

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.

NM-9813

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

South Alkali "LK" Fed. #5

9. AP WELL NO.

30-005-62995

10. FIELD AND POOL, OR WILDCAT

Pecos Slope ABO

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREAD
Sec. 1-T6S-R25E

12. COUNTY OR PARISH 13. STATE

Chaves

New Mexico

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONES ☐

2. NAME OF OPERATOR

YATES PETROLEUM CORPORATION

3. ADDRESS AND TELEPHONE NO.

105 South Fourth Street, Artesia, New Mexico 88210

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

At surface

660' FNL & 990' FWL

At proposed prod. zone

Same

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

Approximately 48 miles NNE of Roswell, New Mexico

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

650.61

17. NO. OF ACRES ASSIGNED
TO THIS WELL

102.59

18. DISTANCE FROM PROPOSED LOCATION*

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

2000'

19. PROPOSED DEPTH

4400'

20. ROTARY OR CABLE TOOLS

Rotary

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

3819' GR

22. APPROX. DATE WORK WILL START*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2" 14 3/4"	13 3/8" 9 3/8"	54.50# J-55, 36#	748' 900'-950'	585 sacks - circulate
12 1/4" 8 3/4"	* 8 5/8" 7"	24.6# J-55, 20#	1476' 1450'	650 sacks - Tie back
7 7/8"	4 1/2"	9.5# J-55	TD	575 sacks

* 8 5/8" casing to be set if lost circulation is encountered. If lost circulation is not encountered, the hole will be reduced to 7 7/8" at 1476'.

Yates Petroleum Corporation proposes to drill and test the Abo and Intermediate formation. Approximately 748' of surface casing will be set and cement circulated to shut off gravel and cavings. If needed due to lost circulation, 8 5/8" intermediate casing will be run to 1476' and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: Spud mud to 748'; FW gel/LCM to 1476'; cut Brine to 3400' and diesel to TD.

BOPE PROGRAM: BOPE will be installed on the 13 3/8" casing and tested.

GAS NOT DEDICATED

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION
OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION
OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT
IN ADVANCE.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Clifton R. May

TITLE

PERMIT AGENT

DATE

9/13/93

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

James D. Allen

TITLE

Area Manager

DATE

10-8-93

* PENDING UP APPROVAL

*See Instructions On Reverse Side

Penalty for falsification: Any person knowingly and willfully to make to any department or agency of the

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

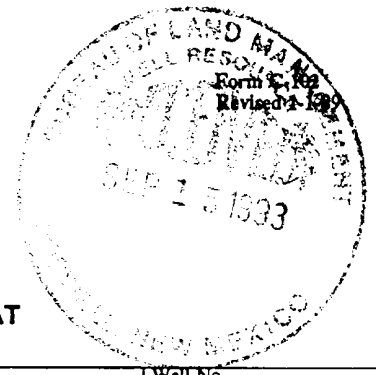
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

