Form 3160-3
(April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 200

APPLICATION FOR PERMIT TO DRIL	L OR REENTER	5. Lease Seria	
1a. Type of Work			llotee or Tribe Name
la. Type of Work DRILL REENT	IEK	0.1111111111,71	diotec of The Pulle
1b. Type of Well Oil Well Gas Well Other	Single Zone Multiple Zone	7. Unit or CA	Agreement Name and No.
2. Name of Operator	CONTRACT	8. Lease Nam	e and Well No.
Energen Resources Corporation 3a. Address	3b. Phone No. (include area cod		29-9-25 #2s
2198 Bloomfield Highway Farmington, New Mexico	VIVIII.	9. API Well IN	045-32842
4. Location of Well (Report location clearly and in accordance with any St			ool, or Exploratory
1230' fnl, 1800' fwl			ruitland Coal
· · · · · · · · · · · · · · · · · · ·	Se SUN 2	11. Sec., T., R.	, M., or Blk. and Survey or Area
At proposed prod. zone	0, 005	C S25,	T29N, R09W
14. Distance in miles and direction from nearest town or post office*		12. County or 1	Parish 13. State
Approximately 5.3 miles sout	h east of Blanco 🗥 🦠	San Juan	NM
15. Distance from proposed*	16 No. of Acres in lease	17. Spacing Unit dedi	cated to this well
location to nearest property or lease line, ft. 1230'	1 1000	2.0	ıi
(Also to nearest drg. unit line, if any)	776.990	299,7	4 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. Approx. 1000'	2731'		
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will start	* 23 Estima	ated duration
		23. EStuik	
GL 6049'	04/05/05	<u>_</u>	14 days
	24. Attachments		
The following, completed in accordance with the requirements of Onshore O	il and Gas Order No. 1, shall be attached	to this form:	
1. Well plat certified by a registered surveyor.	4. Bond to cover the operation	ons unless covered by	an existing bond on file (see
2. A Drilling Plan	Item 20 above).		,
3. A Surface Use Plan (if the location is on National Forest System Lands, to			
SUPO shall be filed with the appropriate Forest Service Office).	Such other site specific info authorized officer.	ormation and/or plans	as may be required by the
25.0			Date
25. Signuature	Name (Printed/Typed)		
Nathan	Nathan Smith		1/18/05
Title			
Drilling Engineer			
Approved by (Signautre)	Name (Printed/Typed)		Date
SDIN (centres (d)			6-22-05
Title	Office		
AFU	FFO		
Application approval does not warrant or certify that the applicant holds le	gal or equitable title to those rights in the	ne subject lease which	would entitle the applicant to
conduct operations thereon. Conditions of approval, if any, are attached.		•	
Conditions of approval, it any, are andericu.			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri	me for any person knowlingly and willful	ly to make to any dep	artment or agency of the United
States any false, fictitious or fraudulent statements or representations as to an	y matter within its jurisdiction.		
*(Instructions on page 2)			
/			

MMOCD

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

Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT ca 9 58

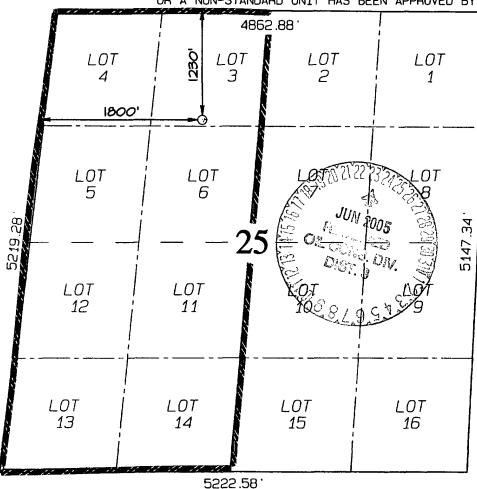
OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT TO THE PARTY OF

30-0(S-3	~I ~	001 Code 71629	Pool Name BASIN FRUITLAND COAL	
Property Code		°Property Name FEDERAL 29-9-25		*Well Number 2S
'ogáid no. 162928	E	*Operator Name NERGEN RESOURCES C	•	*Elevation 6049 '

¹⁰ Surface Location UL or lot no. Lot Idn Feet from the Section Township North/South line County East/West line 25 29N 9W 1230 NORTH С 1800 WEST SAN JUAN ¹¹Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Feet from the Section East/West line County 12 Dedicated Acres ¹³Joint or Infill ¹⁴ Consolidation Code ⁵ Order No. 299.24 Acres - (W/2)

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



OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief W/veD Signature Doug Thomas Printed Name Drilling Superintendant Title Date ¹⁸SURVEYOR 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: OCTOBER 1..2004 Signature and Seal of Professional Surveyor SON C. EOWARDS SEN MEXICO PERSONAL PROFESSIONS SAME TOR _DWARDS

