Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0136 Expires: November 30, 2000

APPLICATION FOR PERMIT TO	3.	Jicarilla Contract 98				
la. Type of Work	6.	6. If Indian, Allotee or Tribe Name				
1a. Type of Work				Jicarilla Apache		
1b. Type of Well Oil Well X Gas Well Other Single Zone X Multiple Zone			ne 7.	7. Unit or CA Agreement Name and No.		
				Jicarilla 98		
2. Name of Operator			8.	Lease Name and We	il No.	
Energen Resources Corporation 3a. Address		3b. Phone No. (include area co	de)		<u> </u>	
Da. Address			. 19.	API Well No. 30-039-	+ 14 21	
4. Location of Well (Report location clearly and in accordance v	with any State eq	uirements)*		Field and Pool, or E		
At surface 2555' FSL. 715' FWL	10.	Blanco Mesaverde				
At proposed prod. zone				Sec., T., R., M., or	Blk. and Survey or Ar	
				L Sec. 19, T26N, R03W, N.M.P.		
14. Distance in miles and direction from nearest town or post office	*			County or Parish	13. State	
12 miles northwest of		Now Movico		o Arriba	NM	
15. Distance from proposed*		No. of Acres in lease		g Unit dedicated to		
location to nearest	1.0	THO. OT TROUGH IN IOUGH	177.00	e com account to	, , , , , , , , , , , , , , , , , , ,	
property or lease line, ft. 715'		2508.2	1	W 1/2		
(Also to nearest drg. unit line, if any)						
18. Distance from proposed location*	19			20.BLM/BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft.	1					
1700'		6401'				
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22	22. Approximate date work will start		t* 23. Estimated duration		
7154' GL	1	February 03		10	Days	
 A Drilling Plan A Surface Use Plan (if the location is on National Forest Syste SUPO shall be filed with the appropriate Forest Service Office 	e).	Item 20 above). Operator certification. Such other site specific in authorized officer.	nformation :	and/or plans as may	be required by the	
25. Signuature	Name	(Printed/Typed)	5 16 77 70	Date		
(i be of homes	Doug	g Thomas	11/27/02			
Title		19 18 c	B			
Production & Completion Foreman		\$ 74	$J_{\alpha \beta }^{\alpha }M\cdot$	a sa		
Approved by (Signautre)	Name	(Printed/Types)	5	Date		
(ORIG. SGN.) RICHARD W. WILS		TO VE	ું . . જી(3 M	AY 7 2003	
Title FOR Assistant Field M			- ~ C) & J			
Application approval does not warrant or certify that the application conduct operations thereon. Conditions of approval, if any, are attached.				ganzan Taman Taman di Taman di	 S	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, m States any false, fictitious or fraudulent statements or representation	nake it a crime for ons as to any matt	any person knowlingly and willfer within its jurisdiction.	ully to make		or agency of the Unite	
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UISTRICT 1 PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD. Artesia. NM 88211-0719

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

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C–102 Revised February 21, 1994 Instructions on back it to Appropriate District Office

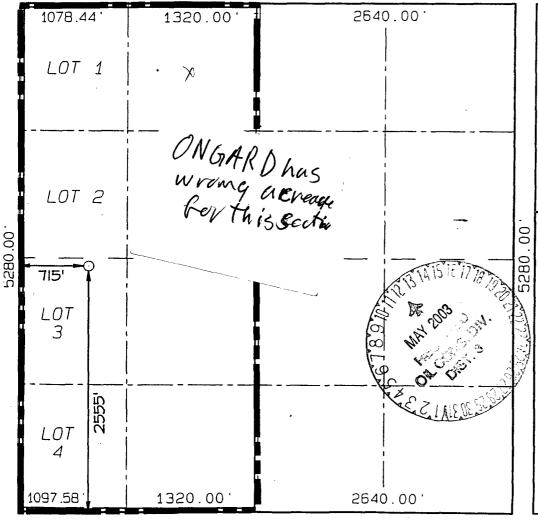
Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

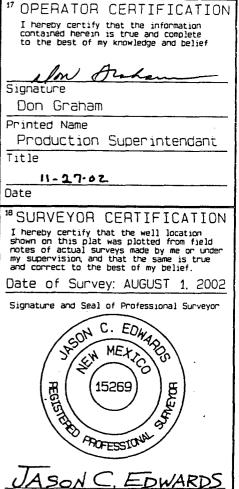
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

3003	PI Numbe	743	1	*Pool Coo 72319		Pool Name BLANCO MESAVERDE					
Property 2194	Code		Property Name JICARILLA 98					°Well Number 48			
'0GRID N 16292	1		{	*Operator Name ENERGEN RESOURCES CORPORATION					l	*Elevation 7154	
¹⁰ Surface Location											
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County	
	19	26N	3W		2555	SOUTH	715	WE	ST	RIO ARRIBA	
¹¹ Bottom Hole Location If Different From Surface											
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County	
¹² Dedicated Agres	291.8	38 Acre	s – (W	/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Onden Na.				
NO ALLOW	ARIE W	TII BE A	SSTGNE) IO TH	IS COMPLETION	ON UNTTL ALL	INTERESTS H	AVE DE	EN CON	ISOL IDATED	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION





Certificate Number

15269

OPERATIONS PLAN

WELL NAME: Jicarilla 98 #4B

LOCATION: 2555' FSL, 715' FWL, Section 19, T26N, R3W, Rio Arriba, New Mexico

FIELD: Blanco Mesaverde ELEVATION: 7154'

FORMATION TOPS:

Surface	San Jose	Huerfanito Benonite	4256
Nacimiento	2351	Cliff House	5466
Ojo Alamo	3451	Menefee	5576
Kirtland	3516	Point Lookout	5951
Fruitland	3621	Mancos Shale	6216
Pictured Cliffs	3761		
Lewis	3956		
		Total Denth	6401

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: NONE

Inter TD to total depth: Temp/HRI/CNT, LDT/GR

Mud Logs:

3600' to total depth

Coring:

None

Natural Gauges:

Every 500' from intermediate TD to total depth

<u>MUD PROGRAM</u>: Fresh water low solids mud from surface to intermediate TD (9.0 - 9.2 PPG). Air/mist from intermediate casing point to total depth.

CASING PROGRAM:

HOLE SIZE	<u>DEPTH</u>	CSG SIZE	$\underline{\text{WT.}}$	<u>GRADE</u>
12-1/4"	200'	9-5/8"	36#	J-55
8-3/4"	4156'	7"	20#	J-55
6-1/4"	4006'-6401'	4-1/2"	10.5#	J-55

TUBING PROGRAM:

6300' 2 3/8 4.7# J-55

WELLHEAD: 11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" 3000 xmas tree.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be available on the rig floor during drilling operations.

CEMENTING:

9 5/8 surface casing - Cement with 110 sxs Class B Cement with 1/4" Flocele/sx and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom with centralizers on the first three joints.

7" intermediate casing - cement with 420 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (937cu. Ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC. Test casing to 1200 psi for 30 minutes.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 8 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2 Production Liner

Cement with 295 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk (369 cu. Ft., 50% excess to intermediate casing). WOC 18 hrs prior to completion.

Cement nose guide shoe on bottom with float collar on top of shoe joint. Liner hanger will have a neopreme packoff on top.

OTHER INFORMATION:

- 1) The Blanco Mesaverde and Gallun Dekote will be completed and downhole commingled.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Gallap is 900, Mesa Verde is 800, Pictured Cliffs is 500 and the Fruitland 400 psi.
- 4) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.