HOBBS OCD
JAN 07 2020
RECEIVED

Operator
HOBBS OCD
JAN 09 2020
RECEIVED

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM66927

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator: EOG RESOURCES, INC
Contact: KAY MADDOX
E-Mail: KAY_MADDOX@EOGRESOURCES.COM

8. Lease Name and Well No.: LOBO BLANCO 9 FEDERAL 701H

3. Address: PO BOX 2267, MIDLAND, TX 79702
3a. Phone No. (include area code): Ph: 432-686-3658

9. API Well No.: 30-025-46079

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface: Sec 9 T26S R34E Mer NMP SWSW 293FSL 347FWL 32.051501 N Lat, 103.482255 W Lon
At top prod interval reported below: Sec 9 T26S R34E Mer NMP SWSW 572FSL 334FWL 32.052268 N Lat, 103.456252 W Lon
At total depth: Sec 4 T26S R34E Mer NMP NWNW 108FNL 367FWL 32.079433 N Lat, 103.482216 W Lon

10. Field and Pool, or Exploratory: WC025 G09 S263416B;UP WC

11. Sec., T., R., M., or Block and Survey or Area: Sec 9 T26S R34E Mer NMP

12. County or Parish: LEA
13. State: NM

14. Date Spudded: 06/27/2019
15. Date T.D. Reached: 08/07/2019
16. Date Completed ☐ D & A ☒ Ready to Prod. 11/11/2019
17. Elevations (DF, KB, RT, GL)*: 3337 GL

18. Total Depth: MD 22866 TVD 12721
19. Plug Back T.D.: MD 22851 TVD 12721
20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12.500	9.625 J55	40.0		838		585		0	
8.750	7.625 HCP-110	29.7		12117		1530		0	
6.750	5.500 ICYP110	20.0		22851		995		7709	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	12970	22851	12970 TO 22851	3.250	2100	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
12970 TO 22851	25,312,876 LBS PROPPANT;442,885 BBLS LOAD FLUID

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
11/11/2019	11/18/2019	24	→	2801.0	4800.0	14455.0	43.0		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**	
64		2515.0	→				1714	POW	

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**	
			→						

ACCEPTED FOR RECORD
DEC 11 2019
BUREAU OF LAND MANAGEMENT
ROSWELL FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #493107 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Reclamation due: 05/11/2020

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
RUSTLER	707		BARREN	RUSTLER	707
T/SALT	1042		BARREN	T/SALT	1042
B/SALT	3980		OIL & GAS	B/SALT	3980
BRUSHY CANYON	8105		OIL & GAS	BRUSHY CANYON	8105
1ST BONE SPRING SAND	10600		OIL & GAS	1ST BONE SPRING SAND	10600
2ND BONE SPRING SAND	11123		OIL & GAS	2ND BONE SPRING SAND	11123
3RD BONE SPRING SAND	12190		OIL & GAS	3RD BONE SPRING SAND	12190
WOLFCAMP	12624		OIL & GAS	WOLFCAMP	12624

32. Additional remarks (include plugging procedure):
PLEASE REFERENCE ATTACHMENTS

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):

Electronic Submission #493107 Verified by the BLM Well Information System.
For EOG RESOURCES, INC, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 12/11/2019 ()

Name *(please print)* KAY MADDOX Title REGULATORY SPECIALIST

Signature (Electronic Submission) Date 11/20/2019

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 fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Lobo Blanco 9 Fed
#701H
OH

Design: OH

Final PVA Report

13 August, 2019

eog resources

Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3359.0usft
Site:	Lobo Blanco 8 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project Lea County, NM (NAD 83 NME)

Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Lobo Blanco 8 Fed

Site Position:		Northing:	383,514.00 usft	Latitude:	32° 3' 5.410 N
From:	Map	Easting:	805,018.00 usft	Longitude:	103° 28' 56.122 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.45 °

Well #701H

Well Position	+N/-S	0.0 usft	Northing:	383,514.00 usft	Latitude:	32° 3' 5.410 N
	+E/-W	0.0 usft	Easting:	805,018.00 usft	Longitude:	103° 28' 56.122 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,337.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/17/2018	6.74	59.90	47,691.41882438

Design OH

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.41

Survey Program Date 8/13/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
188.0	22,866.0	Learn MWD #1 (OH)	MWD	OWSG MWD - Standard

