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	5	5. Lease Serial No. 6337		
Ia. Type of Work X DRILL	REENTER 2005 JAN 11	TIT 11 46	. If Indian, Allotee or	Tribe Name
1b. Type of Well Oil Well Gas Well Oth		Itiple Zone 7	. Unit or CA Agreeme	nt Name and No.
2. Name of Operator	070 FARM	1111 2 1 2 1	Lease Name and Wel	l No.
Energen Resources Corporation	2h DhamaNa (inclusion	1	Florance Gas	Com H #1S
3a. Address	3b. Phone No. (included to the second	. 9	API Well No.	22517
2198 Bloomfield Highway Farmington, New Ma. 4. Location of Well (Report location clearly and in accordance with the control of the control o			0)-093-	1 1200
At surface 2415' fsl, 1000' fwl	,	10	Field and Pool, or Ex Basin Fruitla	
2415 191, 1000 TWI		11		Blk. and Survey or Area
At proposed prod. zone			K S31,T30N,	RO9W
14. Distance in miles and direction from nearest town or post office*		12	. County or Parish	13.State
Approximately 3.0 mi	les north of Blanco	S	an Juan	NM
15. Distance from proposed*	16. No. of Acres in lease		ng Unit dedicated to t	his well
location to nearest property or lease line, ft. 1000 (Also to nearest drg. unit line, if any)	2972.24	R-12	1737 W 1/2	80638 -80681
18. Distance from proposed location*	19. Proposed Depth	20.BLM	/BIA Bond No. on fi	le
to nearest well, drilling, completed,		J		
applied for, on this lease, ft. Approx. 1000'	2568 '			
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date wo	rk will start*	23. Estimated durat	ion
GL 5811'	04/01/0		14 days	
GL 3011	04/01/0	-	1 14	oays
 A Drilling Plan A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 		cation. specific information	and/or plans as may b	ne required by the
25. Signuature	Name (Printed/Typed)		Date	•
Nother Sich	Nathan Smith	. ,		1/10/06
Title Drilling Engineer			***	
Approved by (Signautre)	Name (Printed/Typed)		Date	1/26/86
Title AFM	Office		- •	,
Application approval does not warrant or certify that the applicant conduct operations thereon. Conditions of approval, if any, are attached.	holds legal or equitable title to those	rights in the subjec	t lease which would o	entitle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mal States any false, fictitious or fraudulent statements or representation.			ke to any department of	or agency of the United
*(Instructions on page 2)				KING TO THE REAL PROPERTY OF THE PERSON OF T
SUBJECT TO COMPLIANCE WITH ATTACHED PROCE	action is subject to technical and dural review pursuant to 43 CFR 3169 ppeal pursuant to 43 CFR 3165,4	5.3 N	MOCD	APR 2000 No. 1 2000
<u>.</u>	.3/2-	107	\$	\$ J.

Submit new plat & glat for Florance Bas Com H#1

District I

1625 N. French Dr., Hobbs, NM 88240

1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

AM 11 01 1220 South St. Francis Dr. 11

State Lease - 4 Copies

Revised June 10, 2003

Form C-102

Fee Lease - 3 Copies

Santa Fe, NM 87505

RECEIVED ☐ AMENDED REPORT

Submit to Appropriate District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Pool Code	³ Pool Name			
130-045-335	517 71629	UP FRUITLAND COAL			
⁴ Property Code	⁵ Pro	⁵ Property Name			
300410	FLORAN	FLORANCE GAS COM H			
OGRID No.	⁸ Op	⁸ Operator Name			
162938	ENERGEN RESO	ENERGEN RESOURCES CORPORATION			

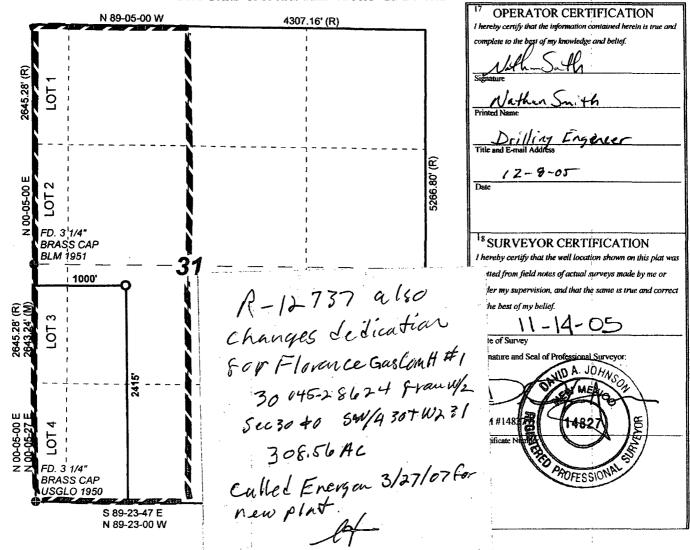
10 Surface Location

I	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	K	31	30N	9W		2415	SOUTH	1000	WEST	SAN JUAN

