Yorn 3160-3 (August 1999)	DEPARTMENT OF THE DATERIOR OF BUREAU OF LAND MANAGEMENT				FORM APPROVED OMB NO. 1004-0136 Expires: November 30, 2000		
; · · · · · ·	APPLICATION FOR PERM	PAGENTER ECEIVE	5. Lease Serial No. SF - 079485 - AB				
la. Type of Work	X DRILL	REENTER	2019AN -6 AM	6 If	Indian, Allotee or	Tribe Name	
1b. Type of Well	Oil Well X Gas Well	Other O.X	Single Zone Multiple Zone	7. Ur	nit or CA Agreemen	nt Name and No.	
3a. Address 2198 Bloomfi	or urces Corporation eld Highway Farmington, N N (Report location clearly and in accorde	ew Mexico 874	36. Phone No. (include area cool 101 (505)325-6800	8. Le Si le) 9. AI	ase Name and Wel an Juan 30-4 PI Well No. 30039	Unit 57	
At surface 97	70' FNL, 675' FWL	equi enens)	11.Se	c., T., R., M., or E	in Fruitland Coa lk. and Survey or Area		
At proposed prod			∫) Sec. 15, T30N, R4W,				
14. Distance in miles	and direction from nearest town or post 10 miles Northeast		or New Mexico		Arriba	13. State	
M. Distance from p	roposed*		16. No. of Acres in lease		Unit dedicated to t		
location to neare property or lease (Also to nearest			1,280.0	PC 160/NW/4 FRT 320/W/2			
18. Distance from p to nearest well, applied for, on t	drilling, completed,		19. Proposed Depth 4670'	20.BLM/BIA Bond No. on file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.			22. Approximate date work will star	t* 2	23. Estimated duration		
7353 ' GL			AUG 2003		14 Days		
 Well plat certifie A Drilling Plan A Surface Use I 	pleted in accordance with the requirement ed by a registered surveyor. Plan (if the location is on National Forest filed with the appropriate Forest Service (ts of Onshore Oil an	Attachments d Gas Order No. 1, shall be attached 4. Bond to cover the operati Item 20 above). 5. Operator certification. 6. Such other site specific in authorized officer.	ons unless co	vered by an existin		
25. Signuature		Na	me (Printed/Typed)		Date		
Title	en Shomas	Do	oug Thomas			12/30/02	
Drilling & Competion Foreman Approved by (Signautre) S David J. Mankiewicz			Name (Printed/Typed)		Date	Date	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	AS DSAIG 2. MISHING MI				МАУ	1.0 2004	
Title		Off	fice		I WAY	<u> </u>	
conduct operations	al does not warrant or certify that the at thereon. val, if any, are attached.	oplicant holds legal	or equitable title to those rights in	the subject le	ase which would o	entitle the applicant to	
Title 18 U.S.C. Sect States any false, fict	tion 1001 and Title 43 U.S.C. Section 12 itious or fraudulent statements or represe	12, make it a crime ntations as to any m	for any person knowlingly and willfunder within its jurisdiction.	illy to make t	o any department o	or agency of the United	
*(Instructions on Re	everse)						

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

•District III

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

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-139 Revised February 21, 1994 Instructions on cas-

Submit to Appropriate District Office

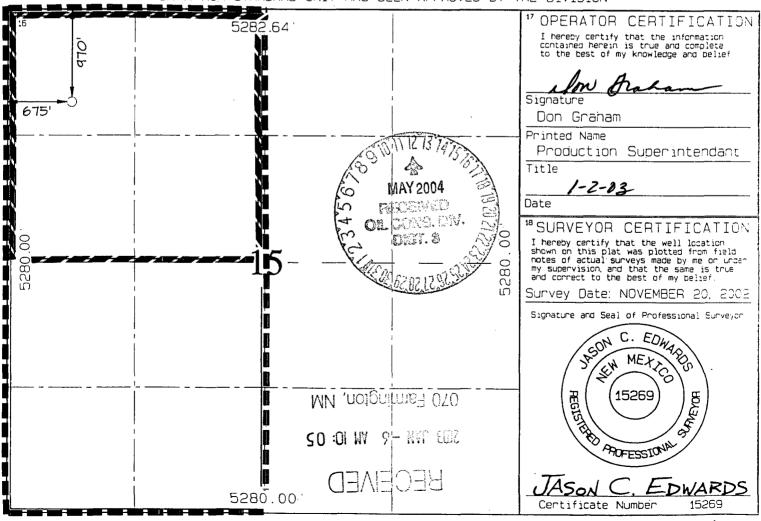
State Lease - 4 Cociss Fee Lease - 3 Cocies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number					³Pool Name				
7- Z	1281	72400	\ 7162	9 Blanco	Pictured Cl:	iffs, East \	Basin Frui	itland Coal	
Code				³Propert	y Name		e M	ell Number	
4			S	NAUL NA	JUAN 30-4 UNIT			57	
lo.				*Operator	Name		9	Elevation	
162928 ENERGEN			RESOURC	RESOURCES CORPORATION			7353		
¹⁰ Surface Location									
Sect ion	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
15	30N	4W		970	NORTH	675	WEST	RIO ARRIBA	
¹¹ Bottom Hole Location If Different From Surface									
Section	Township	Range	Lat Idn	Feet from the	North/South line	Feet from the	East/West line	County	
			- PC	¹³ Jaint or Infill	¹⁴ Consolidation Code	¹⁵ Order Na.		•	
	P- 2° Code 4 lo. 8 Section 15 Section	7-27281 Code 4 10. 8 Section Township 15 30N 11 E Section Township 160.0 Acres	7-2728 72400 Code 4 Io. 8 Section Township Aange 15 30N 4W 11 Bottom Section Township Range 160.0 Acres (NW/4)	P-2728 72400 \ 7162 72400 \ 71	P-2728 72400 71629 Blanco Code Propert SAN JUAN 3 Operator ENERGEN RESOURC 10 Surface Section Township Range Lot Idn Feet from the 15 30N 4W 970 11 Bottom Hole Location I Section Township Range Lot Idn Feet from the 160.0 Acres (NW/4) - PC Doint or Infill	P-2728 72400 \ 71629 Blanco Pictured Cl Code SAN JUAN 30-4 UNIT 10. Operator Name ENERGEN RESOURCES CORPORA 10 Surface Location Section Township Range Lot Idn Feet from the North/South line 15 30N 4W 970 NORTH 11 Bottom Hole Location If Different Section Township Range Lot Idn Feet from the North/South line 15 30N 4W 970 NORTH 11 Bottom Hole Location If Different Section Township Range Lot Idn Feet from the North/South line 160.0 Acres (NW/4) - PC	Property Name SAN JUAN 30-4 UNIT OPERATOR NESOURCES CORPORATION 10 Surface Location Section Township Range Lot Idn Feet from the North/South line Feet from the 15 30N 4W 970 NORTH 675 11 Bottom Hole Location If Different From Surf Section Township Range Lot Idn Feet from the North/South line Feet from the 160.0 Acres (NW/4) - PC	P-2728 72400 \ 71629 Blanco Pictured Cliffs, East \ Basin Fru: Code SAN JUAN 30-4 UNIT O. Operator Name ENERGEN RESOURCES CORPORATION 10 Surface Location Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line 15 30N 4W 970 NORTH 675 WEST 11 Bottom Hole Location If Different From Surface Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line 15 Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line 160.0 Acres (NW/4) - PC South of Infill Consolidation Code South	

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



OPERATIONS PLAN

WELL NAME: San Juan 30-4 Unit #57

LOCATION: 970' FNL, 675' FWL, Section 15, T30N, R4W, Rio Arriba County, NM

FIELD: Basin Fruitland Coal/Blanco Pictured Cliffs

ELEVATION: 7353' GL

FORMATION TOPS:

Surface	San Jose		
Nacimiento	2275		
Ojo Alamo	3530		
Kirtland	3700		
Fruitland	3975		
Pictured Cliffs	4150		

Total Depth

4670

LOGGING PROGRAM:

Open Hole Logs:

Surface to TD: HRI/SP/GR, CNT/LDT/MLT, MRIL

Mud Logs:

None

Coring:

None

Natural Gauges:

None

MUD PROGRAM:

Fresh water low solids mud from surface to T. D. 9.0-9.2 PPG.

CASING PROGRAM:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG SIZE</u>	$\underline{\mathrm{WT.}}$	<u>GRADE</u>
12 ¼"	200'	9 5/8"	32.3#	H-40
7 7/8"	4670'	5 ½"	15.5#	J-55

TUBING PROGRAM:

4600' 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 ½# 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.

5 1/2" production casing:

First Stage - cement with 140 sks Class B with 2% Calcium Chloride, 10% Gilsonite and 1/4# flocele/sks (174 cu. ft. of slurry, 50% excess to circulate stage tool @ 4000).

