

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
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

RECEIVED

FEB 11 2020

FORM C-102

Revised August 1, 2011

EMNRD-OCD ARTESIA

copy to appropriate

District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

As Drilled

¹ API Number 30-015-45749	² Pool Code 98330	³ Pool Name Penasco Draw ; Permo Penn Oil
⁴ Property Code 322937	⁵ Property Name RUMBLE STATE	⁶ Well Number 4H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3567'

¹⁰Surface Location

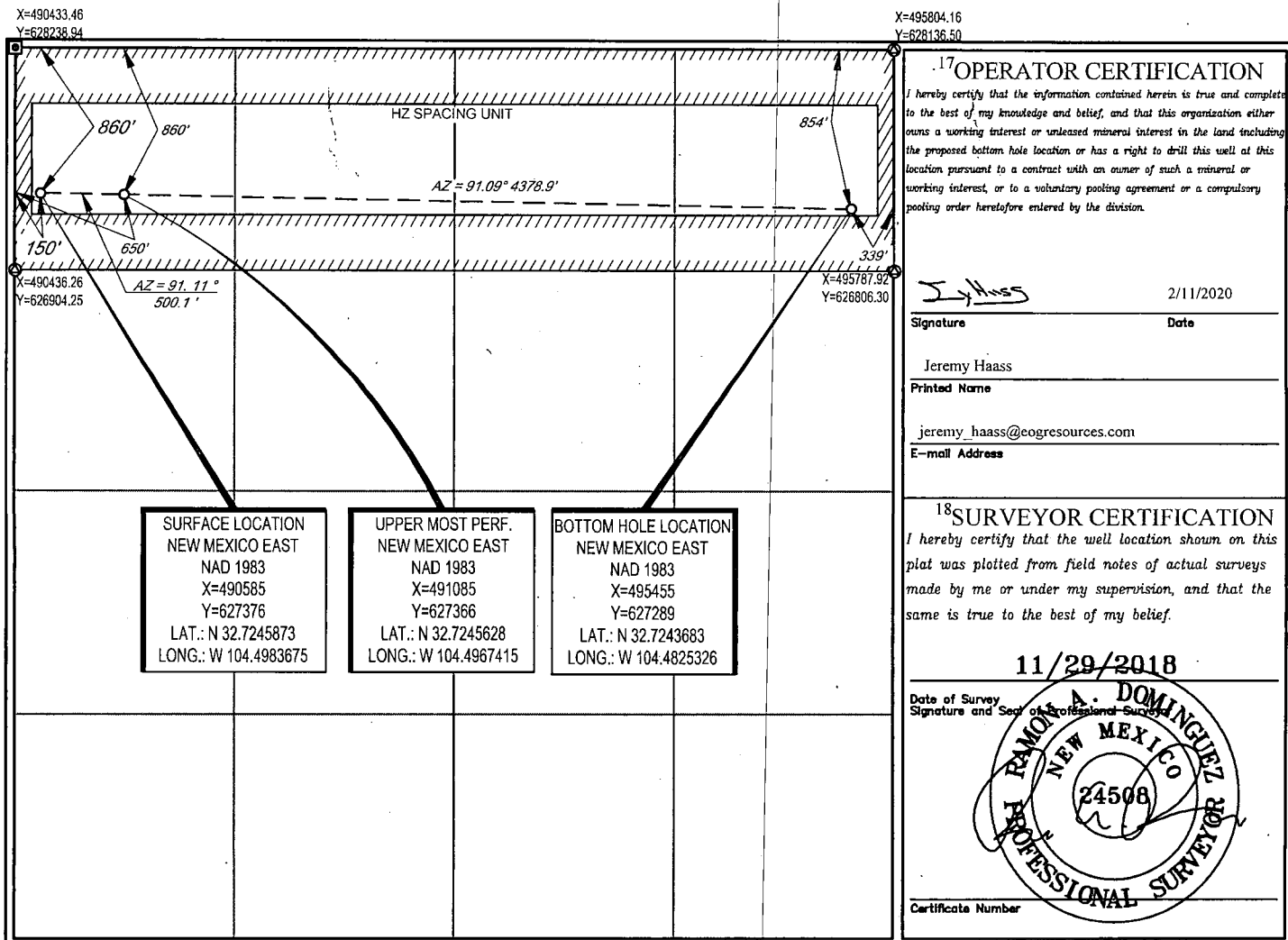
UL or lot no. D	Section 28	Township 18-S	Range 25-E	Lot Idn -	Feet from the 860	North/South line NORTH	Feet from the 150	East/West line WEST	County EDDY
--------------------	---------------	------------------	---------------	--------------	----------------------	---------------------------	----------------------	------------------------	----------------

