Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

APPLICATION FOR PERMIT	TO DRILL O	R REENTER		e Serial No. 013688	
la. Type of Work	☐ REENTER	eant state of old o		dian, Allotee or T	ribe Name
LAJ =	KEENTER	7003 NOV 2 AA 8	, . L		
1b. Type of Well Oil Well Gas Well	Other	Single Zone Multiple Zon	e 7. Unit	or CA Agreemen	t Name and No.
2. Name of Operator		ete financia	8. Lease	e Name and Well	No.
Energen Resources Corporation 3a. Address		3b. Phone No. (include area coo		antic #2059	<u> </u>
2198 Bloomfield Highway Farmington, New	w Mowies 97	,	' 1 9 API	Well No. 45-	32419
4. Location of Well (Report location clearly and in accordance	ce with any State	equirements)*		and Pool, or Exp	
At surface 1025' fsl, 940' fel	•			in Fruitlar	
·			11.Sec.,	T., R., M., or Bl	k. and Survey or Ar
At proposed prod. zone			P	S22,T31N, F	10W
14. Distance in miles and direction from nearest town or post off	fice*	,	12. Cour	nty or Parish	13. State
Approximately 8.0 mi			San J	iuan	NM
15. Distance from proposed* location to nearest		16. No. of Acres in lease	17. Spacing Un	it dedicated to th	is well
property or lease line, ft. 940' (Also to nearest drg. unit line, if any)	1	2440	309.	96 E 1/2	
18. Distance from proposed location*		19. Proposed Depth	20.BLM/BIA	Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft.	E				
Approx. 70	0'	3297'			
21. Elevations (Show whether DF, KDB, RT, GL, etc.		22. Approximate date work will star	rt* 23.	Estimated duration	on .
GL 6318'		11/25/05		14	days
. /					,
H	24.	Attachments			
The following, completed in accordance with the requirements of	of Onshore Oil an	d Gas Order No. 1, shall be attached	l to this form:	-	
 Well plat certified by a registered surveyor. A Drilling Plan A Surface Use Plan (if the location is on National Forest Sy SUPO shall be filed with the appropriate Forest Service Off 	-	 4. Bond to cover the operating tem 20 above). 5. Operator certification. 6. Such other site specific in authorized officer. 			· ·
25. Signuature	Na	me (Printed/Typed)		Date	
1 lala CAL	Na	athan Smith			11/1/05
Title		61.18 B	475767		
Drilling Engineer	I No	me (Printed/Tyfied) DEC %	- (A)	Data	
Approved by (Signautre)	l Na	P		Date	1 1
1 Jun lovato		H) (All Caracas	ED S	1 12	(2102
Actine Field Manager - 1	Nin.	m Dist.	3 💥		
Application approval does not warrant or certify that the application of the conduct operation thereon.	icant holds legal			e which would e	ntitle the applicant t
Conditions of approval, if any, are attached.		8.56,31	2/2/3/08		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representations.			illy to make to a	any department of	agency of the Unite
*(Instructions on page 2)				•	
SUBJECT TO COMPLIANCE WITH ATTACKED proce	action is subject edural review pur appear pursuant t	to technical and rsuam to 43 CFR 3165.3 to 43 CFR 3165.4	NMO	CD	

OK 10.24-05

District I 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

Revised February 21 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

Form C-102

7005 MOV

| AMENDED REPORT 2 88 8 24

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-045-33 409	*Pool Code 71629	Pool Name BASIN FRUITLAND COAL	
*Property Code 21/60		operty Name TLANTIC	Well Number 205S
'0GRID №. 162928	· ·	erator Name DURCES CORPORATION	*Elevation 6318
	40 0 4		

