

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
1625 N. French Dr.
Albuquerque, NM 87106

FORM APPROVED
1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOGS, NM 88240

5. Lease Serial No.
12

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other		6. If Indian, Allottee or Tribe Name	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other		7. Unit or CA Agreement Name and No.	
2. Name of Operator EOG RESOURCES, INC.		8. Lease Name and Well No. LUSK 22 FEDERAL 1	
3. Address P. O. BOX 2267 MIDLAND, TX 79702		9. API Well No. 30-025-35590	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 715FNL 1330FWL At top prod interval reported below At total depth		10. Field and Pool, or Exploratory LUSK, MORROW East	
14. Date Spudded 06/22/2001		15. Date T.D. Reached 07/19/2001	
16. Date Completed ☒ 08/30/2001 ☐ Ready to Prod.		17. Elevations (DF, KB, RT, GL)* 3610 GL	
18. Total Depth: MD 13050 TVD		19. Plug Back T.D.: MD 13005 TVD	
20. Depth Bridge Plug Set: MD TVD		21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR/NEU/DEN/SP/DIFE/DAL/MX.	
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☒ No ☐ Yes (Submit analysis)			

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Casing Top*	Amount Pulled
14.750	11.750 H40	42.000	0	622	622	335		0	
11.000	8.625 J-55	32.000	0	4604	4604	1500		0	
7.875	5.500 P110	17.000	0	13048	13048	1335		4580	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	12497							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MORROW	12902	12910	12902 TO 12910	2.000	32	PRODUCING
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
12902 to 12910	FRAC W/50-70% CO2 + 20/40 interprop; 100 gal Clay safe acid; 32,413 gal 63% col; 2914 gal 52% co2 foam; 2970 gal 49% co2 foam.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/03/2001	08/07/2001	24	→	12.0	204.0	0.0	53.0	0.67	FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	509	-0.0	→	12	204	0	16962	Prod.	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ACCEPTED FOR RECORD

(ORIG. SGD.) DAVID R. GLASS

SEP 26 2001

DAVID R. GLASS
PETROLEUM ENGINEER

7-ELM
1-CCD
1-LTN
1-bec

DLN
ROSWELL, NM

SEP 14 01

RECEIVED

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
MORROW	12902	12910		QUEEN YATES DELAWARE BONE SPRING WOLFCAMP STRAWN ATOKA SHALE LOWER MORROW MORROW CLASTIS MISSISSIPPIAN	2940 2990 5800 7300 10475 11476 11925 12350 12815 12900

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

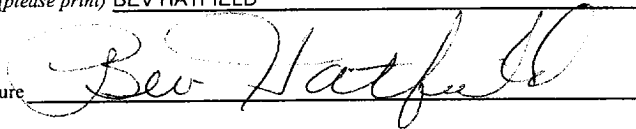
- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Name (please print) BEV HATFIELD

Title Sr. Regulatory Admin.

Signature



Date 09/10/2001

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.

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30 025 35590		Pool Code 80759 80770	Pool Name Lusk, Morrow East
Property Code 28095	Property Name LUSK FED. "22"		Well Number 1
OGRID No. 7377	Operator Name EOG RESOURCES INC.		Elevation 3610

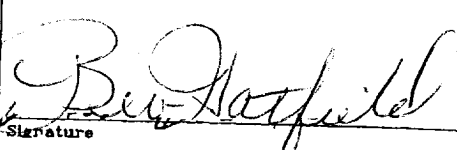
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	22	19	32		715	NORTH	1330	WEST	LEA

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
Dedicated Acres 320		Joint or Infill		Consolidation Code		Order No.			

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

16 1330' 715' EOG RESOURCES INC. LUSK FEDERAL "22" No. 1 ELEV. 3610' Y: 601050.0 X: 677115.6 LAT: 32°39'03.85" LONG: 103°45'28.39"	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature BEV HATFIELD Printed Name SR. REGULATORY ADMINISTRATOR Title 9-10-01 Date		
	18 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 best of my belief. MARCH 15, 2001 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number 14729		

