

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 ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Basin Fuels, Ltd.

3. ADDRESS OF OPERATOR

300 W. Arrington, Suite 300, Farmington, NM 87401

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

At surface

1650' FNL & 990' FEL

At proposed prod. zone

same

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

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

160

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

2750

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

6713 G.R.

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	20.	100	100 Sacks
7 7/8	4 1/2	10.5	2750	325 sacks

(See Attachments)

Gas under this lease is not dedicated to a contract.

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

John Alexander

TITLE Agent

DATE October 30, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

**NEW 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.

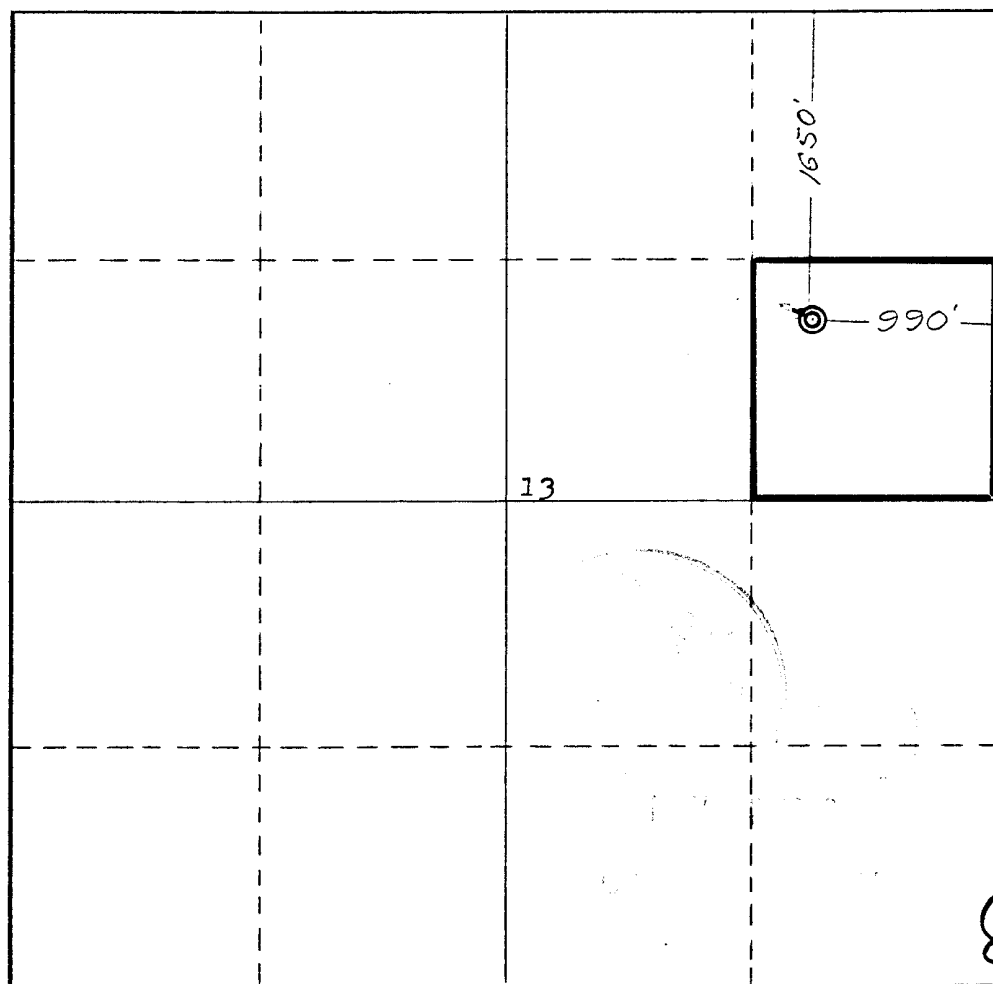
Operator BASIN FUELS, LTD.			Lease NOO NAVAJO		Well No. 4
Unit Letter H	Section 13	Township 20 NORTH	Range 6 WEST	County MCKINLEY	
Actual Footage Location of Well: 1650 feet from the NORTH line and 990 feet from the EAST line					
Ground Level Elev. 6713	Producing Formation Mesa Verde		Pool Franciscian Lake Mesa Verde	Dedicated Acreage: 40 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 _____

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 contained herein is true and complete to the best of my knowledge and belief.