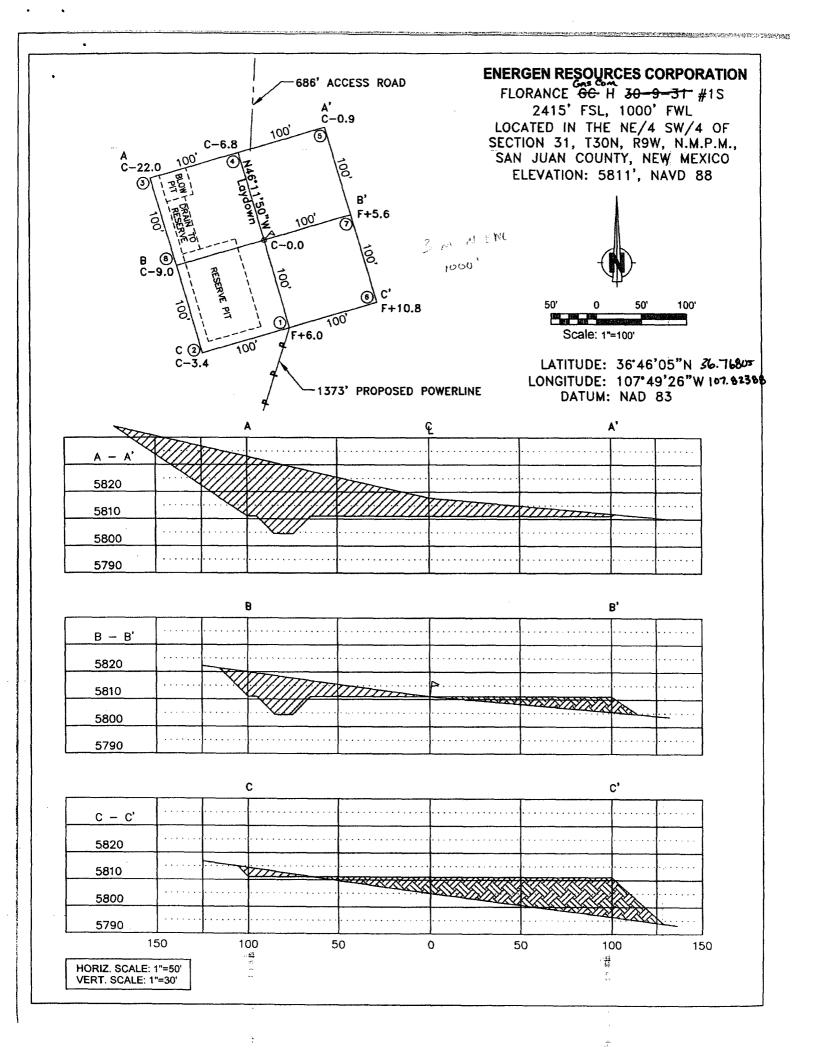
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres	13 Joint o	rinfill ¹⁴ C	Consolidation	Code 15 Oz	der No.	12737	7 Su/2	yey. Sec en Sec	30 3/

