

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

MCDONNOLD OPERATING, INC.

3. ADDRESS AND TELEPHONE NO.

505 N. BIG SPRING, SUITE 204, MIDLAND, TX 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1710' FNL & 2630' FEL

UNORTHodox LOCATION:

At proposed prod. zone

2580' (mt)

(6)

oval

SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

6 AIRMILES NORTHEAST OF JAL, NEW MEXICO

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

1250'

16. NO. OF ACRES IN LEASE

680

17. NO. OF ACRES ASSIGNED
TO THIS WELL

20

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1000'

19. PROPOSED DEPTH

3900

20. ROTARY OR CABLE TOOLS

ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3275' GR

22. APPROX. DATE WORK WILL START*

JUNE 16, 1994

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55 8 5/8"	24.0#	400'	275 sxs CIRCULAR
7 7/8"	K-55 5 1/2"	14.0#	3900'	875 sxs - SEE STRIPS.

WELL WILL BE DRILLED TO A TOTAL DEPTH OF 3900' AND ALL POTENTIAL ZONES WILL BE EVALUATED. IF COMMERCIAL PRODUCTION IS INDICATED, WELL WILL BE SELECTIVELY PERFORATED AND STIMULATED.

ATTACHED ARE:

1. WELL LOCATION AND DEDICATION PLAT
2. SUPPLEMENTAL DRILLING DATA
3. SURFACE USE PLAN
4. MAPS
5. SURFACE AGREEMENT
6. SKETCH BOP

OPER. OGRID NO. 14372

PROPERTY NO. 14945

POOL CODE 37240

EFF. DATE 8/18/94

API NO. 30-025-32642

24. 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.

SIGNED

TITLE

AGENT

DATE 5/26/94

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

Title 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 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 37240	Pool Name LANGLIE MATTIX SEVEN RIVERS QUEEN GRAYBURG
Property Code 10021	Property Name LANGLIE JACK UNIT	Well Number 18
OGRID No. 014372	Operator Name MCDONNOLD OPERATING INC.	Elevation 3276'

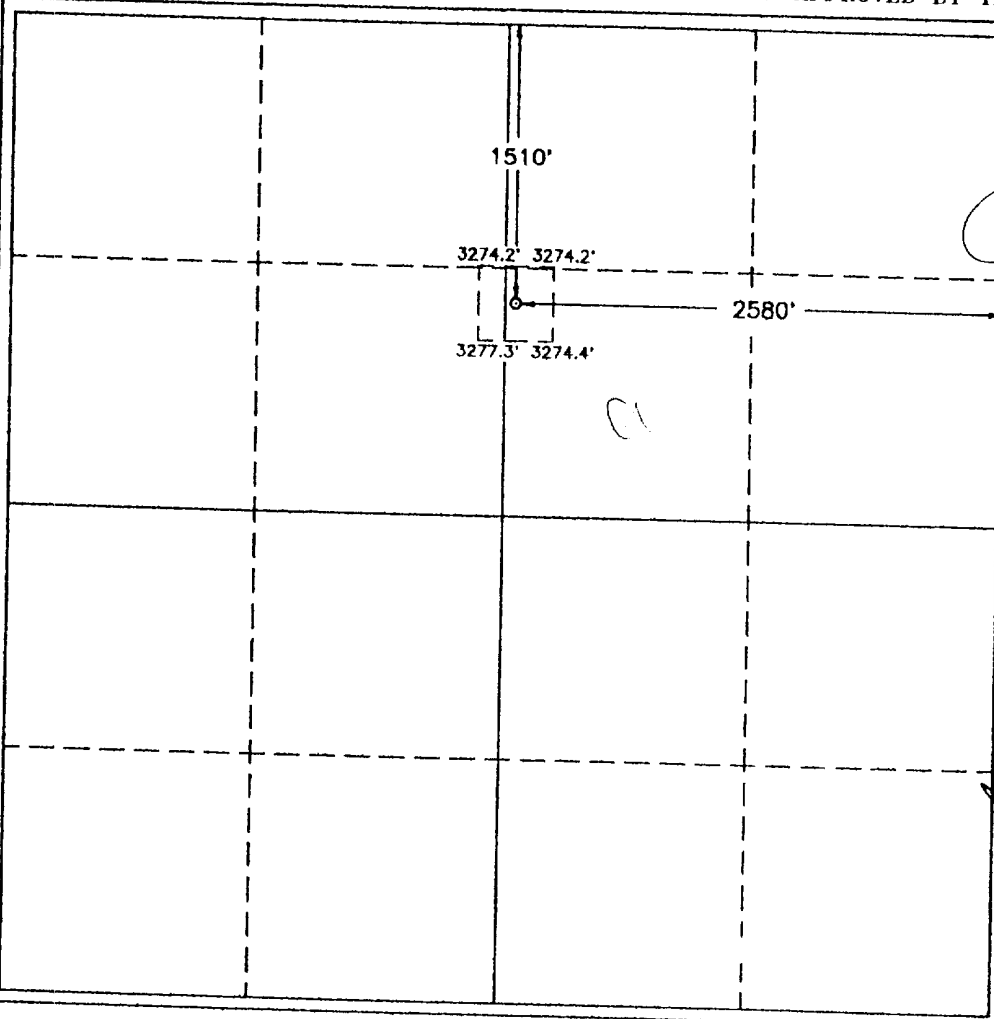
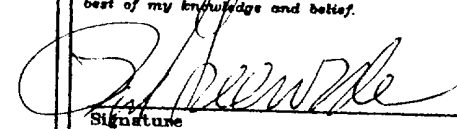
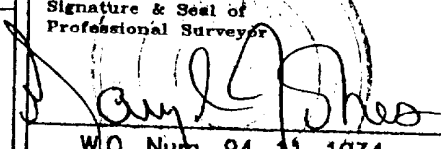
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	20	24 S	37 E		1510	NORTH	2580	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 20	Joint or Infill INFILL	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION <i>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature PATRICIA T. GREENWADE Printed Name AGENT Title 6/22/94 Date
	SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> JUNE 13, 1994 Date Surveyed  Signature & Seal of Professional Surveyor W.O. Num. 94-11-1034
	Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239 GARY L. JONES, 7877