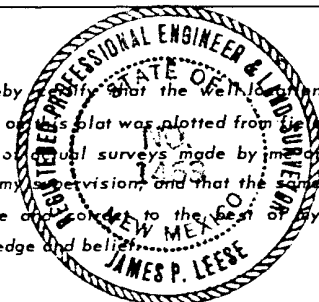
John Alexander
Name
John Alexander

Position
Agent

Company
Basin Fuels, Ltd.

Date
October 26, 1978

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

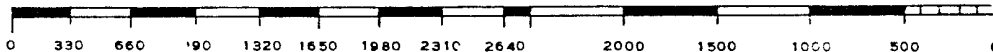


Date Surveyed
19 October 1978

Registered Professional Engineer and Land Surveyor

James P. Leese
James P. Leese

Certificate No.
1463



BASIN FUELS, LTD.

FORMATION INFORMATION AND DRILLING PRACTICE

WELL:

NOO NAVAJO #4

LOCATION:

1650' FNL & 990' FEL

S 13-T20N-R6W

McKinley Co., NM

LEASE NUMBER:

NOO-C-14-20-4402

1. Geologic name of surface formation.

Kirtland

2. Estimated tops of important geologic markers.

La Ventata	875
Chacra	1233
Cliff House	1779
Menefee	1841
Point Lookout	2675

3. Estimated depths at which anticipated water, oil, gas or other mineral-bearing formations are expected.

2675' - oil & gas

4. Proposed casing program.

Surface: 8 5/8", 20#, new casing to be set at 100'.
Cement will be with 100 sk. Class "B" + 2%
gel + 0.5% CFR-2.

Production: 4 1/2", 10.5#, K-55, new casing to be set at 2750'.
Cement will be 325 sk. Class "B" + 2% gel + 0.5% CFR-2.

5. Specifications for pressure control equipment.

The attached schematic shows the type of blow out preventer to be used while drilling. The unit will be tested to 200 psi as soon as possible after its installation on the surface pipe. Testing will be done with the rig pump. This is a manual type preventer, and its operation will be manually checked when practical.

6. Drilling fluids.

Depth	Type	Viscosity	Weight	Fluid Loss (cc)
0-100	Gel-lime	35-45	8.6-9.0	N/C
100-2600	Low-solids	29-33	8.4-8.8	15
2600-2750	Gel-chem	35-40	8.8-9.4	8

7. Auxiliary equipment.

- a. bit float
- b. full opening stabbing valve to be used when kelly is not in the string

8. Logging - Coring - Testing.

Logging: Induction Electric Log, Formation Compensated Density, Gamma Ray Caliper