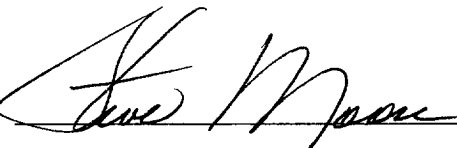
SCANNED

OPERATOR: EOG RESOURCES
WELL/LEASE: LUSK 22 FED. #1
COUNTY: LEA

498/263-0117

STATE OF NEW MEXICO
DEVIATION REPORT

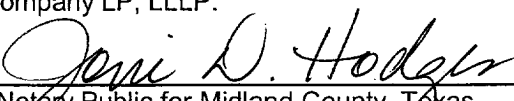
200	3/4	11,614	1 3/4
628	3/4	12,107	1 3/4
710	1	12,448	2
1,030	3/4	12,928	2
1,529	3/4	13,050	2
2,027	1		
2,336	2		
2,528	2		
2,752	1		
3,037	1 1/4		
3,293	1 1/4		
3,805	1 1/4		
4,186	3/4		
4,566	3/4		
4,971	3/4		
5,417	1/2		
5,917	1		
6,407	3/4		
6,909	3/4		
7,396	1		
7,892	1		
8,257	1 1/2		
8,704	1 3/4		
9,080	2 3/4		
9,173	1 3/4		
9,418	2 1/4		
9,668	2 1/4		
10,040	2 1/4		
10,345	2 1/4		
10,825	2 1/2		
11,217	1 3/4		

By: 

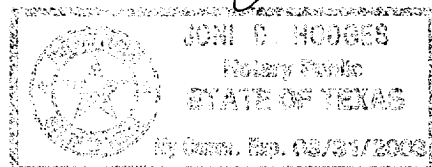
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 31st day of July, 2001, by
Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.


Notary Public for Midland County, Texas

My Commission Expires: 3/31/2003



Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator EOG RESOURCES, INC.					Lease or Unit Name LUSK 22 FED.				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8/7/01		Well No. 1		
Completion Date 8 3 01		Total Depth 13050		Plug Back TD 13005		Elevation		Unit Ltr - Sec - TWP - Rge 22 19 32	
Csg. Size 5 1/2	Wt. 17	d	Set At 13049	Perforations: From: 12902 To: 12910			County EDDY Lea		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 12512	Perforations: From: To:			Pool		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE					Packer Set At 12429		Formation MORROW		
Producing Thru Tbg. Size		Reservoir Temp. °F 183.7 @ 12900		Mean Annual Temp. °F 60		Baro. Press. -P _s 13.2		Connection VENTED	
L * 12900	H 12900	Ug 0.668	%CO ₂ 0.67	%N ₂ 0.627	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG	
FLOW DATA					TUBING DATA			CASING DATA	
No.	Prover Line Size	Orifice Size	Press p.s.i.g.	Drill. h _w	Temp. °F	Press p.s.i.g.	Temp. °F	Press p.s.i.g.	Temp. °F
SI						3360	N/A	PKR	N/A
1	4 X	1.750	509	2.56	160	3115		"	
2	4 X	1.750	491	5.29	140	2895		"	
3	4 X	1.750	527	8.41	110	2700		"	
4	4 X	1.750	564	21.2	70	2205		"	
5									
RATE OF FLOW CALCULATIONS									
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd	
1	14.93		36.56	522.2	0.9158	1.224	1.029	630	
2	14.93		51.65	504.2	0.9309	1.224	1.033	908	
3	14.93		67.4	540.2	0.9551	1.224	1.043	1227	
4	14.93		110.62	577.2	0.9905	1.224	1.059	2120	
5									
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 16.962 Mcf/bbl.				
1	.77	620	1.64	.944	A.P. 1. Gravity of Liquid Hydrocarbons 53 Deg.				
2	.75	600	1.58	.938	Specific Gravity Separator Gas 0.668 XXXXXXXX				
3	.80	570	1.50	.920	Specific Gravity Flowing Fluid XXXXXX GMIX .839				
4	.86	530	1.40	.892	Critical Pressure 670 P.S.I.A. N/A P.S.I.A.				
5					Critical Temperature 378 R. N/A R				
P _c 3867 P ₂ 14953.7									
No.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $P_o^2 = \frac{2.521}{P_c^2 - P_w^2}$ (2) $\left(\frac{P_o^2}{P_c^2 - P_w^2} \right)^n = 1.749$				
1		3763.3	14162.4	791.3					
2		3670.9	13475.5	1478.2					
3		3542.4	12548.5	2405.2					
4		3003.7	9022.2	5931.5					
5									
AOI = Q $\left(\frac{P_c^2}{P_o^2 - P_w^2} \right)^n = 3.708$									
79825									
Absolute Open Flow 3.708		Mcf/d @ 15.025		Angle of Slope Q: 58.85		Slope n: 0.6043			
Remarks: * BHP INSTRUMENT SET @ THIS DEPTH--WELL PRODUCED 12.00 BBLs CONDENSATE									
Approved By Division:			Conducted By: SIGNAL WIRE LINE		Calculated By: BM		Checked By: BM		

