Form 3160-3
(December 1990)

N.M. OIL CONS. COMMISSION
P.O. BOX 1980
HOBBS, NEW MEXICO 88240

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM 51844

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT AGREEMENT NAME: N/A

8. FARM OR LEASE NAME, WELL NO.: Anasazi "9" Federal No. 3

9. API WELL NO.: 30-025-32118

10. FIELD AND POOL, OR WILDCAT: Wildcat Bone Spring

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 9, T20S, R33E

12. COUNTY OR PARISH: Lea | 13. STATE: NM

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Mitchell Energy Corporation

3. ADDRESS AND TELEPHONE NO.: P.O. Box 4000, The Woodlands, TX 77387-4000 (713)377-5855

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2000' FNL and 2,080' FEL (SW/NE)
At proposed prod. zone: 2000' FNL and 2,080' FEL (SW/NE) Unit G

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 30 miles west of Hobbs, NM

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	17. NO. OF ACRES ASSIGNED TO THIS WELL
560	1,161.34	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
100	9,800	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3546 GR

22. APPROX. DATE WORK WILL START*: 7-01-93

23. PROPOSED CASING AND CEMENTING PROGRAM Secretary's Potash / R-111-P Potash

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8", K	54.5	500'	Class C, TOC = Surface
12-1/4"	8-5/8", K	32.0	2950'	Lite + Class C, TOC = Surface
7-7/8"	5-1/2", K	17.0	TD	Lite + 50/50 POZ, TOC = 2500'

The operator proposes to drill to a depth sufficient to test the Bone Spring formation for oil. If productive, 5½" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulations. Specific programs as per Onshore Oil & Gas Order #1 are outlined in the following attachments:

Drilling Program
Surface Use & Operating Plan

Exhibit #1 & 1A - Blowout Preventer Equipment
Exhibit #2 - Location & Elevation Plat
Exhibit #3 - Planned Access Roads
Exhibit #4 - One-mile Radius Map
Exhibit #5 - Production Facilities Layout
Exhibit #6 - Drilling Rig Layout
Exhibit #7 & 7A - Hydrogen Sulfide Drilling Operations Plan
Exhibit #8 - Cultural Resources Examination

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 drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED George Mullen (George Mullen) TITLE Regulatory Affairs Specialist DATE 04-14-93

(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: APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

APPROVED BY /s/ Cathy Foster TITLE Acty State Director DATE 7-6-93

*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 as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill or deepen an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling operations on an oil and gas lease.

*U.S. GPO: 1991-573-016/26050

DRILLING PROGRAM

Attached to Form 3160-3
Mitchell Energy Corporation
Anasazi "9" Federal No. 3
2000' FNL & 2080' FEL
SW/NE, Sec. 9, T20S, R33E
Lea County, New Mexico

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface
Rustler	1300'
Base of Salt	2800'
Yates	3040'
Delaware	5410'
Bone Spring	8120'
Total Depth	9800'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	100'	Fresh Water
Yates	3040'	Oil
Delaware	5410'	Oil
1st Bone Spring SS	9150'	Oil

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13-3/8" casing at 500' and circulating cement back to surface. Shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them behind the 8-5/8" casing. The 5-1/2" production casing to be run at TD will be cemented back 450' into the 8-5/8" casing (TOC at 2500') in order to cover all productive zones in the Delaware and Bone Spring.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond, Type
26"	0-40'	20"	Conductor, 0.3" wall thickness
17-1/2"	0-500'	13-3/8"	54.5#, K-55, ST&C, New, R-3
12-1/4"	0-2950'	8-5/8"	32#, K-55, LT&C, New, R-3
7-7/8"	0- TD	5-1/2"	17#, K-55, ST&C, New, R-3

Cement Program:

13-3/8" Surface Casing @ 500':	Cemented to surface with 525 sacks of Class "C" + 2% $CaCl_2$ + 1/4 #/sack of Flocele.
8-5/8" Intermediate Casing @ 2950':	Cemented to surface with 800 sacks Premium Lite + 6% gel + 10#/sack salt & 300 sacks Class "C" + 2% $CaCl_2$.
5-1/2" Production Casing @ TD':	Cemented with 700 sacks Premium Lite + 0.4% Halad 22A and 400 sacks 50/50 Class H/Poz + 0.8% Halad 9 + 1/4 #/sx Flocele + 3% KCl. This cement slurry is designed to bring TOC to 2500'.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3,000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be nippled up on the 13-3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3,000 psi and the hydril to 70% of rated working pressure (2100 psi). This testing procedure will be duplicated after any use under pressure during the drilling of the well.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water, brine water, and starch mud system. The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0-500'	Fresh Water (spud)	8.5	40-45	NC
500-2950'	Brine Water	10.0	30	NC
2950-9100'	Cut Brine Water	9.2-9.5	30	NC
9100-TD	Cut Brine/Gel/Starch	9.2-9.5	32	$\leq$40

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

C. A mud logging unit with H_2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 2950' to TD.

8. Logging, Testing and Coring Program:

A. Drillstem tests will be run on the basis of drilling shows.

B. The electric logging program will consist of GR-Dual Laterolog-MSFL and GR Compensated Neutron-Density from TD to 2950' and GR/CNL to surface. Selected SW cores will be taken in zones of interest.

C. The H_2S Drilling Operations Plan shown in Exhibit #7 will be utilized from the top of the Yates formation until 5-1/2" casing is cemented at TD.

D. No conventional coring is anticipated.

E. Further testing procedures will be determined after cementing the 5½" production casing at TD based on drill shows, log evaluation and drill stem test results.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom-hole temperature (BHT) at TD is 150°F and estimated bottom-hole pressure (BHP) is 3800 psig. No major loss circulation zones have been reported in offsetting wells. Minor concentrations of H_2S have been reported in offsetting Yates oil wells. The H_2S Drilling Operations Plan (Exhibit #7) will be in effect from the initial penetration of the Yates until the 5½" casing is cemented at TD.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is July 1, 1993. Once commenced, the drilling operation should be finished in approximately 25 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

MINIMUM BLOWOUT PREVENTER REQUI /ENTS

3,000 psi Working Pressure

3 MWP

EXHIBIT # 1

Anasazi "9" Fed #3

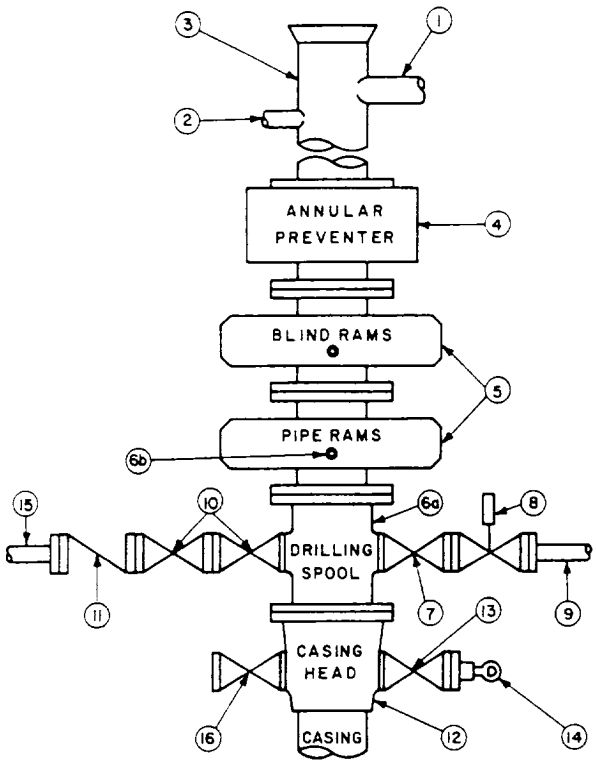
Lea County, New Mexico

STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
	—or—		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate ☐ Plug ☐	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate ☐ Plug ☐	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL			
16	Flanged valve	1-13/16"	

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised 1-1-89

Exhibit #2
Anasazi "9" Federal No. 3
Lea County, New Mexico

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No
MITCHELL ENERGY Corporation	ANASAZI 9 FEDERAL	#3

Unit Letter	Section	Township	Range	County
G	9	20S.	33E. NMPM	LEA

Actual Footage Location of Well:
2000 feet from the NORTH line and 2080 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3546	Bone Spring	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

