEST GMT. 9 Unit Letter Township County 14 VOCNAC Actual Footage Location of Well: feet from the line and Ground Level Elev. Producing Formation Dedicated Acreage: 6472.9 EVELER OUTH 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? Yes ΠNο If answer is "yes," type of consolidation \_ If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. **CERTIFICATION** I hereby certify that the information confained herein is true and complete to the DAVID Position 2310 AGONT Company I hereby certify that the well location OIL COM. DIV rn on this plat was plotted from field notes of actual surveys made by me or my supervision, and that the same true and correct to the best of my knowledge and belief. and/or Land Surveyor 9750 Certificate No.

660

1320 1650

1980 2310

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Coulthurst Management & Investment Inc. ERIN #9

- (1) Estimated tops of important geological markers. Surface to 345' upper Menefee sands, 346' to 850' middle and lower Menefee sands, 850' Point Lookout sands.
- (2) Estimated depths to anticipated water, oil, or gas. The Menefee formation is interspersed with sands that contain oil and water in varying saturations. There are 19 sands in the proposed drilling section with water saturations varying from 40% to 100%. No gas is expected since none was encountered in nearby wells. Casing will be cemented to the surface to protect any water bearing sands.
- Pressure control equipment.

  Pressure control equipment will meet the 2M system requirements by using a double ram 3M Townsend, Duke type unit which is the minimum available in this region. The unit will have pipe and blind rams.

  The choke manifold equipment will conform to a 2M system using 3M or 5M components as available.

  The BOPE will be tested to 1050 psi which will provide a 1.4 safety factor in a 850 foot well. This assumes a maximum pressure gradient of 1.0 psi per foot in a 850 foot well. A higher test pressure cannot be acheived without exceeding the rod load of the mud pump. The anticipated BHP is less than or equal to 150 psi.
- (4) Supplementary information. Menefee, Point Lookout well program. Move in drilling rig.
  - 1. Drill 9 5/8 hole to 85'
  - Run 85' of 7" J-55 23# surface casing and cement to surface using 25 sacks of cement.
  - 3. Wait on cement 24 hours.
  - 4. Drill 6 3/4" hole to 850' using low water loss bentonite mud with viscosifier.
  - 5. Set 850' of 4 1/2" J-55 10.5# with 3-4 centralizers.
  - 6. Cement to surface using 145 sacks.
  - 7. Wait on cement 24 hours.
- (5) Type and characteristics of drilling fluid.

  Bentonite mud with fluid loss additives and thinners will be used. Mud will be checked for weight and vicosity by drilling contractor, fluid loss will be monitored by mud engineer. No weighted material will be used. Mud will be contained in 2 8' x 12' plastic lined mud pits along with an 8' x 12' plastic lined reserve pit.
- (6) Anticipated testing, logging, coring. No pre-production testing will occur. No coring is anticipated. Logs will be run from surface to T.D. and will include Gamma, SP, porosity and resistivity.
- (7) Expected bottom hole pressure and temperature.
  The expected bottom hole pressure will be 155 psi. The

(7) cont.

expected bottom hole temperature will be 65 F. No gas or hazardous gas is expected.  $\,$ 

(8) Other facets of proposed operation. None.

2 m BOPE

SURFACE USE PROGRAM
Coulthurst Management & Investment Inc.