¹¹Bottom Hole Location If Different From Surface

UL or lot no. A	Section 28	Township 18-S	Range 25-E	Lot Idn -	Feet from the 854	North/South line NORTH	Feet from the 339	East/West line EAST	County EDDY
--------------------	---------------	------------------	---------------	--------------	----------------------	---------------------------	----------------------	------------------------	----------------

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



RECEIVED

FEB 18 2020

EMNRD-OCD ARTESIA



Operator: EOG Resources
Well Name: Rumble State #4H
County: Eddy
State: New Mexico
Rig Name: Trinidad 436
Intrepid Job#: ID2149
Job Number: 30-015-45749

Intrepid Directional Drilling Specialists certifies that the surveys performed on the above referenced well are true and correct MWD surveys, data provided as follows:

Surveyor: Intrepid Directional Drilling Specialists
Survey Depths: 1,405' MD – 12,000' MD
Projection to Bit: 12,084' MD
Dates Performed: 02/28/2019 – 03/13/2019
Type of Survey: MWD

Sincerely,

A handwritten signature in dark ink, appearing to read "JB", with a horizontal flourish extending to the right.

James Burleson
Vice President of MWD Operations
Intrepid Directional Drilling Specialists



EOG Resources - Midland

**Eddy County, NM (NAD 83 NME)
(Rumble)Sec28_T-18-S_R-25-E
Rumble State #4H**

OWB

Design: AWB

Standard Survey Report

12 March, 2019

INTREPID

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well: Rumble State #4H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28_T-18-S-R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM-10-13

Project	Eddy County, NM (NAD 83 NME)	
Map System:	US State Plane 1983	System Datum:
Geo Datum:	North American Datum 1983	Mean Sea Level
Map Zone:	New Mexico Eastern Zone	

Site:	(Rumble)Sec28_T-18-S-R-25-E	
Site Position:		Northing:
From:	Map	Easting:
Position Uncertainty:	0.0 usft	Slot Radius:
		Latitude:
		Longitude:
		Grid Convergence:

Well:	Rumble State #4H	
Well Position	+N/-S	0.0 usft
	+E/-W	0.0 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:
		Latitude:
		Longitude:
		Ground Level:

Wellbore	OWB	
----------	-----	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	02/25/19	7.24	60.35	47,958.83296974

Design:	AWB	
---------	-----	--

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	91.09

Survey Program	Date	03/12/19	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
75.0	1,261.0	Invictus MWD (OWB)	MWD
1,405.0	12,084.0	Intrepid MWD (OWB)	MWD
			Description
			MWD - Standard
			MWD - Standard

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
75.0	0.20	242.37	75.0	-0.1	-0.1	-0.1	0.27	0.27	0.00
85.0	0.30	7.37	85.0	0.0	-0.1	-0.1	4.46	1.00	1,250.00
117.0	0.70	328.37	117.0	0.2	-0.2	-0.2	1.57	1.25	-121.88
180.0	0.30	352.37	180.0	0.7	-0.4	-0.5	0.70	-0.63	38.10
237.1	0.90	11.37	237.1	1.3	-0.4	-0.4	1.09	1.05	33.27
265.0	1.10	349.37	265.0	1.8	-0.4	-0.4	1.54	0.72	-78.85
293.7	1.30	347.37	293.7	2.4	-0.5	-0.5	0.71	0.70	-6.97
322.1	0.70	352.37	322.1	2.8	-0.6	-0.7	2.13	-2.11	17.61
352.6	1.10	351.37	352.6	3.3	-0.7	-0.7	1.31	1.31	-3.28

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well Rumble State #4H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28_T-18-S-R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10-13