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

COMPANY BOG RESOURCES, INC LEASE : L.22 PED WELL NO. : 1 DATE 8 7 01
UNIT SECTION : 22 TOWNSHIP : 19 RANGE : 32
L 12900 H : 12900 L/R : 1 G/GMIX : 0.6680
CO2 : 0.67 N2 : 0.627 H2S :
GH : 8617.2 PCR : 670 TCR : 378

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	663.0	663.0	663.0	663.0	663.0	663.0	663.0	663.0
3	T=(Tw+Ts/2)	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
4	Z (EST.)	1.021	0.902	0.942	0.891	0.929	0.880	0.876	0.838
5	TZ	611	540	564	533	556	527	524	502
6	GH/TZ	14.107	15.966	15.288	16.157	15.506	16.358	16.444	17.173
7	eS(TABLE XIV)	1.697	1.820	1.774	1.833	1.789	1.847	1.853	1.904
8	Pf or Ps	5076.69	5076.69	4969.82	4969.82	4813.9	4813.9	4144.71	4144.71
9	Pf2 or Ps2	25772.8	25772.8	24699.1	24699.1	23173.6	23173.6	17178.6	17178.6
10	Pc2=Pf/eS or Pw2=Ps2/eS	15185.2	14162.7	13921.8	13475.5	12955.9	12548.3	9272.1	9022.1
11	Pc or Pw	3897	3763	3731	3671	3599	3542	3045	3004
12	P=(Pw+Ps/2) or (Pc+Pf/2)	4487	4420	4351	4320	4207	4178	3595	3574
13	Pr=(P/PCR)	6.70	6.60	6.49	6.45	6.28	6.24	5.37	5.33
14	Tr(T/TCR)	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
15	Z (TABLE XI)	0.902	0.897	0.891	0.889	0.880	0.878	0.838	0.837

PW 1 : 3763.3 PW 2 : 3670.9 PW 3 : 3542.4 PW 4 : 3003.7

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (P_c or P_w)
FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_b)