SUPPLEMENTAL DRILLING DATA

MCDONNOLD OPERATING, INC.

Well #18 Langlie Jack Unit
1310' FNL, 2630' FEL, Sec. 20, T-24-S, R-37-E
Lea County, New Mexico

1. SURFACE FORMATION: Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Rustler	1180'
Yates	2900'
Seven Rivers	3225'
Queen	3440'

3. ANTICIPATED POROSITY ZONES:

Water	180'
Gas	3020'
Oil	3440'

4. CASING DESIGN:

<u>Size</u>	<u>Casing</u>	<u>Interval</u>	<u>Weight</u>	<u>Class</u>	<u>Joint</u>	<u>Condition</u>
12 1/4"	8 5/8"	0 - 400'	24.0#	K-55	STC	New
7 7/8"	5 1/2"	0 - 3900'	14.0#	K-55	STC	New

5. SURFACE CONTROL EQUIPMENT: A 3000 psi working pressure BOP system. A sketch of BOP is attached.

6. CIRCULATING MEDIUM:

0'- 400' Fresh water with gel added if needed for viscosity
400'- TD Salt water conditioned as necessary for control of
viscosity and water loss.

7. AUXILIARY EQUIPMENT: Drill string safety valve.

8. TESTING, LOGGING, AND CORING PROGRAMS: No coring or DST's are planned. Compensated Neutron-Formation Density w/Gamma Ray Log, 0-TD; Dual Lateral Log Shoe to TD.

9. ABNORMAL PRESSURES, TEMPERATURES OR GASES: None anticipated.

10. ANTICIPATED DATES: It is planned that drilling operations will commence about June 16, 1994. Duration of drilling and completion operations should be 20 to 60 days.

Road Log to the Langlie Jack Unit #18

Starting Point is Jal, New Mexico at the intersection of County Road 128 and County Road 18.

- 0.0 Turn left (North) and proceed 6.3 miles to Cooper Cementery Road.
- 6.30 Turn right (East) and proceed .75 miles to an existing lease road.
- 7.05 Turn right (South) and proceed in a southerly direction for a distance of .25 miles to the northeast edge of the proposed drill pad.
- 7.30 Langlie Jack Unit #18 drillsite.

