

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☒GAS WELL ☐OTHER ☐

JUL 28 1983

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

DINERO OPERATING COMPANY ✓

O. C. D.

3. ADDRESS OF OPERATOR

P. O. DRAWER 10505, MIDLAND, TEXAS 79702

ARTESIA, OFFICE

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

At surface

660' from North line and 660' from West line.

At proposed prod. zone

660' from North line and 660' from West line. ut. I

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

Carlsbad, New Mexico 6 miles NorthWest from well.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

Amoco No. 1
1650' FSL &
1980' FEL.

19. PROPOSED DEPTH

3,800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3,071.5 G.L.

22. APPROX. DATE WORK WILL START*

on/or before 7/31/83

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11	8 5/8	24#	400'	160sx. CL. C. 2% CC CIRCULATE
7 7/8	4 1/2	10.50# STC	3800'	935sx. CL.C. 2% G CIRCULATE
				50/50 poz mix

MUD PROGRAM-----SEE EXHIBIT "D"

CEMENT PROGRAM----SEE BELOW:

8 5/8 casing----160 sacks Class C. 2% CC.--circulate

4 1/2 casing----935 sacks 50/50 poz mix, Class C., 2% gel, 5# salt, .5% CFR

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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.

24.

SIGNED

Lavada Nerman

TITLE Production Supervisor

DATE July 5, 1983

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

A. A. Lopez

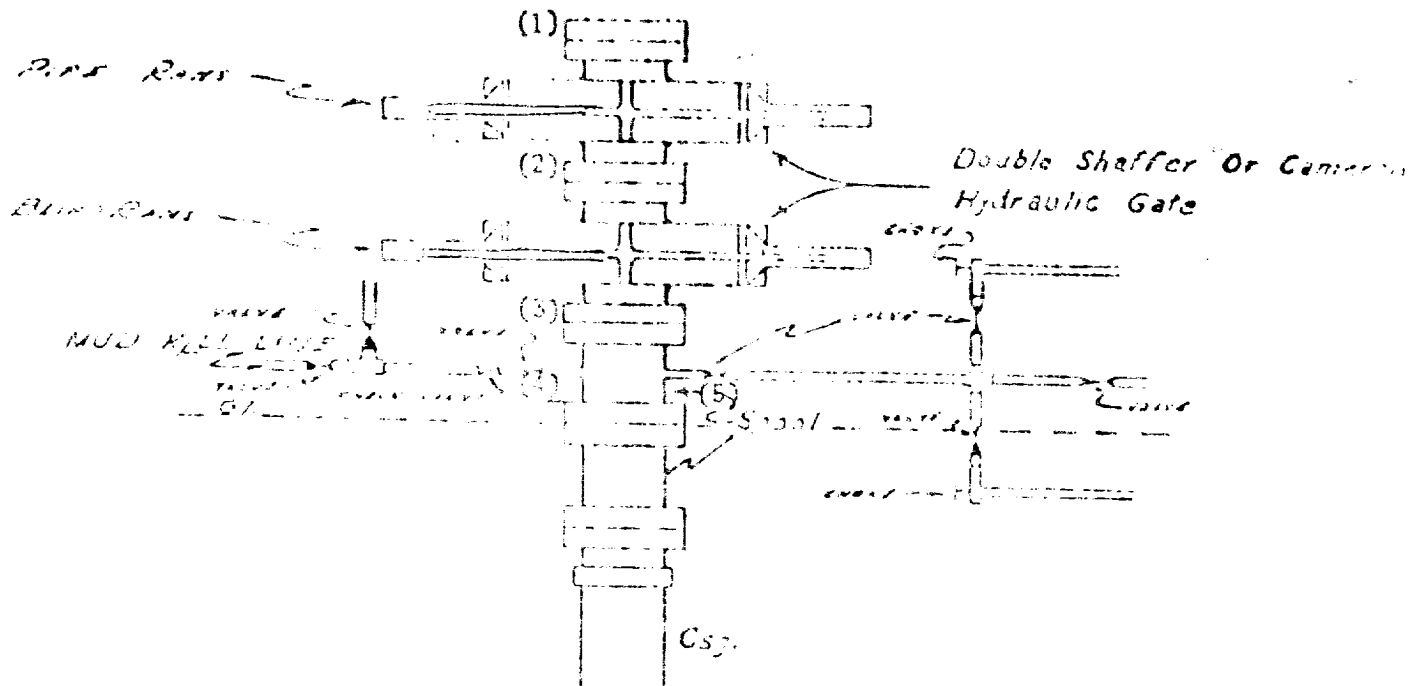
TITLE

DATE

7/27/83

CONDITIONS OF APPROVAL, IF ANY:

X-PERT DRILLING CORPORATION BLOW-OUT PREVENTER



NOTE:

MANUAL AND HYDRAULIC CONTROLS WITH
CLOSING UNIT NO LESS THAN 75' FROM
WELL HEAD. REMOTE CONTROLS ON RIG
FLOOR.

(1) 10"-3,000#

(2) 10"-3,000#

(3) 10"-3,000#

(4)&(5) Values 3,000#

DINERO OPERATING COMPANY

APPLICATION FOR DRILLING
DINERO OPERATING COMPANY
AMOCO FEDERAL "AE" NO. 2 WELL
660' FNL, and 660' FWL, GL. 3071.5'
Section 20 Eddy County, New Mexico
T-22-S, R-28-E

In conjunction with Form 9-331C, Application for Permit to Drill subject well, DINERO OPERATING COMPANY submits the following ten items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation is Quarternary
2. The estimated tops of geologic markers are as follows:

Anhydrite	350'
Yates	450'
B/Salt	1995'
Queen	2140'
Delaware Lime	2400'
Delaware Sand	2460'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: Approximately 100'
Oil or gas:

Delaware---approximately 2400' to
T. D. of 3800'.

4. Proposed Casing Program: See Form 9-331C

5. Pressure Control Equipment: ~~None~~ *Exhibit E*

6. Mud Program: See Exhibit-D

7. Auxiliary Equipment: None

8. Testing, Logging and Coring Programs:

Well will be tested only if valid shows of oil & or gas are present.

Electric logs will be run from total depth to the surface casing.

No cores will be taken.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated starting date: As soon as possible, on or before July 30, 1983.

