

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-031-20602

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK		
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. NAME OF OPERATOR Cities Service Company		
3. ADDRESS OF OPERATOR Box 1919, Midland, TX 79702		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 330' FNL & 1650' FEL of Sec. 28-19N-5W At proposed prod. zone McKinley County, NM same as above		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 8½ miles NW of Torreon, NM		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330' N		
16. NO. OF ACRES IN LEASE 760		
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. --		
19. PROPOSED DEPTH 5390'		
20. ROTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6687' GR		
22. APPROX. DATE WORK WILL START* June 1, 1980		

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	8-5/8"	24#	200'	Circulated
7-7/8"	5½"	14#	5390'	1000 sacks

It is proposed to drill to a total depth of 5390' to test the Entrada formation. The blow out prevention program is as follows:

1. one set of blind rams.
2. one set of drill pipe rams.

The acreage allocated to this well is not dedicated to any gas gatherer.

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 prevention program, if any.

J. S. GEOLOGICAL SURVEY
DURANGO, COLO.

24. SIGNED E. J. Pender TITLE Region Oper. Mgr. DATE 4/8/80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY: _____

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

NMOCC

*See Instructions On Reverse Side

APPROVED
AS AMENDEDMAY 1 1980
JAMES F. SIMS
DISTRICT ENGINEER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

Operator CITIES SERVICE COMPANY			Lease FEDERAL "E"		Well No. 1
Unit Letter B	Section 28	Township 19N	Range 5W	County McKinley	
Actual Footage Location of Well: 330 feet from the North line and 1650 feet from the East line					
Ground Level Elev. 6687	Producing Formation Entrada		Pool Wildcat	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.

Sec.			
28			

CERTIFICATION

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

E. Spulder
Name
Region Operations Mgr.
Position
Cities Service Co.
Company
4/8/80
Date

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.

MAY 2 1980
OIL CON. DIV.
DIST. 3

Date Surveyed
March 1980
Registered Professional Engineer
and/or Land Surveyor
Fred B. Kerr
Fred B. Kerr
Certificate No. **3950**

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

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Santa Fe
SERIAL No.: NM 6999

and hereby designates

NAME: Cities Service Company
ADDRESS: P. O. Box 300
Tulsa, Oklahoma 74102

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 19 North, Range 5 West, N.M.P.M.

Section 22: SW $\frac{1}{4}$;

Section 28: E $\frac{1}{2}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

March 24, 1980

(Date)

James L. Ludwick
(Signature of lessee)

