

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

WEST GAS, INC.

3. ADDRESS OF OPERATOR

Suite 350, Rocky Village, Billings, Montana 59102

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

At surface

700 FSL, 1075 FEL, Sec. 2, T29N, R19W

At proposed prod. zone

Same

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

9 mi. Southwest of Shiprock, New Mexico

15. DISTANCE FROM PROPOSED*

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

700'

18. DISTANCE FROM PROPOSED LOCATION*

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

450'

16. NO. OF ACRES IN LEASE

4060

19. PROPOSED DEPTH

800'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

402 acres

20. ROTARY OR CABLE TOOLS

Rotary

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

5231' GL

22. APPROX. DATE WORK WILL START*

within 30 days

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9-7/8"	7"	23#	30'	20 sxs
6-1/4"	4 1/2"	9.5#	800'	150 sxs

West Gas proposes to drill the above well to develop the Dakota Sand in the Rattlesnake Field. Completions will be determined by open hole logs, FDC, CNL, IES. A copy of all logs will be filed with your office on completion.



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

TITLE

Opr. Mgr.

DATE

3-3-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

RECEIVED

MAR 3 1978

*See Instructions On Reverse Side

U.S. Geological Survey
Farrington, N.M.

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 West Gas Incorporated			Lease West Gas		Well No. 4
Unit Letter P	Section 2	Township 29 North	Range 19 West	County San Juan	
Actual Footage Location of Well: 700 feet from the South line and 1075 feet from the East line					
Ground Level Elev. 5254	Producing Formation Dakota	Pool Kathleenake	Dedicated Acreage: 40 Acres		

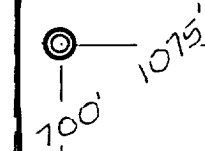
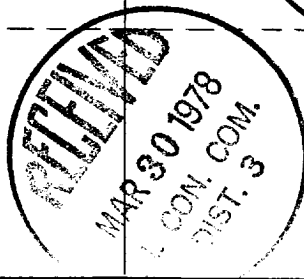
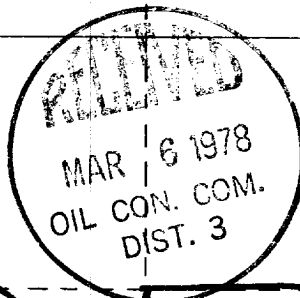
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). *There is only one lease*
3. If more than one lease 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.

