<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

Form C-101 August 1, 2011

Permit 273059

Manufacturer

1. Operat	EOG	e and Address RESOURCES IN	С							2. OGRII	Number 7377		
		Box 2267 and, TX 79702								3. API N	umber 30-015-4636	35	
4. Proper	ty Code 3261			5. Property Name LACAMA	20 STATE COM					6. Well N	lo. 602H		
						7. Surf	ace Location						
JL - Lot		Section	Township	Range	Lot Idn	F	eet From	N/S Line	Feet From		E/W Line	County	
	G	19	18	S 2	:5E		1974	N	131	13	E		Eddy
					8. Pro	posed B	ottom Hole Location	on					
			Township	Range	Lot Idn		Feet From	N/S Line	Feet From		E/W Line	County	
UL - Lot		Section	Lownship	Range	Lot luli		1 661 1 10111	14/O LITTO			L/VV LIIIC	County	

9. Pool Information

Pennasco Draw Permo Penn gas 82775							
		Additional We	ell Information				
11. Work Type 12. Well Type 13. Cable/Rotary 14. Lease Type 15. Ground Level Elevation							

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		Private	3606
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	13479	Permo Penn		11/1/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

Type

21. Proposed Casing and Cement Program

Ziii Topooda Gaoing ana Goineilt Togram										
Type	Hole Size	Casing Size Casing Weight/ft		Casing Size Casing Weight/ft Setting Depth Sacks of Cen		Estimated TOC				
Surf	12.25	9.625	36	1300	465	0				
Prod	8.5	5.5	20	13479	1280	200				

Casing/Cement Program: Additional Comments

EOG Resources requests the approval of an intermediate casing string contingency to be determined if losses are encountered in the vertical portion of our wellbore. Surface and production casing will remain the same. Production cement will be tied back 200' into previous casing string if the intermediate string is run.

Working Pressure

22. Proposed Blowout Prevention Program

Test Pressure

21	9		
Double Ram	3000	3000	What ever is avaliable
23. I hereby certify that the information	given above is true and complete to the best o	of my	OIL CONSERVATION DIVISION
knowledge and belief.			
I further certify I have complied with 1	9.15.14.9 (A) NMAC And/or 19.15.14.9 (B)	NMAC	

knowledge and be I further certify I I , if applicable. Signature:		NMAC ⊠ and/or 19.15.14.9 (B) NMAC			
Printed Name:	Electronically filed by Kay Maddo	(Approved By:	Raymond Podany	
Title:	Regulatory Agent		Title:	Geologist	
Email Address:	kay_maddox@eogresources.com	n	Approved Date:	10/8/2019	Expiration Date: 10/8/2021
Date:	10/7/2019	Phone: 432-686-3658	Conditions of Appr	roval Attached	

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1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

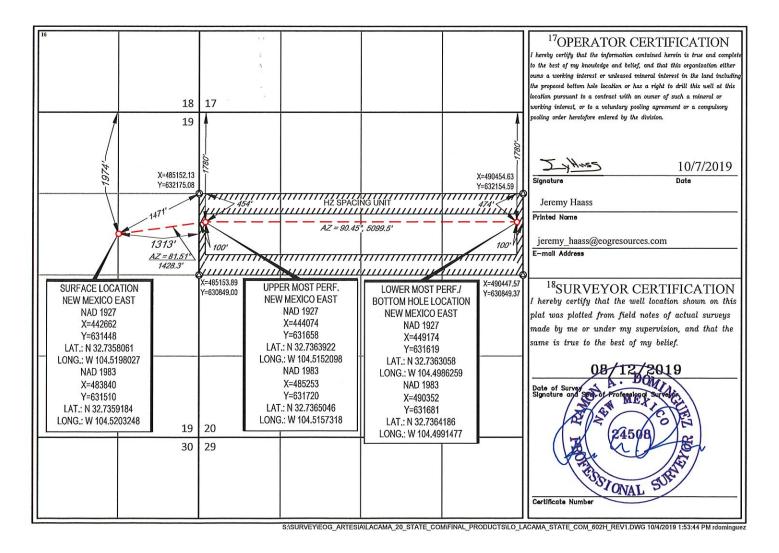
FORM C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number ² Pool C							³ Pool Na	ame			
	Регто - Репп										
⁴ Property Code ⁵ Property Name									⁶ Well Number		
	LACAMA 20 STATE COM									602H	
⁷ OGRID N	lo.				⁸ Operator	Name				⁹ Elevation	
7737				EC	G RESOUF	CES, INC.				3606'	
	10 Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Ea	st/West line	County	
G	19	18-S	25-E	-	1974	NORTH	1313	EA	ST	EDDY	
			11	Bottom Ho	le Location If l	Different From Su	rface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	E	ıst/West line	County	
H	20	18-S	25-E	-	- 1780 NORTH 100 EAST					EDDY	
12Dedicated Acres	¹³ Joint or	Infill 14C	¹⁴ Consolidation Code ¹⁵ Order No.								
160.00		1									

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.



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1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462 State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

		GAS CAPTURE	PLAN			
Date: 10/8/2019						
⊠ Original	Operator & OGRID No.:	[7377] EOG RESOURCES INC				
☐ Amended - Reason for Amendment:						
This Gas Capture Plan outlines actic Note: Form C-129 must be submitte Well(s)/Production Facility – Name	d and approved prior to exceed	•		•	omplete to new z	zone, re-frac) activity
The well(s) that will be located at the Well Name	production facility are shown	in the table below.	Footages	Expected	Flared or	Comments
Wen Hame	711	(ULSTR)	Toolages	MCF/D	Vented	Comments
LACAMA 20 STATE COM #602H	30-015-46	365 G-19-18S-25E	1974N 1313E	2000	None	
Gathering System and Pipeline Not Well(s) will be connected to a produ	ction facility after flowback ope	rations are complete, if gas transp		e gas produced from	•	•

Flowback Strategy

Eddy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ENTERPRISE FIELD SERVICES L.L.C. system at that time. Based on current information, it is belief the system can take this gas upon completion of the well(s).