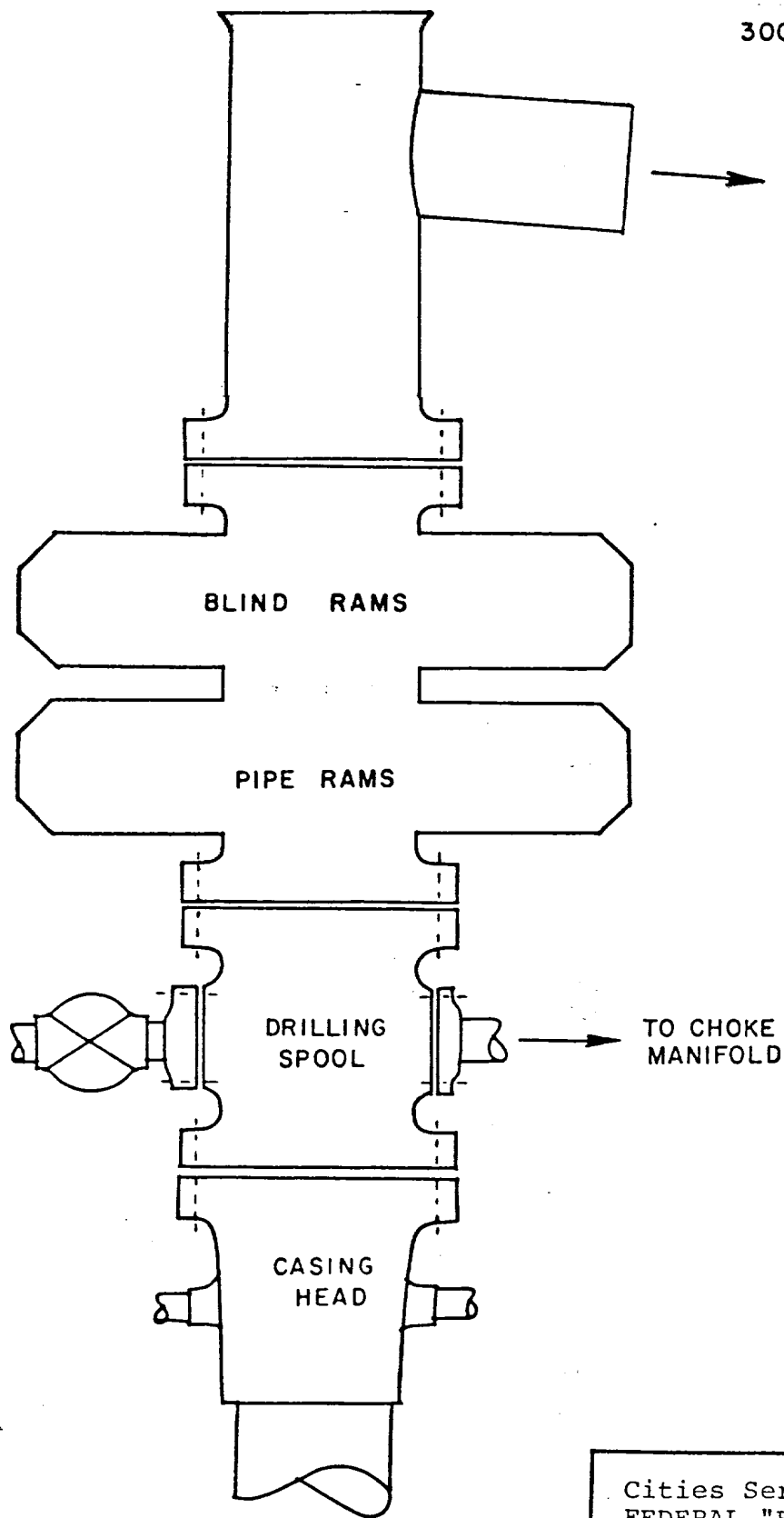
James L. Ludwick

P. O. Box 70

Farmington, New Mexico 87401

(Address)

BLOWOUT PREVENTER DIAGRAM
3000# W.P.



Cities Service Co.'s
FEDERAL "E" No. 1
330' FNL & 1650' FEL
Section 28-19N-5W
McKinley County, New Mexico
Lse # NM 6999

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

CITIES SERVICE COMPANY
WELL NO. 1 FEDERAL "E"
330' FNL & 1650' FEL, SECTION 28-19N-5W
MCKINLEY COUNTY, NEW MEXICO
FEDERAL LEASE NO. NM-6999

This plan is submitted with the Application for Permit to Drill the captioned well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operation plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation, so that a complete appraisal can be made of the environmental effects associated with the operation.

The well has been staked by Mr. Fred Kerr, a Registered Land Surveyor and the work area and access road have been staked and flagged. Mr. Bill Naylor with the San Juan Community College in Farmington has been commissioned to make an Archaeological survey of the work area and access road. His findings concerning cultural resources will be reported to the Bureau of Land Management in Farmington, New Mexico.

1. Existing Roads

A portion of a McKinley County highway map is attached which shows the proposed location in relation to the towns of Cuba and Torreon, New Mexico and the existing road system leading into the area.

Direction to Location:

Start at Torreon which is 27 miles southwest of Cuba, New Mexico. From Torreon go northwesterly 7 miles to a gate on the right and a large pink water storage tank. About 100 yards before coming to the water tank, turn right and follow the old road 2.7 miles. Turn right on an existing trail that goes within 50-75 feet of the location.