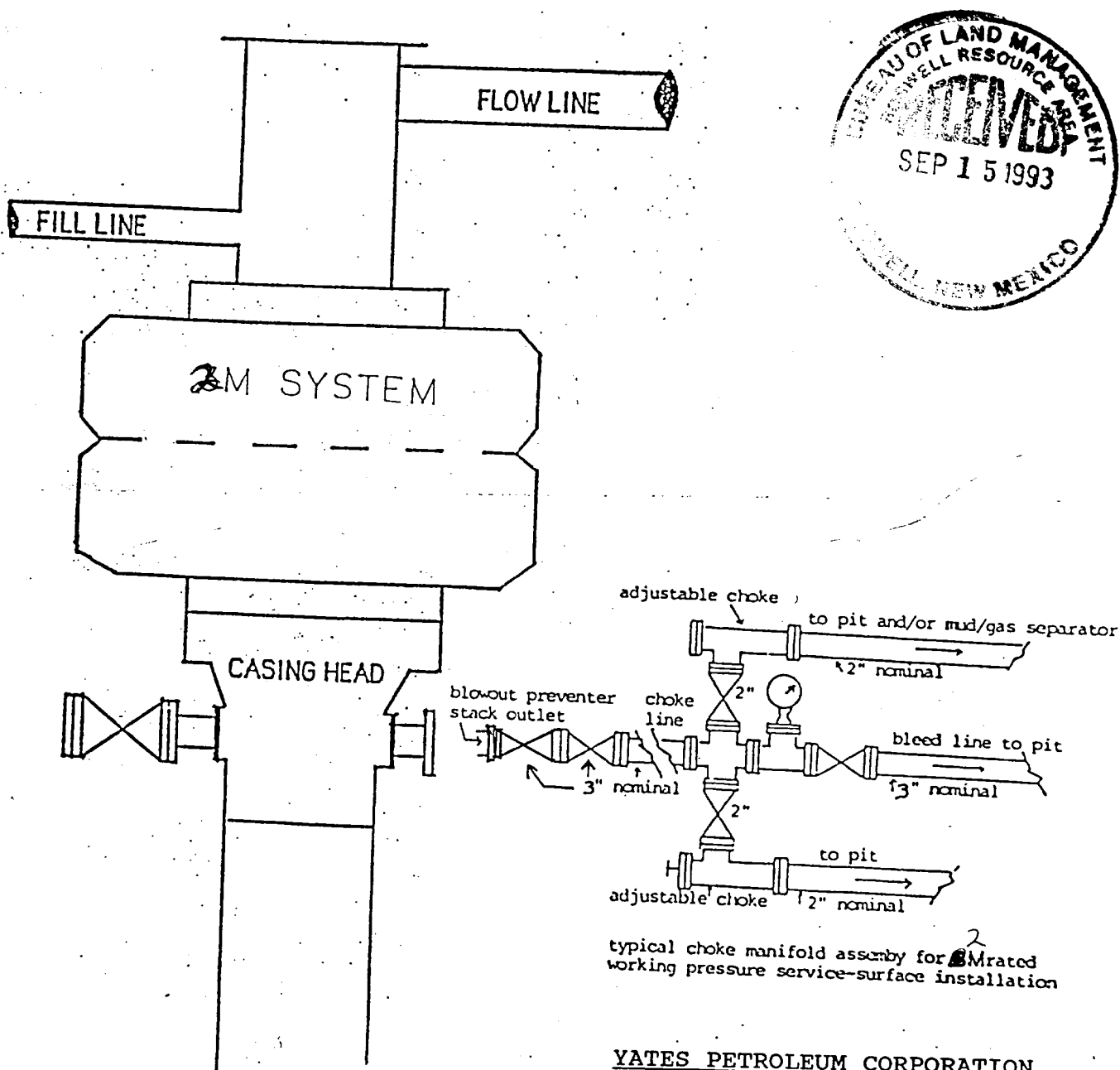
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section



Operator YATES PETROLEUM CORPORATION			Lease SOUTH ALKALI "LK" FEDERAL		Well No. 5
Unit Letter D	Section 1	Township 6 SOUTH	Range 25 EAST	County CHAVES	
Actual Footage Location of Well: 660 feet from the NORTH line and 990 feet from the WEST line					
Ground level Elev. 3819	Producing Formation ABO		Pool PECOS SLOPE ABO		Dedicated Acreage: 102.59 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>3. 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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					
			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.		
			Signature <i>Clifton R. May</i>		
			Printed Name CLIFTON R. MAY		
			Position PERMIT AGENT		
			Company YATES PETROLEUM CORPORATION		
			Date 9/13/93		
			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 8/23/93		
			Signature & Seal <i>[Signature]</i>		
			Certificate No. 3640		

