Form 3160-3 (August 1999)

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

UNITED STATES DEPARTMENT OF THE INTERIORY OF Familiagion, MM **BUREAU OF LAND MANAGEMENT**

5. Lease Serial No.

SF 077972 6. If Indian, Allottee or Tribe Name

APPLICATION FOR	PERMIT TO	DRILL OR	REENTER

la. Type of Work: X DRILL	RE	ENTER		7. If Unit or CA Agreement,	Name and No.
b. Type of Well: Oil Well Gas Well	Other	X Single Zone	Multiple Zone	8. Lease Name and Well No Richardson Co	
2. Name of Operator ENERGEN RESOU	RCES	CORPORATION		9. API Well No. 30045	39919
3A. Address		3b. Phone No. (include area co	ode)	10. Field and Pool, or Explo	ratory
c/o Walsh Engineering,7415 E. Main, Farmington, N	IM 87402	(505) 327-	4892	Basin Fruitlan	d Coal
4. Location of Well (Report location clearly and in accord	lance with			11. Sec., T., R., M., or Blk, a	
At surface 820' FSL and 1980' FWL At proposed prod. Zone		•		N Sec. 2, T27N,	•
14. Distance in miles and direction from nearest town or p	ost office	*		12. County or Parish	13. State
9 miles south				San Juan	NM
15 Distance from proposed* location to nearest property or lease line, ft. 820'	<u> </u>	16. No. of Acres in lease	17. Spacing Unit de	edicated to this well	
(Also to nearest drig. unit line, if any)		320+		320 acres (West half)	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	200'	19. Proposed Depth 1640 +/-	20. BLM/BIA Bond	d No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	<u> </u>	22. Approximate date work v		23. Estimated duration	
5945' GL		June 15,	<u> </u>	1 week	<u> </u>
		24 Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification.
- Such other site specific information and/or plans as may be required by the authorized office.

25. Signature Paul C. Thomps -	Name (Printed/Typed) Paul C. Thompson, P.E.	Date 2/25/2004
Title	Agent	,
Approved by (Signature) (an lie 4)	Name (Printed/Typed)	Date 5/10/06
Title AFM	Office	

Application approval 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.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED 'GENERAL REQUIREMENTS".

s action is subject to technical and red review pursuant to 43 CFR 3165.6 District I PO Box 1980, Hobbs, NM 88241-1980 9

State of New Mexico

Energy Minerals & Natural Resources Department

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

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

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 State Lease - 4 Copies Fee Lease - 3 Copies