2. Planned Access Road

A. Dirt contractor will run motor grader over the 2.7 miles of old road and will improve the existing trail that goes within 50-75 feet of the location. The completed access road will be 12 feet wide and about 0.9 mile long. See attached vicinity map.

B. Surfacing material: The roadway will be bladed, watered and graded. There may be some spots that will need to be topped with local red rock. The work area will be topped with red rock if necessary.

Planned Access Road - cont.

- C. Maximum grade: The terrain is rolling. Maximum grade 3%.
- D. Turnouts: Two passing turnouts will be constructed at 0.3 and 0.6 mile from the beginning of the access road. This construction will increase the width of the new road to 20 feet for a distance of 30 feet.
- E. Drainage design: Access road will have a drop of 6 inches from center line to each side.
- F. Culverts: None needed
- G. Cuts and fills: Location will need to be leveled as shown on attached profile prepared by Kerr Land Surveying 3-31-80.
- H. Gates and cattleguards: None required.

3. Location of Existing Wells

Existing wells within a two mile radius of our proposed Federal "E" No. 1 are spotted on the third attached plat.

4. Location of Existing and/or Proposed Facilities

There are no existing facilities in the area.

Proposed production facilities will be set on the drilling pad approximately 150 feet from the well. The equipment will consist of a heater treater and 2 - 500 barrel tanks to store crude oil and 1 - 500 barrel tank to store produced water. All equipment will be fenced with a chain link fence and painted in accordance with BLM stipulation.

5. Location and Type of Water Supply

A fresh water mud system will be used to drill this well and fresh water will be purchased and trucked to the well site over existing and proposed roads.

One source of supply is Entrada produced water available in Section 15 to the north from Dome Petroleum Corp's tank battery in the Papers Wash Pool.

Another source is at the Pueblo Alto Trading Post and a third source is Chapman's water hole at Escrito on Highway 44.

6. Source of Construction Material

Red Rock for the access road and well pad will be purchased and hauled by the dirt contractor from the nearest possible source.

7. Methods of Handling Waste Disposal

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be collected and buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by wind.
- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities

- A. None needed.

9. Well Site Layout

- A. A plat of the well site is attached which shows dimensions of well pad, mud pits, reserve pit and location of major rig components.

10. Plans for Restoration of the Surface

- A. After completion of the well, all equipment not needed for operations will be removed.
- B. All unattended pits containing liquids will be fenced and the liquid portion allowed to evaporate before the pits are broken and backfilled.

Plans for Restoration of the Surface - cont'd.

- C. All waste associated with the drilling operation will be buried in place in a separate pit. Garbage and debris will be buried at least 3 feet deep.
- D. Surface restoration will be in accordance with the requirements of the Bureau of Land Management.
- E. The well site, if a producer, will be maintained and kept clean of all trash and litter or other foreign material which detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practices.

After the well site is cleaned and pits backfilled, any obstruction to the natural drainage will be corrected by ditching and/or terracing. All disturbed area, including any access road no longer needed, will be ripped and sown in grass seed recommended by the BLM.

11. Other Information

- A. Topography: Terrain is rolling and broken. Drainage is to the north into "Papers Wash".
- B. Soil: Thin fine sandy soil with numerous Red Rock outcrops.
- C. Flora and Fauna: Vegetative cover is sparse sage and native grasses. No trees. Wildlife in the area includes coyotes, rabbits, rodents, reptiles, dove, quail and deer.
- D. Ponds and Streams: No streams or ponds were noted in the area.
- E. Residences and Other Structure: None noted in the immediate area.
- F. Archaeological, Historical and Cultural Sites: None observed. Mr. Bill Naylor with the San Juan Community College in Farmington, New Mexico has been engaged to make a survey of the well pad and access road.
- G. Land Use: Ranching.
- H. Surface Ownership: The well site and access road are all on Federal surface administered by the BLM.