THIRTEEN POINT PROGRAM

- 1. Existing Roads: Existing roads which lead to the proposed drillsite are shown on Exhibits "A" and "B".
- 2. Proposed New Road: Proposed new access road will be approximately 30' in length and connect the northeast edge of 200' x 150' area to an existing lease road shown on Exhibit "B".
 - A. Width: 14 feet with 30-foot R-O-W
 - B. Surfacing Material: The new road will be surfaced with caliche or other available material, if required.
 - C. Maximum Grade: Less than one percent
 - D. Turnouts: None required.
 - E. Drainage Design: New road will be crowned with drainage to the side.
 - F. Culverts: None planned.
 - G. Gates, Cattleguards: None required.
- 3. Location of Existing Facilities: Existing wells in the vicinity of the proposed drillsite are shown on Exhibit "C".
- 4. Location of Proposed Facilities:
 - A. If this well is productive, production and storage facilities will be located on the wellpad.
- 5. Location and Type of Water Supply:
 - A. Water for leasehold operations will be purchased from an available permitted water hauling company.

6. Source of Construction Materials: Where possible, material-in-place will be used for upgrading the road and construction of the well pad. If additional material is required, it will be obtained from a caliche pit located on the lease just East of the location owned by J. T. Crawford.
7. Method of Handling Waste Disposal:
 - A. Pits will be dug a minimum of 4' below ground level and lined.
 - B. Drill cuttings will be disposed of in the pits.
 - C. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - D. Water produced during test will be disposed of in the drilling pits.
 - E. Plastic lining of the pits will be removed before reclaiming the pit area.
 - F. Trash, waste paper garbage and junk will be stored in an above ground container, emptied when full and taken to an authorized landfill or other suitable disposal facility. At the conclusion of well completion operations, or plugging operation in the case of a dry hole, the trash and debris containers shall be removed from the location.
8. Ancillary Facilities: None anticipated.
9. Wellsite Layout:
 - A. The dimensions and relative location of the drill pad, mud pit and trash container with respect to the well bore are shown on Exhibit "D".
 - B. Four inches of top soil will be removed from the surface and stockpiled on southwest corner of location. Four inches of caliche will be used for surfacing of location.
10. Plans for Restoration of the Surface:
 - A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible.

11. Other Information:

- A. Topography: The wellsite elevation is 3275' GR +/-.
- B. Soil: Top soil is sandy loam.
- C. Land Type & Use: The vicinity surrounding the drillsite is semi-arid rangeland and its primary use is for grazing.
- D. Flora & Fauna: The vicinity surrounding the drillsite is semiarid desert ranchland. Flora consists primarily of mesquite and range grasses interspersed with other desert plants. Fauna for this type of habitat includes rabbits, lizards, snakes, rodents, skunks, coyotes, dove, quail, and other small birds.
- E. Ponds and Streams: None
- F. Water Wells: nearest known water well located in the SW/4 of Section 21, T-24-S, R-37-E.
- G. Residences and Other Structures: Nearest occupied dwelling is 3 miles to the southwest of location.
- H. Archaeological reconnaissance of the well pad will be forwarded directly to the BLM office.
- I. Land Use: Grazing
- J. Surface Owner: Henry H. Harrison
Leasee: J. T. Crawford

12. Operator's Representative: Representative responsible for assuring compliance with the approved Surface Use Plan:

Craig McDonnold
505 N. Big Spring, Ste 204
Midland, TX 79701

Office: (915) 682-6396

13. Cerfification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by MCDONALD OPERATING, INC. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

5/24/94

Craig M. McDonnold
Craig McDonnold
MCDONNOLD OPERATING, INC.

RECEIVED

ADDENDUM TO
SUPPLEMENTAL DRILLING DATA
MCDONNOLD OPERATING, INC.

JUN 13 10 49 AM '94
CARLE... ROE
AREA HEL... ERS

Langlie Jack Unit #18
1310' FNL, 2630' FEL, Sec. 20, T-24-S, R-37-E
Lea County, New Mexico

CEMENTING PROGRAM:

1. Surface Casing - 275 sxs Premium Plus, 2% CaCl₂, 1/4# per sack of flow seal.
2. Production Casing - 600 sxs Halad light, 6# salt, 1/4# flow seal per sack. Tail in w/275 sxs Premium Plus w/.5% Halad 9.

SURFACE USE PLAN
FOR
DRILLING, COMPLETING AND PRODUCTION

MCDONNOLD OPERATING, INC.

Well #18 Langlie Jack Unit
1310' FNL, 2630' FEL, Sec. 20, T-24-S, R-37-E
Lea County, New Mexico

LOCATED: 6.38 air miles Northeast of Jal, NM

FEDERAL LEASE NUMBERS: LC-032326(A) issued 12/1/57
LC-033575 issued 2/1/68
NM-037667 issued 7/1/57

RECORD LESSEE: McDonnold Operating, Inc.