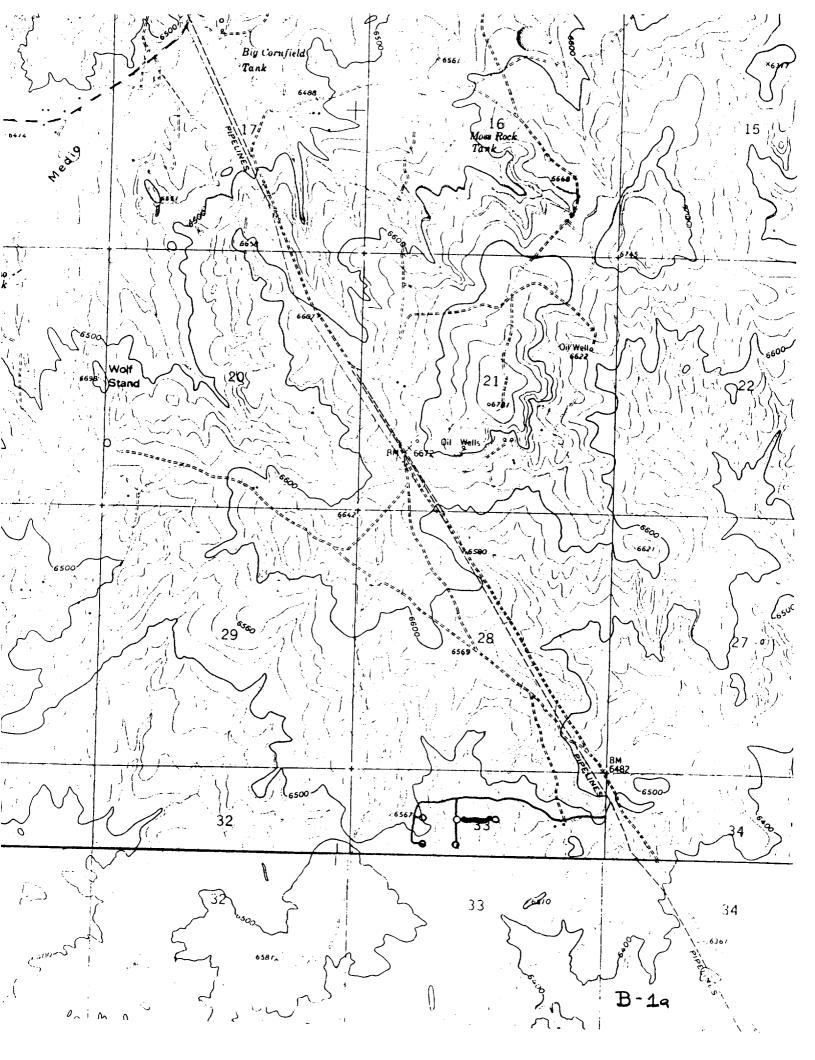
- (1) Existing roads.

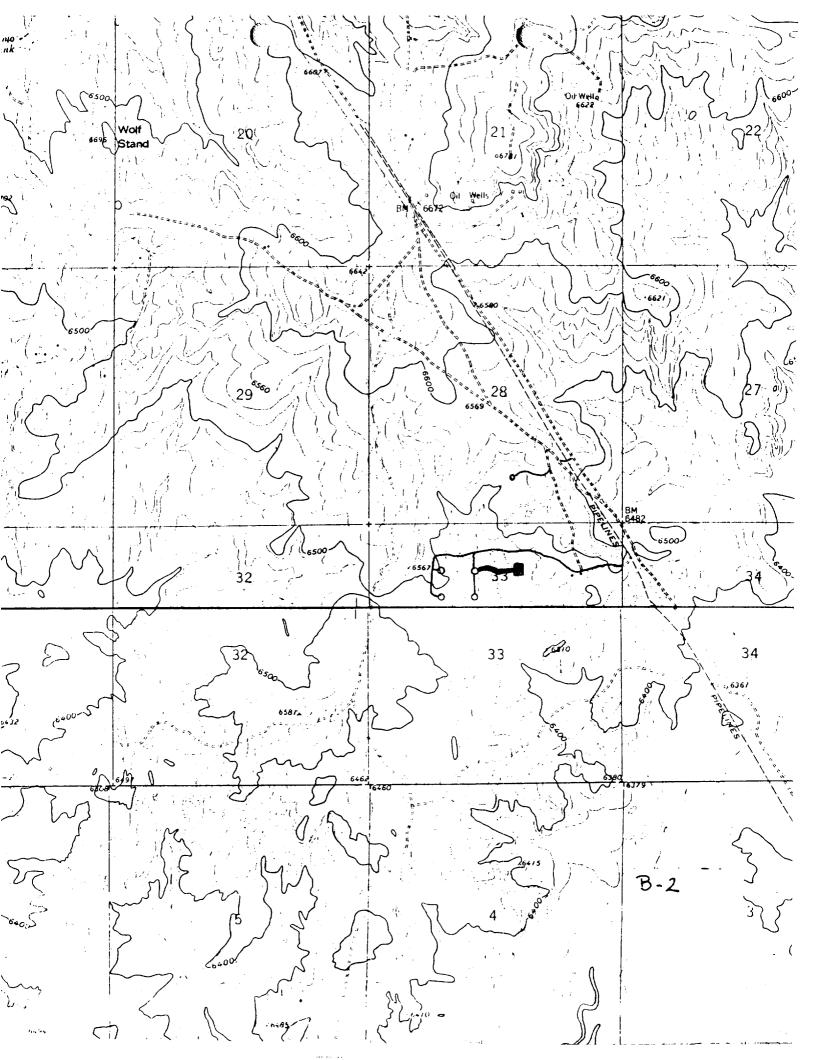
  Map b. (1) is a portion of the Quadrangle Maps of State of N.M. #28 at a scale of 1=190,080. The location can be reached by turning south off N.M. SR 197 (19 miles west of Cuba N.M.) onto 197 A then 3 miles to the Torreon Navajo Mission. Map b. (1a) is a portion of the Wolf Stand U.S.G.S. 1=24,000 map. Turn east onto the Big Cornfield Tank road, go South 3 miles to location access road, turn West onto location and proceed to Erin #2 and then East to Erin#9.
- (2) Access road to be contructed or reconstructed.