Coring: None

Drill Stem Testing: None

9. Abnormal temperatures, pressure, or hazardous conditions.

None expected

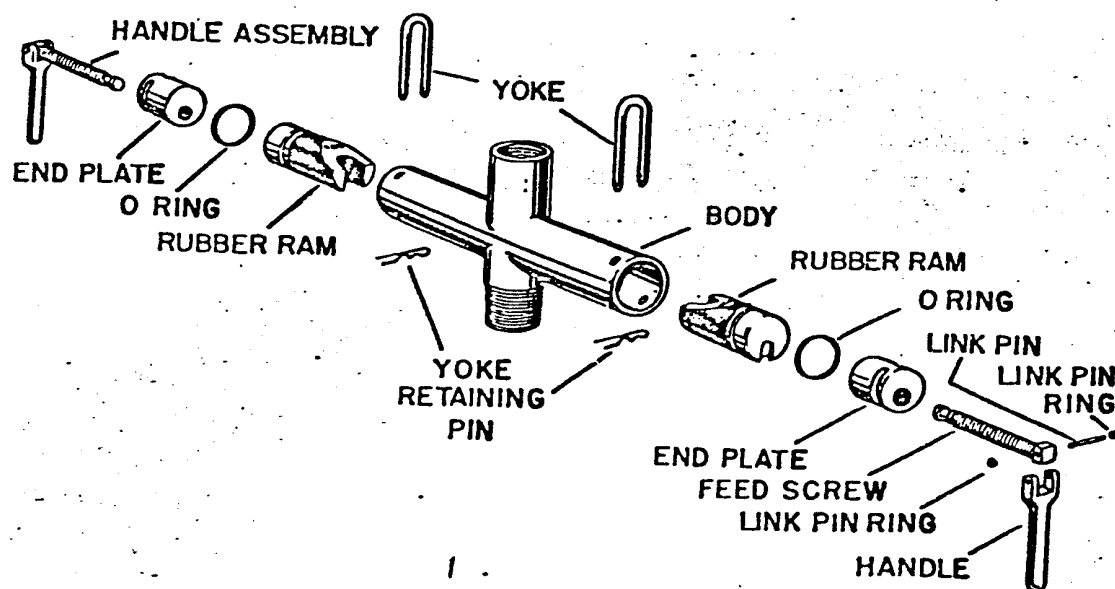
10. Starting Date.

Anticipated starting date is November 15, 1978. Approximately six days will be needed to build roads and location and drill the well to total depth. If commercial, completion will commence immediately and require ten days.

G TUBING BLOWOUT PREVENTERS

G BLOWOUT PREVENTER RAMS

PREVENTER SIZE	2-3/8"	2-7/8"	3-1/2"
RAM I.D. INCHES	Part No.	Part No.	Part No.
Blank.....	28262	28263	28264
9/16".....	59383	45019	59388
5/8".....	44948	44969	59393
3/4".....	59391	41502	59410
7/8".....	59392	54571	59389
1".....	59384	59386	45903
1.050".....	44949	41424	45056
1-1/8".....	28354	28336	28365
1-1/4".....	28355	28331	28366
1.315".....	45055	44109	44057
1-3/8".....	44730	59387	44964
1-1/2".....	28356	28337	28367
1-5/8".....	59385	46780	59390
1.660".....	45462	43629	44963
1-3/4".....	28357	28346	28368
1.900".....	45463	43630	45609
2.063".....	59394



ATTACHMENT TO POINT 5
API SERIES 6" 600

BASIN FUELS, LTD.

DEVELOPMENT PLAN FOR SURFACE USE

WELL:

NOO NAVAJO #4

LOCATION:

1650' FNL & 990' FEL

S13, T20N, R6W

McKinley Co., NM

LEASE NUMBER:

NOO-C-14-20-4402

1. Existing roads. (Shown in green)

The attached topographic map shows all existing roads within one mile of the proposed location. All roads are in fair condition and will require a minimal amount of work to upgrade them to handle normal drilling activity traffic.

2. Planned Access Road. (Shown in red)

The new access road will be approximately 20' wide and 600' long. No cut, fill, turnouts, or culverts will be needed. No fences, gates or cattle guards will be crossed. Maximum grade will be 5%. Water bars will be used where needed to aid drainage and help prevent erosion.

3. Location of existing wells.

All wells (water, abandoned, disposal, and drilling) are shown and so labeled on the attached section layout.

4. Location of existing production facilities.

All production facilities for this well will be located on the site.

All tank batteries, production facilities or production, gathering and service lines within one mile of the proposed location are shown on the attached section layout.

5. Location and type of water supply.

Water for drilling will be trucked from Chapman's water hole, approximately 35 miles northwest of the location. This water is privately owned.

6. Source of construction material.

Any construction material required for road or location will be excess material accumulated during building of such sites.

7. Methods of handling waste material.

(Refer to attached well site layout.)

All material that can be safely burned will be so disposed when weather conditions permit.