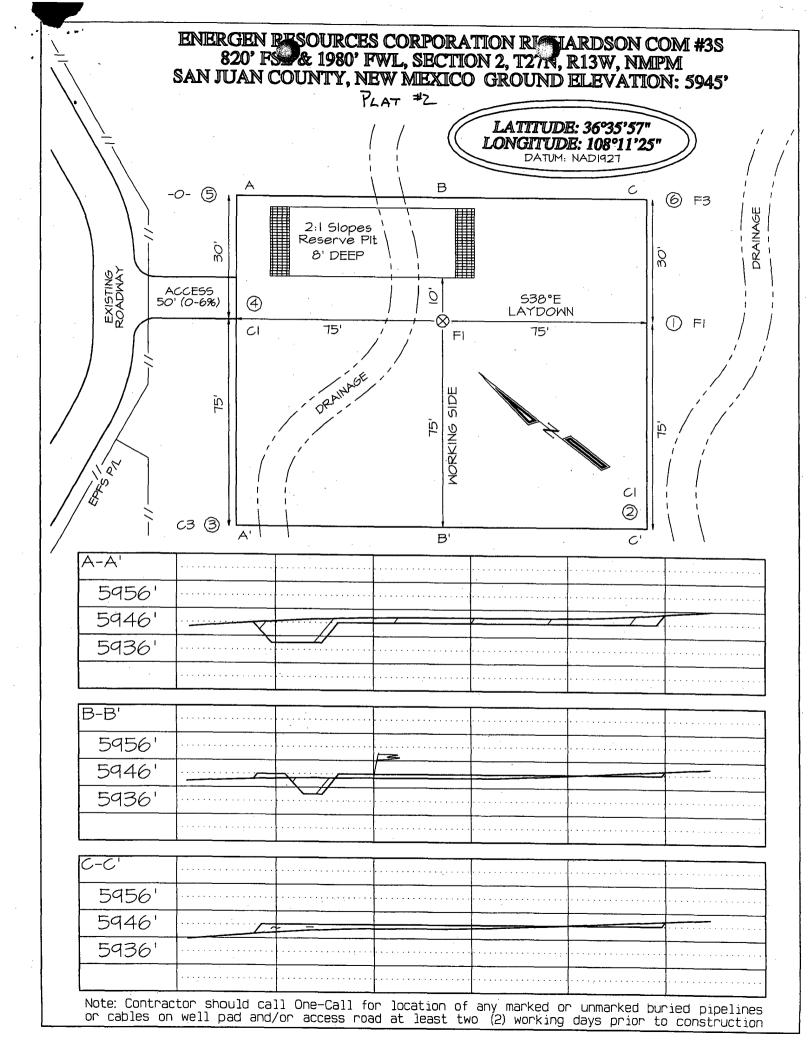
District III 1000 Rio Brazos Rd., Aztec, NM 87410

] AMENDED REPORT

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

O Box	2088, 5	Santa Fe.	NM 87504-	2088	•							
,				WELL	LOCATI	ON AND A	CREAGE DEDI	[CAT	ION PL	AT		
'API Number				e			Pool Name					
30	-046	5-32	2212		71629)	BAS	IN F	RUITLA	ND CC)AL	
'Property Code				Property Name RICHARDSON COM					*Well Number 3S			
	OGRID N 16292				ENERGE	'Operator Name RGEN RESOURCES CORPORATION					*Elevation 5945	
						¹⁰ Surface	Location	,			· · · · · · · · · · · · · · · · · · ·	
UL or	lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Fee	t from the	East/Wes	it line	County
	N	2	27N	13W		820	SOUTH	1	.980	WES	ST	SAN JUAN
		'	11 E	ottom	Hole L	ocation I	f Different	Fro	m Surf	ace.		<u> </u>
UL or	lot no.	Section	Township	Range	Lat Idn	Feet from the	North/South line	Fee	t from the	East/Wes	st line	Countý
12 Dedic	ated Acres	319.	61 Acre	es - (N	1/2)	Subject or Infill	¹⁴ Consolidation Code	¹⁵ Onder	No.			
NO	ALLON	ABLE W	ILL BE OR A	ASSIGNE NON-S1	D TO TH ANDARD	IS COMPLETI UNIT HAS BE	ON UNTIL ALL EN APPROVED	INTE BY T	RESTS H	AVE BE SION	EN CON	SOLIDATED
15				52	280.00				17 OPER	ATOR	CERTI	FICATION
. 80			 				↓ I	. 20	I hereby containe to the t	certify to the central description of the centra	hat the : s true ar knowledge	information nd complete e and belief
1312.08	LOT	4	LC	T 3	· /	LOT 2	LOT 1	1318	Zau/ Signatur	<u> </u>	hop	
									Printed	C.7	H8 0176	son
.00.05								.00.02	AGENC Title			

132(*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. Date of Survey: APRIL 18, 2003 Signature and Seal of Professional Surveyor SON C. EDWARDS SEN MEXIC MIN Indigitaria 070 2640.00 8 PESTINE PROFESSION SAMENOR 2640. 1980' 660' BEOFINED 820 5281.321 Certificate Number 15269



ENERGEN RESOURCES CORP. OPERATIONS PLAN Richardson Com #3S

I. Location: 820' FSL & 1980' FWL

Date: February 25, 2004

Sec 2 T27N R13W

San Juan County, NM

Elev: GL 5945'

Field: Basin Fruitland Coal Surface: Navajo Nation / NAPI Minerals: Federal SF 077972

II. Geology: Surface formation _ Nacimiento

Α.	Formation Tops	Depths
	OjO Alamo	157 ′
	Kirtland	257 ′
	Fruitland	1237'
	Pictured Cliffs	1442'
	Total Depth	1640′

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 1237' and 1442'.