OPERATOR'S AUTHORITY: Lessee

BOND COVERGE: Statewide Bond

ACRES IN LEASE: 680

SURFACE OWNERSHIP: Henry H. Harrison

SURFACE GRAZING LEASE: J. T. Crawford
Drawer T
Jal, NM 88252

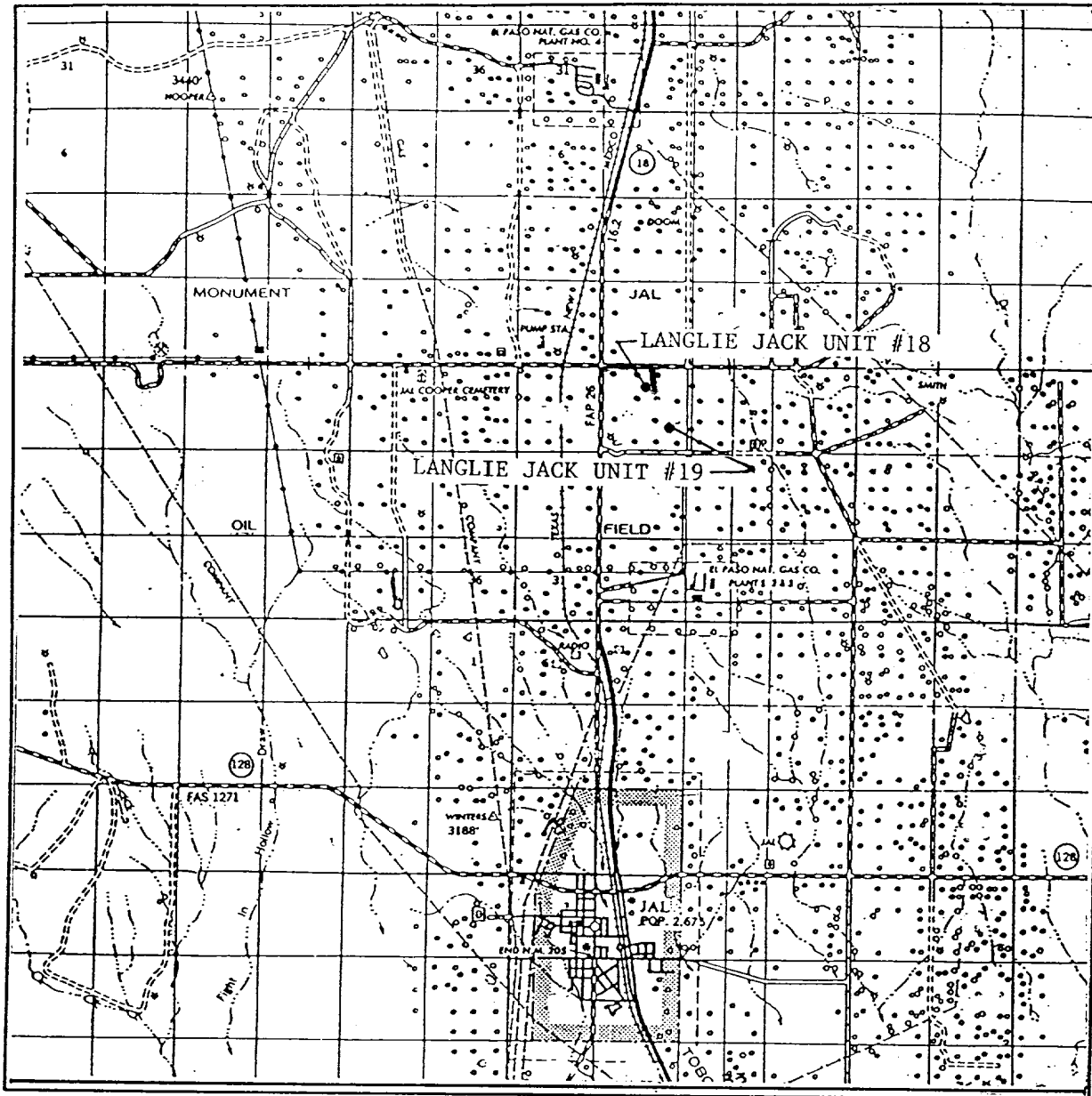
WELL SPACING: 20 acre spacing

POOL: Langlie Mattix Seven Rivers Queen
Grayburg

EXHIBITS:

- A. Portion of Lea County Road Map
- B. Topo Location Verification Map
- C. Lease Map
- D. Sketch of Well Layout
- E. Surface Agreement
- F. Sketch BOP

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 24 S RGE. 37 E

SURVEY N.M.P.M.