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Site:	Lobo Blanco 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
166.0	0.09	224.48	166.0	-0.1	-0.1	0.05	0.05	0.00	-0.1	0.0
325.0	0.09	201.80	325.0	-0.3	-0.2	0.03	0.00	-16.32	-0.3	-0.1
510.0	0.70	219.21	510.0	-1.3	-1.0	0.33	0.33	9.41	-1.6	0.1
695.0	0.53	190.55	695.0	-3.0	-1.8	0.19	-0.09	-15.49	-3.3	-1.3
789.0	0.88	184.40	789.0	-4.2	-2.0	0.38	0.37	-6.54	-4.3	-1.7
980.0	0.35	227.12	980.0	-6.0	-2.5	0.35	-0.28	22.37	-6.0	2.7
1,171.0	0.70	241.18	1,171.0	-7.0	-4.0	0.19	0.18	7.36	-6.9	4.2
1,362.0	0.26	328.02	1,362.0	-7.2	-5.2	0.36	-0.23	45.47	-7.3	5.2
1,552.0	0.53	268.78	1,551.9	-6.8	-6.3	0.24	0.14	-31.18	-6.5	6.7
1,743.0	0.70	273.52	1,742.9	-6.8	-8.4	0.09	0.09	2.48	-8.0	7.3
1,934.0	0.70	254.71	1,933.9	-7.0	-10.7	0.12	0.00	-9.85	-12.1	3.9
2,124.0	0.62	227.12	2,123.9	-8.0	-12.6	0.17	-0.04	-14.52	-14.7	-2.7
2,315.0	0.88	162.08	2,314.9	-10.1	-12.9	0.44	0.14	-34.05	-5.7	-15.3
2,505.0	1.76	137.82	2,504.8	-13.7	-10.5	0.54	0.48	-12.77	-3.1	-16.9
2,696.0	2.20	130.79	2,695.7	-18.2	-5.7	0.26	0.23	-3.68	-7.6	-17.5
2,887.0	2.73	114.44	2,886.6	-22.5	1.2	0.46	0.28	-8.56	-10.4	-20.0
3,077.0	2.64	125.16	3,076.3	-26.9	8.9	0.27	-0.05	5.64	-22.8	-16.9
3,268.0	1.93	101.08	3,267.2	-30.1	15.7	0.62	-0.37	-12.61	-21.1	-26.5
3,459.0	2.29	168.93	3,458.1	-34.4	19.6	1.24	0.19	35.52	-37.5	12.6
3,649.0	2.81	161.77	3,647.9	-42.8	20.1	0.40	0.27	6.76	-42.1	21.5
3,840.0	3.08	168.05	3,838.7	-52.5	21.1	0.39	0.14	-7.18	-55.7	9.7
4,031.0	3.52	167.04	4,029.3	-63.3	21.4	0.61	0.23	0.94	-60.2	29.0
4,221.0	3.34	170.52	4,219.0	-74.6	21.8	0.53	-0.09	1.83	-77.1	9.0
4,412.0	4.75	246.28	4,409.6	-83.3	15.3	2.66	0.74	39.66	-19.0	61.2
4,603.0	2.46	231.16	4,600.3	-89.0	4.8	1.29	-1.20	-7.92	-43.1	62.4
4,794.0	2.55	188.69	4,791.1	-95.8	1.1	0.99	0.05	-23.28	-64.9	10.9

Company:	EOG Resources - Midland	Local Coordinate Reference:	Well #701H
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Site:	Lobo Blanco 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim (usft)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
4,984.0	4.40	153.28	4,980.8	-106.5	3.9	1.40	0.97	-17.58	-56.8	-20.4
5,178.0	5.98	156.10	5,171.0	-122.2	11.3	0.84	0.83	1.47	-60.3	-9.5
5,368.0	3.96	202.51	5,361.3	-137.4	12.8	2.27	-1.06	24.30	-46.2	38.9
5,558.0	3.86	197.59	5,550.9	-149.7	8.3	0.18	0.00	-2.59	-46.3	30.4
5,747.0	3.76	186.16	5,741.4	-162.0	4.5	0.11	-0.09	-0.74	-43.6	25.6
5,938.0	3.25	210.95	6,932.1	-172.7	0.0	0.55	-0.28	7.73	-32.3	29.9
6,128.0	2.80	210.42	6,121.8	-181.5	-5.2	0.18	-0.18	-0.28	-27.9	22.2
6,319.0	2.37	209.36	6,312.6	-189.1	-9.6	0.28	-0.28	-0.55	-22.0	14.4
6,510.0	1.85	215.87	6,503.5	-195.0	-13.4	0.30	-0.27	3.41	-13.1	6.5
6,700.0	1.76	219.73	6,693.4	-199.7	-17.0	0.08	-0.05	2.03	-5.0	-0.1
6,891.0	1.58	218.33	6,884.3	-204.1	-20.5	0.10	-0.09	-0.73	1.5	-6.5
7,082.0	1.67	207.08	7,075.2	-208.6	-23.4	0.17	0.05	-5.89	1.0	-10.0
7,273.0	0.44	358.60	7,266.2	-210.3	-24.7	1.08	-0.64	79.33	-3.9	9.6
7,463.0	0.35	41.67	7,456.2	-209.2	-24.3	0.16	-0.05	22.67	2.8	10.2
7,654.0	0.18	23.56	7,647.2	-208.5	-23.8	0.10	-0.09	-9.48	-1.5	10.3
7,845.0	0.53	184.93	7,838.2	-209.1	-23.8	0.37	0.18	84.49	4.2	-9.2
8,036.0	0.88	214.29	8,029.2	-211.2	-24.7	0.26	0.18	15.37	-3.1	-8.6
8,226.0	0.88	210.42	8,219.1	-213.6	-26.2	0.03	0.00	-2.04	-5.4	-8.9
8,417.0	0.97	196.60	8,410.1	-216.4	-27.4	0.13	0.05	-7.55	-5.8	-11.3
8,607.0	1.58	197.23	8,600.1	-220.5	-28.7	0.32	0.32	0.65	-10.2	-11.1
8,797.0	1.41	180.36	8,790.0	-225.3	-29.4	0.25	-0.09	-8.88	-11.4	-14.4
8,988.0	1.76	180.36	8,980.9	-230.6	-29.5	0.18	0.18	0.00	-16.7	-14.4
9,179.0	1.14	208.31	9,171.9	-235.2	-30.4	0.48	-0.32	14.63	-26.0	-3.5
9,370.0	0.79	285.12	9,362.9	-236.6	-32.6	0.64	-0.18	40.21	-11.1	28.4
9,560.0	0.79	304.99	9,552.8	-235.5	-34.9	0.14	0.00	10.46	-4.0	29.0
9,751.0	0.97	350.69	9,743.8	-233.1	-36.3	0.37	0.09	23.93	15.4	24.1
9,941.0	1.49	28.31	9,933.8	-229.3	-35.3	0.48	0.27	19.80	23.2	10.6