Certificate Number

15269

Form 3160-5 (April 2004),

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

5	Lease	Serial	No

ο.	Lease	Seriai	NO

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

SF 8000 6. If Indian, Allottee or Tribe Name

FORM APPROVED

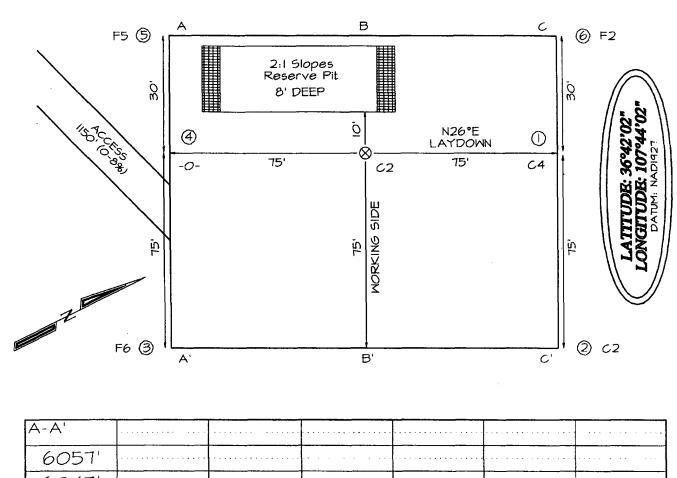
OMB NO. 1004-0137

Expires March 31, 2007

abandoned well. Use Fort	n 3160-3 (APD) foi	such proposals.			
SUBMIT IN TRIPLICATE	Other instructions	on reverse side		7. If Unit or CA	VAgreement, Name and/or No
1. Type of Well Oil Well X Gas Well Other 2. Name of Operator				8. Well Name a	
Energen Resources Corporation					
3a. Address		3b. Phone No. (include are	a code)	9. API Well No	
2198 Bloomfield Highway, Farmington	. NM 87401	(505) 325-6800)		Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey I	Description)				tland Coal
Sec 325 T29N, R09W 1230' FNL, 180	O' FWL				
NE/NW				11. County or	Parish, State
				San Juan	NM
12. CHECK APPROPRIATE	BOX(ES) TO IND	DICATE NATURE OF N	OTICE, REP	ORT, OR OTI	HER DATA
TYPE OF SUBMISSION		TYP	E OF ACTION	<u>.</u>	
X Notice of Intent	Acidize	Deepen	Production	n (Start/Resume)	Water Shut-Off
	Alter Casing	Fracture Treat	Reclamation	on	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomple	te	X Other
—	Change Plans	Plug and Abandon		ily Abandon	
Final Abandonment Notice	Convert to Injecti	=	Water Dis	•	Road change
testing has been completed. Final Abandonment I determined that the final site is ready for final insperation. Access road changed due to arc si	ection.)		05	OTO FARMINGTON IN	2005 APR 14 PM
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Vicki Donaghey		Date 04/14/05	· · · · · · · · · · · · · · · · · · ·	st.	
	S SPACE FOR FE	DERAL OR STATE OFF	ICE USE		
Approved by Conditions of approval, if any, are attached. Approval certify that the applicant holds legal or equitable title to	o tho se rights in the sub	varrant or office oject lease	4	Di	ate 6-22-05
which would entitle the applicant to conduct operations t	nereon.	<u> </u>	<u> </u>		

Submit 3 Copies To Appropriate District	State of New Me	exico		Form	C-103
Office · District I	Energy, Minerals and Natu	ral Resources			27, 2004
1625 N. French Dr., Hobbs, NM 87240			WELL API NO).	
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION	N DIVISION			
District III	1220 South St. Fra	ancis Dr.	5. Indicate Typ		
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 8	7505	STATE		
1220 S. St. Francis Dr., Santa Fe, NM 87505			6. State Oil & SF 800		
SUNDRY NOTIC (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIO		OR PLUG BACK TO A	7. Lease Name Federal 29-9	or Unit Agreement N 9-25	ame:
PROPOSALS.)	THORT ON LIMIT (FORM 0-10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8. Well Number		
1. Type of Well: Oil Well Gas Well	Other		o. Well Number	2S	
2. Name of Operator			9. OGRID Nun		
Taurus Exploration, U.S.A.	, Inc.			162928	
3. Address of Operator			10. Pool name		
2198 Bloomfield Highway; F 4. Well Location	armington, NM 87401		Basin Fruitl	and Coal	
Unit Letter C:	1230 feet from the Nor	cth line and	1800 feet	from the West	line
			1000	nom the nest	— IIIIe
Section 25		Range 09W	NMPM	County San	Juan
	11. Elevation (Show whether 604	DR, KKB, KI, GR, etc 19' GL		医基础性性	
Pit or Below-grade Tank Application 🕱	or Closure				
Pit type Drill Depth to Groundwater	>100' Distance from nearest fresh	h water well <u>>1000'</u> Dist	ance from nearest :	surface water <u>>1000 '</u>	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume.	2000 bbls; Constructio	n Material <u>N</u> a	ative	
12 Check A	ppropriate Box to Indicate	Nature of Notice	Report or Ot	her Data	
NOTICE OF INTE			- '	REPORT OF:	
	PLUG AND ABANDON		SEQUENTR		NO []
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	لسا	ALTERING CAS	NING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLI	NG OPNS.	PLUG AND ABANDONMEN	п 🗆
PULL OR ALTER CASING	MULTIPLE COMPLETION	CASING TEST AND CEMENT JOB		, , , , , , , , , , , , , , , , , , , ,	
OTHER: Build Drilling Pit	X	OTHER:		 	
 Describe proposed or completed of starting any proposed work). or recompletion. 					
Energen Resources plans to					
issured on November 1, 200			C-144 for clos	sure of this pit i	n
accordance with BIM and 'C	CD Pit and Below-Grade Tar	nk Guidelines'.			
hereby certify that the information ab					
rade tank has been/will be constructed or cl	oged according to NMOCD guidelines				. —
SIGNATURE NATIONAL STATEMENT	TIT	LE <u>Drilling</u> nail address:	Engineer		/05
Type or print name Nathan Smith	E-n	nan auuress:	nsmith@energ To	jen.com elephone No. 505.56€	5.4681
For State Use Only	////	REPORTED ON 9 CAS	HICECTOB NIC	er bas .	
APPROVED BY	- M/ L	TLE) (25k2) (15,3시)면 (ME	T DATE JUN 23	2005
Conditions of Approval, if any:		Arki		_DATE	- CUU

