UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

a.	Type of Work	5 Lease Number
	APPLICATION FOR PERMIT TO DRILL, DEI Type of Work DRILL	SF-078115
	5 19 15 16 77 700	Unit Reporting Number
1b.	Type of Well GAS MAY 0-	6. If Indian, All. or Tribe
2.	Operator MAY 2000	7. Unit Agreement Name
/	RESOURCES Oil & Gas Company	J
3.	Address & Phone No. of Operator	8. Farm or Lease Name
	PO Box 4289, Farmington, NM 87499	Grenier 9. Well Number
	(505) 326-9700	1B
4.	Location of Well	10. Field, Pool, Wildcat
	1650'FNL, 790'FEL	Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM)
	Latitude 36° 55.8, Longitude 108° 01.4	H Sec. 6, T-31-N, R-11- API # 30-045-
14.	Distance in Miles from Nearest Town	12. County 13. State
	12 miles from Aztec	San Juan NM
15.	Distance from Proposed Location to Nearest Property or Leas	se Line
16.	Acres in Lease	17. Acres Assigned to Well 320.69 E/2
18.	Distance from Proposed Location to Nearest Well, Drlg, Comp	pl, or Applied for on this Lease
40	750' This pation is subtraction	
19.	orprocedural review pursuant to 43 CEP ages a	20. Rotary or Cable Tools
	and appeal pursuant to 43 CFR 3165.4.	Rotary
21.	Elevations (DF, FT, GR, Etc.)	22. Approx. Date Work will Start
	6504' / GR	
23.	Dropood Cooling and Computing Duranting Control	LLING OPERAZONS AUTHORIZED ARE
		ENERAL REQUIREMENTS"
24.	Authorized by: Siggy Cale	1-4-00
	Regulatory/Compliance Administra	ator Date
PERM	IIT NO APPROVAI	DATE

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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 presentations as to any matter within its jurisdiction.





•			•			
District I PO Box 1980, Hobbs, NM 8	58241-198 0	State of Ne Energy, Minerals & Natur		e nt	Revised Febru	Form C-102 vary 21, 1994 ions on back
District II PO Drawer DD, Artesia, N	IM EE211-0749 314 ()	OIL CONSERVAT	ION2DIVISTO		Appropriat e Dis Stat e Leas	strict Office e – 4 Copies
District III 1000 Rio Brazos Rd. Azi	tec. NACE7410 MAY	PO Box	208 8 875 0 4-208 8	inch, M.		e - 3 Copies
District IV PO Box 2088, Santa Fe,					AMENDE	D REPORT
	121 x	, Q.Y	CREAGE DEDI	CATION PL	AT	
'API Number	C LIE	Bool Code		³Pool Name	:	7
30-045 300	240 7231	9/71599	Blanco Me	saverde/Ba	asin Dakot	a
'Property Code 18530	·	Property GREN			"We	11 Number 1B
OGRID No.	BURLIN	Operator		COMPANY	· •	levation
14538		¹⁰ Surface	Locatio n			
UL or lot no. Section	31N 11W	Lot lon Feet from the 1650	North/South line NORTH	Feet from the 790	East/West line EAST	SAN JUAN
ul or lot no. Section	11 BOTTOM	Lot lon Feet from the	f Different	From Surf	CCE East/West line	County
UL or lot no. Section	10.00	Lot 101 Feet 11 Oil Die	10 117 50001 1114	1 666 000 014	Cost, west 1114	LIJ KY
12 Decicated Acres	13 Joint or Infill 14 Consol	idation Code 15 Order No.		1	1	<u> </u>
MV/DK:E/320.6	9					
NO ALLOWABLE W	ILL BE ASSIGNED OR A NON-STA	HTO THIS COMPLETI ANDARD UNIT HAS BI	ON UNTIL ALL EEN APPROVED	INTERESTS. I	HAV E BEEN CO ISI ON	NSOLIDATED .
			• • •		RATOR CERT	
* 1239.4	48' 1362.2	4' 266 3 .	10	true and co	entify that the informet implete to the best of m	sy knowledge and belief
. 44	[Br. V	//	56		
1 •	4 LOT 3	B LOT 2.	2 10	330.		
12		18 KM	1 01 1	7 1	eare (a	0
 		—	·	Signat		
78.	!		790	()	gy Cole	
S LOT 5	· .			Regu	d Nam e latory Adm	inistrato:
15	ed to show			Title	1-4-00	
	d location		JN 3	Date	1-7-00	· .
		5F-07E		¹⁸ SUF	RVEYOR CER	TIFICATION
				I hereby vas ploti or under	certify that the well led from field notes of my supervision and that	ocation shown on this pactual surveys made by the same is true and
LOT 6			•	correct	in the best of my belie	
80			. 80		070050 45	4000
2632:08		 	— - — ~ill	·	CTOBER 15, of Survey	199 9
26		1 Kmg	\$ 263.		and Seel of BooferE	TICO S
LOT 7	<u>;</u>	ϵ_{ij} j	Be.		P'S ME	2 2
		ec 1			N	18/8/
1287.56	1313.40	26 27 .4 6		1	THE S	是月一
				1	1 7M 1	

OPERATIONS PLAN

Well Name: Grenier #1B

Location: 1650'FNL, 790'FEL, Sec 6, T-31-N, R-11-W

San Juan County, NM

Latitude 36° 55.8, Longitude 108° 01.4

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6504' GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	1542'	
Ojo Alamo	1542'	1565 ′	aquifer
Kirtland	1565 ′	2475 ′	gas
Fruitland	2475'	3135'	gas
Pictured Cliffs	3135'	3275 '	gas
Lewis	3275 '	3802 '	gas
Intermediate TD	3375'		
Mesa Verde	3802 ′	4226'	gas
Chacra	4226 '	4751 '	gas
Massive Cliff House	4751'	4942'	gas
Menefee	4942'	5392 ′	gas
Massive Point Lookout	5392'	5762 '	gas
Mancos	5762 ′	6746 ′	gas
Gallup	6746 ′	7464 '	gas
Greenhorn	7464'	7516'	gas
Graneros	7516'	7574'	gas
Dakota	7574 ′		gas
TD (4 1/2"liner)	7779' 🦳		

Logging Program:

Open hole - AIT, CNL-CDL - TD to intermediate TD CNL-CDL, CBL-CCL-GR - intermediate TD to surface Cased hole - CBL-CCL-GR - TD to surface

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud		40-50	no control
200- 3375'	LSND	8.4-9.0	30-60	no control
3375- 7779'	Gas	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program (as listed, the equivalent, or better):

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3375'	7"	20.0#	J-55
6 1/4"	3275' - 7779'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 7779' 2 3/8" 4.70# EUE

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