COUNTY LEA STATE N.M.

DESCRIPTION 1330' FSL & 1460' FEL
1310' FNL & 2630' FEL

ELEVATION 3258'
3275'

OPERATOR McDONNOLD OPERATING INC.

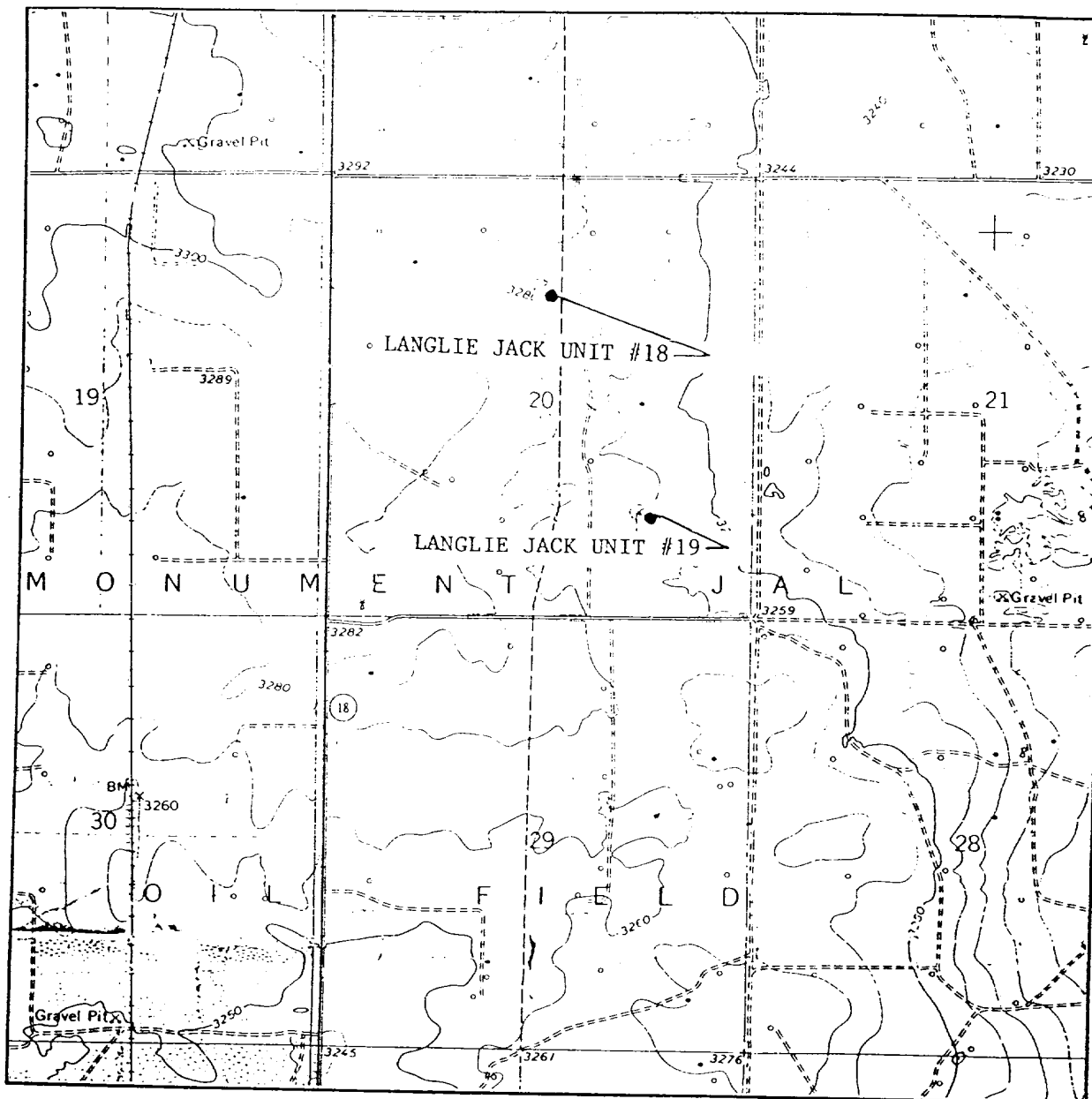
LEASE LANGLEIE JACK UNIT

County Road
LEASE Road
Proposed Road

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

SUPPLEMENTAL EXHIBIT "A"
LEA COUNTY ROAD MAP

MCDONNOLD OPERATING, INC.
WELL #18 LANGLEIE JACK UNIT
1310' FNL, 2630' FEL, SEC 20-24S-37E
LEA COUNTY, NEW MEXICO



SCALE: 1" = 2000'

CONTOUR INTERVAL 10'

SEC. 20 TWP. 24 S RGE. 37 E

SURVEY N.M.P.M.