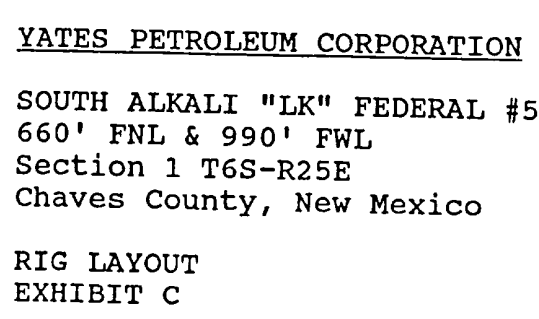
YATES PETROLEUM CORPORATION



YATES PETROLEUM CORPORATION

SOUTH ALKALI "LK" FEDERAL #5
660' FNL & 990' FWL
Section 1 T6S-R25E
Chaves County, New Mexico

BOP DIAGRAM
EXHIBIT B



RIG LAYOUT
EXHIBIT C

YATES PETROLEUM CORPORATION
South Alkali "LK" Federal #5
 660' FNL and 990' FWL
 Sec. 1-T6S-R25E
 Chaves County, New Mexico



1. The estimated tops of geologic markers are as follows:

San Andres	575'
Glorietta	1625'
Fullerton	3011'
Abo	3677'
TD	4400'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 250 - 300'
 Oil or Gas: 3677'

3. Pressure Control Equipment: BOPE will be installed on the ~~8-5/8"~~^{9 5/8"} casing and rated for 2000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

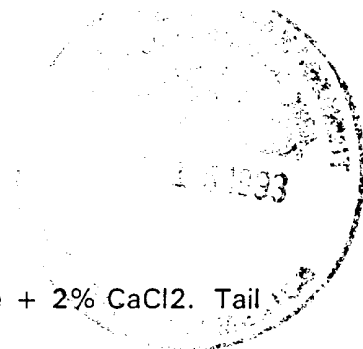
4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	Grade	Thread	Coupling	Interval	Length
17-1/2" 14 3/4	13-3/8"	54.50#	J55	8R	ST&C	0-748'	748'
* 12-1/4" 8 3/4	8-5/8" 7"	24# 20#	J55	8R	ST&C	0-1476' 1450'	1476' 1450'
7 7/8"	4 1/2"	9.5#	J55	8R	LT&C	0-4400'	4400'

* ~~8-5/8"~~^{7"} casing to be set if lost circulation is encountered. If lost circulation is not encountered, the hole size will be reduced to ~~7-7/8"~~^{6 1/4"} at ~~1476'~~^{1450'}.

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8.
2. Yates Petroleum Corporation requests that a variance be granted in requiring the casing and BOPE to be tested to 1500 PSI to testing the casing and BOPE to 1000 PSI. The rig pumps will be used to test the casing. Rig pumps used in this area cannot safely test above 1000 PSI. We would have to go the the greater expense of hiring an independent service to do the testing. Also, the maximum shut-in bottom hole pressure is 1100 PSI. Pressure at the surface is much less. Most of the time the Abo formation requires treatment before it flows.



B. CEMENTING PROGRAM:

Surface casing: Cement with 335 sacks HLC + 1/4#/sack flocele + 2% CaCl₂. Tail in with 250 sacks 'C' + 2% CaCl₂.

Intermediate Casing: (Optional) Cement w/400 sacks Halliburton Lite 'C' with 2% CaCl₂. Tail in with 250 sacks Neat 'C' w/2% CaCl₂.

Production Casing: 575 sacks 65/35 Poz C with/2% gel, .6% Halad 322, 2# salt.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1500'	Gel/LCM	8.6 - 9.9	32-40	N/C
1500'-3400'	Cut Brine	8.6-10.0	28	N/C
3400'-TD	Salt Gel/Starch	<9.3 ppg	31-39	<15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: Every 10' out from under surface casing.

Logging: CNL/LDT TD to casing W/GR/CNL to surface DLL W/RXO TD to casing.

Coring: None anticipated.

DST's: As warranted.

7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: 0	TO: 1500'	Anticipated Max. BHP:	200	PSI
From: 1500'	TO: 3400'	Anticipated Max. BHP:	768	PSI
From: 3400'	TO: TD	Anticipated Max. BHP:	1100	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: 0-1500'.