FORM C-122F

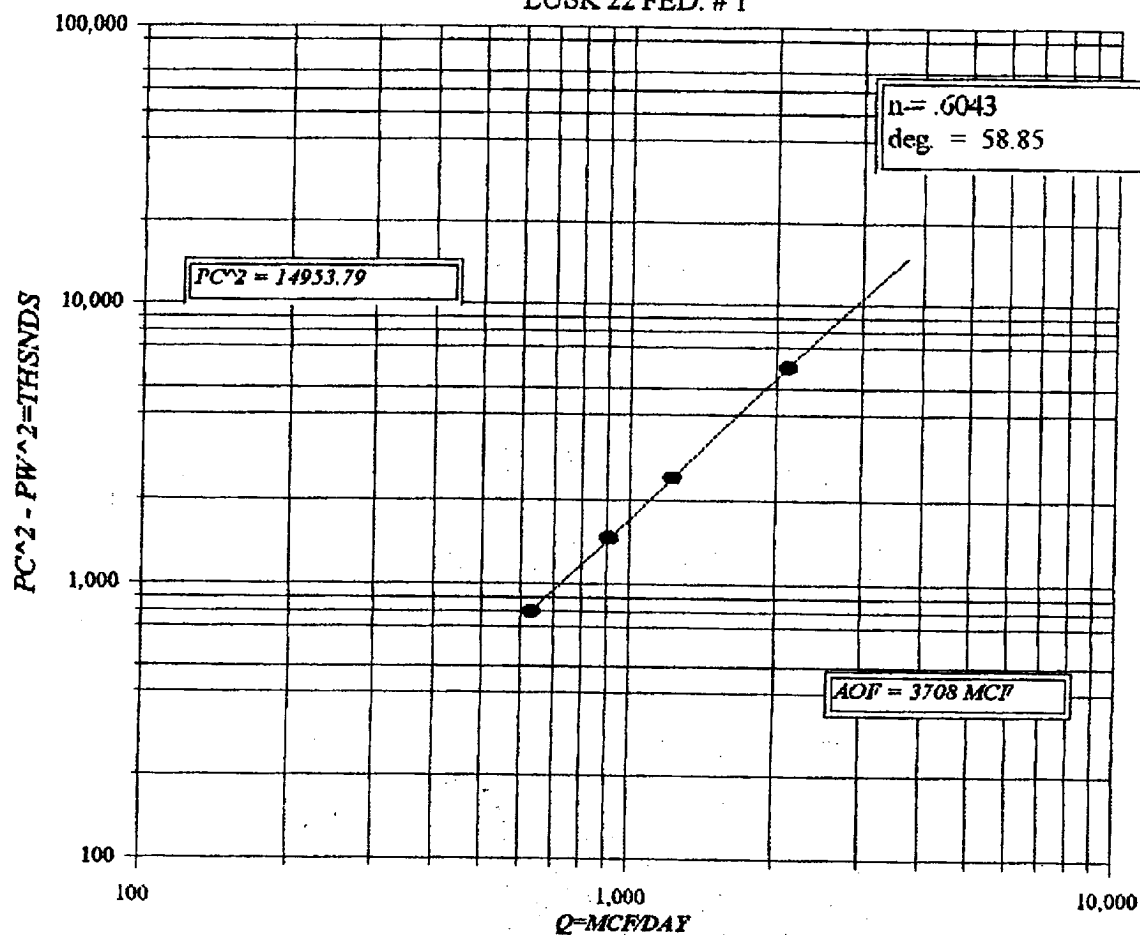
COMPANY EOG RESOURCES, INC LEASE : L.22 FED WELL NO. : 1 DATE 8 7 01
UNIT SECTION : 22 TOWNSHIP : 19 RANGE : 32
L 12900 H : 12900 L/H : 1 G/GNIX : 0.6680
CO2 : 0.67 N2 : 0.627 H2S :
GH : 8617.2 PCR : 670 TCR : 378

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	663.0	663.0	663.0	663.0	663.0	663.0	663.0	663.0
3	$T = (Tw + Ts / 2)$	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
4	Z (EST.)	1.032	0.911	ERR	ERR	ERR	ERR	ERR	ERR
5	TZ	618	545	ERR	ERR	ERR	ERR	ERR	ERR
6	GH/TZ	13.948	15.803	ERR	ERR	ERR	ERR	ERR	ERR
7	eS(TABLE XIV)	1.687	1.809	ERR	ERR	ERR	ERR	ERR	ERR
8	Pf or Ps	5200.6	5200.6	0	0	0	0	0	0
9	Pf2 or Ps2	27046.2	27046.2	0.0	0.0	0.0	0.0	0.0	0.0
10	$Pc2 = Pf / eS$ or $Pw2 = Ps2 / eS$	16030.4	14953.4	ERR	ERR	ERR	ERR	ERR	ERR
11	Pc or Pw	4004	3867	ERR	ERR	ERR	ERR	ERR	ERR
12	$P = (Pw + Ps / 2)$ or $(Pc + Pf / 2)$	4602	4534	ERR	ERR	ERR	ERR	ERR	ERR
13	$Pr = (P / PCR)$	6.87	6.77	ERR	ERR	ERR	ERR	ERR	ERR
14	$Tr = (T / Tcr)$	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
15	Z (TABLE XI)	0.911	0.906	ERR	ERR	ERR	ERR	ERR	ERR

PW 1 : 3867.0 PW 2 : ERR PW 3 : ERR PW 4 : ERR

EOG RESOURCES, INC

LUSK 22 FED. # 1



NEW MEXICO G.O.R./G. MIX

NO. OF BBLs PRODUCED = 12.0

API GRAVITY @ 60 DEG. = 53.0

SPECIFIC GRAVITY OF GAS = 0.6680

XX
TOTAL GAS PRODUCED = 204

G.O.R. = 16.962

G.MIX = 0.839