COUNTY LEA STATE N.M.

DESCRIPTION 1330' FSL & 1460' FEL
1310' FNL & 2630' FEL

ELEVATION 3258'
3275'

OPERATOR McDONNOLD OPERATING INC.

LEASE LANGLIE JACK UNIT

U.S.G.S. TOPOGRAPHIC MAP

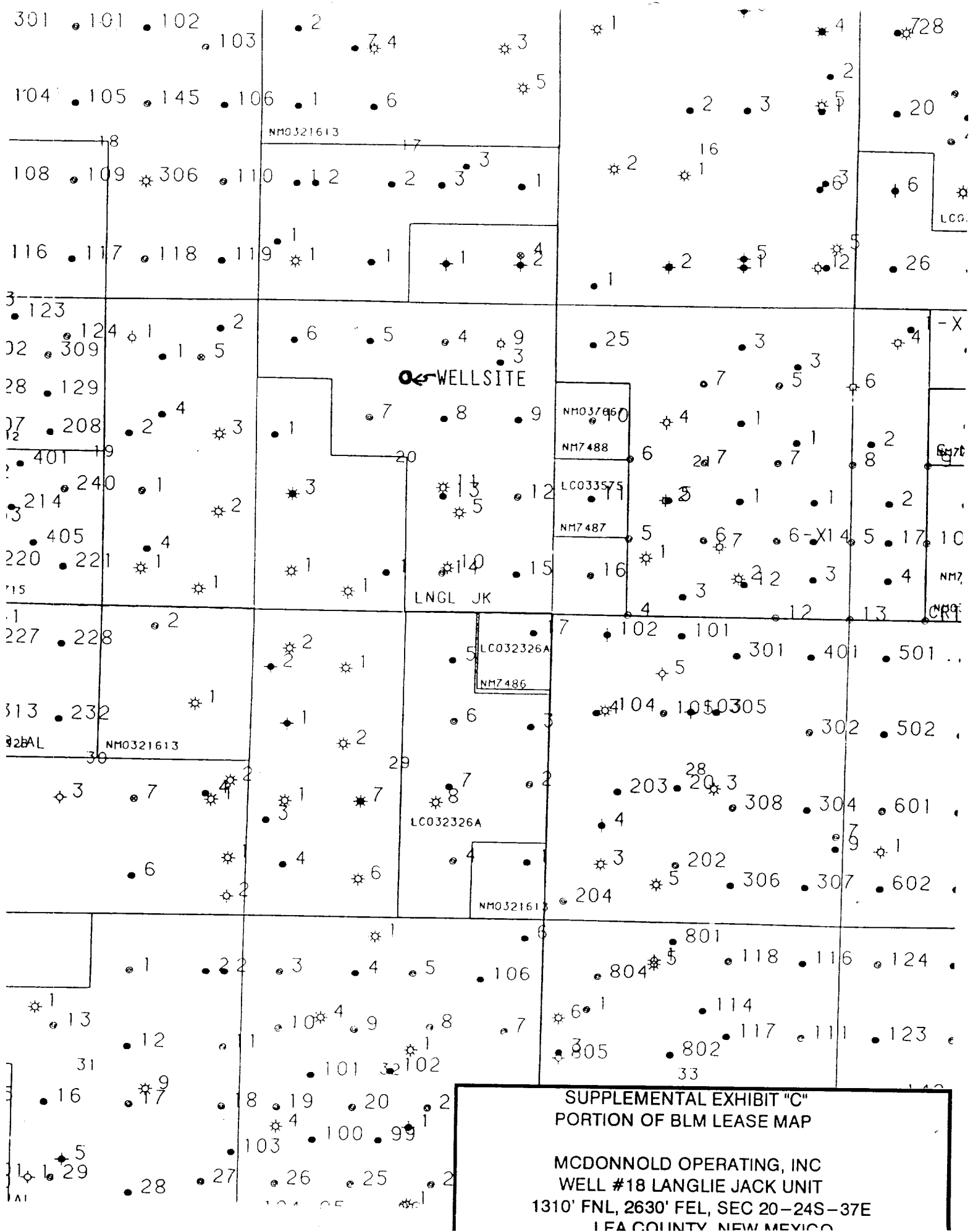
JAL N.W., N.M.