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)	
383.5	0.90	309.37	383.5	3.8	-0.9	-1.0	2.40	-0.65	-135.92	
414.9	0.40	331.37	414.9	4.0	-1.1	-1.2	1.75	-1.59	70.06	
445.8	0.40	305.37	445.8	4.2	-1.3	-1.4	0.58	0.00	-84.14	
477.2	0.70	305.37	477.2	4.3	-1.5	-1.6	0.96	0.96	0.00	
508.7	0.40	292.37	508.7	4.5	-1.8	-1.9	1.03	-0.95	-41.27	
540.0	1.00	294.37	540.0	4.7	-2.1	-2.2	1.92	1.92	6.39	
571.4	0.60	312.37	571.4	4.9	-2.5	-2.6	1.49	-1.27	57.32	
602.1	0.80	315.37	602.1	5.1	-2.8	-2.9	0.66	0.65	9.77	
634.1	0.80	279.37	634.1	5.3	-3.2	-3.3	1.55	0.00	-112.50	
665.2	0.50	309.37	665.2	5.5	-3.5	-3.6	1.43	-0.96	96.46	
696.3	0.60	312.37	696.2	5.6	-3.7	-3.8	0.33	0.32	9.65	
727.6	0.40	229.37	727.5	5.7	-3.9	-4.0	2.17	-0.64	-265.18	
759.5	0.30	267.37	759.4	5.6	-4.1	-4.2	0.77	-0.31	119.12	
790.7	0.60	322.37	790.6	5.7	-4.2	-4.4	1.58	0.96	176.28	
822.5	0.80	320.37	822.4	6.0	-4.5	-4.6	0.63	0.63	-6.29	
853.8	0.40	314.37	853.7	6.3	-4.7	-4.8	1.29	-1.28	-19.17	
885.0	0.60	324.37	884.9	6.5	-4.9	-5.0	0.70	0.64	32.05	
917.0	0.80	322.37	916.9	6.8	-5.1	-5.2	0.63	0.63	-6.25	
948.0	0.60	279.37	947.9	7.0	-5.4	-5.5	1.76	-0.65	-138.71	
980.0	0.90	294.37	979.9	7.1	-5.8	-5.9	1.11	0.94	46.88	
1,041.0	0.50	304.37	1,040.9	7.5	-6.5	-6.6	0.68	-0.66	16.39	
1,073.0	0.60	339.37	1,072.9	7.7	-6.6	-6.8	1.08	0.31	109.38	
1,104.0	0.70	313.37	1,103.9	8.0	-6.8	-7.0	0.99	0.32	-83.87	
1,136.0	0.40	336.37	1,135.9	8.2	-7.0	-7.2	1.15	-0.94	71.88	
1,167.0	0.60	295.37	1,166.9	8.4	-7.2	-7.4	1.28	0.65	-132.26	
1,197.0	0.60	296.37	1,196.9	8.5	-7.5	-7.7	0.03	0.00	3.33	
1,229.0	0.40	281.37	1,228.9	8.6	-7.7	-7.9	0.74	-0.63	-46.88	
1,261.0	0.40	280.37	1,260.9	8.7	-8.0	-8.1	0.02	0.00	-3.13	
TIE ON										
1,405.0	0.44	326.76	1,404.9	9.2	-8.8	-8.9	0.23	0.03	32.22	
1,593.0	0.40	326.81	1,592.9	10.4	-9.5	-9.7	0.02	-0.02	0.03	
1,846.0	0.53	318.04	1,845.9	12.0	-10.8	-11.0	0.06	0.05	-3.47	
2,035.0	0.41	299.13	2,034.9	13.0	-12.0	-12.2	0.10	-0.06	-10.01	
2,223.0	0.40	305.55	2,222.9	13.7	-13.1	-13.3	0.02	-0.01	3.41	
2,412.0	0.48	293.47	2,411.9	14.4	-14.3	-14.6	0.06	0.04	-6.39	
2,601.0	0.46	269.90	2,600.9	14.7	-15.8	-16.1	0.10	-0.01	-12.47	
2,790.0	0.30	271.01	2,789.9	14.7	-17.1	-17.4	0.08	-0.08	0.59	
2,978.0	0.56	262.64	2,977.9	14.6	-18.5	-18.8	0.14	0.14	-4.45	
3,168.0	0.52	265.62	3,167.9	14.4	-20.3	-20.5	0.03	-0.02	1.57	
3,357.0	0.59	260.87	3,356.9	14.2	-22.1	-22.3	0.04	0.04	-2.51	
3,547.0	0.63	246.44	3,546.8	13.6	-24.0	-24.3	0.08	0.02	-7.59	
3,736.0	0.58	242.78	3,735.8	12.8	-25.8	-26.0	0.03	-0.03	-1.94	
3,925.0	0.48	235.37	3,924.8	11.9	-27.3	-27.5	0.06	-0.05	-3.92	

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well Rumble State #4H
Project:	Eddy County, NM (NAD 83:NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28_T-18-S_R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10-13

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)	
4,114.0	0.45	229.98	4,113.8	11.0	-28.5	-28.7	0.03	-0.02	-2.85	
4,303.0	0.85	244.83	4,302.8	9.9	-30.4	-30.6	0.23	0.21	7.86	
4,366.0	3.37	274.70	4,365.8	9.8	-32.6	-32.8	4.23	4.00	47.41	
4,492.0	3.46	273.39	4,491.5	10.4	-40.1	-40.3	0.09	0.07	-1.04	
4,618.0	3.38	270.08	4,617.3	10.6	-47.6	-47.8	0.17	-0.06	-2.63	
4,744.0	3.13	270.14	4,743.1	10.6	-54.8	-55.0	0.20	-0.20	0.05	
4,870.0	3.15	267.50	4,868.9	10.5	-61.7	-61.9	0.12	0.02	-2.10	
4,996.0	3.12	270.17	4,994.7	10.3	-68.6	-68.8	0.12	-0.02	2.12	
5,122.0	3.03	268.70	5,120.5	10.3	-75.3	-75.5	0.09	-0.07	-1.17	
5,248.0	3.12	267.33	5,246.4	10.0	-82.1	-82.3	0.09	0.07	-1.09	
5,374.0	3.02	268.97	5,372.2	9.8	-88.8	-89.0	0.11	-0.08	1.30	
5,500.0	3.13	266.07	5,498.0	9.5	-95.6	-95.7	0.15	0.09	-2.30	
5,626.0	2.70	265.01	5,623.8	9.0	-102.0	-102.1	0.34	-0.34	-0.84	
5,751.0	2.57	262.01	5,748.7	8.4	-107.7	-107.8	0.15	-0.10	-2.40	
5,877.0	2.91	272.32	5,874.6	8.1	-113.7	-113.8	0.47	0.27	8.18	
6,002.0	2.72	270.26	5,999.4	8.2	-119.8	-119.9	0.17	-0.15	-1.65	
6,128.0	2.59	261.52	6,125.3	7.8	-125.6	-125.7	0.34	-0.10	-6.94	
6,254.0	2.37	254.89	6,251.2	6.7	-130.9	-131.0	0.29	-0.17	-5.26	
6,379.0	1.50	248.33	6,376.1	5.5	-135.0	-135.0	0.72	-0.70	-5.25	
6,505.0	0.75	153.07	6,502.1	4.1	-136.1	-136.2	1.38	-0.60	-75.60	
6,595.0	0.99	144.81	6,592.1	3.0	-135.4	-135.4	0.30	0.27	-9.18	
6,721.0	4.01	119.01	6,717.9	-0.1	-130.9	-130.9	2.50	2.40	-20.48	
6,753.0	7.37	115.70	6,749.8	-1.5	-128.1	-128.0	10.55	10.50	-10.34	
6,785.0	10.21	111.49	6,781.4	-3.4	-123.6	-123.5	9.09	8.88	-13.16	
6,817.0	12.95	114.75	6,812.7	-6.0	-117.7	-117.6	8.80	8.56	10.19	
6,848.0	15.72	112.81	6,842.8	-9.1	-110.7	-110.5	9.07	8.94	-6.26	
6,880.0	19.43	114.52	6,873.3	-12.9	-101.8	-101.6	11.70	11.59	5.34	
6,911.0	21.03	115.06	6,902.4	-17.4	-92.1	-91.8	5.20	5.16	1.74	
6,942.0	23.44	114.90	6,931.0	-22.4	-81.5	-81.0	7.78	7.77	-0.52	
6,974.0	23.04	111.62	6,960.5	-27.4	-69.9	-69.3	4.23	-1.25	-10.25	
7,005.0	24.38	109.49	6,988.8	-31.8	-58.2	-57.6	5.13	4.32	-6.87	
7,037.0	25.21	103.36	7,017.9	-35.5	-45.4	-44.7	8.44	2.59	-19.16	
7,068.0	28.47	99.01	7,045.6	-38.2	-31.6	-30.9	12.27	10.52	-14.03	
7,100.0	31.67	97.18	7,073.2	-40.5	-15.8	-15.0	10.40	10.00	-5.72	
7,163.0	39.04	95.98	7,124.6	-44.6	20.4	21.3	11.75	11.70	-1.90	
7,226.0	45.75	96.05	7,171.1	-49.1	62.7	63.6	10.65	10.65	0.11	
7,289.0	52.60	93.79	7,212.3	-53.1	110.1	111.1	11.21	10.87	-3.59	
7,352.0	58.49	89.05	7,247.9	-54.3	162.0	163.0	11.22	9.35	-7.52	
7,373.0	60.88	88.94	7,258.5	-54.0	180.1	181.1	11.41	11.40	-0.53	
FTP @ 7373.0' MD, 911' FNL, 330' FWL										
7,415.0	65.67	88.73	7,277.4	-53.2	217.6	218.6	11.41	11.40	-0.50	
7,478.0	70.40	87.23	7,300.9	-51.1	276.0	276.9	7.83	7.51	-2.38	
7,509.0	72.64	87.25	7,310.8	-49.7	305.4	306.3	7.23	7.23	0.06	
7,540.0	74.75	86.91	7,319.5	-48.2	335.1	335.9	6.89	6.81	-1.10	

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well Rumble State #4H
Project:	Eddy County NM (NAD 83 NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28 T-18-S-R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM-10-13

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)
7,572.0	76.71	86.16	7,327.3	-46.3	366.0	366.9	6.53	6.13	-2.34
7,603.0	78.89	86.40	7,333.9	-44.4	396.3	397.0	7.07	7.03	0.77
7,666.0	80.93	86.67	7,344.9	-40.6	458.2	458.9	3.27	3.24	0.43
7,720.0	86.07	82.84	7,351.0	-35.7	511.6	512.2	11.84	9.52	-7.09
7,784.0	90.11	83.42	7,353.2	-28.1	575.1	575.5	6.38	6.31	0.91
7,847.0	90.84	82.83	7,352.7	-20.5	637.6	637.9	1.49	1.16	-0.94
7,910.0	91.68	82.68	7,351.3	-12.6	700.1	700.2	1.35	1.33	-0.24
7,973.0	90.56	85.34	7,350.0	-6.0	762.7	762.7	4.58	-1.78	4.22
8,036.0	89.66	85.87	7,349.9	-1.2	825.5	825.4	1.66	-1.43	0.84
8,099.0	89.05	88.92	7,350.6	1.7	888.5	888.3	4.94	-0.97	4.84
8,162.0	86.30	91.56	7,353.2	1.4	951.4	951.2	6.05	-4.37	4.19
8,225.0	87.25	91.75	7,356.7	-0.4	1,014.3	1,014.1	1.54	1.51	0.30
8,288.0	89.49	91.58	7,358.5	-2.2	1,077.2	1,077.1	3.57	3.56	-0.27
8,351.0	89.55	91.37	7,359.1	-3.8	1,140.2	1,140.1	0.35	0.10	-0.33
8,414.0	89.83	91.34	7,359.4	-5.3	1,203.2	1,203.1	0.45	0.44	-0.05
8,477.0	89.55	91.46	7,359.7	-6.9	1,266.2	1,266.1	0.48	-0.44	0.19
8,540.0	89.05	91.91	7,360.5	-8.7	1,329.1	1,329.1	1.07	-0.79	0.71
8,603.0	88.20	91.61	7,362.0	-10.7	1,392.1	1,392.0	1.43	-1.35	-0.48
8,666.0	88.09	91.57	7,364.1	-12.4	1,455.0	1,455.0	0.19	-0.17	-0.06
8,728.0	88.76	91.78	7,365.8	-14.2	1,517.0	1,517.0	1.13	1.08	0.34
8,791.0	88.93	91.74	7,367.0	-16.2	1,579.9	1,580.0	0.28	0.27	-0.06
8,854.0	89.16	91.33	7,368.1	-17.8	1,642.9	1,642.9	0.75	0.37	-0.65
8,917.0	89.61	91.26	7,368.8	-19.3	1,705.9	1,705.9	0.72	0.71	-0.11
8,980.0	88.65	91.76	7,369.7	-20.9	1,768.8	1,768.9	1.72	-1.52	0.79
9,042.0	89.38	91.77	7,370.8	-22.8	1,830.8	1,830.9	1.18	1.18	0.02
9,105.0	90.34	90.92	7,370.9	-24.3	1,893.8	1,893.9	2.04	1.52	-1.35
9,169.0	88.60	90.33	7,371.5	-25.0	1,957.8	1,957.9	2.87	-2.72	-0.92
9,232.0	87.37	90.38	7,373.7	-25.4	2,020.7	2,020.9	1.95	-1.95	0.08
9,294.0	87.59	89.73	7,376.5	-25.5	2,082.7	2,082.8	1.11	0.35	-1.05
9,357.0	87.98	89.18	7,378.9	-24.9	2,145.6	2,145.7	1.07	0.62	-0.87
9,420.0	88.32	88.46	7,380.9	-23.6	2,208.6	2,208.6	1.26	0.54	-1.14
9,483.0	88.20	87.57	7,382.8	-21.4	2,271.5	2,271.5	1.42	-0.19	-1.41
9,546.0	88.04	88.95	7,384.9	-19.5	2,334.5	2,334.4	2.20	-0.25	2.19
9,609.0	88.93	91.51	7,386.6	-19.7	2,397.4	2,397.4	4.30	1.41	4.06
9,672.0	89.38	93.31	7,387.5	-22.4	2,460.4	2,460.3	2.94	0.71	2.86
9,735.0	89.55	93.14	7,388.1	-25.9	2,523.3	2,523.3	0.38	0.27	-0.27
9,797.0	90.90	92.75	7,387.9	-29.1	2,585.2	2,585.3	2.27	2.18	-0.63
9,868.0	92.81	95.92	7,385.6	-34.5	2,655.9	2,656.1	5.21	2.69	4.46
9,930.0	93.37	97.08	7,382.2	-41.5	2,717.4	2,717.7	2.08	0.90	1.87
10,009.0	93.03	95.53	7,377.8	-50.1	2,795.8	2,796.3	2.01	-0.43	-1.96
10,072.0	88.15	91.81	7,377.2	-54.2	2,858.7	2,859.2	9.74	-7.75	-5.90
10,135.0	87.81	89.69	7,379.4	-55.0	2,921.6	2,922.1	3.41	-0.54	-3.37
10,198.0	88.15	89.92	7,381.6	-54.8	2,984.6	2,985.1	0.65	0.54	0.37

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well Rumble State #4H
Project:	Eddy County, NM (NAD 83 NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28_T-18-S_R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10-13

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)	
10,261.0	87.42	90.12	7,384.0	-54.8	3,047.5	3,048.0	1.20	-1.16	0.32	
10,324.0	86.63	90.45	7,387.3	-55.1	3,110.4	3,110.9	1.36	-1.25	0.52	
10,387.0	85.96	89.26	7,391.4	-55.0	3,173.3	3,173.8	2.16	-1.06	-1.89	
10,450.0	86.75	90.49	7,395.4	-54.8	3,236.2	3,236.6	2.32	1.25	1.95	
10,513.0	86.92	90.09	7,398.9	-55.1	3,299.1	3,299.5	0.69	0.27	-0.63	
10,575.0	88.65	92.08	7,401.2	-56.3	3,361.0	3,361.5	4.25	2.79	3.21	
10,638.0	88.32	91.98	7,402.9	-58.5	3,424.0	3,424.5	0.55	-0.52	-0.16	
10,701.0	88.15	91.68	7,404.9	-60.6	3,486.9	3,487.4	0.55	-0.27	-0.48	
10,763.0	87.81	91.82	7,407.0	-62.4	3,548.8	3,549.4	0.59	-0.55	0.23	
10,827.0	89.44	91.90	7,408.6	-64.5	3,612.8	3,613.3	2.55	2.55	0.13	
10,889.0	90.28	91.97	7,408.7	-66.6	3,674.7	3,675.3	1.36	1.35	0.11	
10,953.0	90.28	91.96	7,408.4	-68.8	3,738.7	3,739.3	0.02	0.00	-0.02	
11,016.0	89.72	91.87	7,408.4	-70.9	3,801.7	3,802.3	0.90	-0.89	-0.14	
11,079.0	89.72	91.75	7,408.7	-72.9	3,864.6	3,865.3	0.19	0.00	-0.19	
11,142.0	90.22	91.60	7,408.8	-74.7	3,927.6	3,928.3	0.83	0.79	-0.24	
11,205.0	90.11	91.44	7,408.6	-76.4	3,990.6	3,991.3	0.31	-0.17	-0.25	
11,268.0	90.90	91.35	7,408.0	-77.9	4,053.6	4,054.3	1.26	1.25	-0.14	
11,331.0	89.78	90.48	7,407.6	-79.0	4,116.6	4,117.3	2.25	-1.78	-1.38	
11,393.0	89.89	90.15	7,407.8	-79.3	4,178.5	4,179.3	0.56	0.18	-0.53	
11,457.0	86.30	89.99	7,410.0	-79.4	4,242.5	4,243.2	5.61	-5.61	-0.25	
11,520.0	86.64	89.73	7,413.8	-79.2	4,305.4	4,306.1	0.68	0.54	-0.41	
11,583.0	87.08	90.85	7,417.3	-79.5	4,368.3	4,369.0	1.91	0.70	1.78	
11,646.0	88.60	91.83	7,419.7	-81.0	4,431.2	4,432.0	2.87	2.41	1.56	
11,709.0	89.27	91.61	7,420.8	-82.9	4,494.2	4,494.9	1.12	1.06	-0.35	
11,772.0	90.00	91.50	7,421.2	-84.6	4,557.2	4,557.9	1.17	1.16	-0.17	
11,835.0	90.62	91.01	7,420.9	-86.0	4,620.1	4,620.9	1.25	0.98	-0.78	
11,897.0	89.38	90.56	7,420.9	-86.8	4,682.1	4,682.9	2.13	-2.00	-0.73	
11,960.0	88.88	89.78	7,421.8	-87.0	4,745.1	4,745.9	1.47	-0.79	-1.24	
12,000.0	88.93	89.73	7,422.6	-86.9	4,785.1	4,785.9	0.18	0.13	-0.13	
LAST SVY										
12,084.0	88.93	89.73	7,424.2	-86.5	4,869.1	4,869.9	0.00	0.00	0.00	
PTD @ 12084.0 MD, 854' FNL, 339' FEL										

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
T1 (Rumble State #4H)	- Shape	0.00	360.00	7,391.0	-52.5	2,699.5	627,323.33	493,284.76	32° 43' 28.035 N	104° 29' 22.521 W
- actual wellpath misses target center by 15.3usft at 9913.0usft MD (7383.2 TVD, -39.4 N, 2700.6 E)										
- Point										
PBHL (Rumble State #4H)	- Shape	0.00	271.06	7,425.0	-92.9	4,878.7	627,283.00	495,464.00	32° 43' 27.667 N	104° 28' 57.009 W
- actual wellpath misses target center by 11.6usft at 12084.0usft MD (7424.2 TVD, -86.5 N, 4869.1 E)										
- Rectangle (sides W60.0 H4,395.0 D0.0)										

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well Rumble State #4H
Project:	Eddy County NM (NAD 83 NME)	TVD Reference:	KB @ 3583.5usft (Trinidad 436)
Site:	(Rumble)Sec28_T-18-S_R-25-E	MD Reference:	KB @ 3583.5usft (Trinidad 436)
Well:	Rumble State #4H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 10_13

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,261.0	1,260.9	8.7	-8.0	TIE ON
7,373.0	7,258.5	-54.0	180.1	FTP @ 7373.0' MD, 911' FNL, 330' FWL
12,000.0	7,422.6	-86.9	4,785.1	LAST SVY
12,084.0	7,424.2	-86.5	4,869.1	PTD @ 12084.0' MD, 854' FNL, 339' FEL

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------