12. Lessee's or Operator's Representative:

Cities Service Company's representative responsible for assuring compliance with the approved surface use and operation plan is:

E. Y. Wilder
Cities Service Company
Region Operations Manager
P. O. Box 1919
Midland, Texas 79702

Office Phone: 915/ 685-5751
Home Phone: 915/ 694-8626

13. Certification

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 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 Cities Service Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

4/9/80
Date

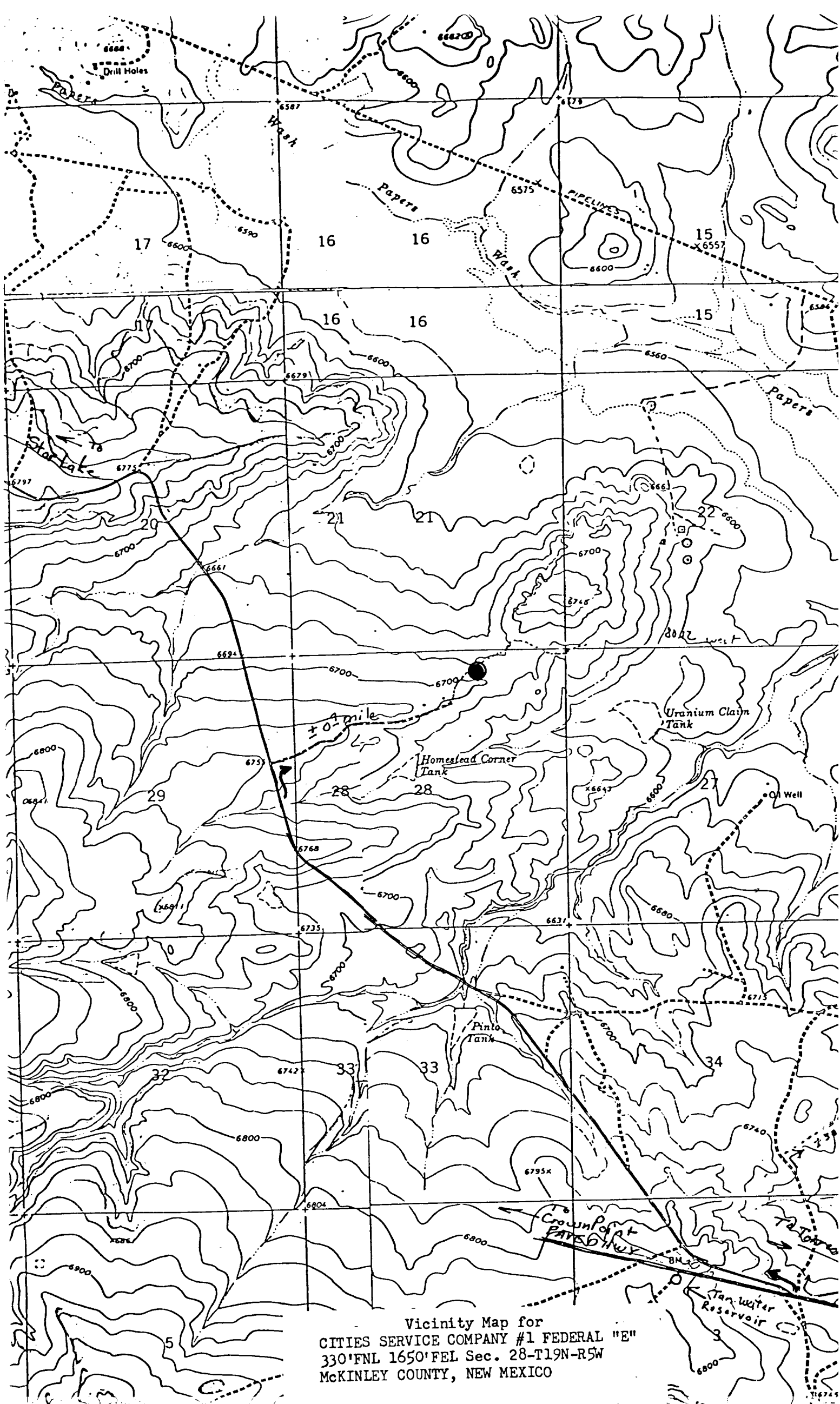
E. Y. Wilder
Region Operations Manager

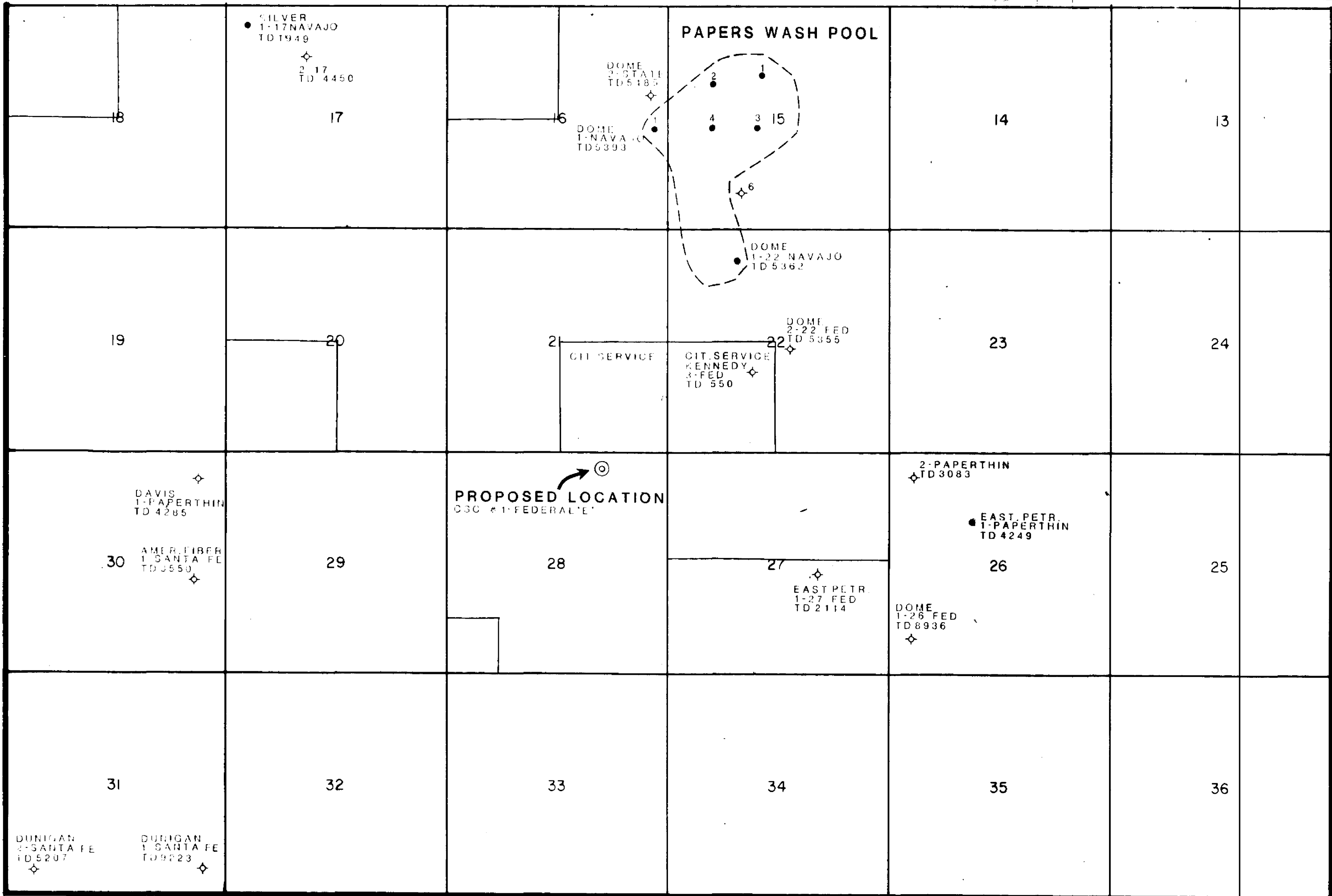
Please contact me at the above address if further information is needed to properly evaluate this proposal.