SEC. 2



CERTIFICATION

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

Name
Samuel Laidlaw
Position
Asst. Mgr.
Company
West Gas Inc
Date
3-27-78

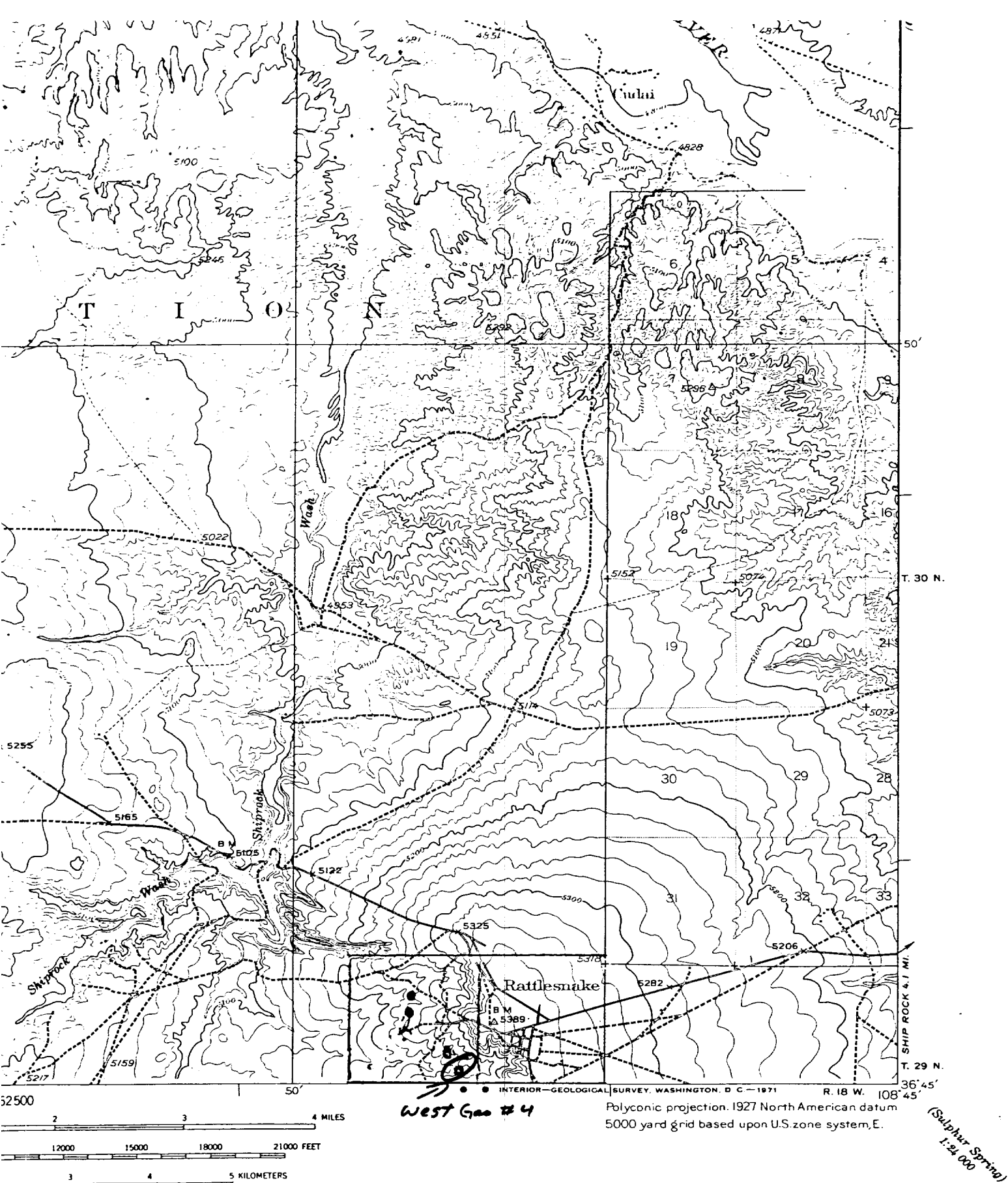
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

