

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

NASSAU RESOURCES, INC.

3. ADDRESS OF OPERATOR

P O BOX 809, Farmington, N.M. 87499

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

At surface

680' FNL - 680' FEL

At proposed prod. zone

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

+19 miles S SW of Bloomfield, N.M.

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 680'

16. NO. OF ACRES IN LEASE

640.0

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320.0

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED, Less than  
OR APPLIED FOR, ON THIS LEASE, FT. 3/4 mile

19. PROPOSED DEPTH

1280'

20. ROTARY OR CABLE TOOLS

Rotary

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

6060' GL

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.  
PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START\*

6-15-90

23.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
8-3/4"	7"	23#	120'
6-1/4"	4-1/2"	9.5#	1280'

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"  
36 cu.ft. circ. to surf.  
204 cu.ft. circ. to surf.

Plan to drill with spud mud to set 120' of surface casing. Will then drill with water and gel-chem. mud to test the Fruitland coal zone at 1280'. Will run DIL-GR-SP and FDC-CNL-GR Caliper logs. If well appears productive, will set 4-1/2" casing at TD, cement in 1 stage, selectively perforate, frac, clean out after frac and complete with 2-3/8" tubing.

Gas is not dedicated.

"Applicant does not warrant that applicant holds legal or equitable rights or title to this lease."

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

Fran Perrin

TITLE Admin. Asst.

DATE 5-17-90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL

TITLE

AREA MANAGER

NSL-2830

CON. DIV.

DIST. 3

\*See Instructions On Reverse Side

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Nassau Resources, Inc.			Lease Cowsaround 21		Well No. 1
Unit Letter A	Section 21	Township 26 North	Range 12 West	County San Juan	

Actual Footage Location of Well:

680 feet from the North line and 680 feet from the East line	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 320.0 Acres
Ground level Elev. 6060			

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc?  
☐ Yes ☐ No 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 interest, has been approved by the Division.

NM 12028 Tenneco Oil Co. 100%		680' 680'
Section 21		

RECEIVED  
AUG 6 1990  
OIL CON. DIV.  
DIST. 3

OPERATOR CERTIFICATION

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

Signature  
*Fran Perrin*  
Printed Name  
Fran Perrin  
Position  
Admin. Asst.  
Company  
Nassau Resources, Inc.  
Date  
5-17-90

SURVEYOR CERTIFICATION

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  
March 7, 1990  
Signature & Seal of Professional Surveyor  
Edgar P. Risenhoover  
NEW MEXICO  
5979  
Certificate No. 5979  
Edgar P. Risenhoover

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



4100

3

5025

PIPELINE

5000

5000

PIPELINE

5024

12

5000

15

S.J. CO. ROAD 7100

14

5200

5175

5228

PIPELINE

Proposed Location

341

5022

22

5025

23

T26N

R12W

GalleBos

Existing Road



NASSAU RESOURCES, INC.  
Cowsaround 21 #1  
Exhibit F

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

July 24, 1990

Nassau Resources, Inc.  
c/o Jerome P. McHugh & Associates  
P.O. Box 809  
Farmington, NM 87499-0809

Attention: Fran Perrin

**RECEIVED**  
JUL 26 1990  
OIL CON. DIV.  
DIST. 3

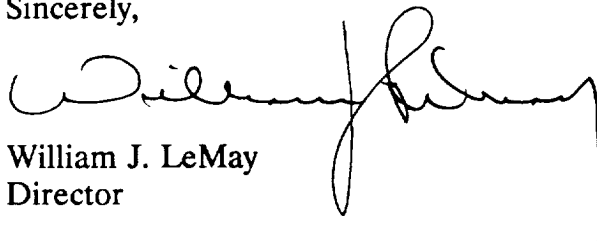
*Administrative Order NSL-2830*

Dear Ms. Perrin:

Reference is made to your application dated May 23, 1990 for a non-standard coal gas well location for your Cowsaround "21" Well No. 1 to be located 680 feet from the North and East lines (Unit A) of Section 21, Township 26 North, Range 12 West, NMPM, Basin Fruitland Coal (Gas) Pool, San Juan County, New Mexico. The N/2 of said Section 21 shall be dedicated to the well forming a standard 320-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of Rule 8 of the Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool as promulgated by Division Order No. R-8768, the above-described unorthodox coal gas well location is hereby approved.