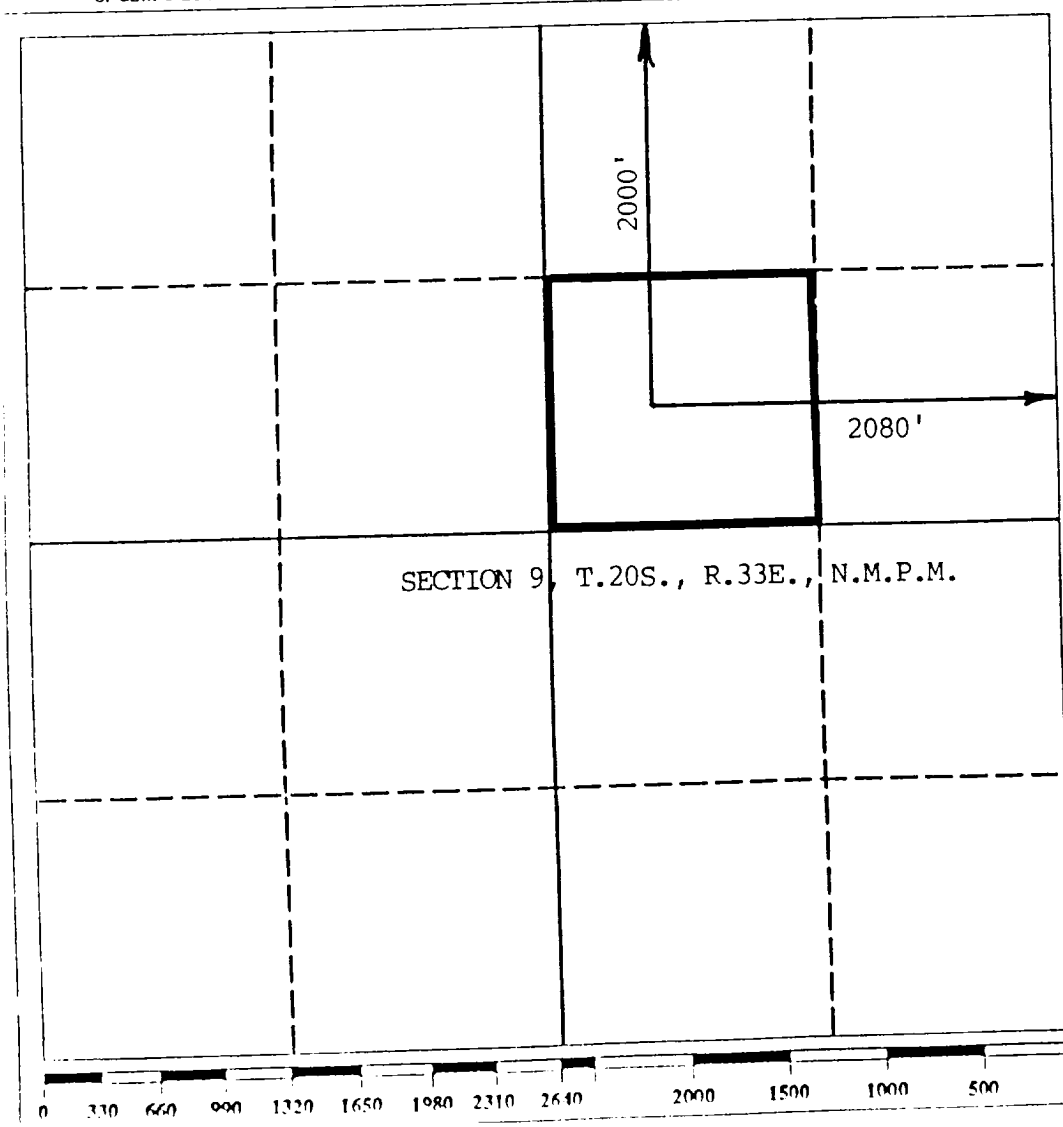
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the 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 neccessary. _____

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.



OPERATOR CERTIFICATION

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

Signature: George Mullen
Printed Name: George Mullen
Position: Regulatory Affairs Specialist
Company: Mitchell Energy Corp.
Date: April 14, 1993

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 2/12/93
Signature & Seal of Professional Surveyor: JACQUES 6290 NEW MEXICO
Certificate No. 6290

BK. 67, PG. 38