All nonburnable waste (drilling fluids,, cuttings, chemicals, etc.) will be held in the reserve pit until dry, and then buried. Any oil that accumulates on the pit will be removed prior to leaving the pit to dry. Pits will be fenced during dry out, then completely back-filled with dirt prior to preparing the location for production or abandonment.

7. Any solid waste that can not be buried will be taken from the location and properly destroyed.

All portable chemical toilet will be supplied for human waste.

8. Ancillary facilities.

None planned.

9. Well site layout.

The attached layout shows the drilling rig with all supporting facilities. Cut and fill, required for pad construction, is also shown.

10. Plans for restoration of surface.

Restoration of the well site and access road will begin within 90 days of well completion, weather permitting.

Should the well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed and leveled. Both road and location will have top soil replaced and will be reseeded when germination can occur.

Should the well be commercial, that portion of location not needed for operation will be repaired as above. The portion of the location needed for daily production operations, and the access road, will be kept in good repair and clean.

In either case, cleanup of the site will include burning any safely burnable material, filling of all pits, and proper disposal of any nonburnable material that can not be safely buried. Any oil that has accumulated on the pits will be trucked away.

11. Other information.

General topography of the area may be seen on the attached map.

This location is $1\frac{1}{2}$ miles west of the Continental Divide at Deja Del Raton Mesa. The site has a small westerly slope. The area is sandy and is covered with sage brush and native grasses. There is evidence of sheep and small animal life in the area.

Surface at this location belongs to the Bureau of Land Management.

There are no occupied dwellings in the area.

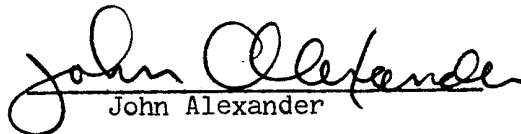
There were no archaeological or cultural sites visible on the location. The archaeologist's report is forthcoming.

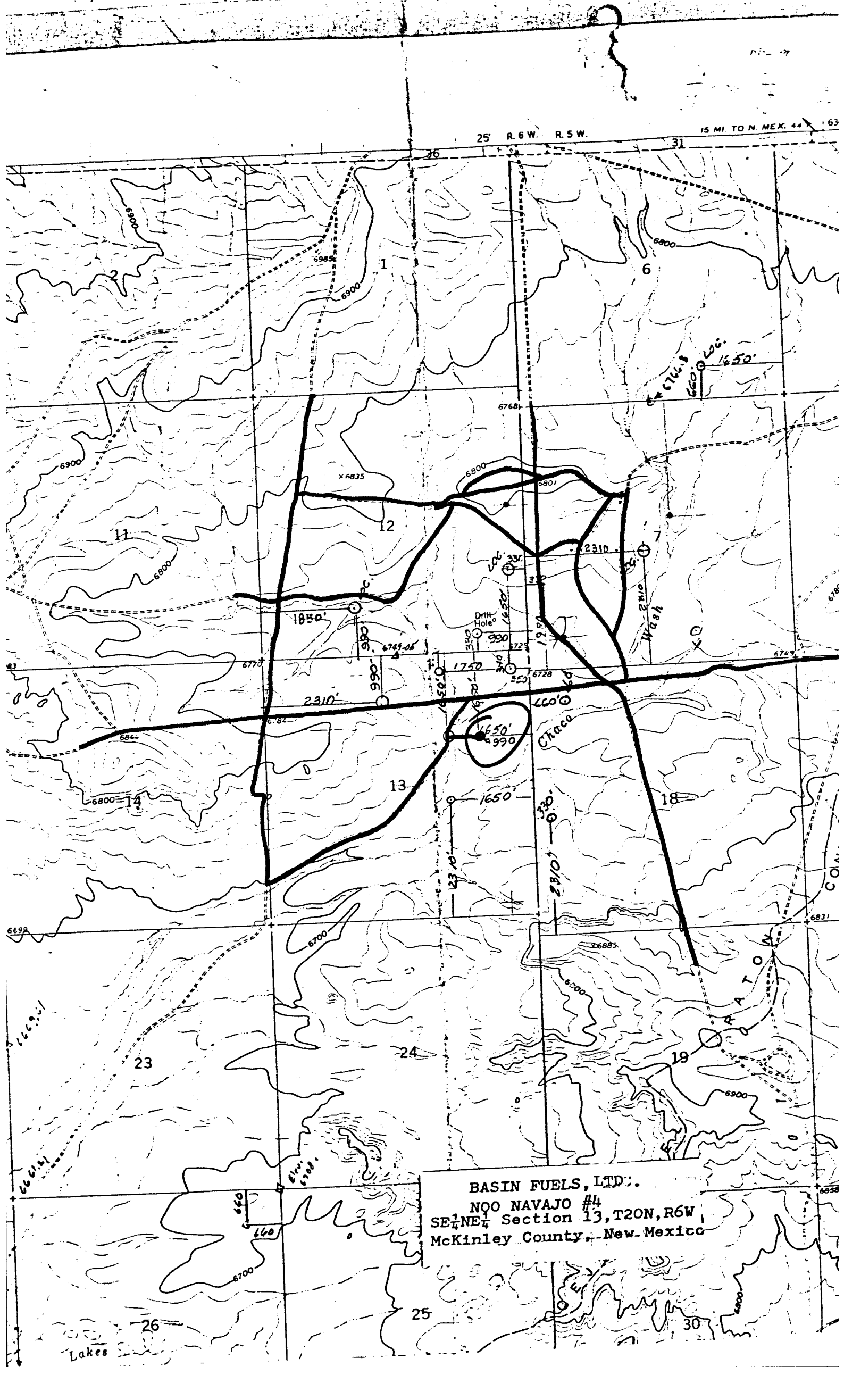
12.