Sincerely,



William J. LeMay  
Director

WJL/MES/ag

cc: Oil Conservation Division - Aztec  
US Bureau of Land Management - Farmington  
Bureau of Indian Affairs - Farmington



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

GARREY CARRUTHERS  
GOVERNOR

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

Date: 6-4-90

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

Re: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL X \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated 5-25-90  
for the NASSAU RESOURCES, INC. COWSPRGROUND 21 #1  
Operator Lease & Well No.

A-21-26N+2W and my recommendations are as follows:  
Unit, S-T-R

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

Ernie Burch



Jerome P. McHugh & Associates  
Operating Affiliate: **Nassau Resources, Inc.**  
P O Box 809, Farmington, NM 87499 0809  
(505) 326 7793 Fax (505) 327-0859

May 23, 1990

New Mexico Oil Conservation Division  
ATTN: Mike Stogner  
P O Box 2088  
Santa Fe, New Mexico 87504

**RECEIVED**  
MAY 25 1990  
OIL CON. DIV  
DIST. 3

RE: Application for Unorthodox Location  
Nassau Resources, Inc. Cowsaround 21 #1  
680' FNL - 680' FEL  
Sec. 21, T26N, R12W, NMPM  
San Juan County, NM

Gentlemen:

Nassau Resources, Inc., hereby requests administrative approval of an unorthodox location for the captioned well based upon surface management agency's requirements.

The northeast quarter of Sec. 21, Township 26 North, Range 12 West, is under the jurisdiction of the Navajo Indian Irrigation Project and a portion of it is designated for their fields, as shown by the attached NIIP map. This well was staked after consultation with Leo Soukup, Project Manager, to have the least impact upon their operations. An on-site inspection has been conducted. There is no standard location for a well in this quarter which is not in a field and it is not considered economically feasible to directional drill to a legal location due to the shallow depth.

All offsetting operators, as shown on the attached lease plat, have been notified of this application. Jerome P. McHugh and Kindermac Partners are operating affiliates with Nassau Resources, Inc. The surface management agency, NIIP, has been notified of this application.

Also attached are copies of the Application for Permit to Drill, surveyor's plat (C-102), and topographic map. I certify that this information is current and correct to the best of my knowledge.

NMOCD - MIKE STOGNER  
Application for Unorthodox Location  
Nassau Resources, Inc. Cowsaround 21 #1

Page 2

Please contact us if anything further is required to complete this application.

Respectfully submitted,

*Fran Perrin*

Fran Perrin  
Admin. Asst.

Attachments

XC: Ernie Busch, NMOCD, Aztec, NM  
Leo Soukup, NIIP (Surface Mgmt. Ag.)  
Amoco Production Co.  
Merrion Oil & Gas Corp.  
M. Richardson Operating Co.  
Pitco Production Co.  
Texaco Producing, Inc.  
Dugan Production Corp.  
Jerome P. McHugh and Kindermac

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I  
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DISTRICT III  
1000 Rio Brazos Rd., Alamo, NM 87410

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Nassau Resources, Inc.			Lease Cowsaround 21		Well No. 1
Unit Letter A	Section 21	Township 26 North	Range 12 West	County San Juan	
Actual Footage Location of Well: 680 feet from the North line and 680 feet from the East line					
Ground level Elev. 6060		Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 320.0 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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☐ Yes ☐ No 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)  
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NM 12028 Tenneco Oil Co. 100%		680' 680'
Section 21		

NASSAU RESOURCES, INC.  
Cowsaround 21 #1  
Appl. for Unorthodox Loc.