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 105 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 10 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
South Alkali "LK" Federal #5
660' FNL AND 990' FWL
Sec. 1-T6S-R25E
Chaves County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 48 miles North Northeast of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

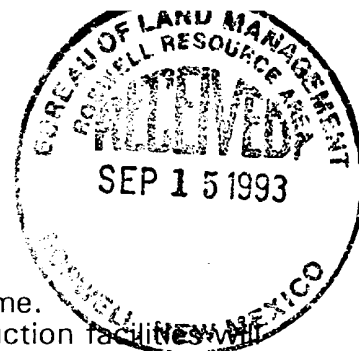
Proceed north of Roswell on highway 285 for approximately 34.5 miles to Dona Ana Road. Turn east on Dona Ana Road and go approximately 7.5 miles. Take the left fork and go approximately 2.5 miles to the Mapco pipeline road. Turn right for approximately 4.5 miles to the Thomas LN #1 location. The new access will start here and go north. NOTE: Yates is applying for off-lease road right-of-way across the NENW of 12-6S-25E. See Exhibit A.

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 3000' in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a Northwesterly direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on both sides. One traffic turnout will be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.
- F. Two cattleguards will be installed.

3. LOCATION OF EXISTING WELL

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.



4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A. A possible source may be Corn water station located in Section 12-T6S-R25E.

6. SOURCE OF CONSTRUCTION MATERIALS:

A Local dirt contractor will be contracted to build this location. They will be responsible for getting the proper permits and will furnish surfacing material from a source of their choosing. Probable source is Corn Brothers private pit in Sec. 8-T6S-26E.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.



10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP:

Federal surface Bureau of Land Management, Roswell, New Mexico.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE

- A. Through A.P.D. Approval:

Clifton R. May, Permit Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

- B. Through Drilling Operations,
Completions and Production:

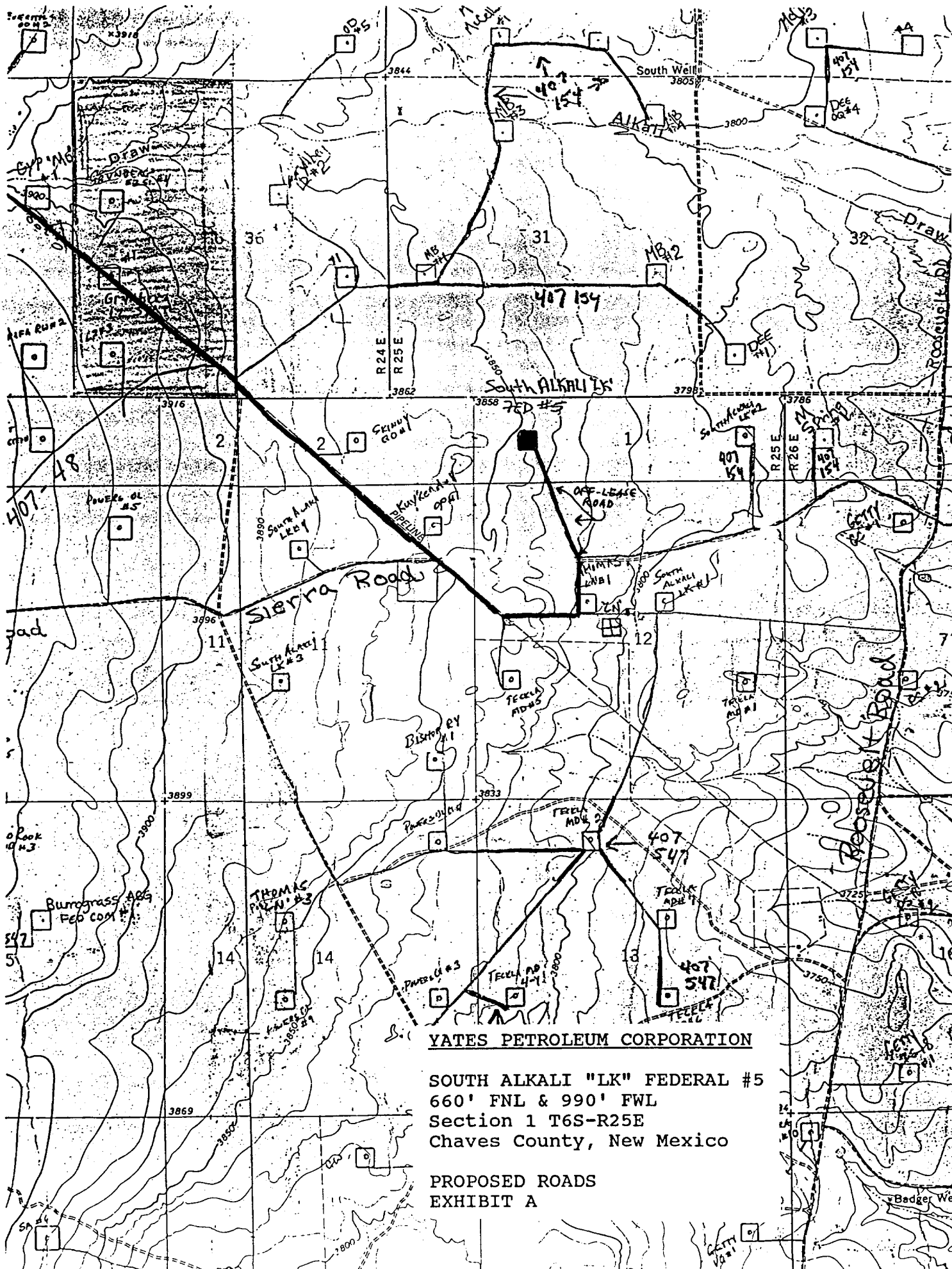
Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