- B. Logging Program: Induction/GR and density logs at TD.
- C. No over pressured zones are expected in this well. No H_2S zones will be penetrated in this well. Max. BHP = 600 psig.

III. Drilling

- A. Contractor:
- B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.5 ppg.

C. Minimum Blowout Control Specifications:

Double ram type or annular type 2000 psi working pressure BOP with a rotating head. See the attached Exhibits #1 and #2 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

Richardson Com #3S Operations Plan Pg #2

C. Cont.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	120'	7 "	20# K-55
6-1/4"	1640'	4-1/2"	10.5# K-55

- B. Float Equipment:
- a) Surface Casing: None
- b) Production Casing: 4-1/2" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe and five turbolizers every fifth joint from the top of the well.

V. Cementing:

Surface casing: 7" - Use 50 sx (59 cu. ft.) of Cl "B" with $\frac{1}{2}$ #/sk celloflake and 2% CaCl₂ (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 600 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. Lead with 110 sx (227 cu.ft) of Cl "B" with 2% metasilicate and 4 #/sk celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). Tail with 100 sx (118 cu.ft.) of Cl "B" with 4 #/sk celloflake (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). Total cement volume is 345 cu.ft. (100% excess to circulate cement to surface).

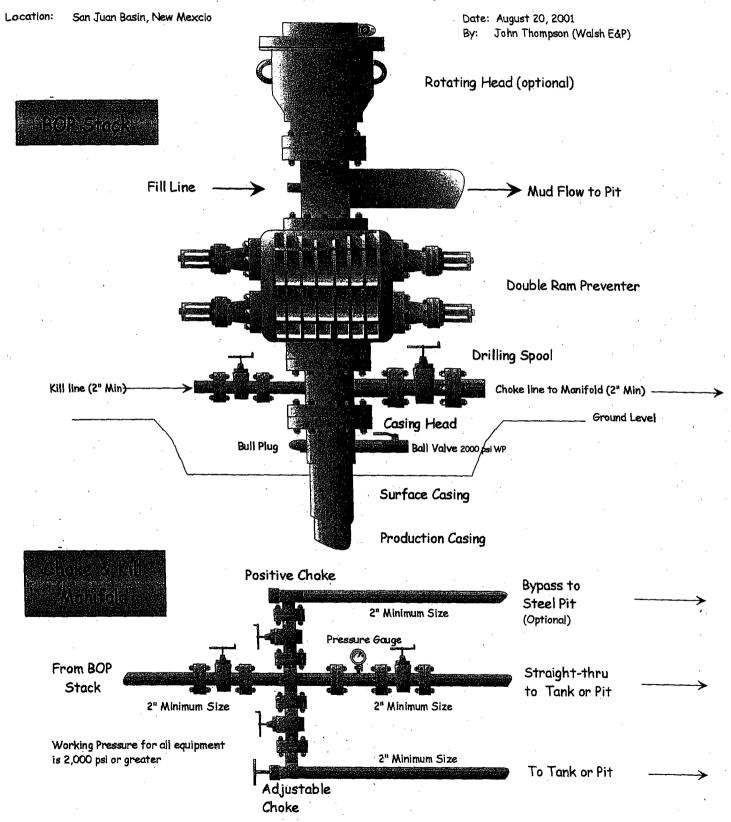
Paul C. Thompson, P.E.

Paul C. Thomps -

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Exhibit #1 Typical BOP setup



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ANNULAR PREVENTER