John Alexander
3E Company, Inc.
Box 190
Farmington, NM 87401
Phone: 505-327-4020

13. I hereby certify that I or persons under my direct supervision, have inspected the proposed drill site 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 Basin Fuels, Ltd., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

October 26, 1978


John Alexander



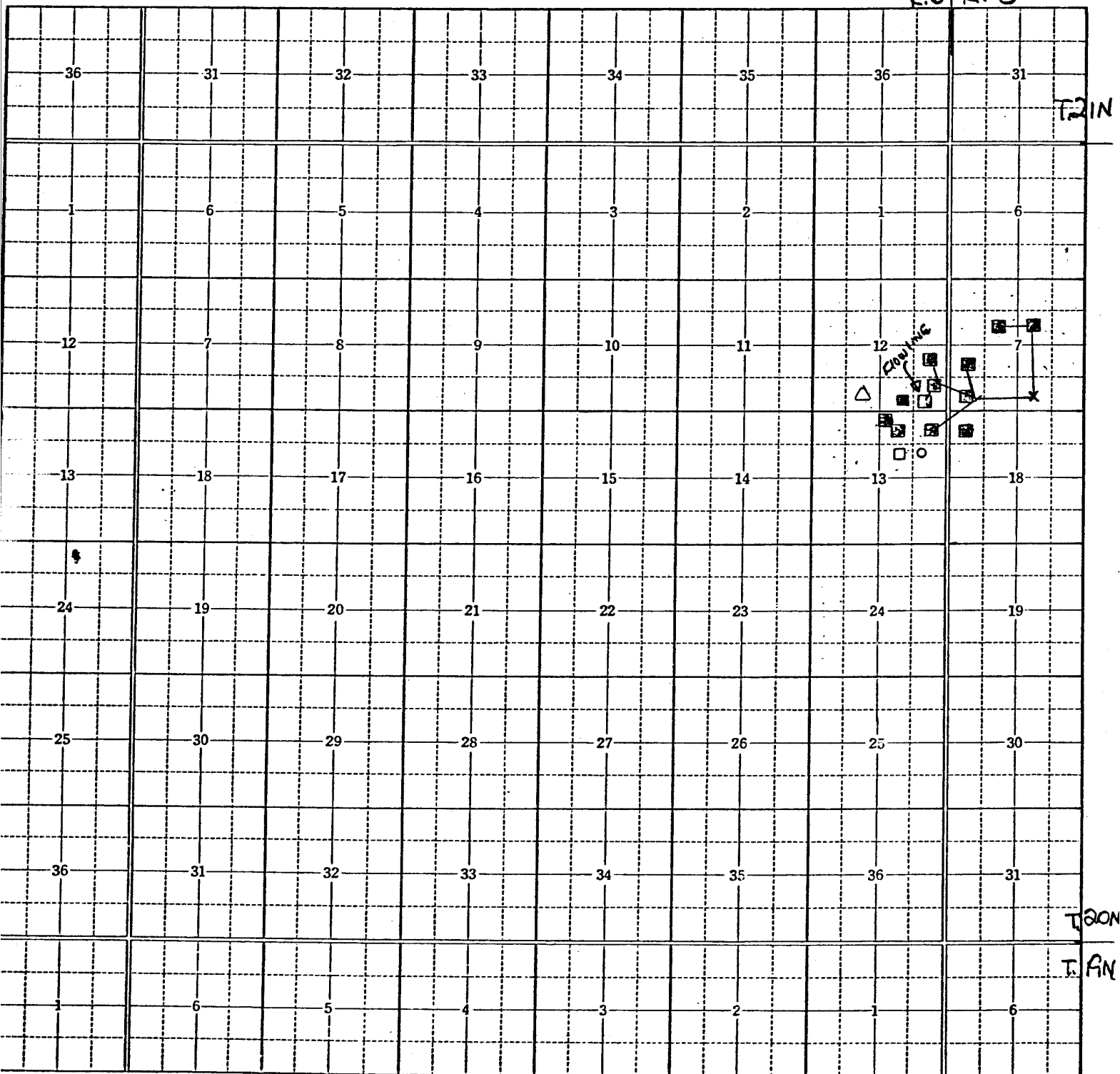
BASIN FUELS, LTD.
N40 NAVAJO #4
SE1/4 NE1/4 Section 13, T20N, R6W,
McKinley County, New Mexico

O = Subject well