EYW:bak

attachments

Vicinity Map for
 CITIES SERVICE COMPANY #1 FEDERAL "E"
 330'FNL 1650'FEL Sec. 28-T19N-R5W
 MCKINLEY COUNTY, NEW MEXICO

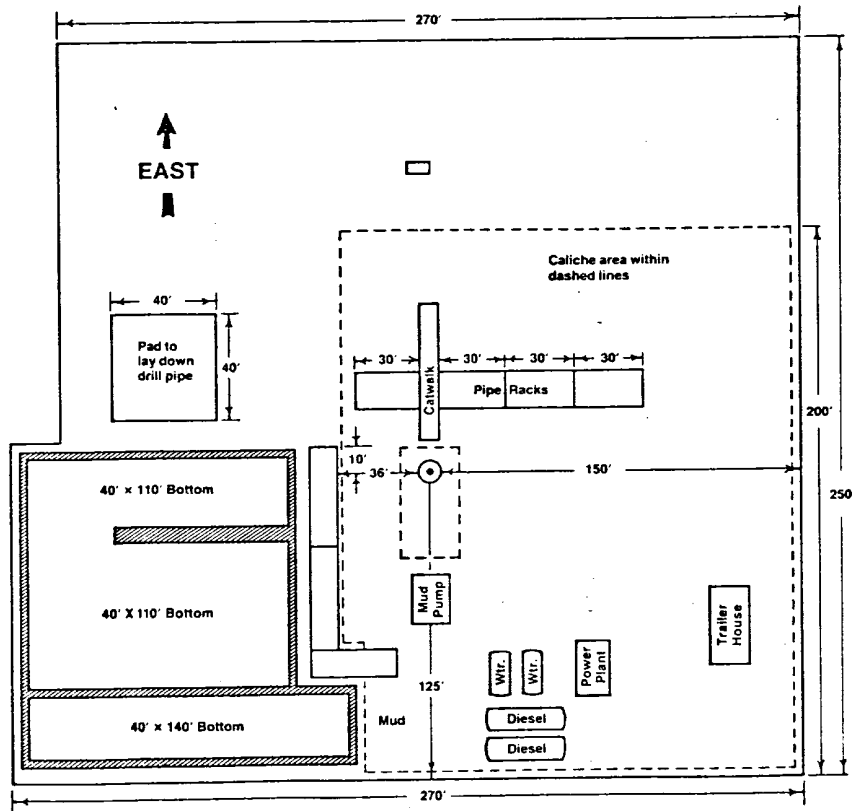




**CITIES SERVICE CO.'s
FEDERAL "E" NO. 1
330' FNL & 1650' FEL
SECTION 28-19N-5W
McKINLEY COUNTY, NEW MEXICO
LEASE #NM 6999
SCALE: 1"-2000'**