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Well:	6701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
10,132.0	1.67	3.00	10,124.7	-224.4	-34.0	0.37	0.09	-13.25	11.4	18.4
10,323.0	1.76	323.27	10,315.6	-219.3	-35.6	0.61	0.05	-20.80	-8.1	19.7
10,512.0	1.41	169.50	10,504.6	-219.2	-37.7	1.84	-0.19	-70.78	-8.9	-21.6
10,702.0	1.32	109.34	10,694.6	-222.2	-36.1	0.93	-0.05	-42.19	17.1	-14.8
10,893.0	1.06	137.29	10,885.5	-224.3	-32.8	0.33	-0.14	14.63	4.5	-20.0
11,084.0	0.53	158.21	11,076.5	-226.4	-31.3	0.31	-0.28	10.95	-5.5	-19.7
11,274.0	0.26	268.43	11,266.5	-227.2	-31.4	0.35	-0.14	58.01	-16.7	12.8
11,465.0	1.58	333.82	11,457.5	-224.9	-33.0	0.78	0.69	34.24	1.8	20.9
11,656.0	1.93	12.31	11,648.4	-219.4	-33.4	0.83	0.18	20.15	9.2	16.9
11,847.0	0.97	282.51	11,839.3	-215.6	-34.2	1.05	-0.50	-41.78	-17.2	8.8
12,038.0	0.35	159.09	12,030.3	-215.5	-35.5	0.65	-0.32	-69.85	5.9	-19.7
12,072.0	0.26	154.87	12,064.3	-215.7	-35.5	0.27	-0.26	-12.41	7.2	-19.2
12,256.0	2.37	13.37	12,248.3	-212.4	-34.4	1.40	1.15	-76.90	2.9	19.3
12,307.4	10.65	359.79	12,299.2	-206.5	-34.2	16.68	16.52	-26.44	-7.5	19.2
KOP (LB 8 Fed 6701H)										
12,352.0	18.29	358.25	12,342.4	-195.3	-34.4	16.68	16.66	-3.45	-17.2	19.1
12,357.2	19.27	358.51	12,347.3	-193.6	-34.5	18.92	18.85	5.06	-18.2	19.2
HL Crossing, MD:12357.2', TVD:12347.3', N/S:-193.6', E/W:-34.5', INC:19.27										
12,447.0	38.23	0.89	12,428.5	-151.9	-34.4	18.92	18.89	2.65	-42.6	20.8
12,542.0	48.72	4.58	12,496.5	-88.0	-31.1	13.40	13.15	3.88	-73.5	21.9
12,636.2	53.64	9.59	12,555.6	-15.2	-22.0	6.66	5.22	5.32	-98.2	18.3
FTP (LB 8 Fed 6701H)										
12,638.0	53.73	9.68	12,556.6	-13.8	-21.7	6.66	5.33	4.96	-98.6	18.2
12,683.0	59.09	6.51	12,581.5	23.2	-16.5	13.28	11.91	-7.04	-107.6	8.1
12,733.0	59.79	4.75	12,608.9	66.1	-12.3	3.34	1.40	-3.52	-113.2	0.5
12,778.0	60.59	1.59	12,629.3	105.1	-10.1	6.35	1.78	-7.02	-112.7	-5.9
12,828.0	63.69	358.60	12,652.7	149.3	-10.1	8.10	6.14	-5.98	-107.3	-8.7