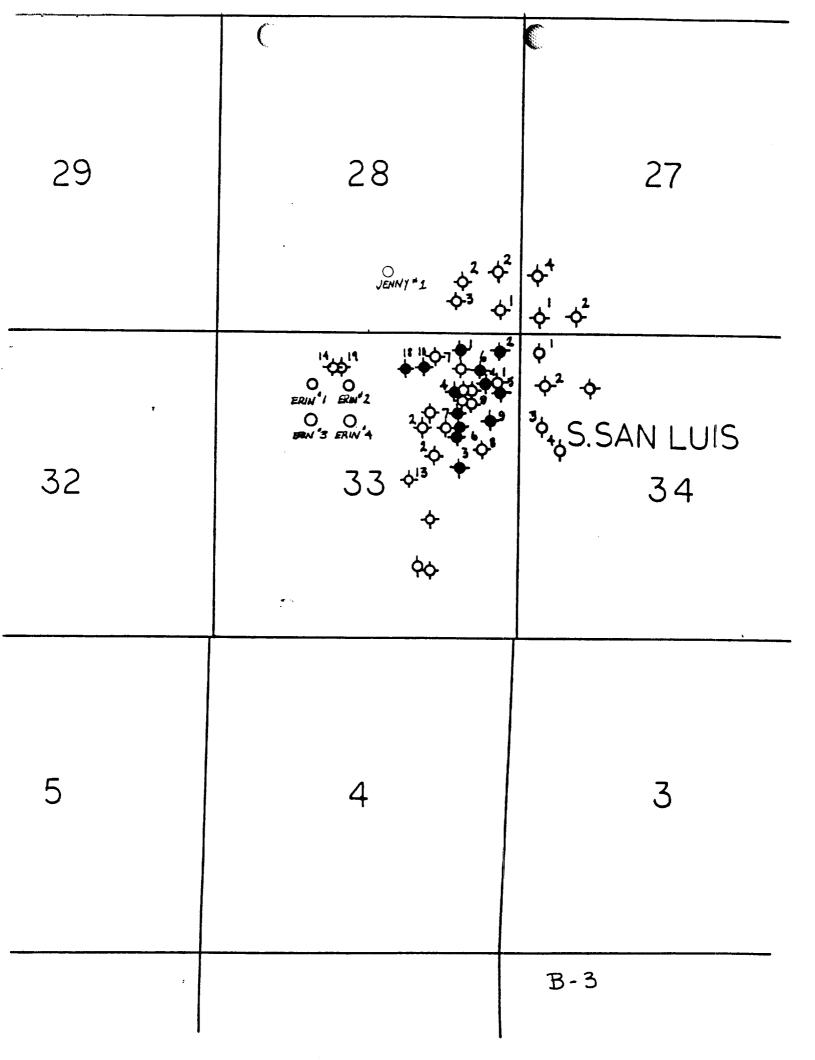
  Map b. (2) is a portion of the Wolf Stand U.S.G.S. topo map at a scale of 1=24,000. This map shows the existing roads built for the previous wells on the lease in blue. The new access road to be built to the Erin #9 is shown in red. The new access road will start at the nearest part of the existing road and continue to the Erin #9 location.
- (3) Location of existing wells. Map b. (3) shows the location of all existing wells within a radius of one mile of the Erin #9 location.
- (4) Location of existing and / or proposed facilities if well is productive. There are no existing facilities on the location. Map b. 4 shows the proposed location of production facilities on the well pad.
- (4b) Off well pad .
   Map b. (5) shows the location of the production line from
   the Erin #9 running to the heater treater at the Erin #2
   location.
- (5) Location of water supply and type.
  Water will be pumped from the waste water pits at the Erin #2 or the tanks at Erin #4.
- (6) Construction material. The access road will be constructed of compacted earth. The surface is composed of alluvium, sandstone, and shale.
- (7) Methods for handling waste disposal.
  A. Drill cuttings will be left in pit until dry and then buried.
  B. Drilling fluids will be allowed to dry in reserve pit and then buried.
  C. Salts and chemicals. We do not anticipate the use of any harmful salts or chemicals. If , however, they are used we will dispose of them per your instructions.
  D. Sewage. Portable toilets will be supplied. Waste from trailers will be drained into pits allowed to dry and buried.