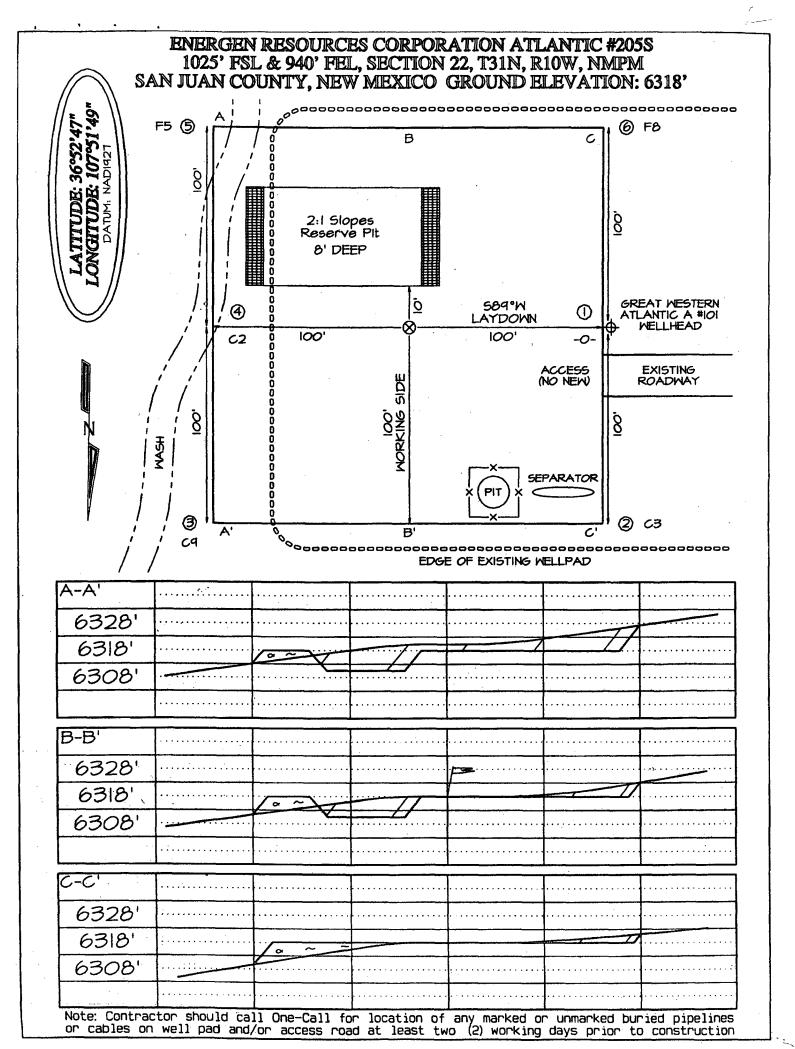
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	55	31N	10W		1025	SOUTH	940	EAST	SAN JUAN
,		11 E	ottom	Hole L	ocation I	f Different	From Surf	ace	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres		<u> </u>			¹⁹ Joint or Infill	⁵⁴ Consolidation Code	²⁵ Order No.		<u> </u>
CCC MACHED MACHES		.96 Acre	es - (E	[/2)	ODDIC OF BILLIN	Constitution Cons			

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

16	e 2635.38°		2630.76		OPERATOR CERTIFICATION
.70.	LOT 4	LOT 3	LOT 2	LOT 1	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature Nather Smith
2636.70	LOT 5	LOT 6	LOT 7	8 LO1 2617	Printed Name Drilling Engineer Title 11/1/05 Date
		2	1 2 — —		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. Survey Date: SEPTEMBER 30, 2005
.64	LOT 12	LOT 11	10 10	LOT 9 .ee	Signature and Seal of Professional Surveyor C. EDWARD MEXICO
2708.64	LOT 13	LOT 14 511	LOT 15	940' 23 150 LOT 16	JASON C. EDWARDS Certificate Number 15269

