

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MAIL CONS. COMMISSION
Drawer DD
Artesia, NM 8821030-015-23939
5. LEASE DESIGNATION AND SERIAL NO.
NM 34246CLSF
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

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Amoco Production Company

3. ADDRESS OF OPERATOR

P. O. Box 68, Hobbs, NM

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

At surface

660' FSL x 1980' FWL Sec 20

At proposed prod. zone (Unit N SE/4, SW/4)

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SEP 25 1981

O. C. D.
ARTESIA, OFFICE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal CM Com

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Happy Valley Morrow

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

20-22-26 44-N

12. COUNTY OR PARISH

Eddy

13. STATE

NM

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

7 MI. Southwest of Carlsbad

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

11,500

20. ROTARY OR CABLE TOOLS

Rotary

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

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48#	700	circ
12-1/2	9-5/8	36#	2900	circ
8-3/4	5-1/2	20# 17#	11600	cmt to 500' above Bone Spring (App. 4495)

Propose to drill and equip well in the Morrow Formation. After reaching TD, logs will be run and evaluated. Perforate and stimulate as necessary in attempting commercial production.

Mud Program: 0-2900 Native mud and fresh water.

2900-TD Commercial mud and brine with minimum properties for safe hole conditions. Will raise viscosity and reduce water loss prior to Morrow penetration. Archaeological Survey attached. Gas is not dedicated. BOP program attached.

Gas is dedicated.

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SEP 16 1981OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICOPosted 10-1
API + NL Book
10-2-81

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 Mark Randolph TITLE Asst. Admin. Analyst DATE 9-9-81

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

APPROVED

(O. & S.) GEORGE H. STEWART

CONDITIONS OF APPROVAL

SEP 23 1981

FOR

0 + 6 USGS, JAMES A. GILHAM 1-MDR 1-W Stafford, Hou

DISTRICT SUPERVISOR

*See Instructions On Reverse Side

NE MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator AMOCO PRODUCTION COMPANY			Lease FEDERAL C.N. COM.		Well No. 1
Unit Letter N	Section 20	Township 22 South	Range 26 East	County Eddy	
Actual Footage Location of Well: 2080 feet from the West line and 660 feet from the South line					
Ground Level Elev. 3368.6	Producing Formation Morrow		Pool Happy Valley - Morrow	Dedicated Acreage: 320 Acres	

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 ☐ No If answer is "yes," type of consolidation Communitization

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.

WORKING INTEREST

Amoco	94.2708
Felmont Oil Corp.	4.6875
Jade Energy	1.0417
	<u>100.00%</u>

Royalty:
United States Government

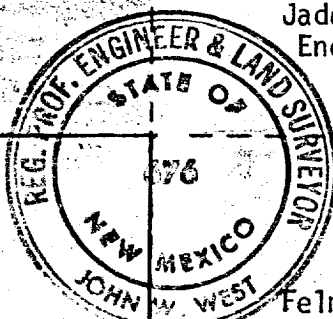
Felmont Oil Felmont Oil

Jade Energy

Amoco
NM-34246

2080'

660'



Felmont
Jade Energy

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Greg Mitchell
Position Admin. Analyst

Company
Amoco Production Company

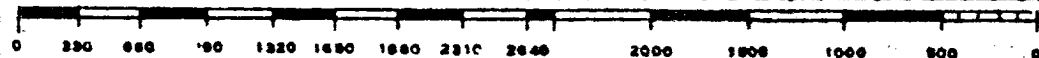
Date
9-21-81

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 knowledge and belief.

Date Surveyed
9/17/81

Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No. JOHN W. WEST 376
PATRICK A. ROMERO 6663
Ronald J. Eldon 3239



NM OIL CONS. COMMISSION

Drawer DD

Artesia, NM 88210

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES DEPARTMENT OF THE INTERIOR 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 Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐

2. NAME OF OPERATOR
Amoco Production Company ✓

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 660' FSL X 2080' FWL, Unit N
AT TOP PROD. INTERVAL: Sec. 20, T-22-S, R-26-E
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) Name change ☐

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐
☐
☐

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SEP 22 1981

OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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SEP 25 1981
O. C. D.
ARTESIA, OFFICE

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.)*

Name changed from Federal CM Com. #1 to Federal CN Com. #1. Location moved from 660' FSL X 1980' FWL to 660' FSL X 2080' FWL.