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



Submit 3 Copies To Appropriate District Office	State of New Me			Form C-103	
District I 1625 N. French Dr., Hobbs, NM 87240	Energy, Minerals and Natur	ai Resources	WELL API NO	May 27, 2004	
District II	OIL CONSERVATION	DIVISION	WELL API NO.	245-33517	
1301 W. Grand Ave., Artesia, NM 88210 District III	1220 South St. Fra	5. Indicate Type of Lease STATE FEE			
1000 Rio Brazos Rd., Aztec, NM 87410 District IV.	000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, NM 87505 District IV				
1220 S. St. Francis Dr., Santa Fe, NM 87505			6. State Oil & Gas Le	ase No.	
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLICA"		R PLUG BACK TO A	7. Lease Name or Uni Florance Gas Com I	-	
PROPOSALS.) 1. Type of Well:			8. Well Number		
Oil Well Gas Well	Other		# 1S		
2. Name of Operator			9. OGRID Number	-	
Energen Resources Corporati	.on		162928		
Address of Operator 2198 Bloomfield Highway, B	Farmington NM 87401		 Pool name or Wile Basin Fruitland Co 		
4. Well Location	armingon, ier 0,401		Basin Fruiciani o		
Unit Letter K : 2	2415 feet from the Sou	th line and	1000 feet from the	ne West line	
Section 31		Range 09W		County San Juan	
The second second	11. Elevation (Show whether 1581	DR, RKB, RT, GR, etc 1' GL	c.)		
Pit or Below-grade Tank Application 🛛					
Pit type Drill Depth to Groundwater _				vater >250'	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume_	bbls; Construction	on Material		
NOTICE OF INTE PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING	ppropriate Box to Indicate NTION TO: PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPLETION	•	SEQUENT REPO		
OTHER: Build drilling pit	X	OTHER:			
13. Describe proposed or completed of starting any proposed work). or recompletion. Energen Resources plans to issued on November 1,2004. accordance with BLM and "O	SEE RULE 1103. For Multiple build a lined pit accord Energen anticipates the	Completions: Attach	wellbore diagram of pr	oposed completion Guidelines", as	
I hereby certify that the information ab grade tank has been/will be constructed or cl	pove is true and complete to the losed according to NMOCD guideline	s 🗶 , a general permit	e and belief. I further cert or an (attached) alterna Tengineer De	tive OCD-approved plan	
Type or print name Nathan Smith	Λ	nail address:	nsmith@energen.co Telephon		
For State Use Only		FUT OL & GAS INS	PECTOR, DIST. (2)	MAR 27 2007	
APPROVED BY Conditions of Approval, if any:			DA		
* * * * * * * * * * * * * * * * * * *	, v -				



Operations Plan December 20, 2005

Florance Gas Com H #1S

General Information

Location 2415' fsl, 1000' fwl

DDDesw S31, T30N, R09W

San Juan County, New Mexico

Elevations 5811' GL Total Depth 2568' (MD)

Formation Objective Basin Fruitland Coal

Formation Tops

Nacimiento	Surface
Ojo Alamo Ss	1163'
Kirtland Sh	1298'
Fruitland Fm	2048'
Top Coal	2163'
Bottom Coal	2368'
Pictured Cliffs Ss	2378'
Total Depth	2568'

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 ft to TD.

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval 0'-300'	Wellbore 12 ¼"	Casing 8 5/8"	Csg Wt	Grade J-55 ST&C
Surface Production	300'-2568'	7 7/8"	5 ½"	24.0 ppf 15.5 ppf	J-55 LT&C
Tubing	0'-2500'		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 1/2" Larkin casing head. 5 1/2" 2000 x 2" tubing head.

Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % $CaCl_2$ and ½ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 266 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

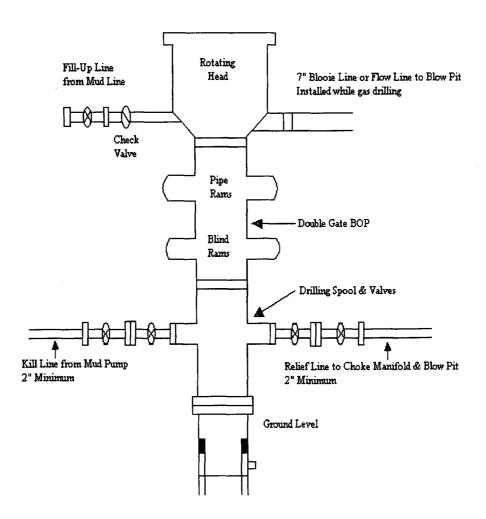
Production Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 375 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 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). (915 ft³ of slurry, 100 % excess to circulate to surface).

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. The production string may need to be cemented in multiple stages 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

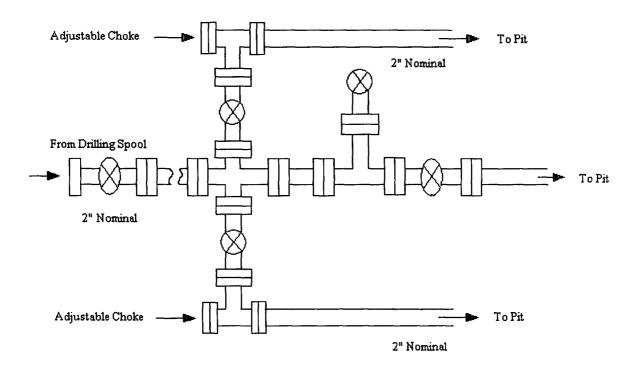
Typical BOP Configuration for Gas Drilling



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Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

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