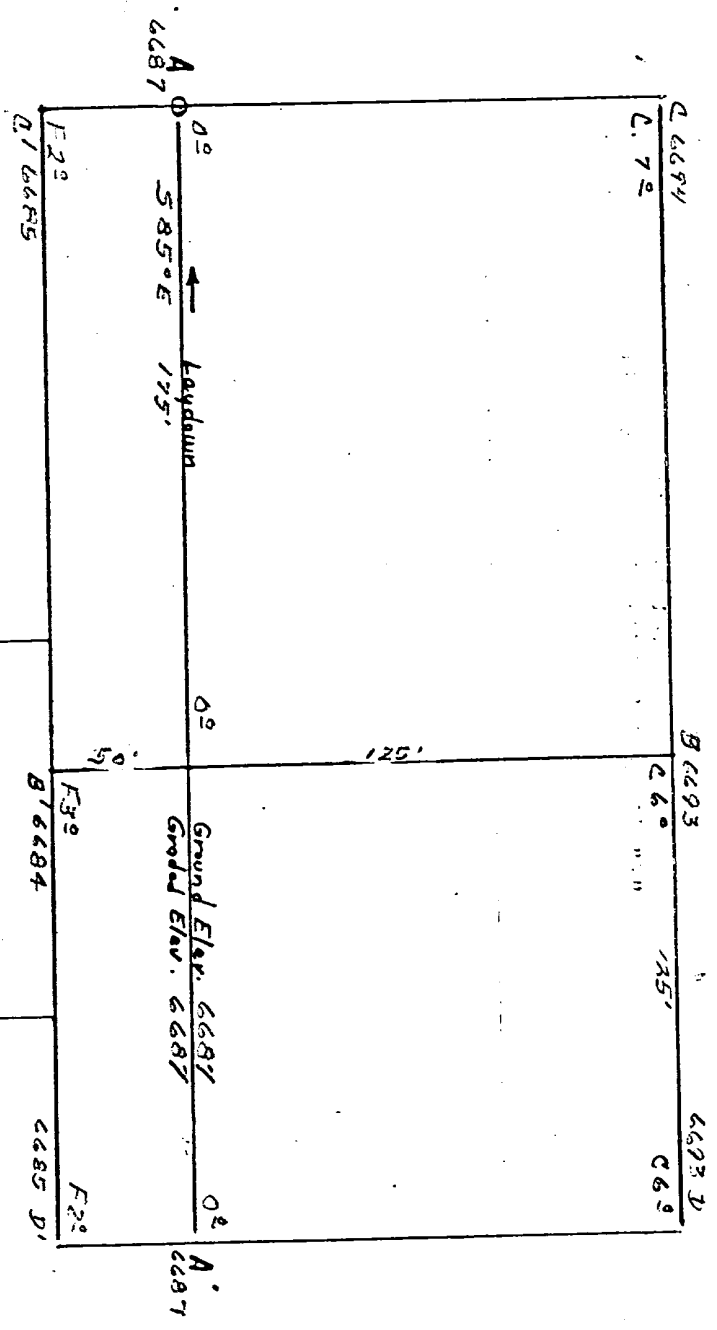
LOCATION PLAT

Rig Up with V-Door to East
and Reserve Pit to North



Cities Service Co.'s
FEDERAL "E" No. 1
330' FNL & 1650' FEL
Section 28-19N-5W
McKinley County, New Mexico
Lse # NM 6999

Profile for
 CITIES SERVICE COMPANY #1 FEDERAL RES
 330' FNL 1650' FEL Sec. 28-T19N-R5W
 MCKINLEY COUNTY, NEW MEXICO

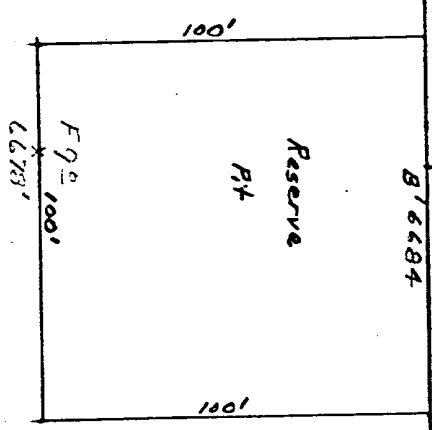


Vert. 1"=40' A-A' Horiz. 1"=100'

6690			
6680			
6670			

B-B' ±

6690			
6680			
6670			



Vert. 1"=40' C-C' Horiz. 1"=100'

6690			
6680			
6670			

D-D' ±

6690			
6680			
6670			