0+4-USGS, R 1-Hou 1-GPM 1-Susp

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED APPROVED TITLE Admin. Analyst DATE 9-21-81

(Orig. & 1) GEORGE H. STEWART (This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS _____ ANY:

FOR
JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions on Reverse Side

N MEXICO OIL CONSERVATION COMMISS. 4
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator AMOCO PRODUCTION COMPANY			Lease FEDERAL G.M. COM.		Well No. 1
Unit Letter N	Section 20	Township 22 South	Range 26 East	County Eddy	
Actual Postage Location of Well:					
660	feet from the South	line and 1980	feet from the West	line	
Ground Level Elev. 3372.6	Producing Formation Morrow	Pool Happy Valley - Morrow	Dedicated Acreage: 320		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 ☐ No If answer is "yes" type of consolidation Communitization

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.

<p align="center">WORKING INTEREST</p> <table style="width:100%;"> <tr> <td>Amoco</td> <td align="right">94.2708</td> </tr> <tr> <td>Felmont Oil Corp.</td> <td align="right">4.6875</td> </tr> <tr> <td>Jade Energy</td> <td align="right">1.0417</td> </tr> <tr> <td></td> <td align="right"><u>100.00%</u></td> </tr> </table> <p>Royalty:</p> <p>United States Government</p>	Amoco	94.2708	Felmont Oil Corp.	4.6875	Jade Energy	1.0417		<u>100.00%</u>	<p align="center">CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Name <i>Mark Randolph</i></p> <p>Position Assist. Admin. Analyst</p> <p>Company Amoco Production Company</p> <p>Date 9-3-81</p> <p>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 knowledge and belief.</p> <p>Date Surveyed 8/31/81</p> <p>Registered Professional Engineer and/or Land Surveyor <i>John W. West</i></p> <p>Certificate No. JOHN W. WEST 879 PATRICK A. ROMERO 8858 Ronald J. Egan 3239</p>
Amoco	94.2708								
Felmont Oil Corp.	4.6875								
Jade Energy	1.0417								
	<u>100.00%</u>								

Amoco Production Company

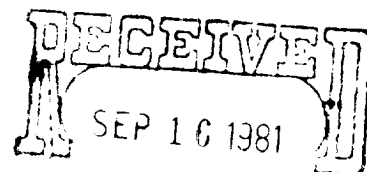
Attachment to "Application for Permit to Drill", Form 9-331 C

Federal CM Com Well No. 1

650' FSL X 1980' FWL

Section 20 T-22-S R-26-E

Eddy County, New Mexico



1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation.

Quaternary

4. Type of drilling tools and associated equipment to be utilized.

See Form 9-331 C

5. Proposed drilling depth.

See Form 9-331 C

6. Estimated tops of important geologic markers.

Bell Canyon	1815'	Bone Springs	4995'	Atoka	10485'
Cherry Canyon	2555'	Wolfcamp	8510'	M. Morrow	11115'
Brush Canyon	3455'	Strawn	10015'	Burnett	11505'

7. Estimated depths at which anticipated water, oil, gas or other mineral-bearing formations are expected to be encountered.

Bone Springs	4995'	Strawn	10015'	M. Morrow	11115'
Wolfcamp	8510'	Atoka	10485'	Burnett	11505'

8. Proposed casing program, including size, grade, and weight of each string and whether it is new or used.

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>New or Used</u>
700'	13 3/8"	48#	H-40	New
2900'	9 5/8"	36#	K-55	New
11600'	5 1/2"	20.17#	N-80	New

9. Proposed cementing program.

13 3/8" Circulate to surface

9 5/8" Circulate to surface

5 1/2" Cement to 500' above Bone Springs (Approx. 4495')

10. Blowout Preventer Program is attached.
11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling, and the quantities and types of mud and weighting material to be maintained.
 - 0-2900 Native mud and fresh water
 - 2900-TD Commercial mud and brine with minimum properties for safe hole conditions. We'll raise viscosity, and reduce water loss prior to Morrow penetration.
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
 - Compensated neutron formation density
 - Dual laterlog micro SFL
13. Any anticipated abnormal pressure or temperatures expected to be encountered or potential hazards, such as hydrogen sulfide gas, along with plans for mitigating such hazards.

None anticipated

14. Anticipated starting date and duration of operation.

10-25-81

12-25-81

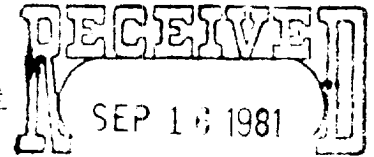
15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.