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
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Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,873.0	63.31	358.43	12,672.8	189.5	-11.1	0.85	-0.78	-0.38	-98.0	-8.1
12,924.0	64.48	357.02	12,695.2	235.3	-12.9	3.35	2.25	-2.76	-81.8	-6.7
12,971.0	70.79	357.72	12,713.1	278.7	-14.9	13.54	13.47	1.49	-64.9	-4.6
13,019.0	70.26	357.37	12,729.1	323.9	-16.8	1.30	-1.10	-0.73	-48.5	-3.0
13,066.0	76.06	358.43	12,742.7	368.8	-18.5	12.53	12.34	2.26	-34.6	-1.6
13,114.0	80.11	359.30	12,752.8	415.7	-19.4	8.62	8.44	1.81	-24.3	-1.1
13,161.0	79.76	358.07	12,760.8	462.0	-20.5	2.68	-0.74	-2.62	-15.7	-0.4
13,210.0	87.14	357.02	12,766.4	510.6	-22.6	15.21	15.06	-2.14	-9.8	1.3
13,305.0	92.07	356.67	12,767.1	605.4	-27.8	5.20	5.19	-0.37	-8.4	5.7
13,401.0	91.98	0.64	12,763.7	701.3	-30.1	4.03	-0.09	4.03	-11.1	7.1
13,496.0	88.64	4.05	12,763.2	796.2	-26.3	5.10	-3.52	3.69	-10.9	2.5
13,591.0	88.09	5.11	12,767.5	890.8	-18.7	2.91	-2.68	1.12	-5.8	-5.9
13,687.0	89.25	1.94	12,771.4	986.5	-12.8	4.66	3.29	-3.30	-1.1	-12.6
13,782.0	88.79	0.18	12,774.7	1,081.4	-11.1	3.18	-2.59	-1.85	2.9	-15.2
13,878.0	84.77	359.43	12,781.8	1,177.2	-12.3	2.78	-2.10	-1.82	10.6	-14.9
13,973.0	88.29	359.07	12,787.5	1,271.9	-13.1	3.72	3.71	-0.38	17.1	-12.8
14,068.0	89.52	358.95	12,789.3	1,366.9	-17.6	1.59	1.29	0.93	19.7	-11.2
14,164.0	90.84	0.01	12,789.0	1,462.9	-18.5	1.76	1.37	1.10	20.1	-11.1
14,259.0	88.61	359.83	12,789.3	1,557.9	-18.6	2.15	-2.14	-0.19	21.1	-11.8
14,355.0	90.75	1.59	12,789.7	1,653.9	-17.4	2.73	2.02	1.83	22.2	-13.8
14,450.0	91.80	2.64	12,787.6	1,748.8	-13.9	1.56	1.11	1.11	20.9	-16.1
14,545.0	88.97	0.36	12,788.8	1,843.7	-11.4	5.62	-5.08	-2.40	22.6	-21.5
14,641.0	87.85	358.60	12,792.8	1,939.6	-12.3	2.05	0.92	-1.83	27.8	-21.5
14,736.0	90.13	357.90	12,794.8	2,034.6	-15.2	2.51	2.40	-0.74	30.0	-19.4
14,831.0	89.96	357.90	12,794.5	2,129.5	-18.7	0.18	-0.18	0.00	30.7	-16.7
14,927.0	89.43	357.72	12,795.0	2,225.4	-22.4	0.58	-0.55	-0.19	31.9	-13.9
15,022.0	93.83	357.37	12,792.3	2,320.2	-26.4	4.65	4.63	-0.37	30.0	-10.7

