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 witin its jurisdiction.

Title

Office

Approved by

Conditions of approval, if any, are attached. Approval of this notice 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.

Cementing Program

Well Name:	Russell Gas Cor	m 1M			Field:		Blanco Mesave	rde / Basin Dal	cota
_ocation:	23-28N-8W, 247	70 FNL, 1390 F	WL		API No.				
County:	San Juan				Well Flac				
State:	New Mexico				Formation	:	Dakota MesaVe	erde	
					KB Elev (est)	6343		
					GL Elev. (est)	6329		
Casing Program:				····					
Casing String	Est. Depth	Hole Size	Casing Size	Thread	TOC		Stage Tool	Cmt Cir. Out	
	(ft.)	(in.)	(in.)		(ft.)		Or TOL (ft.)	(bbl.)	
Surface	200	13.5	9.625	ST&C	Surface		NA		
Intermediate	3054	8.75	7	ST&C	Surface		NA		
Production -	7333	6.25	4.5	ST&C	2954		NA		
Casing Propertie			ctor Included)						
Casing String	Size	Weight	Grade	Burst	Collapse		Joint St.	Capacity	Drift
	(in.)	(lb/ft)		(psi.)	(psi.)		(1000 lbs.)		(in.)
Surface	9.62		H-40	2270		1400	254	0.0787	8.845
intermediate			K-55	3740		2270	25/234	0.0405	6.456
Production -	4.5	5 11.6	J-55	5350		4960	154	0.0155	3.875
Mud Program									
Apx. Interval	Mud Type	Mud Weight				Prope	rties Prio Ceme	<u>nting:</u>	
(ft.)				PV	<20				
				ΥP	<10				
0 - SCP	Water/Spud	8.6-9.2		Fluid Los	:<15				
SCP - ICP	Water/LSND	8.6-9.2							
ICP - ICP2	Gas/Air Mist	NA							
ICP2 - TD	LSND	8.6 - 9.2							
Cementing Progra	am:		Cfr		l=4=	diate		Dan Junetti	
Excess %, Lead			Surface 100		Interme 75			Production 40	
Excess %, Lead			NA		/5 0			40 40	
excess ‰, ⊤a⊪ BHST (est deg. F	١		NA 75		120			40 183	
Special Instruction			, /5 1,6,7		1,6,				
opodiai irisirudikki	1. Do not wash i	numne and line			1,0,	U		2,4,6	
	2. Wash pumps								
	Wash pumps Reverse out	and mies.							
	Reverse out Run Blend Te	set on Comont							
	5. Record Rate,		Deneity on 2 5"	diek					
	Kecora Rate,Confirm dens		-						
	7. 1" cement to:	•							
	8. If cement is n				10∟12 br ~	ftar lan	dina nlua		
	o. n cement is n	or circulated to	Sulface, full (ef	iip. suivey		iei ian	ung plug.		
Notes:	tD- and		Mark Para	£	,	• • •			
	*Do not wash up	on top of plug	. vvasn lines be	rore displac	ing produc	tion ce	ment job to mini	mize anliout.	
Surface:									
	Preflush		20 bbl.	FreshWa	ter			203	ς.
	Slurry 1	160	sx Class C Cer	nent ***				ے <i>ناہم</i> 1 95 ر	
	TOC@Surface		4 2% CaCl (ac		Ì				
	. 000000000		+ 0.25 #/sk Ce			culatio	n additivo)	0.4997	cuft/ft OH
			- 0.20 man 00	порнане ги	ane (1081 CII	Suidiff	n audinve)	U.4007	CONTINUE OF
Slurry Properties:		Density		Yield			Water		
		(lb/gal)		(ft3/sk)			(gal/sk)		
	Slurry 1	762	•	127	Ĭ		5.8	,	
Ossina Feetse		0 E/0t 05 5	T 40						Total
Casing Equipmen	π.	9-5/8", 8R, S							
		1 Guide Shoe							
		1 Top Woode	en Plug						

