• '		m 3160-3 UNITED STATES gust 1999) DEPARTMENT OF THE INTERIOR							FORM APPROVED OMB NO. 1004-0136					
	À	BUREAU OF LAND MANAGEMENT						·	Expires: November 30, 2000					
(	V	APPLICATION FOR PERMIT TO DRILL					ドロシロ REENTER	VED		5. Lease Serial No. SF - 079483				
	la.	Type of Work	▼ DRILL REEN				TER 2003 JUL - 1 PM 12: 34			6. If Indian, Allotee or Tribe Name				
		o. Type of Well Oil Well Gas Well Other			Other	X Single Zone Multiple Zone				7. Unit or CA Agreement Name and No.				
		Name of Operat							8.	Lease Name and \	Vell No.	•		
		Energen Resources Corporation					3b. Phone No. (inc	lude area coo		Carson 203				
		2198 Bloomfield Highway Farmington, New Mexico					87402 (505)325-6800			API Well No.	392747	7		
	4.	Location of Wel	(Report location c	10.	Field and Pool, or		/							
		At surface 70	5'FSL, 1755'	FWL	n An i	. 🖟 🥋 - L B		<u>Basin Fruit</u>	land Coal					
		At proposed proc	zone			$-\int_{\mathcal{C}^{\infty}}$	CONTRACTOR				or Blk. and Survey or Are	ea		
						2000-		25 F		JCC. 0, 100	N, R4W, N.M.P.M.	<u>.</u>		
-	14.	Distance in miles	and direction from r		•	live;	Contract to		9	County or Parish	13.State			
	_			<u>les Northea</u>	<u>st of Gobern</u>		dor New Mexico			Rio Arriba 🧪   NM		-		
	15.	Distance from p				160	No. of Acres in leas		17. Spacin	g Unit dedicated t	o this well			
		property or lease	e line, ft.	705	•		9213 0	المستثنون المستثنون		W/2	)			
		(Also to nearest	drg. unit line, if any	<u> </u>			- LETS. 01	<b></b>				_		
A	18.		roposed location* drilling, completed,			19.	Proposed Depth		20.BLM/	BIA Bond No. or	ı file			
		applied for, on t		5000'			3833'							
, 0	21. Elevations (Show whether DF, KDB, RT, GL, etc.						22. Approximate date work will start*			23. Estimated duration				
		7063' GL					July 2004			6 Days				
٠,٠		24. Attachments												
	The	The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:												
•´,	1.	1. Well plat certified by a registered surveyor.  4. Bond to cover the operations under the operations of the operations									sting bond on file (see			
		A Drilling Plan  Item 20 above).					c antico co verso of an emoning come on and (co							
	3.		Plan (if the location			the	5. Operator cer							
		SUPO shall be filed with the appropriate Forest Service Office).  6. Such other site specific informati authorized officer.					tormation a	ion and/or plans as may be required by the						
	<u></u>	Signuature	$\overline{}$	Name (Printed/Typed) Doug Thomas				Date	:	=				
		P()								07/30/03				
	Titl	n our Streams					TTIUIIIaS			07730703		_		
	Drilling & Completion Foreman													
				-oreman		· (D: 1 / MT D					_			
	Ap	Approved by (Signal tre)					Name (Printed/Typed)			Date	; - 1 - 1 -			
			um byat	<b>&gt;</b>			- ···				3/9/05			
	Title T						Office							
	Hetry Held Manager-Minarely													
	Application approved 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.													
	conduct operations thereon.  Conditions of approval, if any, are attached.													
	TC:AI	Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly and willfully to make to any department or agency of the United												
•	Sta	ites any false, fict	itious or fraudulent:	statements or rep	resentations as to a	nme tor :	any person knowling r within its jurisdict	giy and Willfu ion.	illy to make	e to any departmen	it or agency of the Unite	æ		
										·		_		
	*(I	nstructions on Re	everse)					M 1-1	1					
This action is subject to technical and procedural review pursuant to 43 CFR 3165.30 SUBJECT TO COMPLIANCE WITH A "GENERAL REQUIREMENTS".							HORIZED ARE							
			lseque http://	pursuant to 43 C	FR 3165.4 600 Q	GOOD COM	SUBJ "M" "GFN	ECT TO COM ERAL REQUI	PLIANCE !	WITH ATTACHED				
					* 4/5	L. Carrie	GEN			•				