Submit 3 Copies To Appropriate District	State of New Me			Form C-103
Office District I	Energy, Minerals and Natu	ral Resources	CHIEVA ABVANC	May 27, 2004
1625 N. French Dr., Hobbs, NM 87240	011 0011077771117101		WELL API NO. 30-	-045-33409
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of L	ease
District III 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fra		STATE	FEE 🗆
District IV	Santa Fe, NM 8	7303	6. State Oil & Gas L	
1220 S. St. Francis Dr., Santa Fe, NM 87505			NMM 013688	ease No.
	ES AND REPORTS ON WEI		7. Lease Name or Ur	nit Agreement Name:
(DO NOT USE THIS FORM FOR PROPODIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)			Atlantic	
1. Type of Well:			8. Well Number	
Oil Well Gas Well X	Other		205S	
2. Name of Operator			9. OGRID Number	
Energen Resources Corporat	ion		16292	
3. Address of Operator			10. Pool name or Wi	
2198 Bloomfield Highway, 4. Well Location	Farmington, NM 8/401		Basin Fruitland (<u>par</u>
Unit Letter P : :	feet from the Sou	ith line and	940' feet from	the <u>East</u> line
Section 22		Range 10W		County San Juan
	11. Elevation (Show whether	DR, RKB, RT, GR, et	c.)	
Pit or Below-grade Tank Application 🔀		LO GLI		
Pit type Drill Depth to Groundwater.		h water well >1000 ' Dis	stance from nearest surface	water >200'
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume.			
	American Company (C.)			·
12 (1) 1 4		NI-4CNI-4'	D (0.1 I	> -4-
	ppropriate Box to Indicate	· •	• '	
NOTICE OF INTE		l e	SEQUENT REPO	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK		ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILL	ING OPNS.	PLUG AND ABANDONMENT
PULL OR ALTER CASING	MULTIPLE COMPLETION	CASING TEST AND CEMENT JOB		
OTHER BOTH AND AND		071150		
OTHER: Build drilling pit	X	OTHER:		<u></u>
 Describe proposed or completed of starting any proposed work). or recompletion. 				
Energen Resources plans to	build a lined pit accord	ling to "OCD Pit ar	nd Below-grade Tank	: Guidelines", as
issued on November 1,2004				
accordance with BIM and "G	XID Pit and Below-grade Ta	nk Guidelines".		
				;
				· ·
I hereby certify that the information al	nove is true and complete to the	hest of my knowledge	e and helief I further se	rtify that any nit or halow
grade tank has been/will be constructed or c				
SIGNATURE Nathan S	TIT	LE <u>Drillin</u>	Engineer D	ATE11/01/05
Time or maint name. Nathana Call	E-1	mail address:	nsmith@energen.c	
Type or print name Nathan Smith	Λ_{ϵ}		Telepho	one No. 505.325.6800
For State Use Only	-///	EPUTY OIL & GAS INSI	PECTOR, DIST. #1	DEC 1 3 2005
APPROVED BY	THE TI	TLE	DA	ATE
Conditions of Approval, if any:				



Operations Plan

November 1, 2005

Atlantic #205S

General Information

Location 1025' fsl, 940' fel

nese S22, T31N, R10W

San Juan County, New Mexico

Elevations 6318' GL Total Depth 3297' (MD)

Formation Objective Basin Fruitland Coal

Formation Tops

Nacimiento	Surface
Ojo Alamo Ss	1558'
Kirtland Sh	1628'
Fruitland Fm	2797'
Top Coal	2838'
Bottom Coal	3097'
Pictured Cliffs Ss	3097'
Total Depth	3297'

Drilling

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 7 7/8" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg. Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

Logging Program:

Open hole logs: Induction/Gamma Ray and Density Logs

Coring: None

Surveys: Surface and/or every 500' to TD.

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-300	12 ¼"	8 5/8"	24.0 ppf	J-55 ST&C
Production	300'-3297'	7 7/8"	5 ½"	15.5 ppf	J-55 LT&C
Tubing	0'-3200'		2 3/8"	4.7 ppf	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Production Casing: Depending on wellbore conditions, a Cement nose guide shoe with self fill insert float collar on top of bottom joint and casing centralization with standard bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

Wellhead

8 5/8" 2000 x 5 ½" Larkin casing head. 5 ½" 2000 x 2" tubing head.

Cementing

Surface Casing: 175 sks Std (class B) with 2.0 % $CaCl_2$ and $\frac{1}{4}$ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 207 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Production Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 500 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of 145 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (1160 ft³ of slurry, 100 % excess to circulate to surface).

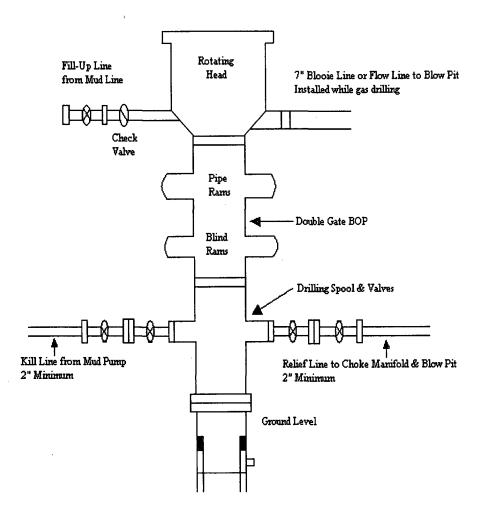
Pump 30 sks of flyash scavenger spacer consisting of 15.0 % Benonite and 0.15 % HR-5 ahead of cement

Other Information

- 1) This well will be cased and the Basin Fruitland Coal fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. <u>The production string may need to be cemented in multiple stages</u> with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

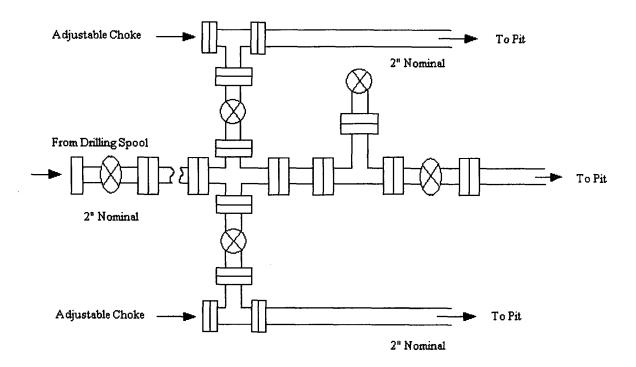
Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

	0+00 = 7+28.50	FIELD SERVICES LLC BLANCO GATHERING SYSTEM BL						
	T-31-N, R-10-W, N.M.P.M. BASIS OF BEARING: GPS OBSERVATIONS	LOT 5 N48'59'26"W 1538.41' LOT 12	DRILLING CO.— EXISTING METER BEGIN 2ND RES N74*55'46"E ——P.I. 0+20.04 \(\triangle\) PROPOSED MET —— S19*54'24"E —	B9*09*50" RT. ER OUT PROPOSED METER IN URCES LP— 205S "W DETAIL SCALE: 1"= 100' LOT 10 SEE DETAIL LOT 15	LOT 9 LOT 9 U.S. OT 16 22 23			
	28	27			U.S.C.S. 27 26	•		
	DWN. BY TC			APPL. DWG.	SLACK CHAIN PIPE SIZE <u>4.50" (</u>) D		
	CKD. BY MD PRINT RECORD	CONSTR. COMPLETED	PIPE DATA	DATEMETER S		FRT		
FM24 (Rev. 1/99)	1 PREUM PROD 03/28/05 7 SJ DISTRIB 06/20/05 7 SJ DISTRIB 10/24/05	LOCATION NO	OCATION ADJOINS E	KISTING WELL LOCATION				
•	SUBDIVISION	OWNER		LESSEE	METER(S) RODS	ACRE(S)		
Ξ	ALL SECTION 22	UNITED STATE	S	JIM T. DUNLAP	2.560	0.039		
9	N N N N N N N N N N N N N N N N N N N							
9	0		······································					
BLH010-060-01	1- REVISED PER RE	ESURVEY NOTES DATED	10/14/05 (10/19/	/05/TC)				
ш								