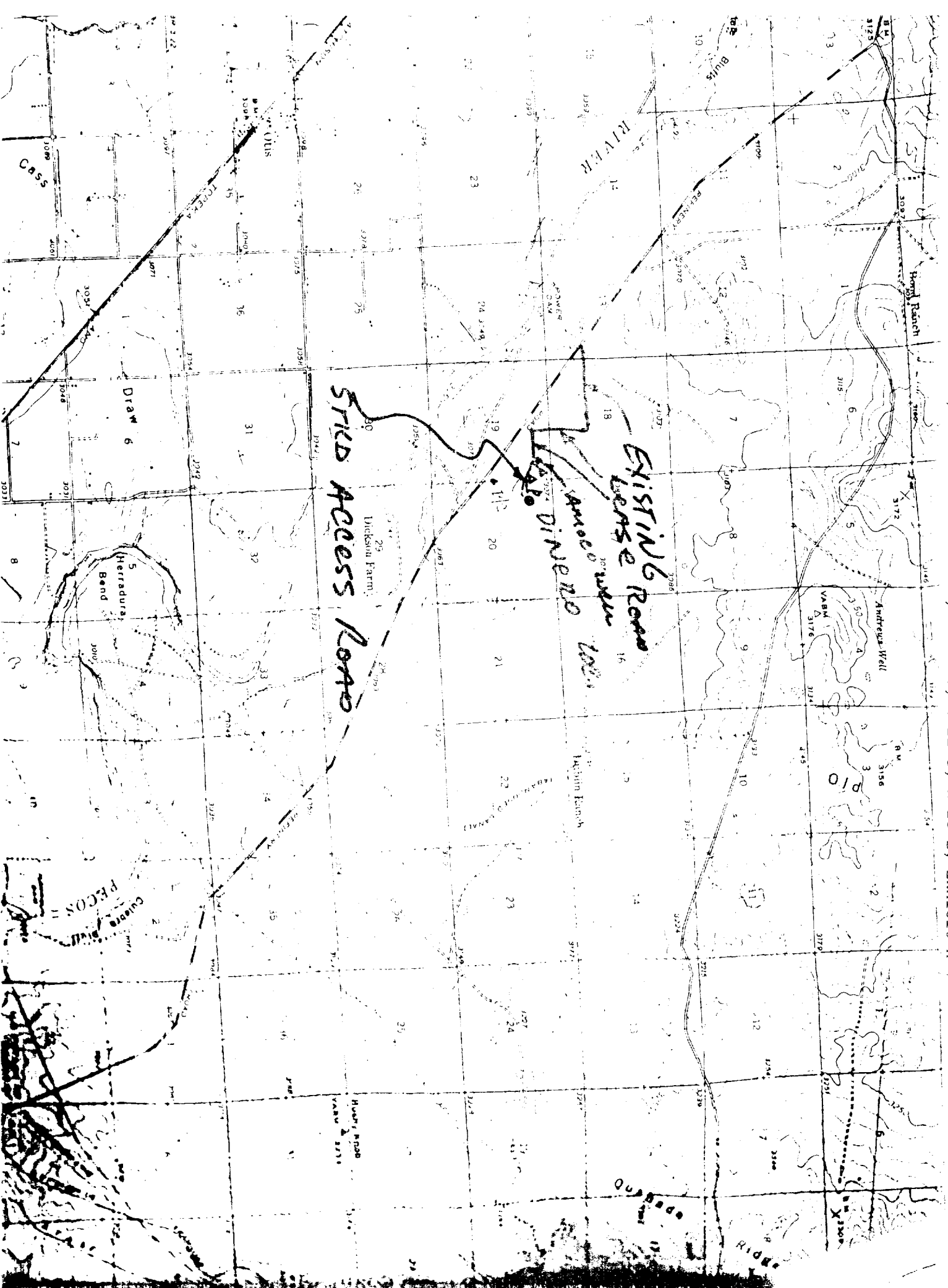
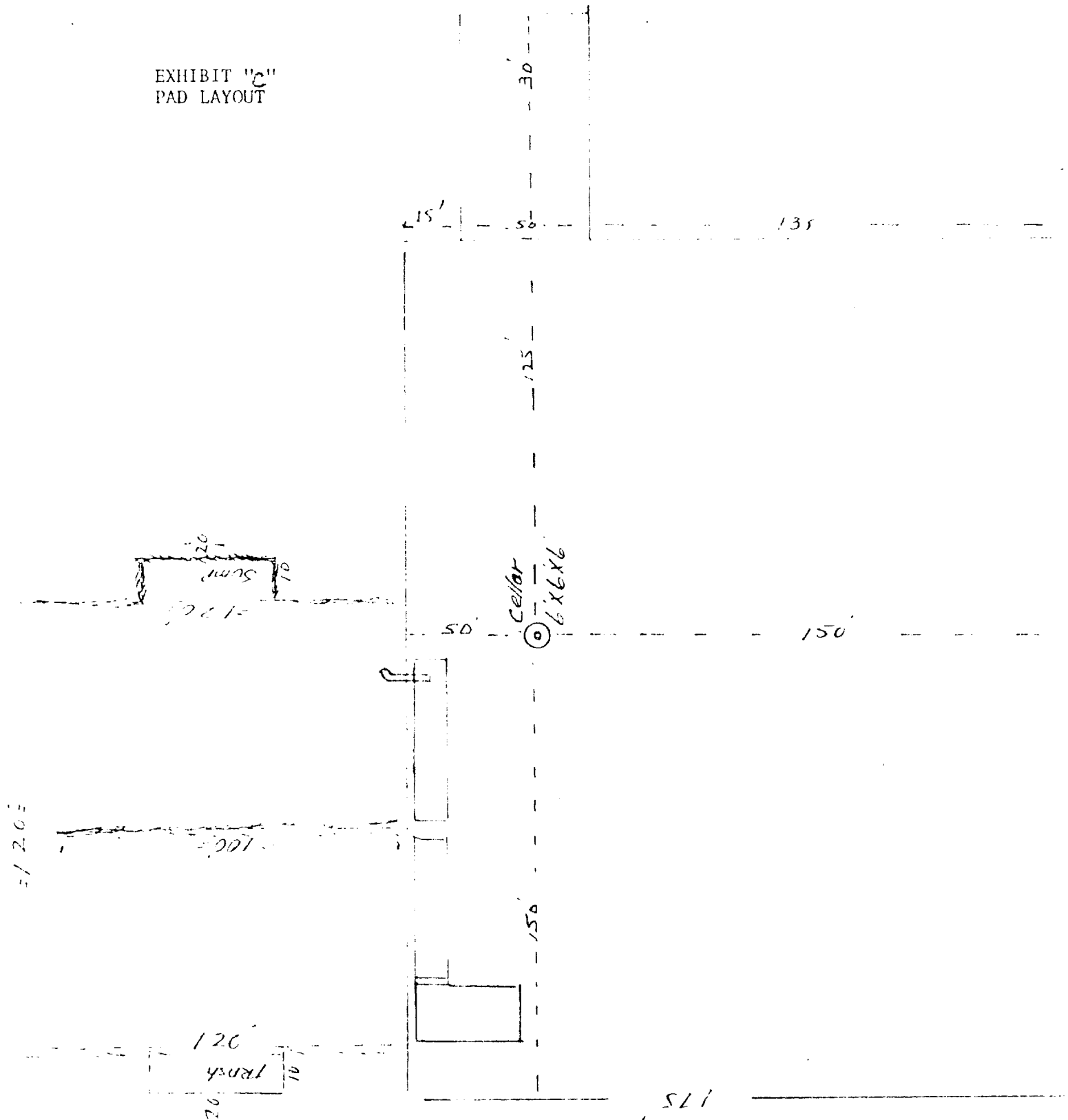