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3359.0usft
Site:	Lobo Blanca 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim...)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,117.0	93.47	359.13	12,768.3	2,415.0	-29.3	1.89	-0.38	1.85	24.8	-8.6
15,213.0	90.04	0.01	12,763.4	2,510.9	-30.0	3.69	-3.57	0.82	22.4	-8.7
15,308.0	90.22	0.01	12,763.1	2,605.9	-30.0	0.19	0.19	0.00	22.9	-9.5
15,404.0	91.19	0.54	12,762.0	2,701.9	-29.6	1.15	1.01	0.55	22.5	-10.8
15,499.0	88.37	2.12	12,762.3	2,796.9	-27.4	3.40	-2.97	1.66	23.6	-13.9
15,594.0	89.78	3.35	12,763.9	2,891.8	-22.8	1.97	1.48	1.29	25.9	-19.2
15,690.0	89.52	0.38	12,764.4	2,987.7	-19.7	3.13	-0.27	-3.11	27.2	-23.2
15,785.0	88.20	358.07	12,766.3	3,082.7	-21.0	2.78	-1.39	-2.41	29.8	-22.7
15,880.0	87.76	357.37	12,769.7	3,177.5	-24.8	0.87	-0.46	-0.74	33.8	-19.7
15,976.0	88.29	356.64	12,773.0	3,273.3	-29.6	0.78	0.55	-0.55	37.9	-15.7
16,071.0	91.63	0.71	12,773.1	3,368.3	-31.7	5.38	3.52	4.07	38.7	-14.5
16,166.0	88.72	0.54	12,772.8	3,463.3	-30.6	3.07	-3.06	-0.18	39.1	-16.4
16,251.7	89.19	359.91	12,774.3	3,548.9	-30.3	0.92	0.55	-0.74	41.3	-17.6
TGT 1 (LB 9 Fed #701H)										
16,262.0	89.25	359.83	12,774.5	3,559.3	-30.3	0.92	0.55	-0.74	41.5	-17.5
16,357.0	89.16	359.66	12,775.8	3,654.2	-30.6	0.20	-0.09	-0.18	43.7	-17.9
16,452.0	90.13	0.71	12,776.4	3,749.2	-30.4	1.50	1.02	1.11	45.1	-19.1
16,548.0	93.47	1.59	12,773.4	3,845.2	-28.5	3.60	3.48	0.92	43.0	-21.8
16,643.0	90.04	0.18	12,770.5	3,940.1	-27.1	3.90	-3.61	-1.48	40.9	-24.1
16,738.0	90.04	0.18	12,770.4	4,035.1	-26.8	0.00	0.00	0.00	41.7	-25.2
16,834.0	89.52	359.83	12,770.8	4,131.1	-26.7	0.65	-0.54	-0.36	42.9	-26.1
16,929.0	90.48	0.01	12,770.8	4,226.1	-26.9	1.03	1.01	0.19	43.7	-26.7
17,025.0	90.92	358.95	12,769.6	4,322.1	-27.8	1.20	0.46	-1.10	43.4	-26.7
17,120.0	90.31	357.37	12,768.6	4,417.0	-30.8	1.78	-0.64	-1.66	43.2	-24.8
17,215.0	91.45	356.07	12,767.1	4,511.9	-34.6	1.41	1.20	0.74	42.6	-21.5
17,311.0	89.34	355.96	12,766.4	4,607.8	-39.6	3.11	-2.20	-2.20	42.8	-17.3
17,406.0	91.01	357.20	12,766.2	4,702.6	-45.2	2.19	1.76	1.31	43.3	-12.5

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3359.0usft
Site:	Lobo Blanco 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
17,501.0	92.33	357.02	12,763.4	4,797.4	-50.0	1.40	1.39	-0.19	41.4	-8.5
17,597.0	91.80	359.30	12,779.9	4,893.3	-53.1	2.44	-0.55	2.37	38.8	-6.3
17,692.0	91.54	359.68	12,777.2	4,988.3	-54.0	0.47	-0.27	0.38	38.8	-6.2
17,714.0	92.07	0.01	12,776.6	5,010.3	-54.0	2.89	2.41	1.59	38.3	-6.4
17,815.0	91.80	359.83	12,773.1	5,111.2	-54.2	0.32	-0.27	-0.18	33.6	-7.1
17,910.0	89.89	0.01	12,771.8	5,206.2	-54.3	2.23	-2.22	0.19	33.4	-7.8
18,006.0	89.89	359.83	12,772.3	5,302.2	-54.4	0.19	0.00	-0.19	34.8	-8.5
18,101.0	90.04	0.01	12,772.6	5,397.2	-54.6	0.41	0.37	0.19	35.8	-9.2
18,196.0	90.40	359.66	12,772.2	5,492.2	-54.9	0.53	0.38	-0.37	36.3	-9.7
18,292.0	90.66	359.48	12,771.3	5,588.2	-55.6	0.33	0.27	-0.19	36.3	-9.8
18,387.0	90.84	0.18	12,770.1	5,683.2	-55.9	0.76	0.19	0.74	35.9	-10.4
18,482.0	91.01	0.18	12,768.5	5,778.2	-55.6	0.18	0.18	0.00	35.2	-11.5
18,524.1	91.16	0.18	12,767.7	5,820.3	-55.4	0.36	0.36	0.00	34.7	-12.0
TGT 2 (LB 9 Fed #701H)										
18,578.0	91.36	0.18	12,766.5	5,874.1	-55.3	0.36	0.36	0.00	34.3	-12.6
18,673.0	91.88	0.18	12,763.8	5,969.1	-55.0	0.65	0.65	0.00	32.8	-13.7
18,768.0	92.15	359.48	12,760.4	6,064.0	-55.2	0.76	0.18	-0.74	30.7	-14.3
18,864.0	91.01	0.18	12,757.7	6,160.0	-55.5	1.39	-1.19	0.73	29.4	-14.8
18,959.0	89.52	359.83	12,757.3	6,255.0	-55.5	1.61	-1.57	-0.37	30.3	-15.7
19,055.0	89.69	359.48	12,757.9	6,351.0	-56.1	0.41	0.18	-0.36	32.3	-15.9
19,150.0	90.04	359.13	12,758.2	6,446.0	-57.2	0.52	0.37	-0.37	33.8	-15.6
19,245.0	90.84	358.78	12,757.4	6,541.0	-59.0	0.92	0.84	-0.37	34.4	-14.7
19,341.0	90.92	358.95	12,755.9	6,636.9	-60.9	0.20	0.08	0.18	34.3	-13.6
19,436.0	90.31	358.78	12,754.9	6,731.9	-62.8	0.67	-0.64	-0.18	34.6	-12.5
19,531.0	89.96	359.13	12,754.7	6,826.9	-64.5	0.52	-0.37	0.37	35.7	-11.6
19,627.0	90.40	359.13	12,754.4	6,922.9	-65.9	0.46	0.46	0.00	36.7	-11.0
19,722.0	90.40	358.95	12,753.7	7,017.9	-67.5	0.19	0.00	-0.19	37.4	-10.2

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well 9701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3359.0usft
Site:	Lobo Blanco 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	9701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim.	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
19,817.0	90.84	356.60	12,752.7	7,112.8	-69.6	0.59	0.48	-0.37	37.7	-9.0
19,913.0	91.80	359.13	12,750.5	7,208.8	-71.5	1.14	1.00	0.55	36.8	-7.9
19,954.5	90.80	358.84	12,749.3	7,250.3	-72.4	2.02	-1.84	-0.56	36.3	-7.5
TGT 3 (LB 9 Fed #701H)										
20,008.0	89.96	358.60	12,749.0	7,303.8	-73.4	2.02	-1.94	-0.56	38.9	-6.9
20,104.0	90.75	358.43	12,748.4	7,399.7	-75.6	0.84	0.82	-0.18	38.7	-5.2
20,199.0	90.75	358.07	12,747.2	7,494.7	-78.7	0.38	0.00	-0.38	39.8	-3.2
20,294.0	90.75	357.55	12,746.0	7,589.6	-82.4	0.55	0.00	-0.55	40.9	-0.4
20,390.0	89.34	359.30	12,745.9	7,685.6	-85.0	2.34	-1.47	1.82	43.1	1.5
20,485.0	90.48	357.80	12,746.0	7,780.6	-87.3	1.90	1.20	-1.47	45.6	3.0
20,580.0	88.55	0.89	12,746.6	7,875.6	-88.3	3.75	-2.03	3.15	48.7	3.2
20,676.0	88.72	0.89	12,749.1	7,971.5	-88.8	0.18	0.18	0.00	53.3	0.9
20,771.0	90.48	1.59	12,749.8	8,066.4	-84.8	1.99	1.85	0.74	58.3	-2.0
20,780.8	91.02	1.59	12,749.5	8,088.2	-84.2	2.75	2.75	0.00	56.6	-2.7
TGT 4 (LB 9 Fed #701H)										
20,867.0	93.12	1.59	12,746.8	8,162.3	-82.1	2.75	2.75	0.00	54.8	-5.5
20,962.0	93.65	2.82	12,741.2	8,257.1	-78.5	1.41	0.56	1.29	50.2	-9.9
21,057.0	89.52	4.05	12,738.5	8,351.9	-72.8	4.54	-4.35	1.29	48.5	-16.4
21,152.0	90.75	2.47	12,738.3	8,446.7	-67.4	2.11	1.29	-1.66	49.2	-22.7
21,248.0	88.48	2.47	12,739.0	8,542.6	-63.3	2.39	-2.39	0.00	50.8	-27.7
21,351.0	87.49	1.59	12,742.6	8,645.5	-59.6	1.27	-0.94	-0.85	55.5	-32.2
21,446.0	87.58	0.01	12,746.7	8,740.4	-58.3	1.66	0.09	-1.66	60.5	-34.4
21,542.0	88.55	0.01	12,749.9	8,836.3	-58.3	1.01	1.01	0.00	64.7	-35.2
21,637.0	89.08	0.71	12,751.8	8,931.3	-57.7	0.92	0.56	0.74	67.6	-36.6
21,732.0	92.59	358.60	12,750.5	9,026.3	-58.2	4.31	3.69	-2.22	67.2	-38.9
21,769.3	92.66	358.60	12,748.8	9,063.5	-59.1	0.19	0.19	0.00	65.8	-38.3
TGT 5 (LB 9 Fed #701H)										

eog resources

Final PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3359.0usft
Site:	Lobo Blanco 9 Fed	MD Reference:	KB = 22' @ 3359.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (grid_north_azim	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
21,828.0	92.77	356.60	12,746.0	9,122.1	-60.6	0.19	0.19	0.00	63.8	-35.4
21,923.0	91.63	359.83	12,742.4	9,217.1	-61.9	1.78	-1.20	1.29	61.4	-34.9
22,018.0	92.42	359.66	12,739.0	9,313.0	-62.3	0.84	0.82	-0.18	59.2	-35.3
22,114.0	93.30	0.01	12,734.3	9,407.9	-62.6	1.00	0.93	0.37	55.7	-35.8
22,209.0	89.78	358.25	12,731.7	9,502.8	-64.0	4.14	-3.71	-1.85	54.3	-35.2
22,305.0	90.57	358.95	12,731.4	9,598.8	-66.4	1.10	0.82	0.73	55.3	-33.7
22,400.0	91.19	359.48	12,729.9	9,693.8	-67.7	0.86	0.65	0.56	55.0	-33.2
22,496.0	91.36	359.66	12,727.8	9,789.7	-68.4	0.26	0.18	0.19	54.1	-33.3
22,591.0	92.24	1.08	12,724.8	9,884.7	-67.8	1.74	0.93	1.47	52.3	-34.7
22,686.0	90.40	359.66	12,722.6	9,979.6	-67.2	2.43	-1.94	-1.47	51.3	-36.2
22,782.0	91.28	0.71	12,721.2	10,075.6	-66.9	1.43	0.92	1.09	51.2	-37.3
22,815.0	89.52	358.95	12,721.0	10,108.6	-67.0	7.54	-5.33	-5.33	51.3	-37.5
Final MWD Survey (MD=22815.0')										
22,865.8	89.52	358.95	12,721.4	10,159.2	-67.9	0.00	0.00	0.00	52.4	-37.0
PBHL (LB 9 Fed #701H)										
22,866.0	89.52	358.95	12,721.4	10,159.8	-67.9	0.00	0.00	0.00	52.4	-37.0
Final Projection to Bit (MD=22866.0')										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
12,357.2	12,347.3	-193.6	-34.5	HL Crossing, MD:12357.2', TVD:12347.3',N/S:-193.6', E/W:-34.5', INC:18.27
22,815.0	12,721.0	10,108.6	-67.0	Final MWD Survey (MD=22815.0')
22,866.0	12,721.4	10,159.8	-67.9	Final Projection to Bit (MD=22866.0')

Checked By: _____ Approved By: _____ Date: _____

I certify this survey to be true and correct to the best of my belief and knowledge.

Kay Maddox 11/19/2019

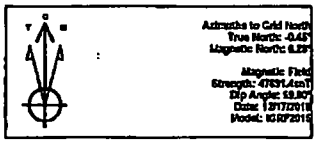
Signed *Date*

eog resources

Lea County, NM (NAD 83 NME)

Lobo Blanco 9 Fed #701H

Plan #1



Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.89°

Magnetic Field
Strength: 47691.4nT
Dip Angle: 59.80°
Date: 12/17/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.89°
To convert a Magnetic Direction to a True Direction, Add 6.34° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #701H

3337.0
KB = 22' @ 3359.0usft

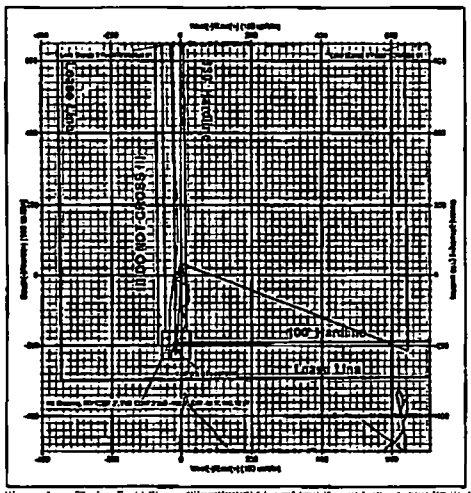
Northing	Easting	Latitude	Longitude
383514.00	805018.00	32° 3' 6.410 N	103° 29' 56.122 W