UNITED STATES

District I PO Box 1980, Hobbs. NM 88241-1980

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

District III 1000 R10 Brazos Ad., Aztec, NM 87410

District IV PO Box 2088, Santa Fe. NM 87504-2088

476.52

1320.00

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe. NM 87504-2088

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

AMENDED REPORT

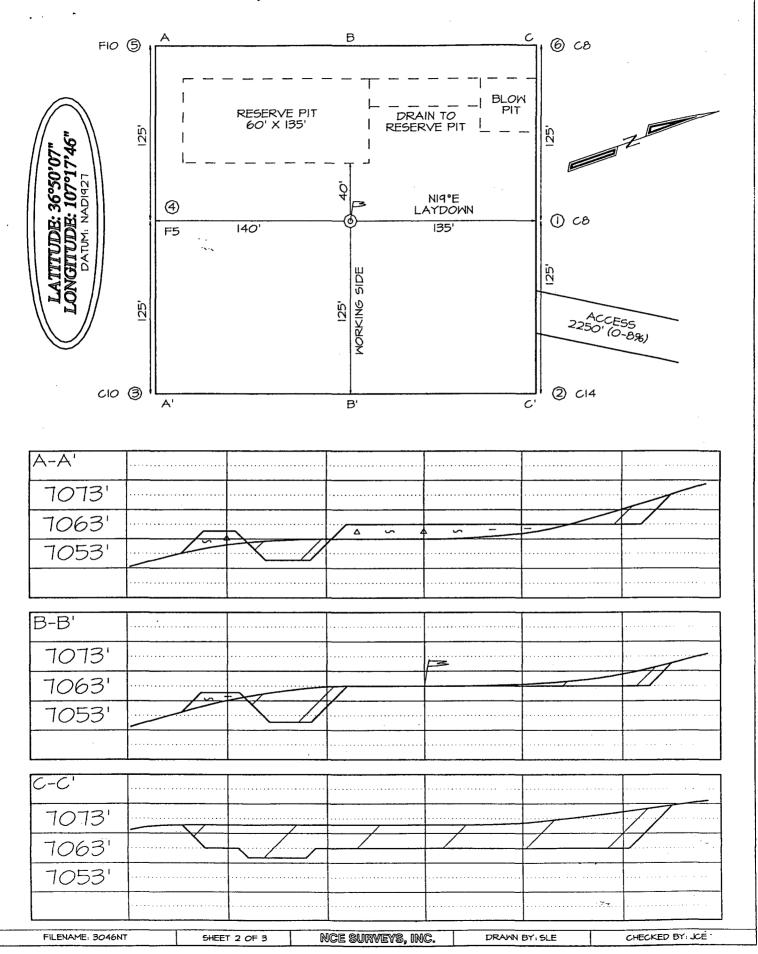
15269

Certificate Number

2003 JUL - 1 PM 12: 34 WELL LOCATION AND ACREAGE DEDICATION PLAT 070 Farrall Quot 'API Number Pool Code BASIN FRUITLAND COAL 30039-2747 71629 Property Code Well Number Property Name CARSON 203 OGRID No. Operator Name Elevation 162928 ENERGEN RESOURCES CORPORATION 7063 <sup>10</sup> Surface Location UL or lot no. Range Lot Idn Feet from the North/South line County Feet from the East/West line RIO 30N 4W WEST 6 705 SOUTH 1755 Ν ARRIBA 11 Bottom Hole Location If Different From Surface UL or lot no. Sect ion Township North/South line Feet from the Feet from the East/West line County 12 Dedicated Acres 13 Joint or Infill <sup>14</sup> Consolidation Code <sup>15</sup> Order No. 232.90 Acres -(W/2)1811.70 2640.00 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 3 LOT 2 LOT LOT .1 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 1320.00° 347.82° 1320.00 LOT 6 LOT 5 0 Signature Don Graham Printed Name Production Superintendant 320.00  $\omega$ 1320.00 Title 1-30-03 0 Date 18 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 belief. 9 Survey Date: JANUARY 27, 2003 Signature and Seal of Professional Surveyor 07 EDWARDS JASON 00 00 SEN MEXIC 2640. 2640. PROFESSIONAL PROFESSIONAL 0 1755' 0

2640,001

# ENERGEN RESOURCES CORPORATION CARSON #203 '705' FSL & 1755' FWL, SECTION 6, T30N, R4W, NMPM RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7063'



# **OPERATIONS PLAN**

WELL NAME: Carson #203

<u>LOCATION</u>: 705' FSL, 1755' FWL, Section 6, T30N, R4W, Rio Arriba County, NM FIELD: Basin Fruitland Coal ELEVATION: 7063' GL

## **FORMATION TOPS:**

San Jose Surface
Nacimiento 1883
Ojo Alamo 3183
Kirtland 3383
Fruitland 3653

Total Depth 3833

# **LOGGING PROGRAM:**

Open Hole Logs:

Surface to intermediate- None Inter TD to total depth: None

Mud Logs:

Intermediate 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 PPG). Air/mist from intermediate casing point to total depth.

# CASING PROGRAM:

<b>HOLE SIZE</b>	<u>DEPTH</u>	<b>CSG SIZE</b>	<u>WT.</u>	<u>GRADE</u>
12 1/4"	200'	9 5/8"	32.3#	H-40-ST&C
8 3/4"	3713'	7"	23#	J-55 – ST&C
6 1/4"	3613 -3833°	51/z "	15.5 <del>±</del>	J-55 LT }C

## **TUBING PROGRAM:**

3800' 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 sks Class B Cement with ¼" flocele/sk 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. 3 bow type centralizers spaced throughout the string.

7" intermediate casing – cement with 470 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and ¼# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and ¼# flocele/sk. (1060 cu. ft. of slurry, 90% 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. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

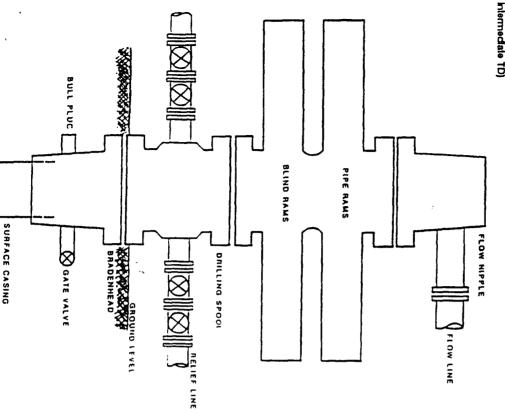
5 1/2" liner - NO CEMENT

## OTHER INFORMATION:

- 1) The Basin Fruitland Coal will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) If lost circulation is encountered sufficient LCM will be added to the mud system to maintain well control.
- 4) This gas is dedicated.
- 5) Anticipated pore pressure for the Fruitland is 1000 psi.

# Figure #1

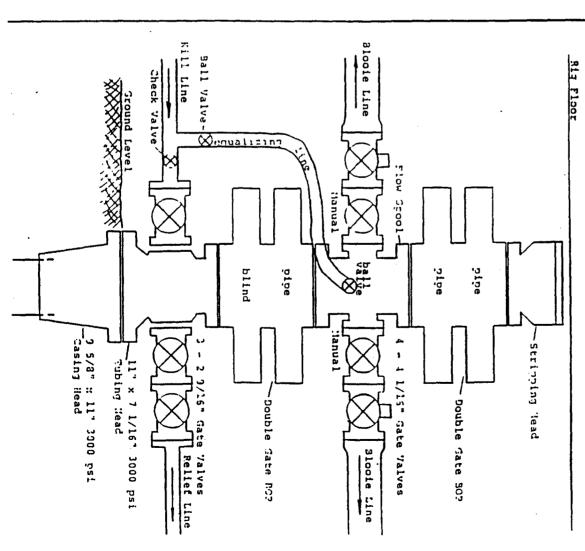
TYPICAL B O.P.E. INSTALLATION FOR A FRUITLAND COAL WELL (to Intermediate TD)



Series 900 double gale BOP Naled at 3000 psi working pressure

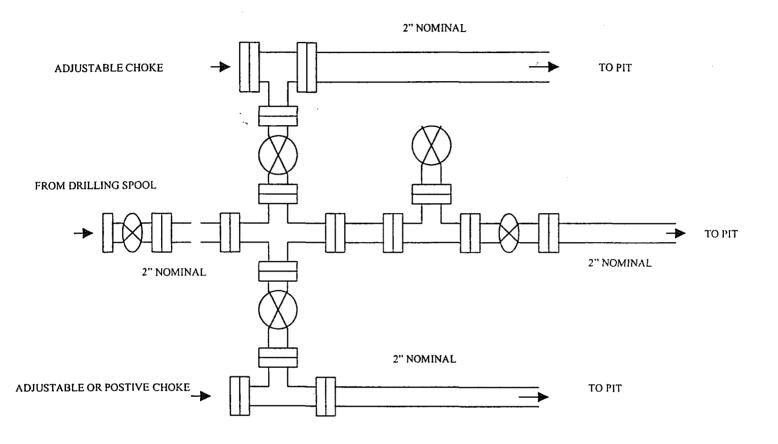
# Figure #2

FRUITLAND COAL WELL
TYPICAL BOP CONFIGURATION
7 1/16" 3000 psi (minimum) BOP STACK
(From intermediate to total depth)



# **ENERGEN RESOURCES CORPORATION**

Choke Manifold Configuration 2M psi System



Minimum choke manifold installation from surface to Total Depth. 2" minimum, 2000 psi working pressure equipment with two chokes.