County Road
Lease Road
Proposed Road

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

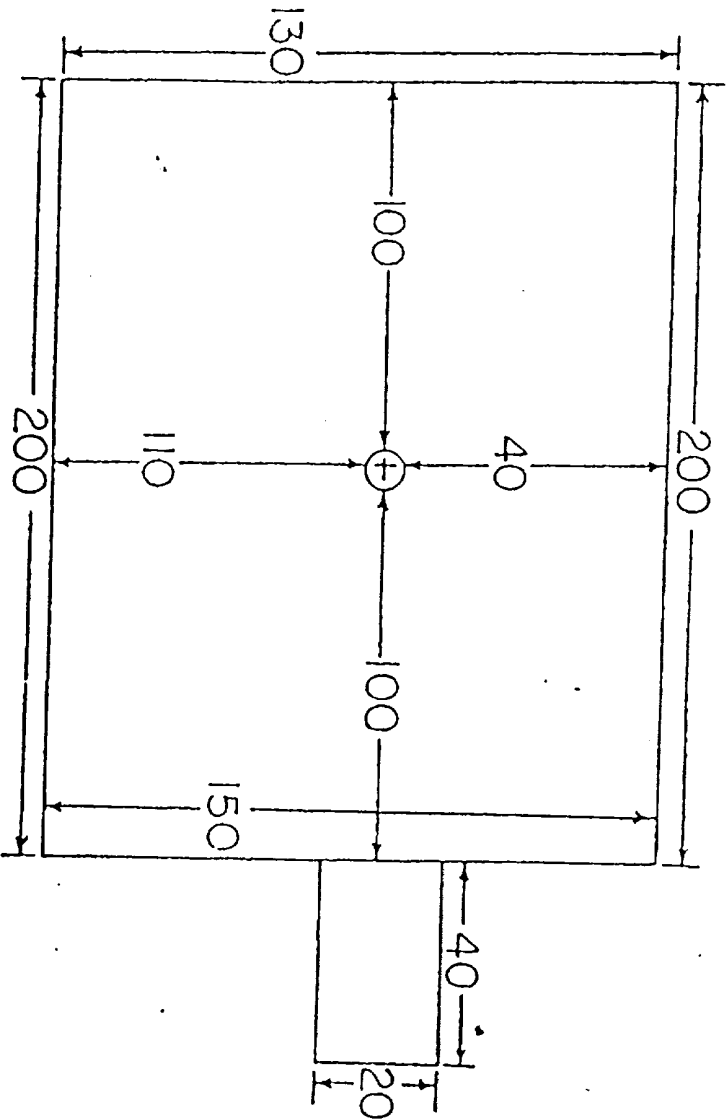
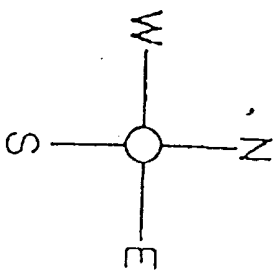
SUPPLEMENTAL EXHIBIT "B"
TOPOGRAPHIC MAP

MCDONNOLD OPERATING, INC.
WELL #18 LANGLIE JACK UNIT
1310' FNL, 2630' FEL, SEC 20-24S-37E
LEA COUNTY, NEW MEXICO



SUPPLEMENTAL EXHIBIT "D"
SKETCH OF WELL LAYOUT

MCDONNOLD OPERATING, INC.
WELL #18 LANGLEIE JACK UNIT
1310' FNL, 2630' FEL, SEC 20-24S-37E
LEA COUNTY, NEW MEXICO

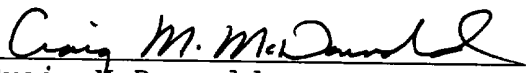


SURFACE AGREEMENT FOR - SEC. 20, T-24-S, R-37-E

Records show that the above-described tract of land is owned as follows:

Surface:	Henry H. Harrison J. T. Crawford, Leasee
Minerals:	U. S. Government
Oil & Gas Leases:	McDonnold Operating, Inc.
Designation of Operator:	N/A

An Agreement has been reached with the private surface owner as to the requirements for the protection of surface resources and reclamation of disturbed areas and/or damages in lieu thereof.