County, New Mexico. It will require 800' of pipeline to connect the facility to High Pressure gathering system. EOG RESOURCES INC provides (periodically)

a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In

Processing Plant located in Sec. 13, Twn. 23S, Rng. 27E, Eddy

have periodic conference calls to discuss changes to drilling and completion schedules. Gas

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

addition, EOG RESOURCES INC and ENTERPRISE FIELD SERVICES L.L.C.

from these wells will be processed at ENTERPRISE FIELD SERVICES L.L.C.

Power Generation – On lease

to ENTERPRISE FIELD SERVICES L.L.C.

- Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
 - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines

Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

- NGL Removal On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Form APD Comments

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

Permit 273059

PERMIT COMMENTS

Operator Name and Address:	API Number:
EOG RESOURCES INC [7377]	30-015-46365
P.O. Box 2267	Well:
Midland, TX 79702	LACAMA 20 STATE COM #602H

Created By Comment Comment Date

Form APD Conditions

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Permit 273059

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
EOG RESOURCES INC [7377]	30-015-46365
P.O. Box 2267	Well:
Midland, TX 79702	LACAMA 20 STATE COM #602H

OCD Reviewer	Condition				
rpodany Will require administrative order for non-standard spacing unit					
rpodany	Will require a directional survey with the C-104				
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing				

Lacama 20 State Com #602H Contingency

Location:

SL: 1974' FNL 1313' FEL, Unit G 19-18S-25E BHL: 1780' FNL 100' FEL, Unit H 20-18S-25E

EOG Resources requests the approval of an intermediate casing string contingency to be determined if losses are encountered in the vertical portion of our wellbore. Surface and production casing will remain the same. Production cement will be tied back 200' into previous casing string if the intermediate string is run.

Casing and cement designs are shown below:

Hole		Csg				DF _{min}	DF _{min}	$\mathbf{DF}_{\mathbf{min}}$
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
12.25"	0'-1,300'	9.625"	36#	J-55	LTC	1.125	1.25	1.80
8.75"	0'-6,400'	7.625"	29.7#	L-80	FLUSHMAX-	1.125	1.25	1.60
					III			
8.50"	0'-13,479'	5.5"	20#	L-80	BTC	1.125	1.25	1.80

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1250'	255	12.9	1.97	Lead: Class 'C' + 4%PF20(Bentonite Gel) + 2%PF1(Calcium Chloride) + 0.125#/skPF29(Celloflake) + 0.4#/skPF45 (Defoamer) 100% Excess (TOC @ Surface)
	210	14.8	1.34	Tail: Class 'C' + 2%PF1(Calcium Chloride) (100% excess)
6400'*	350	12.8	1.79	Lead: 35:65 Poz C + .02 gal/sk Anti Foam + 1% Extender + .13 lb/sk Lost Circulation (TOC @ Surface) (100% Excess)
	200	14.8	1.34	Tail: Class C + 0.13% Anti Foam
13,479'	185	PF20 OF4		Lead: Class 50/50 PozC + 5%PF44(BWOW)(Salt) + 10% PF20(Bentonite Gel) +.2%PF153(Anti Settling Agent(+ 3#/sk OF42(Kolseal) + 0.125#/sk PF29 (celloflake) + 0.4#/sk PF45 (Defoamer) (TOC @ 200' into previous casing string) 35% Excess
	1095	13	1.48	Tail: Class PVL + 1.3% PF44(BWOW)(Salt) + 5% PF174 (Expanding Cement) + 0.5% PF606 (Fluid Loss) + 0.1% PF153 (Anti Settling Agent) + 0.4#/sk PF45 (Defoamer) 35% Excess

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss		
0-1,300'	Fresh Water	8.6-8.8	28-32	N/c		
1,300'-13,479'	Cut Brine	8.8-9.6	34-40	Less than		

Inten		As Dril	led												
Operator Name: EOG Resources Inc.						Property Name: Lacama 20 State Com							Well Number 602H		
Kick (Off Point ((KOP)								:					
UL	Section 19	Township	Range	Lot	Feet		From N		Feet			n E/W	County		
G Latitu		18S	25E		1974 Longitu		North		131	3	Eas	ι	Eddy NAD		
32.7	735918	34			-104	.520	3248						1983		
First 7	ake Poin	t (FTP)													
UL E	Section 20	Township 18S	Range 25E	Lot	Feet 1780		From N	I/S	Feet 100		From	n E/W	County Eddy		
Latitude Longi					Longitu	(1.00) (1							NAD 1983		
Last T	ake Point	t (LTP)													
UL H	Section 20	Township 18S	Range 25E	Lot	Feet 1780	Fron	n N/S th	Feet 100		From East	E/W	Count Eddy			
					Longitu		1477					NAD 1983			
s this	well the	defining w	vell for the	e Horiz	ontal Sp	oacing	; Unit?	Y	'es]					
s this	well an i	nfill well?	[
	l is yes pl ng Unit.	ease provi	de API if a	ıvailab	le, Oper	ator N	Name a	and w	ell n	umber	for [Definin	ng well fo	r Horizontal	
API#															
Oper	ator Nan	ne:	<			Prop	erty N	ame:						Well Number	

