Submit to Appropriate District Office State Lease - 6 copies For Lease - 5 copies

State of New Mexico Energy, Minerals and Natural Resources Department

DISTRICT I P.O. Box 1980, Hobbs, NM \$8240

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

API NO. (assigned by OCD on New Weils)

Indicate Type of	Lease			
	STATE	<u>×</u> _	FEE	_

P.O. DISWE DO, ARESE, RM 88210				STATE FEE
DISTRICT III 1000 Rio Brazos Rd., Aziec, NM 87410			6. State Oil & Gas Less L-3568	e No.
APPLICATION FOR PERMI	T TO DRILL, DEEPEN,	OR PLUG BACK		
Ia. Type of Work:			7. Lease Name or Unit	Agroement Name
DRILL X RE-ENT b. Type of Well: OIL GAS WELL X; WELL OTHER	ER DEEPEN SINGLE	PLUG BACK MULTIPLE ZONE	Burton Fla	t Deep Unit
2. Name of Operator	- 		8. Well No.	
General Atlantic Resour	ces, Inc.		39	· ·
3. Address of Operator 410 17th Street, Ste. 1	400, Denver, CO 8	0202	9. Pool name or Wildcau E. Avalon	FENTON, UECHWARE, NIN
4. Weil Location Unit Letter J: 1,980 Fee	From The south	Line and 1,98	60 Feet From The	East Line
Section 2 Tow	vaship 21 South R	mge 27 East	NMPM Eddy	County
	10. Proposed Depth	i i	Formation	12. Rosary or C.T.
	3,250		Delaware	Rotary
13. Elevations (Show whether DF, RT, GR, etc.) 3,213 GR	14 Kind & Samus Plug Bond Statewide	15. Drilling Command not determ		Due Work wil san n Approval
17. F	PROPOSED CASING A	ND CEMENT PROG	RAM	
SIZE OF HOLE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST TOP
26" 20" H-40	94# ST&C	155 '	385 sxs Class "	G" Sfc.
17 1/2" 13 3/8" H-40	48# ST&C	650'	400 sxs 35/65	
<u> </u>		<u> </u>	+ 200 sxs Clas	s "C" Sfc.
12 1/4" 8 5/8" K-55 +45' S-80	24# ST&C	2,730'	880 sxs 35/65 + 200 sxs Clas	
7 7/8" 5 1/2" K-55	14# ST&C	3,190'	165 sxs Class	
Propose to drill to appro	ximately 3,190' t	o test Delaware	e Formation.	

See attached "Drilling Plan" for drilling, casing, and pressure control program detail.

IU-) 11-19-93 NLANT

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DESIGN OR FLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE, GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

. (nation above is true and complete to the heat of my knowled		Agent/Petroleum Engineer	Nov. 9, 1993
TYPE OR PRINT NAME	David F. Banko, P.E.			(303) TELEPHONE NO. 820–4480
(This space for State Use)	ORIGINAL SIGNED BY MIKE WILLIAMS SUPERVISOR, DISTRICT IF	TITLE		NOV 1 7 1993
TIA L	MEY N.M.O. C.D. IN SUFFICIENT ME TO WITNESS CEMENTING THE 378, 278 CASING		AL THURK VAL DECR PERMIT BURNES 611 UMLESS DRUMING UNIX	74

Selemit to Appropriate District Office State Lease - 4 expise Pee Lease - 3 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Pe, New Mexico 87504-2088

DISTRICT III 1000 Rio Brasco Rd., Autoc, NM 87410

DISTRICT II F.O. Deswer DD, Artesia, NM 88210

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

ENERAL ATLANTIC RESOURCES, INC Burton Floating 2 Township 2 2 SOUTH 2 FAST Notify 2 EDDY Band Perception 2 FAST Notify EDDY EDDY EDDY EAST But Brown Burton For Township 1980 Set Tools the EAST But Brown Burton FOR TOWN W EAST Delocated Arrange: 4 A Acres 1 FOR TOWN W EAST L Centers the arrange dedicated to the califest well by external percent or burtons under an inepit below. 2 If more then are invested of different correctable in the well, tented to well, tented to the well tented to the well tented to the well, tented to the well, tented to the well	permar		CASS			Wall No.
Post	GENERAL A		ES, INC BU	RTON FLAT		
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GENERAL ATLANTIC RESOURCES, INC.

Burton Flat Deep Unit #39 1,980' FSL 1,980' FEL (NW/4 SE/4) Sec. 2 T21S R27E (Irregular section) Eddy County, New Mexico State Lease #L-3568

DRILLING PROGRAM

In conjunction with Form C-101, Application for Permit to Drill, General Atlantic Resources, Inc. submits the following items of pertinent information for the drilling of the above captioned well.

SURFACE F	ORMATION	Aeolia	an sand - Fresh water possible	in small amounts			
ESTIMATED FORMATION TOPS (Water, oil, gas and/or other mineral-bearing formations)							
Rustler		155'	Evaporites				
Yates		590'	Sandstones, shales, some water, oil or gas-be				
Capitan		780'	Carbonates				
Delaware		2,730'	Sandstone, shales & siltstones, some water, oil-bearing				
1st pay		2,780'	Sandstone, expected oil-bearing				
2nd pay		3,020'	Sandstone, expected oil-bearing				
TOTAL DEPTH		3,190'					
CASING PRO	CASING PROGRAM						
Depth	Hole Dia.	Cas. Dia.	Casing Wt. & Grd.	Cement			
O-155	26"	20"	H-40 94# STC New	To surface w/ 385 sx Class "C" + 2% CaCl + .25 #/sk Cellophane			
0 - 650'*	17 1/2"	13-3/8"	H-40 48# STC New	To surface w/ 400 sx Class "C" 35/65 Poz + 6% gel + .25#/sk Cellophane + 200 sx Class "C" neat + 2% CaCl			
0 - 2,730'	12 1/4"	8-5/8"	K-55 24# STC New	To surface w/ 880 sx Class "C" 35/65 Poz + 6% gel + .25#/sk Cellophane + 200 sx Class "C" neat + 2% CaCl			
0 - 3,190'	7-7/8"	5½"	K-55 14# STC New	TD to 2300' w/ 165 sx Class "C")			

Operator will eliminate this string with Oil Conservation Division approval if no salt stringers are penetrated.

PRESSURE CONTROL (See attached schematic diagram)

B.O.P.'s and choke manifold will be installed and pressure tested before drilling out under surface casing and then will be checked daily as to mechanical operating condition. Ram type precentors and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. Annular type preventors, if used, will be pressure tested to 50% of their rated working pressure. B.O.P.'s will be pressure tested at least once every 30 days. All casing strings will be pressure tested to 0.22 psi/ft. or 1500 psi, whichever is greater, not to exceed 70% of internal yield.

B.O.P.'s will consist of 3,000 psi W.P. double gate rams. An annular preventor will not be used due to the space constraints under the rig floor, as discussed between the N.M. Oil Conservation Division and Bob Mowry for General Atlantic Resources, Inc.

MUD PROGRAM

0' - 155' Fresh water w/ gel\lime spud slurry
155' - 650' Fresh water
650' - 2730' Fresh water
2730' - 3190' Cut brine: M.W.: 9.2-9.4 ppg Vis. - 29-30 sec
W.L. - no control

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite.

AUXILIARY EQUIPMENT

- A) Upper kelly cock
- B) Inside B.O.P. or stab-in valve (available on rig floor)
- C) Mud monitoring will be visually observed.

LOGGING, CORING, TESTING PROGRAM

A) Logging: DIL/Microlog/CNL: TD - 2,730' Lithodensity/GR: TD - Surface

GR/CCL: TD - 2730'

B) Coring: None

C) Testing: Possible DST of Delaware pays, none planned.

ABNORMAL CONDITIONS

A) Pressures: Lost circulation is anticipated in the surface interval of the hole. No other

abnormal conditions are anticipated.

Delaware pressure gradient - 0.45 psi/ft

B) Temperatures: No abnormal conditions are anticipated

· - C) H₂S: None anticipated

D) Estimated bottomhole pressure: 1,435 psi

ANTICIPATED START DATE

December 15, 1993

COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" 4.7# J-55 tubing will be run for a flowing/pumping string. A Sundry Notice will be submitted with a revised completion program if warranted.

BURTON FLAT DEEP UNIT #39

3000 PSI MINIMUM שני אווא בייבאל בייבאל . בשיבים ודיצר ציבואל . DECK VALVE

3M CHOKE MANIFOLD EQUIPMENT -- CONFIGURATION MAY VARY

BLOWOUT PREVENTER

9-10 Inch 3000 PSI MINIMUM