ENERGEN RESOURCES CORPORATION FEDERAL 29-9-25 #2S 1230' FNL & 1800' FWL, SECTION 25, T29N, R9W, NMPM SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6049'



A-A'				. , ,		
6057'						
6047'	/				~	
6037'						
B-B'						
6057'			-			
6047'		7		/ /		
6037'						
C-C'					<u> </u>	
6057'						
				,		
6047'						
6037'		,				

Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

Operations Plan

January 3, 2005

Federal 29-9-25 #2S

General Information

Location

1230' fnl, 1800' fwl

nenw S25, T29N, R09W

San Juan County, New Mexico

Elevations

6049' GL

Total Depth

2731' (MD)

Formation Objective

Basin Fruitland Coal

Formation Tops

San Jose	Surface
Nacimiento	251'
Ojo Alamo Ss	1501'
Kirtland Sh	1631'
Fruitland Fm	2206'
Top Coal	2371'
Bottom Coal	2531'
Pictured Cliffs Ss	2536'
Total Depth	2731'

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

N. 1. O

Natural Gauges: None

Tubulars

Casing, Tubing, & Casing Equipment:

String Surface Production	Interval	Wellbore	Casing	Csg Wt	Grade
	0'-300'	12 ½"	8 5/8"	24.0 ppf	J-55 ST&C
	300'-2731'	7 7/8"	5 ½"	15.5 ppf	J-55 LT&C
Tubing	0'-2700'		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

ZLEG

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk-247 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 400 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 ½ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (946.6 ft³ of slurry, 100 % excess to circulate to surface).

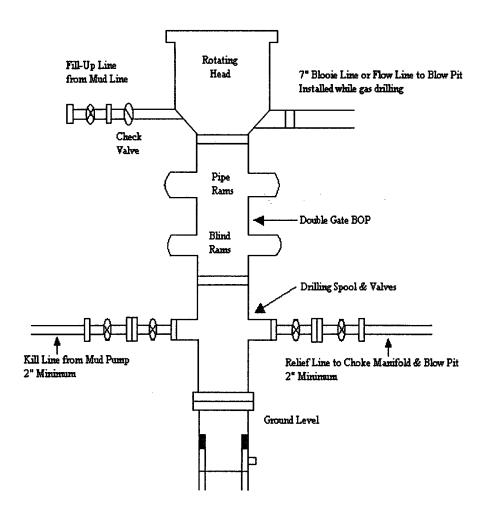
Pump 30 sks of flyash scavenger spacer consisting of 15.0 % Benonite and 0.15 % HR-5 ahead of cement

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. 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.

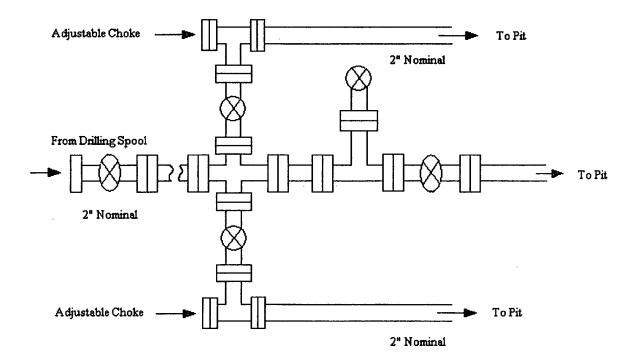
Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD