

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-43892
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator EOG Resources, Inc.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 2267 Midland, TX 79702		7. Lease Name or Unit Agreement Name Ruby 2 State Com
4. Well Location Unit Letter D , 220 feet from the North line and 1178 feet from the West line Section 2 Township 26S Range 34E NMPM County Lea		8. Well Number 702H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3304' GR		9. OGRID Number 7377
		10. Pool name or Wildcat Hardin Tank Wolfcamp

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: Amend APD ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG Resources requests an amendment to the approved APD for this well to reflect changes in lateral length, BHL, and well name.

EOG Resources will reduce the planned lateral on this well from 1.5 mile to 1 mile. Therefore, no federal minerals will be penetrated.

The new BHL is 230' FSL & 993' FWL 2-26S-34E.

The new well name is Ruby 2 State Com 702H 30-025-43892 (formerly Ruby 2 Fed Com 702H).

Please cancel existing permit number 217933 (30-025-43115)

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Stan Wagner TITLE Regulatory Analyst DATE 9/07/2017

Type or print name Stan Wagner E-mail address: _____ PHONE: 432-686-3689

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 09/08/17
Conditions of Approval (if any): _____

Permit Information:

Well Name: Ruby 2 State Com No. 702H

Location:

SL: 220' FNL & 1178' FWL, Section 2, T-26-S, R-34-E, Lea Co., N.M.

BHL: 230' FSL & 993' FWL, Section 2, T-26-S, R-34-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
14.75"	0 – 915'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875 & 8.50"	0' – 11,700'	7.625"	29.7#	HCP-110	LTC & FXL	1.125	1.25	1.60
6.75"	0'-17,565'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
915'	400	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	300	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
11,700'	250	14.8	1.38	Class C + 5% Gypsum + 3% CaCl ₂ (TOC @ Surface)
	2000	14.8	1.38	Class C + 5% Gypsum + 3% CaCl ₂
	550	14.4	1.20	50:50 Class H:Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P
17,565'	800	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,000')

Mud Program:

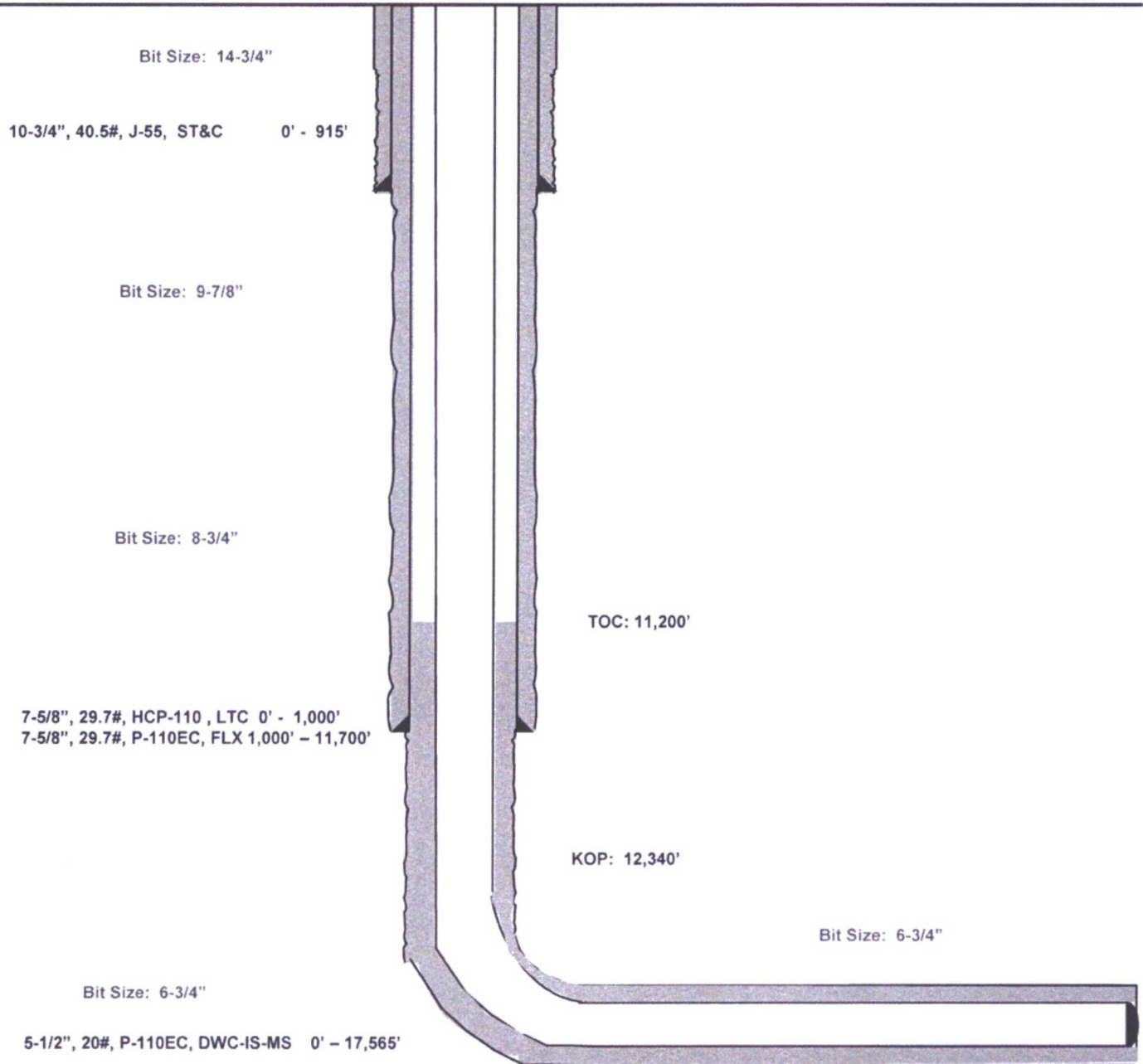
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 915'	Fresh - Gel	8.6-8.8	28-34	N/c
915' – 11,700'	Brine	8.8-10.0	28-34	N/c
11,700' – 12,257'	Oil Base	10.0-11.5	58-68	3 - 6
12,257' – 17,565' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

Ruby 2 State Com #702H

220' FNL
1178' FWL
Section 2
T-26-S, R-34-E

Lea County, New Mexico
Proposed Wellbore
Revised 9/6/17
API: 30-025-43892

KB: 3,329'
GL: 3,304'



Lateral: 17,565' MD, 12,720' TVD
Upper Most Perf:
330' FNL & 993' FWL Sec. 2
Lower Most Perf:
330' FSL & 993' FWL Sec. 2
BH Location: 230' FSL & 993' FWL
Section 2
T-26-S, R-34-E



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ruby 2 State Com

#702H

OH

Plan: Plan #0.1

Standard Planning Report

07 September, 2017

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3329.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3329.0usft
Site:	Ruby 2 State Com	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	Ruby 2 State Com		
Site Position:	Map	Northing:	393,589.99 usft
From:		Easting:	775,148.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 4' 47.315 N
		Longitude:	103° 34' 42.355 W
		Grid Convergence:	0.40 °

Well	#702H		
Well Position	+N/-S	57.0 usft	Northing:
	+E/-W	41,187.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 4' 44.776 N
		Longitude:	103° 26' 43.667 W
		Ground Level:	3,304.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	1/23/2017	6.93
			Dip Angle (°)
			59.95
			Field Strength (nT)
			47,906.90600967

Design	Plan #0.1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			181.72

Plan Survey Tool Program	Date 9/7/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name
1	0.0	17,565.0 Plan #0.1 (OH)	MWD
			MWD - Standard
			Remarks

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,059.6	1.71	313.73	4,059.6	0.6	-0.6	2.88	2.88	0.00	313.73	
12,343.7	1.71	313.73	12,340.0	171.8	-179.6	0.00	0.00	0.00	0.00	
12,936.3	90.00	179.51	12,720.0	-200.5	-184.6	15.39	14.90	-22.65	-134.21	
17,565.0	90.00	179.51	12,720.0	-4,829.0	-145.0	0.00	0.00	0.00	0.00	PBHL (Ruby 2 Fed Cr



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3329.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3329.0usft
Site:	Ruby 2 State Com	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,059.6	1.71	313.73	4,059.6	0.6	-0.6	-0.6	2.88	2.88	0.00
4,100.0	1.71	313.73	4,100.0	1.5	-1.5	-1.4	0.00	0.00	0.00
4,200.0	1.71	313.73	4,199.9	3.5	-3.7	-3.4	0.00	0.00	0.00
4,300.0	1.71	313.73	4,299.9	5.6	-5.8	-5.4	0.00	0.00	0.00
4,400.0	1.71	313.73	4,399.8	7.7	-8.0	-7.4	0.00	0.00	0.00
4,500.0	1.71	313.73	4,499.8	9.7	-10.2	-9.4	0.00	0.00	0.00
4,600.0	1.71	313.73	4,599.7	11.8	-12.3	-11.4	0.00	0.00	0.00
4,700.0	1.71	313.73	4,699.7	13.9	-14.5	-13.4	0.00	0.00	0.00
4,800.0	1.71	313.73	4,799.7	15.9	-16.6	-15.4	0.00	0.00	0.00
4,900.0	1.71	313.73	4,899.6	18.0	-18.8	-17.4	0.00	0.00	0.00
5,000.0	1.71	313.73	4,999.6	20.1	-21.0	-19.4	0.00	0.00	0.00
5,100.0	1.71	313.73	5,099.5	22.1	-23.1	-21.4	0.00	0.00	0.00
5,200.0	1.71	313.73	5,199.5	24.2	-25.3	-23.4	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #702H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3329.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3329.0usft
Site:	Ruby 2 State Com	North Reference:	Grid
Well:	#702H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,300.0	1.71	313.73	5,299.4	26.3	-27.4	-25.4	0.00	0.00	0.00	
5,400.0	1.71	313.73	5,399.4	28.3	-29.6	-27.4	0.00	0.00	0.00	
5,500.0	1.71	313.73	5,499.3	30.4	-31.8	-29.4	0.00	0.00	0.00	
5,600.0	1.71	313.73	5,599.3	32.5	-33.9	-31.4	0.00	0.00	0.00	
5,700.0	1.71	313.73	5,699.3	34.5	-36.1	-33.4	0.00	0.00	0.00	
5,800.0	1.71	313.73	5,799.2	36.6	-38.2	-35.4	0.00	0.00	0.00	
5,900.0	1.71	313.73	5,899.2	38.7	-40.4	-37.4	0.00	0.00	0.00	
6,000.0	1.71	313.73	5,999.1	40.7	-42.6	-39.4	0.00	0.00	0.00	
6,100.0	1.71	313.73	6,099.1	42.8	-44.7	-41.4	0.00	0.00	0.00	
6,200.0	1.71	313.73	6,199.0	44.9	-46.9	-43.4	0.00	0.00	0.00	
6,300.0	1.71	313.73	6,299.0	46.9	-49.0	-45.4	0.00	0.00	0.00	
6,400.0	1.71	313.73	6,398.9	49.0	-51.2	-47.4	0.00	0.00	0.00	
6,500.0	1.71	313.73	6,498.9	51.1	-53.4	-49.4	0.00	0.00	0.00	
6,600.0	1.71	313.73	6,598.9	53.1	-55.5	-51.4	0.00	0.00	0.00	
6,700.0	1.71	313.73	6,698.8	55.2	-57.7	-53.4	0.00	0.00	0.00	
6,800.0	1.71	313.73	6,798.8	57.2	-59.9	-55.4	0.00	0.00	0.00	
6,900.0	1.71	313.73	6,898.7	59.3	-62.0	-57.4	0.00	0.00	0.00	
7,000.0	1.71	313.73	6,998.7	61.4	-64.2	-59.4	0.00	0.00	0.00	
7,100.0	1.71	313.73	7,098.6	63.4	-66.3	-61.4	0.00	0.00	0.00	
7,200.0	1.71	313.73	7,198.6	65.5	-68.5	-63.4	0.00	0.00	0.00	
7,300.0	1.71	313.73	7,298.5	67.6	-70.7	-65.4	0.00	0.00	0.00	
7,400.0	1.71	313.73	7,398.5	69.6	-72.8	-67.4	0.00	0.00	0.00	
7,500.0	1.71	313.73	7,498.5	71.7	-75.0	-69.4	0.00	0.00	0.00	
7,600.0	1.71	313.73	7,598.4	73.8	-77.1	-71.4	0.00	0.00	0.00	
7,700.0	1.71	313.73	7,698.4	75.8	-79.3	-73.4	0.00	0.00	0.00	
7,800.0	1.71	313.73	7,798.3	77.9	-81.5	-75.4	0.00	0.00	0.00	
7,900.0	1.71	313.73	7,898.3	80.0	-83.6	-77.4	0.00	0.00	0.00	
8,000.0	1.71	313.73	7,998.2	82.0	-85.8	-79.4	0.00	0.00	0.00	
8,100.0	1.71	313.73	8,098.2	84.1	-87.9	-81.4	0.00	0.00	0.00	
8,200.0	1.71	313.73	8,198.1	86.2	-90.1	-83.4	0.00	0.00	0.00	
8,300.0	1.71	313.73	8,298.1	88.2	-92.3	-85.4	0.00	0.00	0.00	
8,400.0	1.71	313.73	8,398.1	90.3	-94.4	-87.4	0.00	0.00	0.00	
8,500.0	1.71	313.73	8,498.0	92.4	-96.6	-89.4	0.00	0.00	0.00	
8,600.0	1.71	313.73	8,598.0	94.4	-98.7	-91.4	0.00	0.00	0.00	
8,700.0	1.71	313.73	8,697.9	96.5	-100.9	-93.4	0.00	0.00	0.00	
8,800.0	1.71	313.73	8,797.9	98.6	-103.1	-95.4	0.00	0.00	0.00	
8,900.0	1.71	313.73	8,897.8	100.6	-105.2	-97.4	0.00	0.00	0.00	
9,000.0	1.71	313.73	8,997.8	102.7	-107.4	-99.4	0.00	0.00	0.00	
9,100.0	1.71	313.73	9,097.7	104.8	-109.5	-101.4	0.00	0.00	0.00	
9,200.0	1.71	313.73	9,197.7	106.8	-111.7	-103.4	0.00	0.00	0.00	
9,300.0	1.71	313.73	9,297.6	108.9	-113.9	-105.4	0.00	0.00	0.00	
9,400.0	1.71	313.73	9,397.6	111.0	-116.0	-107.4	0.00	0.00	0.00	
9,500.0	1.71	313.73	9,497.6	113.0	-118.2	-109.5	0.00	0.00	0.00	
9,600.0	1.71	313.73	9,597.5	115.1	-120.3	-111.5	0.00	0.00	0.00	
9,700.0	1.71	313.73	9,697.5	117.2	-122.5	-113.5	0.00	0.00	0.00	
9,800.0	1.71	313.73	9,797.4	119.2	-124.7	-115.5	0.00	0.00	0.00	
9,900.0	1.71	313.73	9,897.4	121.3	-126.8	-117.5	0.00	0.00	0.00	
10,000.0	1.71	313.73	9,997.3	123.4	-129.0	-119.5	0.00	0.00	0.00	
10,100.0	1.71	313.73	10,097.3	125.4	-131.1	-121.5	0.00	0.00	0.00	
10,200.0	1.71	313.73	10,197.2	127.5	-133.3	-123.5	0.00	0.00	0.00	
10,300.0	1.71	313.73	10,297.2	129.6	-135.5	-125.5	0.00	0.00	0.00	
10,400.0	1.71	313.73	10,397.2	131.6	-137.6	-127.5	0.00	0.00	0.00	
10,500.0	1.71	313.73	10,497.1	133.7	-139.8	-129.5	0.00	0.00	0.00	
10,600.0	1.71	313.73	10,597.1	135.8	-141.9	-131.5	0.00	0.00	0.00	

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ruby 2 State Com
 Well: #702H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well #702H
 KB = 25' @ 3329.0usft
 KB = 25' @ 3329.0usft
 Grid
 Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.0	1.71	313.73	10,697.0	137.8	-144.1	-133.5	0.00	0.00	0.00
10,800.0	1.71	313.73	10,797.0	139.9	-146.3	-135.5	0.00	0.00	0.00
10,900.0	1.71	313.73	10,896.9	142.0	-148.4	-137.5	0.00	0.00	0.00
11,000.0	1.71	313.73	10,996.9	144.0	-150.6	-139.5	0.00	0.00	0.00
11,100.0	1.71	313.73	11,096.8	146.1	-152.8	-141.5	0.00	0.00	0.00
11,200.0	1.71	313.73	11,196.8	148.2	-154.9	-143.5	0.00	0.00	0.00
11,300.0	1.71	313.73	11,296.8	150.2	-157.1	-145.5	0.00	0.00	0.00
11,400.0	1.71	313.73	11,396.7	152.3	-159.2	-147.5	0.00	0.00	0.00
11,500.0	1.71	313.73	11,496.7	154.4	-161.4	-149.5	0.00	0.00	0.00
11,600.0	1.71	313.73	11,596.6	156.4	-163.6	-151.5	0.00	0.00	0.00
11,700.0	1.71	313.73	11,696.6	158.5	-165.7	-153.5	0.00	0.00	0.00
11,800.0	1.71	313.73	11,796.5	160.6	-167.9	-155.5	0.00	0.00	0.00
11,900.0	1.71	313.73	11,896.5	162.6	-170.0	-157.5	0.00	0.00	0.00
12,000.0	1.71	313.73	11,996.4	164.7	-172.2	-159.5	0.00	0.00	0.00
12,100.0	1.71	313.73	12,096.4	166.8	-174.4	-161.5	0.00	0.00	0.00
12,200.0	1.71	313.73	12,196.4	168.8	-176.5	-163.5	0.00	0.00	0.00
12,300.0	1.71	313.73	12,296.3	170.9	-178.7	-165.5	0.00	0.00	0.00
12,343.7	1.71	313.73	12,340.0	171.8	-179.6	-166.3	0.00	0.00	0.00
12,350.0	1.25	280.07	12,346.3	171.9	-179.8	-166.4	15.39	-7.39	-536.30
12,375.0	3.82	198.23	12,371.3	171.2	-180.3	-165.7	15.39	10.29	-327.36
12,400.0	7.57	188.80	12,396.1	168.7	-180.8	-163.2	15.39	14.98	-37.74
12,425.0	11.38	185.62	12,420.8	164.7	-181.3	-159.1	15.39	15.25	-12.69
12,450.0	15.21	184.03	12,445.1	158.9	-181.8	-153.4	15.39	15.32	-6.37
12,475.0	19.05	183.07	12,469.0	151.6	-182.2	-146.0	15.39	15.35	-3.85
12,500.0	22.89	182.42	12,492.3	142.6	-182.6	-137.1	15.39	15.36	-2.60
12,525.0	26.73	181.95	12,515.0	132.2	-183.0	-126.6	15.39	15.37	-1.88
12,550.0	30.57	181.59	12,537.0	120.2	-183.4	-114.6	15.39	15.37	-1.44
12,575.0	34.42	181.30	12,558.1	106.8	-183.7	-101.2	15.39	15.38	-1.15
12,600.0	38.26	181.07	12,578.2	92.0	-184.0	-86.4	15.39	15.38	-0.94
12,625.0	42.11	180.87	12,597.3	75.8	-184.3	-70.3	15.39	15.38	-0.79
12,650.0	45.95	180.70	12,615.3	58.5	-184.6	-52.9	15.39	15.38	-0.68
12,675.0	49.80	180.55	12,632.0	39.9	-184.8	-34.4	15.39	15.38	-0.60
12,700.0	53.64	180.41	12,647.5	20.3	-184.9	-14.7	15.39	15.38	-0.54
12,725.0	57.49	180.29	12,661.6	-0.3	-185.0	5.9	15.39	15.38	-0.49
12,750.0	61.33	180.18	12,674.4	-21.8	-185.1	27.4	15.39	15.38	-0.45
12,775.0	65.18	180.08	12,685.6	-44.2	-185.2	49.7	15.39	15.38	-0.41
12,800.0	69.03	179.98	12,695.3	-67.2	-185.2	72.7	15.39	15.39	-0.39
12,825.0	72.87	179.89	12,703.5	-90.8	-185.2	96.3	15.39	15.39	-0.37
12,850.0	76.72	179.80	12,710.0	-114.9	-185.1	120.4	15.39	15.39	-0.35
12,875.0	80.57	179.71	12,715.0	-139.4	-185.0	144.9	15.39	15.39	-0.34
12,900.0	84.41	179.63	12,718.2	-164.2	-184.9	169.7	15.39	15.39	-0.34
12,925.0	88.26	179.55	12,719.8	-189.2	-184.7	194.6	15.39	15.39	-0.33
12,936.3	90.00	179.51	12,720.0	-200.5	-184.6	205.9	15.39	15.39	-0.33
13,000.0	90.00	179.51	12,720.0	-264.2	-184.0	269.6	0.00	0.00	0.00
13,100.0	90.00	179.51	12,720.0	-364.1	-183.2	369.5	0.00	0.00	0.00
13,200.0	90.00	179.51	12,720.0	-464.1	-182.3	469.4	0.00	0.00	0.00
13,300.0	90.00	179.51	12,720.0	-564.1	-181.5	569.3	0.00	0.00	0.00
13,400.0	90.00	179.51	12,720.0	-664.1	-180.6	669.3	0.00	0.00	0.00
13,500.0	90.00	179.51	12,720.0	-764.1	-179.8	769.2	0.00	0.00	0.00
13,600.0	90.00	179.51	12,720.0	-864.1	-178.9	869.1	0.00	0.00	0.00
13,700.0	90.00	179.51	12,720.0	-964.1	-178.1	969.0	0.00	0.00	0.00
13,800.0	90.00	179.51	12,720.0	-1,064.1	-177.2	1,069.0	0.00	0.00	0.00
13,900.0	90.00	179.51	12,720.0	-1,164.1	-176.3	1,168.9	0.00	0.00	0.00
14,000.0	90.00	179.51	12,720.0	-1,264.1	-175.5	1,268.8	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ruby 2 State Com
Well: #702H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #702H
KB = 25' @ 3329.0usft
KB = 25' @ 3329.0usft
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.0	90.00	179.51	12,720.0	-1,364.1	-174.6	1,368.7	0.00	0.00	0.00
14,200.0	90.00	179.51	12,720.0	-1,464.1	-173.8	1,468.7	0.00	0.00	0.00
14,300.0	90.00	179.51	12,720.0	-1,564.1	-172.9	1,568.6	0.00	0.00	0.00
14,400.0	90.00	179.51	12,720.0	-1,664.1	-172.1	1,668.5	0.00	0.00	0.00
14,500.0	90.00	179.51	12,720.0	-1,764.1	-171.2	1,768.4	0.00	0.00	0.00
14,600.0	90.00	179.51	12,720.0	-1,864.1	-170.4	1,868.4	0.00	0.00	0.00
14,700.0	90.00	179.51	12,720.0	-1,964.1	-169.5	1,968.3	0.00	0.00	0.00
14,800.0	90.00	179.51	12,720.0	-2,064.1	-168.6	2,068.2	0.00	0.00	0.00
14,900.0	90.00	179.51	12,720.0	-2,164.1	-167.8	2,168.1	0.00	0.00	0.00
15,000.0	90.00	179.51	12,720.0	-2,264.1	-166.9	2,268.1	0.00	0.00	0.00
15,100.0	90.00	179.51	12,720.0	-2,364.1	-166.1	2,368.0	0.00	0.00	0.00
15,200.0	90.00	179.51	12,720.0	-2,464.1	-165.2	2,467.9	0.00	0.00	0.00
15,300.0	90.00	179.51	12,720.0	-2,564.1	-164.4	2,567.8	0.00	0.00	0.00
15,400.0	90.00	179.51	12,720.0	-2,664.1	-163.5	2,667.8	0.00	0.00	0.00
15,500.0	90.00	179.51	12,720.0	-2,764.1	-162.7	2,767.7	0.00	0.00	0.00
15,600.0	90.00	179.51	12,720.0	-2,864.1	-161.8	2,867.6	0.00	0.00	0.00
15,700.0	90.00	179.51	12,720.0	-2,964.1	-160.9	2,967.5	0.00	0.00	0.00
15,800.0	90.00	179.51	12,720.0	-3,064.1	-160.1	3,067.5	0.00	0.00	0.00
15,900.0	90.00	179.51	12,720.0	-3,164.0	-159.2	3,167.4	0.00	0.00	0.00
16,000.0	90.00	179.51	12,720.0	-3,264.0	-158.4	3,267.3	0.00	0.00	0.00
16,100.0	90.00	179.51	12,720.0	-3,364.0	-157.5	3,367.3	0.00	0.00	0.00
16,200.0	90.00	179.51	12,720.0	-3,464.0	-156.7	3,467.2	0.00	0.00	0.00
16,300.0	90.00	179.51	12,720.0	-3,564.0	-155.8	3,567.1	0.00	0.00	0.00
16,400.0	90.00	179.51	12,720.0	-3,664.0	-155.0	3,667.0	0.00	0.00	0.00
16,500.0	90.00	179.51	12,720.0	-3,764.0	-154.1	3,767.0	0.00	0.00	0.00
16,600.0	90.00	179.51	12,720.0	-3,864.0	-153.3	3,866.9	0.00	0.00	0.00
16,700.0	90.00	179.51	12,720.0	-3,964.0	-152.4	3,966.8	0.00	0.00	0.00
16,800.0	90.00	179.51	12,720.0	-4,064.0	-151.5	4,066.7	0.00	0.00	0.00
16,900.0	90.00	179.51	12,720.0	-4,164.0	-150.7	4,166.7	0.00	0.00	0.00
17,000.0	90.00	179.51	12,720.0	-4,264.0	-149.8	4,266.6	0.00	0.00	0.00
17,100.0	90.00	179.51	12,720.0	-4,364.0	-149.0	4,366.5	0.00	0.00	0.00
17,200.0	90.00	179.51	12,720.0	-4,464.0	-148.1	4,466.4	0.00	0.00	0.00
17,300.0	90.00	179.51	12,720.0	-4,564.0	-147.3	4,566.4	0.00	0.00	0.00
17,400.0	90.00	179.51	12,720.0	-4,664.0	-146.4	4,666.3	0.00	0.00	0.00
17,500.0	90.00	179.51	12,720.0	-4,764.0	-145.6	4,766.2	0.00	0.00	0.00
17,565.0	90.00	179.51	12,720.0	-4,829.0	-145.0	4,831.2	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (Ruby 2 Fed Com - plan misses target center by 5281.2usft at 17565.0usft MD (12720.0 TVD, -4829.0 N, -145.0 E) - Point	0.00	0.07	12,720.0	-10,110.0	-98.0	383,537.00	816,237.00	32° 3' 4.744 N	103° 26' 45.772 W
FTP (Ruby 2 Fed Com # - plan misses target center by 10.6usft at 12848.8usft MD (12709.8 TVD, -113.8 N, -185.1 E) - Point	0.00	0.07	12,720.0	-111.0	-185.0	393,536.00	816,150.00	32° 4' 43.692 N	103° 26' 45.827 W
PBHL (Ruby 2 Fed Com - plan hits target center - Point	0.00	0.07	12,720.0	-4,829.0	-145.0	388,818.00	816,190.00	32° 3' 57.004 N	103° 26' 45.813 W



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ruby 2 State Com
Well: #702H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #702H
KB = 25' @ 3329.0usft
KB = 25' @ 3329.0usft
Grid
Minimum Curvature



Lea County, NM (NAD 83 NME)

Ruby 2 State Com #702H

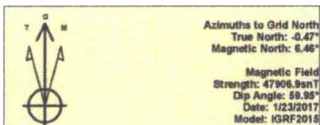
Plan #0.1

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: #702H

Ground Level: 3304.0
KS = 25° @ 3329.0usft
Northing: 393647.00 Easting: 816335.00 Latitude: 32° 4' 44.776 N Longitude: 103° 26' 43.667 W



To convert a Magnetic Direction to a Grid Direction, Add 6.46°
To convert a Magnetic Direction to a True Direction, Add 6.93° East
To convert a True Direction to a Grid Direction, Subtract 6.47°

SECTION DETAILS

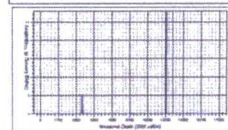
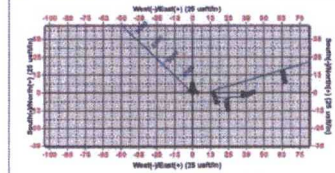
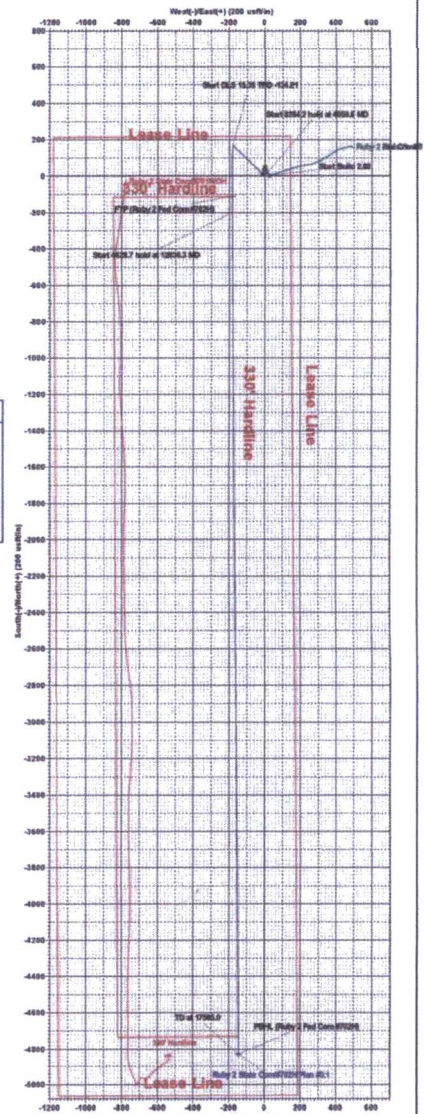
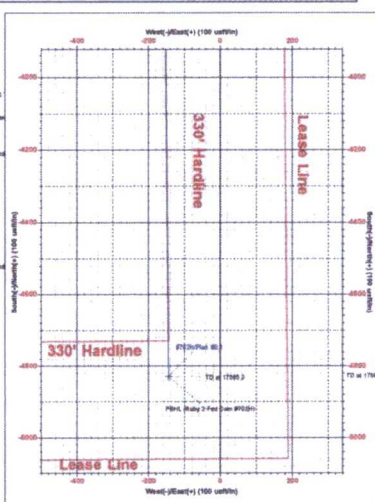
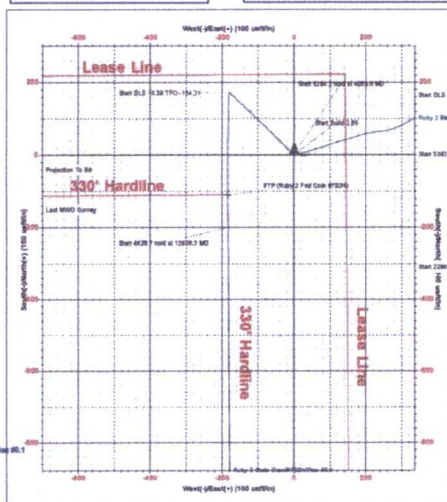
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0	
3	4059.6	1.71	313.73	4059.6	0.6	-0.6	2.88	313.73	-0.6	
4	12343.7	1.71	313.73	12340.0	171.8	-179.6	0.00	0.00	-166.3	
5	12936.3	90.00	179.51	12720.0	-200.5	-184.6	15.39	-134.21	205.9	
6	17955.0	90.00	179.51	12720.0	-4829.0	-145.0	0.00	0.00	4831.2	PBHL (Ruby 2 Fed Com #702H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL (Ruby 2 Fed Com #702H)	12720.0	-4829.0	-145.0	393619.00	816190.00
FTP (Ruby 2 Fed Com #702H)	12720.0	-111.0	-185.0	393636.00	816190.00



Lea County, NM (NAD 83 NME)
Ruby 2 State Com #702H
Plan #0.1
1/23/2017

EOG RESOURCES, INC.
RUBY 2 STATE COM #702H

Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H₂S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
 - Well control equipment
 - a. Flare line 150' from wellhead to be ignited by flare gun.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator
 - Protective equipment for essential personnel.

Breathing apparatus:

 - a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
 - b. Work/Escapes packs — 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
 - c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

 - a. Stretcher
 - b. Two OSHA full body harness
 - c. 100 ft 5/8 inch OSHA approved rope
 - d. 1-20# class ABC fire extinguisher
 - H₂S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)
 - Visual warning systems.
 - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - c. Two wind socks will be placed in strategic locations, visible from all angles.

EOG RESOURCES, INC.
RUBY 2 STATE COM #702H

- **Mud program:**
The mud program has been designed to minimize the volume of H₂S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H₂S bearing zones.
- **Metallurgy:**
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- **Communication:**
Communication will be via cell phones and land lines where available.

**EOG RESOURCES, INC.
RUBY 2 STATE COM #702H**

Emergency Assistance Telephone List

PUBLIC SAFETY: **911 or**

Lea County Sheriff's Department	(575) 396-3611
Rod Coffman	
Fire Department:	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals:	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
New Mexico Oil Conservation	(575) 476-3440
U.S. Dept. of Labor	(575) 887-1174

EOG Resources, Inc.

EOG / Midland	Office (432) 686-3600
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Company Drilling Consultants:

David Dominique	Cell (985) 518-5839
Mike Vann	Cell (817) 980-5507

Drilling Engineer

Steve Munsell	Office (432) 686-3609
	Cell (432) 894-1256

Drilling Manager

Floyd Hernandez	Office (432) 686-3716
	Cell (817) 682-4569

Drilling Superintendent

Jason Fitzgerald	Office (432) 848-9029
	Cell (318) 347-3916

H&P Drilling

H&P Drilling	Office (432) 563-5757
H&P 651 Drilling Rig	Rig (903) 509-7131

Tool Pusher:

Johnathan Craig	Cell (817) 760-6374
Brad Garrett	

Safety

Brian Chandler (HSE Manager)	Office (432) 686-3695
	Cell (817) 239-0251