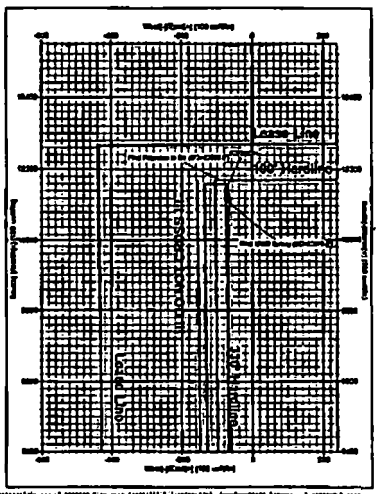
SECTION DETAILS

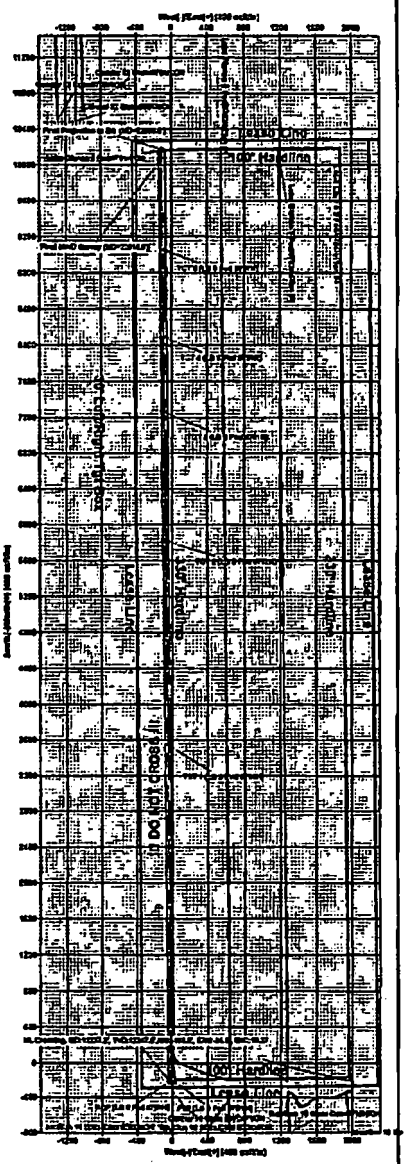
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4325.0	0.00	0.00	4325.0	0.0	0.0	0.00	0.00	0.0	
3	4575.2	5.00	184.01	4574.9	-10.9	-0.8	2.00	184.01	-10.9	
4	6783.8	5.00	184.01	6775.1	-203.1	-14.2	0.00	0.00	-202.9	
5	7034.1	0.00	0.00	7025.0	-214.0	-15.0	2.00	180.00	-213.8	
6	12309.7	0.00	0.00	12300.6	-214.0	-15.0	0.00	0.00	-213.8	KOP (LB 9 Fed #701H)
7	13063.3	90.44	359.50	12779.1	267.1	-19.2	12.00	359.50	267.3	
8	16348.1	90.44	359.50	12753.0	3549.7	-47.8	0.00	0.00	3550.0	TGT 1 (LB 9 Fed #701H)
9	16349.5	90.50	359.50	12753.0	3553.1	-47.8	2.00	3.34	3553.4	
10	16816.2	90.50	359.50	12733.0	6819.5	-67.4	0.00	0.00	6820.0	TGT 2 (LB 9 Fed #701H)
11	16830.5	90.50	359.50	12732.8	6834.2	-67.5	2.00	0.00	6834.5	
12	20058.4	90.50	359.50	12713.0	7259.5	-70.5	0.00	0.00	7260.0	TGT 3 (LB 9 Fed #701H)
13	20098.5	91.40	359.50	12712.4	7299.7	-80.1	2.00	0.00	7299.2	
14	20881.8	91.40	359.50	12693.0	8084.5	-87.0	0.00	0.00	8083.0	TGT 4 (LB 9 Fed #701H)
15	20923.1	90.57	359.50	12692.3	8126.0	-87.3	2.00	-180.00	8126.5	
16	21858.7	90.57	359.50	12683.0	9059.5	-93.4	0.00	0.00	9060.0	TGT 5 (LB 9 Fed #701H)
17	21884.7	90.73	359.50	12682.9	9067.6	-95.5	2.00	0.00	9068.0	
18	22958.3	90.73	359.50	12668.0	10159.0	-104.9	0.00	0.00	10159.5	PBHL (LB 9 Fed #701H)

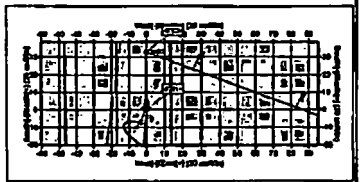
WELLBORE TARGET DETAILS (NAD 83 COORDINATES)

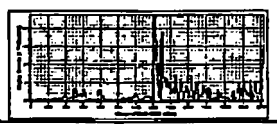
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (LB 9 Fed #701H)	12300.6	-214.0	-15.0	383300.00	805003.00
PBHL (LB 9 Fed #701H)	12668.0	10159.0	-104.9	393473.00	804913.10
TGT 5 (LB 9 Fed #701H)	12683.0	9059.5	-93.4	392373.50	804922.60
TGT 4 (LB 9 Fed #701H)	12693.0	8084.5	-87.0	391398.50	804931.03
TGT 3 (LB 9 Fed #701H)	12713.0	7259.5	-70.5	390573.50	804948.15
TGT 2 (LB 9 Fed #701H)	12733.0	6819.5	-67.4	390133.50	804950.60
TGT 1 (LB 9 Fed #701H)	12753.0	3549.7	-47.8	386863.70	804978.22
FTP (LB 9 Fed #701H)	12773.0	-164.0	-15.0	383320.00	805003.00

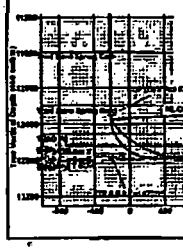












United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220-6292

TAKE PRIDE IN AMERICA

Notice of Change to Procedure – Please Read

To All Operators,

This is to notify you that the Bureau of Land Management (BLM) Carlsbad Field Office will no longer be supplying copies of sundries (3160-5), applications for permit to drill (APDs), or completion reports (3160-4) to the New Mexico Oil Conservation Division (NMOCD).

Effective immediately, to be in compliance with C-104 requirements, the NMOCD is requiring operators to submit a copy of any sundries, APDs, or completion reports processed by the BLM to the appropriate NMOCD office. This change will affect all BLM sundries, APDs, and completion reports in Eddy and Lea counties.

If a copy of a previously processed sundry, APD, or completion report is needed for submission to NMOCD, the Carlsbad Field Office will send a copy to the operator.

If you have any questions, please contact Jonathon Shepard (BLM) 575-234-2237.

Thank you

Note: This notice is being included in multiple communications from the BLM Carlsbad Field Office and you may receive multiple copies.