 Δ = Plugged & abandoned
 ■ = Producing w/ tank on loc.
 □ = Producing
 X = Injection well
 — = WATER INJECTION LINE

Township 20 N, Range 5 & 6, County _____ State _____

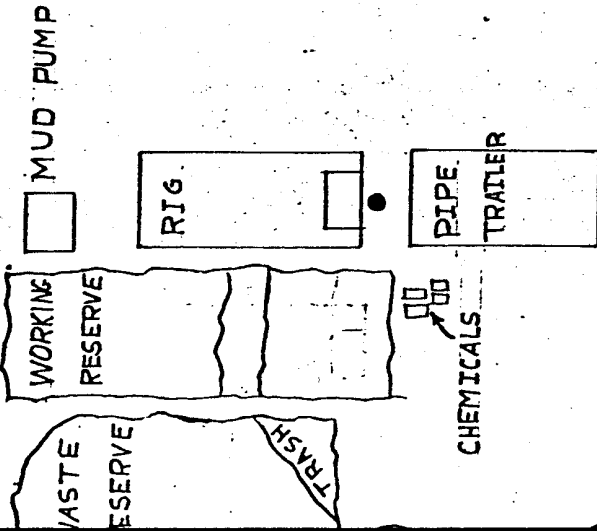
Island Township Plat

R. 6 | R. 5



BASIN FUELS INC.
 OFFSET WELLS
 NOO NAVAJO #4

Access Road



PLAN VIEW 1"=30'
ALL PITS-EARTHEN

SOIL MATERIAL STOCKPILE

27

Location grade

CUT & FILL (SIDE) - 6" TOP SOIL ONLY

WELL SITE LAYOUT
BASIN FUELS
N00 NAVAJO #4

Location grade

UT# FT11 (ECONUT) 24 TOP EARTHEN