1 Autofill insert float valve

Centralizers, 1 per joint except top joint

Cementing Program

- 1 Stop Ring
- 1 Thread Lock Compound

ntermediate:	E				
	Fresh Water	20 b	bl fresh water		
					. out
					684
	Lead		260 sx Class "G" Ce	ement	658 cuft
	Slurry 1		+ 3% D79 exten	nder	
	TOC@Surface		+1/4 #/sk. Cello	•	•
			+ 5 lb/sk Gilsoni	ite	
	Tail		60 sx 50/50 Class *	"G"/Poz	76 cuft
	Slurry 2		+ 2% gel (extend	der)	25 C 27 M C C W
	50	Oft fill	+1/4 #/sk. Cello	phane Flake	0.1503 cuft/ft OH
			+ 2% CaCl2 (ac	celerator)	0.1746 cuft/ft csg ann
			+ 5 lb/sk Gilsoni	ite	
Slurry Properties:		Density	Yield	Water	
		(lb/gal)	(ft3/sk)	(gal/sk)	
Slurry 1		11.4	2.63	15.8	
Slurry 2		13.5	1.27	5.72	
Casing Equipmen	ıt:	7", 8R, ST&C			-
		1 Float Shoe (auto	ofill with minimal LCM in mud	n	
			ofill with minimal LCM in muc		
		1 Stop Ring	The second secon	-,	
			in middle of first joint, then ev	very third collar	
			· ·		
		1 Top Rubber Plu	g		
		1 Top Rubber Plu 1 Thread Lock Co	_		
Dura di satti			_		
Production:	Fresh Water		mpound		
Production:	Fresh Water	1 Thread Lock Co	mpound		
Production:	Fresh Water	1 Thread Lock Co	mpound		
Production:	÷ i	1 Thread Lock Co	mpound obl CW100	/ D124 / D154	504 : cuff
Production:	Lead	1 Thread Lock Co	obl CW100 200 LiteCrete D961		504 cuft
Production:	Lead Slurry 1	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47	antifoam	504 cuft
Production:	Lead	1 Thread Lock Co	obl CW100 200 LiteCrete D961	antifoam uid loss	504 cuft
Production:	Lead Slurry 1	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu	antifoam uid loss	504 cuft
Production:	Lead Slurry 1	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu	antifoam uid loss IC	504 cuft
Production:	Lead Slurry 1 TOC, 400' abov	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI	antifoam uid loss IC "G"/Poz	21¢
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI	antifoam uid loss IC "G"/Poz extender)	214 2002 cuft
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 ant	antifoam uid loss IC "G"/Poz extender) ifoam	214 2002 cuft
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class + 5% D20 gel (e	antifoam uid loss IC "G"/Poz extender) uifoam ophane Flake	214 2002 cuft
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cello	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss	214 2002 cuft
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 anti + 1/4 #/sk. Cellc + 0.25% D167 F + 5 lb/sk Gilson	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite	214 2002 cuft
Production:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 anti + 1/4 #/sk. Cellc + 0.25% D167 F	antifoam uid loss IC "G"/Poz extender) tifoam ophane Flake Fluid Loss tite tarder	214 2002 cuft
	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cello + 0.25% D167 F + 5 lb/sk Gilson +0.1% d800, ret +0.1% D65, die	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant	214 2002 cuft
	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 TI 150 sx 50/50 Class + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cello + 0.25% D167 F + 5 lb/sk Gilson +0.1% d800, ret +0.1% D65, dis	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant Water	210 cuft 0.1026 cuft/ft OH
Slurry Properties:	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 Tl 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cellc + 0.25% D167 F + 5 lb/sk Gilson + 0.1% d800, ret + 0.15% D65, di: Yield (ft3/sk)	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant Water (gal/sk)	210 cuft
Slurry Properties: Slurry 1	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 Tl 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cellc + 0.25% D167 F + 5 lb/sk Gilson + 0.1% d800, ret + 0.15% D65, di: Yield (ft3/sk) 2.52	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant Water (gal/sk) 6.38	QIQ cuft 0.1026 cuft/ft OH 0.1169 cuft/ft csg enn
Slurry Properties: Slurry 1	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 Tl 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cellc + 0.25% D167 F + 5 lb/sk Gilson + 0.1% d800, ret + 0.15% D65, di: Yield (ft3/sk)	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant Water (gal/sk)	QIQ cuft 0.1026 cuft/ft OH 0.1169 cuft/ft csg ann Top of Mancos
Production: Slurry Properties: Slurry 1 Slurry 2 Casing Equipmer	Lead Slurry 1 TOC, 400' abov Tail Slurry 2	1 Thread Lock Co	200 LiteCrete D961 + 0.03 gps D47 + 0.5% D112 flu + 0.11% D65 Tl 150 sx 50/50 Class ' + 5% D20 gel (e + 0.1% D46 ant + 1/4 #/sk. Cellc + 0.25% D167 F + 5 lb/sk Gilson + 0.1% d800, ret + 0.15% D65, di: Yield (ft3/sk) 2.52	antifoam uid loss IC "G"/Poz extender) iifoam ophane Flake Fluid Loss iite tarder ispersant Water (gal/sk) 6.38	QIQ cuft 0.1026 cuft/ft OH 0.1169 cuft/ft csg enn

Cementing Program

- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring

Centralizers, every 4th joint in mud drilled holes, none in air drilled holes.

- 1 Top Rubber Plug
- 1 Thread Lock Compound