**RECEIVED**  
**MAY 25 1990**  
**OIL CON. DIV**  
**DIST. 3**

### OPERATOR CERTIFICATION

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

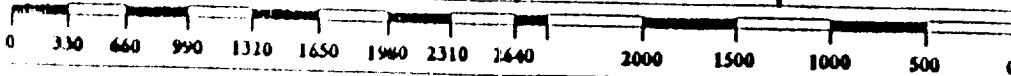
Signature  
*Fran Perrin*  
Printed Name  
Fran Perrin  
Position  
Admin. Asst.  
Company  
Nassau Resources, Inc.  
Date  
5-17-90

### SURVEYOR CERTIFICATION

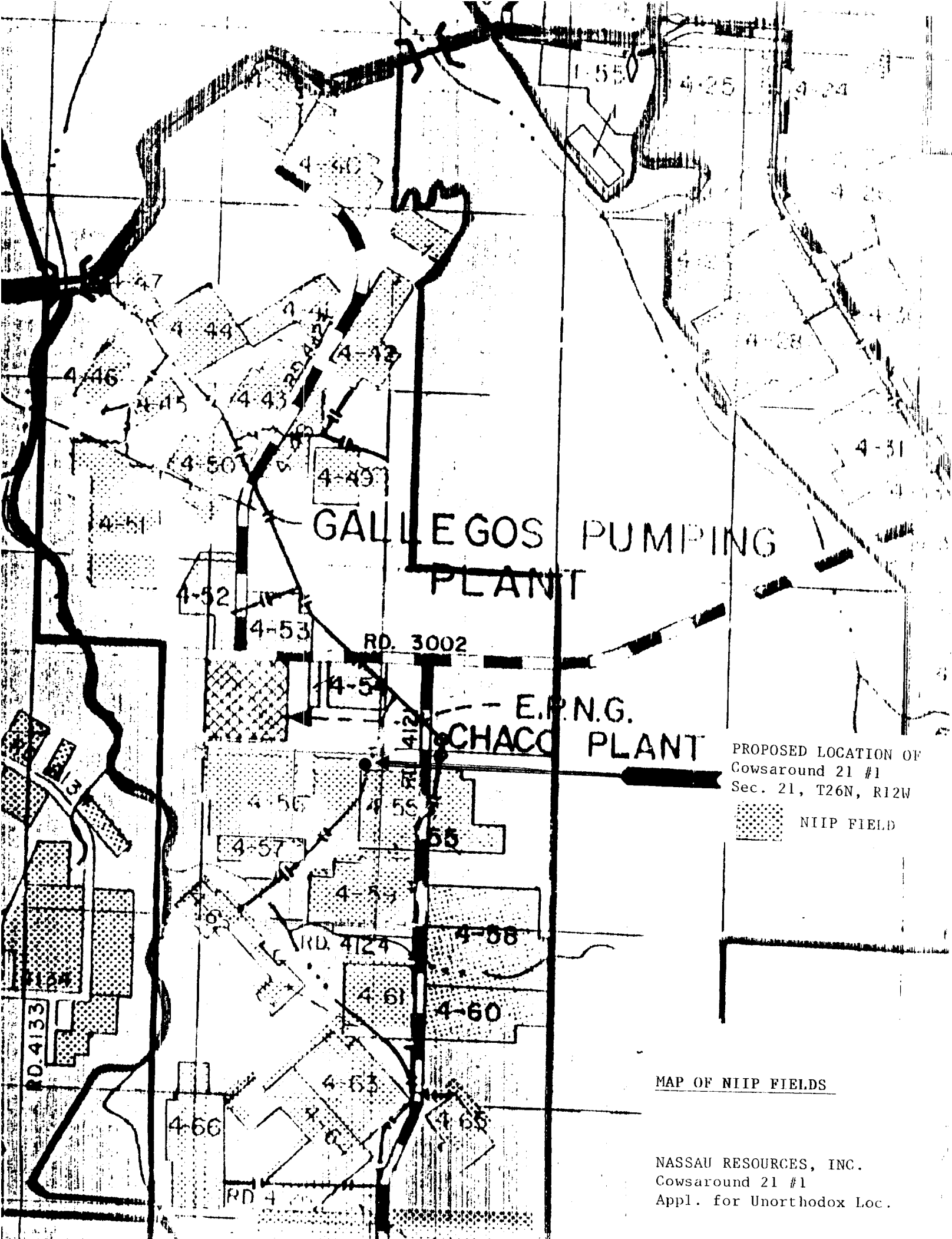
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
March 7, 1990

Signature & Seal of Professional Surveyor  
*Edgar P. Risenhoover*  
NEW MEXICO  
5979  
Certificate No. 5979  
Edgar P. Risenhoover







GALLEGOS PUMPING  
PLANT

RD. 3002

E.P.N.G.  
CHACCO PLANT

PROPOSED LOCATION OF  
Cowsaround 21 #1  
Sec. 21, T26N, R12W

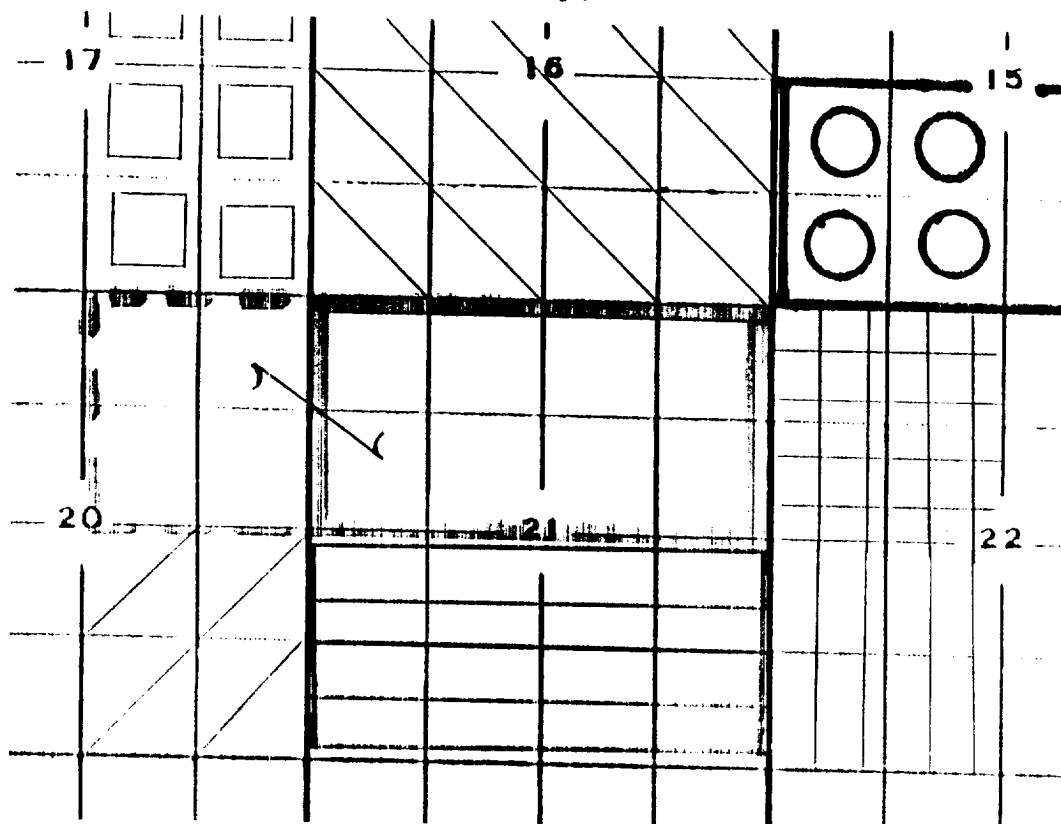
NIIP FIELD

MAP OF NIIP FIELDS









NASSAU RESOURCES, INC.  
Cowsaround 21 #1  
Appl. for Unorthodox Loc.

# LEASE PLAT

Township 26 North, Range 12 West, NMPM  
San Juan County, New Mexico



## OFFSETTING OPERATORS:

	SECTION 15: S/2 AMOCO PRODUCTION CO.	SF 080384 100%
	SECTION 16: ALL KINDERMAC PARTNERS (AN OPERATING AFFILIATE WITH NASSAU RESOURCES, INC.)	VA-235 100%
	SECTION 17: E/2 DUGAN PRODUCTION CORP.	NM 12027 100%
	SECTION 20: NE/4 AMOCO PRODUCTION CO. JEROME P. McHUGH (AN OPERATING AFFILIATE WITH NASSAU RESOURCES, INC.)	NM 12028 50% 50%
	SECTION 20: SE/4 PITCO PRODUCTION CO. MERRION OIL & GAS CORP. TEXACO PRODUCING INC.	NM 0560223 37.50% 33.333% 29.167%
	SECTION 21: S/2 M. RICHARDSON OPERATING CO.	NM 83518 100%
	SECTION 22: NW/4	UNLEASED FEDERAL MINERALS
	SECTION 22: SW/4 (N00-C-14-20-5339 TERMINATED)	UNLEASED INDIAN MINERALS

NASSAU RESOURCES, INC.  
 Cowsaround 21 #1  
 Appl. for Unorthodox Loc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

NASSAU RESOURCES, INC.

3. ADDRESS OF OPERATOR

P O BOX 809, Farmington, N.M. 87499

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

At surface

680' FNL - 680' FEL

At proposed prod. zone

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

±19 miles S SW of Bloomfield, N.M.

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drg. unit line, if any) 680'

16. NO. OF ACRES IN LEASE

640.0

17. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED, Less than

OR APPLIED FOR, ON THIS LEASE, FT. 3/4 mile

18. PROPOSED DEPTH

1280'

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

6060' GL

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

640.0

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START\*

6-15-90

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7"	23#	120'	36 cu.ft. circ. to surf.
6-1/4"	4-1/2"	9.5#	1280'	204 cu.ft. circ. to surf.

Plan to drill with spud mud to set 120' of surface casing. Will then drill with water and gel-chem. mud to test the Fruitland coal zone at ±1280'. Will run DIL-GR-SP and FDC-CNL-GR Caliper logs. If well appears productive, will set 4-1/2" casing at TD, cement in 1 stage, selectively perforate, frac, clean out after frac and complete with 2-3/8" tubing.

Gas is not dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present production zone and proposed new production zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface location and anticipated true vertical depth. Give blowout preventer program, if any.

24.

SIGNED

*Fran Perren*  
FRAN PERREN

TITLE Admin. Asst.

DATE 5-17-90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

NASSAU RESOURCES, INC.  
Cowsaround 21 #1  
Appl. for Unorthodox Loc.