EXHIBIT "C"
PAD LAYOUT





Kiowa Chemical & Mud Co.

Suggested Drilling Fluids Program

DINERO OPERATING COMPANY
AMINOIL FEDERAL AE #2
SECTION 20, T-22-S, R-28-E
EDDY COUNTY, NEW MEXICO

PROPOSED DEPTH: 4000'

SUGGESTED CASING: 8-5/8" @ 400'
5-1/2" @ 4000'

FORMATION TOPS

Anhydrite	-	350'	±
Yates	-	410'	±
B/Salt	-	1995'	±
Queen	-	2140'	±
Delaware Lime-		2400'	±
Delaware Sand-		2460'	±

<u>INTERVAL</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>FILTRATE</u>	<u>PH</u>
0 - 400'	8.4- 8.9	32-36	No Control	10.0-11.0
400 -3500'	9.2-10.2	28	No Control	10.0-11.0
3500-4000'	9.5-10.2	35-40	±20 cc	10.0-11.0



Kiowa Chemical & Mud Co.

June 29, 1983

Mrs. Lavanda Norman
DINERO OPERATING, INC.
Drawer 10505
Midland, Tx 79702

Dear Mrs. Norman:

Enclosed please find Kiowa Chemical & Mud Company's recommendations for your Aminoil Federal AE #2 to be drilled in Section 20, T-22-S, R-28-E, Eddy County, New Mexico.

We recommend a Salt Water Gel/Starch system from mud up depth, 3500', to total depth. This type of system will allow a good clean hole for running logs and/or casing. There is a possibility of lost circulation from 1500' to 2600'. This should be combated by viscous LCM pills.

Our estimated drilling fluids cost for your well is \$4000.00, based upon 9 days of actual drilling with no major hole problems encountered. This cost is with 2-3 viscous LCM pills figured in.

Should you have any further questions regarding this program, or if we may be of further assistance to you, please let us know.

Sincerely,

Kiowa Chemical & Mud Co.

A handwritten signature in black ink, reading "Scott Dudenhoefter". The signature is written in a cursive, flowing style.

Scott Dudenhoefter
Engineering Manager.