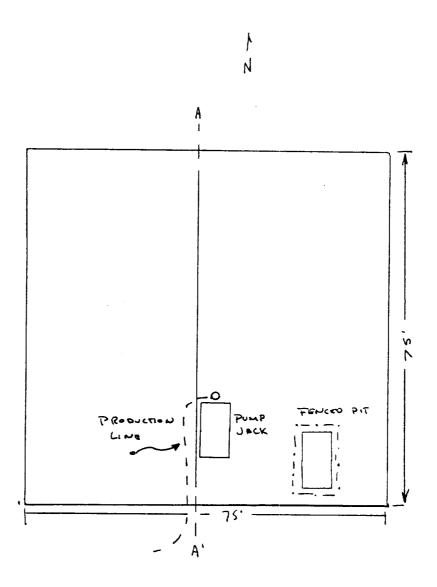
- (7) D. cont. Waste will be disposed of properly.E. Garbage. Garbage and trash will be contained in a bin and hauled to an appropriate land fill.
  - F.Cleanup. When rig moves out location will be cleaned and all trash dealt with as above (E).

    G. Produced oil and water during testing. Fresh water will be left in reserve pit to evaporate. Oil will be retained in the test tanks or tank battery. Small amounts of oil that are not collectible will be left in the reserve pit to dry and then buried.
- (8) Ancillary facilities. No ancillary facilities such as a camp, airstrip, or yard are planned at this time.
- (9) Well site layout. Map b. (9) is a plat showing the proposed drill pad and its approximate location with respect to topographic features. Map b (9a) is a cross section diagram of the drill pad with the cut and fill and the relation to the topography. Map b (9b) is a diagram of the rig layout on the pad.
- (10) Plans for the reclamation of the site. Surface reclamation of the site will be done according to BLM guidelines and will be commenced as soon as the pits dry sufficiently to allow burial. Revegetation will be done according to BLM guidelines as to the type of seed and amount.
- (11) Surface ownership. BLM holds the surface rights in stewardship for the American public.
- (12) Other information. None Necessary.

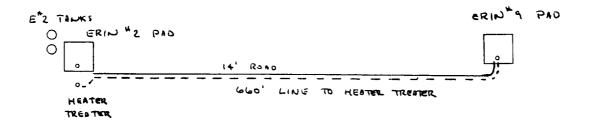








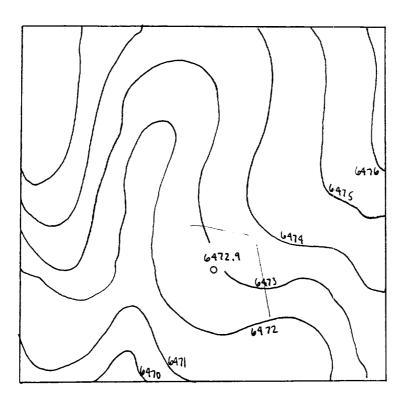
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