\*See Instructions On Reverse Side

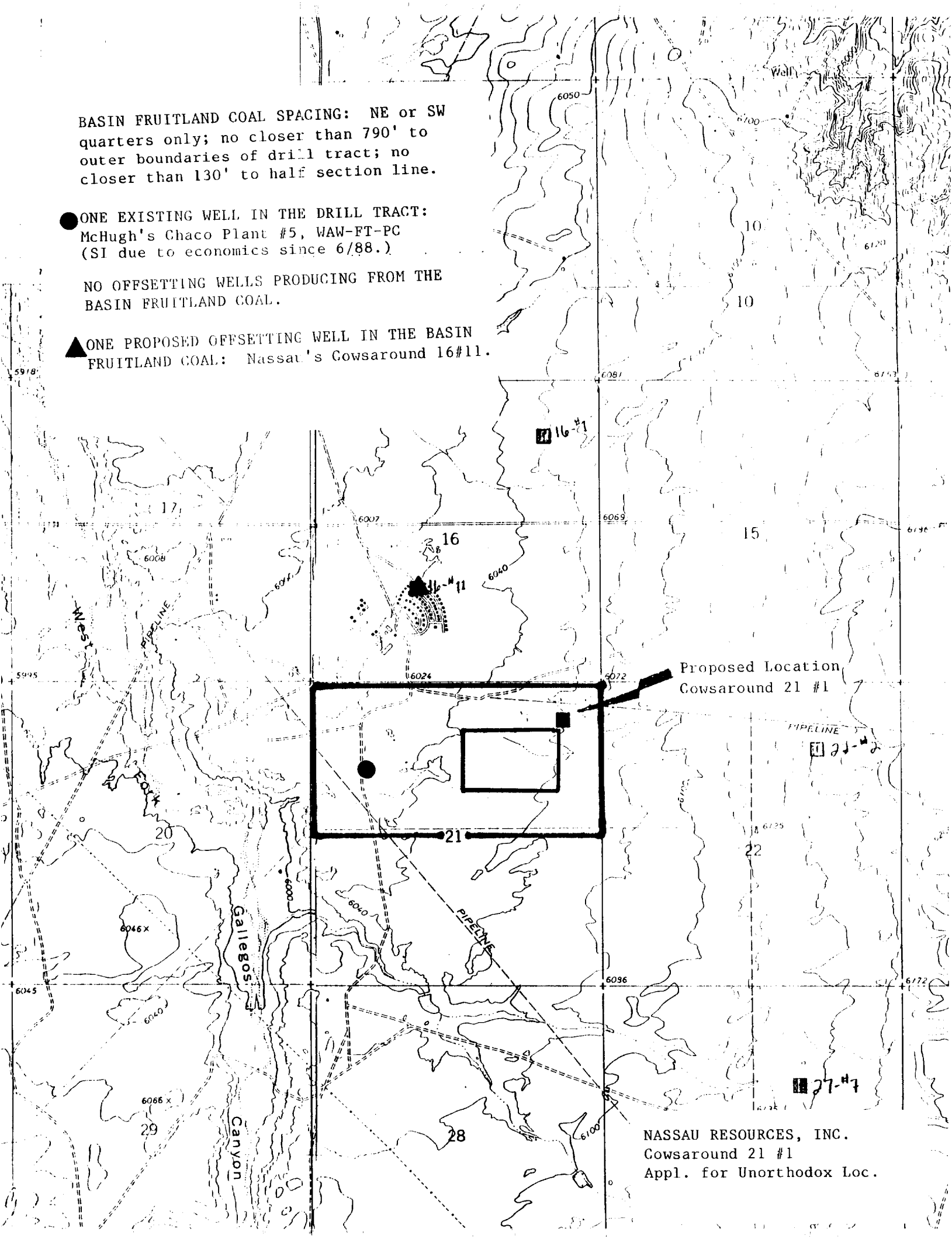
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations or to knowingly and willfully submit any false, fictitious or fraudulent statements or representations.

BASIN FRUITLAND COAL SPACING: NE or SW  
quarters only; no closer than 790' to  
outer boundaries of drill tract; no  
closer than 130' to half section line.

● ONE EXISTING WELL IN THE DRILL TRACT:  
McHugh's Chaco Plant #5, WAW-FT-PC  
(SI due to economics since 6/88.)

NO OFFSETTING WELLS PRODUCING FROM THE  
BASIN FRUITLAND COAL.

▲ ONE PROPOSED OFFSETTING WELL IN THE BASIN  
FRUITLAND COAL: Nassau's Cowsaround 16#11.



NASSAU RESOURCES, INC.  
Cowsaround 21 #1  
Appl. for Unorthodox Loc.