Request exemptions from the painting stipulations of Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" to paint any tanks, separators, and treaters required for the production of this well, Amoco's standard gray color. If a pumping unit is required for the continued production of this well, it will be painted black with orange safety color coding which conforms with your current painting guidelines.

Amoco Production Company

Proposed Development Plan for Surface Use

Federal 'OH' Com Well No. 1
Section 20-T-22-S R-26-E
Eddy County, New Mexico



1. Existing roads including location of exit from main highway.

Detailed map showing drillsite location in relation to the nearest town and all existing roads within one mile of the wellsite are shown on Exhibit A.

For directions, the traffic sketch attached to Exhibit A

2. Planned access roads.

Approx. 369' of access road will be built

3. Location of existing wells.

All existing well within one mile radius are shown on Exhibit C.

4. Location of tank batteries and flow lines

If the well is commercially productive, the production facilities (i.e. tanks, seperators, & treaters) will be

5. Location and type of water supply.

Fresh & brine water to be hauled by commercial hauler.

6. Source of construction materials.

Caliche will be obtained from a pit located in SW/4 SE/4 Section 20
T-22-S R-26-E.

7. WASTE DISPOSAL

- a. Drill cuttings will be disposed of in the reserve pit.
- b. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.

- c. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Waste material will be contained to prevent scattering by wind prior to ultimate disposal.
- d. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.
- e. Current laws and regulations pertaining to disposal of human waste will be complied with.
- f. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.

8. ANCILLARY FACILITIES-

No camps, airstrips, etc. will be constructed.

9. WELLSITE LAYOUT-

- a. Size of Drilling Pad - 550' x 800' x 6"
- b. Compacted - Caliche
- c. Surfaced - No
- d. 450' square area around wellsite has been cleared by archaeologist.
- e. See Exhibit "D".

10. RESTORATION OF SURFACE-

Producing Well - all pits will be cut, filled, and leveled as soon as practical to original condition with rehabilitation to commence following removal of drilling and completion equipment. Rehabilitation to be completed in 180 days if possible.

Dry Hole - same as above with dry hole marker to be installed and surface reseeded if required.

11. OTHER INFORMATION-

- a. Terrain - Plains
- b. Soil- Light grey calcareous loam
- c. Vegetation- Broom Snakeweed
- d. Surface Use- grazing
- e. Ponds and Streams - None
- f. Water Wells None
- g. Residences and Building - None
- h. Arroyos, Canyons, etc. - None
- i. Well Sign - Posted at drill site
- j. Open Pits - All pits containing liquid or mud will be fenced
- k. Archaeological Resources - None found

12. OPERATOR'S REPRESENTATIVE -

Field personnel responsible for compliance with development plan for surface use is:

J. H. Hankins, Drilling Supervisor
P. O. Box 63
Hobbs, NM 88240
Office Phone: (505) 393-2167

LEASE & WELL NUMBER Federal 'CM' Well No. 1

LOCATION 660' FSL X 1980' FWL Section 20 T-22-S R-36-E Eddy County, NM

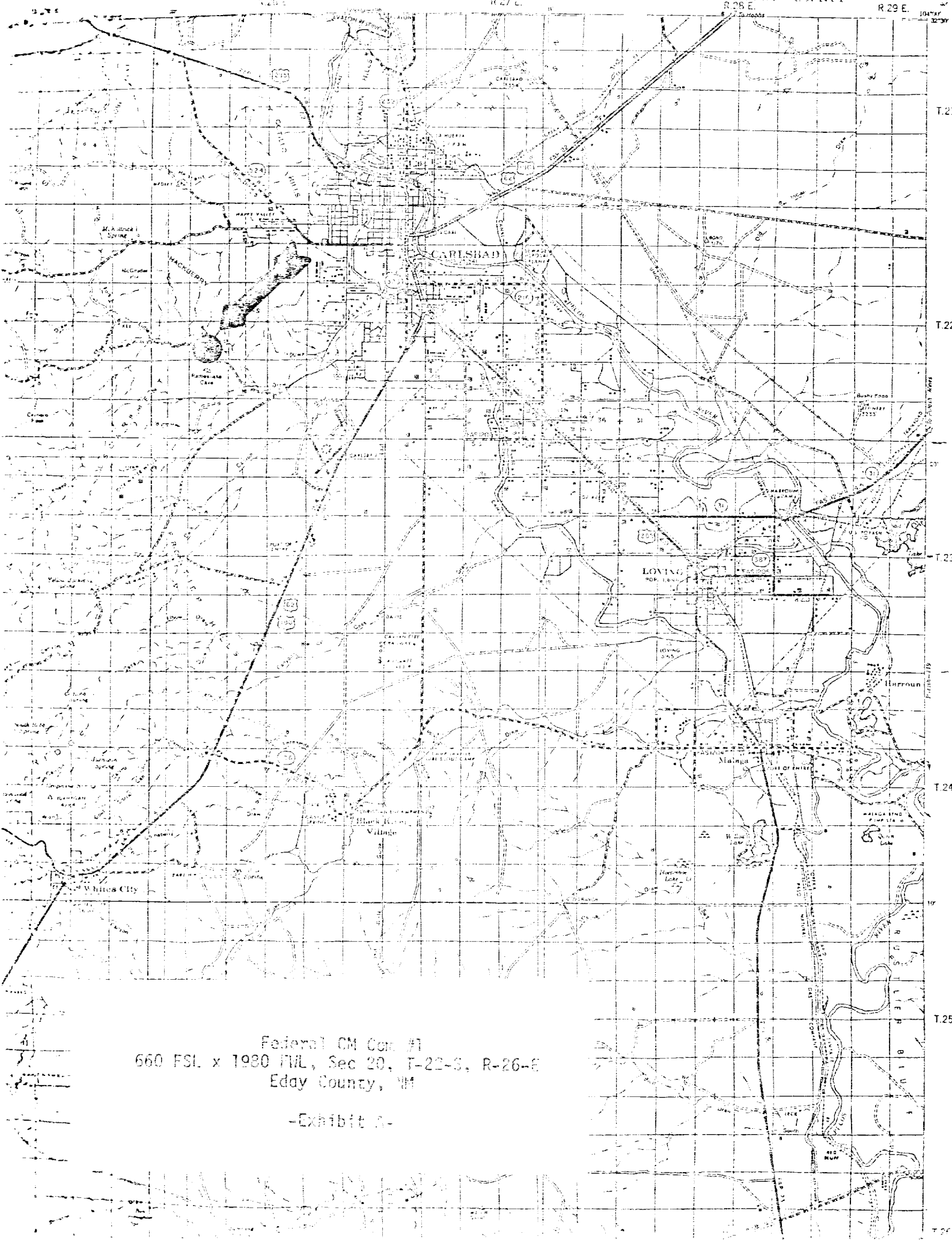
Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

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 this 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 AMOCO PRODUCTION COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-14-81

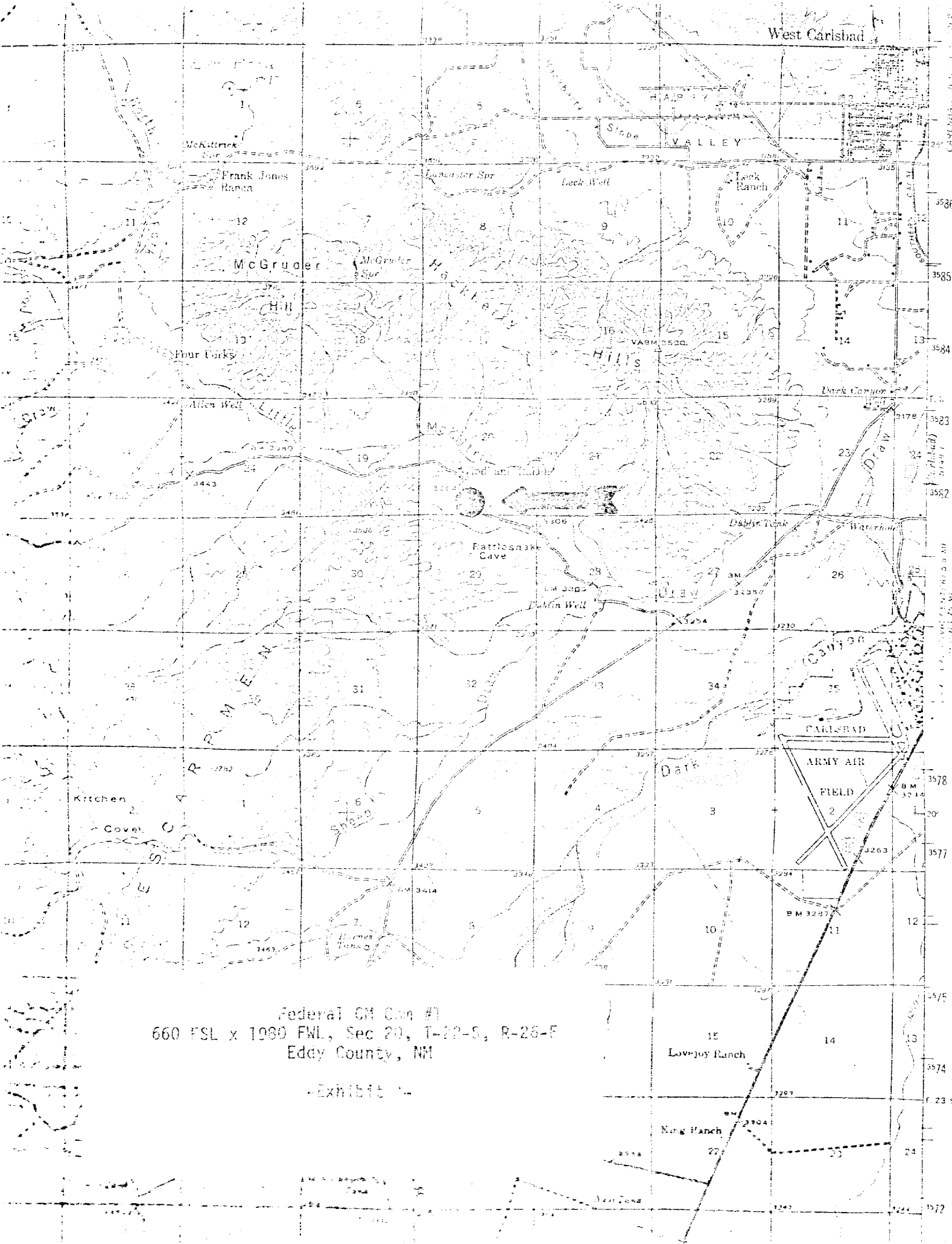
DATE

Jeff Hamilton Drilling Supervisor
NAME AND TITLE



Federal CM Com #1
660 FSL x 1980 IWL, Sec 20, T-22-S, R-26-E
Eddy County, NM

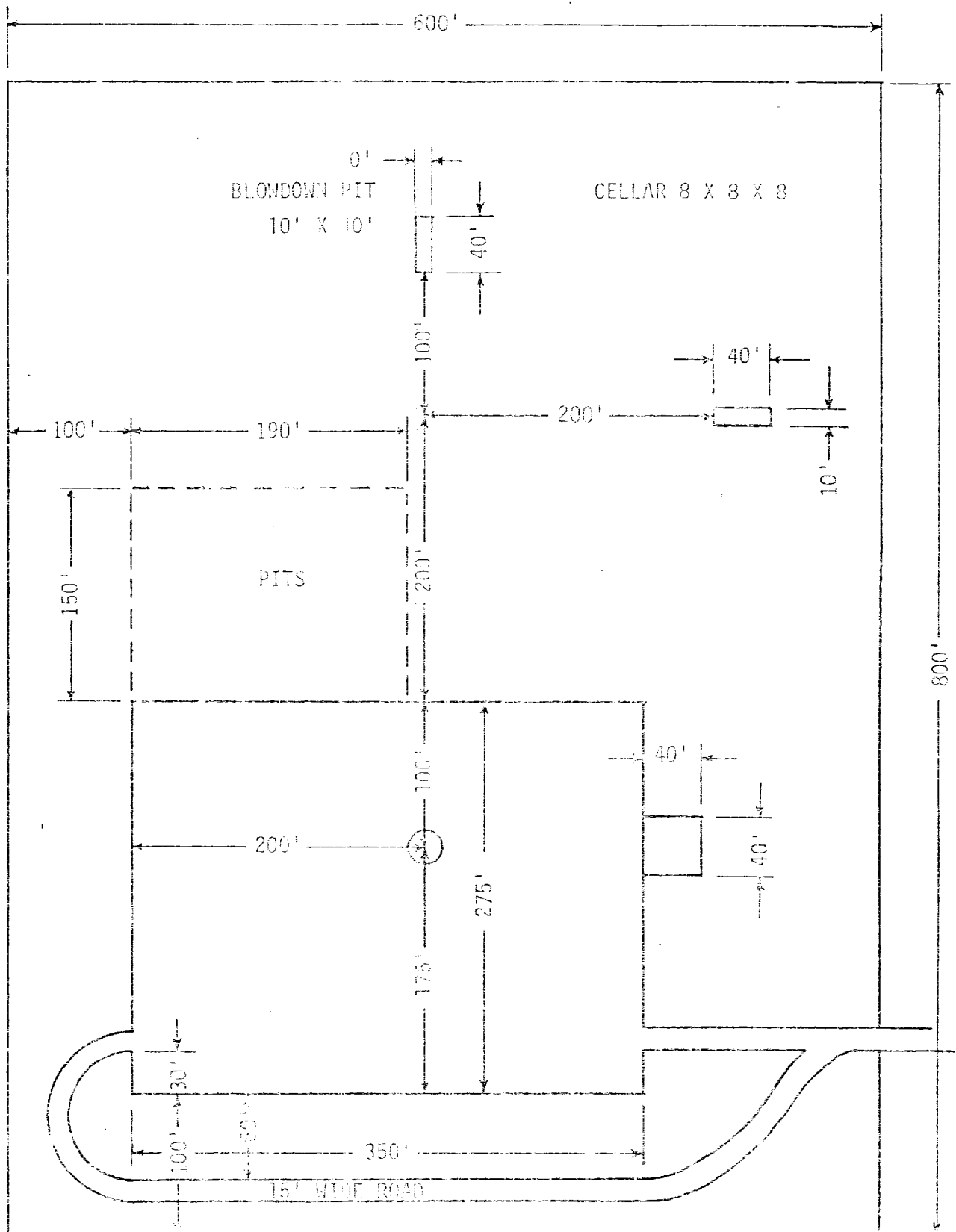
-Exhibit A-



Federal CM Con #1
660 FSL x 1080 FWL, Sec 20, T-22-S, R-26-E
Eddy County, NM

-Exhibit -

DRILL SITE DIMENSIONS



Federal CM Com #1
 660 FSL : 1980 FHL, Sec 20, T-22-S, R-26-E
 Eddy County, NM

Exhibit D

1. BOP'S TO BE FLUID OPERATED.
2. BOP'S AND ALL FITTINGS MUST BE IN GOOD CONDITION AND RATED AT 3000 PSI W.P. MINIMUM.
3. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AT LEAST AS LARGE AS CASING SIZE BEING DRILLED THROUGH.
4. NIPPLE ABOVE BOP'S SHALL BE SAME SIZE AS LAST CASING SET.
5. UPPER KELLY COCK IS REQUIRED AND SHALL BE 3000# W.P. MINIMUM.
6. T. I. W. OR COMPARABLE SAFETY VALVE SHALL BE AVAILABLE ON RIG FLOOR WITH CONNECTION OR TUBS TO FIT ANY TOOL JOINT IN THE STRING. VALVE TO BE FULL BORE 5000# MIN.