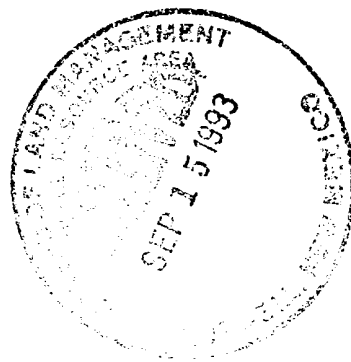
14. CERTIFICATION:

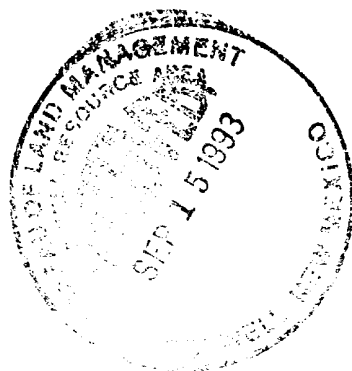
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and , that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

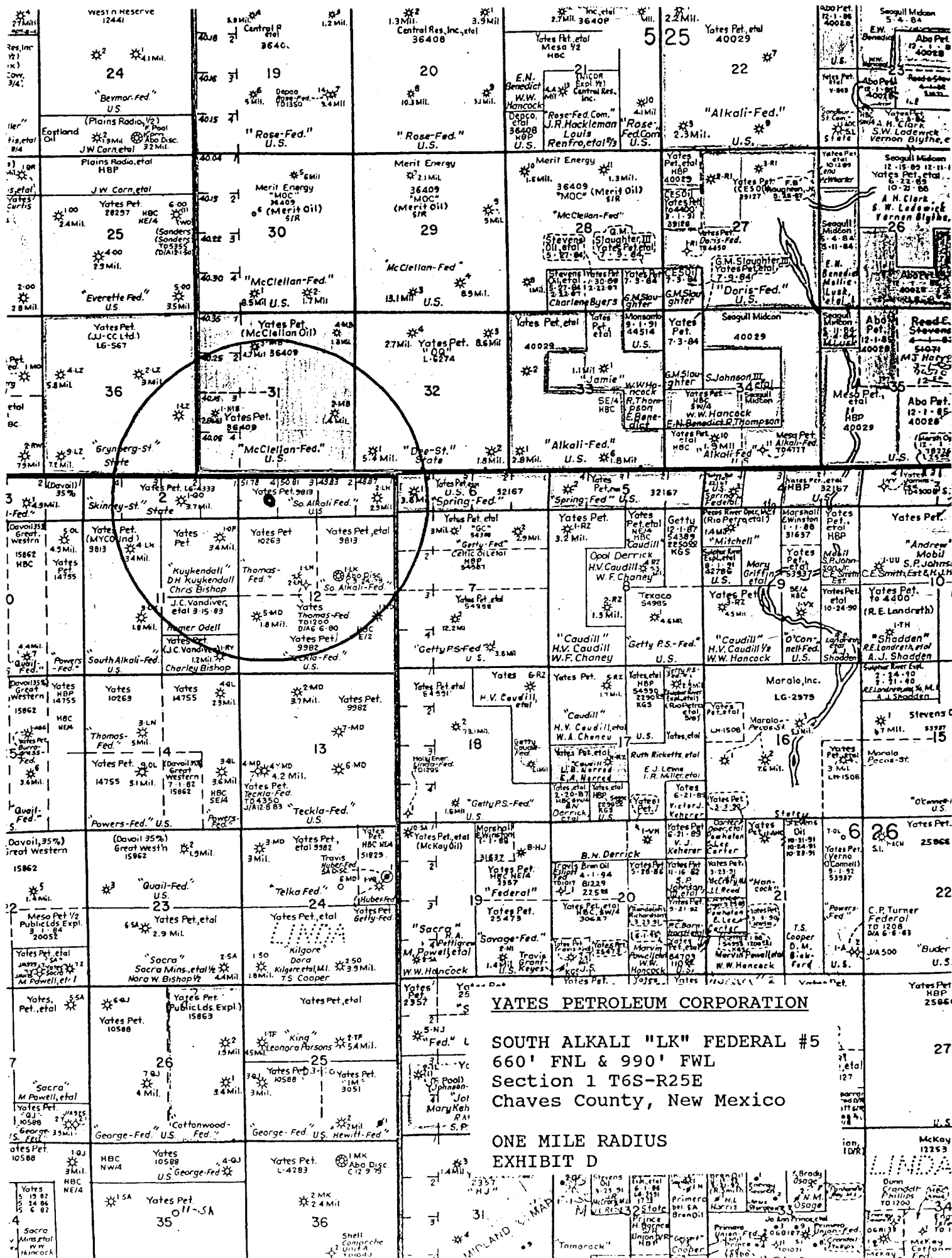
9/13/93


Permit Agent



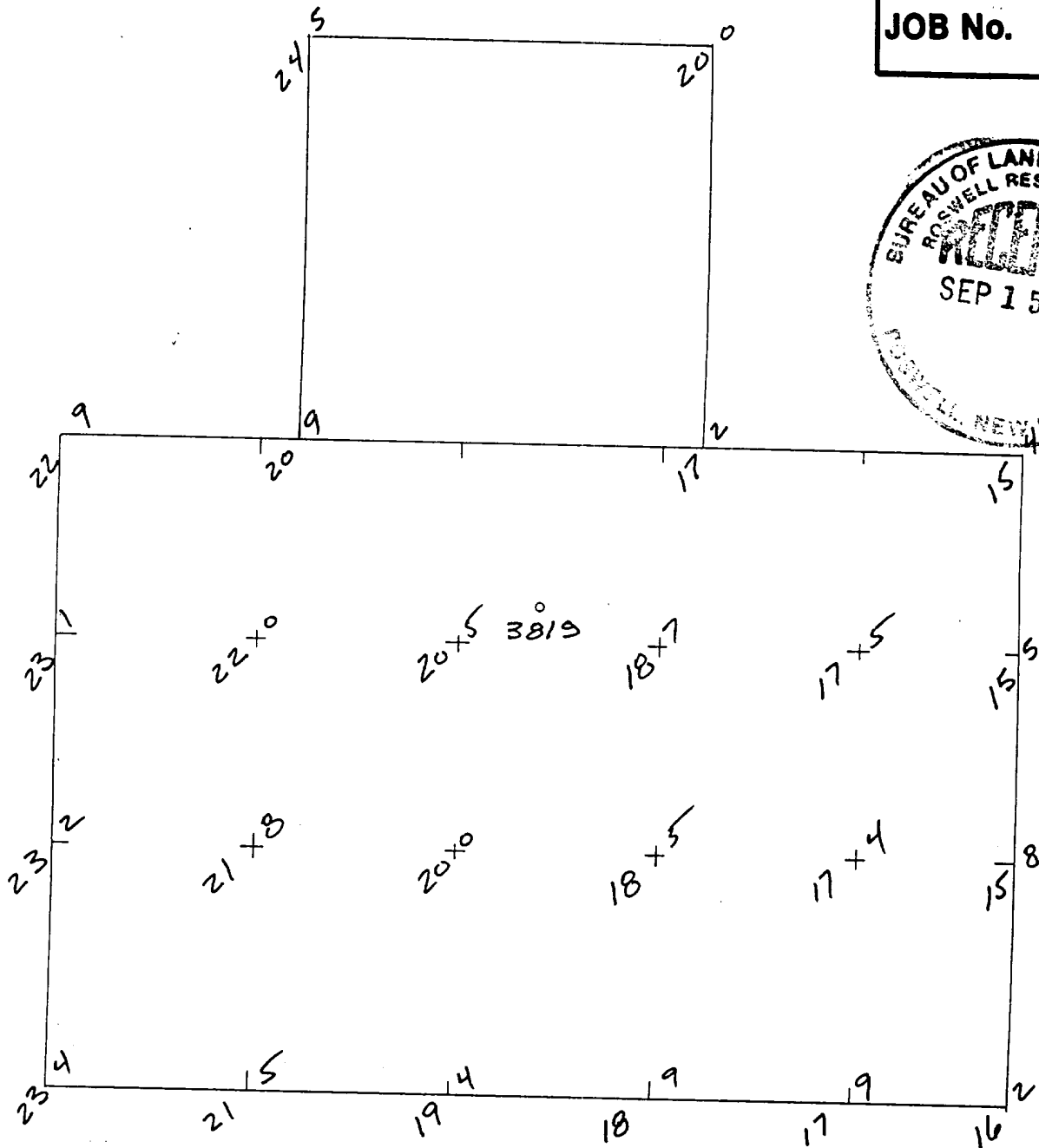