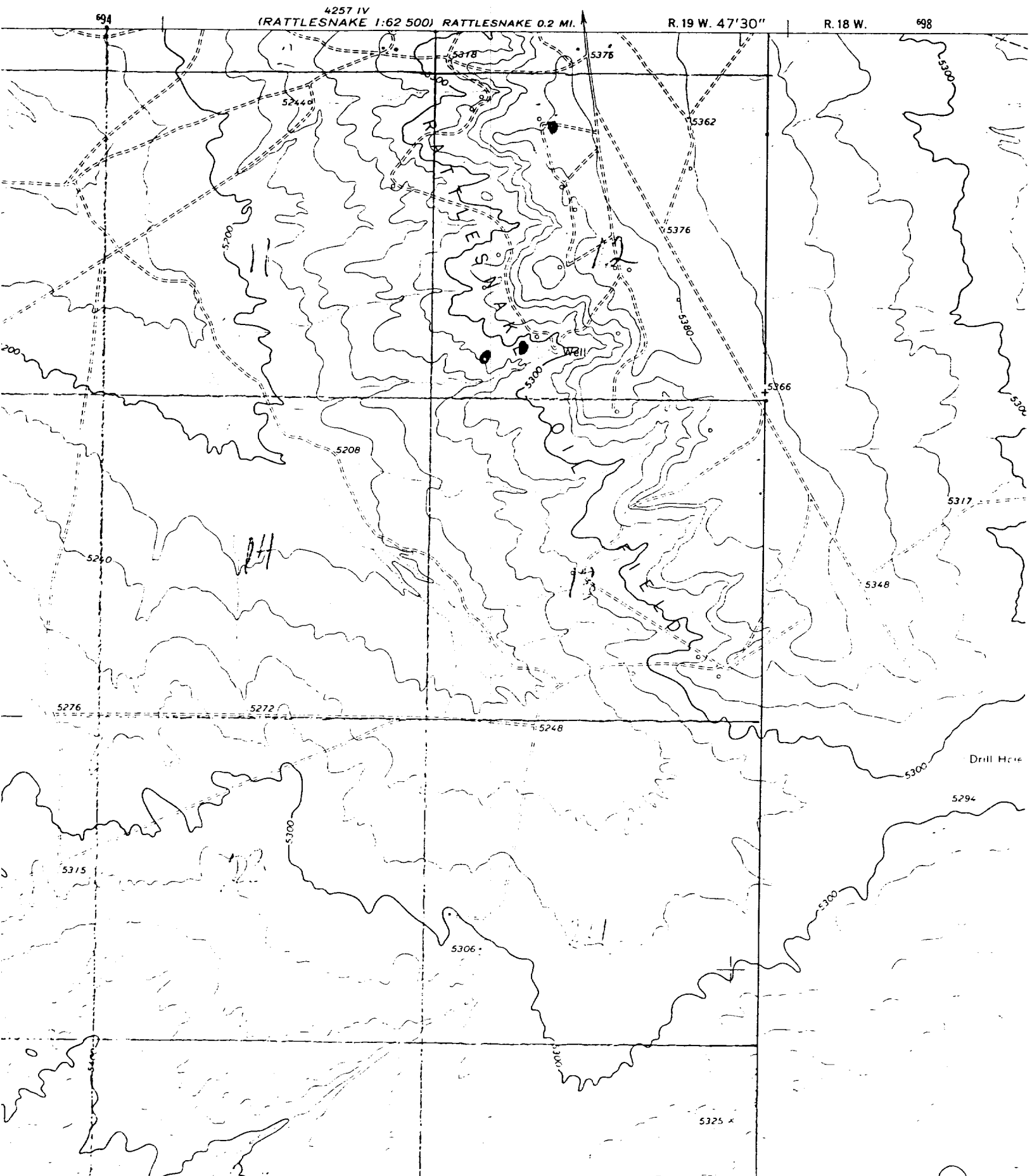
Date Surveyed
February 17, 1978

Registered Professional Engineer
and/or Land Surveyor

Frank V. Echohawk
Certificate No. 3602
E.V. Echohawk LS

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





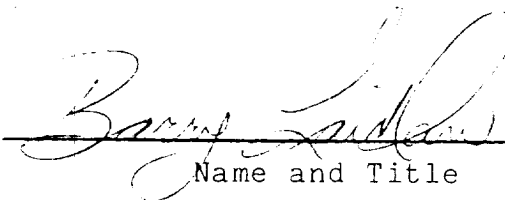
Rattlesnake Development
West Gas, Inc.
Sec. 2 & 12, T29N, R19W

CERTIFICATION

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 West Gas, Inc., and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

March 3, 1978

Date

 Opr. Mgr.
Name and Title

West Gas, Inc.'s Representative:

B. D. Laidlaw

Phone: Office: 406-252-6387; Home: 505-327-5221

Address: 2013 N. Tucker
Farmington, New Mexico 87401

And:

Suite 350, Rocky Village
1500 Poly Drive
Billings, Montana 59102

WEST GAS INCORPORATED
Suite 350, Rocky Village
1500 Poly Drive
Billings, Montana 59102
(406) 252-6387

Development Plan for Wells in
Rattlesnake Field
Sec. 2 & 12, T29N, R19W

The proposed locations are covered with very little sage brush and no grass. The soil is sand. The geological name of the surface formation is Manchos. No access roads should be necessary as there are trails or roads to the drill sites.

No water is going to be hauled, the wells shall be air drilled. All dust shall be contained in the pit and at the completion of each well, it shall be buried not less than 36" below the surface and the lease restored to its original terrain.

The estimated tops of important Geological formations are as follows:

<u>Formation</u>	<u>Depth</u>
Gallup	300'
Dakota	800'

The casing program to be used will include new casing.

Est. Depth	Csg. Size	Weight	Hole Size	Sacks	Type
30'	7"	23#	9-7/8"	20	cls.B.
800'	4½"	9.5#	6-1/4"	150	cls.B.

West Gas shall use a Schaffer, 6"x900 series, rotating head for blowout control with seal rubbers and 3" valves for control.

The logging program will consist of Induction Electric Surveys from TD to 50' and a Formation Density and Neutron log from TD to 50'.