7. VALVE NEXT TO SPOOL SHALL BE 4". OTHER EQUIPMENT MAY BE 3" OR 4". ALL CHOKE MANIFOLD EQUIPMENT SHALL BE FLANGED. FLOW LINE FROM MANIFOLD TO BE MINIMUM OF 3" AND STRAIGHT AS POSSIBLE WITH MINIMUM BENDS.
8. FLUID LINES FROM ACCUMULATOR TO BOP'S AND ALL REMOTE CONTROL FLUID LINES SHALL BE STEEL, AND RATED AT OR ABOVE MAXIMUM ACCUMULATOR PRESSURE. LINES SHALL BE ROUTED IN BUNDLES AND ADEQUATELY PROTECTED FROM DAMAGE.
9. USE RAMS IN FOLLOWING POSITIONS:*

	<u>DRILLING</u>	<u>RUNNING CASING</u>
UPPER RAM	DRILL PIPE	CASING
LOWER RAM	BLIND	BLIND

*AMOCO AREA SUPPL. MAY REVERSE LOCATION OF RAMS.

10. CHOKE MANIFOLD, BEYOND SECOND VALVE FROM CROSS MAY BE OPTIONALLY POSITIONED OUTSIDE OF SUBSTRUCTURE.
11. EXTENSIONS AND HAND WHEELS TO BE INSTALLED AND BRACED AT ALL TIMES.
12. TWO INCH (2") LINES AND VALVES ARE PERMITTED ON THE KILL LINE.

NOTE: ALL UNMARKED VALVES MAY BE PLUG OR GATE VALVE, METAL TO METAL SEAL.