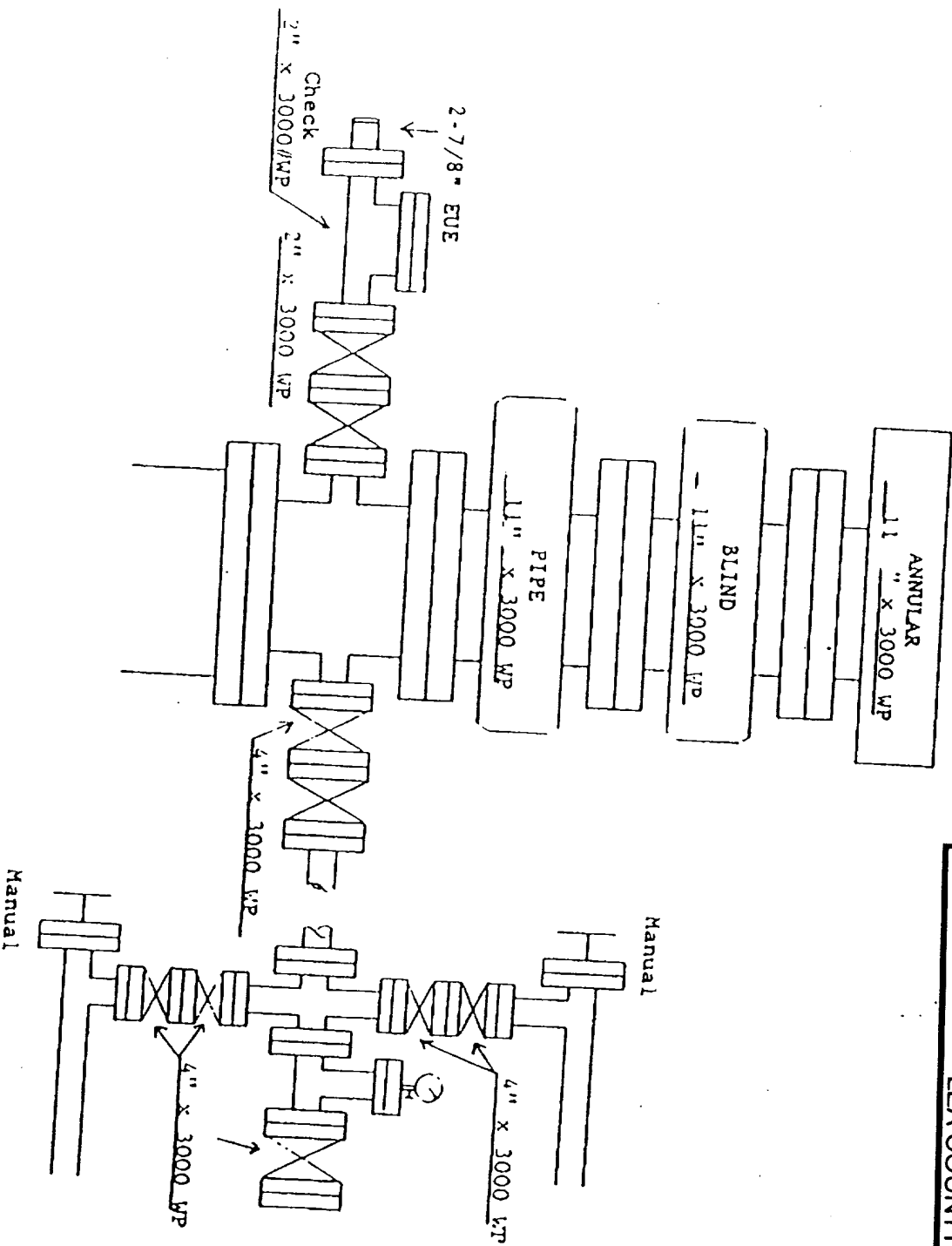

Craig McDonnold
MCDONNOLD OPERATING, INC.

SUPPLEMENTAL EXHIBIT "E"
SURFACE AGREEMENT

MCDONNOLD OPERATING, INC.
WELL #18 LANGLEIE JACK UNIT
1310' FNL, 2630' FEL, SEC 20-24S-37E
LEA COUNTY, NEW MEXICO

SUPPLEMENTAL EXHIBIT "F"
BOP & CHOKE MANIFOLD
3000 PSI WORKING PRESSURE SYSTEM

MCDONNOLD OPERATING, INC.
WELL #18 LANGLE JACK UNIT
1310' FNL, 2630' FEL, SEC 20-24S-37E
LEA COUNTY, NEW MEXICO



I Paul Cross talked with Gary Buckley
at R.D.O. he confirmed that McDonald
Operating Co. is operator of Langlie
Just Wd 8-7-20-94

Paul Cross
BLK