Second Stage - cement with 510 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and ½# flocele/sk. Tail with 50 sks Class B w/2% calcium chloride, 10% gilsonite and ½# flocele/sk. (1040 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs.

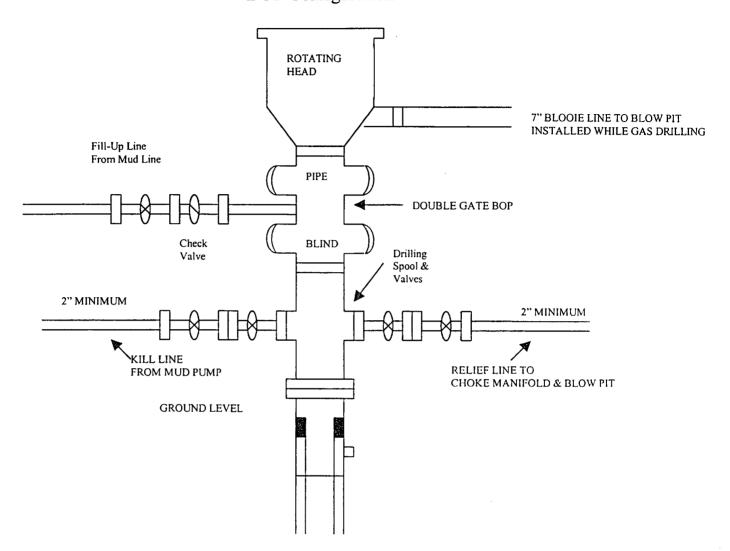
Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 8 bow spring centralizers spaced every 3rd joint off bottom. One bow spring centralizer below and eight above stage tool at 4000. Two turbolating centralizers at the base of the Ojo Alamo.

OTHER INFORMATION:

- 1) No abnormal temperatures or pressures are anticipated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 3) This gas is dedicated.
- 4) Anticipated pore pressure for the Fruitland is 900 psi and the Pictured Cliffs is 1000 psi.

ENERGEN RESOURCES CORPORATION

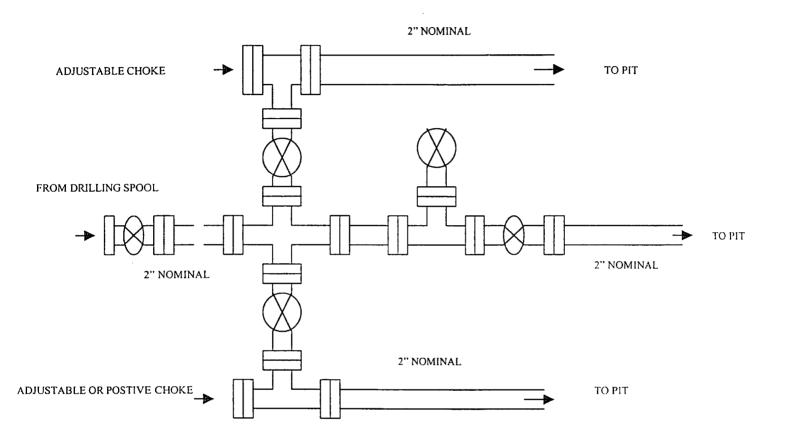
Mesa Verde / Dakota Well BOP Configuration



Minimum BOP installation for a Mesaverde well from Surface to Total Depth. 11' Bore, 2000 psi minimum working pressure double Gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of The BOP. All equipment is 2000 psi working pressure or greater.

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.

970' FNL & 675' FWL, SECTION 15, T30N, R4W, NMPM RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7353' EDGE OF DISTURBANCE ~ ABANDONED ROCK PIT F7 (5) 6 F8 BLOW PIT RESERVE PIT DRAIN TO 60' X 135' RESERVE PIT 25 <u>5</u> N42°E LAYDOWN FENCE-LINE EXISITING ROADWAY -0- 4 (I) C2 135 ACCESS 50' (0-6%) **MORKING SIDE** 125 125 -0- ③ 2 06 B A-A' 7363' 7353' 7343' B-B' 7363' 7353' 7343 C-C' 7363' 7353' 7343' FILENAME: 30415DT NCE SURVEYS, INC. SHEET 2 OF 3 DRAWN BY: 5LE CHECKED BY: JCE

ENERGEN RESOURCES CORPORATION SAN JUAN 30-4 UNII #57