SD:kh

enc

CASING DESIGN

DEPTH

1,000

2,000

3,000

4,000

5,000

6,000

7,000

8,000

9,000

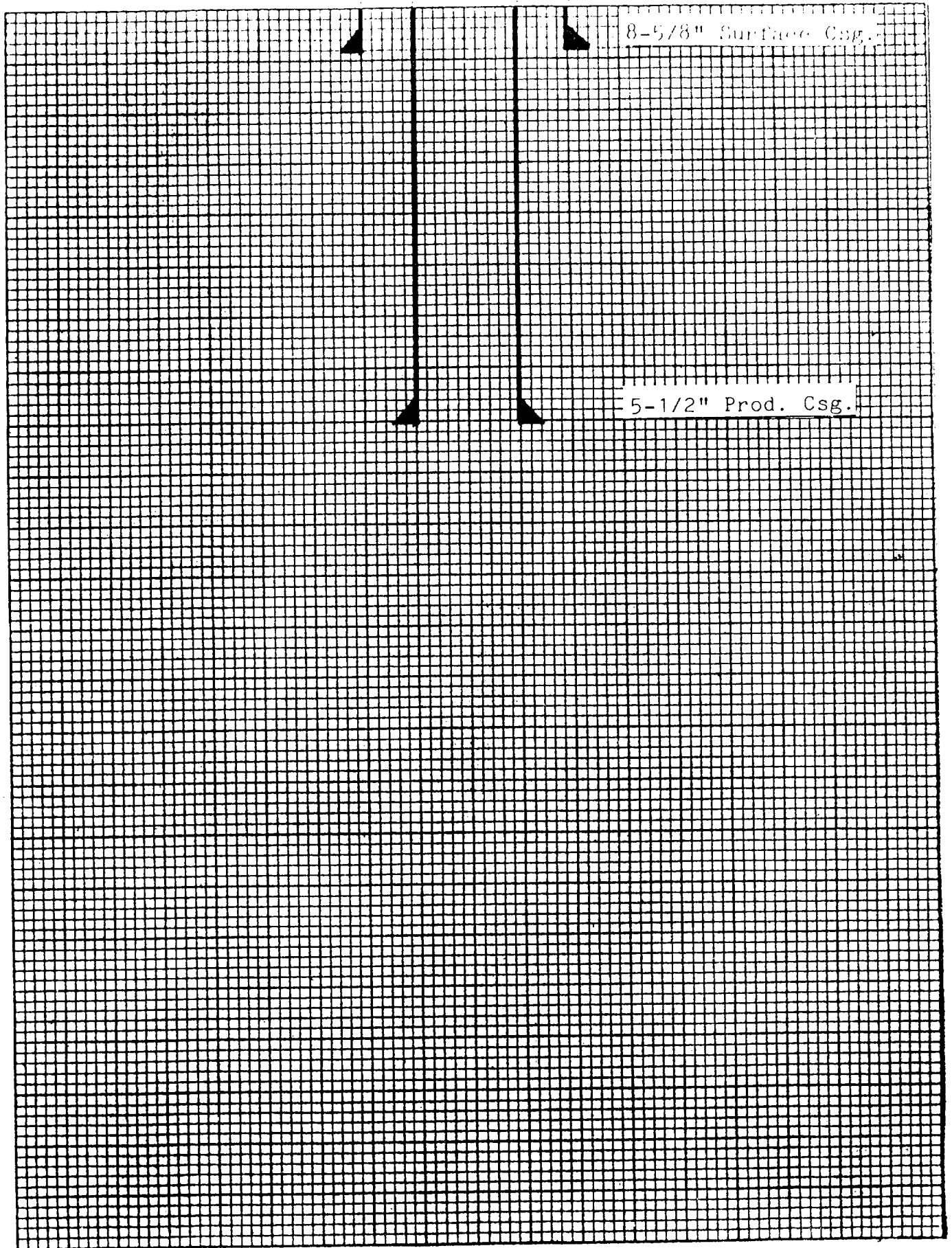
10,000

11,000

12,000

8-5/8" Surface Csg.

5-1/2" Prod. Csg.



RECOMMENDATIONS

<u>INTERVAL</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>FILTRATE</u>	<u>PH</u>
0 - 400'	8.4- 8.9	32-36	No Control	10.0-11.0

Spud in with fresh water using Lime to obtain a 10-11 pH. Use Fresh Water Gel as needed to obtain the necessary viscosity to clean the hole. Use Paper to control seepage and viscous LCM pills (Multiseal, Paper, Cottonseed Hulls) for severe losses.

<u>INTERVAL</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>FILTRATE</u>	<u>PH</u>
400 -3500'	9.2-10.2	28	No Control	10.0-11.0

Drill out of Surface with controlled Brine water, while circulating the reserve pits to control the Red Bed formation. After drilling Red Bed formation, increase the weight to 10 lbs./gal. in order to minimize washouts through the Salt section. Add Lime to control pH at 10-11. There is a possibility of losing circulation during this interval. Use Paper to combat seepage and viscous LCM pills for more severe losses. Sweep the hole with Salt Water Gel sweeps to ensure a clean hole. Discontinue the additions of Lime 24-48 hours prior to reaching mud up depth.

<u>INTERVAL</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>FILTRATE</u>	<u>PH</u>
3500-4000'	9.5-10.2	35-40	+20 cc	10.0-11.0

Return to the working pits and mud up using Salt Water Gel for viscosity of 35-40 sec./qt. Add Starch for water loss of +20 cc Use Caustic Soda to maintain a 10-11 pH. Add Paper as needed to control seepage.