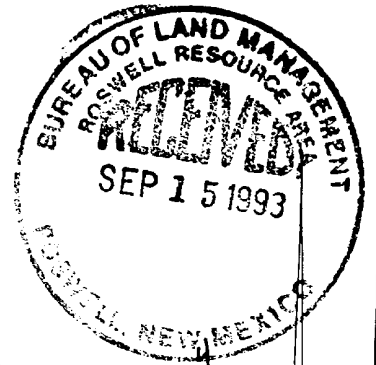








JOB No.



YATES PETROLEUM CORPORATION

SOUTH ALKALI "LK" FEDERAL #5
660' FNL & 990' FWL
Section 1 T6S-R25E
Chaves County, New Mexico

CUT AND FILL DIAGRAM
EXHIBIT E

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED* WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEETS THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

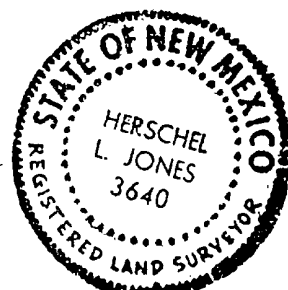
YATES PETROLEUM CORPORATION

ELEVATION PLAN VIEW OF SOUTH ALKALI "LK"
FEDERAL #5, 660/N & 990/W Sec.1, T.6 S., R.25E.,
CHAVES COUNTY, NEW MEXICO.

P.O. Box 996

Lovington, New Mexico 88260

Herschel L. Jones
HERSCHEL L. JONES R.L.S. No. 3640



SCALE: " = '	DRAWN BY:
DATE:	SHEET OF