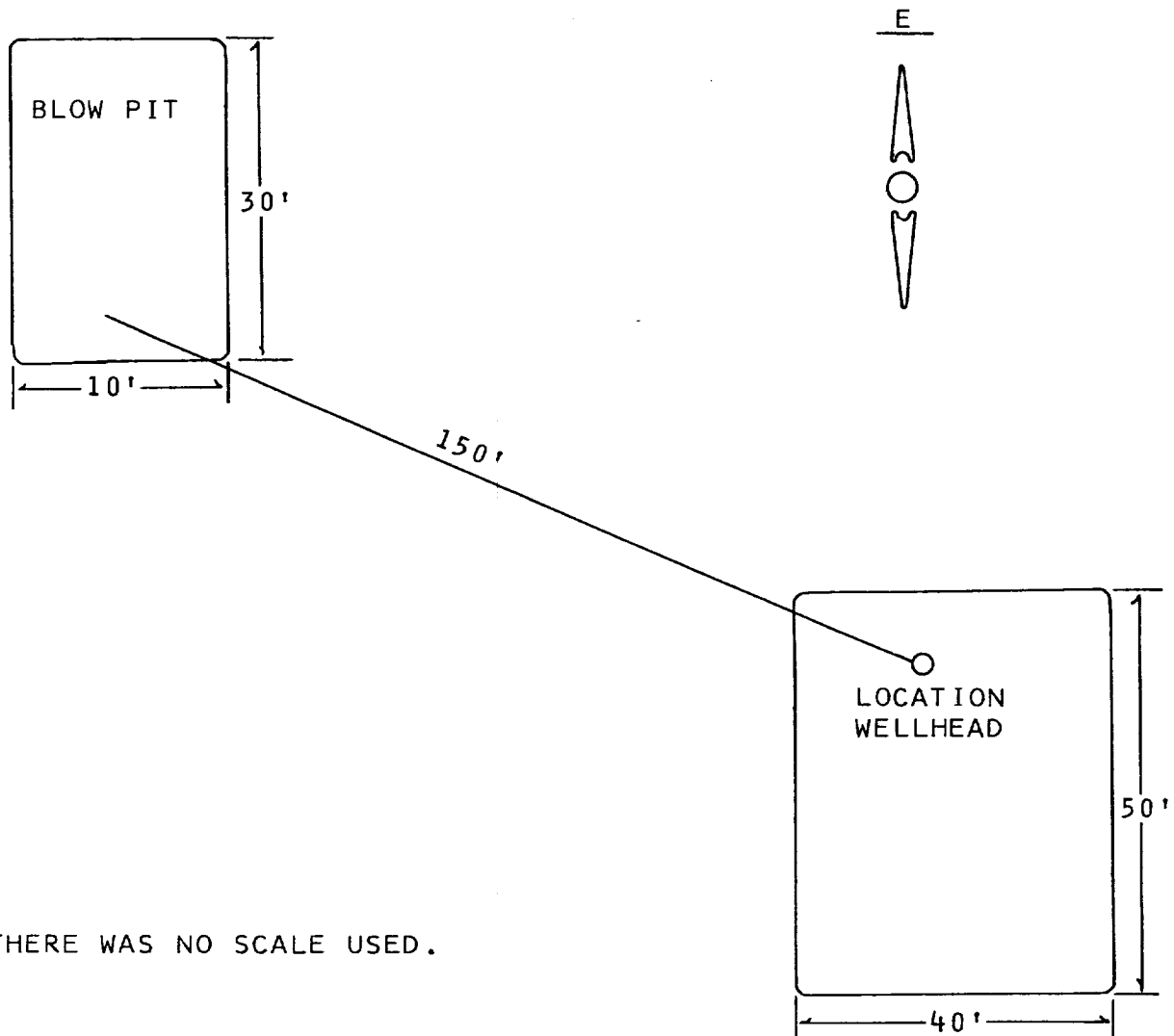
Continued.

Because of the partially depleted Dakota section, West Gas does not expect any abnormal pressures or temperatures. Prior exploration has indicated there is no presence of Hydrogen Sulfide Gas.

There are no air strips in the area, or camps.

The tank batteries to be used are existing ones lying in Section 2 approximately 2300 FSL and 330 FEL.

We would like to begin operations as soon as the well is permitted and a one week per well program is anticipated making a seven week program.



THERE WAS NO SCALE USED.